

## MIND, MACHINES AND PARANORMAL PHENOMENA A rejoinder to Beloff's radical dualist perspective (JCS, 1-1)

Dick J. Bierman, Universities of Amsterdam and Utrecht

In the very first issue of the JCS, dualist John Beloff discusses the problem of how interactions may occur between the supposedly different realms of mind and matter. As a candidate for a process of control of the first over the latter, he proposes the paranormal phenomenon of psychokinesis (Beloff, 1994). In his own words:

*... results [of meta-analyses of parapsychological experiments] show that .... the over-all significance of [psi] phenomena is astronomical .... The relevance of parapsychology to the problem at issue [i.e. dualism vs. epiphenomenalism] should now become apparent ....if it is the case that mind can influence intentionally the behavior of an object other than its own brain it would be futile to doubt that a mind can interact with its own brain ....*

Indeed the meta-analyses covering many years of research give very strong support to the reality of psi phenomena (Utts, 1991). Historical analysis has shown however, that the results of some of the stronger paradigms are subject to a decline effect after an initial successful period of 10 to 20 years.

But even if the reality of the phenomena stand up against time, a proper use of the available data, as opposed to Beloff's selective use of it, would at least complicate the naive interactionist picture and in fact argue **against** the dualist perspective.

For the fact is, that Beloff avoids to discuss two sets of data, both of which suggest that temporal cause-effect sequences may break down in parapsychological research. In the first place, a meta-analysis of so-called precognition experiments, in which the subjects guess the card-order in a pack which still has to be randomised, is discussed in the very same article (Utts, 1991) that Beloff refers to in defence of his dualist position. Although the results of this meta-analysis on precognition are stronger than those of the meta-analysis on psychokinesis, Beloff chooses to neglect precognition.

The second set of data concerns so-called 'psychokinesis on pre-recorded targets'. Here the task of the subject is to 'influence' random events that have already been registered BEFORE the direction of subject's intention was (randomly) determined. A review of 26 published articles (Bierman, 1996; see also Schmidt & Stapp, 1994) yielded results of a magnitude comparable to the results of the direct (i.e. 'real time') 'mind over matter' experiments (Radin & Nelson, 1989), results that Beloff considered to be astronomical. Again one gets the impression that Beloff prefers not to mention these extremely contra-intuitive results.

The reason for this omission seems obvious. Beloff's dualist position, as is clear from the quote above, is framed in terms of cause-effect sequences. In his view, a mental state causes and therefore is primal to a brain state in the case of a volitional act, a causal process that, according to Beloff, is effectuated by psychokinesis. This traditional causal schema is difficult to reconcile with the data on a-temporal correlations discussed above, data that complicate considerably Beloff's dualist's perspective on anomalies.

Of course there remains the possibility of explaining seemingly a-temporal psi phenomena in terms of some form of temporal 'super psi', however Beloff himself has argued against such complex explanations.

In general, the central role of 'time reversal' or 'time independence' in most relevant theoretical approaches to psi phenomena (see e.g. Stokes, 1977) seems not coincidental but rather supports the idea that these phenomena, if real, do require a level of understanding that transcends Newtonian materialistic as well as certain dualistic perspectives, inherent to which is the a priori of sequential causality. Such perspectives start from the assumption that psi phenomena are mediated by some classical form of signal and can therefore be modelled in cause-effect sequences.

To really accommodate the concepts of time reversal and time independence, it might be preferable to interpret parapsychological data as an expression of 'correlations without a cause', much like the (EPR) non-local correlations in physics. There are theoretical grounds for the assumption that these latter correlations do not allow for an explanation in terms of signals travelling from one part of the system to another.

In line with this idea, Von Lucadou (1994) has explicitly proposed that

*....psi correlations are an emergent property of macroscopic self-referential systems which are phenomenologically equivalent to non-local correlations in Quantum Physics.....*

Such a view, in which Quantum Physics and a Theory of Mind are supposed to arise out of an underlying unified theoretical framework, would be in agreement with non-reductionistic identity theories rather than dualistic theories on the relation between mind and matter. Also such a view would be in line with the assumption of Pauli & Jung that 'matter and psyche are two aspects of one reality' (Atmanspacher, 1996).

## References

- Atmanspacher, H. & Primas, H. (1996), The Hidden Side of Wolfgang Pauli, An Eminent Physicist's Extraordinary Encounter with Depth Psychology, *JCS* 3-2, pp.112-126.
- Beloff, J. (1994), Mind and Machines: A Radical Dualist Perspective. *JCS*, 1-1, pp. 32-37.
- Bierman, D.J. (1996), Do Psi Phenomena suggest Radical Dualism? *Proceedings of the TUCSON II Conference*, In Press.
- Utts, J. (1991), Replication and Meta-analysis in Parapsychology, *Statistical Science*, 6, pp. 396-403.
- Lucadou, W.v. (1994). Wigner's friend revitalised? In: H. Atmanspacher & G. Dalenoort (Eds.) *Inside versus Outside*, Springer: New York. pp. 369-388.)
- Radin, D.I. & Nelson, R.D. (1989). Evidence for consciousness related anomalies in random physical systems. *Foundations of Physics*, 19, pp. 1499-1514.
- Schmidt, H. & Stapp, H. (1993), PK with Pre-recorded Random Events and the Effects of Preobservation. *Journal of Parapsychology*, 57-4, pp.331-350.
- Stokes, D. (1977), Theoretical Parapsychology, In: Stanley Krippner (Ed.) *Advances in Parapsychological Research* 5, Mc Farland & Comp., London, 1977. pp.77-285.

