Searle's Chinese Room shows a lack of 'understanding'!

John Searle, Mills Professor of Philosophy at Berkeley, quite rightly feels that Dennett denigrates consciousness. In contrast he thinks that consciousness is very special:

...the funny thing is not, why is consciousness important, but, how can anything else be important?....what's special about consciousness is that as far as human life is concerned it's pretty much the precondition of everything important.

But he does not go overboard with enthusiasm:

When I say that consciousness is all-important, I don't want to even hint at idealism that suggests that all of reality is just forms of consciousness - I don't believe that for a moment, Consciousness is an amazing product of certain kinds of human and animal brains, but it's very local, very special. ii

As he repudiates idealism with such vigor it is clear that Searle is a materialist, so from his point of view this amazing phenomenon that perceives, experiences, thinks and so on is somehow exuded by the material stuff of brains. As he says in his book *The Rediscoverey of Mind*: 'brains cause minds.' So according to Searle minds are products of matter which is organized in special ways:

I think you have to take seriously the idea that consciousness, as created by the brain, is a unified conscious field and that what we think of as perception doesn't so much create conscious states as modify the pre-existing conscious field.ⁱⁱⁱ

But, whereas Dennett thinks that there is no extra 'mystery stuff' that is added into the equation by the phenomenon of consciousness, Searle suggests that in some way a new dimension of reality comes into effect with the generation of the field of consciousness. This can be best understood as a qualitative dimension of directly experienced understanding or meaning. How this new quality of reality can emerge from a foundational aspect of reality which is supposed to have no trace of such a quality Searle does not venture to say.

Searle's viewpoint is enshrined in his 'intuition pump' of the Chinese Room:

Imagine a native English speaker who knows no Chinese locked in a room full of boxes of Chinese symbols (a data base) together with a book of instructions for manipulating the sym-bols (the program). Imagine that people outside the room send in other Chinese symbols which, unknown to the person in the room, are questions in Chinese (the input). And imagine that by following the instructions in the program the man in the room is able to pass out Chinese symbols which are correct answers to the questions (the output). The program enables the person in the room to pass the Turing Test for understanding Chinese but he does not understand a word of Chinese.

The fact that Searle employs the 'Turing Test' for his test for understanding is appropriate because this 'test', suggested by the genius mathematician Alan Turing in the 1950's, really supplies a means for determining whether a computer which is programmed to imitate human understanding can produce an *appearance* of understanding. Turing wrote:

I believe that in about fifty years' time it will be possible to programme computers, with a storage capacity of about 10^9 , to make them play the imitation game so well that an average interrogator will not have more than 70 percent chance of making the right identification after five minutes of questioning. ... I believe that at the end of the century the use of words and general educated opinion will have altered so much that one will be able to speak of machines thinking without expecting to be contradicted.

Searle goes on to say, "The point of the argument is this: if the man in the room does not understand Chinese on the basis of implementing the appropriate program for understanding Chinese then neither does any other digital computer solely on that basis because no computer, qua computer, has anything the man does not have." So, whereas Turing seemed to be happy to refer to a digital imitation of

'thinking' as actually being thinking, Searle thinks differently. The man in the Chinese Room might give an appearance of 'understanding' but the actual experience of understanding is absent.

Searle employed his Chinese room thought experiment against the 'Strong Artificial Intelligence' assertion that the mechanistic digital shuffling of electronic 'symbols' could produce the same kind of consciously experienced understandings and meanings which occur within human beings. The Chinese Room 'intuition pump' indicates that there must be something 'extra' beyond purely mechanistic neuronal shufflings to comprehend the phenomena of understanding and consciousness.

Searle seems to think that this extra qualitative ingredient is magically generated by the brain, a view which is close to Johnjoe McFadden's 'Electromagnetic Field Theory of Consciousness'. According to McFadden:

...the brain generates an electromagnetic (em) field that influences brain function through em field-sensitive voltage-gated ion channels in neuronal membranes. Information in neurons is therefore pooled, integrated and reflected back into neurons through the brain's em field and its influence on neuron firing patterns. vi

Searle is convinced that the issue of the nature of consciousness is 'a scientific and not a philosophical question.' But, bafflingly given the hugely significant indications within experimental physics of the entanglement of consciousness at the quantum level, Searle only mentions neurobiological research as being relevant. When Blackmore presses him as to the relevance of quantum theory Searle resorts to the same kind of unsupported and unargued for answer proffered by Dennett with regard to quantum physics:

Maybe we're going to need some quantum mechanical explanation, but I'm suspicious because most of the quantum mechanical accounts of consciousness are obviously not going anywhere: they substitute two mysteries for one. Consciousness is a mystery; how're you going to solve it? Oh well, here's another mystery, quantum mechanics. So now we've got two mysteries, but I don't see that we've got a solution to either. VII

Such a view, however, almost seems, as the hero of *The Shawshank Redemption* says to his jailer, 'obtuse'. Both Searle and Dennett present their evaluation of the situation as if there were two disconnected 'mysteries' which in no way illuminate each other. But, as we have seen just two pages previously, this is not the case, for as Rosenblum and Kuttner have shown, although consciousness and the 'quantum enigma' might be two 'mysteries', current evidence powerfully indicates that consciousness is a significant feature of the quantum realm and:

...physics' encounter with consciousness, demonstrated for the small, applies to everything. And that 'everything' can include the entire Universe. viii

In other words the entanglement of consciousness within the quantum realm clearly gives us a clue as to the interconnection of the fundamental quantum realm and the qualitative nature of consciousness.

Quantum physicist Nick Herbert elucidates the relationship between consciousness and the quantum realm as follows:

...every quantum system has both an 'inside' and an 'outside', and that consciousness both in humans as well as in other sentient beings is identical to the inner experience of some quantum system. A quantum system's outside behavior is described by quantum theory, it's inside experience is the subject matter of a new 'inner physics'....^{ix}

At the quantum level there is a multitude of potentialities for manifestation and these potentialities are often conceived of a being alternative 'possible worlds'. According to Michael B. Mensky, leading researcher at the Russian Academy of Science, 'consciousness is nothing else than the separation of the alternatives' which are contained within the quantum potentiality realm, or, in other words, individuated consciousness is the qualitative 'feel' of the functioning of the 'stuff' of quantum reality as it emerges towards manifestation. Mensky, in contrast to Searle, thinks that when the two 'mysteries' of consciousness and the quantum realm are put together as the current experimental evidence suggests the mystery disappears:

...two unclear concepts, one from quantum mechanics and the other from psychology, are identified and thus 'explain each other'.xi

This viewpoint maps easily on to quantum physicist Max Tegmark's conclusion that:

I believe that consciousness is the way information feels being processed. Since matter can be arranged to process information in numerous ways of varying complexity, this implies a rich variety of levels and types of consciousness. xii

It is unfortunate that Tegmark, with philosophical laxity, employs the term 'matter' to indicate the quantum arrangements of embodied sense faculties, but the overall perspective presented by Tegmark indicates that individuated structures of embodied consciousnesses emerge from a deeper realm of quantum information processes, a view which clearly means that the 'stuff' of quantum reality must be some form of non-individuated consciousness. And this perspective also suggests that brains are intermediate level material constructions, constructed from the deeper level of quantum informational awareness-consciousness precisely in order to individuate consciousness. This process takes place through a sequence of what the physicist David Bohm called 'implicate orders' (see later section on Bohm) which emerge from the fundamental ground quantum 'implicate' source and thereby manifest the 'explicate' dualistic world of experience (fig 2.1). As the founding father of quantum physics Erwin Schrödinger said:

Mind has erected the objective outside world ... out of its own stuff. xiii

And it also seems that the fundamental quantum 'Mindnature' creates individuated consciousness by organizing its own 'stuff' into the apparently material 'stuff' of the brain.

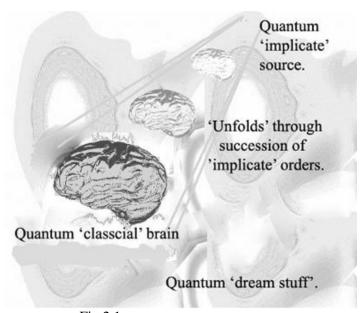


Fig 2.1

Searle, however, like Dawkins and Dennett, wants to cut off the descent of levels in search of the origin of consciousness somewhere above the quantum, but he is actually hopelessly unclear:

What we now know suggests that you'd better take the neuron and the synapse seriously. Maybe it'll turn out that we're wasting our time on all these dumb neurons, and you've got to get inside there to the microtubules, down much lower than the pathetic neuron and the synaptic cleft; or maybe you've got to look at much bigger things than neurons, you have to look at whole clouds of millions of neurons operating in chaotic dynamics. XiV

Searle seems to think that the suggestion that the origin of individuated consciousness requires a more fundamental level of quantum awareness means that we treat neurons and synapses with distain. But the assertion that the *ultimate* source of individuated consciousness is a deeper level of non-individuated consciousness does not mean that neurons and synaptic clefts are not taken 'seriously'. They are part of a complex system of quantum-'implicate' potentialities becoming classically 'explicate' levels of manifestation, a process which accounts for the manifestation from the quantum realm into the dualistic realms of individuated consciousness and apparent materiality. But they are not the *ultimate* source of the phenomenon of consciousness; they are quantum materialized structures which have a part to play in individuating a deeper level of awareness into the dualistic world. In a similar way, as we shall see later, genes are not the *ultimate* informational units of evolution, contrary to the view that Dawkins doggedly and dogmatically proclaims, they are gateways through which the quantum informational realm materializes.

It is shocking how often one comes upon the view that any theory of the process of reality which does not ground itself in some way upon a material substratum must be some form of 'magical thinking.' Susan Blackmore, for instance, is worried by the nature of Searle's proposed 'preexisting conscious field' and asks:

But isn't this field worryingly close to magic, like a sort of psychic field ... or extra force or...?^{xv}

And this gets Searle worried that he might be thought to be moving towards mysticism:

I don't mean there's something mysterious about this field; I don't think there is a sort of field of spiritual forces - like magnetism but more touchy-feely, or maybe less touchy-feely. That's not it at all. xvi

But, leaving aside the somewhat vague issue of touchy-feely-ness of putative conscious fields (wouldn't one expect a field of consciousness to have an experiential nature?), Searle clearly does conceive of this field of consciousness as being analogous to a magnetic field. But, whereas we might think of a magnetic field being produced in some way by a magnetized bar of magnetic metal, the image in Searle's mind is clearly that of a field of consciousness being generated in some way by configurations and pulsings of neurons, or maybe sub-neuronal structures of the brain.

However, the field of magnetism surrounding a bar magnet is not *ultimately* produced by the bar magnet itself. It is a result of the nature of the fundamental quantum fields which make up the bar magnet. So, analogously, one would expect the same to apply to any field of consciousness. In the same way it may appear that Searle's field of consciousness is generated by the neurons and synapses of the brain, but, if there were to be such a field, it would *ultimately* have its origin at the quantum level. Given the fact that we know that consciousness is in some way entangled at the quantum level such a view seems completely natural.

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ⁱ Blackmore, Susan (2005), pp 198-199

ii Blackmore, Susan (2005), p199

iii Blackmore, Susan (2005), p201

iv Searle (1992)

^v Turing, A. (1950), "Computing Machinery and Intelligence," Mind, 59 (236): 433-60.

vi The Conscious Electromagnetic Information (Cemi) Field Theory The Hard Problem Made Easy?

vn ibid

viii Rosenblum, Bruce and Kuttner, Fred (2006) p201

^{ix} Herbert, Nick: 'Holistic Physics -or- Introduction to Quantum Tantra' – Internet document (www.southerncrossreview.org/16/herbert.essay.htm)

^x Mensky, Michael: 'Reality in quantum mechanics, Extended Everett Concept, and Consciousness' p6

xi Mensky, Michael: 'Reality in quantum mechanics, Extended Everett Concept, and Consciousness' p6

xii Piet Hut, Mark Alford, and Max Tegmark (2009): 'On Math, Matter and Mind' (Foundations of Physics) p6

xiii Schrödinger, E. (1944).

xiv Blackmore, Susan (2005) xv Blackmore, Susan (2005), p203 xvi ibid