"WHAT IS THE DIFFERENCE BETWEEN A DUCK?"

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Yes, the title seems odd, but it is not a mistake; this chapter is about defective questions. This is a broader and potentially heavier topic than my official assignment to comment on the papers of Dr. Baars and Dr. Flanagan, which itself was a big enough challenge. But I have kept it light; in the symposium on which this volume is based, my talk was scheduled after two very full days of scholarly and empirical rigor, and the audience needed a break. By way of introduction I told a joke. But I am not frivolous; it is a philosophical joke.

The CIGAR JOKE:

> Two monks from different orders were old friends. They shared a great fondness for cigars, and once each year when they had a chance to visit they would pray together and light up. But they became concerned that there might be some sin in their habit, and they resolved to each write to the Pope for guidance.
>
> When they met again one was puffing away. "But the Pope told me it was a sin," protested the other.
>
> "What did you ask him?" said the first.
>
> "I asked if it was all right to smoke during our evening prayer and he said no."
>
> "Well," said his friend, "I asked if it was all right to pray during our evening smoke, and he said it was fine!"
>
> MORAL: The answer you get depends on the question you ask.

This symposium was originally called "Scientific Approaches to the Question of Consciousness". Notice that the title pointed to "THE question of consciousness." But there are many, many questions of consciousness! Much of what appears as conflict and confusion in the previous chapters and in the wide published literature is due to people addressing different questions. The forewarning of this source of troubles was right there in our title. The problem of finding the right questions is ubiquitous in science, and it is not just a problem for theoreticians. In empirical studies, quite often the method chosen implicitly determines the broader question. For example, our choice as to whether to record evoked potentials, or to measure reaction times, or to ask subjects to describe their experiences, will limit the class of answers we can possibly get. My comments on the symposium as a whole and on the Baars and Flanagan papers are particularly concerned with the questions addressed, implicitly and explicitly.

Commentary on Talks by Baars and Flanagan:

"Consciousness Creates Access": Baars, Fehling, LaPolla, and McGovern, (this volume).

Dr. Baars is to be admired for undertaking to construct a full-range cognitive theory of consciousness, including awareness, will, and self. He did not just nibble timidly around the edges. He is habitually courageous; besides his major book *A Cognitive Theory of Consciousness*, published in 1988 when this topic was still not at all politically correct, he has also written the *History of the Cognitive Revolution* (1986), and has founded an important new journal *Consciousness & Cognition*.

His presentation here focused on how his cognitive theory of con-sciousness could be applied to the analysis of control of action. He argues that the success of this application provides pragmatic support for the wider theory, which is understandably a bit sketchy at this stage because it covers so much territory. His chapter is very much abbreviated from his book *Experimental Slips and Human Error: Exploring the Architecture of Human Volition* (1992), which is based on laboratory studies of slips of the tongue and other action errors.

Dr. Baars cites a great deal of empirical data on slips, in keeping with the prior presentations and usual tastes of this audience. However, I do not want to address whether or not he provides enough details and connecting links to enable others to see his broader vision. Rather, I want to emphasize his frame of reference. Although he contrasts his model with other cognitive architectures such as *ACT** and *SOAR* which he says "de-emphasize consciousness and its sister issues", Baars' model is not concerned with the qualitative experiential aspects of consciousness. Instead, he stresses the functional role of consciousness; *it is the way it is because that is necessary for what it does*. He embraces the usual academic cognitive psychologists' functional approach: performance and mechanism, what does it do and how does it do it? There is very little phenomenology, such as "What does it feel like to you when you do this?"

However, Baars did comment in his oral presentation that he felt it was important that the Dark Age of Behaviorism was over and that we (academic psychologists) were now studying Consciousness because if we think of other people as having a rich inner life, as sensitive beings with points of view of their own, then we will tend to grant them more status, and having more respect for each other will be good for all the ills of this world. I agree, (see also Sperry 1993), but I would also point out that in the Dark Age it was only academic psychology that forgot consciousness; other disciplines like psychiatry and literature never stopped paying attention to it and to the rich inner (and hidden) life.

Flanagan: "Prospects For A Unified Theory of Consciousness, or What Dreams Are Made Of", (this volume).

Dr. Flanagan is a distinguished philosopher of Mind. In addition to his well-known *The Science of Mind* (1991b) and Consciousness Reconsidered (1992), he has also written *Varieties of Moral Personality* (1991a), a book on moral and ethical issues (an area that never once appeared in the symposium, though not explicitly forbidden by the symposium's organizers as they forbid discussion of metaphysical dualism. It did not have to be forbidden, it was so far from anyone's mind!)

As proper for the philosopher in residence, he did not offer a theory of consciousness himself but examined premises, methods, and frames of reference. That is, he brought out the usually invisible factors that determine what questions we ask. Flanagan pointed out that different properties or aspects of consciousness are picked out by the narrow frame of reference of each of the subdisciplines concerned. He concluded that a scientific and unified theory of consciousness is possible, but that what it will look like depends on who you let contribute to it. For a complete theory he suggests that the cognitive functional analysts, the neurobiologists, and those interested in phenomenology (subjective experience) should all be invited. In addition to cognitive psychology and neuroscience, he says, "give phenomenology its due. Listen carefully to what individuals have to say about how things seem." But at this meeting there has been enormous resistance to talking about subjective experience, even though we are supposed to have

outgrown the Behaviorists' restriction to external observation and their edict forbidding introspection.

Recall the joke about how impossible "subjectivism" was in the Behaviorist era: two behaviorists making love... afterwards, one says to the other, "That was great for you; how was it for me?" Well, first-person experience is politically correct now; what is the reason that we still are not talking about it?

One reason is intellectual; we are lacking some fundamental cognitive tools for the task. We have not yet developed a taxonomy for the varieties of subjective experience or even a consensus on the constructs or terminology with which to characterize its richness (Galin 1992a,b, 1994; Shallice 1988). I am speculating that sometimes there may be a second reason, perhaps more emotional than intellectual. I suggest this because the topic seems to provoke both extreme skittishness and extreme fascination. Research on subjective experience is like sex; everybody is terribly interested in it but does not want to be caught in public doing it. Could it be that this area of research contains something so personal, so intimate, that we have trouble looking at it directly? Let's peek.

Why is Consciousness such a fascinating topic?

To help us decide what we ought to be most interested in, I propose that we first notice what we ARE most interested in. I will put my answer to this question in the form of three hypotheses which seem to be empirically testable:

Hypothesis 1. Most people are fascinated with consciousness because they are really interested in first-person experience, and only secondarily interested in the information processing aspect or the neurobiology of it.

Hypothesis 2. Most people are interested in their own first-person exper-ience, not just first-person experience in general.

Test whether this is so for you. Imagine that you can get a treatment that will augment your perception and memory and problem-solving by 1000%. Imagine also that you will be able to achieve your goals 1000% more effective-ly. The only catch is that you would no longer be conscious. Would you want the treatment? (Some people claim this is the deal offered by higher education).

Hypothesis 3. We do not value all of our experiences equally. There is a particular experience that people care about. It is the experience of *wholeness*. We are fascinated by consciousness and its first-person experience aspect because we are seeking this particular experience.

Although wholeness is difficult to define, most people seem to recognize something in the term. It seems to be a core concept in many areas that are sources of value in our lives: aesthetics, love, science, and religion. In brief, science seeks the unifying theory; love involves a shift in some sort of bound-ary between people and the emergence of a new unity; aesthetic value is commonly described with terms such as dynamic unity, harmony, or integration ("it all works together"); and descriptions of the most universal religious experience, independent of doctrine, always involve a compelling sense of unity, oneness, wholeness.

Entertain for a few moments the possibility that there is something of surpassing importance about wholeness, and that it is our nature to seek the experience of it.

The Dachshund Joke:

A little boy asks his father, "Daddy, how does the telegraph work?"

Dad thinks a bit and says, "Well, imagine that we had a giant dachshund with his tail in Pittsburgh and his head in New York. If you pinched his tail in Pittsburgh the head would bark in New York. Its sort of like that".

Little boy says, "Thank you Daddy, I think I understand. But tell me, how does the wireless telegraph work?"

Dad thinks again and says, "That's the same thing, but without the dog!"

This joke is only superficially about the dangers of being seduced by analogies. It is only superficially about vacuous, hand-waving explanations that we get (or give) when our overstretched model breaks down. The power behind this joke is that it pushes us up against the very deep questions of what is an explanation and what makes an explanation satisfying.

This is an extensive issue in philosophy. I looked into it a bit because I did not understand why I found all the explanations of consciousness so unsatisfying. Wimsatt's analysis "Ontological and explanatory primacy" (Wimsatt 1976, pp.242-251) was the most helpful to me. I offer you my provis-ional formulation:

> An explanation is an account of the variance of the phenom-enon of interest. It is satisfying if it is expressed in the terms of a frame of reference in which *you* are comfortable, and if it accounts for enough of the variance for *your* purposes.

It is important to note here that for an explanation to be satisfying it need not be true, or be the only account, or account for all of the variance. I have not been satisfied with our explanations of consciousness (adequate though they may be for some purposes), because my purposes concern the experience of wholeness, and our accounts so far are responsive to other questions. They are not directed toward the experience of love, beauty, spirit, or knowing, as such.[1]

It has been pointed out by Bogen (1976) that if a problem which has engaged the best minds has not been resolved after several hundred years, then it probably is not going to be resolved within the terms in which it has been formulated. In other words, we may need to change the frame of reference. In this instance I believe the first change needed is to enlarge the frame, recognizing that there are MANY questions about consciousness (recall this symposium's original title and the moral of the cigar joke.

The second step is to order the questions in priority of interest. Are the questions addressed so far at this symposium the most interesting ones? To help us decide what we OUGHT to be most interested in, I proposed that we first notice what we ARE most interested in. If we want deeply satisfying explanations, then let us choose to ask the questions that are aligned with our deepest purposes.

FOOTNOTE

1. A notable exception is Mangan (1991), who brings contemporary cognitive psychology to bear on aesthetics and mystical experience.

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