

The Scientific Standing of Psychoanalysis

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'Psychoanalysis still represents the most coherent and intellectually satisfying view of the mind' (Kandel, 1999)

Speaking in my capacity as the new Director of the Science Department of APsaA, my aim in this presentation is to propose what we psychoanalysts may consider to be the core scientific claims of our discipline today. This scientific stock-taking is necessary due to widespread misconceptions among the public, and disagreements among ourselves regarding specialist details, which obscure the bigger picture upon which we can all agree. Agreement on our core claims, which enjoy strong empirical support, enables us to defend them against the prejudice that psychoanalysis is not 'evidence-based'.

I want to address these questions: (A) How does the emotional mind work, in health and disease?; (B) On this basis, what does psychoanalytic treatment aim to achieve?; and (C) How effective is it?

My arguments will be: ad (A) Psychoanalysis rests upon three core claims about the emotional mind that were once considered controversial but which are now widely accepted in neighbouring disciplines; ad (B) The clinical methods that psychoanalysts use to relieve mental suffering flow directly from these core claims, and are consistent with current scientific understanding of how the brain changes; ad (C) It is therefore not surprising that psychoanalytic therapy achieves good outcomes - at least as good as, and in some important respects better than, other evidence-based treatments in psychiatry today.

I will now review these three arguments in turn:

1. Our three core claims about the mind are the following: (1) The human infant is not a blank slate; *like all other species, we are born with a set of innate needs*; (2) *The main task of mental development is to learn how to meet these needs in the world*, which implies that mental disorder arises from *failures* to achieve this task; (3) *Most of our ways of meeting our needs are executed unconsciously*, which requires us to bring them to consciousness once more in order to change them.

These core claims could also be described as foundational *premises*, but it is important to recognise that they are *scientific* premises, in that they are testable and falsifiable. As I proceed, you will see that I shall elaborate on these core claims, adding details, but I want to differentiate between the core claims (or premises) themselves and the details which elaborate them. The details are *empirical* contents. Whether *they* are ultimately upheld or not does not affect the core claims. So: the details may change over time, as they already have over the decades, but our three core claims are foundational. Everything we do in psychoanalysis is predicated upon these claims, in my view. If they are disproven, the core scientific presuppositions upon which psychoanalysis as we know it rests will have been rejected. But as things stand currently, in 2017, they are eminently defensible, strongly - indeed increasingly - supported by accumulating and converging lines of evidence in our and neighbouring fields.

I turn now to each of the three claims.

- *The human infant is not a blank slate; like all other species, we are born with a set of innate needs.* These needs ('demands upon the mind to perform work', as Freud (1915) called them – his "id") are felt and expressed as *emotions*. That is why emotion is so important in psychoanalysis. The basic (hard-wired) emotions release instinctual behaviours, which are innate *action plans* we perform in order to meet our needs (e.g., cry, search, freeze, flee, attack). Universal agreement about the number of innate needs in the human brain has not been achieved,^[1] but most mainstream taxonomies (e.g. Panksepp 1998) include the following:^[2]
- We need to engage with the world – since all our biological appetites (including bodily needs like hunger and thirst) can only be met there.^[3] This is a *foraging* or seeking or 'wanting' instinct. It is felt as interest, curiosity and the like. (It coincides roughly but not completely with Freud's concept of "libido".)
- We need to find sexual partners. This is felt as *lust*. This instinct is sexually dimorphic (on average) but male and female inclinations exist in both genders.
- We need to escape dangerous situations. This is *fear*.
- We need to destroy frustrating objects (things that get between us and satisfaction of our needs). This is *rage*.
- We need to attach to caregivers (those who look after us). Separation from attachment figures is felt not as fear but as *panic*, and loss of them is felt as (The whole of "attachment theory" relates to vicissitudes of this need.)
- We need to care for and *nurture* others, especially our offspring. This is the so-called 'maternal instinct', but it exists (to varying degrees) in both genders.
- We need to *play*. This is not as frivolous as it appears; play is the medium through which social hierarchies are formed ('pecking order') and in-group and out-group boundaries are maintained.
- *The main task of mental development is to learn how to meet our needs in the world.* We do not learn for its own sake; we do so in order to establish optimal *action plans to meet our needs* in a given environment. (This is what Freud called "ego" development.) This is necessary because even innate action programmes have to be reconciled with actual experiences. Evolution predicts how we should behave in, say, dangerous situations, but it cannot predict all possible dangers (e.g., electrical sockets); each individual has to learn *what to fear*. This typically happens during critical periods in early childhood, when we are not best equipped to deal with the fact that innate action plans often *conflict* with one another (e.g., attachment vs rage, curiosity vs fear). ^[4] We therefore need to learn *compromises*, and we must find *indirect* ways of meeting our needs. This often involves *substitute-formation* (e.g., kicking the cat). Humans also have a large capacity for satisfying their needs in *imaginary* and *symbolic* – It is crucial to recognise that *successful action programmes entail successful emotion regulation, and vice-versa*. This is because our needs are *felt as emotions*; thus successful avoidance of attack reduces fear, successful reunion after separation reduces panic, etc, whereas unsuccessful attempts at avoidance or reunion result in *persistence* of fear or panic, etc.
- *Most of our action plans* (i.e., ways of meeting our needs) *are executed unconsciously*. Consciousness ('working memory') is an extremely limited resource, so there is enormous pressure to automatize learnt solutions to life's problems (for review see Bargh & Chartrand 1999, who conclude that only 5% of our goal-directed actions are conscious). Innate action programmes are effected automatically from the outset, as are the programmes acquired in the first years of life, before the conscious ('declarative') memory systems mature. Multiple unconscious ('non-declarative') memory systems exist, such as

‘procedural’ and ‘emotional’ memory, which operate according to different rules. – *Not only successful action plans are automatized.* With this simple observation, you will see, we can do away with the unfortunate distinction between the ‘cognitive’ and ‘Freudian’ unconscious. Sometimes a child has to make the best of a bad job in order to focus on the problems which it *can*. Such illegitimately or prematurely automatized action programmes are called “the repressed”. In order for automatized programmes to be revised and updated, they need to be ‘reconsolidated’ (Nader et al 2000, Sara 2000, Tronson & Taylor 2007); that is, *they need to enter consciousness again*, in order for the long-term traces to become *labile* once more. This is difficult to achieve, not least because most procedural memories are ‘hard to learn and hard to forget’ and some emotional memories - which can be acquired through just a single exposure – appear to be indelible, but also because *the essential mechanism of repression entails resistance to reconsolidation of automatized solutions to our insoluble problems.* The theory of reconsolidation is very important for understanding the mechanism of psychoanalysis.

1. My second argument is that the clinical methods that psychoanalysts use to relieve mental suffering flow from the above claims, which are consistent with current understanding of how the brain changes:
 - Psychological patients suffer mainly from feelings. The essential difference between psychoanalytic and psychopharmacological methods of treatment is that we believe *feelings mean something*. Specifically, *feelings represent unsatisfied needs*. (Thus, a patient suffering from panic is afraid of losing something, a patient suffering from rage is frustrated by something, etc.) This truism applies regardless of aetiological factors; even if one person is constitutionally more fearful, say, than the next, their fear still means something. To be clear: *emotional disorders entail unsuccessful attempts to satisfy needs*.
 - The main purpose of psychological treatment, then, is to *help patients learn better (more effective) ways of meeting their needs*. This, in turn, leads to *better emotion regulation*. The psychopharmacological approach, by contrast, suppresses unwanted feelings. We do not believe that drugs which suppress feelings can *cure* emotional disorder; drugs are symptomatic (not causal) treatments. To cure an emotional disorder, the patient’s failure to meet their underlying need/s must be addressed, since this is what is *causing* their symptoms. However, symptom relief is sometimes necessary before patients become accessible to psychological treatment, since most forms of psychotherapy require collaborative work between patient and therapist (see below).
 - *Psychoanalytical* therapy differs from other forms of psychotherapy in that it *aims to reconsolidate deeply automatized action plans*. This is necessary for the reasons outlined above. Psychoanalytic technique^[5] therefore focuses on:
 - Identifying the *dominant emotions* (which are consciously felt but not necessarily recognized as belonging to the self, etc).
 - These emotions reveal the *meaning* of the symptom. That is, they lead the way to the (unsuccessful) *automatized programmes* that gave rise to the feelings.
 - The pathogenic action programmes *cannot be remembered directly* for the very reason that they are automatized (i.e. unconscious). Therefore, the analyst identifies them *indirectly*, by bringing to awareness the *repetitive patterns of behaviour* derived from them.
 - Reconsolidation is thus achieved through reactivation of long-term traces via their *derivatives* in the *present* situation (this is called “transference” interpretation).

- Such reconsolidation is nevertheless *difficult to achieve*, mainly due to the ways in which non-declarative memory systems work (they are ‘hard to learn, hard to forget’) but also because repression entails intense resistance to the reactivation of insoluble problems. For these reasons, psychoanalytic treatment takes time - i.e. numerous and frequent sessions – to facilitate “working through”.

(Mental healthcare funders need to learn how learning works!)

1. My third argument is that psychoanalytic therapy achieves good outcomes - at least as good as, and in some respects better than, other evidence-based treatments in psychiatry today:
 - *Psychotherapy in general is a highly effective form of treatment.* Meta-analyses of psychotherapy outcome studies typically reveal effect sizes of between 0.73 and 0.85. (An effect size of 1.0 means that the average treated patient is one standard deviation healthier than the average untreated patient.) An effect size of 0.8 is considered a large effect in psychiatric research, an effect size of 0.5 is considered moderate, and an effect size of 0.2 is considered small. To put the efficacy of psychotherapy into perspective, recent antidepressant medications achieve effect sizes of between 0.24 (tricyclics) and 0.31 (SSRIs).^[6] The changes brought about by psychotherapy, no less than drug therapy, are of course visualizable with brain imaging (see Beaugregard 2014).
 - *Psychoanalytic psychotherapy is equally effective* as other forms of psychotherapy (e.g. CBT) but there is evidence to suggest that *the effects last longer – and even increase – after the end of the treatment.* Shedler’s (2010) authoritative review of all randomized control trials to date reported effect sizes of between 0.78 and 1.46, even for diluted and truncated forms of psychoanalytic therapy.^[7] An especially methodologically rigorous meta-analysis (Abbass et al 2006) yielded an overall effect size of 0.97 for general symptom improvement with psychoanalytic therapy. The effect size increased to 1.51 when the patients were assessed at follow-up. A more recent meta-analysis by Abbass et al (2014) yielded an overall effect size of 0.71 and the finding of maintained and increased effects at follow-up was reconfirmed. This was for short-term psychoanalytic treatment. According to the meta-analysis of De Maat et al (2009), which was less methodologically rigorous than the Abbass studies, longer-term psychoanalytic psychotherapy yields an effect size of 0.78 at termination and 0.94 at follow-up, and psychoanalysis proper achieves a mean effect size of 0.87 and 1.18 at follow-up. This is the overall effect; the effect size that she found for symptom improvement (as opposed to personality change) at termination was 1.03 for long-term therapy, and for psychoanalysis it was 1.38. Leuzinger-Bohleber et al (in preparation) are about to report even bigger effect sizes, but I cannot cite her yet. The consistent trend toward larger effect sizes at follow-up (where the effects of other forms of psychotherapy, like CBT, tend to *decay*) suggests that psychoanalytic therapy sets in motion processes of change that continue even after therapy has ended (cf. “working through”).
 - The therapeutic techniques that predict best treatment outcomes, regardless of the form of psychotherapy, *make good sense in relation to the psychodynamic mechanisms outlined above.* These techniques are (Blagys & Hilsenroth 2000):
 - *unstructured*, open-ended dialogue between patient and therapist
 - identifying *recurring themes* in the patient’s experience
 - linking the patient’s *feelings* and perceptions to *past experiences*
 - drawing attention to *feelings* regarded by the patient as *unacceptable*

- pointing out ways in which the patient *avoids* them
- focusing on the *here-and-now therapy relationship*
- drawing connections between the *therapy relationship and other relationships*

It is highly instructive to note that these techniques lead to the best treatment outcomes, regardless of the ‘brand’ of therapy that the clinician espouses. In other words, these same techniques (or at least a subset of them; see Hayes et al 1996) predict optimal treatment outcomes in CBT too, even if the therapist believes they are doing something else.

- It is therefore perhaps not surprising that psychotherapists, irrespective of their stated theoretical orientation, tend to choose psychoanalytic psychotherapy for themselves! (Norcross 2005)

Conclusion: I am well aware that the core claims I have summarized here do not do justice to the full complexity and variety of views in psychoanalysis, both as a theory and a therapy. I am saying only that these are our *core* claims, which underpin all the details, including those upon which we are yet to reach agreement. If we can agree on just these few claims, we are much better placed to explain our point of view to neighbouring disciplines and to the public. I believe that these core claims are eminently defensible, in light of current scientific evidence, and that they make simple good sense.

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Footnotes:

[1] The taxonomy of human instincts is an empirical question, of the kind I mentioned earlier; it does not affect the basic claim that we *are* born with a set of innate needs, which are felt as emotions.

[2] Here I am focusing on *emotional* needs – which are felt as separation distress, rage, etc – not *bodily* drives – which are felt as hunger, thirst, etc - or *sensory* affects - which are felt as pain, disgust, etc.

[3] The fact that we can only meet our needs by engaging with others is why life is difficult. You cannot successfully copulate with yourself, attach to yourself, etc, although this does not stop us from trying! (The psychoanalytic theory of “narcissism” arises from these simple facts.)

[4] This is why childhood, and the quality of parental guidance, are so important in psychoanalysis.

[5] See Blagys & Hilsenroth 2000.

[6] See Turner et al 2008, Kirsch et al 2008.

[7] I would like to thank Jonathan Shedler for his generous help with this paper.