The text is balanced by the cheerful, avuncular presence of Aravind, with fascinating anecdotes, case examples and cheerful mystery. So what's missing? Don't expect to find psycho-analysists such as Klein or Winnicott mentioned here, even though their theories have shaped our 'working model' of the origins of psychological distress in childhood.

Open-ended techniques are under-represented. Leuner's Guided Affective Imagery is often used by Gestalt therapists and in approaches such as Assagioli's Psychosynthesis. Images such as the meadow and climbing a mountain could merit a short description here. Equally the overlap of spiritual and psychiatric symptoms is not explored. Perhaps the fault lies in the literature, in which cognitive approaches predominate. Surely 'N = 1' studies and detailed qualitative work will balance this inequality eventually.

Overall, Mike Heap and Aravind have created a stimulating and valuable edition of this text. I share their aspiration that a future edition will bridge the gap between theorists and practitioners.

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## REVOLUTIONARY CONNECTIONS: PSYCHOTHERAPY AND NEUROSCIENCE

## Edited by: J. Corrigall and H. Wilkinson

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## **Reviewed by John Gruzelier**

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This is a valuable collection of papers arising from a 2001 conference of the United Kingdom Council for Psychotherapy (UKCP) on relations between psychotherapy and neuroscience, and in particular what is called 'affective neuroscience' as distinct from 'cognitive neuroscience'; a distinction that reflects the inevitable, pervasive and regrettable fractionations in psychological sciences, this time between emotion and cognition. The collection is required reading in UKCP courses for further training.

In setting up the Council ten years ago, aside from maintaining standards of professional conduct and training, the vision was to facilitate a dialogue between diverse strands of psychotherapy and to 'promote professional contact and the exploration of issues of common interest' to include 'the engagement between psychotherapy and neuroscience'. A fundamental theme in this 'revolutionary connection' is the importance of the neuroscience of early development for understanding the foundations of emotional experience and their implications for maturation and maturity, as well as for dysfunction.

The collection includes the Bowlby Memorial Lecture of Alan Schore who, in publications since 1994, has tracked the growing body of evidence in support of affective

neuroscience, and appropriately for this collection focuses on the neuroscience of early attachment. If you have yet to catch up with Schore's work, this is a fascinating read. He also traces the neuroscience of how attachment mediates the social construction of the brain and the regulation of biological synchrony between people.

This is amplified by Colwyn Trevarthen who worked with Roger Sperry and is now Emeritus Professor of Child Psychology at Edinburgh. He reviews his landmark work on frame by frame analysis of filmed mother-baby interactions. These disclose protocommunication in the preverbal years of life. Babies are highly sophisticated communicators with musical intelligence and narrative awareness, and are born with developed motivational systems in the brain. These intrinsic systems underpin development of the fronto-limbic cortex through approach (left hemisphere) and withdrawal (right hemisphere) psychodynamic interactions.

Douglas Watt extends to adult psychotherapy these concepts, including the fundamental importance of subcortical emotion and motivation for the neurodevelopmental structure of the brain, emphasizing the implications of prolonged activation of negative states for the creation of psychopathology and neuropsychiatric disorders. He uses depression and obsessive compulsive disorders as examples. Going further than the conventional polar opposites of approach-withdrawal or positive-negative emotion, he draws on Panksepp's comparative animal studies that delineate three systems – novelty seeking, defence subserving fear and rage, and attachment.

Danya Glaser from the Great Ormond Street Hospital working with abuse and neglect in children introduces developments relevant to these conditions. Oliver Turnbull draws on Damasio's work on patients with medial frontal lesions, work which again implies that it is emotional systems that determine cognitions and not vice versa. He gives examples of abnormalities such as acquired sociopathy, as well as false beliefs characteristic of confabulation, dreaming and schizophrenia (see also my use of Damasio's patients in connection with the characteristically disinhibited behaviour found in stage hypnosis; Gruzelier, 2000, 2004). Finally the collection of papers ends with reflections by three psychotherapists on the implications of affective neuroscience for the psychotherapeutic process itself.

Clearly the UKCP in its cognizance of affective neuroscience is way ahead of the training of hypnotherapy in the UK. In conclusion, I abridge Douglas Watt's final remarks. He says 'Psychotherapy needs to include much more training in neuroscience, especially in clinical and affective neuroscience...We need less infighting about the virtues of competing technical approaches in psychotherapy... Above all, we need research, and lots of research, towards the goal of an integrated language of mind and brain.'

## References

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