From Keith Augustine: Does Consciousness Depend on the Brain?

Chris Carter has recently posted an article challenging the idea that consciousness depends (for its very existence) on the brain. I've read it carefully and am underwhelmed. I have two general comments.

First, though Carter summarizes the evidence for mind-brain dependence well in the beginning, he has merely asserted--and comes nowhere near demonstrating--that William James' "transmissive hypothesis" (a variant of what Paul Edwards' called "the instrument theory," the notion that the brain is merely an instrument of the soul) is "just as consistent with the observed facts..." Saying so is one thing. Showing it is another. Nothing in this paper does the latter.

Second, it is simply false to characterize the explanatory value of materialism and dualism, with regard to the overwhelming evidence for mind-brain dependence, as on a par. Materialism clearly explains such evidence better in demonstrable ways.

Indeed, over 80 years ago, philosopher C. D. Broad's intellectual honesty compelled him to concede as much. In a chapter titled "Empirical Arguments for Human Survival" in his 1925 classic on the philosophy of mind, The Mind and Its Place in Nature, before defending his own idiosyncratic form of dualism he dubbed "compound theory," Broad writes:

"The view that the mind is existentially dependent on the organism and on nothing else is compatible with all the normal facts, and is positively suggested by them, though they do not necessitate it. And it is the simplest possible view to take. The theory that the mind merely uses the body as an instrument is difficult to reconcile with the normal facts; and it is doubtful whether there are any well-established [paranormal] phenomena that require it."

Carter fails to address any arguments to the effect that materialism (broadly conceived to include property dualism) explains the evidence for mind-brain
dependence much better than any form of substance dualism--arguments even present in his main target: Corliss Lamont's *The Illusion of Immortality*. For instance, Carter writes:

"James then explores the various possibilities for the exact type of functional dependence between the brain and consciousness. It is normally thought of as productive, in the sense that steam is produced as a function of the kettle. But this is not the only form of function that we find in nature: we also have at least two other forms of functional dependence: the permissive function, as found in the trigger of a crossbow; and the transmissive function, as of a lens or a prism. The lens or prism do not produce the light but merely transmit it in a different form. As James writes

Similarly, the keys of an organ have only a transmissive function. They open successively the various pipes and let the wind in the air-chest escape in various ways. The voices of the various pipes are constituted by the columns of air trembling as they emerge. But the air is not engendered in the organ. The organ proper, as distinguished from its air-chest, is only an apparatus for letting portions of it loose upon the world in these peculiarly limited shapes."

In *The Illusion of Immortality*, Corliss Lamont directly rebutted the prism analogy, which could easily be modified to cover the organ analogy as well:

"If the human body corresponds to a colored glass ... then the living personality corresponds to the colored light that is the result of the glass.... Now while light in general will continue to exist without the colored glass ... the specific red or blue or yellow rays that the glass produces ... will certainly not persist if the glass [is] destroyed" (p. 104).

Yet Carter does not say a word in reply. And what about the simple point Paul Churchland raises in the introduction to his 1984 *Matter and Consciousness*:

"If there really is a distinct entity [an immaterial soul] in which reasoning, emotion, and consciousness take place, and if that entity is dependent on the brain for nothing more than sensory experiences as input and volitional executions as output [the transmissive hypothesis], then one would expect reason, emotion, and consciousness to be relatively invulnerable to direct control or pathology by
manipulation or damage to the brain. But in fact the exact opposite is true. Alcohol, narcotics, or senile degeneration of nerve tissue will impair, cripple, or even destroy one's capacity for rational thought.... And the vulnerability of consciousness to anesthetics, to caffeine, and to something as simple as a sharp blow to the head, shows its very close dependence on neural activity in the brain. All of this makes perfect sense if reason, emotion, and consciousness are activities of the brain itself. But it makes very little sense if they are activities of something else entirely" (p. 20).

Carter goes on to say that all that the mind-brain dependence evidence shows is concomitant variation, not that mental activity is produced by the brain. But, as Hume has argued, if the issue is one of probability, this is precisely what concomitant variation implies: "The weakness of the body and that of the mind in infancy are exactly proportioned; their vigour in manhood, their sympathetic disorder in sickness, their common gradual decay in old age. The step further seems unavoidable; their common dissolution in death." Indeed, John Stuart Mill even recommended the "method of concomitant variation" as one of the most reliable ways to reason from effect to cause, that is, to infer the most probable common cause of a number of effects.

Let's look at Hume's example. As brain complexity increases, mental abilities also increase (in Hume's example, when you chart brain growth from infancy to adulthood; but also when differences in the intelligence of species with brains of varying complexity are compared). At the same time, as brain complexity decreases--in the progressive stages of Alzheimer's disease (Hume's "gradual decay"), say, or by progressively destroying more and more of the brain--mental acuity also decreases.

Mill's method of concomitant variation recommends that we look for a prior condition that correspondingly varies with all events of certain type in order to identify that condition as a potential cause of events of that type. In this case, the question becomes: What always varies with the varying mental capacities of (say) different organisms? The answer: The complexity of their brains. As brain complexity goes up, mental abilities increase. As brain complexity goes down, mental abilities decrease. Brain complexity, then, causes mental ability. In short, the brain causes (or "produces") the mind. If the William James' transmissive
hypothesis were correct, and the brain essentially only acted as a "transceiver" for consciousness, there is no reason to think that ever increasing mental complexity would require, in step, ever increasing brain complexity. A chimpanzee or a human being can type on a typewriter, but the greater complexity of what the human being types doesn't require any increase in the complexity of their "instrument"--the typewriter. But increasing mental acuity does appear, without exception, to require increasing brain complexity. That observation is precisely the opposite of what one would predict if substance dualism were true, and exactly what we would expect if consciousness was a property of the brain.

Despite the clarity of this point, Carter concludes: "[T]he dependence of consciousness on the brain for the manner of its manifestation in the material world does not imply that consciousness depends upon the brain for its existence" [emphasis mine].

It seems to me that there is an intentional ambiguity here: what does Carter mean by 'the manifestation of consciousness'? The most natural interpretation of 'consciousness manifesting itself in the physical world' is the behavior of conscious beings. But, as Corliss Lamont argued: "A severe injury to the head ... may change an ordinarily cheerful man into a sullen and morose one subject to sudden fits of homicidal mania. If the brain and body are simply the instruments of the soul, we have to say in such a case that this personality is really still brimming over with joy and benevolence, but that unfortunately these sentiments can only express ['manifest'] themselves in dark glances, in peevish complaints and in violent attacks" (p. 100).

Evidently, then, 'the manifestation of consciousness' cannot refer to behavior, because it is demonstrable that manipulating the brain does not merely modify behavior, leaving the mind itself intact, but modifies mental functioning itself. LSD affects how you think, not merely how you behave. So what can Carter possibly mean by 'the manifestation of consciousness'?

Posted by debater at 11:12 PM

Labels: atheism, demography, theism

5 comments:

Leo MacDonald said...
There are numerous well documented cases of people having near death experiences / out of body experiences, even during a flat EEG where brain and heart activity have ceased, returning with factual information which they had no prior knowledge of, and numerous cases in which the experiencers returned to life with information unavailable to them at the time of death. These include being able to accurately tell the doctors what they were doing while they were clinically dead, what clothes they wore, and what procedures and instruments they used, including accurate blow by blow accounts of their own resuscitation from a bird's eye point of view, all of which is later verified to be true. Often times they also describe what was happening out in the hallway, who was sitting in the waiting room, and conversations being said at these same locations, all while they were clinically dead elsewhere, all of which is likewise later verified to be true. There are many cases of NDErs being able to accurately perceive objects, people, and situations, and hear conversations said there, far away from their body while clinically dead that are indeed later verified to be true.

There are also accounts of experiencers meeting deceased relatives during an NDE that the person did not yet know was dead, such as a relative or a friend, and finding out that they were in fact deceased after the fact, and learning information from them that they could not have otherwise known. There are many accounts of children NDErs learning about relatives and siblings who had died before their own birth that they never met or were never told about, etc. People who have been blind since birth being able to accurately perceive visual surroundings during their experience. Being informed of knowledge far beyond their personal capacity. Etc.

The most convincing aspect of these, is that many of them were recounted, recorded, and documented IMMEDIATELY or VERY SOON after the patient regained consciousness to the doctors, nurses, staff, and family members, not long after the fact.

Interestingly, there have in fact been successful Experiments in actually testing Veridical NDEs...
* Many doctors, nurses, medical staff, paramedics, and family members have been interviewed by NDE Researchers to obtain cross-referanced verifiable information between the stories of the patients concerning their Veridical NDEs and the cross-referanced experiences of the medical staff involved with them.

* Dr. Michael Sabom did a study on over 57 cardiac patients who had clinically died and were brought back, 32 of whom had experienced Veridical OBEs and had described in great detail their own resusitations during cardiac arrest, and 25 of whom had not experienced an OBE during their cardiac arrest. He had two groups, the experiencers who saw in their OBEs and the non-experiencers who did not, describe their resusitations. To his suprise, 80% of the non-experiencers misdescribed the procedures. On the other hand, all of the experiencers did not make a single mistake.

* Dr. Pim Van Lommel did a more indepth study with 344 cardiac patients independently of Dr. Michael Sabom with similar results.

* Dr. Kenneth Ring did a study on Veridical NDEs of 31 persons who were born blind and found that they could veridically "see" events while their OBE unfolded the same way sighted people's do. His book is called "Mind Sight".

There is also evidence from The scole experiments a 5 year investigation, also the pye records done under strict scientific controls that captured 200 voices from the otherside that were replicated.

9:45 AM

Leo MacDonald said...

Materialism clearly explains such evidence better in demonstrable ways.

But materialism can't explain psi phenomena. If these phenomena are genuine, materialism is in trouble. (Which is, I think, why materialists belittle or ignore the evidence for psi.)
Corliss Lamont directly rebutted the prism analogy

No analogy is perfect, but I prefer the TV analogy. Turn off the TV and the signal continues. The particular pattern of light and sound, as decoded by the receiver, is gone, but all the information that comprises the pattern is still in existence in the signal itself.

And the vulnerability of consciousness to anesthetics, to caffeine, and to something as simple as a sharp blow to the head, shows its very close dependence on neural activity in the brain.

Damaging the circuitry of a TV set will impair its ability to display an image, but the TV signal is unaffected.

As brain complexity increases, mental abilities also increase

Why? Because the brain can decode the signal with greater efficacy. To vary the analogy, a powerful radio can pick up more signals than a weak radio. Or to return to TV, a cable-ready TV can pick up more channels than one that is not cable-ready.

Brain complexity, then, causes mental ability.

Correlation is not causality. Brain complexity is directly proportional to mental ability, but is this complexity necessary to produce consciousness or to receive and decode consciousness?

If the brain and body are simply the instruments of the soul, we have to say in such a case that this personality is really still brimming over with joy and benevolence, but that unfortunately these sentiments can only express ["manifest"] themselves in dark glances, in peevish complaints and in violent attacks.

In this case, the signal is undamaged, but when it is received by the brain and decoded, the reception/decoding is distorted or incomplete. In our
earthly lives, our thoughts are mediated by our brains, so brain damage will affect our thoughts. But this does not tell us the ultimate source of consciousness. Remember, a damaged TV may display a blurry picture and produce garbled sound, even though the signal is as clear as ever. Bad TV reception does not equal a bad TV signal.

> what can Carter possibly mean by 'the manifestation of consciousness'?

He means the pictures and sound on the TV set, rather than the TV signal.

Of course, if psi phenomena are not genuine, then the "production theory" of consciousness must be preferred. But if psi phenomena are genuine, then the "transmission theory" fits the facts much more neatly. So it comes down to an evaluation of the empirical evidence. Keith Augustine apparently assesses the evidence as weak or nonexistent; I would assess it as strong and, in some cases, dispositive. Time will tell ...

**1:44 PM**

**Leo MacDonald** said...

Please read Titus Rivas if your up for the challenge
http://www.emergentmind.org/rivas-vandongen.htm

**6:56 AM**

**Ian Wardell** said...

I have just read both Chris Carter's article and Keith Augustine's response. Carter's article very closely parallels my own thoughts on this subject.

It will take some time to respond to Augustine's comments, but just to say a couple of things here.

I certainly think that "the production theory is the best way to describe the facts of neuroscience". That is to say if we look at the data of neuroscience the production hypothesis most economically explains all the facts. (although as an aside there are many philosophical reasons and much empirical data in the form of anomalous experiences which favour the transmission hypothesis. But I won't address them here. I could
perhaps address those in another post if I can be bothered).

However, contrary to Augustine, it seems to me that the transmission hypothesis also explains all the facts, although this hypothesis is more complex. (as an aside even if Augustine agreed with this he could point out that multiple hypotheses can always be dreamt up to explain any given phenomenon. What should guide the selection of our hypothesis is to choose the hypothesis which most straightforwardly explains the data i.e employ Occam's razor. But I might address this point in another post if I can be bothered).

So let's look at the reasons he advances for his assertion that the transmission hypothesis does not explain all the facts.

[quote]
Augustine

In The Illusion of Immortality, Corliss Lamont directly rebutted the prism analogy, which could easily be modified to cover the organ analogy as well:

"If the human body corresponds to a colored glass ... then the living personality corresponds to the colored light that is the result of the glass.... Now while light in general will continue to exist without the colored glass ... the specific red or blue or yellow rays that the glass produces ... will certainly not persist if the glass [is] destroyed" (p. 104).

Yet Carter does not say a word in reply.
[/quote]

But it does not seem to me to create any difficulties for the transmission hypothesis at all. If there is indeed a "life after death" then what sort of personality would we expect to have in the afterlife realm? A personality such as we tended to have when we were 7 years old? Or as a young adult? Or as an old man/woman? Or as typified when we are drunk? Or suffering from Alzheimer's?
Surely none of them. Indeed what Corliss and Augustine are doing is conflating ones personality with ones self.

But this is the very issue that those who subscribe to the survival hypothesis tend to reject. They believe that we are (substantial) selves and that these selves survive the death of our bodies. Now if we are precisely the same self as when we were 7, or an adult, or drunk etc, then we cannot possibly equate to our personalities since our personalities are in a constant state of change.

Or to put it in more stark terms. If my personality is to be equated with me then planning to go out for the night, get drunk and have a good time would be a complete waste of time since if my personality changes when drunk, then it would not literally be me experiencing these things.

Our intelligence, our interests, our moods etc change throughout our lives. Thus if we are literally the same selves throughout our lives then it follows that we cannot be equated with our personalities (coloured light through the prism). In fact personality traits, whether I am in a good mood, bad mood etc, are properties of the self rather than constituting the self.

Thus if I am the recipient of some good news and am transformed into a good mood as a consequence, I have not ceased to exist to be literally replaced by another person suddenly spontaneously springing into being. No, rather it seems to me that I am the very same self but experiencing different moods!

So I can have different moods, differing interests, a different intelligence, and even a total cessation of consciousness as in deep sleep but yet remain the very same self. This is in complete accordance with our commonsense notion of ourselves.

What Corliss and Augustine are doing is simply begging the question.
Those who subscribe to a materialist based metaphysic must, it seems to me, equate the "self" with ones personality. This does indeed create difficulty for the survival hypothesis, but the basic tenets of the materialist metaphysic rules out the notion of a disembodied self in any case! (indeed I would argue any (substantial) self, embodied or disembodied is inconsistent with the hypothesis that mental states are wholly dependent and simply follow brain states).

So in short they are implicitly assuming the materialist notion of a self to claim difficulties for the transmission hypothesis. As those who subscribe to survival would reject such a materialist conception of the self their argument amounts to nothing at all.

Of course Augustine might well have objections to such a notion of a self. I would be happy to address such objections if he mentions them anywhere. But the point is that this point about the coloured light no longer existing without the prism is simply question begging.

[quote]
Augustine

And what about the simple point Paul Churchland raises in the introduction to his 1984 Matter and Consciousness:

"If there really is a distinct entity [an immaterial soul] in which reasoning, emotion, and consciousness take place, and if that entity is dependent on the brain for nothing more than sensory experiences as input and volitional executions as output [the transmissive hypothesis],

[/quote]

Hold on there, hold on there! Who on earth is saying the transmission hypothesis is saying this? OK both Churchland and Augustine are, but who else? If the transmission hypothesis does state this then I do not subscribe to it. But from what I understand it certainly doesn't. Churchland and Augustine are attacking a strawman.
There clearly is much more of an intimate relationship between the brain and the self than this and I defy these guys to point to anyone advocating the transmission hypothesis who thinks different!

So given that their premise is clearly false then this particular argument cannot have any merit.

[quote]
Augustine

If the William James' transmissive hypothesis were correct, and the brain essentially only acted as a "transceiver" for consciousness, there is no reason to think that ever increasing mental complexity would require, in step, ever increasing brain complexity. A chimpanzee or a human being can type on a typewriter, but the greater complexity of what the human being types doesn't require any increase in the complexity of their "instrument"--the typewriter. But increasing mental acuity does appear, without exception, to require increasing brain complexity. That observation is precisely the opposite of what one would predict if substance dualism were true, and exactly what we would expect if consciousness was a property of the brain.

[/quote]

This typewriter analogy is incorrect as the state of the brain does have a profound impact on one's emotions, intelligence etc.

I'm sure that Augustine acknowledges this but that this is the precise problem and makes the transmission hypothesis difficult to hold. In other words he's saying it [i]ought to[/i] to be a correct analogy even though it isn't. He wants it to be a correct analogy because then the transmission hypothesis would be inconsistent with the fact that our intelligence is correlated with brain complexity. Why in fact shouldn't we be equally intelligent with a very simple brain?
But the problem here is it's a false analogy. But then Augustine will want to ask why it's a false analogy. Why in other words does the brain have such an all invasive influence on mental states if not producing those mental states.

Now I have clarified his position, and understand the problem he has, we can see this whole question is also tied up with the question of why we need brains at all if the brain only modifies consciousness or minds.

The first thing to recognise here is that processes within the brain are akin to any information processing system. As with any such information processing system there are architectural constraints and, whilst the self is "filtered" by the brain (as the transmission hypothesis holds), these serve to limit the self so we only have access to those perceptions that follow the familiar and regular patterns that we associate with the physical world. This then allows us to function proficiently whilst we subsist in this empirical reality.

Now if the self is so "filtered", then clearly the complexity of the brain will have ramifications for the degree to which the self is limited. More complex brains allow further pathways for consciousness to follow and hence might allow more sophisticated thinking to take place.

But when the self operates in detachment from the brain, when it is temporarily or permanently disembodied, then its processing is released from the constraining influence of the laws governing the processes within the brain. It will then have access to all other perceptions apart from our everyday perceptions. Those other perceptions will be driven by some other "engine", and the person may seem to be passing through other worlds. This would be broadly consistent with the anecdotal experiences of some out-of-body experiences, especially near-death experiences - and indeed with reportedly channeled descriptions from the dead, as well as with traditional accounts such as those found in the "Tibetan Book of the Dead."
OK, there's lots more to say about Augustine's response but don't have time at the moment.

8:32 AM

Omar Cruz said...

Head Shop, Herbal Grinders, Bongs, Glass Pipe. Visit us for more info at: http://www.headshopinternational.com/

11:13 AM

The transmission theory of the mind/body relationship

Interesting Ian wrote:. Transmission theory holds that rather than the brain producing consciousness that consciousness operates through the brain. Here is a article which very closely parallels my own thoughts on this subject. ...

Posted by Interesting Ian at 7:10 AM

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Why Do Personal Development?

A natural trait of humans is to be constantly developing, growing and moving toward a balanced and mature way of being. Our present personality is determined by both who and what we have been and by the person we strive to become. The goal of personal development is to learn and apply that which enables us to attain emotional wellbeing, understanding and effectiveness, and to share this knowledge with others.

Personal development is the conscious evolution of human nature, and yet throughout history it has been sorely lacking! Although it is in our nature to learn and grow, we are held back by our culture, which is predominantly focused on survival needs, each of us in competition with others, and our spiritual inner nature is repressed. The animal rules. We make no room for unconditional love.

Even though the culture may have evolved with technological advancement and administrative complexity, human nature has not moved forward as it might. Our consciousness and mindfulness remain as always. We are now paying the price for Mankind's selfishness and inconsideration. Going forward, the quality of our lives on this planet - even our survival - now depends on each of us taking responsibility for our personal growth.

The human being needs to awaken to the soul that inhabits each body and is our true self and source of inner knowing. Awaken through a process of self-discovery, leading to one's own, self-directed spirituality. We need to become mindfully conscious instead of ruled by the dictates of instincts, past habits and fixed beliefs. We need to throw away dogma, open our minds and reconsider. Instead of fear about our survival and competitive angst, we will then be motivated by compassionate understanding and creative love.

For those that do move forward, the next epoch - that is almost upon us as we move into 2012 - will be a celebration of human cooperation and shared love. It's our best hope for the future - and it's in our hands.