# Foundations of Psycho-Social Analysis Part II: Analysis

More than two years separate the completion of Part I (Diagnosis)<sup>1</sup> from the publication of this second paper. The delay has enabled us to take account of medical research on full-term foetal malnutrition which came to our attention in December 1983<sup>2</sup>, as well as several of the major papers delivered earlier that year in Toronto to the 1st International Congress on Preand Peri-natal Psychology, together with the published works on which they were based<sup>3</sup>.

The central insights of this section were first shared with members and staff of the Consultancy Training Group of the Tavistock Leicester Conference in March 1979. The accompanying papers<sup>4</sup> stimulated the late Dr. Frank Lake to request that the material should be prepared for presentation to the 1980 Annual Conference of the Clinical Theology Association. Intense review of the related writings of Sigmund Freud<sup>5</sup>, Melanie Klein<sup>6</sup>, D.W. Winnicott<sup>7</sup>, Stanislav Grof<sup>8</sup>, and others culminated in the publication of the monograph 'Innate Defences' in the early summer of 1982. By late 1983 the material had been expanded and revised for delivery to the post-graduate Sociology of Religion Seminar at the London School of Economics. Further major revision took place in the first half of 1984 in preparation for an address, workshop and two-day institute at the 7th Annual Congress of the European Association for Humanistic Psychology. There followed intensive reworking, the inclusion of new material and the reordering of content into five modules for a one-day seminar/workshop organised in early March 1985 by CONNECT {a network seeking to relate the insights of psychotherapy to politics). The text of Part II is the product of yet another stage of radical revision, and forms the basis of a presentation to be delivered in July 1985 to the 2nd International Congress on Pre- and Perinatal Psychology in San Diego, California

In Part I attention was given to principles which could form a foundation for the bridge connecting individual and social analysis. These may be summarised as follows:

- The **approach** is essentially psychoanalytic in seeking to understand the causal dynamics of defensive behaviour.
- However the criteria of significance in psycho-social analysis are antithetical to those dominating therapeutic analysis. For the therapist, the more deviant the behaviour, the more significant the material, whereas for the psycho-social analyst the most significant material is that which approximates most closely to the norm behaviours of large aggregation social groupings.
- If **the task** of the therapist is the returning to norm of deviant behaviour, then the task of the psycho-social analyst is the reduction of neurotic and psychotic elements of normal behaviour itself.
- The distinction is made between **three differing attitudes** to unconscious material, namely: the **collusional** avoiding the disturbance of unconscious defences for any

member of the social system; the **therapeutic** - seeking to resolve deviant effects of unconscious defences, while leaving the normative core undisturbed; and thirdly the **developmental** or maturational - which recognises the neurotic elements of norm behaviour and seeks improvement in the psychic health of the social system as a whole by the resolution of the common unconscious.

- The persistent presence of **repressed psychotic anxiety**, held behind the common defences was seen to lead to collusional relationships, conservative dynamics, dysfunctional performance and a defended presence within the system environment.
- In contrast, **an authentic system**, free of such 'buried pain' would be characterised by reality-orientation, reality-testing, adaptive dynamics, functional performance, and an authentic presence of the system within its environment.
- Improvement in the health of a social system requires the shift of energy from the defensive to the authentic tasks. This demands the resolution of the common, repressed, psychotic anxiety, which in turn leads to a lowering of the defences, an increasingly accurate process of reality testing, the breaking of collusive patterns of behaviour and the releasing of system dynamics to be adaptive and responsive to environmental change. In this process lies the realistic hope of major improvement in the change-handling capacity of human systems and in the levels of potential achievement and maturation of the individuals which constitute them.

If any such major improvement in social health is to be achieved, then we require accurate analysis of the origin of those deep common traumata which energise the norm social defences and represent the core of the as yet unresolved intrapersonal unconscious. The causal analysis must then be followed by careful delineation of the processes by which the norm defences against anxiety affect every level of social behaviour. It is on this analytic agenda that our attention is focussed in the second part of the Foundations of Psycho-Social Analysis.

#### **PROLEGOMENA**

It is important not to underestimate the difficulties involved in coming to terms with this material. We have to deal with some of the most primitive and intractable elements of human behaviour, namely, the processes of idealisation, splitting, projection, displacement and denial. These phenomena, described by Melanie Klein<sup>10</sup> as 'the paranoid-schizoid defences', are, of all, the most inaccessible to analysis and the most resistant to intervention and modification<sup>11</sup>.

**Boundaries of Classical Analysis:** In traditional psychoanalytic practice these mechanisms lie within the unresolved residual collusional core common to both analyst and analysand. On a wider level, the set of psychoanalytic schools, acting as a complex therapeutic community, operates with common collusional defences around that material which resonates most deeply with the normal social process. So for Freud<sup>12</sup>, the psychotic anxiety and its associated defences were 'instinctive', part of the organisation of the id, to probe which is to

invite psychotic disaster, and in control of which the mature defences of the ego must be organised. For Melanie Klein<sup>13</sup> the material was 'innate', or 'atavistic' in origin, carried across the boundary of birth by some genetic process but unresolvably present in the neonate. For Jung<sup>14</sup> the same material was encoded in the 'archetypes of the racial unconscious', socially and genetically transmitted from the dawn of history.

For Winnicott<sup>15</sup> the material was by definition non-significant, since traumatic impingement generated significantly neurotic behaviour and only behaviour which deviated significantly from the norm was significantly neurotic. There were, therefore, ipso facto, no traumatic origins of normal responses. The boundaries defined as ultimate by the analysts determined the boundaries of the material which the analysts could ultimately handle.

Those who persistently strayed 'out of bounds' encountered massive resistance to their work. Freud<sup>16</sup> indicated that he found himself facing many and great pressures and was therefore unable to proceed in the area of social analysis. Rank<sup>17</sup> stepped out of line and wandered into the taboo area. His work, initially endorsed by Freud<sup>18</sup>, came under increasing rejection and he was eventually evicted from his professional fraternity, travelling as a scapegoat, like so many before him, across the Atlantic to find haven in the New World. Inevitably he introjected the paranoid projection of the analytic community and presented paranoid neurosis in some of his later work. His history was mirrored in the career of Wilhelm Reich<sup>19</sup> who sought to bridge the gap between psyche and soma, so challenging the schizoid defences of the classical schools. Immanuel Velikovsky<sup>20</sup> pinned the psychotic elements in normal social behaviour, yet in causal analysis sought their origin in some distant global catastrophe, the terror of which was transmitted through racial memory to the present day. The list could be expanded ad nauseam, the point is that any attempt to probe into this core material meets with massive resistance. Those who attempt it are themselves treated as if they are the cause of the psychotic disturbance. Under the pressures of social transference, norm defences are re-introjected, connections broken and information fragmented. irritant is rejected and ostracised, publications are suppressed and the core social defences against psychotic anxiety react with dynamic resistance to repair the breach. The whole process should in fact be an encouragement to press further with the agenda, since such behaviour points to unresolved and deeply repressed common traumata.

**Reaction:** The analysis of common defences is problematic. In so far as the material under examination is precisely that of which we are all unconscious and against which we are all effectively defended. Raising awareness of the common origins of norm defences can raise for both writer and reader quite acute levels of psychotic anxiety. Indeed, the recognition that lurking behind the deceptive calm of normality may be a disturbing depth of corporate madness, which finds its ultimate expression in the fractioned terrorism of fundamentalist religions, or the subtle insanity of modern war, can be quite disturbing. Indeed, it may be that it can only be tolerated in so far as we understand these norm behaviours as no longer tolerable and placing at risk the very survival of the species.

Accurate analysis of the originating common traumata and the subsequent shared defences can raise for each of us the primitive emotions of rage, terror, grief, guilt, ambivalence and love, laid down in the precipitating events. It is against the resurgence of this material into common conscious experience that the defences are erected and socially maintained.

The initial response is to deny the interpretation, reinforce defences and re-repress the material. Reactions to the precipitating traumatic experiences are brought to bear upon any

analysis which threatens to trigger some level of abreaction. Even when reaction is comparatively mild, it is common for people to experience an overwhelming sense of tiredness, an inability to make sense of quite simple sentence structures or the sudden blanking out of memory. It is as if the last paragraph has not been read. There is the occasional associational flight of fantasy, sometimes linked to dream symbolism, or simply a sense of unease, rising anxiety and fragmentation.

In so far as the following analysis is accurate, it invites the readers to be involved not simply in an exercise of understanding, vital though that is, but more significantly in a process of catharsis and integration which may well be continued over a period of many years.

#### 1. THE NATURE OF ANXIETY DEFENCE

**Healthy anxiety:** A clear distinction must be made between primary anxiety and neurotic or associative anxiety. Primary anxiety is an essential and natural response to threat experienced by the human organism. It is a complex emotional/biochemical reaction, generating significant changes in blood circulation, muscle tonus, gastric process, breathing pattern, oxygen utilisation, and mobilising the problem-solving centres of brain activity. The organism is put in a state of 'red alert', ready to deal with the threat in the most appropriate way, in order to minimise damage and preserve life. It is a healthy element of survival-activity, enabling the individual or social system to relate effectively to actual threats, whether these arise from the realities of the internal or external worlds. Primary anxiety is a flag or pointer to an agenda in the real world requiring attention. It is not in and of itself problematic, but is part of the solution to the presenting problem.

**Trauma:** In certain circumstances, however, anxiety may become so acute, the life-threat so intense, that the organism is unable to handle the response. This condition of hyper-stress, or as Dr. Frank Lake described it 'transmarginal stressing'<sup>21</sup>, can occur at any stage of life, but most particularly in conditions in which the subject has no ability to make any difference to the presenting situation. The more impotent and helpless, weak and dependent, the person is, the more likely they are to be pushed into an experience of transmarginal stress in response to an experience of acute life-threat or impingement. The condition has close parallels to the concept of alienation in the earlier writings of Karl Marx, and of his predecessor Ludwig Feurbach. It is also precisely the event more widely described as psychological trauma. D.W. Winnicott for instance defined trauma to be 'impingement in conditions of helplessness'<sup>22</sup>.

**Primary defence:** In such a situation the subject, overwhelmed by anxiety and unable to do anything about the precipitating threat, displaces the agenda from objective problem-solving in the real world to subjective management of the overwhelming anxiety itself. Certain mechanisms are brought into play by which the levels of anxiety are reduced and the distress rendered more tolerable. The anxiety is repressed in some way, its recall into conscious memory is blocked, and the experience becomes fixated, buried and stored in the depths of the unconscious. From here the 'buried pain' to use Janov's term<sup>23</sup>, persistently seeks to surface into consciousness for cathartic resolution. However, in so far as the emotions associated with the precipitating trauma are too intense to tolerate, given the contemporary resources of the person concerned, just so far are the fundamental defences against the

anxiety retained in place and maintained for the rest of life. The subject retains a core of psychotic anxiety, managed by a system of defensive mechanisms.

Neurotic anxiety: Any subsequent experience or event which has elements which resonate in any way with those associated with the precipitating trauma can trigger an irruption of repressed anxiety into the contemporary conscious experience. This can happen whether or not the triggering event poses any realistic threat to the subject. The triggered anxiety is therefore an unrealistic or neurotic response, inappropriate to the presenting situation. Neurotic anxiety, in distinction from primary anxiety, is an inauthentic response. It is an experience in reaction to an event in the present, based upon stored transmarginal stress associated with an impingement in the past. Such an understanding of neurosis is clearly independent of whether the response happens to be shared, common, and normal, within a culture. It depends simply upon the originating process. This understanding of neurosis widens the definition employed by the purely therapeutic analysts, who understood neurotic behaviour in terms of deviance from the norm. By concentrating on originating process, rather than conditions of deviance, we can overcome the methodological block to the psychoanalysis of the pathology of social systems, clearly enunciated by Freud and implicit in D.W. Winnicott's treatment of birth trauma.

**Displacement:** The emergence of triggered or neurotic anxiety in later life leads the subject to treat the triggering event as if it were the precipitating event. The displacement has several dysfunctional effects. Not only does the subject experience quite inappropriate levels of anxiety, but the triggering event is treated as if it were a replica of the precipitating event, leading to the adoption of quite inappropriate courses of action. Furthermore, the subject's self-perception regresses to the condition at which the original trauma was experienced, so leading to action as if the subject were helplessly impotent and dependent in the face of the perceived threat. Since the triggering event evokes the same emotional hyper-stress as the precipitating event, the reaction is again subject to similar patterns of defensive repression. The task shifts very quickly from dealing with the triggering event, to managing the irruptive anxiety. The result of mobilising primitive anxiety defences is that the triggering event and its associated information become the subject of repression, displacement, and denial. The subject is thus rendered unconscious of the resonant elements of the triggering context. It is in this way that the primitive anxiety defences set up permanent information-filters in adult life, distorting data received from the environment and suppressing or otherwise generating inappropriate behaviour in response to all those elements which tend to resonate with and trigger the stored psychotic anxiety.

**Collusion:** In so far as two or more people share sufficiently similar precipitating traumatic experience, they will have congruent patterns of defence and will exhibit a coherent form of neurosis, a common pattern of defensive reactions in relation to the experienced world. It is these patterns of common resonance which underlie the phenomenon of shared, or social, defences against anxiety which in turn generate the 'normal' neurotic patterns of social behaviour.

#### 2. PATHS OF APPROACH

**Social Resistance:** Traditional methodology repeatedly reaches an impasse in this field. In working with a group or institution the usual approach would be to identify and clarify the

presenting problem, to elucidate the nature of the context or situation within which the problem has emerged, together with the characteristics of structure and performance of the group concerned. Next would come an identification of the dynamics involved, the forces leading towards solution of the problem, the forces leading towards an exacerbation of the An organisation development or management consultant might then seek to develop some form of dynamic modification which, when implemented, would lead to a change in the performance leading to resolution of the problem concerned. Even quite simple straight-forward and apparently logical interventions of this kind can trigger collusional resistance to the change, and set up intensely conflicted social processes, the end product of which may be a far worse condition than the original presenting problem itself. Probing deeper, we may find certain sub-groups acting out in corporate states of anxiety and the institution as a whole behaving as if under some kind of threat. It reacts, quite unconsciously, in such a way as to marginalise the threatening initiative and re-establish the enterprise within the known parameters of the status quo. The phenomenon of 'dynamic conservativism' was described by Donald Schon<sup>24</sup> and epitomised in the case study of the social system of a teaching hospital by Isabel Menzies<sup>25</sup>. The deeper the analyst probes toward the root or cause of the dysfunctional behaviour, the more intense the resistance becomes until the endeavour is terminated, a compromise is reached, the underlying defences are retained intact, and a 'solution' is adopted, which takes the path of least possible change and maximum possible sedation of the institutional anxiety.

**Individual Resistance:** The classical psychoanalyst has a somewhat similar experience working with an individual. A process will normally start with the presentation of some conscious difficulty. The analyst will seek to map out the context within which the problem has emerged and to probe the personal and contextual history which led to its development. During the process of analysis more and more primitive material may emerge with increasing resistance encountered as the focus of analysis moves earlier in time and probes deeper into the unconscious. The psychodynamic origin of some patterns of deviant behaviour may be discovered in adolescent, childhood, or infant experience. There may well come a point at which the analyst feels that further probing would demolish the personal defences to such an extent that the individual could be overwhelmed with psychotic anxiety and exposed to the chaotic disintegration of instinctive drives. At such a frontier the classical analyst normally interprets the task as strengthening the fundamental defences of the analysand<sup>26</sup> in such a way that they can operate reasonably well within their current social context. It was such experience which led Sigmund Freud to take such a pessimistic view of the ultimate potential of psychoanalysis during the closing years of his life and which characterised his fatalistic response to Albert Einstein in the correspondence 'Why War?'<sup>27</sup>

**Impasse:** Some such barrier to insight and progress is to be predicted in any approach adopting a therapeutic stance, whether with individuals or organisations. The more deviant the behaviour under consideration the easier is the analysis. The closer the material comes to that which is shared in common between analyst and analysand, the more powerful the collusional processes become. As core material (common to both parties and to the social context in which they are set) is approached, all progress is blocked by the shared social defences against anxiety. Any attempts at further probing are met with the threats of social talion and fears of personal and corporate breakdown<sup>28</sup>. The experience is like trying to find what lies behind a high wall by taking it down, only to find that it was in fact a dam and the process of demolition has unleashed a tsunami of chaos and destruction. It is extremely difficult to approach and resolve a fundamental imprint of transmarginal stress by working

back towards it from the post-event defended position. In so far as the defences are unpicked effectively the subject is suddenly exposed to the full force of the anxiety, unprotected and without any resources for dealing with it. In so far as the event is common and shared, there are no social resources for handling the discharge of one member without being caught up in resonant catharsis or abreaction. The task appears to meet a brick wall, with all the characteristics of the 'event horizon' of a black hole.

Rationalisation: At this point, traditional methodology takes refuge in tautology, seeking to provide some pseudo-explanation of an apparently uncaused effect by means of a definition which allows no further probing. The material may be 'instinctive' (Freud), 'innate' (Klein), 'atavistic' (Riviere), 'archetypal' (Jung). In theological terms it may be seen as 'original sin', 'alienation from the ground of being', or just 'human nature'. The definition may, or may not, be provided with some aetiological myth as 'support'. So Freud posited the myth of the primal horde, Velikovsky attributed psychotic terror to some dimly remembered global catastrophe, while several religious cultures have variations of the myth of the fall.

**Social Tolerance:** Progress in this difficult field has gradually accelerated during the last half-century. As the discipline of psychoanalysis, together with its associated schools of therapy, has increasingly won recognition for its insights, so the social tolerance of its work has increased. With rising awareness of the effect of unconscious factors on individual and corporate behaviour, there has been increasing social sanction and acceptance of the analytic procedures. (Not that progress has been uniformly smooth over time, or is uniformly spread throughout the culture. For instance as recently as 1980 Rob Harre, of the Sub-Faculty of Philosophy at Oxford University<sup>29</sup>, could argue that 'far from being the dynamic or causal factors within the psyche, Freudian entities were simply "features of a rhetoric through the use of which social complaints can be handled". In other words the psychodynamic approach contained no contentful relationship to the cause and effect of the dynamics of human behaviour but was simply some kind of mythology with the task of providing tools for more effective control.)

Learning Loop: Within the more permissive and accepting social milieu, analysis itself has been engaged in an iterative learning process. Material which represented the pinnacle of insight of one generation has become the base camp from which the pioneers of the next moved on. It is as if the social organism is passing through a multi-generational cyclic analysis. As social behaviour is presented for analysis, leading to a certain amount of abreaction and integration, so the presentation is itself modified before becoming the subject of still further analysis, abreaction and integration and so forth. So the frontiers of the unknown are slowly being pushed back.

To the slow and creative interplay between practice and theory must be added the dawning realisation of the dynamic relationship between behaviour of individuals and groups. There was the pointer from the mid-1950s in the writing of Eliot Jaques "May not sufficiently detailed observation of social behaviour then take us inside the individual. And may not sufficiently deep analysis of the individual take us into the group?"<sup>30</sup>

Writing over a generation later, one of the contemporary leaders of the new therapies movement reaffirmed:

"Studying the dynamics of a single individual and as well examining the dynamics of that individual in the larger context of his/her family can provide us with vital insights into the workings of even larger groups. The individual and family are thus microcosmic symbols or analogues of the macrocosmic nation, race, or species. What tends to occur in a single individual or a single family as regards the dynamics of affective experience, communication, goal fulfilment etc. can immediately be cast on a larger scale to aid in understanding the dynamics of international relations and even whole planet warfare. In actual fact this may well represent our best available resource for insight into the dynamics of our whole species at this most critical moment in our history"<sup>31</sup>.

With the recognition of the congruence between intrapersonal and social dynamics has also come awareness of the possibility of understanding the depths of intrapersonal behaviour by studying the major symbols and myths of the great world religions and other ideological movements. The making of connections, however, has been painfully slow. It is not easy to interrelate disciplines of social anthropology, group dynamics, comparative religion and the study of cross-cultural mythology and its associated symbols with the nascent disciplines of psychoanalysis.

**Breakthrough - Context:** It is now possible to speak of something of a breakthrough, and to begin to summarise the kind of contexts and methodological characteristics which have combined to make progress possible. Of necessity the breakthrough has to do with unconscious material shared by the person concerned with the social grouping of which he/she is a member. People making the most creative connections appear to be operating under conditions of high but tolerable stress, with intense motivation for problem-solving. They may be facing conditions of low resource, high stress and rapid change in their own personal, familial, or organisational lives, in which they find that their own psychic, economic or social security and survival depend upon their abilities to make sense of what is happening. Some in these conditions break down, others (perhaps more fortunate in having high levels of resource and support from family and/or colleagues) appear more able to tolerate the high levels of stress and anxiety involved and break through instead of breaking down. For the insight to be sustained and elaborated there has to be a high level of social tolerance for the exercise so that the insights are explored and shared within a group context which provides adequate opportunities for critical reflection, combined with effective shielding from the 'plague reaction' as Reich would have termed it<sup>32</sup>, of others within the social system whose own defences were potentially threatened by the developments. Typically research in this kind of field has required the development of small quasiautonomous units sufficiently independent to be able to avoid the collusional entrapment of dependency on an unsympathetic hosting institution.

**Breakthrough - Methodology:** The points of breakthrough have been marked by the suspension of dependence upon the axioms or assumptions of previously formulated theory. Boundaries previously taken for granted have been re-examined, definitions challenged and reworked. There has been a review of the pattern of human development, searching for points of possible hyper-stress which could have laid down the primitive traumata which in turn gave rise to the most primitive forms of anxiety-defence. This review has in turn raised the issue of the origin of life, focusing acutely on the relationship between genetically transmitted material and environmentally learned responses. It has been facilitated in this search by the massive research into the nature and origin of memory, which has been

conducted internationally over the last 15 years. Following the outline of possible points of hyper-stress comes the statistical evaluation of the frequency of occurrence of specific traumata within the population as a whole.

**Detective Saga:** Progress has in no sense been a continuous linear action, but has had more of the feel of a detective investigation following up many clues in different areas and sifting them for common pointers to a possible causal matrix. There has been careful recording, analysis and examination of social behaviour, symbols, myths, rituals, political and religious processes, architecture, etc. for elements of common resonance with those issues being indicated by the statistical survey. Alongside this has continued an examination of the occluded boundaries, the paradoxes, the contradictions, the tautologies, the points of definition and the emergence of myths within the classical analysts of the last century. If the emergent hypothesis were correct, the examination would reveal pointers, straws in the wind, indicators of the as yet unresolved common core of the social unconscious. Another strand of exploration was the examination of historical response to the interpretations offered by people who had stumbled unawares upon the material. Accurate interpretation should have led to common patterns of abreaction, catharsis and integration, followed by significant changes in behaviour, but met by intensely defensive reactions from families, colleagues and the wider social context.

**Possible Validation:** Since the material concerned focuses around the events of parturition, various further avenues of research can be followed through in the continuing task of seeking corroboration or falsification of the working hypotheses which are now emerging. For instance, comparative studies of twins should reveal significant differences between the defensive behaviours of the first born from those of the second born. The hypotheses would also predict significant differences between the defences, symbols, dream material, group dynamic presentation and so on of those who had a normal vaginal birth from those who were delivered by caesarean section before the onset of labour.

### 3. A QUESTION OF RECALL

Before there can be any examination of the statistically significant points of hyper-stress in human development which could possibly be responsible for generating the common defences against anxiety, one final hurdle must be overcome, namely the problem of the origin of "memory".

Verbal and Preverbal: In common parlance a 'first memory' would be judged very early if it came from the age of 3. Most people can remember some events from the age of 4 or 5, a few insist that they can recall material prior to their third birthday. In these instances we are talking about conscious verbal recall. Memory, however, is a far more complex function. It involves the three essential elements of recording, or encoding, storage and later retrieval. Large areas of memory may be unconscious and inaccessible to recall in ordinary circumstances. It is as if the recording and storage facilities are intact but a 'write only' command has been encoded. Material which is emotionally loaded may be blocked off from conscious recall. Unconscious memory may be released in states of altered consciousness, in sleep, meditation, shock or other experience of high stress, by associative triggers, under

hypnosis, under the effects of certain drugs like LSD and through various techniques of meditation and regressive psychotherapy. Then again, recall may not be verbal but couched in dream form, images, symbols, emotional echoes and neuro-muscular imprints. With such widening parameters, the frontiers of memory can be pushed back into the first few months after birth.

**Denial:** It was assumed for many years that the new-born came into the world with no memory and no initial capacity for memory, which developed slowly as the nerve tracts in the cortex became fully myelinised. Myelin is a fatty, cellular tissue which covers the neurons and was assumed to be necessary for the recording, storage, and retrieval of memory traces. This medical myth has long stood as a justification for denial of the possibility of any significant memory of birth events, let alone experience from the months before. Psychological life was deemed to begin at birth. Denial of the possibility of earlier memory has persisted in spite of confirmation that some myelinisation of nerve tracts occurs in the last 3 months before birth and that in any case myelinisation is not a necessary factor in neural activity<sup>33</sup>. Its absence slows down the passage of nerve messages but does not prevent them flowing. It may well be that this irrational persistence of the denial of memory functions is a reflection of the boundaries of tolerable recall. For instance one doctor was overheard at a 1982 meeting of the Medical and Scientific Network to say, 'If we were conscious at birth it would be the most shattering experience of our lives<sup>34</sup>. Or as Greenacre comments, 'Perhaps the struggle of birth is at once too terrifying and too inspiring for us to regard it readily with scientific dispassion<sup>35</sup>. It is but a short step from the feeling that material is too intensely traumatic to tolerate to the sense that it is too painful to recall, to the statement 'I can't remember it', to the theoretical justification 'memory is impossible'.

It is no longer possible to treat birth as the origin of memory.

**Perinatal Memory:** Evidence of the encoding, storage and possible retrieval of events at and around the time of birth is now so overwhelming that Arnold Buchheimer introduced his paper given to the 1st International Congress on Pre and Perinatal Psychology in Toronto 1983 with the words 'We now have enough empirical evidence to demonstrate clearly that human beings can and do recall birth events with validated accuracy<sup>136</sup>. Similarly Thomas Verny had written the year previously, 'Today we know that from the 6th month of pregnancy onward and especially from the 8th month, memory templates are laid down that follow recognisable patterns. By then the child's brain and nervous system are developed sufficiently to make this possible and the fact that memories retrieved from this period have a recognisable shape and form tends to confirm the notion that the brain is operating near normal adult levels by the third three months after conception'<sup>37</sup>.

Recent research studies in the field of embryology, foetal development, neurobiology and developmental psychology have converged in confirmation of these statements. While Philip Ploye had comparatively little hard research in 1973 on which to base his tentative article 'Does Prenatal Mental Life Exist'<sup>38</sup>, a short 7 years later Colwyn Trevarthen was able to draw on a mass of material for his field survey 'Neurological Development and the Growth of Psychological Functions'<sup>39</sup>, although at that date he could still complain 'The new evidence is fully accessible to only a few specialists'.

During the last 5 years major new aspects of research in this field have been completed and the material has been made much more widely available. 1982 saw the publication of Lloyd

deMause's 'Foundations of Psycho-History' with his memorable chapter on 'Fetal Origins of History' including a masterly survey of developments in the fields of pre and perinatal psychology. The following year David Chamberlain released his review of the empirical evidence for 'Consciousness at Birth' drawing on material from some 200 sources relevant to the field. The 'seep-through effect' was remarkably quick. Articles on aspects of prenatal development began appearing in popular journals, like one on the effects of alcohol in pregnancy in New Society in January 1981<sup>42</sup>. Tom Verny's book was reviewed in the Sunday Times in October 1982<sup>43</sup>, while in July 1984 the Sunday Times Business News<sup>44</sup>, of all publications, carried an article recording research which confirmed that babies exposed during the last 3 months in the womb to certain musical tunes, voice patterns, specific words and stories, showed clear signs of recognition of the material shortly after birth.

Research in the field has been enhanced with the advent of techniques for observing intrauterine conditions, using ultrasound and fibre optic technology, leading to a plethora of books, films, documentaries and television programmes including work by Leboyer, Odent, Nilsson and others, culminating in the recent controversy surrounding the abortion propaganda film 'The Silent Scream'. In the film's commentary, the New York City Obstetrician Bernard Nathanson affirms that 'new technologies have convinced us beyond question that the unborn child is simply another member of the human community' 45

First Trimester Recall: Today the frontiers of memory are being pushed further and further back. The Swedish foetal endocrinologist Peter Fedor-Freybergh has reported the detection of the specifically memory-related hormones of vasopressin and ACTH from the 7th and 5th week after conception respectively<sup>46</sup>. He holds that these hormones or neuro-transmitters are supposed to be responsible for the first transformation of information and the laying down of the earliest memory traces, initially in the structures of the hypothalamus and later in foetal development in the higher brain areas themselves. He argues that from this very early stage the foetus is able to transform information coming from the mother and from the whole environment into primitive memory traces which could then be developed and re-evoked later, both before and after birth. The detection of hormonal presence in foetal brain structures would appear to be a much more sensitive indicator than the rather more crude detection of electrical activity within the cortex which builds up from the 5th and 6th month onwards. Nerve cell multiplication in the foetal brain accelerates rapidly from about the 5th week, reaching its peak after 20 weeks before rapidly dying away<sup>47</sup>. These advances in understanding would appear to give some basis for the idea that primitive, preverbal memory traces may be laid down well within the first three months after conception. Such an understanding would accord well with the rapidly accumulating evidence from the carefully recorded journals of people undergoing primal integration therapy, intrauterine hypnotic regression, dream analysis and prenatal psychoanalytic investigation. Validated early intrauterine experiences consistently emerge, particularly associated with experiences of attempted abortion or threatened miscarriage within the first trimester.

**Protein-molecular Imprints:** The most recent advances in thinking about the very nature of memory itself, though not as yet validated by hard research, may well in the long term prove even more significant than advances in the last decade. Following work by Glassman, Myers, Penfield and others, Arnold Buchheimer<sup>48</sup> charts the inconclusive search for the sites of memory 'engrams' in specific locations within the human brain. He goes on to argue that the complex network of inter-neural connections and synaptic buds is not itself the memory store but a complex retrieval, switching and processing entity which utilises a distributed data

base stored in the protein-molecular structures of RNA within the cell nuclei themselves. The implication is that each cell develops within its molecular structure a holographic data store of the total organism and its life-trace and experience. The brain acts as a large central processor, accessing, reorganising, revising and processing the data field. RNA would thus serve as a store of learned data in much the same way that DNA encodes the genetically transmitted data. The implication is that the laying down of the analogue data field does not require the mature development of the cortex, although the latter is necessary for retrieval and processing. The logical conclusion to which Buchheimer is driven was articulated in response to a question at the Congress, 'How early in life do you think memory begins?' He replied without hesitation 'At conception'.

RNA molecules present within the first complete cell of the human being would already be storing a continuously modified imprint of the transaction between the cell and its environment. The protein-molecular data field would be replicated and distributed as cell division and complexification led to the development of the embryo and its subsequent growth into a self-conscious foetus.

Although still at the level of tentative speculation, Buchheimer's hypothesis is supported by some of the analytic case material to which reference has already been made. Some subjects have provided accounts which appear to be symbolic echoes of the event of fertilisation, of the experience of the free-floating spherical blastocyst, of the struggles and triumph of implantation and the establishing of the early symbiotic relationship between the new being and the maternal environment.

Conception and Beyond? The material raises some fascinating questions since it poses the possibility of some kind of memory trace being transmitted in the protein molecular structures of sperm and ovum from the distributed parental memory base. If that is so, then how many generations are involved? Need there be any cut-off? Do we in fact inherit in some dim way not only the continuing genetic coding, stretching back in an unbroken lifeline to the dawning synthesis of protein molecules within the primeval soup, but also some kind of racially distributed memory trace, reaching back over a similar period?

**Sub-atomic Stores?** In this review of the question of recall we have seen three major 'level shifts' in our understanding. The first transition was from verbal conscious recall from ages 3 or 4 back into the preverbal postnatal field. The second shift focussed attention on the symbolic pre and perinatal memory traces reaching back into the first trimester, while the third level change, more hypothetical and tentative, moved the understanding of memory from the inter-cellular activity of the cortex to the intra-cellular structures of protein molecules, raising the possibility of data stores stemming from conception and beyond. The account, however, would be incomplete without at least a mention of a fourth level shift which, if validated, could put all our previous levels of understanding in the shade. The ideas are emanating from the realms of the speculative philosophy of science on the boundaries between fundamental particle physics, astrophysics and microbiochemistry. Post-Einsteinian research into the fundamental nature of matter/energy has been intensely focussed around the search for a 'Unified Field Theory' capable of bringing into synthesis our understanding of the four apparently disparate forces of electromagnetism, gravity and the so-called strong and weak nuclear fields. Momentum of the research has increased spectacularly over the last few years, owing to the combination of advanced computer analysis and the facilities of the very high energy particle accelerators. The result has been the opening of a window on the subatomic level quite as significant as the breakthrough in biochemistry to the sub-molecular structures of complex proteins, which has in turn opened the door to genetic engineering and biotechnology<sup>49</sup>

From the perspective of a protein molecule the world of sub-atomic particles appears to be unimaginably infinitesimal. However, from the perspective of a proton, the world of fundamental particles, quarks, anti-quarks, muons and their fellows opens up a world of even further infinitesimality. Now from the physicists working at CERN, the European Nuclear Research Centre in Geneva, comes the theory of super-symmetry, raising the possibility of the fundamental building blocks of matter/energy operating in 'an 11 dimensional super-symmetric universe' within which the physical effects 'would be directly observable only on a still inaccessible scale billions of times smaller even than that of sub-atomic particles' 50.

In the Beginning: Just as we understand the human organism as being able to record, encode and carry an imprint of its experience from conception to the here-and-now, so it may well be that the sub-atomic particles, let alone the atoms which they later come to constitute, may be able to lay down within their complex multi-dimensional energy fields some kind of holographic coding of the total experience of that particular point of matter/energy, stretching back continuously through time and beyond into the high density energy plasma conditions which preceded the 'Big Bang', believed to have led to the constitution of the known universe. Such possibilities would accord well with ideas put forward in the realms of the philosophy of physics by Professor David Bohm<sup>51</sup>, who developed a theory of quantum physics which treated the totality of existence, including matter and consciousness as an unbroken whole. For Bohm, each independent element of the universe is itself a microcosmic reflection of the totality of information, folded in on itself in a multi-dimensional field.

The implications for our purpose is that far from being unbelievably simple and infinitesimal the protein-molecular structures of RNA may themselves be almost unimaginably massive and share at a much more fundamental strata, structures capable of encoding energy field transactions over space and time with roots that take us not just into early childhood, not just before birth, not just into the cellular events around fertilisation, not just into the dawn of biological history, nor simply into the origins of our solar system, but back into the primeval events of the birth of the cosmos and beyond. Put in this context the functions of consciousness and memory represent a minute time-span of evolutionary history, in which a speck of universal matter has begun to become aware of itself and its history in a primitive and partial way.

However archaic the information base, it is clear that the experience of any specific individual begins at conception. Information stored in the molecular, atomic and sub-atomic fields of sperm and ovum prior to that event are carried forward from a past, however dim and distant in the body/mind structures of parental beings. Fertilisation marks the origin of the life of the new individual as a potentially viable independent entity. It is, therefore, to the examination of the development of the individual from conception to adulthood that we must turn in our search for the points of traumatic experience to which the most primitive defences against psychotic anxiety are called into being.

D. Wasdell July 1985

## Meridian Programme

Meridian House, 115 Poplar High Street, London E14 0AE, Tel: +44 (0) 20 7 987 3600, Fax: +44 (0) 20 7 515 8627, e-mail: info@meridian.org.uk
Hosted by the Unit for Research into Changing Institutions (Charity Reg. No. 284542)

## **REFERENCES**

1. D. Wasdell,	Foundations of Psycho-Social Analysis, <u>Energy and Character</u> , Vol. 14, No.2, September, 1983
2. A. Briend,	"Fetal malnutrition - the price of upright posture?", <u>British Medical Journal</u> , 1979, 2, 317-319
3.	See <u>Syllabus of Abstracts</u> , First International Congress on Pre and Peri Natal Psychology, Toronto, July 1983, pub. by Pre and Peri-Natal Association of North America, 93 Harbord Street, Toronto, Ontario M5S 1G4, Canada
4. D. Wasdell,	Towards _a <u>Unified Field Theory</u> , URCHIN, 1979 D. Wasdell, <u>The Boundaries of Group Dynamics</u> , URCHIN, 1979
5. S. Freud,	Totem and Taboo, Some Points of Agreement Between the Mental Lives of Savages and Neurotics, Authorized Translation by James Strachey, Routledge and Kegan Paul, 1950 See also: D. Wasdell, The Myth of God: Agenda Taboo [A responsive analysis of the above], URCHIN, 1982
6. M. Klein,	Notes on Some Schizoid Mechanisms, in <u>Developments in PsychoAnalysis</u> , Hogarth Press and Institute of Psycho-Analysis, 1952. See also: D. Wasdell, <u>Anxiety Defences: Their Origin, Functioning and Evolution, Parts</u> I & <u>II</u> , URCHIN, 1980
7. D.W. Winnicott,	The Maturational Process and the Holding Environment, Hogarth Press and Institute of Psycho-Analysis, London 1976 See also: D. Wasdell, <u>The Holding Environment</u> , [Critical analysis of the above), URCHIN, 1979
8. S. Grof,	Realms of the Human Unconscious, The Viking Press, New York, 1975 See also: D. Wasdell, Perinatal Matrices, [Critical response to the above), URCHIN, 1979
9. D. Wasdell,	Innate Defences, URCHIN, 1982
10. M. Klein,	1952, op. cit.
11.I. Menzies,	The Functioning of Social Systems as a Defence Against Anxiety, Tavistock Institute of Human Relations, London, 1970, p.40
12. S. Freud,	An Outline of Psychoanalysis, Part 1, Ch.1, in <u>Works</u> , edited by Strachey, Vol.23, p.145

13. M. Klein,	Some Theoretical Conclusions Regarding the Emotional Life of the Infant, in <u>Developments in Psycho-Analysis</u> , Hogarth Press
and	Institute of Psycho-Analysis, 1952, p.198
14. C.G. Jung,	The Archetypes and the Collective Unconscious, translated by R.F.C. Hull, Princeton University Press, 1968, p.43
15.D.W. Winnicott,	Birth Memories, Birth Trauma and Anxiety, in <u>Collected Papers</u> , <u>Through Paediatrics to Psycho-Analysis</u> , Tavistock Publications, 1958, p.180 See also: D. Wasdell, <u>Birth Trauma</u> ?, [Critical analysis of the above], URCHIN, 1979
16. S. Freud, 1950,	op. cit., p.146
17. 0. Rank,	The <u>Trauma of Birth</u> , Kegan Paul, London, 1929
18. E. Jones,	<u>Life and Work of Sigmund Freud Vol. III, "The</u> Last Phase <u>1919 - 1939"</u> , p.62 f.
19 .D. Boadella,	Wilhelm Reich: The Evolution of His Work, Vision Press Ltd., 1973
20. I. Velikovsky,	Mankind in Amnesia, Sidgwick & Jackson, 1982, p.85 f.
21. F. Lake,	Clinical Theology, Darton, Longman & Todd, 1966, p.169 f.
22. D.W. Winnicott,	1958, op. cit., p.174 f.
23.A. Janov & M. Holden,	The Primal Man, Thos. Cromwell, New York, 1975
24. D. Schon,	Beyond the Stable State, Maurice Temple Smith Ltd., London 1971
25. I. Menzies, 1970,	op. cit., p.34 f.
26. S. Freud,	An Outline of Psychoanalysis, 1940, P.161, 'The maintenance of certain internal resistances [to unconscious material] is a sine qua none of normality'.
27.	See R. Clark, <u>Freud: The Man and the Cause</u> , Jonathan Cape, 1980, p.486
28. I. Menzies,	1970, op. cit., p.39
29. R. Harre,	Making Social Psychology Scientific, in <u>The Development of</u>

	Social Psychology, ed. Gilmore & Duck, Academic Press, London, 1980, pp.28 - 51.
30. E. Jaques,	On the Dynamics of Social Structure, <u>Human Relations</u> , Vol. 6, p.3
31. J. Daemion,	Nuclear War and Affective Social Ecology, unpublished manuscript, 1982, p.24
32.	W. Reich, <u>Emotional Plague of Mankind, Vol.II</u> , Souvenir Press, 1975
33. T.Verny & J.Kelly,	Secret Life of the Unborn Child, Sphere Books Ltd., 1982
34.	Recounted in conversation by George Henson, 1984
35 P. Greenacre,	Biological Economy of Birth, <u>Psychoanalytic Study of the Child</u> , No.l, 1945, p.40
36.A. Buchheimer, PhD,	Memory - Preverbal and Verbal, address given at First International Congress on Pre and Peri-Natal Psychology, Toronto, July 1983. Text available from the author, Rossiter Road, Richmond, Ma. 01254, USA
37 T. Verny, 1982,	op. et loc. cit.
38. P. Ploye,	Does Prenatal Mental Life Exist?, <u>Int. J. Psycho-Analysis</u> , 1973, Vol.54, p.241 f.
39. C. Trevarthen,	Neurological Development and the Growth of Psychological Functions, in <u>Developmental Psychology and Society</u> , ed. J. Sants, McMillan, 1980, pp. 46 f.
40. L. deMause,	<u>Foundations of Psycho-History</u> , Psychohistory Press, 1982. See Chapter 7, 'The Fetal Origins of History', pp. 244 - 332
41. D.B. Chamberlain, PhD	Consciousness at Birth: A Review of the Empirical Evidence, Chamberlain Communications, 5164 35th Street, San Diego, California 92116, USA
42.	Alcohol in Pregnancy, New Society, 8 January 1981
43. E. Dunn,	Good Baby Vibes, Sunday Times, 10 October 1982
44. T. Osman,	Born With A Sound Education, <u>Sunday Times Business News</u> , 22 July 1984
45.	<u>Time Magazine</u> , March 25th 1985, p.40, quoting Bernard Nathanson, New York City Obstetrician in the film, 'The Silent Scream'

46. P.Fedor-Freybergh, given	The Maternal-Fetal Psycho-endocrinological System, address
	at First International Congress on Pre and Peri-Natal Psychology, Toronto, July 1983
47. C.Trevarthen,	1980, op. cit. p.66
48. A. Buchheimer,	1983, op. cit.
49.	For a layman's review see the article 'The Nobel Quest for the Meaning of Protein', <u>Economist</u> , 29th March 1985, p.81f.
50.	For a layman's review of the field see Bryan Silcock's article, Sunday Times, 24th March 1985, p.13
51. D. Bohm,	Wholeness and the Implicate Order, Routledge & Kegan Paul, London 1980.