Epidemiology and Psychiatric Sciences (2016), **25**, 528–529.
doi:10.1017/S2045796016000457

COMMENTARY TO SPECIAL ARTICLE

Our endless search for a scientific paradigm is not over

Received 4 June 2016; Accepted 8 June 2016; First published online 7 July 2016

Key words: Social psychiatry, philosophy of science, biopsychosocial model.

Commentary on: A social paradigm in psychiatry: themes and perspectives, by Stefan Priebe. *Epidemiology and Psychiatric Sciences* (doi: 10.1017/S2045796016000147).

In the history of ideas the notion of 'paradigm' is linked to the work of Thomas Kuhn who in his famous The Structure of Scientific Revolutions (1970) analysed what differentiates mature from immature sciences. A mature science, according to Kuhn, experiences alternating phases of normal science and revolutions. In normal science the key theories, instruments, values and metaphysical assumptions that comprise the disciplinary matrix are kept fixed, permitting the cumulative generation of puzzle-solutions, whereas in a scientific revolution the disciplinary matrix undergoes revision, in order to permit the solution of the more serious anomalous puzzles that disturbed the preceding period of normal science.

A particularly important part of Kuhn's thesis focuses upon one specific component of the disciplinary matrix. This is the consensus on exemplary instances of scientific research, such as that reached in the history of science by Ptolemy, Newton or Maxwell. According to Kuhn, their paper and books are exemplars, i.e. the actualisation of paradigms as they: (1) integrate ideas from ontology, metaphysics, ethics, empirical research, epistemology, etc.; (2) are useful to solve conceptual and practical problems; and (3) reach wide consensus in the scientific community.

The claim that the consensus of a disciplinary matrix is primarily agreement on paradigms-as-exemplars is intended to explain the nature of normal science and the process of crisis, revolution and renewal of normal science. It also explains the birth of a mature science. Kuhn describes an immature science, in what he sometimes calls its 'pre-paradigm' period, as lacking consensus. Competing schools of thought possess differing procedures, theories, even metaphysical presuppositions. Consequently there is little opportunity for collective progress. Even localised progress by a particular school is made difficult, since much intellectual energy is put into arguing over the fundamentals with other schools instead of developing a research tradition.

Seen in this perspective, the paper by Stefan Priebe calls for a discussion on whether psychiatry is a mature science or if we are still in the phase of immaturity, when pre-paradigms compete, proposing mutually exclusive explanatory models and practical interventions. The issue is of particular interest because of the nature of psychiatry, which is both a scientific discipline and an institution, addressing and managing extremely sensitive aspects of the human being.

This double nature of psychiatry has made it historically more exposed to scientific weaknesses, with rare periods of 'normal science' in Kuhn's terms, and long periods of endless debates among different pre-paradigms (e.g.,: nature *v.* nurture, institutionalisation *v.* deinstitutionalisation, biology *v.* psychoanalysis, nosography *v.* dimensional approaches). This represented both the wealth and the poverty of our profession and probably we must acknowledge that psychiatry as a science is still epistemologically weak, a 'second rank' discipline in search of a real paradigm and that taken independently, biological and social psychiatry are even weaker. In this context we need to be particularly cautious with advocating for specific sub-paradigms and my opinion is that we are entitled to do so only if we cannot reach a higher level of synthesis and consensus.

As a clinical psychiatrist working in the community, daily in contact with individuals, groups, institutions and populations I am deeply convinced, as well as Priebe, that all interactions, also the clinical ones, are social in nature. Furthermore, all interactions imply a

Address for Correspondence: A. Fioritti, Department of Mental Health, Azienda USL Bologna, Bologna, BO, Italy.
(Email: a.fioritti@ausl.bologna.it)

power relationship, which needs to be considered from the social, political and ethical point of view. Diagnoses are mostly social constructs with varying degrees of scientific evidence in them, as they vary along time according to values, social attitudes and political changes. And we are all aware of how important is to help people with mental disorder to get integrated into society, to overcome isolation and to get their rights protected from discrimination. So we should all strongly support Priebe's views and ideas, endorsing the social paradigm and calling for its primacy in the scientific arena, where, on the contrary, others are usually prevalent.

Nevertheless, I am still reluctant at giving it up with searching for a higher and shared paradigm, one that should be at the same time convincing, useful and agreed upon by a large part of the scientific community. Psychiatry as practice may welcome theories from one or more sciences, which may be in their turn equipped with methodologies, in order to form one or more pre-paradigms (i.e. neurobiology, sociology, psychology, etc.). This is generally accepted in modern philosophy of science, with particular reference to psychiatry (Kendler, 2005, 2008; Murphy, 2010, 2011).

However, putting in competition neurobiological and social psychiatry seems to be a rather obsolete approach. The fact that, more money goes to biological research and that some neuroscientists advocate for a hierarchical prevalence of biology over sociology, does not justify any resurgence of opposite reductionisms. Almost 30 years after the cornerstone paper of Eisenberg (1986) against mindless and brainless psychiatry is there still room for a social paradigm as opposed to a biological one? Is the Bolton & Hill (2004) approach quoted by Priebe so well accepted to deserve a counterbalance by a solely social paradigm? Can this proposal of social paradigm be another prejudice exactly as it was the 'somatic prejudice' evoked by Jaspers (1913). History seems to have integrated into practice many different approaches, shaping our profession as a unique mixture of biological, psychological and social tools (Burns, 2013).

The biopsychosocial paradigm has been the main reference for most researchers and clinicians over the last 30 years. It was formulated for the first time by Engel (1962) and then become prevalent in the '70s and the 80s. It has produced cornerstone research as that on Expressed Emotions (Vaughn & Leff, 1985) and the integrated model of addictions (Donovan, 1988; Wallace, 1990), which have linked beautifully social, psychological and biological aspects of the human being. Of course, the model has its limitations, but it is necessary to analyse pros and cons of proposing narrower and more reductionist models.

Actually, the more science learns about the biology of mental and cognitive functions, the more it refers to the social dimension and to social sciences. So examining separately social factors, behaviors, treatments and constructs may be as inappropriate as to examining only their neurobiological aspects.

We must be very grateful to Stefan Priebe for proposing this agenda for social psychiatry for the next decade, and we need to get momentum from his strive for the social dimension of our discipline to continue our two-century search for becoming science.

A. Fioritti
Department of Mental Health, Azienda USL Bologna, Bologna, BO, Italy.

References

Bolton D, Hill G (2004). *Mind, Meaning and Mental Disorder: The Nature of Causal Explanation in Psychology and Psychiatry*. Oxford University Press: Oxford.

Burns T (2013). *Our Necessary Shadow: The nature and meaning of Psychiatry*. Penguin Books: London.

Donovan DM (1988). Assessment of addictive behaviours: implications for an emerging biopsychosocial model. In *Assessment of Addictive Behaviours* (ed. DM Donovan and A Marlatt), pp. 3–27. Guilford Press: New York.

Eisenberg L (1986). Mindlessness and brainlessness in psychiatry. *British Journal of Psychiatry* **148**, 497–508.

Engel GL (1962). *Psychological Development in Health and Disease*. Saunders: Philadelphia.

Jaspers K (1913). *Allgemeine Psychopathologie, ein Leitfaden für Studierende, Ärzte und Psychologen*. Springer: Berlin.

Kendler K (2005). Toward a philosophical structure for psychiatry. *American Journal of Psychiatry* **162**, 433–440.

Kendler K (2008). Explanatory models for psychiatric illness. *American Journal of Psychiatry* **165**, 695–702.

Kuhn T (1970). *The Structure of Scientific Revolutions*, 2nd edn with post-script. University of Chicago Press: Chicago.

Murphy D (2010). Explanation in psychiatry. *Philosophy Compass* **5**, 602–610.

Murphy D (2011). Conceptual foundations of biological psychiatry. In *Philosophy of Medicine* (ed. F Gifford), pp. 425–451. Elsevier: London.

Vaughn C, Leff J (1985). *Expressed Emotion in Families: Its Significance for Mental Illness*. Guilford Press: New York.

Wallace J (1990). The new disease model for alcoholism. *Western Journal of Medicine* **152**, 502–505.

https://doi.org/10.1017/S2045796016000457 Published online by Cambridge University Press