



## NEUROPSYCHOANALYSIS AROUND THE WORLD AGAIN

12 - 13 June 2021

### ABSTRACTS

12 JUNE

#### **Lionel Naccache and Mark Solms:** *Perspectives on consciousness*

##### **Lionel Naccache**

I will introduce key ideas of the Global Neuronal Workspace Theory (GNWT) of consciousness we introduced in 2001, and will then focus on the interaction between conscious and non-conscious cognitive processes. The importance of conscious influences on unconscious processing will be emphasized. In this perspective, I will discuss why these ideas may prove relevant when addressing 'neurological functional disorders', and I will illustrate them through a case-report of hypnotic deafness.

##### **Mark Solms**

In this talk, I will present an alternative perspective on the nature and function of consciousness to the mainstream 'global workspace' theory, which is the perspective that Lionel Naccache represents. I will begin by reviewing the relationship between global workspace theory and the 'hard problem' of consciousness. Then I will summarize clinico-anatomical and physiological evidence for the views (1) that consciousness is generated in the brainstem and not in the cortex, and (2) that the form of consciousness which is generated in the brainstem is not lacking in content or quality, as is widely claimed. Furthermore, regarding (1) I will argue that the cortex can perform almost all of its information-processing tasks unconsciously – which raises the question as to why it ever processes information consciously – and regarding (2) I will argue that the brainstem form of consciousness is fundamentally affective in nature. This will lead me to the conclusion that affective consciousness is the fundamental form of consciousness and that it is prerequisite for all other forms, such as conscious perception and cognition. Against this empirical background, I will revisit the philosophical hard problem. Finally, I will consider afresh the biological function of affective consciousness and I will offer some hypotheses concerning the nature of the relationship between this (brainstem) form of consciousness and the cortical form.

#### **Irith Barzel-Raveh, Eduardo Gastelumendi and Deborah Marks:**

##### *Clinical neuropsychanalysis session*

This session, comprising three presentations from Peru, the United Kingdom and Israel, will provide a window into developments emanating from the clinical neuropsychanalysis groups that are supervised by Professor

Mark Solms. Brief reports of approximately ten minutes each will be given by a representative from each group. Discussion will revolve around the themes that have emerged in each group's work. Amongst other topics, the clinical application of Panksepp's taxonomy of the basic emotion command systems will be elucidated.

## **Neuropsychanalytic memory research**

**Cristina Alberini:** *Mechanisms of infantile memories, an update*

I will discuss the progress my laboratory has made on the mechanisms underlying infantile memories. Infantile memories, although not expressed and apparently forgotten, are stored in a latent form; in fact, they can be re-instated by recalls given later in life. The investigation of the biological mechanisms underlying the processing of these latent memories revealed the existence of critical periods of learning to learn and remember. During these critical periods, experiences shape brain development in a selective manner. Furthermore, we obtained evidence that infantile memories, although not expressed, influence adult behaviours. We will discuss how and why the storage of infantile memories may affect responses throughout life. These findings provide novel information for better understanding the contribution of latent memory storage on identity, personality traits, as well as psychopathology.

**Nikolai Axmacher:** *Memory traces for stressful and traumatic events*

Memories help us anticipate the future and are core constituents of our identities. However, we may also "suffer from reminiscences" of past experiences and can be haunted by traumatic events. How we remember our past may thus substantially affect our wellbeing and can contribute to various psychiatric diseases, most obviously posttraumatic stress disorder. Research in the cognitive neurosciences may help shed light on these processes. In this talk, I describe new evidence on the characteristic features of memory traces for stressful and traumatic experiences. These studies show that memories can be remembered in different "representational formats", which may account for the distressing properties of pathological memories. They also indicate that voluntary memory suppression does not lead to an erasure of memories but to their selective modification, even if we cannot consciously access them anymore. Finally, I will describe how this framework may account for the beneficial transformations of memories during psychotherapy.

## **13 JUNE**

**John Dall'Aglio:**

*Beyond the Free Energy Principle: A Lacanian Neuropsychanalytic Perspective*

In *Beyond the Pleasure Principle*, Freud's key problematic is: how and why does the psyche sabotage its own homeostatic logic? Lacan develops Freud's answer – the death drive – in his concepts of *jouissance*, the real, and the subject. Contemporary neuropsychanalysis has updated the pleasure principle with the Free Energy Principle. The question thus arises: is there a *beyond* the Free Energy Principle? This talk will develop a Lacanian reading of Mark Solms' theory of consciousness as felt uncertainty. Lacan's distinction between 'ego' and 'subject' is key here. Whereas the former rests on the side of predictive resolution (the generative model), the latter rests on the side of *failed* predictions (premature automatization) and the symptomatic network built upon them. An orientation towards the subject points to the real not as a deeper principle than the Free Energy Principle, but as the name of an aberrancy *immanent* to the brain's predictive function. The conflicting hyperpriors of Jaak Panksepp's emotional instincts are proposed as one neuronal instance of the real. This stance bears theoretical implications for dual-aspect monism. Moreover, I propose that Lacanian clinical

technique (including the 'variable-length' session) is specifically suited to problematizing failed predictions – opening a space for the subject to (re)create itself in novel uncertainty.

## Breakout sessions

### **Portuguese Neuropsychanalysis Group with the South Brazil Neuro-PSA Group:**

*Attention Deficit Hyperactivity Disorder (ADHD) from a Neuropsychanalytic Perspective*

Chair: Maria Sonia Goergen

Clinical Case Presentation of a Child with ADHD by Dr. Alexandra Medeiros;

Neuroscience Perspective on ADHD by Susana Lêdo;

Psychodynamic Perspective on ADHD by Joana Henriques-Calado;

Neuropsychanalytic Perspective on ADHD by Filipe Arantes-Gonçalves.

After these four presentations we will have some time for discussion with the audience.

The session will be held in English.

### **NPAP Neuropsychanalytic Clinical Study Center (NSCS):**

*I was Mr. Fixit and Now I Need to be Fixed": Psychoanalysis, Neuroplasticity and the Homeostatic Imperative*

The synergy of the psychoanalytic process, a neuropsychanalytically informed perspective and a neurobiological understanding enabled half of the brain-injured patients in a qualitative study to move forward toward a more creative resolution. The intrapsychic processes of psychoanalysis, the neuroplasticity of the brain, and the neurobiological evolutionary motive force of what Antonio Damasio describes as the homeostatic imperative, meaning the will to maintain oneself and move forward simultaneously, enabled brain-damaged patients to achieve a new level of integration. Even more remarkable is that the brain, the very organ that was injured, had to cope not only with the physical damage but also with the challenging psychological sequelae, including concreteness, identity issues, loss, grief, and mourning. The underlying ways of explaining the therapeutic process and the significant clinical and technical findings will be considered. A discussion will follow and participants comments and observations are most welcome.

### **Madrid Neuropsychanalysis Group: Does neuropsychanalysis exist in Freud's work?**

We would like to make our own the affirmations of E. Stengel that are mentioned in the prologue of "On Aphasia" (Freud, 1891): *"Not only did Freud make valuable contributions to neurobiology, but he also laid the foundations of psychoanalysis (...) It is the first of the author's studies dedicated to mental activities"*. Freud knew the main afferent and efferent brain pathways - we must remember that he had worked on the histology of the auditory pathway - his "Psychological Scheme of the concept of the word" (p. 91) was a model that he generalized as a prototype for the formation of a "concept". We believe that this "Scheme" exemplifies the "psychic concomitant" of brain neurobiology that Freud knew about. The intimate relationship between words and the formation of "concepts" makes language the main access route to the psyche. The scientifically coherent consequence being that the psychic treatment must be carried out by means of the word. This conclusion makes the statement, "What cannot be said, is acted", understandable to neurobiology.

### *¿Existe neuropsicoanálisis en la obra de Freud?*

Quisiéramos hacer nuestras las afirmaciones de E. Stengel, en el prólogo de “Sobre la Afasia” (Freud, 1891): “No solamente hizo Freud valiosas aportaciones a la neurobiología, sino que sentó las bases del psicoanálisis (...) Es el primero de los estudios del autor dedicado a las actividades mentales” Freud conocía las principales vías cerebrales aferentes y eferentes –recordemos que había trabajado en la histología de la vía auditiva-. Su “Esquema psicológico del concepto de la palabra” (p. 91), fue un modelo que generalizó como prototipo de la formación de “concepto”. Creemos que este “Esquema” ejemplifica el “concomitante psíquico” de la neurobiología cerebral que Freud conocía. La íntima relación entre las palabras y la formación de “conceptos” hacen del lenguaje la principal vía de acceso al psiquismo. La consecuencia, científicamente coherente, será que el tratamiento psíquico, deba realizarse mediante la palabra. Esta conclusión hace comprensible a la neurobiología la afirmación: “Lo que no se puede decir se actúa”.

Paper presented by:

Professor Rosario García Cordovilla (Coordinator of the Madrid Neuropsychanalysis Group) with the collaboration of Javier Fernandez Soriano (M.D.); IPA Psychoanalyst.

### **Iberian Neuropsychanalysis Association (AINPSA):**

#### *The Body as a Stage of Encounter: Conversations between psychoanalysis and neurosciences*

In this open forum conducted in Spanish, we aim to study the concept of Microtrauma. Opposed to trauma, Microtrauma is experienced gradually. It also ends up causing an unhealthy remodeling of character. This concept will help us to address the issue of the body as a stage of encounter and display of emotions. Emotions are considered adaptive bodily states. However, it is their management that leads us through different stages, one of them, the elaboration of symptoms. We propose to validate the concept of Microtrauma by opening this space for a conversation that allows us to get closer to the reciprocal and collaborative influence between psychoanalysis and neurosciences.

### **Russian-speaking Neuropsychanalysis NPSA group, Belarusian NPSA regional group, Moscow, Russia NPSA group, and Omsk, Russia NPSA group**

Two presentations, 30 minutes each, in English.

#### **First presenter, Yuli Fradkin, MD, Professor at Rutgers University, psychiatrist.**

I have a case of medical doctor who developed an acute reaction after being overworked for 72 hours. He presented with psychomotor retardation, anxiety, depression, unproductive speech. I treated him with antidepressants. Before the incidence of his illness, he was running a private clinic that included a surgical center. During recovery, I did a lot of therapy for him, his wife, and his children. His mood improved, but his cognitive functions and speech continued to be affected. I asked Dr. Elkhonon Goldberg, Ph.D. (who is Alexander Luria’s former student) to perform neuropsychological testing, which revealed early stages of the primary degenerative process, possible Lewy Body Dementia. As a result of these findings, I changed the course of individual and family therapy. The patient's wife took over the management of his practice and the patient became a consultant and stopped seeing patients. Key point: Understanding neuropsychopathology can help with the course of therapy and decision-making.

**Second presenter: Alexey Tolchinsky, Psy.D. NPSA Clinical Fellow**

*Psychodynamic Psychotherapy With a Patient “From The Same Cultural Tradition”.*

Whenever an immigrant from a former Soviet Union country is walking by on the street, from a brief glance at each other we usually know that we were brought up in a somewhat similar cultural environment before any words are spoken. Such prediction is usually accurate, even though it has not been submitted to a formal scientific investigation thus far. This cultural recognition phenomenon is a bit of a mystery. Why does this work? Is it the facial expression, or posture, or gait, and if so, what specifically in these factors?

In my presentation, I will consider if there is in fact such a thing as the "same cultural tradition" psychologically and neurobiologically; I will formulate some hypotheses on the possible neuropsychological underpinnings of how the therapist might perceive the patient as being brought up in “the same cultural tradition” and then I will then illustrate these points with one or two case examples in therapy and mention how the transference/countertransference dynamics were affected by such a preliminary evaluation of cultural similarity.

**Paul Moore and Oliver Turnbull: *Psychotherapy without (episodic) memory***

How does psychotherapy work, and which brain areas does it require? Our group has pioneered an unusual approach to this problem, to identify which brain areas and psychological processes are not necessary for effective psychotherapy. We discuss the first ever published account of long term psychoanalytic therapy with a profoundly amnesic neurological patient (77 sessions, over two years). As expected, there was typically disruption of temporal continuity during and between sessions. However, for a small fraction of (emotionally important) content there was remarkable continuity across sessions, including evidence of therapeutic change. These findings have implications for psychoanalytic technique, for the transference, and for which sorts of patient might be appropriate for treatment. Importantly, there are also implications for other psychotherapies (such as CBT) which suggest that episodic memory is a core element of the therapeutic process.

