

Charles A. Lund, Ray C. Paton

The Representation of Form, Field and Transformation in Psychotherapy

Abstract

The material reported in this paper has grown out of an ongoing dialogue between a psychiatrist and a computer scientist. The former is concerned with the development of meaningful communication between an expert practitioner in psychotherapy and trainees especially within the context of supervision, and the latter with the characterisation of complex domains of knowledge in relation to the possible development of computer-based support systems. The challenge of the ongoing study reported here has been to analyse some of the key concepts in the psychiatrist's domain of expertise with the result of developing a visual metaphor for helping to integrate and clarify these concepts.

1. Introduction

Models are the representation of one thing in terms of another and as such diagrams, word descriptions as well as mathematical and computational representations can serve as models (see for example Harre, 1986). If one compares, say, the representation of thinking in the biological sciences with psycho-analysis there are striking differences. In biology there is a highly visual mode of presentation and communication of ideas from molecules to ecosystems (Paton, 2000). This stands in contrast to psycho-analysis, where there is virtually no visual representation but a vast written descriptive literature and a complex richly woven evolving oral tradition mediated by intensive therapy, supervision and seminars. In the case of psycho-analysis there is a less frequently used equivalent in the form of diagrams that position written concepts relative to each other (i.e., a form of concept network).

A particular problem that has faced the clinical author is the lack of a means whereby the minute by minute complexity of transactions in therapy could most satisfactorily be represented in terms of the experienced mental states of both patient and therapist. In the history and current practice of clinical psychology, psychoanalysis and psychotherapy, there is a long evolution in struggling with this issue and related problems. At the level of reproducible recording there is the widespread use of audio and videotape. At the level of somatic experience there is the telemetric recording of the patient's physiological state, though only rarely is there recording of the equivalent therapist physiological state. In terms of the recording of the clinical sessions, in clinical psychology, by and large there is much written recording of the content of the client's communications increasingly together with content recording of therapists' comments or instructions. Such work has facilitated the production of manualised psychotherapies. In the fields of psycho-analysis and psychodynamic psychotherapy there is a literature, published and unpublished, of detailed and complex descriptions of the subtle nuances of personal and interpersonal experience that arise in sessions both for the patient and for the therapist. Such recordings address both current experience in the session and the remembered experience of contemporaneous relationships and the emotionally toned memories of past relationships.

The physical difficulty that limits the use of all of these forms is that of how to portray complex phenomena occurring in two persons, at least, simultaneously in a way that is assimilable. On the written page the linear format severely limits such representation. Attempts to overcome this by the use of side by side columns describing the experiences of each are rarely used because even they can only be taken in linear fashion and rarely record which transference mode each participant is in. Even more limiting in the use of page bound written accounts is the mass of complex information emanating from both patient and therapist. A process of editing has to take place to render the material manageable both for thinking about and later for presentation to a particular audience, whether obviously public or to a supervisor. This editing usually involves the early use of theoretical screening (Borossa, 1997). Yet even such notes barely capture the wealth of internal thought and feeling that is being experienced by both patient and therapist. What is, as it were, written on the lines is important but what is felt between the lines is at least as important yet so difficult to capture. So often the difference can be equated to the difference in experience as between watching the wooden acting of a soap opera compared with a superbly wrought production of Shakespeare. In part the difference can be understood in terms of how the plot and the lines and the actor's portrayal evoke the emotional and phantasy life of the member of the audience in relation to both their current and past experience. But in part it relates to the way any event is simultaneously involving a number of internal characters.

Aware of these issues on the one hand and frustrated by the limitations of current notation particularly in yet more complex fields such as conjoint marital therapy, the clinical author approached the hermeneutic author to discuss the issues. Perhaps inevitably, gradually it became apparent that as always the casting of theory is greatly influenced by the mould of the representation of phenomena. Alchemy evolved into chemistry as the diversity of its representation expanded and the means of greater explanation eclipsed the elaboration of meaning. In part that evolution was conceptual, in part the product of evolving technology. This was achieved both in terms of the tools to conduct experiments but also the evolution of easily and cheaply available written material and a rapidly expanding population able to read that literature. Manifestly, a comparable historical transition is upon us now with the means to transform the vehicle by which the phenomena can be represented, namely the computer.

The dialogue between clinical and hermeneutic authors evolved over a period of time and the materials presented in this paper reflect steps towards presenting a coherent visualisation of some of the core ideas in psycho-analytic practice. An earlier stage in the work of this evolving dialogue is reported in Lund and Paton (1999). The value of the visual representation in this case is its explanatory and integrative power. Because of the nature of the work a psychotherapist may undertake there is a great need to be able to contain the emotions of practitioner and patient in therapy sessions. The material reported here can be best viewed as a practitioner's reflections on important constructs in his knowledge domain. As noted elsewhere in this volume (Meyer and Paton), a major analytical tool a hermeneut may use to explore a domain is its key metaphors. The present domain of study looks at a lot of descriptive language in which there are key ideas that access visual (especially spatial) representations.

2. Form, Field and Representation

2.1. Issues of Psychological Form

Consideration of the representation of transactions leads, perhaps inevitably, to issues of form and field. In some respects thinking about these issues in the fields of biology and mental life can follow a common path, in other respects the issues are quite different. In common is a philosophical heritage that can be seen in the divers interweavings, influences and juxtapositions of various modes of thinking. A Platonic approach assumes that there are eternal or ideal forms. Given that biological forms change within and between life cycles ideals, if anyone uses them, are more likely to be expressed in mathematical terms relating to symmetry, topology, invariance and transformation. By contrast, by virtue of the

influence of Platonism on the Judeo-Christian culture, there are shared notions of ideal and normative personality forms (Bolton and Hill, 1996) The Aristotelian perspective is best expressed in the essentialist view. While it has links with Platonism it emphasises that a form is described through the sharing of certain essential properties among instances. In some ways this remains a dominant view both in biological and psychological views on form. A Pythagorean view could be summarised by Galileo's phrase: "The book of Nature is written in the language of mathematics." There are several approaches that seek to treat both biological and psychological forms either numerically, geometrically or even algorithmically.

When it comes to considering these aspects of psychology which have to do with clients or patients, the notions of individual psychological forms are infiltrated and reinforced by other considerations. These include forensic concerns centring on notions of individual responsibility and accountability and also professional matters which include a duty of care toward a patient or client who has to be thought of in Platonic terms. There are of course wider societal concerns about this expression of a Platonic relationship. A practitioner is only too aware of the gulf between the representation of the ideal of a professional relationship and clinical reality. One response is to further exaggerate the individual difference and separateness of a patient and practitioner and the attendant reduction in attention to the interactive field (Main, 1989). It was a particularly dramatic expression of this issue that led to the discovery of the clinical aspects of transference and the beginnings of psycho-analysis (Jones, 1962).

Under the weight of these traditions of representation the personality of the individual is regarded as the entity whose presumed internal organisation is variously represented, (e.g. Beck and Freeman, 1990; Jones 1962) whose interactions with other personalities are also represented, sometimes by models which broadly correspond to the internal models (Foulkes, 1973) and sometimes by models that do not (Dalai, 1998). In some traditions there is a stronger modification of notions of form by notions of development deriving more from Structuralist ideas than others. For example, child psychology and psychiatry is more developmentally orientated than either cognitive-behavioural therapy or phenomenological psychiatry.

A further powerful influence stressing the centrality of the notion of the individual in those branches of psychology which are concerned with therapy or counselling is the position of the practitioner him or herself. In the physical sciences it is more or less plausible to adopt the role of the detached observer. In the therapy situation it is not. One is very much a participant observer being as much affected as the ostensible subject.

While this issue will be discussed in more detail in the next section when addressing issues of field, suffice it to say here that faced with an emotionally charged field of uncertainty, there is an understandable culturally determined

predisposition to cope with that situation by using representations of the emerging phenomena which serve to distance the participant observer from the emotional phenomena, particularly if they are perceived to be mad. This immediately limits the representation of the interactive field, as has been acknowledged in a wide variety of literature ranging from scholarly study (Rosenhan, 1973) to popular films like *One Flew over the Cuckoo's Nest* (Kesey, 1973).

2.2. Issues of Psychological Field

In the thinking, representation and practice of psychotherapy the concept of field was slow to develop relative to that of the representation of the individual. Initially the practice of group psychotherapy was an economy measure whereby psycho-analysis could be made available to the less wealthy. The practice was the therapy of an individual observed by others who took their turn (Wolf and Schwartz, 1962). Any group interaction was discounted and was not the subject of theory. Soon other practitioners recognised the therapeutic value of group interactions but had little by way of theoretically based representation to illuminate it other than by drawing comparisons with, employing the metaphor of, the family group.

This situation was transformed by the recruitment from biology into the field of psychology of the notions of General Systems Theory (Bertalanffy, 1973). Not only did the concepts of boundary, feedback, hierarchy, role, function greatly inform group work, it massively encouraged the development of Family therapy. It both provided an intellectual tool to conceptualise the complex functioning of a family and an emotional buttress for a therapist buffeted by introducing him or herself into the unusually dysfunctional emotional forces of troubled families (Minuchin, 1974).

However, the emergence of these alternative domains of understanding and therapy did not readily lead to an integration of the understanding of the individual and the group, the form and the field. Indeed clear tensions exist between advocates of the rival therapies based on these concepts. At best, there are attempts to integrate concepts derived from individual therapy with those from group therapy (Foulkes, 1973).

Not only in therapy, but in wider psychology domains the issue of form and field resurfaces in developmental psychology in the guise of Nature versus Nurture debates. While this can be ostensibly about genetics versus societal forces, in another sense it is about the representation of issues conceptualised from an individual or group societal perspective. Yet in that apparently polarised debate there is the question of the transmission between the entities, whether it be represented as genetic material or cultural influence. In most such debates the

transmission is thought of as uni-directional, parent to child. This seems common- sense; it is assumed that the parent forms the child. But if psychology revisits biology then what is it to make of,

the whole organism can be considered as the coded representation of its environment. We can say that the wings of a bird “represent” the air...

(Young, 1978, p. 43)

or,

the form of an object is a “diagram of forces”

(Thompson, 1942, p.16)

Once such ideas are taken seriously, the next step is the identification of those concepts that may elucidate the interface and gives clues to the nature of transformation not only at the interface but also in the structures on either side of that interface, The agents of transmission that will be considered are feeling and phantasies and the concepts that can be thought of as surfaces on either side of the interface that appear in both the individual and group literature are transference, counter-transference, projection, identification, container and contained.

2.3. The Representation of Affects and Phantasies

The history of the evolution of animals would indicate that it is the use, management and containment of emotions and their attendant phantasies that ensures basic survival and reproductive social organisation. The biological basis of the emotions infiltrating hunting and self-defence, attachment and nurturance and sexuality are well understood.

Less available for study in animals but more capable of retrieval in humans is the phenomenon of phantasy. A hunter stalking a deer holds an internal representation not only of a deer but a complex set of attitudes and possible manoeuvres as between himself and his quarry. These representations, phantasies, are likely to be derived from a combination of the memory of prior experience together with folklore and pictorial images whether cave paintings or films. These phantasies are of course not uni-directional. The phantasy is capable of encoding not only the intent of the hunter but the possible dangers inherent in the ostensible quarry and its environment. This may be represented as shown in Figure 1. Intimately bound up with this phantasy thinking is affective experience. In the hunting example these are likely to be aggression in respect of hunting, anxiety

in respect of any associated hazards that is the basis of the familiar fight-flight response first described by Cannon (Cannon, 1929). Equivalent interactive scenarios in respect of self, phantasy/emotional response, other can be constructed in respect of parenting situations and sexual encounters.

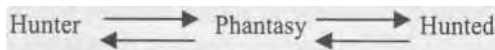


Figure 1. Hunter-Hunted

The emotions are not a dispensible superfluous accompaniment to thought and action but themselves perform complex roles. The arousal of affect may be the first signal of external danger or internal need. The magnitude of the affect is likely to be in some proportion to the magnitude of the external threat or the internal state, for example of hunger. In those situations where the affect is not responded to immediately, the affective tension state is usually managed by a combination of internal “dialogue” of internal phantasies with representations of internal figures and by recourse to external figures en route to a considered action. For example a mother worried by the onset of sickness in her child will contain her worry by checking the present situation against memories of what has happened in the past, imagining worst case scenarios, “consulting” internal mentors, consulting reality based sources of advice and thereby holding the worry without either being overwhelmed by panic or rushing in to precipitate ill- considered action.

This example also draws out the way in which what starts out as an internal worry becomes a communicated emotion as the mother signals her distress to others who become involved. Some of these others may helpfully contain the mother’s mental state by emotional support and practical help whereas others may be unable to do so and may exaggerate the mother’s concerns. This may be represented as shown in Figure 2. Though the affect of worry is in common, the phantasies and realities of the Friends and Family and Sick Child respectively are quite different and again in the case of the phantasies derive from prior experience, internal images and societal artefacts.

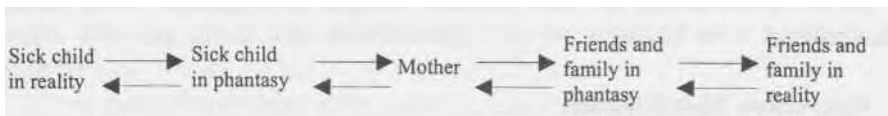


Figure 2. A Mother’s Worry

2.4. The Phenomena to be Represented

Broadly speaking, the domain to be represented comprises those aspects of the mind that hold the representation of relationships and mediate their transaction in relation to the minds of others, including therapists, who become parties to those representations. If we begin with a view of such a domain which is highly psychoanalytic, this view would be held in varying degrees by a wide range of therapists of the psycho-analytic/psychodynamic schools, (Freud, 1905; Ogden, 1982; Bion, 1962; Sandler, Holder and Dare, 1979; Heiman, 1950). Their description of the essence of day to day work with patients or clients would include three pairs of concepts.

1. Transference - Counter-transference
2. Projection - Identification
3. Container - Contained

Each of these pairs of concepts has a large literature, each has a considerable history, up to a century long and in the course of that history has undergone such transformations of meaning as at times to have overlapped with the other terms causing considerable confusion. Indeed it may be said that attempts to unravel the confusion has contributed to the realisation that part of the difficulty was that the stance that the analyst was only a scientist observing a phenomenon in the patient was problematic. Not only was it at odds with there being two human beings in the same room, but also that unless the mental activity of both was taken into account, it was impossible to accurately describe what was being observed.

Many descriptions and definitions of these terms exist and we briefly summarise their properties as follows:

Transference

A universal tendency to read current relationships as unconscious re-runs of past relationships. Moreover it is apparent that this is not a passive perceptual issue but involves active cueing of the other to reciprocate.

Counter-transference

This has developed two meanings. The first is the recognition that the therapist can bias a relationship unconsciously as much as a patient. The second is that it represents the evocation in the therapist of responses to the patient's transference.

Projective Identification

A complex phenomenon whereby between two people there is the unconscious donation and acceptance of more or less sophisticated mental

contents, Such contents may be unacceptable to the donor as characteristics of him or herself and the unconscious preference is that these characteristics be expressed by the other, often a spouse or a colleague. As well as an evacuative function, such a manoeuvre has a communicative function in terms of conveying to another how one truly feels. That is to say that the identificatory aspect is the basis of empathy.

Container-Contained

The original meaning of this term implied that two minds were party to managing a feeling or anxiety. In some circles this sense came to assume more of a state of holding and being held as in the case of a mother and child. However further reflection would lead to a return to the original meaning since

- (a) a baby defines a woman as a mother and
- (b) the distress of a child is as distressing to a mother at least as much as it is to the child.

It is the contention of the authors that a spatial representation of the relationships between these concepts and of the functions transacted between them and by them could be the basis of a computer based representation nearer the essential nature of therapy sessions.

3. A Spatial Model

While the number of relationships any given person can unconsciously transfer into a current relationship is huge, for practical purposes and in accordance with the analytical literature, one can limit these to certain key relationships and still capture the salient themes and variations. These key relationships are Mother, Father, Child and Siblings. Two other relationships are vitally important but less easily personified than those mentioned.

The first of these is Culture. In developmental terms this is usually at first a personified relationship with respect to Grandparents and the wider family circle. Later it includes family friends, teachers, the Church, personal friends and interests. The second is the person's relationship with their body. Although the Mind- Body split has been castigated, it is helpful in many ways to recall the many subtle transactions between the mind and the body which make it clear that each can act independently of the other, act synergistically with the other or at odds with the other. The relationships can be arranged as a hexagon (see Figure 3).

Given that relationships exist not at a point in time but on a time-base the relationships can be represented as a hexagonal tube as shown in Figure 4. The tube can either be viewed as long and continuous, co-terminous with the

life of the Self or taken in segments to understand greater or lesser periods of the development of relationships.

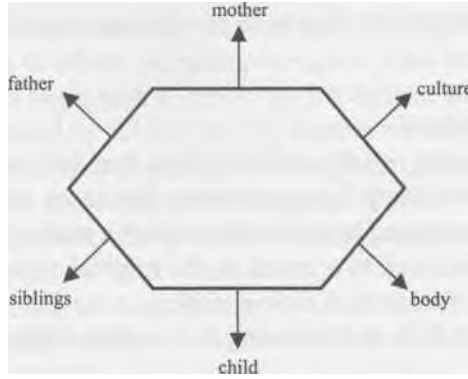


Figure 3. A Spatial Model

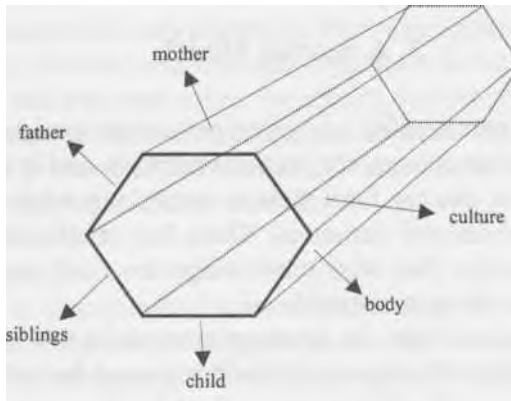


Figure 4. The Hexagonal Tube

The spatial model described thus far can be summarised as the grouping together of potentially transference affected relationships with a common theme, setting these in relation to each other and indicating a time-base which implies a developmental perspective. It addresses the question of relationships with reference to projective identification or containment. In order to visualise these it is suggested that grooves are depicted scored into the inward facing surface of each plate, parallel with the line of junction of the plates and of infinite length

(Figure 5). These grooves can be thought of as the sites of receptivity and transmission of emotions and phantasies as between the different transference entities within the more distant past. One may link this to ideas of projection and identification and through that to containment by returning to the example of the mother worried about the sickness of her child.

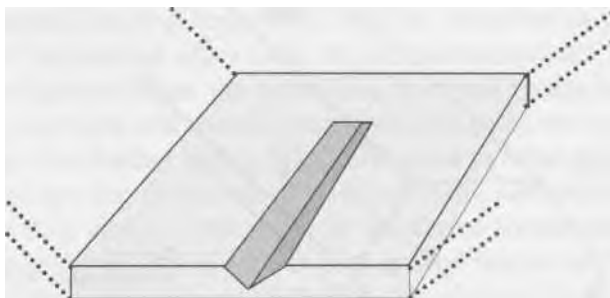


Figure 5. A Plate with a Groove

The sequence would in all probability begin with the mother becoming more aware of a change in her child both in terms of some change in its appearance or behaviour along with a change in its mood state. The child could be said to have projected its distress into the mother who has internalised that distress. Thus alerted the mother would be in a heightened state of awareness and anxiety. This change in state would initially trigger internal thinking which would be a review of memories of similar episodes in her experience both as a mother and as a child herself. This review would be further informed by a review of her mother's response in similar situations. This would be augmented by a review of wider Cultural influences having a bearing on the situation such as other mothers. Health Clinics, media reports. This review or reverie would not only serve the purpose of reviewing the likely outcomes and practical solutions but also serves to contain the mothers concern and anxiety. If the mother is adaptive and the illness not too severe it is probable that the mother will both manage herself and the child on her own, from both a practical and emotional point of view. This containment can be represented as shown in Figure 6.

However the level of the child's illness or distress may be too great. Or the memory of her own mother when she was ill was of a panicky mother who did not manage her emotions or the situation and is therefore not available as an internalised positive resource, indeed may represent an undermining influence. In either or both of these situations, one or more external agencies may be recruited to manage both the emotions and the practicalities. What might be recruited is some combination of involvement of actual Cultural representatives like the General

Practitioner or the Health Visitor, or it may be the recruitment of a mother figure such as grandmother, a friend or even that the well-known local G.P. may represent both a Cultural resource and a transference maternal resource (regardless of his or her actual gender). This may be represented as shown in Figure 7.

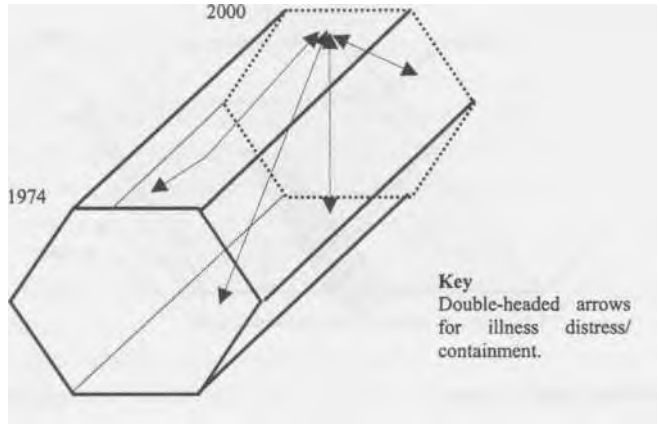


Figure 6. The Tube in Time

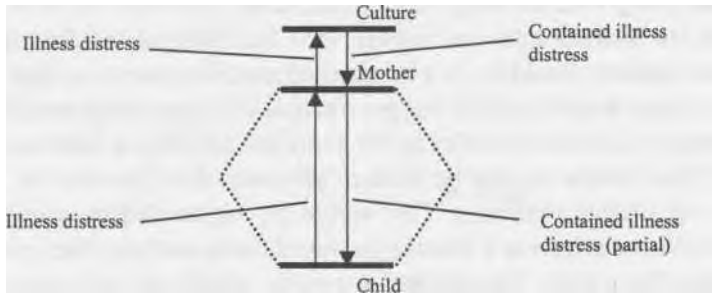


Figure 7. Containment and Distress

The mother and the sick child has been taken as one example. There are a myriad of possible combinations of interactions that can be cited with different interactions between different plates at different epoques of a person’s life both with and without the recruitment of external resources. Insofar as most people live their lives without recourse to designated therapists then the external resource is likely to provide some combination of practical response and emotional engagement, helpful or unhelpful. That engagement will be laid down as a more or less influential memory on one or other plate in whatever epoque it occurs and may or may not be used, consciously or unconsciously, in future.

In the context of analytical psychotherapy, the therapist is likely, in phantasy with emotional accompaniment, at different times to occupy each of the plates and as such, to use the jargon, would be working in the transference. In explorative therapy, that interactive experience would be explicated by interpretation. In more supportive therapy the assigned role would be accepted in modified form without comment.

To summarise, the total framework could be visualised as in Figure 8. That is to say, that the internal experience and representations are indicated by the continuous hexagon whereas the potentially recruited reality-based influences, relationships, resources and counter-transferential figures are represented by the corresponding free floating plates. With this image in mind it is perhaps timely to return to the opening discussion of form and field, particularly the notions of ideal form as they apply to the mind. In the above representation there is no entity marked as “Self” or “Mind”. It is suggested that no such entity need be posited other than as the outcome of the complex sustained make-break weaving of phantasies and emotions between the plates and along the plates connecting past and present. Moreover this view of self relates to Other via the interaction between the plates of one entity and another. That is to say that the Self that is apparent to internal reflection is evanescent and can be thought of as a three- dimensional net formed by pulsatile strands between and along the plates.

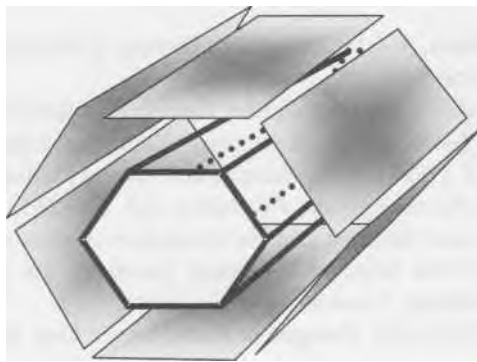


Figure 8. Tube and Plates in Perspective (compare Figure 7)

4. A Hermeneutic Reflection - Concluding Remarks

As noted near the beginning of this paper, the medical expert’s reflections identified a lack of visual metaphors in the domain for describing or articulating what happens in therapy sessions. The visual metaphor accesses a number of descriptive dimensions including:

- Process - in relation to transference and projection
- Space - in relation to container-contained

The system-boundary and endo- exo-system relations can be explored in the visual metaphor of the hexagonal tube. Clearly, there are potential misunderstandings or misconceptions that could arise from this visual metaphor but at least it provides a coherent visual representation (picturing mechanism). There are features of the medical expert's reflections that suggest (albeit in retrospect) the following of paths or trajectories and state or temporal transitions. The stage is now set to refine the metaphor in the light of appropriate modelling techniques. Without being drawn into any form of computational metaphor, it is possible to make use of modelling methods that capture the complexity and subtle nuances of the target domain (i.e., psychotherapy) in terms of parallel distributed processing. For example, some aspects of the dynamics of the hexagonal tube scenario could be formalised into a state-based concurrent process language such as Petri nets. There is still some way to go in pursuing this aspect of the work. The utility of the hexagonal tube as a didactic and also integrative conceptual device also requires assessment. Any ontological status for the tube is far from clear.

References

- Beck, A. T. and Freeman, A. (1990) *Cognitive Therapy of Personality Disorders*, Guildford Publications, New York.
- Bertalanffy, L. von (1973) *General System Theory*. Harmondsworth: Penguin.
- Bion, W. R. (1962) *Learning from Experience*. Heineman, London.
- Bolton, D. and Hill, J. (1996) *Mind, Meaning and Mental Disorder: The Nature of Causal Explanation in Psychology and Psychiatry*, p.p. 200-205, O.U.P. Oxford.
- Borossa, J. (1997) *Case histories and the Institutionalisation of Psychoanalysis in The Presentation of Case Material in Clinical Discourse*, Ed. Wardl p.p. 45-63, Freud Museum Publications, London.
- Cannon, W. B. (1929) *Bodily Changes in Pain Hunger Fear and Rage*. Appleton, New York.
- Dalai, F. (1998) *Taking the Group Seriously: Towards a Post-Foulkesian Group Analytic Theory*. Jessica Kingsley, London.
- Foulkes, S. H. (1973) *The Group as Matrix of the Individual's Mental Life*. In selected papers (1990) p.p. 209-221, Kamac, London.
- Harre, R. (1986), *Varieties of Realism: a Rationale for the Natural Sciences*, Blackwell, Oxford.
- Heiman, P. (1950), "On Counter-transference", *British Journal of Medical Psychology*, 33, 9-15.
- Jones, E. (1962) *The Life and Work of Sigmund Freud*. Edited and abridged by Trilling, L. and Marcus, S., Penguin Books, London

- Kesey, K. (1973) *One Flew over the Cuckoo's Nest*. Picador. London.
- Lund, C. A. & Paton, R.C. (1999), "A Visual Metaphor for Psychoanalytic Training and Supervision", in Paton, R.C. & Neilson, I. (editors), *Visual Representations and Interpretations*, London: Springer.
- Main, T. (1989) *Some Medical Defences Against Involvement with Patients. In The Ailment and Other Psychoanalytic Essays*. Edited by Jones, T. Free Association Books, London.
- Meyer, M. A. & Paton, R.C. (this volume)
- Minuchin, S. (1974) *Families and Family Therapy*. Tavistock Publications, London.
- Ogden, T. (1982) *Projective Identification and Psychotherapeutic Technique*. Jason Aronson, New York.
- Paton, R. C. (2000), "Systemic Metaphors and Integrative Biology", *Theoria et Historia Scientiarum*, in press.
- Rosenhan, D. L. (1973) "On Being Sane in Insane Places", *Science*, **179**, 250-258.
- Sandler, J., Dare, C. and Holder, A. (1979) *The Patient and The Analyst: The Basis of the Psychoanalytic Process*. Kama Books, London
- Thompson, D'Arcy W. (1942). *On Growth and Form* A New Edition. University Press: Cambridge University Press. Also the 1992 Canto edition with Cambridge University Press.
- Wolf, A. and Schwartz, E. K. (1962) *Psychoanalysis in Groups*. Grune and Stratton, New York
- Young, J. Z. (1978). *Programs of the Brain*. Oxford: OUP.