LANGUAGE AND PSYCHIATRY: "An argument for indeterminism"

Saad F. Ghalib

"Schizophrenia" is written and spoken about as if the language used simply reflected a reality already discovered or about to be discovered. Such a representational view of language has been strongly questioned in a range of theoretical ideas whose common assumption is that what we think of as reality or truth is not discovered or reported but is constructed, primarily through the strategic use of language" (Boyle 2002).

INTRODUCTION

It is not a revelation, that practising psychiatry or psychotherapy and pursuing psychological research, rely heavily on phenomenology, which may be descriptive (Jasper, Husserl), or dynamic (Freudian), and influences that which may have on several diagnostic categories. The question of how our use of terms correlates with whatever it is trying to describe, requires serious consideration. The aim of this editorial is to sketch some significant developments in psychological, biological, physical and philosophical studies, with specific reference to the role of language in these evolving scientific endeavours.

EARLIER PERSPECTIVES

As early as 1921, Wittgenstein (1889 – 1951) proposed two major ideas that revolutionised philosophical thinking. The first was the principle of verification (that statements are meaningful, only when they can be verified by experiment), which has since been adopted as the manifesto of logical positivism, and the basis of new scientific thinking. His second central thesis was to deny that logical or linguistic concepts represent reality. Furthermore, he suggested that the apparent harmony between language and reality is merely the shadow cast upon the world by grammar. In his major work "The Concept of Mind" (1949), Gilbert Ryle (1900-1976), suggested that the Cartesians (followers of Descartes) have been misled, in picturing the mind as a "ghostly" counterpart of the brain; simply due to our way of expression, when handling "one category as if it belonged to another" (Category Error).

It is undeniable that logical positivism (sentences are meaningful if they can be assessed either by an appeal to sense data or by an appeal to the meaning of the wards and the grammatical structure that constitute them) has lived up to expectations in ridding scientific methodology of metaphysical arbitrance. It also brought a range of new issues under the spotlight, which were previously unrecognised. First, the verification condition for a given Empirical statement presupposes a massive background of default auxiliary assumptions (Duhem, 1954), i.e. all experiments will presume the truth of some theories to help judge that the set-up is adequate and the instruments are reading what they are meant to read. But these presupposed theories need not be identical to the theory under test. Second, the long held dichotomy between Priori statements (true by virtue of meaning), and

Contingent statements (true by empirical evidence) is no longer tenable, and that neither is shown to be immune to revision at some point in time (Quine, 1961). Furthermore, single terms in scientific theories are meaningful only on their place in the theory.

DOES REDUCTIONISM HELP?

Although a reductionist approach (describing a phenomenon in relation to its constituent parts) has been traditional in biology, there has been some reluctance to apply reductionism to the study of human behaviour. However, it was precisely the assumption that elementary forms of learning are common to humans and simple animals, that consequently led to the discovery of the cellular and molecular basis of memory and learning (Kandel, 2000).

On the other hand, the common misconception, even in textbooks of genetics is to speak of genes determining traits of the whole organism, as if identifying a gene will mean the trait of the organism is known. If one examines the more general relation between gene, environment and organism, it is apparent that the situation is more complex. First, there is no unique phenotype corresponding to a genotype; the phenotype depends on both genotype and environment. Second, the form and direction of the environment's effect upon development differs from genotype to genotype. Third, and reciprocally, there is no unique ordering of genotype such that one can always be characterized as "superior" or "inferior" to another. (Levins and Lewontin, 1985).

Even with reductionist sciences like physics, the view held is "that physics is not about how nature is. Physics concerns what we can say about nature" (Bohr, in Peterson, 1963). This view recently echoed by Hawking (New Scientist, 2003), where he suggested that our deepest theories rely on our language of logics, which is self-referential, and cannot be complete and consistent at the same time. In simple terms, there is an eternally unbridgeable gap between what is true within a given logical framework or system and what we can actually prove by logical means using that same system. Obviously, this may open the way to confusion and paradoxes, as causality within the system cannot be determined.

PSYCHOANALYSIS BEING ANALYSED

Wittgenstein makes serious criticism of determinism in psychodynamic theories. When Freud says, "he could not believe that an idea produced by the patient could be an arbitrary one and unrelated to the idea we were in search of". He is apparently making a category error by mixing two different statements: "Everything has a meaning" (can be interpreted) is not "Everything has a cause" (Bouveresse, J 1995). The person who agrees with us about the way things had to happen "suddenly sees the cause". This, however, neither constitutes causality, nor can be empirically tested.

There is also the unjustifiable assumption that if meaning can be given to some mental events, it must be possible to assign meaning to all such events, even if it hasn't yet been found. The latter might explain the common characterization of Freudian theories as pseudoscientific.

Curiously, one may well reasonably argue (due to lack of clear causality) that both patient and therapist, having reached different explanation of the same behaviour, are entirely justified, within the context of their own paradigm of thinking.

LANGUAGE ACQUISITION AND PERCEPTION

An influential framework of language acquisition, where knowledge of language is mentally represented as "grammar" (a finite system of rules) and the fundamental properties of these grammars are part of innate endowment was first proposed by Chomsky (1965). Chomsky's ideas provide some explanation for our tendency to formulate premature theories (including scientific ones) on weak and limited evidence. Furthermore, when one considers both the evidence of how young children use language, and of how they understand it, there is often a lack of accord between the two (Huttenlocker, 1974). Interestingly, the interpretation of terms (language) is significantly dependent on the context of occurrence (the situations that it is used in) (Macnamara, 1972).

Studies of models of colour vision, support a wealth of evidence that what people treat as the same or as different depends on what language they speak. Furthermore, in the perception of space, language categories significantly mould thought and behaviour in a striking way (Scientist American, April 2004).

One may conclude from the above that our emotions, perceptions and theorizing are constrained by the limits of our own language. It is worth noting that the Epistemological limitations imposed by our language is not fixed in time but rather continuously change as we endlessly renegotiate our notion of reality as our language and our life develops (Putnam, 1994). Others went further to suggest that assigning diagnostic labels to human behaviour may even be more dramatic because people classified in a certain way, change in response to being classified (Hacking, 1999). Hence, it may be fair to say that diagnostic labels do not register the value of some passive attribute but of an attribute that is determined in part by our own actions in the process of ascribing labels to these attributes.

IN CONCLUSION

Francis Crick's (1979) remark that "we are deceived at every level by our introspection" may well be more appropriately applied to our capacity to use language. This is especially relevant when language is employed in describing human behaviour, psychiatric diagnostic categories and neurophysiological studies. By virtue of its logical incompleteness, self referentiality and the context in which it is employed, language may lead to erroneous interpretations, would that be a therapeutic session, a psychiatric diagnosis, or even describing the microscopical functions of a nerve cell.

One is not suggesting how these issues could be remedied (that would require another editorial). However, it cannot even be overestimated that, although diagnostic categories assist our every day clinical work, a detailed analysis of the limitations and complexity of our language would facilitate understanding of our patients, and lead to fruitful scientific research.

CONFLICT OF INTERESTS

None declared

AUTHOR DETAILS

SAAD F. GHALIB, MRCPsych, Consultant Old Age Psychiatrist, South Essex Partnership Trust, United Kingdom

CORRESSPONDENCE: Dr S F Ghalib, Consultant Old Age Psychiatrist, Mental Health Unit, Basildon University Hospitals, Basildon SS16 5NL.

Email: Saad.Ghalib@southessex-trust.nhs.uk

REFERENCES

- Boyle, M (2002): Schizophrenia. A scientific delusion? 2nd Edition, Routledge
- Wittgenstein, L.J: Tractatus logico-philosophicus, trans. D.F. Years and B. McGuiness (Routledge and Kegan Paul, 1961)
- 3. Ryle, G. (1949). The Concept of Mind. London
- Duhem, P. (1954). The Aim and Structure of Physical Theory, New York, Doubleday
- 5. Quine, W.V.D. (1961). Word and Object, Cambridge, Mass., MIT press
- 6. Kandel, E. (2000) Nobel Lecture www.nobel.se/medicine/laureates/2000/kandel-autobio.html
- Levins, R. Lewontin, R. (1985). The Dialectical Biologist. Harvard University press p.90-93.
- Neils Bohr, quoted in A. Peterson, "The Philosophy of Neils Bohr" Bulletin of the atomic Scientist. Sept 1963, p.12
- 9. Stephen Hawkins, quoted in the "New Scientist" 5 April 2003, p.34 35.
- Bouveresse, J. (1995) "Wittgenstein Reads Freud, The myth of the Unconsious" Trans. Carol Cosman. (Princeton) p.88 – 96.
- 11. Chomsky, N. (1965). "Knowledge of Language: Its Nature, Origin and Use". New York.
- 12. Huttenlocker, J. (1974). "The Origin of Language Comprehension". In Solso, R.C. (Ed), Theories in Cognitive Psychology. Hillsdale, New Jersey.
- 13. Macnamara, J. (1972). Cognitive Basis of Language Learning in Infants. Psychological Review, 79, 1-13.
- 14. "Scientific American" April 2004, p.24 25.
- Putnam, H. (1994). "Sense, Nonsense and the Senses: An Inquiry into the Powers of the Human Mind". The Journal of Philosophy 91: 445 – 517.
- Hacking, I. (1999). "The Social Construction of What?" Harvard University Press. P.100 – 124.
- 17. Crick, F.H.C. (1979). Thinking about the Brain. Scientific American 241: