The Husserlian Phenomenology of Consciousness and Cognitive Science: We Can See the Path But Nobody Is On It

This response chooses the sole topic for its concern as the central question "how can Husserl's approach to consciousness be used to inform cognitive science?" This paper is a response to the papers on phenomenology, in particular the one by Varela. The response makes brief comments on Husserl's phenomenology and the breadth of cognitive science is alluded to as well as its wide spectrum of phenomena. The authors are agreed that there could be a Husserlian cognitive science, but it would take some compromises from both traditions. In general we find that there is some good neuroscience in Varela's approach but he mixes the contradictory perspectives of natural science and Husserl's phenomenology without explaining or mentioning the major problems which could be entailed by this.

The authors of this response believe the three papers on phenomenology are not helpful in establishing new empirical methods, nor do they adequately meet the large number of theoretical and empirical questions that the papers raise (Depraz 1999, Naudin et al 1999, Varela 1999). Where the phenomenological authors are lacking is that they present condensed presentations of phenomenology which omit the basic overview which is required to critique and develop cognitive science. Therefore none of the three contributions communicate sufficiently well to inform or attract cognitive scientists to Husserl's work and so miss the opportunity to explain a source of potential help. In order to mend this deficit, a succinct definition of Husserlian pure psychology for cognitive science is required. Please allow the following remarks to set the scene before we try to indicate how to bridge the gap between the ideals of philosophy and the necessary forms of empiricism within cognitive science.

There is a great deal that could be written in trying to define a working version

of Husserlian pure psychology, as Husserl intended it to be practised, nevermind critiquing or developing its assumptions and method (Husserl 1977, 1980, 1981, Owen in press). Furthermore, given sufficient space it would be possible to argue for and against Husserl's position. But it is not possible to make any informed discussion of this large subject here. It is only possible to refer the reader to some writers who have kept true to the original emphases (Bernet, Kern & Marbach 1993, Marbach 1993, 1996, Ströker 1993). There are many writers who have argued for cognitive science to turn to Husserl's themes in order to improve cognitive research (Chalmers 1996, Natsoulas 1983).

Husserlian phenomenology asserts that the criteria for the philosophical acceptability or empirically-derived theorizing about consciousness needs to attend to fundamental theorising for the scientific community first of all. It is argued that the concepts that a scientific community requires for its empirical work should arise out of the distinctions within the experiences of consciousness in its social dimension, intersubjectivity, as well as the experience theorists have of their own consciousness and the consciousness of others. These experiences are considered as elements of human consciousness in general. Husserlian pure psychology is a pre-empirical conceptual grounding for the scientific community by seeing the universal essences of the many distinctions, conditions for phenomena to exist, interrelations and sources in one's own consciousness. The aim is not to base conceptual distinctions in assumptions or inappropriate metaphors that cannot deliver an accurate understanding of consciousness. Pure psychology should not project an inappropriate conceptualisation onto consciousness, before it begins its theorizing, or follow through with inappropriate empirical methods.

On the other hand, cognitive science is a set of empirical practices already. Generally, what is acceptable to it are those practices which have to make an assumption, state it in such a manner that it can be investigated and to test such hypotheses in a variety of ways. It employs measurement of chemical and electrical neurological events. It employs mathematical modelling of various types. Only in the light of its own findings might it alter its theory, conclusions or methods. For instance, the standard procedure for constructing deontic reasoning tests of the rationality of consciousness it is assumed that rationality can be investigated through card tests in

which a question can be posed and the participants in the experiment are free to give one of eight answers in allegedly controlled conditions. Thus what is the norm for the various areas of cognitive science is not the norm for phenomenology. Initially the two traditions are far apart.

Having sketched out pure psychology and cognitive science we now turn to the specific problems of Varela's paper.

The main problem with Varela's contribution is that he omits sufficient details which frame the problem of consciousness incorrectly in a pure Husserlian approach. It could be argued from Husserl's transcendental or his pure psychological phenomenological position that there could be no such thing as a neuro-phenomenology. The order of events that Husserl requested should be in place. These are namely to attend to consciousness as consciousness, without first trying to model it in some way. For Husserl's pure psychology this would achieve a community of psychologists who have had direct personal experiences which informed their theorizing. The main aim of the theorizing is to think in a manner free of the constraints of the immediate assumptions of Scientism. Husserl's radical critique of natural science was against explanations which jump between the secondary natural sciences of biology, psychology or neurology. Varela does not state this nor make any comments that show how or why he has been able to progress from the Husserlian aim of attending to *consciousness as consciousness* with an attention to meaning (in a wide sense of "meaning").

The central and most valuable contribution of Husserl to science is to encourage scientists to think in orderly yet creative ways before empirical work, to enable better theorising and for new methods to be created and shared. Varela does not state this and moves from a mention of the necker cube to Husserl's formal and abstract analyses in *On the Phenomenology of the Consciousness of Internal Time* (Husserl 1966, 1991). Therefore there is a deeply problematic jumping between foundations right at the beginning of the paper. This is unacceptable to Husserl, for no shared system of pure psychology is current among neuroscientists nevermind among psychologists. Also the mention of an internal clock in consciousness is not Husserlian. This is particularly incorrect when Husserl clearly rejected the use of inappropriate metaphors, natural science and empirical measuring devices in the *Time* book (Husserl 1966, p. 4, p. 9, p.

339, p. 348, Husserl 1991, p. 4, p. 9, p. 350, p. 359). Following Husserl, it is much easier to argue that neurology or neuroscience can tell us nothing of first priority about how to create phenomenology, Husserl's own project of creating a perfect science of consciousness that obeyed philosophical rigour for an experiential grounding. All other aims are of lesser importance. In fact, natural psychological science often does not turn itself to the task of theorizing and experimenting in ways that have the sole purpose of modelling qualia and meaning as these occur for people in their families and communities.

But we claim that between the positions of the ideal of a philosophy that grounds its concepts in experience - and a set of empirical practices that grounds its concepts in empirical falsificationism, lies the ultimate ground to be covered during the next century for cognitive science. The key question is "what would a Husserlian-based cognitive science be like?" In order to be true to its Husserlian side, a hybrid phenomenological science of consciousness would need to have initial conceptualisations that mirror the invariant aspects of the processes of consciousness itself. To date there is no such agreement within the many sub-disciplines that comprise cognitive science. Because cognitive science has gone on ahead and produced within its schools many natural scientifically-grounded distinctions a great deal of these stances would have to be altered to make them more Husserlian. A truly-Husserlian empirical phenomenology would be like gestalt psychology. In social science ethnomethodology is probably the closest and most fruitful off-spring of Husserl (Garfinkel 1984). In cognitive science, Dennet's "multiple drafts" metaphor is quite like what Husserl would have termed an interplay between the now, the "primordial impression" and "retentional consciousness," short and long term involuntary memory (Dennet 1991, Husserl 1966, p 331, Husserl 1991, p. 343). The empirical documentation of various forms of amnesia, aphasia and neurological variance and injury are all material that a Husserlian approach to theorizing would have to take empirical events and relations to physical entities into account.

In closing, a position that might be a crossover between phenomenology and cognitive science is one that would value a broad view of the key phenomena to be investigated. There are many experiences which are difficult to be made fully conscious or to describe or to empathise with. Consciousness is hard to capture and hence the great

difficulty of a science of consciousness. But after successful empiricism, Husserlian psychology could change its original stance in the light of theoretical or practical findings agreed by the community of colleagues, and yet maintain its ideals of being true to the phenomena as they are experienced. In a longer paper it would be possible to argue for and against the multiple stances that together comprise what is known as cognitive science. But overall phenomenology is judged to be the way out of the impasse in theorizing and empiricism and the non-collegiate pluralism in cognitive science. Hence, we can see the path but nobody is on it.

## References

Bernet, R. Kern, I. & Marbach, E. (1993) An introduction to Husserlian phenomenology. Evanston: Northwestern University Press.

Chalmers, D.J. (1996) The conscious mind: In search of a fundamental theory. Oxford: Oxford University Press.

Dennet, D.C. (1991) Consciousness explained. Harmondsworth: Penguin.

Garfinkel, H. (1984) Studies in ethnomethodology. Cambridge: Polity.

Husserl, E. (1966) Zur phänomenologie der inneren zeitbewusstseins. Haag: Nijhoff.

Husserl, E. (1977) Cartesian meditations. (D. Cairns, Trans). Dordrecht: Kluwer.

Husserl, E. (1980) Phenomenology and the foundations of the sciences. (T.E. Klein & W.E. Pohl, Trans). Dordrecht: Kluwer.

Husserl, E. (1981) Philosophy as rigorous science. In P. McCormack & F.A. Elliston (Eds & Trans) Husserl: Shorter Works. (pp. 166-197). Notre Dame: University of Notre Dame Press.

Husserl, E. (1991) On the phenomenology of the consciousness of internal time (1893-1917). (J.B. Brough, Trans). Dordrecht: Kluwer.

Marbach, E. (1993) Mental representation and consciousness: Towards a phenomenological theory of representational reference. Norwell: Kluwer.

Marbach, E. (1996) Understanding the representational mind: A phenomenological perspective. Human Studies, 19, 137-152.

Natsoulas, T. (1983) Concepts of consciousness. Journal of Mind and Behavior, 4, 13-

Owen, I.R. (1998) Using the experience of gender to explain the difference between Husserlian and Heideggerian phenomenology. Phenomenological Inquiry.

Ströker, E. (1993) Husserl's transcendental phenomenology. (L. Hardy, Trans). Stanford: Stanford University Press.