Dialogues in Philosophy, Mental and Neuro Sciences

Dialogues

Why a logical-pragmatic perspective on validity in mental health is not sufficient: introduction to the principle of convergent trans-disciplinary cross-validity

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Introduction

The logical-pragmatic perspective on the psychiatric diagnosis, presented by Rodriguez and Banzato (2009) contributes to and develops the existing conventional taxonomic framework. The latter is regarded as grounded on the epistemological prerequisites proponed by Carl Gustav Hempel in the late 1960s, adopted by the DSM task force of R. Spitzer in 1973 (Aragona, 2009). So far Rodriguez and Banzato's proposal, though much more sophisticated and updated is restrained by the "framing" effect of the logical positivism and hence can not deliver novel conceptual vision for the development of psychiatric diagnosis and nomenclature. The logical-pragmatic approach is not sufficient because it does not take into consideration the complex inter-disciplinary and trans-disciplinary relationships of psychiatry with the other human sciences.

The critical point in this respect is that both psychiatry and clinical psychology claim at evidential "explanatory" component ***without*** neuroscience.

Argument

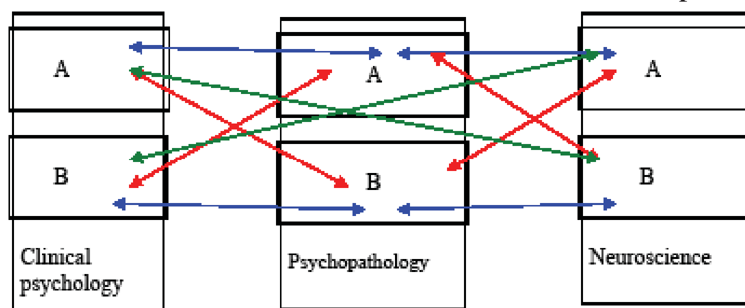
As it has been demonstrated elsewhere (Stoyanov, 2010):
(i) Psychiatry and clinical psychology can not drive their claims for evidence validity from narratives. Narratives represent the values, facts represent evidence. The facts of psychiatry are derivative from narratives; therefore they should not be regarded as evidence, but as fragmented de-contextualized narratives. Still, we need some source of **external validity** able to meet the "moral imperative" for turning clinical psychology and psychopathology into a "*robust science*" (Anonymous, 2009). This imperative comes from the normative functions of psychiatry in many critical areas of expertise, i.e. the demand to establish cross-culturally relevant norms in order to prevent abuse.
(ii) Psychiatry is not unitary science but an inter-discipline, and therefore it can not count sole on qualitative comprehensive values-based assessment though it should be aware and respect the values. The inter-disciplinary structure of psychiatry involves many facets from neuroscience which is regarded as one possible source of external validity. Neuroscience shares same notions and categories with psychopathology. However there are not introduced any relevant rules for "translation" of the data among these inter-connected domains of common interest.

According to my rationale measures (clinical and biological) are considered valid for different reasons. They are valid however inside their own divergent domains (disciplinary matrix). I propose their simultaneous cross-disciplinary convergence, which may provide synergistic explanation for the mechanism of production of the disorder and facilitate the inter-domain translation..

The figure in the next page represents the trans-disciplinary nomothetic network of clinical psychology, psychiatry and neuroscience. They are regarded as three interconnected disciplinary matrixes, stabilized with cross-validity "bridging" structures. Each box illustrates a provisional common used term (prototype), where "A" stands for paranoia and "B" – for depression. The blue arrows indicate the bridges of convergent inter- and trans-disciplinary validity; the red arrows indicate divergent (discrimina-

tive) inter-disciplinary validity and the green arrows - discriminative trans-disciplinary validity.

There is established problem-based inter-disciplinary dialogue between psychology and psychopathology on one hand, and between psychopathology and neuroscience on the other. Still the methodology of mental health knowledge misses the **trans-disciplinary dialogue**, which is supposed to unify the taxonomy, axiomatic constructs and to predispose the formulation of meta-language (Berrios, 2006).



The validity of the corresponding constructs in each of the disciplinary networks is one crucial aspect of this dialogue. It is **cross-validity** because we imply bi-directional cross-sectional validation, both convergent and divergent (discriminative) of the shared notions and terms.

Such proactive program is grounded on continuous convergence of clinical and neurobiological operations. It entails determination of stable broad prototype (Salloum and Mezzich, 2009) taxonomic units demarcated with neuro-biochemical indicators and predictors of the drug treatment response.

Conclusion

In terms of Schaffner this program is a quest for a type of "***reductive ethio-pathogenetic validity***", which may bridge the explanatory gap between humanities and neuroscience, to be complemented with the "clinical validity", which actually includes the person-centered comprehensive assessment (Fulford et al., 2006; Salloum and Mezzich, 2009).

Our goal is to provide stable fundamental explanations to taxonomy as the current ones are controversial and unstable. Without reliable and valid taxonomical apparatus and underlying explanatory connections psychiatry is governed by epistemic anarchy (Stoyanov, 2009) and Meehl's principle "*understanding it makes it normal*" (Gurova, 2010). We take also into consideration the argument of Broome and Bortolotti (2009) that biomarkers can not serve as sole diagnostic criteria. This is why we aim at epistemic *"frame shift"* of the current taxonomies towards "high umbrella" prototypes (Salloum and Mezzich, 2009), further extended with narratives**.** The strong evidence (matching the criteria of specificity, sensitivity, validity and reliability) can deliver the necessary, though not sufficient foundation for the establishment of bi-conditional law-like constructs between neuroscience and clinical psychiatry.

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