# After pluralism:

## Towards a new, integrated psychoanalytic paradigm<sup>1</sup>

#### JUAN PABLO JIMÉNEZ

Departamento de Psiquiatría y Salud Mental, Universidad de Chile, Av. Salvador 486, Santiago, Chile — jjimenez@med.uchile.cl

After a restatement of the isolationism of psychoanalysis from allied disciplines, and an examination of some of the reasons for the diversity of schools of thought and the fragmentation of psychoanalytic knowledge, the author suggests the need to adopt principles of correspondence or external coherence along with those of hermeneutic coherence to validate psychoanalytic hypotheses. Recent developments in neurocognitive science have come to the aid of psychoanalysis in this period of crisis, resulting in the proposition of integrating both areas to form a new paradigm for the construction of the theory of the mind. This emerging paradigm tries to integrate clinical knowledge with neurocognitive science, findings from studies on the process and outcome of psychotherapy, research into the early mother-infant relationship, and developmental psychopathology. The author examines theoretical technical models based on the concept of drives and of relationships in the light of interdisciplinary findings. He concludes that the relational model has a broad empirical base, except when the concept of drives is discredited. Interdisciplinary findings have led to the positing of the replacement of the Freudian model of drives with a model of motivational systems centred on affective processes. He draws certain conclusions which have a bearing on the technique of psychoanalytic treatment. These arise from the adoption of the new integrated paradigm.

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## Beyond the crisis of psychoanalysis

It has befallen on us to practise our profession in turbulent but stimulating times, because the overall state of present-day psychoanalysis is ambiguous. On the one hand, during the 1990s, we were the observers and the participants of the debate on the so-called 'crisis of psychoanalysis'. Many have contributed to describing the situation of an isolated field, devoid of connections with other psychotherapeutic approaches and of methodological links to biology, psychology and psychiatry, and, above all, lacking in sufficient empirical research to support the efficacy of psychoanalytic treatment. This, when viewed by a society increasingly guided by its belief in evidence-based mental health criteria, generates doubts about the future of the psychoanalytic profession. In addition, the controversy surrounding the process

of accumulation of clinical knowledge, the third pillar of the Freudian definition of psychoanalysis, has become evident. After decades in which the construction of psychoanalytic theory appeared to be dominated by the assumption that there existed only one psychoanalytic truth, we celebrate with enthusiasm the confirmation that this monistic approach is an illusion, and that theoretical and technical diversity is the rule of the day (Wallerstein, 1988, 1990). This monistic epistemological stance was sustained by an authoritarian environment in our institutions, and each psychoanalytic school believed that it was the possessor of the 'true' Freudian legacy.

Without doubt, Freud always considered the possibility of a unified and integrated psychoanalytic science. In order to arrive at this point, clinical knowledge had to be 'accumulated' until it constituted a scientific discipline (Freud, 1923). However, there are many indications that Freud thought that psychoanalysis would only temporarily develop independently of biology. The fact is that Freud, over the course of his work, consistently mentioned that, one day, psychoanalysis would be integrated with neuroscience. Nevertheless, at the same time, he never stopped insisting that this would not be possible while neuroscience did not develop a methodology which was capable of embracing the complex, dynamic character of mental processes (Solms, 2003).

However, even if we maintain that psychoanalysis can be an autonomous discipline, we must recognize that psychoanalytic knowledge, rather than accumulating in an orderly way, seems to have accumulated in a 'piled-up' fashion, with little 'discipline' to the point where Fonagy et al. (1999) talk of the fragmentation of psychoanalytic knowledge and Thomä (2000) of the chaotic appearance of modern psychoanalysis. The truth is that, rather than pluralism, what exists is a mere plurality or, worse still, a theoretical fragmentation; what is lacking is a methodology which can be applied systematically to compare the various theories and technical approaches. Wilson warned us that the pluralism of today, which has managed to remedy the authoritarian monism of yesterday, 'can easily evolve into tomorrow's nightmare, unless some guiding principles chart an ever evolving integrative course' (2000, p. 412). Bernardi (2005) would appear to share the same concerns when he poses the question about what will follow pluralism, and about the conditions necessary to convert the situation of diversity in the psychoanalytical field into a factor which will bring about progress. Because, however happily we welcome diversity in psychoanalysis, this same diversity also has certain negative aspects. It is not an exaggeration to say that, each time clinicians with different psychoanalytical cultures try to communicate with one another, the 'Babelization' of psychoanalysis is reproduced. Bernardi's (2002, 2003) studies on the manner in which psychoanalysts debate different controversial issues leave a feeling of pessimism as regards our ability to find a way out of this situation. In my view, it is impossible to overcome this impasse without modifying the paradigm that guides the construction of theory in psychoanalysis. This is because the tendency towards the fragmentation of knowledge appears to be inherent in the development of a psychoanalysis which is based solely on hermeneutic principles. (Fonagy, 1999; Jiménez, 2005; Strenger, 1991; Thomä and Kächele, 1987). In Fonagy's opinion (1999), problems related to inductive reasoning explain the overabundance of theories and the fragmentation of psychoanalytic knowledge, and these will be the factors ultimately responsible for the isolation of psychoanalysis.

The basic strategy in the construction of a theory in psychoanalysis fits within the framework of what is called 'enumerative inductivism'. When treating a patient, analysts have access to a set of observations which arise from the evaluation and the evolution of the therapeutic process. After obtaining this sample of observations, certain observations are singled out as 'selected facts' and, on the basis of these facts, conclusions are drawn about a patient. In this way, the analyst will be predisposed to focus on those aspects of the relationship with the patient which make sense in terms of the analyst's own privileged constructs. Of course, these constructs have also come from the 'clinical theories' of other analysts, constructed with regard to other clinical cases (Fonagy, 2003a). Klimovsky states that 'the inductive method belongs to the context of discovery, given that in its applications what is obtained is a hypothesis, which is nothing more than a conjecture requiring investigation [by means of other methods] to ascertain if it is valid or not' (2004, p. 67).

Although it can be argued that the hermeneutic criteria of narrative coherence serve to guide the process of validation in daily clinical work, this is not sufficient as a criterion of truth for the purpose of validating psychoanalytical theory as nomothetic knowledge (Rubovits-Seitz, 1992). As Strenger (1991) states, as well as being coherent, theoretical propositions must be consistent with a generally accepted body of knowledge incorporated in related disciplines and must be akin to it. From the point of view of epistemological common sense, this is a standard requisite for any scientific theory.

It seems to be, therefore, that the exclusive application of the coherence criterion is the factor which has led to the fragmentation of psychoanalytic knowledge. So, if we wish to change course, the processes of validating psychoanalytical hypotheses demand that we shift towards the search for an external coherence, in other words, a validation in a context different from the analytical situation. This change of context derives from the use of investigative methods which are not those of the clinical psychoanalytic methodology (Kandel, 1999; Main, 1993; Thomä and Kächele, 1975; Wallerstein, 1993). The assumption which underlies this search is that there is 'something out there' that, even when we are not capable of grasping it totally and homogeneously, acts as a referent and as an *a priori* condition of the psychoanalytical dialogue between the patient and his analyst, within the psychoanalytic community, and between the psychoanalytic field and the academic and scientific world as well (Cavell, 1993, 1998).

In the same way, Fonagy et al. propose some strategies for the external validation of the psychoanalytic method. Among them, they highlight the 'strengthening of the evidence base of psychoanalysis' (1999, p. 43), in accordance with which psychoanalysis 'should ... develop closer links with alternative data gathering methods available in modern social and biological science.' In this way, 'the convergence of evidence from several data sources ... will provide the best support for the theories of mind proposed by psychoanalysis' (p. 45).

### The need for psychoanalysis in neuroscience

On the other hand, and in contrast to the situation just described, the eminent neuro-scientist Eric Kandel, winner of the Nobel Prize for medicine and physiology,

suggested that despite everything 'psychoanalysis still represents the most coherent and intellectually satisfying vision of the mind' (1999, p. 505). In two seminal articles (1998, 1999), Kandel also sharply criticizes the stagnation of psychoanalysis during the second half of the 20th century and proposes that 'the challenge for psychoanalysts is to become active participants in the difficult joint attempt of biology and psychology, including psychoanalysis, to understand the mind' (1999, p. 521). Only by doing this can psychoanalysis survive as an intellectual force in the 21st century. Kandel warns us, however, that, in order for this transformation to take place in the intellectual climate of psychoanalysis, psychoanalytic institutes themselves must change from being mere professional institutes to being centres of research and academia. The challenge, then, is to start taking advantage of this crisis and to stop treating it as threat but rather see it as an opportunity.

Of course, it is true that the integration of psychoanalysis and neuroscience may not only be of benefit to the former but it also appears to be a necessary step if neuroscience is to contribute to the study of the mind. In Kandel's opinion, psychoanalysis, together with psychiatry and cognitive psychology, 'can define for biology the mental functions that need to be studied for a meaningful and sophisticated understanding of the biology of the human mind' (Kandel, 1998, p. 459). In this way, what is proposed is a new methodological paradigm which attempts to integrate the 'subjective' approach to the mind, typical of psychoanalysis, with the 'objective' approach, typical of neuroscience. In particular, the development of modern techniques in cerebral imaging has clearly shown the need to adopt a dynamic model to understand the functioning of the brain. But the most surprising of all is that the model emerging from neuroscience in the last decade is extremely compatible with the psychoanalytic model of the mind (see Cozolino, 2002; V. Green, 2003; Levin, 1991; 2002; Kandel, 1998, 1999; Kaplan-Solms and Solms, 2000; Siegel, 1999; Solms and Turnbull, 2002).

I now present some ideas about what I believe are the implications of this emerging paradigm for psychoanalytic theory. I believe that this new paradigm seeks to integrate not only clinical psychoanalysis and neurocognitive science, but also the findings of current empirical research into process and outcome in psychotherapy, recent studies in the early mother—infant relationship and new developmental psychopathology.

To better understand the theoretical shift which I have made reference to in this presentation, I draw on the examination of psychoanalytic theories in the pioneering book by Greenberg and Mitchell (1983), using the thesis that they put forward as a starting point.

# Two theoretical and technical models of psychoanalysis: The drive model and the relational model

Greenberg and Mitchell (1983) state that diagnostic and therapeutic theories in psychoanalysis are not homogeneous but rather can be analysed in terms of different combinations of two basic models, these being profoundly different and permanently at odds with one another ever since the origins of psychoanalysis. One is the model based on the notion of drives and the other is based on that of relations.

According to the model of drives, the patient comes to treatment with pathogenic conflicts which are intrapsychic and encapsulated. The analyst must make such conflicts conscious. Yet in the same way that the object is always external to the drive's aim, the analyst remains outside the neurotic process. The Freudian concept of the 'blank screen' sums up the way of approaching the therapeutic situation. The relationship with the analyst basically is understood in terms of displacements from the past. The transference is determined only by the experiential history of the patient and its contents are a function of the demands made on early objects and the defences erected against such demands. In a patient who can be analysed, and given minimum interference from the analyst, these contents will gradually unfold to finally crystallize in a transferential neurosis. Interruptions in the process of association are understood as *resistance*, this being what emerges from the anxiety generated by conflicts between drives. The countertransference is a sign of neurotic conflicts which have not been resolved in the analyst, the patient merely setting off this process just as the day's residues are the trigger for a dream. Any expression or acting out of countertransferential feelings will be to the detriment of the progress of the treatment, because this will interfere with the development of the transference of the patient.

As regards the model based on relations, the analytic situation is inherently dyadic. The therapeutic situation is not seen as the mere unfolding from within of the dynamic structures that constitute the neurosis of the patient. Rather, what emerges from the treatment situation is conceived as being created in the interaction between therapist and patient. As with the drive model, the analyst is placed in a series of roles by the patient, these being derived from the patient's past relationships. However, this construction differs in that the analyst never operates from outside the transference. As an individual person, not only does the therapist play different roles, but he also precipitates these roles. Everything that the analyst does shapes the transference regardless of whether it does or does not respond to transferential demands. The participation of the analyst exerts a pressure on the patient and, in this way, the analyst becomes the co-author of the transference. Likewise, the way in which the patient experiences his analyst and his behaviour puts pressure on the analyst. Becoming aware of these pressures enables the therapist to use this knowledge to understand the patient's pattern of relationships. Thus, the countertransference offers crucial clues about the predominant transferential configurations, since the transference and countertransference reciprocally penetrate one another.

However, as well as the repetition of past patterns, 'something more' takes place in the experience of the patient with his analyst. A genuine emotional contact is established, with an intimacy and a freedom up to that time never previously experienced in the interpersonal history of the patient. This allows the patient to transcend the limits of old models of relationships sustained by anxiety or by the attachment to bad objects.

For the model based on drives, the goal of analysis is knowledge and the role of the analyst is to interpret the defences of the patient and the underlying impulses which they are based on. By means of this self-knowledge, which involves becoming aware of factors which were previously rejected, the patient will be in a position to

relinquish objects from his past and to establish more realistic goals. Assuming the abstinence and lack of participation of the analyst, the transference is seen as the 're-presentation' in the present of old conflicts which, precisely by virtue of their representation, are made accessible to interpretation. The therapeutic effect arises from self-knowledge: interpretation leads to *insight*, and this to the cure.

In the case of those analysts who are guided by the relational model, the therapeutic action of psychoanalysis is based not only on self-knowledge, but also on the skill of the therapist in remedying developmental failures. However, since the most crucial factor in the development of the patient is the quality of early relationships, therapeutic efficacy is attributed to the quality of the relationship which is established between the patient and the analyst. The patient is seen as having lived in a closed world of archaic object relations which have led to self-fulfilling prophesies. By means of a new mode of interaction with the patient, the therapist will be able to enter this world and open it up to the development of new modes of relationship. Of course, the analyst interprets and thus communicates information to the patient about his inner world, but it is not just this isolated information that produces change. Rather the essence of the cure lies in the nature of the relationship which develops around this communication.

Certainly, *all* the authors and schools of psychoanalytic thought combine both models, although the technical significance attributed to the interpretations and to the relationship is different, in the same way in which the valuing of absence and presence in treatment varies. In Latin America, especially as regards psychoanalysis in the River Plate area (Argentina and Uruguay), the relational conception is well established. In a recent review, Winograd suggested that

...the construction of an explanatory system of the clinical field based on the contributions of authors from the River Plate area should include the models of the bond theory and of the spiral process of Pichon Rivière as a diachronic conceptualization or temporal development of the therapeutic field and the therapeutic process; it should include the Barangers' dynamic field theory, which would mean a more synchronic cross-section through the vicissitudes and the products of the therapeutic couple; a contribution from David Liberman's theory of the presence of clinical indicators in the discursive material, along with the importance of complementary structures and the interpretative style (together with the content of the interpretation) introduced by Álvarez de Toledo; the exploration of the inner space of the analyst which functions as an indicator and a decodifier, first presented by Racker and taken up by colleagues such as Cesio and others. (2002, p. 15)

## The relational model and the drive model in the light of interdisciplinary findings

In contrast to the opinion of Greenberg and Mitchell (1983) that the two basic models of psychoanalysis are irreconcilable due to their coming from irreducible anthropological roots, I believe that current knowledge enables a reformulation of this dichotomy and points towards a new integration of the drive and relational models. The irruption of what was termed relational psychoanalysis in the 1990s, in its intersubjective (Stolorow and Atwood, 1992) and interactive (Beebe and Lachmann, 2002) versions, in particular the brilliant argumentation of Mitchell (1988, 2000), would seem sufficient to expel the notion of drives from the theoretical psychoanalytic

universe forever. However, I believe that the relational model without the concept of drives is incompatible with the findings of the neurocognitive sciences, albeit we should understand drives in a way which is very different to how they have been understood traditionally.

Nonetheless, I think that the crisis of the drive model was precipitated by clinical practice. The drive model, which supports classic psychoanalysis, was oriented to the treatment of neurosis. However, over the last 50 years, the range of patients who have sought psychotherapeutic treatment has suffered an epidemiological shift towards more disturbed patients classed as 'borderline cases' (A. Green, 1975). These patients are borderline because they are precisely on the borderline of *analysability* and have led to technical modifications, the majority of which include concepts based on the relational model. Such serious cases tend to have difficulties in using the setting as a facilitating environment for therapeutic work. In these patients, the frame, usually silent, and only perceived as an absence, makes its presence felt, hindering the work of symbolization and requiring the arduous task of containment from the therapist.

Yet what has given greater legitimacy to the relational postulate has been studies into early development, and empirical research into process and outcome both in psychotherapy and in psychoanalysis. In this context, Stern states that

Some psychoanalytic thinkers are interested in infants' actions, not in and of themselves, but rather only as forerunners of thinking or language. Similarly, the very mental structuring of experience has been viewed as possible only in, and due to, the absence of action or absence of an object to act upon. ... The opposite view [supported by modern infant research] is that it is action and objects to act upon that structure experience and permit its representation. (Absence only recalls or reevokes these representations; it does not structure them). (1995, p. 197, note 2, my italics)

The consequences for the technique of treatment are immediately evident: the therapeutic change arises from a certain type of emotional, cognitive and corporal exchange between patient and therapist—in the here and now—rather than from the interpretation of unconscious representations, that is, the impact of absence.

From the perspective of current research into process and outcome in psychotherapy and psychoanalysis, the relationship between the quality of the therapeutic bond and the therapeutic outcome is the area most studied. The *global quality of the therapeutic relationship* is consistently associated with positive results (Horvath, 2005; Horvath et al., 1993; Orlinsky, 1994; Wampold, 2002). Orlinsky (1994, p. 116) asks about the implications of these findings for the practice and the theory of psychoanalysis, concluding that it would be a serious error to interpret them as a validation of the concept of 'transference cure'. In the model centred on drives, transference is understood as a sort of solipsistic and conflictual experience which, if not resolved by means of interpretation, will tend to result in therapeutic failure. However, for Orlinsky, the research supports the Winnicottian concept of 'holding environment' as a more adequate means of understanding the way in which the bond contributes to therapeutic success. If patients experience this bond as providing a safe environment for independent exploratory behaviour, this will strengthen

their ability to stop defensive reactions and will improve their ability to learn more adaptive ways to confront what were previously threatening situations. The impression that what is involved here is present reality and not just regressive fantasy is reinforced by the findings concerning the importance of empathetic rapport and communicative syntony. The findings regarding the importance of a collaborative relationship also mean that adult aspects of the patient and the therapist must play a part in the therapeutic alliance. Clearly, this alliance can be threatened by an excessive detachment, this being the result of 'analytic neutrality'. In the same way, the alliance can be subverted if the dependence of the patient is actively stimulated in the belief that such dependence is necessary to start up an 'analytic process'. In Orlinsky's opinion, the neurotic condition of the patient is sufficient to ensure that regressive fantasies and transferential conflicts will spontaneously emerge in the course of the treatment. When this happens, the successful resolution of the conflict will depend to a great degree on the preservation of the therapeutic alliance and on the support of the adult functioning of the patient.

What is certain is that there is an enormous accumulation of empirical evidence and a growing clinical consensus that the quality of the therapeutic relationship is a powerful predictive tool for the outcome of a treatment. Naturally, the question remains—and this needs to be resolved by further investigation—whether the therapeutic alliance is *in itself* the curative component of the therapy or if, in fact, the relationship creates the interpersonal context necessary for other therapeutic elements to come into play (Horvath, 2005). In any case, the idea is that the resistances and the counter-resistances, arising from the interaction between transference and countertransference, permanently subvert the 'best possible bond' between the analyst and the patient.

Empirical psychoanalytic research shows results which are compatible with what has been mentioned above. The Menninger project showed that the results from supportive therapies and expressive therapies tended to converge and not diverge as would have been expected in line with the psychoanalytical theory of therapeutic change. This led Wallerstein to state that support 'deserves far more respectful specification in all its forms and variants than has usually been accorded in the psychodynamic literature' (1986, p. 730).

The findings of the Stockholm outcome study of psychoanalysis and psychotherapy have shown that

A significant part of the outcome differences between patients in psychoanalysis and in psychotherapy could be explained by the adoption, in a large group of therapists, of orthodox psychoanalytic attitudes that seemed to be counterproductive in the practice of psychotherapy but not in psychoanalysis. (Sandell et al., 2000, p. 921)

Without doubt, this does not mean that neutrality as a resource or insight as an objective are inadequate. The critical point seems to be that the classic psychoanalytic perspective, under the pretext of the rule of abstinence, seems to give little value to warmth, to intense interpersonal relationships and to making the patient feel that somebody cares about him. This does not seem so important in the classic psychoanalytic setting, but it is important in psychotherapy. The results of this investigation

suggest that analysts who can be called classic tend to conduct bad psychotherapy, whereas the relationship-oriented analysts usually have good outcomes in both forms of treatment.

Similar findings can be found in a retrospective study of 763 cases of psychotherapy and psychoanalysis in children, conducted at the Anna Freud Centre, London, UK (Fonagy and Target, 1996). For the authors, the most helpful interventions for the most complex cases differed from those which are habitually described as central in psychotherapeutic child technique. In particular, interpretations of unconscious conflict aimed at promoting *insight*, which for much time were seen as the central axis of this approach, seem to have limited value in the most serious cases. The least disturbed children, in contrast, did appear to benefit from an interpretative approach.

Finally, the studies of process—outcome show that it is the convergence between a type of patient willing to work psychotherapeutically and an analyst with specific personal and professional characteristics, capable of dedicating himself to the needs of this particular patient, that can explain the success or the failure of the treatment. The findings of the Boston outcome study of psychoanalysis corroborate that it is not the personal characteristics of the patient and the analyst that are important, but the *match* between them:

...while there may be some characteristics of particular patients and analysts that seem to make them either well- or ill-suited partners from the outset, the dynamic aspect of their interactions, their resonances and dissonances, and their joint capacity or limitation in expanding the 'blind spots' or bridging the differences that develop over the course of the analytic work are likely to be central to the outcome. (Kantrowitz, 1993, p. 327)

But the empirical research into the psychotherapeutic process has taken things a step further, focusing on the microprocesses of the patient—therapist interchange. In fact, the whole theory of change, and relational concepts such as a facilitating environment, support and containment, would be an empty metaphor without such microprocesses. The study of the processes of the affective interchange between patient and therapist shows that this empathetic meeting takes a non-verbal form, by means of eye contact, the position of the body and of changes in the tone of voice. Various studies have shown that facial behaviour, especially the emotional facial behaviour of both patient and therapist, in its interactive aspects, is an indicator of the affective bond and a significant predictor of the therapeutic outcome. Studies which correlate facial behaviour, verbal content and emotional experience make it possible to operationalize the processes which determine the intersubjective field by describing possible relationships between the cognitive content and affective interaction (Benecke et al., 2001, 2005).

The Boston Process of Change Study Group (PCSG, 1998) have put forward a model of change in psychoanalytic therapy which includes current knowledge of recent developments in cognitive sciences. Using studies about mother—infant interaction as a starting point, along with non-linear dynamic systems and their relationship with theories of the mind, the authors assert that the therapeutic effect of the bond lies in the intersubjective and interactive processes which give rise

to what they call implicit relational knowledge. This is a non-symbolic field, different from declarative, explicit, conscious or preconscious knowledge, which is symbolically represented in a verbal or imaginary way. Historically, interpretation focused on the intrapsychic dynamic represented at a symbolic level, rather than in the implicit rules which govern our own transactions with others, this being a situation which has recently changed. According to this model, in the analytical relationship, there are moments of intersubjective meeting between patient and therapist which are capable of creating new organizations in this relationship and thus of reorganizing the implicit knowledge the patient has regarding the way in which he relates to others. This knowledge is not conscious; it is inscribed in the long-term procedural memory and includes the models of attachment. The different instances of interaction between patient and therapist take shape in a sequential process led by the verbal exchange between them which can include varied interventions. The mutative locus in therapy arises, however, when the movement of intersubjective negotiation leads to moments of meeting in which patient and analyst share an understanding of the mutual implicit relationship, and thus a recontextualization of the implicit relational knowledge of the patient is produced. On these occasions, what takes place between patient and analyst is a reciprocal recognition of what is in each other's mind regarding the present nature and state of their mutual relationship. This mutual recognition takes the patient and the analyst to a realm which transcends the 'professional' relationship, without cancelling it, and, by doing this, it partially liberates them from the tonalities of the transference-countertransference relationship. The shared knowledge can be later consciously validated. However, it can also remain implicit. This illustrates what clinicians have known for a long time, namely, that there are treatments in which the level of self-knowledge gained does not explain the magnitude of the changes achieved by the patient.

#### Memory, the therapeutic bond and therapeutic change

The PCSG studies are compatible with the current conceptions in neurocognitive science regarding the functioning of the memory. These studies are being incorporated into psychoanalytic theory of therapeutic change, giving validity to the relational model (Fonagy, 1999; Leuzinger-Bohleber and Pfeifer, 2002). Fonagy puts forward this view in a radical way:

Analysts and patients frequently assume that remembering past events has caused change. I believe that the return of such memories is an epiphenomenon, an inevitable consequence of the exploration of mental models of relationships. Whether or not the remembered event was one of those that established a pathogenic way-of-experiencing oneself with another, the significance of its recovery is the same. It provides an explanation, but is therapeutically inert. Therapeutic action lies in the conscious elaboration of models of preconscious relationship representations, principally through the analyst's attention to the transference. (1999, p. 218)

In any event, this knowledge about the functioning of the memory is not totally new in psychoanalysis. Matte Blanco (1988, pp. 162–4) points out that Klein had already touched on this problem:

All this is felt by the infant in much more primitive ways than language can express. When these pre-verbal emotions and phantasies are revived in the transference situation, they appear as 'memories in feelings', ... and are reconstructed and put into words with the help of the analyst. In the same way, words have to be used when we are reconstructing and describing other phenomena belonging to the early stages of development. In fact, we cannot translate the language of the unconscious into consciousness without lending it words from our conscious realm. (Klein, 1957, p. 5, footnote)

With the following comments, Matte Blanco places this remembering of feelings in a relational context:

I have come to see that the expression of these 'memories in feelings' is fundamental in the treatment of some cases. Without them these patients could not be cured. Some of the patients I am referring to had some memories of their (repeated) traumatic situations, others not. No increase in memories of the happenings was obtained. The feelings, instead, were abundantly and repeatedly discharged over a long time. I feel that this repeated expression of most varied feelings connected with the episodes and persons concerned, now made towards a basically respectful and tolerant analyst who tries to understand the meaning of the emotional expression and its connections with the details of early experiences and actual relationships, is the real healing factor. (1988, p. 163, original italics)

Scientific studies into memory processes have suggested that experiences which contribute to certain object-relations models take place too early to be remembered, in the sense of the conscious experience of retrieving a past experience and bringing it to the present. This does not mean, however, that early experience is not formative. What happens is that it is stored in areas of the brain which are separate from those where autobiographical memories are encoded and stored, and from where they can be retrieved. Memory does not constitute a single mechanism; rather, it involves different systems. There exists a declarative or explicit memory system which participates in the conscious recovery of information from the past, and an implicit or procedural system in which the information can be retrieved without passing via the experience of remembering. The declarative memory contains memories and information about events whereas the procedural memory is empty of contents and participates in the acquisition of sequences of actions—in the 'how' of behaviour, e.g. how to ride a bicycle or how 'to be with others'.

The concept of 'representation' does not suit the relational models stored in the procedural memory, which are better understood in the framework of the interaction of an organism with its environment. What to the psychoanalytic observer appears to be a structure of meaning is not the result of an internal representation but rather it derives from a number of different processes in the interaction with the real world (Cohen and Varela [internet]; Leuzinger-Bohleber and Pfeifer, 2002; Stern, 2004). The concept of representation binds knowledge to an external world which existed beforehand. However, our experience in the everyday world shows that this approach is far from complete. Living knowledge consists, to a great degree, of asking relevant questions, questions which come up in each moment of our lives. These questions are not predefined but are rather 'enacted' and emerge from a background, and what is relevant is what our common sense judges to be so, always within a certain context (Varela, 1990). In this emergence of significant issues, the procedural, as opposed

to the declarative, memory comes into play. The implicit memory of an experience of oneself with another person is what Sandler and Joffe called the non-experiential realm, 'intrinsically unknowable, except insofar as it can become known through the creation or occurrence of a phenomenal event in the realm of subjective experience' (1969, p. 82). This non-experiential realm can only become explicit and knowable when it is enacted or when it is reified in an unconscious fantasy. For Fonagy (1999), the distinction between enactment and unconscious experience is crucial, because the emotional reaction (conscious or unconscious) to an implicit memory will only appear when this memory has entered into the experiential realm, i.e. only when it manifests itself in transference. Leuzinger-Bohleber and Pfeifer explain this as follows:

...the (unconscious) perception of certain sensory-motor states and processes [in the patient] 'triggered' the sensory-motor reactions and the (unconscious) fantasies of the analyst in the analytic situation and finally enabled the analyst ... to reflect on these countertransference reactions. (2002, p. 25)

Everything previously mentioned leads to the conclusion that early experiences are not directly accessible to interpretation, that is to say, they are not stored as representations of absent objects in the explicit memory but are, in fact, enacted in the relationship with the analyst. They emerge in the context of the physical interaction with the analyst, that is to say, in the presence of the analyst. Furthermore, the modification of such pathological attachment models of 'being-with-the-other' can occur even without their passing via the consciousness of the patient.

The discovery of what is called 'implicit relational knowledge' adds another layer to the relational turn in psychoanalysis, in this case a turn to what might be called the experiential realm of the therapeutic relationship. Stern elucidates this further:

In talking therapies the work to interpret, to make meaning, and to narrativize can be seen as an *almost* nonspecific, convenient vehicle by which the patient and the therapist 'do something together.' It is the doing-together that enriches experience and brings about change in ways-of-being-with others through the implicit process discussed. (2004, p. 227, my italics)

Even though interpretative work can bring about changes, these can only be achieved if the implicit doing-something-together and the implicit relational knowledge, which has been modified, frame and seal the flow of explicit understanding. This experiential turn to which I am referring comes from studies into the microprocesses of regulation and auto-regulation in the mother—infant dyad and their application to the interaction in the therapeutic relationship, where these microprocesses are also at play (Beebe and Lachmann, 2002). On the other hand, research into learning processes in general and into the therapeutic situation has demonstrated the importance of an atmosphere of emotional contact between therapist and patient. Such studies suggest the image of an analyst who is spontaneous, committed and, above all, emotionally attentive to the subtle affective shifts and to the details of non-verbal behaviour of the patient. Lastly,

<sup>&</sup>lt;sup>2</sup>This is the case of the 'dead mother complex' (A. Green, 1986), whose procedural nature has been discussed by Stern (1995) and Leuzinger-Bohleber and Pfeifer (2002).

that analyst should be capable of interpreting through metaphors rich with emotional nuances (Levin, 2002; Modell, 2003; Stern, 2004).

## Emotion and motivation: The reformulation of the concept of drives

The concept of drives now appears outdated in psychoanalysis. Solms and Turnbull suggest that

It has had the unfortunate effect of divorcing psychoanalytic understanding of the human mind from knowledge derived from other animals. We humans are not exempt from evolutionary biological forces that shaped other creatures. It is therefore difficult to form an accurate picture of how the mental apparatus really works without using a concept at least something like Freud's definition of 'drive' (2002, p. 117, my italics)

as

...a psychical representative of the stimuli originating from within the organism and reaching the mind, as a measure of the demand made upon the mind for work in consequence of its connection with the body. (Freud, 1915, p. 122)

Mitchell has developed a brilliant argument with the goal of eliminating the concept of drives from psychoanalytic theory, although he does admit his reservations. Assuming that the establishment of the relational matrix is innate, the question is whether 'it [is] meaningful to speak of an innate drive toward relation' (1988 p. 62). He himself replies to this question saying that,

Although I have no strong objection to such a concept, I am not sure it takes us very far. Either one depicts a relational 'drive' in extremely broad terms, like 'attachment', object seeking, bonding, which adds little in the way of specificity, or else one collapses the complexity of social and interpersonal relations to what are presumed to be more fundamental ... . The latter reductions seem to me often arbitrary and lose something of the richness of the many forms of connection within the relational tapestry ... . Further, as soon as one establishes a motive as innate, one ironically closes it off somewhat from analytic inquiry and thereby loses the opportunity to deepen an appreciation of its origins and resonances within the individual's particular relational matrix. (p. 62, my italics)

In the same way as in the basic model of drives the object is external to the aim of these drives, after hearing Mitchell's argument, it is plausible to assume that, for the relational model, drives are considered as external to the mind. Behind this idea, there seems to be a conception which separates the mind too much from the brain, this being the equivalent of the dichotomy between constitution and environment which has prevailed for decades in psychiatry and also in psychoanalysis. Without going into details about this fascinating controversy, I will just point out that, if psychoanalysis must 'serve as a skillful and reality-oriented tutor for a sophisticated understanding of the mind—brain' (Kandel, 1999, p. 520), it is necessary to adopt an integrated epistemological stance which considers mind and brain as two sides of the same coin, even when their exploration requires different methodologies, subjective in the first case, and objective in the second. This implies adopting a dual solution to the mind—brain problem: ontological monism on the one hand (mind and brain are the same thing), epistemological dualism on the other hand (the knowledge of

both is of a different nature and mutually irreducible). This irreducibility, however, does not prevent both from being, at least, compatible with one another. Modern biology has changed the inevitable character that had been assigned to the genetic constitution. Although mental processes reflect cerebral operations, and genes—and the proteins which these produce—are important determinants of the patterns of interconnections between neurons and their functioning, faulty genes do not alone explain the variations in a specific mental illness. Environmental factors also contribute to this variation, because changes in genetic expression brought about by learning give rise to changes in the neuronal connections. One can conclude, therefore, that psychotherapy produces persistent changes in behaviour by means of learning, promoting changes in the expression of genes, changing the strength of synaptic connections and inducing structural changes which alter the anatomic pattern of the interconnections between neurons (Kandel, 1998). In this way, based particularly on genetic-epidemiological studies into depression (Andreasen, 1997; Caspi et al., 2003; Kendler et al., 2003), the psychoanalytic hypothesis emerges that it is not the stressful event in itself which triggers off the expression of a gene, but rather the way in which the individual interprets this event, through the mediation of representational, intrapsychic processes which are basically unconscious (Fonagy, 2003a, 2003b).

In the case of neuroscience, the motivational force which corresponds to the Freudian definition of drives cited previously is emotion. Intentional actions are ultimately motivated by the biological task of satisfying our needs in the external world. From a biological point of view, the function of consciousness lies precisely in relating the information on the current state of the self with circumstances in the environment, this being the place where the objects are which will satisfy our needs. This information is, therefore, intrinsically evaluative, because it tells us how we feel in relation to the things in our environment. This is why consciousness is primarily an emotional consciousness. Emotion is a perception of the state of the subject. But we do not only feel our emotions, we also express them. So, as well as being a modality of perception which is directed inwards, emotion is also a form of motor discharge. Emotions drive us to 'do something'. Internally, emotions produce humoral discharges and different internal changes; externally, emotions manifest themselves through changes in facial expression, in gestures, muscular tremors, crying, laughter, all of which are actions we call, precisely, expressive, that is to say, directed towards others in the context of the relational matrix.

The fact that, despite individual and cultural differences, there are certain events which make all of us feel more or less the same way is of great importance in understanding our biological history. For example, there are *natural* cues to signal danger, such as the absence of familiarity, abrupt changes in sensorial stimulation, the approach of something or someone which is rapid or unexpected, heights, or being left alone, all of which are capable of inducing an emotional response of fear in the great majority of human beings. They are situations with universal meaning. Neurobiologists call these universal emotional responses *basic emotions*, which consist of fixed connections between certain situations which are relevant for survival and the subjective response which these elicit. Basic emotions are organized

into motivational systems like a hypothetical, homogenous set of neurons responsible for motivational states. There exist, therefore, complex anatomical—functional structures with a defined neurochemical basis which underlie specific affective and behavioural states. Each system is based on an innate, recognizable need, and has developed throughout the history of evolution as it has a survival value.

There is a certain agreement among neurobiologists as regards which are the basic motivational systems. For example, Panksepp (1988) describes four: exploration and search, anger, fear, and panic or distress due to separation. Sexuality is considered to be a subsystem of exploration and the panic system is related to social behaviour linked to attachment and affiliation, these being responsible for caring behaviour and for the responses of loss and grief. From the clinical point of view, however, the matter would appear to be more complex, and it is here that psychoanalysis can make a significant contribution. For instance, Rizzuto et al. have recently presented a new, overarching theory of aggression

...as the capacity of the mind to carry out any psychic or physical activity directed to overcoming any obstacle interfering with the completion of an intended internal or external action. The motive of aggressive activity is overcoming an obstacle in order to complete the action and achieve the intended goal. Affects experienced in the effort of attempting to overcome the obstacle are dependent on motivational sources related to the specific intended action and the obstacles(s) interfering with its goal-attainment. (2004, p. 6, my italics)

Lichtenberg (1988, 1989) suggested more than a decade ago that psychoanalysis is a theory of structured motivation. Having integrated psychoanalytical theories and findings from studies into the early mother-infant relationship, he described five motivational systems: the regulation of physiological needs, attachment and affiliation, exploration, aversion as a result of antagonism or withdrawal, and sensual and sexual pleasure. These motivational systems are organized and stabilized in dialectic, reciprocal tension, undergoing a constant hierarchical readjustment according to the developmental phase and the environmental circumstances. They are defining constituents of moment-by-moment aspects of experience and they are constantly in a state of flux, each system being dominant in a specific moment of experience while the others are in a latent state or are less active. During childhood, these systems develop through interaction with parents and caregivers. The adaptive goals which underpin motivational systems can serve sequentially as central axes around which structural developments are organized. Likewise, in the therapeutic exchange, motivational dominance is influenced by the intersubjective context of the moment, thus contributing to the dynamic of the subjectivity, which is often unpredictable (Lichtenberg, 1998).

Using the conception of a radical human relationality as his starting point, Stern (2004) postulates the intersubjectivity desire as a primary, innate motivational system which is essential for the survival of the species. Speaking from a perspective which integrates the relational model with the conception of motivational systems, he states that 'the desire for intersubjectivity is one of the major motivations that drives a psychotherapy forward. Patients want to be *known* and to share what it feels like to be them' (p. 97, original italics). Similarly, Fonagy (2003b) offers evidence

of the existence of an innate 'interpersonal, interpretive mechanism' which develops as a result of the attachment relationship. This involves the ability to mentalize, in other words, to interpret the behaviour of others in terms of mental states, desires, intentions and beliefs. When the individual feels a secure state of attachment, the genes responsible for the mentalizing neuronal structure come into play, which is probably localized in the medial prefrontal cortex and the temporoparietal sulcus (Gallagher et al., 2000; Zimmer, 2003).

All this is consistent with the findings of empirical research into affects. Ekman (1992) presumes that rage, fear, sadness, happiness, annoyance and surprise are fundamental affective processes with a phylogenetic base which enable human beings to handle heterogeneous tasks in their environment. Krause (1990) added contempt to the list of basic emotions. Basic affects are characterized by a situational configuration which triggers off a specific emotion and a specific facial expression. These communicate a desire to the fellow interactor, which is also specific. Different studies into specific psychopathological conditions and different therapeutic situations have made possible to describe interactions of virtuous or iatrogenic facial expressions between patient and analyst. Benecke and Krause (2005) suggest that the general processes in productive therapeutic work must be modified depending on the specific disturbance and on the corresponding offer of a relationship on the part of the patient. These studies open up a promising line of development as regards adaptive psychoanalytic techniques (Benecke et al., 2005).

In this way, the findings of neurocognitive science and of mother—infant research support a change from Freud's model of drives to a multiple motivational model, in which sensations and affects are seen as appetites—as desires that the subject can express in relation to the object. Such motivational systems are dynamic, that is to say, hierarchical but also conflictual.

## **Conclusions: Current challenges**

The possibility of adopting a psychoanalytic technique which can be adapted to each individual patient is an old idea in psychoanalysis (see Thomä and Kächele, 1987). It had not been possible to put this into practice because the homogeneity principle had prevailed in psychoanalysis, according to which the unity of the psyche comes from a global organizing principle which is the same for all components, the mind evolving as a whole, such that at each stage of development all the elements work according to the same laws. Only now, after the paradigmatic change described, are we in a position to consider such a possibility. In this regard, Gabbard and Westen (2003) suggest that single-mechanism theories of therapeutic action, no matter what their complexity, are unlikely to prove useful. This is due to the variety of targets of change and because of the variety of methods useful in effecting change in those targets as well as the variety of techniques aimed at altering different kinds of conscious and unconscious processes. Because of this, we are invited to defer the technical question of whether these techniques are psychoanalytic 'focusing instead on whether they are therapeutic' (Gabbard and Westen 2003, p. 826, original italics). In the same vein, Bleichmar (1997, 2004) proposes the adoption of a modular conception for psychoanalysis guided by the idea that the mind is constituted by the articulation of modules or systems which obey different rules, which evolve in parallel and asynchronously, which, linked through complex relationships, produce and undergo transformations, and which require multiple modalities of intervention in order to be modified.

In keeping with interdisciplinary findings, Bleichmar suggests that it is possible to develop a technique with specific, flexible therapeutic interventions in their multiple forms and that, together with the fundamental role of making the unconscious conscious, emphasizes the importance of procedural memory, of cognitive restructuring, of change in action and exposure to new experiences. This amounts to specific therapy for each case, guided by the questions: what type of interventions for what subtype of psychopathological picture, for what type of personality structure, for what stage in the patient's life, for what conditions of treatment?

I am certain that the development of new techniques of psychoanalytic treatment based on the emerging paradigm will be a collective effort in which many will participate. This will not depend, as it has done up to now, on the lucidity and creativity of a few leading clinicians, and it is essential that it be validated by process and outcome empirical research. In this way, psychoanalysis will not only survive as an intellectual force in the 21st century, but will also meet this challenge of actively participating in the task of attempting to understand the mind together with the disciplines of biology and psychology. This can only result in a renaissance of psychoanalysis which will be of benefit to those individuals, our patients, who need us to help alleviate their suffering.

#### Translations of summary

Nach dem Pluralismus: auf dem Weg zu einem neuen, integrierten psychoanalytischen Paradigma. Der Autor beschreibt zunächst die isolierte Situation, in der sich die Psychoanalyse gegenüber verwandten Disziplinen befindet, und untersucht einige Gründe für die Diversität der Denkschulen und die Fragmentierung des psychoanalytischen Wissens. Im Anschluss daran begründet er die Notwendigkeit, zusätzlich zu den Prinzipien der hermeneutischen Kohärenz auch Grundsätze der Entsprechung oder äußeren Kohärenz anzuwenden, um psychoanalytische Hypothesen zu validieren. Aktuelle Entwicklungen der Kognitionsund Neurowissenschaften sind der Psychoanalyse in dieser Krisenzeit zu Hilfe gekommen. Daraus ging ein Projekt hervor, beide Bereiche zu einem neuen Paradigma der Konstruktion der Theorie des Geistes miteinander zu verbinden. Dieses in Entwicklung begriffene Paradigma versucht, klinisches Wissen mit den Kognitions- und Neurowissenschaften, mit Erkenntnissen aus der psychotherapeutischen Verlaufsund Ergebnisforschung, mit der Erforschung der frühen Mutter-Kind-Beziehung und schließlich mit der Entwicklungspsychopathologie zu integrieren. Der Autor untersucht theoretisch-behandlungstechnische Modelle, die auf dem Trieb- und Beziehungskonzept beruhen, im Lichte der interdisziplinären Erkenntnisse. Er gelangt zu dem Schluss, dass das relationale Modell eine breite empirische Basis hat, sofern das Triebkonzept nicht diskreditiert wird. Die interdisziplinären Ergebnisse sprechen dafür, das freudianische Triebmodell durch ein Modell der auf affektive Prozesse konzentrierten Motivationssysteme zu ersetzen. Der Autor formuliert Schlussfolgerungen, die Implikationen für die psychoanalytische Behandlungstechnik besitzen und denen das neue integrierte Paradigma zugrunde liegt.

Después del pluralismo: hacia un nuevo paradigma psicoanalítico integrado. Tras constatar el aislamiento del psicoanálisis respecto de las disciplinas afines y de analizar algunas razones de la diversidad de escuelas y de la fragmentación del conocimiento en psicoanálisis, el autor plantea la necesidad de adoptar criterios de correspondencia o de coherencia externa, junto con los de coherencia hermenéutica para validar hipótesis psicoanalíticas. Los desarrollos recientes en ciencias neurocognitivas han venido en ayuda del psicoanálisis en este periodo de crisis, con la propuesta de integrar ambas áreas en la formación de un nuevo paradigma para la construcción de la teoría de la mente. Este paradigma emergente intenta integrar el conocimiento clínico con las ciencias neurocognitivas, los hallazgos de investigación sobre el proceso

y los resultados en psicoterapia, la investigación en la relación temprana madre—bebé y la psicopatología evolutiva. Se examinan los modelos teórico-técnicos basados en el concepto de pulsión y de relación, y se los confrontan con los hallazgos interdisciplinarios. Se concluye que el modelo de relación tiene una amplia base empírica, salvo cuando el concepto de pulsión es desacreditado. Los hallazgos interdisciplinarios proponen un reemplazo del modelo freudiano de pulsión por un modelo de sistemas motivacionales centrados en procesos afectivos. Se extraen algunas consecuencias para la técnica del tratamiento psicoanalítico. Estas surgen de la adopción del nuevo paradigma integrado.

Après le pluralisme : vers un nouveau paradigme psychanalytique intégré. Après avoir resitué l'isolationnisme de la psychanalyse par rapport aux autres disciplines, et avoir examiné quelques unes des causes de la diversité des écoles de pensée et de la fragmentation de la connaissance psychanalytique, l'auteur soutient la nécessité d'adopter des principes de correspondance ou de cohérence externe en lien avec les principes de cohérence herméneutique pour permettre la validation des hypothèses psychanalytiques. De récentes avancées dans les sciences neurocognitives sont venues à l'aide de la psychanalyse en cette période de crise, ce qui a permis la proposition d'intégration de ces deux champs afin de former un nouveau paradigme pour la construction de la théorie de l'esprit. Ce paradigme émergent tente d'intégrer connaissance clinique et sciences neurocognitives, données issues des études sur le processus et résultats des psychothérapies, recherches sur la relation précoce mère-enfant et psychopathologie développementale. Les modèles théorico-techniques basés sur le concept de la pulsion et de ses relations sont examinés à la lumière de ces résultats inter-disciplinaires. Il en est conclu que le modèle relationnel repose sur une vaste base empirique, sauf lorsqu'il remet en cause le concept de pulsion. Les découvertes inter-disciplinaires ont conduit à la proposition de remplacer le modèle freudien des pulsions par un modèle de systèmes motivationnels centrés sur les processus affectifs. Quelques conclusions, issues de ce nouveau paradigme intégré, sont proposées concernant la technique du traitement psychanalytique.

Dopo il pluralismo: Verso un nuovo paradigma psicoanalitico integrato. Dopo aver constatato l'isolamento della psicoanalisi rispetto alle discipline confinanti e aver esaminato alcune delle ragioni per le diversità di scuola e di pensiero e per la frammentazione della conoscenza psicoanalitica, l'autore propone, al fine di validare le ipotesi psicoanalitiche, la necessità di adottare principi di corrispondenza o di coerenza esterna insieme a quelli di coerenza ermeneutica. I recenti sviluppi nella scienza neurocognitiva sono venuti in aiuto alla psicoanalisi, in questo periodo di crisi, con la proposta di integrare le due discipline e formare un nuovo paradigma per la costruzione di una teoria della mente. Questo paragdima nascente cerca di integrare la conoscenza clinica con la scienza neurocognitiva, i risultati emergenti da studi su processo e esito di trattamenti psicoterapeutici, la ricerca sul rapporto madre-neonato e la psicopatologia evolutiva. Vengono esaminati i modelli teorico-tecnici fondati sul concetto di pulsione e di relazione alla luce di scoperte interdisciplinari. Si conclude che il modello relazionale ha ampio fondamento empirico, eccetto per quanto concerne il discreditato concetto di pulsione. In seguito a questi studi viene proposta la sostituzione del modello freudiano di pulsione con un modello di sistemi motivazionali centrato sui processi affettivi. In conclusione, si valuta il probabile impatto dell'adozione di questo nuovo paradigma sulla tecnica del trattamento psicoanalitico.

#### References

- Andreasen NC (1997). Linking mind and brain in the study of mental illnesses: A project for a scientific psychopathology. *Science* **275**:1586–93.
- Beebe B, Lachmann FM (2002). *Infant research and adult treatment: Co-constructing interactions.* Hillsdale, NJ: Analytic Press. 280 p.
- Benecke C, Krause R, Merten J (2001). Über die Bedeutung des intersubjektiven Feldes in der Psychotherapie [On the significance of the intersubjective field in psychotherapy]. *Psychotherapie* **6**:73–80. [Benecke C, Krause R, Merten J [internet]. The intersubjective field: Behavioral basis of therapeutic relationships and their mental representation [cited 2006 Nov 9]. Available from: www.uni-saarland.de/fak5/krause/ulm97/Krause.htm]
- Benecke C, Krause R (2005). Facial–affective relationship: Offers of patients with panic disorder. *Psychother Res* **15**:178–87.
- Benecke C, Peham D, Bänninger-Huber E (2005). Nonverbal relationship regulation in psychotherapy. *Psychother Res* **15**:81–90.

- Bernardi R (2002). The need for true controversies in psychoanalysis: The debates on Melanie Klein and Jacques Lacan in the Río de la Plata. *Int J Psychoanal* **83**:851–73.
- Bernardi R (2003). What kind of evidence makes the analyst change his or her theoretical and technical ideas? In: Leuzinger-Bohleber M, Dreher AU, Canestri J, editors. *Pluralism and unity? Methods of research in psychoanalysis*, p. 125–36. London: IPA.
- Bernardi R (2005). What after pluralism? Ulysses still on the road. Psychoanal Inq 25:654-66.
- Bleichmar H (1997). Avances en psicoterapia psicoanalítica. Hacia una técnica de intervenciones específicas [Advances in psychoanalytic psychotherapy. Towards a technique of specific interventions]. Barcelona: Paidós. 408 p.
- Bleichmar H (2004). Making conscious the unconscious in order to modify unconscious processing: Some mechanisms of therapeutic change. *Int J Psychoanal* **85**:1379–400.
- Caspi A, Sugden K, Moffit TE, Taylor A, Craig IW, Harrington H, et al. (2003). Influence of life stress on depression: Moderation by a polymorphism in the 5-HTT gene. *Science* **301**:386–9.
- Cavell M (1993). The psychoanalytic mind: From Freud to philosophy. Cambridge, MA: Harvard UP. 276 p.
- Cavell M (1998). Triangulation, one's own mind and objectivity. Int J Psychoanal 79:449-67.
- Cohen AE, Varela FJ [internet]. Facing up to the embarrassment. The practice of subjectivity in neuroscientific and psychoanalytic experience. Paris: Les Amis des États Généraux de la Psychanalyse. © 2000 [cited 2006 Nov 8]. Available from:
  - www.etatsgeneraux-psychanalyse.net/mag/archives/paris2000/texte183.html [(2000). *Psychomedia—J Eur Psychoanal* Winter–Fall; 2000(10–11)]
- Cozolino LJ (2002). The neuroscience of psychotherapy: Building and rebuilding the human brain. New York, NY: Norton. 377 p.
- Ekman P (1992). An argument for basic emotions. Cogn Emotion 6:169–200.
- Fonagy P (1999). Memory and therapeutic action [Guest editorial]. Int J Psychoanal 80:215–23.
- Fonagy P (2003a). Genetics, developmental psychopathology, and psychoanalytic theory: The case for ending our (not so) splendid isolation. *Psychoanal Inq* **23**:218–47.
- Fonagy P (2003b). The interpersonal interpretive mechanism: The confluence of genetics and attachment theory in development. In: Green V, editor. *Emotional development in psychoanalysis, attachment theory and neuroscience: Creating connections*, p. 107–27. Hove: Brunner-Routledge.
- Fonagy P, Kächele H, Krause R, Jones E, Perron R (1999). An open door review of outcome studies in psychoanalysis: Report prepared by the Research Committee of the IPA at the request of the President. London: University College. 330 p.
- Fonagy P, Target M (1996). Predictors of outcome in child psychoanalysis: A retrospective of 763 cases at the Anna Freud Centre. *J Am Psychoanal Assoc* **44**:27–77.
- Freud S (1915). Instincts and their vicissitudes. SE 14, p. 111-40.
- Freud S (1923). Two encyclopaedia articles. SE 18, p. 235-62.
- Gabbard GO, Westen D (2003). Rethinking therapeutic action. Int J Psychoanal 84:823-41.
- Gallagher HL, Happe F, Brunswick N, Fletcher PC, Frith U, Frith CD (2000). Reading the mind in cartoons and stories: An fMRI study of 'theory of mind' in verbal and nonverbal tasks. *Neuropsychologia* **38**:11–21.
- Green A (1975) The analyst, symbolization and absence in the analytic setting: On changes in analytic practice and analytic experience. *Int J Psychoanal* **56**:1–22.
- Green A (1986). On private madness. London: Hogarth. 380 p. (International Psycho-analytical Library, No. 117.)
- Green V, editor (2003). *Emotional development in psychoanalysis, attachment theory and neuroscience: Creating connections.* Hove: Brunner-Routledge. 236 p.
- Greenberg JR, Mitchell SA (1983). *Object relations in psychoanalytic theory.* Cambridge, MA: Harvard UP. 437 p.
- Horvath AO (2005). The therapeutic relationship: Research and theory [Introduction to special issue]. *Psychother Res* **15**:3–7.

- Horvath AO, Gaston L, Luborsky L (1993). The therapeutic alliance and its measures. In: Miller NE, Luborsky L, Barber JP, Docherty JP, editors. *Psychodynamic treatment research: A handbook for clinical practice*, p. 247–73. New York, NY: Basic Books. 577 p.
- Jiménez JP (2005). The search for integration or how to work as a pluralist psychoanalyst. *Psychoanal Inq* **25**:602–34.
- Kandel ER (1998). A new intellectual framework for psychiatry. Am J Psychiatry 155:457–69.
- Kandel ER (1999). Biology and the future of psychoanalysis: A new intellectual framework for psychiatry revisited. *Am J Psychiatry* **156**:505–24.
- Kantrowitz JL (1993). Outcome research in psychoanalysis: Review and reconsideration. *J Am Psychoanal Assoc* **41**(Suppl):313–28.
- Kaplan-Solms K, Solms M (2000). *Clinical studies in neuro-psychoanalysis: Introduction to a depth neuropsychology*. London: Karnac. 320 p.
- Kendler KS, Hettema JM, Butera F, Gardner CO, Prescott CA (2003). Life event dimensions of loss, humiliation, entrapment, and danger in the prediction of onsets of major depression and generalized anxiety. *Arch Gen Psychiatry* **60**:789–96.
- Klein M (1957). Envy and gratitude: A study of unconscious sources. London: Tavistock. 101 p.
- Klimovsky G (2004). *Epistemología y psicoanálisis*, vol. 1: *Problemas de epistemología* [Epistemology and psychoanalysis, vol. 1: Problems in epistemology]. Buenos Aires: Biebel. 319 p.
- Krause R (1990). Psychodynamik der Emotionsströrungen [Psychodynamic of emotional disorders]. In: Scherer KR, editor. *Psychologie der Emotionen. Enzyklopädie der Psychologie* [Psychology of the emotions. Encylopaedia of psychology] IV/3, p. 630–705. Göttingen: Hogrefe.
- Leuzinger-Bohleber M, Pfeifer R (2002). Remembering a depressive primary object: Memory in the dialogue between psychoanalysis and cognitive science. *Int J Psychoanal* **83**:3–33.
- Levin FM (1991). Mapping the mind: The intersection of psychoanalysis and neurosciences. Hillsdale, NJ: Analytic Press. 264 p.
- Levin FM (2002). Psyche and brain: The biology of talking cures. Madison, CT: International UP. 314 p.
- Lichtenberg JD (1988). A theory of motivational–functional systems as psychic structures. *J Am Psychoanal Assoc* **36**(Suppl):57–72.
- Lichtenberg JD (1989). *Psychoanalysis and motivation*. Hillsdale, NJ: Analytic Press. 422 p. (*Psychoanalytic Inquiry* book series, vol. 10.)
- Lichtenberg JD (1998). Experience as a guide to psychoanalytic theory and practice. *J Am Psychoanal Assoc* **46**:17–35.
- Main M (1993). Discourse, prediction and recent studies in attachment: Implications for psychoanalysis. *J Am Psychoanal Assoc* **41**(Suppl):209–44.
- Matte-Blanco I (1988). Thinking, feeling, and being: Clinical reflections on the fundamental antinomy of human beings and world. London: Routledge. 347 p. (New Library of Psychoanalysis, vol. 5.)
- Mitchell S (1988). Relational concepts in psychoanalysis: An integration. Cambridge, MA: Harvard UP. 326 p. [(1993). Conceptos relacionales en psicoanálisis: Una integración, Córdoba M, translator. Mexico City: Siglo Veintiuno.]
- Mitchell S (2000). *Relationality. From attachment to intersubjectivity.* Hillsdale, NJ: Analytic Press. 173 p.
- Modell A (2003). Imagination and the meaningful brain. Cambridge, MA: MIT Press. 253 p.
- Orlinsky D (1994). Research-based knowledge as the emergent foundation for clinical practice in psychotherapy. In: Talley PF, Strupp HH, Butler SF, editors. *Psychotherapy research and practice: Bridging the gap*, p. 99–123. New York, NY: Basic Books.
- Panksepp J (1998). Affective neuroscience: The foundations of human and animal emotions. New York, NY: Oxford UP. 466 p.
- Rizzuto AM, Meissner WW, Buie DH (2004). *The dynamics of human aggression. Theoretical foundations, clinical applications.* New York, NY: Brunner-Routledge. 300 p.

- Rubovits-Seitz PFD (1992). Interpretive methodology: Some problems, limitations, and remedial strategies. *J Am Psychoanal Assoc* **40**:139–68.
- Sandell R, Blomberg J, Lazar A, Carlsson J, Broberg J, Schubert J (2000). Varieties of long-term outcome among patients in psychoanalysis and long-term psychotherapy: A review of findings in the Stockholm outcome of psychoanalysis and psychotherapy project (STOPP). *Int J Psychoanal* 81:921–42.
- Sandler J, Joffe WG (1969). Towards a basic psychoanalytic model. *Int J Psychoanal* **50**:79–90. Siegel DJ (1999). *The developing mind: How relationships and the brain interact to shape who we are.* New York, NY: Guilford. 394 p.
- Solms M (2003). Preliminaries for an integration of psychoanalysis and neuroscience. In: Leuzinger-Bohleber M, Dreher AU, Canestri J, editors. *Pluralism and unity? Methods of research in psychoanalysis*, p. 184–206. London: IPA.
- Solms M, Turnbull O (2002). The brain and the inner world: An introduction to the neuroscience of subjective experience. New York, NY: Other Press. 342 p.
- Stern DN (1995). The motherhood constellation: A unified view of parent–infant psychotherapy. New York, NY: Basic Books. 229 p. [(1997). La constelación maternal: Un enfoque unificado de la psicoterapia en las relaciones entre padres e hijos, Jaumà Classen M, translator. Madrid: Paidós.]
- Stern DN (2004). The present moment in psychotherapy and everyday life. New York, NY: Norton. 300 p.
- PCSG (1998). Non-interpretive mechanisms in psychoanalytic therapy. The 'something more' than interpretation. *Int J Psychoanal* **79**:903–21.
- Strenger C (1991). Between hermeneutic and sciences: An essay on the epistemology of psychoanalysis. Madison, CT: International UP. 234 p. (Psychological Issues, Monograph 59.)
- Stolorow RD, Atwood GE (1992). Contexts of being: The intersubjective foundations of psychological life. Hillsdale NJ: Analytic Press. 145 p.
- Thomä H (2000). Gemeinsamkeiten und Widersprüche zwischen vier Psychoanalytikern [Commonalities and contradictions between four psychoanalysts]. *Psyche—Z Psychoanal* **54**:172–89.
- Thomä H, Kächele H (1975). Problems of metascience and methodology in clinical psychoanalytic research. *Annual of psychoanalysis*, vol. 3, p. 49–119. New York, NY: International UP.
- Thomä H, Kächele H (1987). *Psychoanalytic practice*, vol. 1: *Principles*, Wilson M, Roseveare D, translators. New York, NY: Springer.
- Varela FJ (1990). Conocer: Las ciencias cognitivas—Tendencias y perspectivas. Cartografía de las ideas actuales [Knowing: The cognitive sciences—Tendencies and perspectives. A cartography of current ideas]. Barcelona: Gedisa. 120 p.
- Wallerstein RS (1986). Forty-two lives in treatment: A study of psychoanalysis and psychotherapy. New York, NY: Guilford. 784 p.
- Wallerstein RS (1988). One psychoanalysis or many? Int J Psychoanal 69:5-21.
- Wallerstein RS (1990). Psychoanalysis: The common ground. Int J Psychoanal 71:3-20.
- Wallerstein RS (1993). Psychoanalysis as science: Challenges to the data of psychoanalytic research. In: Miller NE, Luborsky L, Barber JP, Docherty JP, editors. *Psychodynamic treatment research. A handbook for clinical practice*, p. 96–106. New York, NY: Basic Books.
- Wampold BE (2002). The great psychotherapy debate. Models, methods, and findings. Mahwah, NJ: Erlbaum. 263 p.
- Wilson A (2000). Commentary [on 'the case history' by Robert Michels]. *J Am Psychoanal Assoc* **48**:411–7.
- Winograd B (2002). El psicoanálisis rioplatense [Psychoanalysis of the River Plate]. *Rev Soc Argent Psicoanál* **2002**(5):9–29.
- Zimmer C (2003). Cognition. How the mind reads other minds. Science 300:1079-80.