## PSYCTM001 - Approaches to Consciousness

## Robert Ham

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The challenge to understand the nature of consciousness requires the discipline of science together with a willingness to accept the contribution of other, diverse approaches. Discuss.

The challenge to understand the nature of consciousness is no small task. Both within and outside of science, there are a myriad of different approaches that can shed light on the subject. Physics, neuroscience, psi and paranormal research, spiritual and mystical traditions, and psychedelic experience, to name a small selection, all provide information related to consciousness. The real challenge, then, becomes the determination of which sources to take onboard and which to dismiss. It is in this challenge that the discipline of science is of paramount importance.

One may be excused for assuming that the discipline of science (as in, a method of practice) would not be needed in discussing the discipline of science (as in, a branch of knowledge) but this is not the case. The prevailing view within science is a materialist one in which consciousness is essentially a by-product of an inherently inanimate substrate consisting of particles, forces and energy. Neuroscience involves the bounded study of the relationship between consciousness and this substrate, where the upper-bound is the central nervous system. Neuroscience is arguably the best candidate within materialist, physical science to provide a description of the nature of consciousness. However its methods are, at present, a gross art. They are extremely simplistic in comparison to the brain itself, and indeed the intuitive complexity of consciousness.

Early EEGs reduced brain activity to one single signal. The brain has tens of billions of individually active neurons. To reduce this complexity to a single signal is an extraordinary simplification. These EEGs are the extreme; fMRIs, MEGs and modern EEG systems can provide higher resolutions but still fall very far short of the kind of detail necessary to claim a precise understanding of activity within the brain. Without a precise understanding, any conclusions about correlations between the brain's activity and consciousness must be heavily qualified. As Chalmers (2000) states while discussing neural correlates of consciousness,

"positive hypotheses based on current sorts of evidence should probably be considered suggestive but highly speculative." (Chalmers, 2000, p. 34)

The level of detail revealed by methods used in neuroscience will inevitably increase over time. At the limit of physics, activity in every neuron in the central nervous system, possibly every cell in the body, would be monitored, along with the inter-penetrating strong, electroweak and gravitational fields, and correlated with aspects of consciousness. Neuroscience methods are a very long way from that limit. However, the limit of physics is itself an unknown factor and hence the precision of conclusions based on neuroscience methods is also unknown.

As described by Bohm (1980/2002), physics provides a number of models of the behaviour of the universe within different orders. While current physics models are very broadly applicable, they are still limited. There is no Grand Unified Theory within physics. Hence, there is a gap between physics' understanding of the universe and the actuality of the universe. Moreover, the distance of this gap cannot be known. There is no way to know, a priori, the order of the universe and hence there is no way to know whether the order described by physics models is in any way accurate.

The contexts in which different physics models are applicable is largely understood. However, the correctness of different models within particular contexts is still not guaranteed. Anomalons are a class of matter created by nuclear particle interactions whose presence and behaviour is unexplained. As reported by Thomsen (1985), in some experiments, matter (nuclei and alpha particles) resulting from the collision of atomic nuclei display abnormal reactivity with other nuclei. "Abnormal", in this instance, refers to the fact that there is a difference between the predictions given by current physics models and the observed behaviour of the matter. These phonomena are anomalous from the perspective of physics, hence the name of the class.

Not only are anomalous anomalous in their existence and behaviour but they are anomalous in that some physicists can find them and some can't. It is as though the behaviour of matter within these experiments is dependent on some variable, some property of the environment which differs between laboratories and which has yet to be discovered by physicists and incorporated into physics models.

The existence of anomalons shows that, even in contexts where it is expected that physics models will be correct, they can be inadequate. This hints at fundamental problems within the models themselves. As Brandt (2003) states,

"experimental facts [about anomalons] ... have been known for decades and they have never been challenged. However, no conclusive interpretation based on well-established principles of physical science was ever presented. In this context, it must now be allowed to suggest giving up some of those physics principles" (Brandt, 2003, page 257)

With these limitations on the descriptive power of neuroscience and, more generally physics, alternative approaches to the nature of consciousness become a primary source of information. That is not to say that these materialistic approaches should be dismissed or ignored. Rather, they should be taken as *guidelines* for a base order of the universe. They should not be elevated to such a degree that sources which contradict them are dismissed solely because of the contradiction. The idea that physics or neuroscience may be incorrect in such instances while non-materialist sources are correct is not revolutionary; it is merely the consequence of the acknowledgement of the limitations of these approaches.

Similarly, it should not be taken that all sources contradicting neuroscience and physics are correct. Indeed, congruence with physical science should add weight to any source. To be more specific, ideas related to the nature of the consciousness beyond the base order of the universe should not be penalised because of contradiction with materialist approaches. Meanwhile, ideas related to the nature of consciousness within the base order, if they contradict materialist approaches, have a greater burden of proof.

Taking approaches outside the realm of neuroscience or physics as primary sources, there is a tremendous amount of information available. We have roughly six thousand years of recorded human experience to draw upon. From these sources, some of the most relevant to the discussion of consciousness are spiritual and mystical traditions which include descriptions of aspects of the human body, mind and soul and their relationship to one another.

As an example, Kabbalah is one such tradition. Lancaster (2004) compares re-entrant processing in the brain with kabbalistic teachings, noting a general principle of 'lower' levels awakening 'higher' levels, and vice-versa. If this principle is extended, as it explicitly is in Kabbalah, reentrant brain activity, which Lancaster points out correlates with consciousness, becomes the 'lowest' level in a series of interconnected levels that extend beyond the body. In Lancaster's words:

"the interaction between 'lower' and 'higher' regions of the human brain may be just the initiating step in a cascade of interactions reaching beyond the physical plane." (Lancaster, 2004, p. 145)

A similar structure is proposed by Roberts (1972/1994), a modern trance medium who channelled a personality named Seth, dictating entire books discussing the nature of reality and human consciousness (Roberts, 1970). This material has value if the source of the dictation exists external to and independent of Lancaster's "physical plane".

The existence of such entities is argued by Strassman (2001). In clinical studies with the psychedelic drug DMT, Strassman noted a high frequency of communication with what he terms "other beings" (p. 185) that participants consciously perceived within environments distinct from everyday reality. The validity of these experiences is cautiously concluded by Strassman:

"At a certain point, I decided to accept at face value volunteers' reports. This thought experiment replaced my original tendency to explain away, interpret, or reduce their experiences into something else, such as a disordered brain's hallucinations, dreams, or psychological symbolism. Now, after several years of additional study and reflection, I think it's worth considering seriously whether it's possible that these experiences indeed were exactly what they seemed to be." (Strassman, 2001, p. 313)

Following Strassman's lead and taking Roberts' dictations at face value, the source of the dictation, the Seth personality, exists independently of the physical plane. The material has value, then, in that it describes 'higher' planes from a first-person perspective. The nature of the human mind and soul dictated by the Seth personality is a continuum of interconnected "personality" stretching from the physical plane through 'higher' planes, with personalities that are seemingly distinct within the physical plane becoming increasingly interconnected and merging at the extremity into a single entity. Consciousness is dictated as the projection of attention from parts of the personality in 'higher' planes into the physical plane.

This description raises the question of how an entity that exists within 'higher' planes can perceive this nature and describe it through a connection with a human consciousness while that same human consciousness cannot perceive it. The answer is explicitly given in the dictations: those activities that give rise to consciousness within the physical plane also exclude the perception of 'higher' planes. Specifically, there is nothing inherently prohibitive within the system but the voluntary narrowing of attention into the physical plane gives rise to inattention of 'higher' planes. This is similar in concept to Huxley's "reducing valve" (Huxley, 1954/2004, p. 11).

The correspondence of the Seth personality's view and the kabbalistic view is striking. Indeed, the interconnected multi-level structure described within Kabbalah is explicated by the Seth personality:

"Channels, psychological and psychic, always exist, sending communication back and forth through the various levels of the self, and the ego [ie, consciousness in the physical plane] accepts necessary information and data from the inner portions of the personality" (Roberts, 1972/1994, p. 71)

This multi-level structure, in fact corresponds with many different approaches. As Lancaster writes:

"a pillar of esoteric traditions holds that there is an ultimate correspondence between *levels* in creation." (Lancaster, 2004, p. 144, italics added)

The fact that this structure crosses the boundaries of particular traditions or schools of thought implies that the idea contains some measure of truth. Similarly, the explanation of consciousness as a flow (of 'awakeningness' or 'communication') between different levels is an idea that crosses boundaries. And yet again, we can see this cross-boundary truth with the idea of the Huxley's reducing value which is repeated by the Seth personality. So, within just these few examples there are a number of instances of conceptually similar ideas that shed light on the nature of consciousness.

To generalise this principle beyond the subject of consciousness, there appears to be a *perennial* truth, if you would, that crosses the boundaries of particular traditions and schools of thought. Particular instances of these ideas may differ in details but at an abstract level they can be seen to be equal. In contrast with the perennial *philosophy* argued by Huxley (1946), this perennial truth

is not bound to religious ideas of morality, grace, prayer, etc. Indeed, the perennial philosophy may be seen as a subset of the perennial truth.

Within these diverse approaches to consciousness, then, there is a set of truths regarding the nature of consciousness, yet to be fully described by physical science. They are reflections of the actuality of the universe. Their prominence is evidence of an intuitive and, in many cases experiential correctness. This intuitive correctness is often ignored in favour of a materialistic dismissal due to the absense of anything measurable with some device or due solely to contradiction with current physics models. This occurs at the expense of greater understanding. To use a famous quote of Einstein,

"the intuitive mind is a sacred gift and the rational mind is a faithful servant. We have created a society that honors the servant and has forgotten the gift."

(Albert Einstein)

In order to make use of diverse approaches to the nature of consciousness, we must use the rational mind, exemplified by the discipline of science. In evaluating different schools of thought in order to glean aspects of the perennial truth, we must use rational and logical thinking. In fact, it is often easy to see which schools of thought stand alone precisely because they abandon logic or rationality (often, it seems, in an attempt to make people feel better.) This illustrates the danger of rejecting or ignoring the discipline of science; the product of such an endeavour would inevitably become yet another dogmatic religion or cult, as opposed to an independant contribution to our understanding of consciousness.

To take this approach to the challenge further, Strassman (2001, chap. 21) describes and argues for an idyllic research centre devoted to psychedelic research and therapy. I would extend this idea to incorporate the goals of Tart's (1972) State-Specific Sciences, psi research, experiential research into spiritual and mystical traditions and, where its methods do not interefere with these often delicate experiential activities, neuroscience. Coupled with scholarly study aided by a, specifically undescriminating library of relevant material, such a centre would no doubt produce exceptionally valuable contributions to the study of consciousness. Indeed, I would posit that such a centre is inevitable in the future of consciousness studies as without the willingness to accept the contribution of such diverse approaches, it seems unlikely that a complete understanding of the nature of consciousness will be forthcoming.

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