Comment on Some implications of new developments in neurobiology for psychoanalytic object relations theory by Otto Kernberg.

David Tuckett

(Psychoanalysis Unit University College London (UCL) and Blavatnik School of Government, Oxford University.)

Astract:

Otto Kernberg provides us with a detailed and sophisticated account of how contemporary evidence from neuroscience can be fitted into the ego psychological-framed object relations theory that he has been developing for many years. In this commentary, I frame the clinical lessons to be drawn from this and other neuroscience evidence by considering four questions that every psychoanalyst answers, explicitly or implicitly, whenever they are at work. What is it that is unconscious in a session? What is it that is repeated to produce the problems patients have? What goes on in a session? How can analysis work and what should we communicate to patients? Although knowledge of neurobiology cannot substitute for clear theory about how to conduct psychoanalysis or the need to manage the emotional challenge of adopting a psychanalytically framed disposition, I suggest it can help us to distinguish aspects of theory and practice that do not stand the test of time and so help to clean up and clarify the specificity of psychoanalysis.

Otto Kernberg provides us with a detailed and sophisticated account of how contemporary evidence from neuroscience can be fitted into the ego psychological-framed object relations theory that he has been developing for many years. His reading leads him to stress the central role of two groups of drive-derived affects and so to the necessity to integrate unconscious conflicts between loving and aggressive impulses, as they are expressed in internalised affect invested object relations. In ordinary language our current lived relationships are the outcome of repetitive enactments of “memories” of early ambivalent experience of mother (or caregivers) and how it has become structured.

Diagnostically, he emphasizes three different developmental outcomes we might use to think about the structured “memories” generating the repetitive patterns that patients’

associations and behaviour reveal and what their different treatment implications might be. As I understand him, in one developmental outcome, because extremely traumatic circumstances prevailed in the early relationship, the evidence is that it is only behavioural traces (action patterns) rather than memories (in the usual declarative sense) or fantasies capable of conscious formulation that guide patients' lives lived life in the present. In a second outcome, in which less severe initial circumstances prevailed, memories and fantasies of some sort exist, but not in a way in which the ambivalent conflicts they introduce can be integrated. Therefore, to avoid the conscious experience of ambivalence, lived relationships are subject to a repetitive oscillation of idealised and persecutory experience in relationships, precisely as described by Melanie Klein. Only in a third outcome, in which still less severe initial circumstances prevailed, do memories and fantasies of early relationship remain to allow sufficient knowledge of the experience of ambivalence to persist. Then it is possible for what he calls a traditional tripartite structure of id, ego and superego to be consolidated into a set of dynamic unconscious internal relationships of the kind that he thinks is suitable for what he calls "non-modified" classical (North American) psychoanalytic technique. In any case, for him, whichever of the three outcomes the psychoanalyst or psychoanalytic psychotherapist faces, technique will necessarily need to focus on working through what he calls "activated transference" (i.e. lived experiences of ambivalence with the analyst) in the context of "technical neutrality" - i.e. with the analyst not seeking to try to be perceived in one way or another.

My interest in psychoanalytic theory is limited to its implications for understanding either human behaviour and decision-making or how psychoanalysis specifically is to be done in the clinical setting. For both purposes, I find additional clarity if I place Kernberg's summary of relevant findings for theory and technique together with Solms (2018) summary of the neurological underpinnings of psychoanalytic theory and technique.

Both authors emphasise that the earliest learning processes influence behaviour in the form of unconscious procedural (or non-declarative) memory. Details of what happened in very early life cannot return to consciousness. It is unregulated feelings (sadness, anger, irritability, and frustration) stirred up from that period which persist, as do automated feeling responses derived from the way the human affect system works. When evoked in

our daily lives, it is these feelings and responses that a profound determinant of how we relate to our psychosocial environment.

Kernberg's stress on integrating affects is clinically crucial. And in this connection, it is worth recalling that ambivalence is the term Freud (1912) borrowed from Bleuler to describe why transference is a resistance - because it evokes both "positive" and "negative" feelings to the analyst. Solms, meanwhile, stresses still broader theories of the core role of affect in how the human brain enables automated prediction and action (i.e., learned patterns of unthought response) without which we could not function.

In this way both authors emphasise that cognitive functions in cortical networks (hence ideas, beliefs, representations, fantasies, declarative memories, etc., as usually understood) sit on top of and are constantly interacting with affect and controlling executive functions at subcortical levels. This underlines the importance of recognising that non-declarative memory - so to speak, symbol-less responses and behaviour - lies at the core of human functioning. In other more familiar words, memories, in Klein's (1961) terms, are in "feelings" not necessarily in "thoughts"[1]. In still other words, fantasy meanings expressible in words get added to feelings retroactively and dynamically, as the concepts of *Nachträglichkeit* and *après coup* seek to conceive (Faimberg, 1996).

Given the evidence, unregulated feelings, not ideas, become the starting point for clinical work. Both authors, therefore, emphasise the experience of the here and now situation between patient and analyst as the critical ground on which any therapy must be played out. Brain science like historiography has established convincingly that past and future are in the now (for example, Schacter, Addis, & Buckner, 2008). Finally, although they do not stress it in their papers, both Kernberg and Solms are no doubt aware of findings that the brain is profoundly social - producing constant automated interactions between people at numerous levels beyond conscious awareness (Frith, 2008) with obvious clinical implications for countertransference as well as transference.

We can frame the clinical lessons to be drawn from the neuroscience evidence by considering four questions that every psychoanalyst answers, explicitly or implicitly,

[1] "… I am referring to memories in feelings which went back to earliest infancy and which often underlie a cover memory. Such cover memories are of importance if we are able in the analysis to discover the deeper and earlier emotional situations which are condensed in them." Klein, 1961 p 318.

whenever they are at work (Tuckett 2023, forthcoming and Tuckett et al, forthcoming): What is it that is unconscious in a session? What is it that is repeated to produce the problems patients have? What goes on in a session? How can analysis work and what should we communicate to patients?

Unless rejected, neuroscience evidence necessarily limits the way these questions can be answered and so would be unwise to ignore.

The unconscious in the session

Put in the simplest possible terms, Freud built psychoanalysis on four linked propositions: (1) that ideas somehow fixed from infancy that were inaccessible or unconscious to the subject (2), were repetitively dominating their relationships and behaviour (3), so that an investigation of these ideas conducted using free association and evenly suspended attention focused on their emergence in sessions , and (4), was in itself therapeutic.[2]

It is many years since Freud's foundational discovery, when working with hysterics, that ideas inaccessible to a patient herself, but causing her trouble, turn up in sessions. It happened in his view not because patients tell their analysts things in some sort of conversational exchange of views, but because in free association the troublesome ideas are (betrayed, *verraten*) via signs of resistance. "A universal characteristic of such ideas", the ideas causing symptoms of hysteria, he wrote, were that "they were all of a distressing nature, calculated to arouse the affects of shame, of self-reproach and of psychical pain, and the feeling of being harmed; they were all of a kind that one would prefer not to have experienced, that one would rather forget.*"* (Freud, 1893 p 268-9.)

So, although unconscious ideas were the cause of trouble, Freud's founding discovery was that it was affect that betrayed their existence. Certainly, both Freud and those who came after have elaborated illuminating accounts of what these ideas *might* be and all the ways they are defended. But, at the same time, Freud's view of how or indeed whether an analyst can actual "know" the ideas causing the discomfort is much more subtle

[2] "*Psycho-Analysis is the name (1) of a procedure for the investigation of mental processes which* ***are almost inaccessible in any other way****", and "(2) of a method (based upon that investigation) for the treatment of neurotic disorders*".[2] (***Bold type*** *added)* Freud, 1923 page 235.

than might be supposed from much contemporary practice. He recognised, in a way that many contemporary analysts often appear not to, the epistemological problem of making any claim to know another person's unconscious thoughts (or indeed one's own) and so was very cautious as to whether an analyst really could know them or interpret them (Vassalli (2001). Similarly, neuroscience evidence should cause us to pause when we want to suggest the content of ideas in our patients' minds and rather focus on what is evident: affect and signs of resistance to association.

What is repeated?

Hard as they might be to know, Freud's view that unconscious ideas derived from managing the conflicts of infantile sexuality were the cause of his patient's symptoms was unequivocal[3]. Later analysts developed the proposition into a theory of internal object relations governing the perception and interaction of people in lived experience. As Kernberg brings out in his paper, such relations become more or less structured into personality.

Solms draws on Friston's (2009) concept of active inference to place psychoanalytic ideas about mental life within the framework of prediction. In simplistic terms, the conservation of energy requires that we see the world we expect to see, until we are forced by surprise to recognise otherwise, whereupon we may panic or do cognitive work to establish afresh what is going on, based on prior learning. From this perspective what is repeated in object relations is that deeply automatized (and so unconscious) predictions function as unthought beliefs. Situations in the present are predicted to be situations in the past and if sensed as disturbing or frightening produce emotional distress. While the original situations and beliefs giving rise to discomfort *cannot* be known because they are unthought beliefs, they nonetheless go on producing consequences, exactly as Freud supposed. This is how *what looks like* unconscious repetition of ideas is generated.

What goes on in a session?

From the points of view developed so far, psychoanalytic sessions are the occasions for repetition and for identifying the dominant emotions giving the clue to unconscious

[3] "we can produce good evidence to show that even when it is unconscious [an idea] can produce effects, even including some which finally reach consciousness." Freud, S. (1915 p 166).

meaning. Automated but hidden predictions, based on unconsciously structured expectations of object relations, evoke feelings. They are consciously felt in response both to the situation with the analyst and, importantly, the analyst's response to it. They are that which is to be grasped. So, based on the neuroscience evidence, although "pathogenic predictions" cannot be remembered or talked about, they are, as Freud had intuited, betrayed (*verraten*) by unregulated feelings. Via recognising repetition in sessions, the analyst (and/or the patient) can eventually come to recognise patterns and "guess" (erraten) the thoughts that make sense of them.

The patterns to be observed in sessions are not just patterns of patient behaviour. The brain is hard-wired to be social. So, patterns will emerge in the interaction between patient and analyst and via the analyst's feelings and enactments – creating "mutual enactment" (Tuckett, 1997) which the analyst will also need to recognise. It is this that makes it dangerous for an analyst *to aim* to take up any other position than neutrality or "evenly suspended attention". Of course, we cannot claim *ever* to achieve neutrality. But by aspiring to it we can hope to notice deviations from it. Although, beyond a comment about the need for a "safe environment" and the potential for "role reversals", Kernberg does not support the reasoning behind his assertion that technical neutrality is required, I take it this is likely to be his position also.

How can analysis work and what should we communicate?

This is a very large subject with multiple conflicting and confusing views. But some conclusions about both topics can be derived from the neuroscience discussed, insofar as psychoanalysts accept the premise that what is at stake in patient's pathology are "errant" predictions– i.e., the unconscious, repressed predictions which they have learned and which they unknowingly and (given context) invalidly use to meet their emotional needs and desires. If so, the analytic task is to create a calm enough and stable enough setting for these predictions to be enacted repeatedly. They can then recognise patterns of experience, draw attention to them and provide the possibility for new more appropriate predictions and responses to be developed.

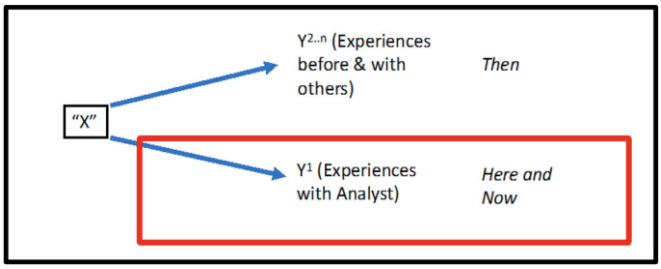
Requiring re-consolidation, it will be a slow process.

Parsimonious Model

The "parsimonious model" I have proposed (Tuckett, 2019), based on my understanding of Freud, is a way to surface repressed predictions. Its emphasis is on "designating" discomfort, shared signs of felt "resistance" in the transference, rather than, or at least well in advance of, constructing meanings and explanations. The aim is to avoid imposing meaning on patients that the analyst cannot know – particularly avoiding intellectual explanations and fictional constructions of outside life or past history, or of how the patient is enviously or otherwise turning the analyst and others around into bad objects. It also avoids the mutual folly of analyst and patient comfortably agreeing that someone or something outside the room was to blame even if, on an outside view, that might be the case.

Figure 1 sets out hypothetically how affects and beliefs evident in free association in sessions derive from an unconscious internal predictive template "X". "X" drives both representations and action becoming manifest in sessional experience with an analyst, as in all other relationships of emotional significance.

Figure 1 Transference as an unconscious causal template. (From Tuckett, 2019)



The proposition is that the same unconscious internal template for representing and acting on the world, "X" (built in unconscious iterations from infancy) influences experience here and now in sessions (Y^1) as well as in past and present experience in the world ($Y^{2...n}$).

If we add countertransference, then we add the analyst's internal template (X^a) to the model. Interaction between X and X^a produce unconscious "mutual enactment" (Tuckett, 1997).

The idea behind the parsimonious model is reliably to create the conditions to infer and modify (X), clarifying how an analyst can achieve the triple tasks of experiencing, identifying and communicating to the patient so that he or she can recognise unconscious internal templates ("X"), predictions, that influence how they experience, think and act on

their worlds, insofar as it becomes manifest in sessions (Y1). The triple tasks are achieved by following four rules of thumb:

(1) Aspire to create a rigorous "neutral" setting (Tuckett 2011) of free association and evenly suspended attention to allow the templates (X) underlying a patient's ideas about his or her experience (Y1) to come to the fore so that they become recognisable to both parties, as far as possible undisturbed by the analyst.

(2) Impose a self-denying ordinance on oneself to wait for the outward manifestation of resistance to free association. In principle this resistance may often be felt more through the analyst's thoughts and feelings (analysts' recognitions of their own templates in operation) than directly expressed by the patient. I take this self-denying attitude to be close to that advocated by Bion (1967) when he argues against preconceptions in his "Notes on Memory and Desire."

(3) Once resistance to free association, that is to say some sign of discomfort with their unthought thoughts, is identifiable, and, therefore, has become an experience that is shared, use interpretation to make the moment of resistance manifest in the here and now—for instance, to the effect "it looks like you have got stuck there and something in your mind is in conflict."

(4) At the same time, or as a next step, if the material suggests evidence that the resistance is caused by an immediate belief about the analyst which is being prevented from becoming conscious in the patient's mind, then consider elaborating further to make an interpretation that seeks to "designate" the transference.

To "designate" the transference is to make a statement about a patient's image of the analyst in relation to the patient—whether it might be that the analyst is felt as loving, hating, envious, rivalrous, weak, intrusive, etc. For example, the interpretation "I have the impression you think I have become competitive" would draw a patient's attention to a currently experienced unconscious belief and, if repetitive, would open up the possibility to treat such beliefs as potential evidence of the templates operating in his or her life — tending to experience people with whom he or she is as competitive with them. (In this model a designating the transference interpretation is logically distinguished from a constructing the transference interpretation that aims to help a patient to be aware

consciously how and why they represent or perhaps treat the analyst in the way they do. While construction may have therapeutic value, in this model it is not privileged. Indeed, it is conceived, if premature, as a potential interference.)

Final Remarks

I am grateful to Otto Kernberg for his paper and the opportunity it gives us all to ask fundamental questions about what we do. Neuroscience knowledge cannot substitute for clear theory about how to conduct psychoanalysis or the need to manage the emotional challenge of adopting a psychanalytically framed disposition, but it can help us to distinguish aspects of theory and practice that do not stand the test of time and so help to clean up and clarify the specificity of psychoanalysis.

References

Bion, W.R (1967) Notes on Memory and Desire in The Psychoanalytic Forum, 2, pp. 272-3, 279-80, 1967.

Faimberg, H. (1996) 'Listening To Listening'. International Journal of Psychoanalysis 77:667-677

Freud, S. (1893) The Psychotherapy of Hysteria from Studies on Hysteria. The Standard Edition of the Complete Psychological Works of Sigmund Freud 2:253-305

Freud, S. (1912) The Dynamics of Transference. The Standard Edition of the Complete Psychological Works of Sigmund Freud 12:97-108

Freud, S. (1923) Two Encyclopaedia Articles. The Standard Edition of the Complete Psychological Works of Sigmund Freud 18:233-260

Friston, K (2009) The free energy principle. A rough guide to the brain? Trends in cognitive sciences. 13, 293-301

Frith CD. Social cognition. Philos Trans R Soc Lond B Biol Sci. 2008 Jun 12;363(1499):2033-9. doi: 10.1098/rstb.2008.0005. PMID: 18292063; PMCID: PMC2375957.

Klein, M. (1961) Narrative of a Child Analysis: The Conduct of the Psycho-Analysis of Children as seen in the Treatment of a Ten-year-old Boy. Narrative of a Child Analysis: The Conduct of the Psycho-Analysis of Children as seen in the Treatment of a Ten-year-old Boy 55:1-536

Schacter, D. L., Addis, D. R., & Buckner, R. L. (2008). Episodic simulation of future events: concepts, data, and applications. In A. Kingstone & M. B. Miller (Eds.), *The year in cognitive neuroscience 2008* (pp. 39–60). Blackwell Publishing.

Solms, M. 2018. “The Neurobiological Underpinnings of Psychoanalytic Theory and Therapy.” Frontiers in Behavioural Neuroscience 12: 294. doi:10.3389/fnbeh.2018.00294.

Tuckett, D. (1997). Mutual enactment in the psychoanalytic situation. In J. Ahumada, Olagaray, J., Richards, A.K., Richards, A.D. (Eds.), The perverse transference and other matters: Essays in honor of R. Horacio Etchegoyen (pp. 203 - 216–). New York, NY: Aronson.

Tuckett, D. (2011). Inside and Outside the Window: Some Fundamental Elements in the Theory of Psychoanalytic Technique. Int. J. Psycho-Anal., 92:1367-1390. doi: 10.1111/j.1745-8315.2011.00471.x

_____ (2019) Transference and transference interpretation revisited: Why a parsimonious model of practice may be useful, The International Journal of Psychoanalysis, 100:5, 852-876.

Tuckett, David; Allison, Elizabeth; Bonard, Olivier; Bronstein, Abbott; Bruns, Georg; Christopoulous, Anna; Diercks, Michael; Hinze, Eike; Linardos, Marinella; Rudden, Marie; Sebek, Michael. (Forthcoming) Knowing what we do and doing what we know: Report from the Comparative Clinical Methods Group Volume 2.

Tuckett, D, (2023) A Turn Towards or a Turn Away? Why and how resistance to unbearable ideas evoked in the analyst’s presence must be the cornerstone of psychoanalytic work. In Busch, F (ed) Psychoanalysis at the Crossroads.

Vassalli, G. (2001) The Birth of Psychoanalysis from the Spirit of Technique: What have We Learned? How Can We Apply It? International Journal of Psychoanalysis 82:3-25