

Reappraisal

What's the point of neuropsychanalysis?

Franck Ramus

Summary

Neuropsychanalysis is a new school of thought attempting to bridge neuroscience and psychoanalysis. Yet few neuroscientists and psychiatrists would have heard of it if it had not recently received public support from notable

neuroscientists. The present paper discusses whether such support is warranted.

Declaration of interest

None.

According to Panksepp & Solms, 'Neuropsychanalysis seeks to understand the human mind, especially as it relates to first-person experience. It recognizes the essential role of neuroscience in such quests. However, unlike most branches of neuroscience, it positions mind and brain on an equal footing'.¹ In a landmark 1998 paper framed as a challenge to psychoanalysts, Kandel further stressed that psychoanalysis had an essential part to play in such a legitimate enterprise:

'As a result of advances in neural science in the last several years, both psychiatry and neural science are in a new and better position for a rapprochement, a rapprochement that would allow the insights of the psychoanalytic perspective to inform the search for a deeper understanding of the biological basis of behavior.'²

Fifteen years later, one can only be delighted to see that some psychoanalysts have taken up the challenge, embracing the scientific method and attempting to put Freudian hypotheses to rigorous test, as attested by a recent special issue of the *Psychoanalytic Review* in honour of Kandel.³ In the conclusion of this special issue, this rapprochement between psychoanalysis and neuroscience is called 'a natural alliance' by Damasio,⁴ and is further celebrated by LeDoux.⁵ As noted by LeDoux in an earlier book, 'Freud was right on the mark when he described consciousness as the tip of the mental iceberg'.⁶ Indeed, Freud's theory 'still stands as perhaps the most influential and coherent view of mental activity that we have'.⁷ Thus, the stage is set for Carhart-Harris & Friston (and many others) to explore 'the notion that Freudian constructs may have neurobiological substrates', by attempting 'to demonstrate consistencies between key Freudian ideas and recent perspectives on global brain function'.⁸ Of course, all the quoted authors are well aware that psychoanalysis has until now been on shaky ground, and show remarkable caution in their displays of support. They insist that its claims should be put to empirical test, and that indeed the time is ripe thanks to the progress of neuroscience, a position that appears entirely reasonable and harmless. Or is it?

First of all, it may be argued that the attribution of many enduring and important insights and concepts (such as unconscious processing) to Freud is largely erroneous. Although Carhart-Harris & Friston⁸ do an admirable job of synthesising a great deal of neuroscientific data and linking it with the 'free energy principle' framework, why attempt to systematically associate almost every neuroscientific concept or finding with a quote from Freud? Certainly, it is of historical and epistemological interest to trace modern ideas back to their precursors; Freud may have had genuine insights about the functioning of the mind. At least if it can be shown that these ideas really originated from Freud, rather than being borrowed shamelessly from predecessors without appropriate credit (e.g. the idea of unconscious processes from Janet⁹ and many others¹⁰). Carhart-Harris & Friston's main focus, the id and the ego, can be traced back to Plato's distinction

between passions and reason, via countless intermediaries. But these authors do not seem to seek any other source than Freud, a curious form of historical scholarship. Armed with exclusively Freudian literature and with a liberal use of analogy and metaphor, there is no doubt that 'consistencies' can be found. But what does this mean for modern neuroscience and psychiatry? Do empirical studies of the default-mode network, of the emotional brain or of psychiatric disorders benefit in any way from the free association of cognitive and neuroscientific concepts with psychoanalytical ones? Is the history of ideas well served in the process? Kandel's latest book⁷ reveals, if anything, that there is no other justification for constantly going back to Freud than nostalgia for the Viennese 1900s and admiration for an inspirational writer.

Second, psychoanalysis seems to provide no additional insight to already existing concepts in cognitive psychology and neuroscience. Just like Kandel,² Panksepp & Solms¹ convincingly argue that there is a need for a dedicated level of description for the mind, i.e. for thoughts, feelings, and all other mental states, distinct from biological levels of description. But in so doing, are they not just rediscovering psychology? The case for the importance of a cognitive level of description for any proper understanding of the mind/brain, and for its conceptual independence from the biological level has already been made long ago by Marr,¹¹ and has been couched in more modern terms by Morton & Frith^{12,13} with their causal modelling framework. It may be that some scientists in molecular and cellular neuroscience need to be reminded of the limitations of a purely reductionist biological approach, and of the essential contribution of cognitive science to the understanding of the brain. But psychoanalysis is the last thing they need. The science of the mind already exists, and that is psychology. For most contemporary psychologists, psychoanalysis is only one school of psychology: an outdated one, whose hypotheses were either trivial or untestable, or proved wrong. And the new science of the mind/brain (including subjective feelings, emotions and social relations) already exists: it is to be found at the thriving interface between psychology and neuroscience. Thus, all the ideas that Panksepp & Solms attribute to neuropsychanalysis are fine, but are already mainstream within cognitive, social, and affective psychology and neuroscience. So, what is the point of renaming these successful scientific endeavours 'neuropsychanalysis'? Is this not just an attempt to rehabilitate psychoanalysis by giving it a fashionable prefix and by attributing it the merits of other disciplines?

This is not merely a futile dispute about a word. Psychoanalysis is not just a harmless set of ideas that may be used as a source of inspiration and philosophical musings. In order to realise that, it may be useful to recall the situation of countries where it still

constitutes the core of psychology and psychiatry and leads both theoretical thinking and clinical practice. In France, for example, psychoanalytically trained child psychiatrists reject international classifications of mental disorders in favour of their own idiosyncratic one;¹⁴ delay the diagnosis of autism or substitute it with psychoanalytic diagnoses such as 'infantile psychosis'; delay or prevent any form of educational intervention; practice instead analytical forms of psychotherapy whose efficacy is not supported by any empirical evidence (including highly questionable ones such as packing¹⁵); put the blame on parents for the neurodevelopmental disorders of their children; and may even sue a filmmaker who dares to expose their ideas about autism.¹⁶ In a context of increasing challenges to their authority, French psychoanalysts relish any overt sign of interest for psychoanalysis from a world-renowned neuroscientist. Such declarations are then instrumentalised in the hope of delaying any evolution of French psychiatry and psychology for a few more years, forming new obstacles on the path to evidence-based psychiatry. Patients pay dearly for that.

I have no doubt that the respected neuroscientists mentioned above condemn all these abuses and show indefectible commitment to evidence-based psychology and psychiatry. But they should think twice before making any statement that may be interpreted as a rehabilitation of psychoanalysis (unless they have stunning new data to reveal, of course). They should be aware of all the consequences of unduly preserving the popularity of psychoanalysis. They should be aware that they will be unwittingly enrolled in the support of dismal diagnostic and therapeutic practices, at the expense of patients, albeit in distant places.

If psychoanalysis is to be rehabilitated, this will have to be on the basis of its own merits. It is not enough for empirical research to tackle the influence of early life experiences, the neural correlates of unconscious processing, or the decoding of dream content using neuroimaging, to support psychoanalysis as such, even if Freud happened to use the same words. What is needed is to show that (1) certain central psychoanalytical concepts (such as the Oedipus complex, psychosexual development stages or the symbolic meaning of dreams) can now be sufficiently precisely defined to make clear, testable predictions, that some of these predictions are indeed correct, and that they are not better explained by other, simpler theories; or that (2) psychoanalytical theories of the causes of certain mental disorders are correct and make more accurate predictions than alternative theories; or perhaps that (3) psychoanalytical therapies have proven some efficacy for certain disorders, for reasons specific to psychoanalytical concepts. But none of the authors cited here has provided any hint that this is the case. Merely finding inspiration

in Freud's writings and making vague analogies between psychoanalytical concepts and neuroscientific findings will not do.

Franck Ramus, PhD, Laboratoire de Sciences Cognitives et Psycholinguistique, Ecole Normale Supérieure, EHESS, CNRS, Paris, France. Email: franck.ramus@ens.fr

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