

Thesis title: **Observing the nature and trajectory of infant defences against disturbing mothering on a mother and baby unit**

Author: **Alexandra de Rementeria**

Course Title: **Professional Doctorate in Child Psychoanalytic Psychotherapy**

Awarding body: **University of East London**

Date: **October 2018**

Abstract

Title

Observing the nature and trajectory of infant defences against disturbing mothering on a mother and baby unit.

Introduction and aims

Mental health vulnerability emerges out of the interaction between the quality of early relationships and genetic inheritance. The quality of early relationships is strongly influenced by the mother's unconscious memories of her first relationships: Fraiberg's (1980) *Ghosts in the Nursery*. We propose that the intergenerational transmission of mental health vulnerability is largely mediated by such unconscious, internal-world phenomena.

Genetic inheritance, historical relationships and internal world phenomena are all hidden from direct observation. However, psychoanalytic clinical practice has established that the quality of historical relationships and the way that they interact with temperament through the prism of our unconscious internal worlds to shape a relational interaction in the present, can be inferred. Close observation of mother-infant interactions, and observation of what impact these interactions have on the observer utilises the psychoanalytic technique of analysing the counter-transference to gain access to the unconscious phantasies of the observed.

We argue that the earliest perceptions are inchoate and coloured by phantasy distortions. This is what lends Fraiberg's (1980) 'ghosts in the nursery' their phantom quality. We seek to capture the moments when an unwell mother is being haunted by such figures from her own infancy and then trace how they come to take up residence, and new forms, in the internal world of her baby.

The secondary aim of this study was to explore whether an infant observation approach can be captured in a standardised (or standardisable) rating scale without blunting the very sensitivity we hope to capture. The methodological challenge of creating a tool that respects the complexity of transference phenomena, without becoming too cumbersome to use, was only partially met.

Methods

This study uses a two-pronged approach. One prong is designed to capture qualitative data in the form of transcripts of observation write-ups and further reflections on those transcripts. The second prong is designed to capture some of the complexity of this data quantitatively in a Psychoanalytic Infant Observation Scale (PIOS).

A psychoanalytic infant observation of videotaped interactions on a mother and baby unit were written-up, including the observer's counter-transference experience.

A senior parent-infant psychotherapist used the transcripts to make a clinical formulation and treatment plan for the pairs.

Comparison with another well-evidenced assessment tool was possible because Care Index ratings were available for our pairs. In order to distill the rich qualitative data

into quantitative data that could be readily compared with the Care Index scores, an Infant Observation Scale was developed and applied to the transcripts.

Results

The transcripts were rich in clinical deductions about the internal world of mother and infant, although there were more inferences made about maternal than infant defences.

The Parent-infant psychotherapist felt confident making a formulation based on the transcripts and his treatment plans concurred with those indicated by the Care-index rating.

When qualitative data was rendered as numerical scores on clinically derived scaled items, there was a good fit with the Care Index ratings for the same parent-infant pairs.

Conclusions

Psychoanalytic infant observation can identify certain internal world phenomena. These are phantasy distortions impacting on interactions and various infantile defences, including manic, second skin, dissociative and narcissistic. These were not directly observable but inferred from countertransference experience and observable behaviours. Psychoanalytic infant observation is clinically useful for formulating parent-infant relational difficulties. In this early development of an Infant Observation Scale, the measure's validity and reliability were found to be good. The particular strength of psychoanalytic infant observation is the use of transference phenomena to inform an understanding of unconscious processes and this study suggests that with further work it might be possible to develop and standardise a scale to capture and measure that phenomena.

Fraiberg, S. (1980) Ghosts in the nursery: A psychoanalytic approach to the problem of impaired infant-mother relationships in *Clinical studies in infant mental health: The first year o life*, S.H. Fraiberg, (ed.) (164-196) London: Tavistock Publications.

Table of contents

Preliminaries:

· _Title page	i
· _Abstract	ii
· _Table of contents, including subsections	ix
· _List of tables	vki
· _Acknowledgements	viki
· _Dedication	ix

Main thesis text:

Introduction and rationale

Section 0.1 Aims	p.3
Section 0.2 Rationale for this study	p.4
Section 0.3 Rationale for the design of this study	p.4
Section 0.4 Possible learning that might come from this study	p.6
Section 0.5 Rationale for methodological approach	p.6

Chapter 1 – Literature Review

Part 1 Overview of relevant theoretical positions and debates

Section 1.1 Overview of main argument	p.13
Section 1.2 Overview of different kinds of evidence	p.15
Section 1.3 Early Dynamic Unconscious	
Section 1.4 Attachment, neurobiology and affect regulation	p.21
Section 1.5 Panksepp's 7 Basic Emotions	p.32
Section 1.6 Readiness to Relate	p.34
Section 1.5 Phantasy and drive theory	p.35
Section 1.6 'The wish is father to the thought'	p.36
Section 1.7 Object relations: paranoid schizoid and dep. pos.	p.40
Section 1.8 Infantile defences and the dynamic unconscious	p.43
Section 1.9 Concluding comments	p.45

Part 2 Rationale, with reference to the literature, items on the Infant Observation Scale

Section 1.10 Making Contact	p.46
Section 1.11 Mutual Understanding	p.54
Section 1.12 Making Relationships	p.62
Section 1.13 Maintaining Relationships	p.70
Section 1.14 Making Sense of the World	p.81
Section 1.15 Inferences about internal world phenomena	p.86

Chapter 2 – Methods

Section 2.1 Methods of qualitative arm of study	p.102
Section 2.1a Development of protocol for obs and transcript	p.106
Section 2.1b Textual analysis protocol	p.108
Section 2.1c Test of clinical usefulness of transcript	p.109
Section 2.2 Methods of quantitative arm of study	p.110

Section 2.2a Development of PIOS	p.110
Section 2.2b Inter-rater reliability test for PIOS	p.112
Section 2.2c Development of PIOS out of the Relationship Scale	p.113
Section 2.2d Existing assessment tools	p.114
Chapter 3 – Results	
Section 3.1 The Infant Observation Scale	p.121
Section 3.2 Results from the clinician using the transcripts as a source of clinical material	p.122
Section 3.3 Comparison of Psychoanalytic Infant Obs Scale and Care Index	p.123
Section 3.4 Reliability of the Infant Observation Scale.	p.128
Chapter 4 – Researcher’s Experience	
Section 4.1 Opportunity	p.130
Section 4.2 Inspiration	p.130
Section 4.3 First impressions	p.131
Section 4.4 Collecting the data	p.133
Section 4.5 Occupational hazards of working in the transference	p.133
Chapter 5 – Discussion	
Section 5.1 - in relation to aims and rationale	p.139
Section 5.2 - in relation to methodological issues	p.141
Section 5.2a - of issues in research in psychoanalysis generally	p.141
Section 5.2b - of methodological issues in qualitative research generally and for Infant observation as research	p.145
Section 5.2c - issues arising from the quantitative arm	p.147
Section 5.2d - translating qualitative data into quantitative data	p.150
Section 5.2e -arising for the qualitative arm of the study	p.152
Section 5.3 Qualitative analysis of transcripts:	p.155
Section 5.3a Transference phenomena	p.161
Section 5.3b Self-contingency and congruence	p.170
Section 5.3c Dynamic unconscious of infant	p.174
Section 5.3d Two person bodily self	p.178
Section 5.3e Internal world phenomena	p.182
Section 5.4 Consilience with neuroscience	p.187
Section 5.5 Usefulness of transcripts for informing clinical form.	P.193
Section 5.6 Discussion of findings of this study in relation to NICE Guidelines	p.194
Chapter 6 – Conclusions and recommendations	p.196
References	p.201
Appendices	p.212

- Appendix (i) Relationship Scale form	p.213
- Appendix (ii) PIOS observer forms	p.217
- Appendix (iii) Overview of the six domains of IOS	p.225
- Appendix (iv) Sample transcript with questions	p.226
- Appendix (v) Transcripts with further reflections for the 8 videos	p.231
- Appendix (vi) Formula for working out comparable score	p.305
- Appendix (vii) Data & formulation for calc. inter-rater reliability	p.306
- Appendix (viii) Maternal and Infant scores	p.309
- Appendix (ix) Care Index information	p.311
- Appendix (x) clinical formulations	p.312

List of tables

Table 1	Participant characteristics	p. 105
Table 2	Comparison of Infant Observation Scale and Care Index (ranked total scores)	p. 123
Table 3	Comparison of Infant Observation Scale and Care Index (Discharge-Admission total scores)	p. 124
Table 4	Comparison of Infant Observation Scale and Care Index (ranked infant scores only)	p. 125
Table 5	Comparison of Infant Observation Scale and Care Index (Discharge – Admission: Infant items only)	p. 125
Table 6	Comparison of Infant Observation Scale and Care Index (ranked maternal scores)	p. 126
Table 7	Comparison of Infant Observation Scale and Care Index (Discharge – Admission total scores)	p127
Table 8	Reliability data for the Infant Observation Scale	p.128
Table 9	Overview of six domains of IOS	p.225

Acknowledgements

I would like to thank Dr Susan Pawlby who works clinically as a developmental psychologist at the Mother and Baby unit and academically at the King's College London's Institute of Psychiatry. Dr Pawlby has run a celebrated clinic using video feedback to improve mother and baby relationships for many years. Originally she used the Care Index and later developed a tool more focused on maternal mind mindedness. She has been extremely generous in giving me access to the rich data she has collected over the years and in offering guidance and support and long buried paper work to get this study off the ground.

The late Dr Louise Emanuel was an inspiration in her role as course leader on the Infant Mental health masters in which I learnt Psychoanalytic Infant Observation. I was also lucky enough to have her supervise the project in the early stages, bringing her immense knowledge and potent powers of observation, which helped me to trust that there was much to be gained from applying and developing my own clinical observation skills. Her death was a devastating blow to the whole field of infant mental health and left this, among many, many other projects impoverished by her loss.

Dr Anthony Lee has been the rock through out the project. His expertise made the statistical analysis of the results possible and in this way showed me what I'd found. In his generous supervision he has held the bigger picture in mind when I was lost in the detail, offering essential guidance about the overall structure of the study, while simultaneously commanding the detail and offering inspiring discussion of issues arising from the project, usually barely within my 'zone of proximal development' spurring me to go home and read until I could really make use of what he'd said. He is a gifted teacher and I have benefited greatly from this.

Dr Danny Goldberger, under whom I had seen two parent-infant psychotherapy cases at the Maudsley, was the person who first put me in touch with Dr Pawlby and encouraged me at the very beginning to consider using Infant Observation to explore the video material. I was grateful when he later became more formally involved as second supervisor and enriched the project a great deal with his contributions to the 'clinical formulation test' and advice about getting the project completed.

Fanny Lena has offered friendship, support and encouragement in addition to her thoughtful writing about psychoanalytic video feedback. She was also the person to identify that what needed further investigation in research is the internal world of the infant. I hope she can celebrate my attempt to do this and help me think about why the internal world of the infant proved so illusive even when it was the named object of study.

Hilary-Ann Salinger, my service supervisor at Lewisham CAMHS has been interested and curious throughout the project, making it possible to feel that it could be something that would compliment, rather than compete with my clinical work.

Thank you to Dr Jocelyn Catty and Dr Jenifer Wakelyn for practical advice through the sizeable administrative task of doing research.

Last, and perhaps most importantly, I would like to thank Dr Dilys Daws, my Infant Observation Seminar leader from over ten years ago who first taught me to see with my feelings and who has supported my interest and fuelled my passion for infant mental health since then in various and always generous ways.

Dedication

For James, Amaia and Frankie,

I hope I can repay your patience and encouragement x

Observing the nature and trajectory of infant defences against disturbing mothering on a mother and baby unit.

Introduction, rationale, aims and issues

Introduction

What happens in the mind of a baby when his mother is too unwell to provide ordinary good-enough responses? By observing what babies do in interaction with a mentally ill mother, and what impact viewing these interactions has on an observer, it was expected that we would be able to infer the use of psychic defences in the baby and the mother.

It will be argued that the intergenerational transmission of mental health vulnerability is largely mediated by unconscious, internal-world phenomena, which can be inferred from close observation of mother-infant interactions, and observation of what impact these interactions have on the observer.

This study makes the argument for two further claims. Firstly, that the earliest perceptions are inchoate and coloured by phantasy distortions and that this is what lends Fraiberg's (1980) 'ghosts in the nursery' their phantom quality. "Phantasy is (in the first instance) the mental corollary, the psychic representative, of instinct. There is no impulse, no instinctual urge or response which is not experienced as unconscious phantasy" (Isaacs, 1948, p. 81). Klein, and then Isaacs, expounded a theory of the function of phantasy in which it was understood that infants project their own instinctual urges, especially the aggressive ones, into their primary (part) objects and so must then experience their objects as coloured by their own aggressive impulses. It is this mechanism that is thought to exacerbate the intergenerational transmission of mental health vulnerability.

Through close observation of interactions, this study seeks to capture the moments when an unwell mother, doubly haunted in this way, would struggle to prevent these ghosts from taking up residence, and new forms, in the internal world of her baby.

This stance makes contentious claims about the nature and emergence of thought, claims that were first made during the controversial discussions between Klein and Anna Freud. One main focus of this study is an in-depth engagement with the Post-Kleinian theory that developed on one side of this divide in the psychoanalytic world of the 1940s. It is beyond the scope of this study to do justice to the theoretical developments on both sides, nor the entire research field of attachment research that developed out of Bowlby's work. However, there will be an attempt to take account of Fonagy's work on mentalisation in the literature review and some of the important work of the Parent Infant Project at the Anna Freud Centre is briefly reviewed in the methods section. This study takes as its focus the theoretical constructs, clinical observation and experimental research findings that support claims about the primacy of phantasy. Freud's hallucinatory wish-fulfilment (1900) and Bion's (1962), suggestion that the first thoughts are a bridge between embodied drives and the experience of having them sated, will be taken as a starting point. Building on this, Winnicott claims that individuation is a developmental task and that separateness is not a perceptual given. Here an argument is built about the primacy of unconscious phantasy in the developing mind of the infant and the powerful role it plays in the transmission of mental health vulnerability between generations. Convergent findings from neuroscience and new models of infant development from the field of affective neuroscience are explored where they can also be seen to support this way of thinking about infant defences and the implications for future mental health.

Videotaped interactions between mothers and their babies, on Admission and discharge at a mother and baby unit, were viewed from within the frame of psychoanalytic infant observation. A transcript, including a description of the interaction and the feelings evoked in the observer, was written up and returned to after a period of time to create a space within which it was possible to reflect on the observer's countertransference experience.

Section 0.1: Aims

The primary aim of this study is an in-depth engagement with the relationship between the highly detailed infant observation material, the observer's later reflections on this and the psychoanalytic framework from within which the observer was operating.

In this way it is hoped that the process by which understanding is reached in psychoanalytic observation can be scrutinised. In particular it is hoped that clinical deductions about the role of phantasy in mediating mother-infant relationships will be specified and their importance in terms of informing clinical formulations illustrated. It is important to acknowledge that this is tantamount to researching the theory of infant unconscious phantasy through observational methods. While the clinical practice of many psychotherapists employs an easy interchange between these two paradigms, the theory of infant unconscious phantasy and observational methods are considered by some to be conflicting paradigms. Some argue that research observing and experimenting with actual infants has called into question theoretical claims about the baby. This tension will be returned to at various points in relation to reviewing the literature, the methods and in relation to the observation material collected here.

The secondary aim is to begin to evaluate this approach through comparison with another well-evidenced assessment tool – the Care Index. Care Index ratings were already available for the mother/infant pairs studied and the ratings were based on the same video-taped interactions that were psychoanalytically observed in this study. In order to distill the rich qualitative data of the transcripts into quantitative data that could be readily compared with the Care Index scores, a Psychoanalytic Infant Observation Scale (PIOS) was developed. This is an amended version of Dr Anthony Lee's Relationship Scale, which was developed to track the transference relationship between psychotherapist and child patient during a psychotherapy session. This tool was developed primarily to enable a comparison between the observation transcripts and the Care Index ratings, but the scale may also have the potential to be developed as a clinical assessment or research tool, but it is important to stress that this was not the primary reason for developing the scale. (See the discussion in chapter 5.)

Section 0.2: Rationale

- Maternal mental illness is a risk factor for child, and later adult, mental illness.
- While the genetic factors involved in this transmission are acknowledged, the purpose of this study is to try to understand something about how this effect is mediated within the mother-infant relationship.
- It is known that unattuned maternal care at 4 months predicts disorganised attachment at 2 years (Beebe, 2012), which predicts poor mental health outcomes in childhood and adulthood.
- While unattuned parenting at 4 months might be correlated with neglect and or abuse over the next two years, the impact of unattuned parenting in itself seems to have a profound impact on the infant's emotional development.
- The Care Index has established that specific interactive behaviours are indicative of poor maternal sensitivity. These behaviours can be coded and are predictive of poor outcomes for the relationship and the child.
- Psychoanalytic infant observation uses close observation of interactive and individual emotional phenomena and countertransference to make inferences about the emotional development of the infant as mediated through his internal world.
- **Close scrutiny of the process of psychoanalytic observation will underscore the importance of phantasy in mediating mother-infant interactions by rendering instances of such phenomena visible.**

Section 0.3: Overview of design

The original aim of this study is to capture qualitative data in the form of transcripts of observation write-ups and further reflections on those transcripts. This is the first arm of the study. The second arm was designed to capture some of the complexity of this data quantitatively in a Psychoanalytic Infant Observation Scale (PIOS). This is organised around six domains, each containing 3-7 items describing:

- the observers' clinical deductions about the emotional experiences of mother and baby during these interactions, partly informed by her countertransference experience and

- the observers' speculations about how these relational events are mediated by the internal world and phantasy life of the infant and mother as informed by psychoanalytic theory.

While the scale is too blunt a tool to fully capture the complexity and subtlety of the qualitative data, it does provide a way of capturing in broad brush-strokes something of what the observation can be shown to suggest. This has made it possible to compare the quantitative findings with the Care Index ratings, which are available for the same video interactions.

The intention is to make explicit the process of extrapolation by which knowledge about the unconscious phantasy life of psychoanalytic patients, as built up over decades of field research in the consulting room, enable us to estimate or infer the value or meaning of what is observed between mother and infant, beyond the range of the present observation. The clinical tool of tracking transference and countertransference phenomena is the means by which much psychoanalytic knowledge has been established. In this study, as with psychoanalytic infant observation generally, countertransference is also what illuminates the links between the observable interpersonal phenomena and the intra-psychic phenomena that mediate it.

This is a complex, multi-layered, business that involves analysis of the feelings and associations evoked in the observer as well as an integration of what is directly observable. This degree of inference and deduction borders on speculation and carries some risk of misinterpretation. However, given that the phantasy life of mother and infant are by definition not directly observable or accessible for self-report, yet are understood to mediate relational trauma, it does seem the appropriate clinical method to apply to such complex presentations, despite this inherent, necessary and unavoidable risk. In our field, the process of supervision of clinical work and infant observations through the presentation of write-ups to experienced psychoanalytic practitioners is the main check against false readings. In an attempt to control for such errors in this study, an inter-rater reliability test was carried out for the Psychoanalytic Infant Observation Scale for 2 out of 6 of the videos analysed.

Section 0.4: Possible learning that might come from this study

It is hoped that by breaking down the process of using close observation, countertransference and psychoanalytic knowledge to make internal world inferences we might help to render the process accessible to researchers in other fields. It is also possible that systematizing our procedures in these new ways may lend us a new perspective on the knowledge-base and tools of research we are familiar with.

There is much evidence to show that the intergenerational transmission of mental health difficulty is mediated by maternal care and, in particular, the degree of maternal attunement. As stated, this study hopes to illustrate how this in turn is mediated by the infant's internal world. It is hoped that any convergence between findings of the Psychoanalytic Infant Observation Scale and the Care Index would lend the Psychoanalytic Infant Observation Scale some validity given that "There are more than 40 publications supporting the validity of the CARE-Index, including those addressing its use in situations of maltreatment and maternal psychiatric disorder" (Farnfield et al., 2014, p.1).

Section 0.5: rationale for methodological approach taken in this study:

The historical context of the method of naturalistic observation

After a free-ranging start with thinkers like James (1892) and Mead (1934), the field of developmental psychology became shackled to empiricist, rationalist methods. This has meant that most research has studied quantitatively measurable behaviours under experimental conditions. The study of subjective experience became sidelined, deemed inappropriate for a field seeking acceptance as a science. However, questions regarding the emergence of self or the nature of being human would not confine themselves to philosophy, and the latter half of the twentieth century saw an explosion in the study of 'objectively' observable behaviours that could be codified and used to make inferences about subjective phenomena. The validity of findings has largely continued to be judged against the experimental designs' relative success in

emulating ways of studying the physical world. The subjectivity of the researcher was to be reined in as a weakness leading to 'experimenter effects'.

Research in Psychoanalysis

Meanwhile, psychoanalysis was unearthing the infant buried in the unconscious internal world of adult patients. Using psychoanalytic theory, inferences were made about infantile experience from patient behaviour within the analytic relationship, using the analyst's experience of transference. Freud (1917/1973) noticed that his patients related to him as though his behaviour had aroused particular feelings in them, which he recognised as actually belonging to 'the old disorder' - what we would now think of as sensitivities developed in relationship with early attachment figures. Freud realised that rather than interfering with the work, this transference onto the analyst of aspects of past relationships provided an insight into the patient's unconscious expectations of relationships. He did not immediately understand how the feelings these transferences evoked in the analyst could be utilized as a source of information about what was being transferred, or projected into the analyst. Klein rejected countertransference as a confounding variable, feeling that it identified a need for further analysis for the analyst, and did not see its potential as an analytic tool. It was Heimann (1950) and then Bion (1952) who expounded the value of this tool in clinical work, although it has always been contentious. Bion understood that when a patient befuddled one's thinking or caused a lapse in insight this was an informative attack on the analyst's capacity to make links in his mind. Later Joseph (1985/1988) would acknowledge that in clinical work one is often not aware that one is in the grip of countertransference until one feels the 'nudge to act'. Brenman Pick (1985/1988) went further to say that inevitably there are times when a degree of acting out must happen before the analyst is able to identify that her own unconscious difficulties have been stirred by the material. See the 'Observer's Experience' in Chapter 4 for reflections on how these issues impacted on this project.

So, in psychoanalytic clinical practice, which has been the main arena for psychoanalytic research for most of its life, subjectivity has become a tool for receiving knowledge. The subjective experience of the impact that the other has on the self is read as a source of information about the preoccupations and motivations of

the other. This is why personal analysis is such an important aspect of the training of psychoanalytic practitioners. A personal analysis affords some confidence that the impact of the other is not too coloured by the preoccupations and relational dynamics of the therapist's past. This means of generating knowledge, using one's subjective experience of being with the other, is valued for its specificity and capacity to describe complexity but for many does not meet the requirements of scientific research.

There is much debate about how best to improve the standing of psychoanalytic thought in the wider community. For Stern (2000) theories, particularly those pertaining to infantile experience and intra-psychic phenomena, must be amended where they are no longer 'plausible' in the light of empirical research. For Green (2000), this affords an unwarranted authority to empirical methods as the parameter setter.

In this study the aim is not to test or amend any theory that has earned its place in the theoretical cannon through clinical usefulness. It is hoped that some elements of the mechanism by which psychoanalytic knowledge is created in the consulting room might be explored in the context of observing filmed interactions. The two situations share some important elements, chiefly the observation of interpersonal and specifically transference phenomena in order to infer intra-psychic phenomena. The main disadvantaging differences are that there is no opportunity to test inferences through interpretation or any action in the moment, and the fact that the transference relationship is at one remove, coming via the camera. However, it is the camera, the fact that what the researcher is responding to is captured and can be seen by others, that is a great advantage here. The traditional system by which analysts and therapists share and build on psychoanalytic understanding involves recording process notes from an analytic session, taking them for supervision and publishing papers describing established theoretical concepts in clinical action or, more rarely, developing theory to account for clinical phenomena that current theory does not adequately explain. As Rustin (2016) has argued, while this system has served us well in terms of generating and disseminating new understanding, which is adequate for the private analytic arm of our profession, the limitations of this system are putting the publicly-funded arm in potential jeopardy.

Doing research outside the consulting room means that it is possible to use methods that would do damage to the delicate process of analytic clinical work to shed new light on aspects of what we do. Green (2000) expresses a concern that attempts to appease the wider community, by bending to the laws of empirical research, will serve to undermine the field from within. In response, Alvarez has commented that resisting the scientific world 'feels like shutting father out of the nursery' (p. 107). The psychologist McLeod (2001) argues for qualitative research in psychotherapy claiming that the knowledge it generates is: 'holistic, nuanced, personal, contextualised, incomplete...a knowing that is familiar to therapists' (p. viii). While these are proclaimed as strengths in his writing, he does acknowledge a pull toward the positivist position within his field. It is hoped that this study will contribute to a growing number of ways of looking at what psychoanalytic clinicians do and how we know what we know. It is hoped that it will contribute to a diversification of perspectives, a kind of triangulation, as Alvarez points out, rather than a watering down of or toppling of the one true method. 'Shutting daddy out of the nursery' will do nothing to protect publicly-funded psychoanalytic work. It is outcome monitoring and randomised controlled trials that will do most to ensure public funding and not empirical evidence for specific concepts. Green's argument that only the consulting room can be the arbiter of what works in the consulting room is persuasive. Also, his assertion that it is adult analysis that enriches infant research chimes with the researcher's experience in this study. However, it does not seem reasonable to refute that the psychoanalytically informed study of the actual infant might enrich our understanding of how the actual infant's experiences co-create the infantile or 'true' (Green, 2000) infant in the child and adult. The intra-psychic phenomena that mediate this process are not directly observable but the field of infant observation research suggests that 'the old disorder' can be captured live by an appropriately trained observer. This would not be possible without the understanding of intra-psychic life that was unearthed on the couch. To extend Freud's archaeological metaphor, if an artefact from an ancient civilisation is found lying on the surface by a lay person its value may be missed. The significance of the find is only understood because of the years of excavation that unearthed many objects, in context, which meant that their complex relationship to one another could be inferred and much about the people of that civilisation could be speculated on. The accidental finds on the surface are not

discarded because they were not dug up! The informed archaeologist celebrates even a dull fragment of pot because in his mind it connects up with a pot and a household and a culture. So it is with the analytic infant observer. Wolff (1996) argues that ‘neither inferences about the observed infant’s subjective experience nor eclectic research strategies that integrate empirical data and inferences about the infant’s affective self will contribute significantly to psychoanalytic psychology as a psychology of idiosyncratic personal meanings and hidden motives.’ (p.42.) Green and Wolff would discard our pot fragment but if it shares enough features with fragments from the dig to be thought to be of the same peoples, surely it should find a place in the museum? Fraiberg’s psychoanalytic training enabled her to notice the significance of what seemed insignificant or meaningless to other observers of disturbed infants. In her paper ‘Pathological Defences in Infancy’ (1982) she described how her knowledge of the function of ego defences in adults enabled her to make sense of the *idiosyncratic personal meanings and hidden motives* behind the baffling behaviours of the infants she saw (see further discussion of this paper in Lit. Rev. Part 1).

Wolff also argues that revisions to psychoanalytic treatment informed by infant observation “differ so fundamentally from standard practices that their relation to the psychoanalytic talking cure is no longer discernible. The goals of psychoanalytic treatment have shifted from efforts to understand the origins of intrapsychic conflicts, in order to liberate patients for their hidden obsessions and compulsions, to efforts to help patients overcome the real experience of neglect and impaired social interaction by affirmation, empathy and corrective emotional experiences” (1996, p.46).

The method employed for this research is based on the Tavistock model of infant observation, which was developed as part of the training for child psychotherapists by Ester Bick. For psychoanalytic psychotherapists trained in this tradition Wolff’s (1996) description does not work. As will be seen in this study, it is the intrapsychic conflicts, the obsessions and compulsions that develop as defences against the pain of neglect and abuse that contemporary psychoanalytic psychotherapists work with. It is not either psychoanalytic or about ‘real’ maltreatment. It is the infinitely complicated work of understanding how maltreatment is experienced through the prism of

idiosyncratic unconscious phantasies and defensive organisations. Psychoneurosis is still 'inherent and irreconcilable' but publically funded psychoanalytic treatment must and has adapted to the specific needs of deprived and depriving families without becoming less psychoanalytic. When psychotherapists are successful in such work our patients are in a position to realise that even in mental health, this is as good as it gets.

Bick's is a naturalistic observation, conducted for one hour per week, at a set time, in the infant's family home. The observer's task is to watch how the infant's personality emerges and how relationships within the family grow over a period of two years. The observer is asked to attend to and describe her own emotional responses as well as the emotions and actions of the infant and his family. Notes from each observation are written from memory and taken to an Infant Observation Seminar, which includes four other students and a tutor. It is in these seminars that the projections from baby and family member into one another and into the observer are thought about in terms of what they might reveal about the internal worlds of those being observed. This involves engaging with the feelings in the room, one's own included. The highly subjective and initially ineffable material this leaves the observer with then needs to be reflected upon. This process requires bearing with a sense of chaos, of not knowing what any particular piece of material 'means', but letting it exist in the mess until the psychoanalytic framework from which the material is approached allows some order to be imposed and some provisional conclusions to be drawn. Over decades of teaching Infant Observation it has been seen that psychoanalytic theory on infantile experience offers a parsimonious explanation of what observers see and what is felt in the transference and countertransference. These theories were developed to account for the primitive and unconscious modes of thinking unearthed in therapeutic relationships with adults. However, it is arguable that those theories that were seen to converge with what was directly observable in infant observation are further validated by the convergence.

While the experimental method disavows the researcher's subjective experience, the psychoanalytic method utilises it as a tool. After Money-Kyrle (1956) and Joseph (1989) expounded the value of interpreting the countertransference, this tool got sharper, but the attendant risks became graver. An empiricist critique of

countertransference as a research tool would be similar to Klein's objections to its use as a therapeutic tool. By admitting material that may have its origins in the personal history of the observer, a confounding variable has been introduced. However, if the history and subjective experience of the observer are *admitted*, in both senses of the word, they can be subjected to scrutiny. The naturalistic observation method employed here prioritises specificity over replicability or control over variables. As such its main strength is ecological validity, as the observer's presence is the only thing that keeps it from being exactly like real life. While the observer's presence will have a profound impact on those being observed, it is part of the work of observation to reflect on this and on the observer's own emotional responses in order to unearth the emotional 'truth' of the situation.

Literature Review:

Part 1

This literature review starts by setting out the theoretical arguments that support the disputed claims about infantile mental capacity and development that this research is premised on. A rationale for the inclusion of the various forms of research evidence and theory will follow. Theoretical models of development from neuroscience, Kleinian psychoanalysis and infant research will be compared, stressing convergent findings from the mutually supporting, but radically different, forms of evidence from each field. This section will include an excerpt from the Infant Observation paper the researcher wrote as part of her pre-clinical training in the hope that it will serve to illustrate some of the theoretical ideas under discussion. The final section will organise key points from this discussion under the headings from the Psychoanalytic Infant Observation Scale (PIOS). Here it will be possible to identify specific observable relational and self-regulating behaviours and elaborate on their significance for future mental health and resilience. This final section can also be read as a stand-alone primer for observers using the PIOS. For Psychoanalytic Child Psychotherapists this would serve as review of ideas they would be familiar with from their training and practice.

1.1 Overview of main argument

The researcher will be making inferences about the internal world of the infant based on the premise that young infants have a dynamic unconscious, in that they use defences and engage in unconscious phantasy. It will be argued that this dynamic unconscious is an emergent property of the interaction between endogenous, phylogenetic primitive emotions and drives, and the anoetic, affectively charged and embodied relational experiences with part-objects of very early life. This would assume that symbolic thought proceeds from phantasy, as posited by Bion (1962), rather than being a pre-requisite for it (Stern, 2000). The researcher's inferences will also assume a degree of self/other confusion born of the fact that in early infancy the functional unit, in terms of survival, is a two-person unit. As Winnicott (1952) so evocatively put it: 'There is no such thing as a baby'. The implications of the notion that an infant's mind emerges from a two-person unit will be explored. It will be proposed that, in light of research supporting the argument that higher, representational or symbolic thought emerges out of earlier 'embodied cognition', the recognition that the bodily unit is a two-body unit strongly suggests that differentiation is a developmental task rather than a given.

In asserting that very young infants are both relational and undifferentiated a paradox is set up. However, the most parsimonious explanation of the apparently contradictory evidence that can be found in support of both ideas, independently and simultaneously, is Klein's conception of a phantasy life. This would emerge out of the bodily experiences of being with another who is not fully perceived or conceived of, but who is related to in a piecemeal way, that is then represented as bodily, motor-sensory-affective bits of doing or being done to.

It will also be argued that it is the embodied nature of early cognition, the fact that it is experienced concretely as sensori-affective-motor phenomena, that strongly suggests that cognition passes through a phase of concrete symbolic equation (Segal, 1957) towards symbolization proper. The first embodied cognitions are stimulated by interoceptive cues about loss of homeostasis but these are also the first relational experiences because homeostasis can only be achieved through activation of the carer – the other half of the functional unit. This is not yet 'communication' proper because

the infant does not perceive or conceive of a whole object or have the intention to communicate with her. He is discharging states of body and a rudimentary mind but this mind and body does have the capacity to attribute his own mind/body states and urges – which we might go so far as to call motivations, through a process of simulation (Gallese, et al, 2011) on to the part-objects of his earliest experiences.

Fotopoulou (2012) argues that the neuroimaging literature suggests that knowing others and knowing ones-self involve two distinct neural networks. One is more embodied in that it involves mirror-neurons and understanding others through motor-simulation mechanisms which broadly mean that seeing someone do or feel something activates the neuronal networks for this doing or feeling in our own brain. Thus we come to know how they feel because the neural networks are mapped from one mind to the other. There is some debate as to whether the meaning of the other's experience is automatically appreciated from the simulation of it in oneself or whether the subject re-uses his own experiences that match with this one to access the meaning. In either case, these processes are implicit and automatic and do not require that the feeling be symbolically represented and so available for propositional cognitions. This mechanism not only allows us to access the feeling states of another before a self or other is fully conceived but, as Fotopoulou (2012) points out, leaves us vulnerable to conflation between self/other experiences. She links this with the pathological over-use of projection and vulnerability to contagion of those suffering with personality disorders. The second network is located in the pre-frontal cortex and involves more formal mentalization, involving symbolic and abstract thought. **In line with Fonagy's (2002) work on mentalisation, she** proposes that the latter system works to inhibit conflation with reference to research with patients who have damage to the part of the brain that inhibits automatic mirroring. For most of us this is what allows us to use embodied simulation to give us insight into the internal state of others without being compelled to feel exactly what they feel, or even do what they do, although the contagion of yawning is an example of where this system fails. Fotopoulou cites further research linking the neural networks involved in this imitation inhibition with the work of self-referential processing and agency. She argues that this supports the notion that self/other distinctions require work because a decoupling needs to take place. This also seems interesting in relation to the

spontaneous and arguably uninhibited urge to imitate in newborns. (See section on imitation in this chapter)

This notion of a creatively constructed experience from the beginning chimes with Likierman's (2001) description of Klein's infant.

'Above all, Klein began to see that the process of investing the experiencing self in the world does not simply amount to a mode of perceiving and organizing a mass of bewildering impingements from life. It is a mode of extracting a qualitative experience from an existence that would otherwise consist of a chain of meaningless events. It is therefore an emotional mode of constructing human meaning; of telling an early story of pleasure and pain, love and hate, good and bad.' (p.83)

For Trevarthen and Aitken (2001) it is clear that the newborn infant can engage in meaning making exchanges from birth and he even argues that if his innate drive to seek these experiences are not recognised: 'The infant here can suffer shame if submitted to the dull gaze and tuneless voice of indifference, even if kept warm and well fed' (p.119)

1.2 Overview of different kinds of evidence from diverse fields

In psychoanalytic practice, psychoanalytic models of development are valued for, and so justified by, their usefulness in the clinical work (Green, 2000). This study involves applying psychoanalytic models of development to infant research focused on direct observation of the mother-infant interaction. The usefulness of research lies in its veracity and, in the experimental tradition, this is inferred from its reliability and validity (see methods section). It is hoped that this will, in a small way, add to the body of knowledge that is judged against these standards. However, the inferences made about internal world phenomena based on the close observation of behaviour will be highly speculative. These inferences rely on psychoanalytic theoretical models generated through attempts to make sense of phenomena in the consulting room, which led to a retrospective reconstruction of development. There is no direct access to the unconscious mind. Aspects of it, the shape or contours of certain dynamics can be felt in the transference relationship and over a century of such 'feeling out' quite a

full picture has been sketched of the dynamic unconscious and its development. When these dynamics also seem to describe and make sense of what is observed live in the mother-infant relationship, this in itself provides some corroborative support for the theories. However, to warrant applying these theories beyond the consulting room we need to strengthen the basis for our claims through triangulation, and for this we must turn to neuroscience.

The work of neuroscientists such as Panksepp (1998) support the idea that the first self is a bodily self whose most affectively charged and so salient experiences are of primitive relational affects. The convergence between Klein's models of early infant development and those emerging from neuroscience will be highlighted to support the assumptions being made about the infant's mental capacities. Namely, that an early phantasy life spurred by phylogenetic forces and experienced as strong affective states, promoting behaviours that bring care responses, which enable survival, both predates and shapes reality perception, including separateness post-partum.

Much of what is known about infant development and early relationships has emerged from experimental and observational research in the laboratory. This review relies heavily on that body of work and focus in particular on Tronick, Trevarthen, Beebe, Stern and Zeedyk. Another source of evidence and theoretical models about early infant development is Infant Observation, as taught at the Tavistock, based on the approach of its founder as part of the training for Child Psychotherapists, Esther Bick. It is a naturalistic observation over a two-year period in the home of a baby and his family. The observer visits once a week for one hour and refrains from participating in family life as far as possible. She makes no notes and offers no comments but writes all she can remember of the hour soon after leaving, noting what she saw and how it made her feel. It is at once a way of attuning the observer to transference phenomena, a way of honing observation skills and an invitation to test the theories of development being studied, both psychoanalytic and from the fields of developmental psychology and neuroscience.

1.3 Early dynamic unconscious

The theory of unconscious infantile defences is probably most readily observable in the form of avoidance. Fraiberg (1982) describes how this was the first defence she noticed and that even then she had to overcome her disbelief - perhaps the infants' seeking behaviours had atrophied due to neglect? But then it became clear that the same infant might avoid an intrusive mother and seek a well-attuned father. Further, she noticed that such babies would scan the room and let their gaze pause momentarily to register potentially interesting things like the person of the researcher or cameraman but that there was no flicker of recognition as the babies scanned past the person of a disturbing carer. Fraiberg describes how it seemed that "perception has selectively edited the picture of the mother from the pictures in the visual survey" (1982, p5). Fraiberg speculates that when the biologically informed innate expectation that the carer will be need-gratifying is confounded, there is profound distress and so the baby's sensori-motor systems are organised to minimise distress by skewing perception. Fraiberg was using observational methods to illuminate the ways in which reality perception is not a given and can be compromised in the service of the pleasure principle. She stops short of describing this as repression but does acknowledge that it is probably a pre-cursor of such later defences. In this paper Fraiberg also illustrates how the biologically driven, automatic fight/flight and freeze responses were triggered by anxiety *and* seemed to serve to defend against having to experience the affect of anxiety, leading to something more like a habitual response or ego defence. Crucially, when the parents were shown how their children's apparent imperviousness or monstrousness was actually anxiety, the relationships improved and both parties' were able to come back in to touch with reality.

Fraiberg also described 'transformations' where very painful experiences were subverted into a source of pleasure, like the baby who has known starvation laughing to have his bottle teasingly taken from him. She speculates that he may have been enjoying the anticipation of restitution that always came in the game but there is also a sense that there is something perverse in this act of appropriation. This is more obvious in the example she gives of the infant who laughs hysterically to be struck in the genitals by a rogue ball. Many such defensive transformations are described in the observation material discussed in Chapter 5.

What follows is a review of the research supporting the more contentious notion of an early dynamic unconscious, employing phantasy and projection and experiencing concrete bodily equations as the first representations. However, it will be helpful to begin with an excerpt from the researcher's own infant observation studies at the Tavistock. It is hoped that this material will illustrate and bring to life some of the ideas to be discussed.

The baby boy, whom I shall call Ruben, is 8 months old at the time of this observation. He is playing with a soft-toy mouse and then has a bottle. At around this time his mother was preparing to return to work and was, in various ways, beginning to create some emotional distance between them. It was felt in the seminar group that this was a way of preparing them for, or even an attempt to inoculate them from, the anticipated pain of loss.

Mum leaves the room to prepare his bottle. The mouse doll is made of a patchwork of brightly coloured fabric. It has enormous long floppy ears and a sausage-like stuffed snout with spindly arms and legs that hang limply. He puts the nose in his mouth. I imagine that it gives a satisfying amount of resistance. He bites harder into it, wrinkling his nose and shutting his eyes with the effort. Taking an ear in each hand, in order to get a better purchase on it, he pulls the mouse away from him and holds the nose fast in his mouth so that he is yanking it so hard in two directions that he starts to wobble. The mouse arms and legs swing violently until eventually he topples over...

Moments later the feed begins and Maria's role in creating distance during feeding becomes evident, as does his anger about it.

Maria sits cross-legged on the floor opposite me and lifts him into her lap but facing out towards me! She puts the bottle to his mouth and he takes in the teat and sucks and swallows at a fast rate taking half the bottle without a pause. Then he begins to slow the pace and, as he does so, he turns a little so

that he is facing side- on and can glance up at her face. He also begins to reach up her body with his left arm so that the back of it gently rubs her breast as he feeds. His face relaxes, as his eye lids flutter and close momentarily. All this is lost when she suddenly props him up again. The arm that had been against her body he now brings round to cup the bottle. Soon he begins to tap the bottle, at first in the distracted and sensual way he had moved it up and down her body but increasingly the tapping gets harder and faster until it is more like hitting. He is no longer drinking the milk but holding the bottle in place by biting down on the teat while he hits it from the side

Once his hunger is sated Ruben attempts to bring the couple together again through his positioning and caresses. However, when she returns him to his outward-facing disconnected place, the bottle becomes the recipient of a punitive attack on the withholding mother/breast.

Likierman (2001) describes Klein's observation about feeding and weaning: 'When the object becomes available again the infant is simultaneously relieved yet vengeful...these two contradictory impulses are united in the single phantasy of a vengeful devouring' (p.104).

Ruben's play with the mouse-doll seems to betray just such a phantasy. (8months) (de Rementeria, 2012, p242.)

Obviously this is an older baby who might be said to have developed some symbolic functioning. However, if it is posited that his experience went something like: 'I have a feeling state – the combined wish to punish and to possess. In order to give this expression, I will act out the composite 'devouring' with this toy pretending that it is the breast.' This would involve the capacity to make one thing stand in for another while it is known that it is not actually that thing. This would involve suspending disbelief in order to behave 'as if' it were the same thing. That is not what the observer felt she saw. To her it felt that the unprocessed or undischarged devouring urge was awakened by the feeling of the mouse-doll snout in his mouth and he imbued it with, or projected into it, the intention of 'withholding' because withholding was the relational antecedent to his sensori-affective state. The observer did not believe that he was making a distinction between breast and doll. He was relating to the live

intention to withhold which in that moment he felt to be located in the doll. This is not 'as if' symbolic thinking but phantasy distortion which starts with the sensori-affective state and this is meaningfully linked with, often profoundly distorting the perception of, the reality that sensori-affective state is experienced within. It seems to me that this would precede rather than follow on from symbol formation proper.

The difficulty we have when making conjectures about when such symbolic equations might begin is that younger infants do not have the motor control to enact their mental states in such readable ways as this older baby has. There is a massive literature collating evidence of the phantastic nature of the primitive mental life of infants as experienced in the play and transference relationship during psychoanalytic psychotherapy with children and adults. However, because of the power of immediacy, an example from the researcher's own experience of psychotherapy with a four-year-old boy will be given. Certain features of the case make it a particularly compelling illustration of how very early defensive phantasy distortions might begin. The patient was one of twin boys born to a severely mentally ill white British mother and Chinese father. For 8 days the twins were in hospital with their mother, in which time the patient was underfed, roughly handled and possibly physically hurt, while his brother was fed and more affectionately handled. The patient, who will be called Kai, was also the recipient of projections – 'too fat, too Chinese'. While his brother's development seems quite ordinary, the patient continues to struggle in many ways. Particularly worrying is his preoccupation with his faeces, which he would try to eat, as well as getting quite excited about the pleasure of picking his nose and eating it. During those earliest days, when he felt his survival was threatened, perhaps he retreated into imagining he was back in the womb. In this way he could deny the terrifying reality of his situation. At each stage, after being brought into a safe and loving home, that he experienced any ordinary frustration, he would have returned to this fantasy that he can recreate the intrauterine experience of not being aware of having needs or of being dependent on others to meet those needs - by denying the separation of birth. Similarly, he might, at other times, have phantasised that he was the source of sustenance. However, faeces and mucus being his only products, he may have come to idealise his faeces as the 'magic' food of his own creation. Overvaluation of faeces, then, was the observable aspect of a phantasy of self-feeding

on his own products. A phantasy developed as a defence against the intolerable anxiety of being dependent for survival on an undependable and frightening object. Interestingly, as the psychotherapy loosened the powerful grip of this defensive omnipotence, his preoccupation with his faeces abated but he began to wet himself occasionally. The researcher wondered if this was an expression of the dependency anxiety that had been set free by his beginning to be able to tolerate the reality of his dependence on his adoptive parents and on his therapist. This formulation certainly proved useful in the clinical work but there is no independent means of testing its veracity. If it is right, however, then defensive phantasies of omnipotence must have been set in train within the first week of life because they were around the fear of starving, which was his experience for the first 8 days of his life only.

Stern (2002) asserts that ‘reality experience precedes fantasy distortions’ and that the young infant is ‘unapproachable by psychodynamic considerations’ (p.255) but Segal’s (1957) account made better sense of the researcher’s infant observation material and clinical experiences with Kai. In both, the earliest experiences seemed to be mediated by phantasy, beginning as a lack of differentiation between self and m/other, which allowed attunement to be experienced as omnipotence and travelled through symbolic equation, as illustrated by Ruben’s interaction with his mouse-doll and Kai’s faecal preoccupation.

1.4 Attachment, neurobiology and affect regulation

Substantial brain growth and organisation span the last trimester to the end of the second year. There is also a second sensitive period in adolescence. Infancy, however, is the period that sees the biggest explosion of synapse production in readiness for information, from experience within the attachment relationship, about which neural pathways to forge. Brain organisation takes place through this process as “cells that fire together wire together” (Hebb’s law cited in Pally (2000)). The role of early attachment relationships in brain organisation will be the focus of this section. Bowlby (1944, 1973, 1983) developed attachment theory to describe the way that an innate desire to seek proximity to one, or a small number of caregivers, has been selected for in all species that evolved in an environment with predators. Schore, (2001) has provided the neurobiological evidence for what Bowlby, Freud and

Darwin had proposed, namely: that the human infant is an “immature organism ... critically shaped by its primordial relationship with a mature adult member of its species”(p13). Bowlby had observed a link between delinquency in adolescent boys and maternal deprivation in early childhood (1944). He proposed that inquiry into the relationship between biology and psychology within attachment relationships would be fruitful. At the time such a link was dismissed by most as few subscribed to the genetic-developmental theory that early experience impacts later adaptations, with Psychoanalysis being a notable exception. Through his clinical work at the Tavistock, Bowlby noticed that what was often presented as psychopathology in the child, was actually best treated by addressing the relational problems within the family as a whole. What he established was that individual psychology is predominantly shaped by attachment relationships. Attachment research was to be developed by Ainsworth, (1967) initially using naturalistic observations of infant behaviour in the home across the world over long periods of time. In this way she got to know the families, experienced the relationships in context and over time in way that anchored her understanding of the infant’s psychology as something emerging out of, if not determined by, the nature of his first relationships. Ainsworth (1978) went on to develop an experimental ‘strange situation’. Reunions of mother and infant, after absences and after interactions with a friendly stranger were analysed to establish three classifications: ‘Securely attached’, ‘anxious/avoidant insecurely attached’, ‘anxious/ambivalent insecurely attached’. Crittenden (2017) describes how “researchers who lacked a year for home observation could summarize that important first year of life with just 21 minutes of effort” (2017, p.438). The power of this experimental tool was that it was standardised and could produce ‘scientific’ data. Crittenden (2017) comments that without this data attachment theory and research would have been doomed because “No longer could clinical experience and reflective thought – that formed the basis of Freud’s work – be accepted by the scientific community”(p.438). Issues around the methods of research in psychoanalysis will be a recurring theme in this study, but arguably this tension, between the relative strengths and weaknesses of a standardisable tool and naturalistic observation for investigating the parent-infant relationship, which is so central to this study, actually started with the ‘strange situation’. Crittenden (2017) laments the way in which Ainsworth’s focus on *patterns* of behaviour within the dyad began to get lost as a new

generation of researchers moved towards numbers, tick boxes and a misconception that attachment style was a property of the individual, rather than a property of the relationship. She describes seeing researchers analyse video of the ‘strange situation’ where the adult was out of shot, literally edited out. Crittenden (2017) goes on to suggest: “Maybe we should return to slow, open-ended observational research – because it increases the probability of finding something you didn’t expect and, therefore, can’t be found with existing assessments or tick-boxes” (p.440). For better or worse, Ainsworth had brought attachment research into the scientific community and had brought to Bowlby’s attachment theory the notion of individual difference - the understanding that attachment is universal but also always adapted to the kind of care available.

Later, Main and Solomon (1986) proposed a fourth ‘disorganised attachment’ usually found in cases of child abuse or parental pathology. Securely attached infants show adaptive strategies for coping with the stress of the strange situation; they seek and receive comfort from a reliable caregiver. The two insecurely attached classifications describe infants who have developed maladaptive strategies – avoidance or anger, to cope in the face of unreliable parenting. The child with a disorganised attachment has not managed to develop a strategy for coping with stressful situations at all.

Crittenden (2017) suggests that even these infants will develop a strategy, which will be adaptive to the care available, even if that adaptation is costly to them in important ways. In the Dynamic-Maturational Model (DMM) of attachment and adaptation, developed by Crittenden this would be described as reorganization. The DMM model is grounded in psychoanalytic theory and considers intrapersonal as well as interpersonal and cultural factors. It is based on recognition that mental and physical maturation make possible and require changing attachment relationships throughout the lifespan, each stage with its own opportunities for development and its own risks in terms of maladaptation. The Care Index, which started as Crittenden’s Master’s thesis, has also made adaptations over the years to account for this model.

Bowlby had described how children developed an ‘internal working model’ of their experience of an attachment figure. This determines the expectations a child has of later relationships and the adaptive or maladaptive behaviours she or he will use to

make the best of, or survive, those experiences. Main and Goldwyn (1984) developed the ‘adult attachment interview’ in which trans-generational transmission of attachment styles was established. This finally laid to rest attempts to discredit the links made between parenting and attachment styles because the adult attachment interview status of a pregnant mother can predict her child’s attachment at 18 months. Also, one child can develop different attachment styles with different adults and there is no correlation between temperament and attachment style.

In the 2000s, dubbed the ‘decade of the brain’, the biology of *how* attachment relationships work was described by Schore (2001) and Siegal (2001), among others. They discuss neuroscience findings that indicate how elements of the secure attachment relationship enable normal brain maturation and nervous system regulation. These, they argue, are the main factors in whether psychological resilience and emotional well-being will be achieved for an individual.

As described, brain growth and organisation span the last trimester to the end of the second year. There is also a second sensitive period in adolescence. Infancy, however, is the period that sees the biggest explosion of synapse production in readiness for information, from experience within the attachment relationship, about which neural pathways to forge. Brain organisation takes place through this process as “cells that fire together wire together” (Hebb’s law cited in Pally (2000)). The role of early attachment relationships in brain organisation will be the focus of this section. Bowlby (1944, 1973, 1980, 1983) developed attachment theory to describe the way that an innate desire to seek proximity to one, or a small number of caregivers, has been selected for in all species that evolved in an environment with predators. Schore, (2001) has now evidenced what Bowlby, Freud and Darwin had proposed: that the human infant is an “immature organism ... critically shaped by its primordial relationship with a mature adult member of its species”(p13). Bowlby had observed a link between delinquency in boys and maternal deprivation (1944). He proposed that inquiry into the relationship between biology and psychology within attachment relationships would be fruitful. Attachment research was to be developed by Ainsworth, (1969) using observations of infant behaviour in an experimental ‘strange situation’. Reunions of mother and infant, after absences and after interactions with a friendly stranger were analysed to establish three classifications: ‘Securely attached’,

‘anxious/avoidant insecurely attached’, ‘anxious/ambivalent insecurely attached’. Main and Solomon (1990) discovered a fourth ‘disorganised attachment’ usually found in cases of child abuse or parental pathology. Securely attached infants show adaptive strategies for coping with the stress of the strange situation; they seek and receive comfort from a reliable caregiver. The two insecurely attached classifications describe infants who have developed maladaptive strategies – avoidance or anger, to cope in the face of unreliable parenting. The child with a disorganised attachment has not managed to develop a strategy for coping with stressful situations at all.

Bowlby had described how children developed an ‘internal working model’ of their experience of an attachment figure. This determines the expectations a child has of later relationships and the adaptive or maladaptive behaviours she or he will use to make the best of, or survive, those experiences. Main and Goldwyn (1984) developed the ‘adult attachment interview’ in which trans-generational transmission of attachment styles was established. The issue of biology, in relation to attachment research, was used mostly to discredit the links it made between parenting and attachment styles. Siegal (2001), lists evidence against the argument that attachment style is genetically inherited. Firstly, one child can develop different attachment styles with different adults. Secondly, there is no correlation between temperament and attachment style. Lastly, the adult attachment interview status of a pregnant mother can predict her child’s attachment at 18months. The biology of *how* attachment relationships work is described by Schore (2001) and Siegal (2001). They discuss neuroscience findings that indicate how elements of the secure attachment relationship enable normal brain maturation and nervous system regulation. These, they argue, are the main factors in whether psychological resilience and emotional well-being will be achieved for an individual.

Affect Regulation

Schore (2001) cites Western: “The attempt to regulate affect – to minimise unpleasant feelings and to maximise pleasant ones is the driving force in human motivation.” (p42) Yet the infant is not born with the capacity to achieve this. It emerges through the interplay of experience and genetic information within the inter-subjectivity of attachment relationships. The bodily manifestation of affect regulation

involves regulation of the autonomic and central nervous systems, within which the parasympathetic system is mediated by noradrenalin. It can minimise the experience of negative affect through passive coping, which leads to a slowing of heart rate, immobility and/or avoidance. The sympathetic system relies on dopamine and can mobilise the person to remove the source of negative affect, through a fight or flight response, but is also associated with mediating positive affect. These states can become maladaptive and need to be regulated. Schore (2001a) explains that the neonate does not possess the “sense of security and resilience that comes from the intuitive knowledge that one can regulate the flows and shifts of one’s bodily-based emotional states...” (p. 42), This sense of security is something that the infant can only come to know if an adult is available to use their own capacity for affect regulation, to regulate the infant’s. An adult, who is present and can remain calm and soothing in the face of the infant’s distress, acts directly on the infant’s nervous system, altering his affect state. In this way the adult also inducts the infant into the job of affect regulation as distress and joy are experienced and increasingly regulated together. This process, by which an infant comes to know that his difficult feelings can be born through the presence of an adult who is not overwhelmed by them, echoes Bion’s theory of containment. Schore (2001a) can be seen to be mapping out the psychobiological transactions and bodily events that occur in containment, an event in which nurture acts on nature in the present and programmes it for the future.

When left unregulated by a caregiver, infants will spend long periods in sympathetic and parasympathetic response states. These states become amplified and can lead to hyperarousal and dissociation respectively. Balbernie, (2001) explains that: “the stress response is a biological given that can come to dominate brain and personality structure” (p247). Throughout infancy, a child experiencing frightening or dangerous caregiving will be unable to override his attachment-figure-seeking response to novelty or potential danger. He is also motivated to avoid the source of potential danger – his carer. Schore (2001,b) describes how this ‘irresolvable paradox’ activates both arousing sympathetic, and avoidance-inducing parasympathetic responses simultaneously. This leads to paradoxical or self-contradicting behaviours such as “‘backing’ towards the parent rather than approaching face to face.” (p215) Such behaviour illustrates a ‘disorganised attachment’. Perry *et al* (1995) explain that these

psychobiological states, although adaptive for specific dangerous situations become maladaptive in the maturing brain as 'states become traits'. They explain that: "although experience may alter the behaviour of an adult, experience literally provides the organising framework for an infant and child" (p276). The likelihood of triggering a child's response systems increases because of sensitisation, that is, the child is more likely to perceive threat. Also, the generalisation of triggers to anything similar to the original source of stress means that children are likely to spend more time in their hyper-aroused, hyper-vigilant state. This potentially leads them to create more stressful experiences for themselves, such as when traumatised boys attract negative teacher attention through their 'hyperactive' or aggressive behaviour. Similarly, and more commonly for girls, dissociating into depressive and avoidant states betrays their need for help with affect regulation. Schore (2001,b) explains that an outcome of this "primitive defence against affect" is that emotional contexts, especially novel and complex ones, are avoided, i.e. not attended to. This, further precludes emotional learning and thus, it is seen, biology and the social environment continue to interact to compound the problems of the child. Poor nurturance informs bodily responses and expectations which, in turn, shape the child's experience of the social environment.

Intersubjective experience

Affect regulation depends upon inter-subjectivity, which in turn relies on an innate capacity for empathy. Adolphs et al (2000), cited in Schore (2001a) describes how the brain's right hemisphere limbic region begins a growth spurt at the 2-3month - a time that usually sees an explosion of face-to-face intersubjective behaviour. This region processes emotion recognition by actually "internally generating somatosensory representations that stimulate how the individual would feel when displaying a certain facial expression". (p2683) It seems quite possible that this mechanism for emotion recognition could also be used to describe the manifestation in the brain of Klein's Object Relations Theory of the mind. The object, or mother's, affect state is 'introjected' when it is perceived in her facial expression, and recreated as an 'internal object'. In this way the infant comes to know the quality and range of his feelings, and the possibility of storing them for reference, through introjecting those of his mother

Integration: within brains and between minds

Maturation of the brain involves integration of regions in order that the capacity for self-regulation of affect states can emerge. This process, Siegal (2001) notes, is also embedded in the attachment relationship. 'Co-created play states', defined by synchronicity and contingency, lead to high levels of positive affect. This allows the caregiver's psychobiological regulation of the infant's maturing limbic system. This co-regulation of the limbic system is similar to that of the central and autonomic nervous systems described. Schore (2001a) maps out the way in which inter-subjective joy, processed in the orbitofrontal region, integrates subcortical, emotion-and-implicit-memory processing right limbic regions, with the cortical and left regions. The causal reasoning associated with the left hemisphere will later enable self-regulation of affect and behaviour. Pally (2000) explains that:

"these high arousal states specifically induce the sprouting of dopamine-releasing axon terminals, which grow upwards from their cell bodies located in the midbrain [limbic], to sites deep in the prefrontal cortex. The increased release of dopamine into prefrontal areas, in turn, promotes a growth spurt of synapses and glial cells in this region."

In this way growth, but also organisation, of brain structure is dependent on the experience of an emotion that is manifested as the firing of neural networks. These events 'pave' or strengthen those neural pathways. An emotion, then, experienced within an attachment relationship and processed in the subcortical limbic region, which is mediated by a neurotransmitting chemical, dopamine, leads to a bottom-up connection with the prefrontal cortex. This connection, between the highly plastic prefrontal cortex and the more permanent circuitry of the limbic area is essential if the infant is to become capable of reflection upon a complex social environment. The most crucial thing is the ability to be flexible and adaptive within that environment, by utilising this connection to facilitate top-down affect regulation. What Schore has described is that the genetic potential for this highly adaptive 'social brain' is innate but its expression, through integration of brain regions, depends upon specific experiences in infancy within an attachment relationship. In this way it has been possible to map out the interaction between certain biological phenomena and psychological experiences that might explain the link between the delinquency of the boys Bowlby worked with and their lack of secure attachment relationships.

Neglect and relational trauma can cause a failure to integrate, vertically, regions in the right hemisphere. The orbitofrontal areas that mediate cortical and subcortical interaction are experiencing overproduction of synapses to respond to environmental pruning in the critical period of 12 to 18 months. Trauma within the attachment relationship increases dopamine metabolism and noradrenaline production, neurochemicals involved in the stress response, which "result in regression of synapses and programmed cell death" (Schore, 2001b, p224). Such a compromised orbitofrontal area would leave the infant dependent on the more primitive amygdala to process affect states. Without top-down regulation, he argues, these states would become intense and difficult to come out of. He describes how persisting hyperaroused and/or dissociated states can lead to sociopathology in adulthood and refers to research correlating relational trauma, both neglect and abuse, with adult diagnoses for borderline personality disorders and neurobiological studies showing altered amygdala and orbitofrontal function in these patients. Siegal (2001) describes how an unregulated infant "unable to integrate the various aspects of overwhelming

experiences” will develop impulsive responses dominated by subcortical regions because “emotions may flood the mind and make rational thought and mindful behaviour quite impaired” (p88) Both Schore (2001b) and Siegal (2001) show us how failures in nurture trigger maladaptive responses in nature, which become determinants of personality, even to the point of predicting pathology. However, while certain temperaments may be more or less likely to respond maladaptively to certain failures in nurturing, ultimately the process of personality development is a transaction between biology and the social environment.

Right and left brain integration are also extremely important in personality development. Right brain limbic regions unfold early in development and store implicit, that is, unconscious memory, before explicit memory is fully functional. Memory and emotion are laid down, in the earliest weeks and months, creating the unconscious ‘internal working model’ of the attachment relationship. As Siegal (2001) describes:

“although we may never recall ‘explicitly’ what happened to us as infants, the experiences we had with our caregivers have a powerful and lasting impact on our implicit processes...when implicit memories are activated, they do not have an internal sensation that something is being recalled. They merely influence our emotions, behaviours and perceptions in the here and now, without our awareness of their connection to some experience in the past” (p74).

This unconscious emotional motivation working to regulate affect beyond conscious awareness fits the psychoanalytic conceptualisation of the dynamic unconscious. Again, it might be helpful to think in terms of it being *manifested* in the right limbic region. The left hemisphere is associated with language and symbolic and abstract thinking generally. It has been described as the interpreting hemisphere.

Siegal (2001) describes carer behaviours that nurture the emerging capacity for self regulation of affect and are functions of the left hemisphere. ‘Reflective dialogue’ is the process by which the caregiver attempts to take in and interpret the infant or child’s emotional states and convey back, somehow, that they have made meaning out of the experience. For the infant this may be in the form of empathic body language. Later, the adult’s verbalising will help them to make shared meaning of affect states. The interpreting and language processing left hemisphere is thus connected to the

affect processing right hemisphere through reflective dialogue. The child will then be able to make explicit 'coherent narratives' about the experience of affect.

Siegel links this capacity to create coherent narratives with autobiographical self-knowledge, which he defines as: "an internal sense of connection to the past, to live fully in the present and to prepare for the future as informed by past and present" p77. He points out that lack of coherence in recall of childhood and affect states in the 'adult attachment interview' is correlated with insecure attachment in the interviewee's own infancy, and/or unresolved trauma. Also, it is a predictor of insecure attachment with the interviewee's own children. (p. 88) He suggests that a carer with unintegrated cross-lateral functioning is unlikely to be able to engage her infant in reflective dialogue and so produce coherent narratives together. This is likely to be another factor involved with transgenerational transmission of attachment status. A frightening, unintegrated implicit memory may not bring the event into consciousness, yet will still induce the sensation of fear, but with no possibility of using reason to regulate the affect state. Siegal (2001) describes how the child will experience the: "intrusion of elements of implicit memory, in the absence of an explicit memory counterpart for the past traumatic experience" (p. 88) Coherent interpersonal integration manifests itself as neural integration, primarily within attachment relationships but also, potentially later, in transformative personal or therapeutic relationships.

Fonagy et al's (2007) paper on mentalisation and the construction of the subjective self draws on a wealth of research into infant cognitive development and parent-infant interaction to propose a theory of how the capacity to contain one's own distress is transferred within the attachment relationship. The authors describe mentalisation as "A form of mostly preconscious imaginative mental activity, namely perceiving and interpreting human behaviour in terms of intentional mental states." (2007, p.288) The carer mirrors her infant's emotional states but crucially she cues that these are the infant's and not her own feelings by 'marking' this mirroring with raised eyebrows, head tilting and motherese. This lets the baby know that she is not directly expressing her own state, from which he deduces something like - she must mean me! From this the baby learns that feelings can be thought about as well as directly felt and in time

he turns this reflective capacity towards his own feelings states. Fonagy proposes that this is part of a ‘pedagogical engagement’ that infants are pre-wired to seek. It emerges out of an automatic experiential understanding of others’ states that is facilitated by mirror neurons (see lit rev part 2 for further discussion) but crucially by bringing feelings into the realm of symbolically represented phenomena, they become something that can be known about as well as felt and in time that they can be moderated too. The authors note that: “an expression congruent with the baby’s state, but lacking markedness, may overwhelm the infant. It is felt to be the parent’s own real emotion, perhaps making his experience seem contagious, or universal, and thus more dangerous.” (2007, p.309) This description chimes with Bion’s notion of the convex container (see lit rev part 2 for further discussion). Such situations are frightening in the moment but it is also speculated that such experiences lead the infant to avoid further opportunities for learning mentalisation. Both carer and infant are then left prone to overwhelming experiences of undifferentiated affect with little sense of whom it belongs to. This would further impede understanding that such a thing as a separate mind, with contents that can be understood but are not equivalent to one’s own, even exists. It would seem that a susceptibility to conflation between self and other is inherent in this model of how infants come to know minds. Also, the idea that reality, even the reality of one’s own internal state, is not always directly perceived but must be accessed via an act of ‘preconscious imaginative mental activity’ would seem to support Isaac’s (1948) position on the primacy of unconscious phantasy and Segal’s (1957) understanding of symbol formation.

1.5 Panksepp’s 7 basic emotions

In ‘Affective Neuroscience’ Panksepp (1998) has identified 7 primal emotion systems which are phylogenetically inherited and endogenous. He subdivides these into those that are basic to our survival – FEAR, RAGE and SEEKING. (They are capitalised in order to signal that a specific system in the mind and neural circuitry in the brain are being referred to using these everyday words.) The other four are termed the social set: LUST, PANIC, PLAY and CARE. However, given that our species is born premature and effective social bonds are necessary for infant survival, this sub-set is also burdened with responsibility for survival if indirectly. He emphasises how these

systems interact with the (mostly social) environment to determine higher brain functioning in a bottom-up way that can, with good enough experiences, eventually promote top-down regulation of these systems. For Panksepp, most unhappiness and mental illness is the manifestation of these maladaptations.

FEAR is the system for processing what will later be adaptive responses to predator danger. It is associated with the fight/flight/freeze response. RAGE is primarily for the purpose of procuring and defending resources and can be activated by restriction of freedom of movement. Presumably this also helps to prevent a person becoming someone else's resource/lunch. RAGE can also be activated by frustration of the SEEKING system, which is the last primal emotion. SEEKING is appetitive, energizing, in the service of procuring resources and dopamine-mediated, and is where learning begins. Out of SEEKING emerge LUST, PLAY and CARE. Out of FEAR emerges the PANIC/GRIEF system, which is essentially separation distress as understood in the attachment research but is also associated with mourning or social loss throughout life. Although it would be interesting to explore the LUST system in infants vis-à-vis Klein's early oedipal configuration, that is beyond the scope of this enquiry and this section will focus on the other two primal emotions emerging from SEEKING, namely PLAY and CARE. The CARE system is associated with bonding or attachment and yearning and is mediated by oxytocin and other neuro-chemicals associated with social bonds. PLAY is pro-social, involves engagement, curiosity and joy.

This conception of SEEKING shares some aspects with Klein's epistemophilic sense, in that inquisitiveness and acquisitiveness are undifferentiated at first. Also, the first experience of FEAR is likely to be what Bion (1962) described as 'nameless dread'. 'The infant's terrors of falling to bits, liquefying when in an unheld, unintegrated, quivering state of unendurable being.' (Jackson and Nowers, 2002). This experience can only be soothed by holding arms, which provide what Bick describes as a psychic skin, which holds the infant together. However, when care is not good enough and SEEKING behaviours do not bring homeostasis via the activation of a carer, noisy separation distress transforms into silent despair. From an evolutionary perspective, if the distress calls of PANIC/GRIEF are made in vain, they might only serve to alert

predators to the infant's status as easy prey. However, this dampening despair response is highly maladaptive to social loss in contemporary society and Solms and Panksepp (2012) argue that this state of despair is both the origin of depression and linked to dissociation. Because the despair state inhibits the dopamine-mediated SEEKING behaviours, which are necessary to move out of the despair state, it is easy to get stuck there. The insecurely attached infant can be thought of as existing in a chronic state of PANIC/GRIEF. 'From this point of view, depression may be an evolutionarily selected mechanism (present in some form in virtually all mammals) to terminate protracted and unsustainable separation distress, as first formulated by John Bowlby (1960, 1980)' (Solms and Panksepp, 2012,p.5).

Very broadly, Neuropsychoanalysis is showing how these innate affective forces demand and support primitive but powerful relational phenomena even before a 'self' or 'other' are fully conceptualized or even apprehended by the infant. Panksepp (1998) does state that the SEEKING system is objectless at the beginning but if this were the whole truth it would be hard to explain why a newborn baby directs his eyes towards a familiar voice or has a preference for stories read while intrauterine. This suggests some form of anoetic memory, associated with positive affect through familiarity, which seeks the source of that pleasure, inviting further affective-relational phenomena. This will be explored further in the Discussion Chapter.

1.6 Readiness to relate

Trevarthen (2001) argues that pride and shame are innate emotions, which drive what he has termed 'innate motives for companionship'. A rudimentary but meaningful capacity for intersubjective experience, and the emotions that govern it, is there from the very beginning. He writes of the infant being born with 'sociable motives' that seek what Alvarez (2012) has termed 'live company'. He cites research by Nagy and Molnar (1994) demonstrating intentionality of imitation in newborns by showing that their preparation to imitate is accompanied by an increase in heart rate while 'provocating' (inviting the partner to respond) is followed by a deceleration in heart rate, suggesting that active anticipation is at play. Trevarthen's (2001) newborn is an agent of meaning-making, apparently enjoying a recognisable experience of self with other. He emphasises the 'Baby's need for exuberance and enthusiasm with clear

anticipation of success and evident pride' (p.119). Yet, there are only brief windows of time in which such exchanges can take place. The baby must be free of bodily need, in homeostasis, yet alert. To varying degrees the readiness to relate of very young infants is acknowledged in most infant research over the last 30 years. While few make the claims about complex 'moral' emotions that Trevarthen does, it is acknowledged that something important and relational happens before conscious awareness of self and other are established. Stern (2002) talks of 'implicit relational knowing' and Lyons-Ruth (1999) of 'the two-person unconscious' sharing 'implicit relational procedures'. Panksepp (2012) writes about 'anoetic consciousness' but given that even interoceptive and proprioceptive cues are often mediated by the caregiver's behaviours and that mutual attention is one of the most arousing experiences a young infant can have (Zeedyk, 2006), it seems that most of this 'anoetic consciousness' is of experiences with another.

1.7 Phantasy and drive theory

Advances in infant research evidencing relational capacity have been used to discredit notions of primary narcissism on the grounds that evidence of 'being with' precludes self/other confusion. This is at odds with the researcher's experience of infant observation in which the baby seemed to spend much time in a state of mind that straddles the border between an oceanic feeling of merger with the object, and a state that acknowledges separateness but only under certain conditions. When the infant is calm and alert and a face full of love and desire looms over him, separateness is tolerable because he feels secure as the object of her desire. In that moment of aesthetic experience (Reid, 1990) and active intersubjectivity his fragile selfhood is held aloft by her reverie and he feels viable. These relational states have their roots in an innate readiness to relate, even intra-utero, to the part-objects of distant maternal and paternal voice (Maiello, 1995). However, when she drops him from her gaze during the ordinary mis-steps in the dance (Stern, 2002) then it seems that a return to less differentiated states might ensue to avoid the pain of falling from grace. This fall is experienced as mortifying – a mortal threat to psychic survival and an experience of shame at a sense of lack or being cast out. Gerhardt (2009) describes this as a state of abjection.

1.8 ‘The wish is father to the thought’ – and can be attributed.

Early infant research focused on demonstrable cognitive capacities and then inferred the degree of complexity of affective relational phenomena that our understanding of the infant’s cognitive capacities could support. This rather put the cart before the horse and led to a gross under-estimation of both cognitive capacity and relatedness in infants. For some time now it has been understood that relational emotions are the spur to development and cognitive capacities are pulled along to support relational complexity (Tronick 1989, Trevarthen 2001, Reddy 2008). This study will look at the evidence that supports the notion that thinking does not come into being because the mental apparatus to support it spontaneously comes online but because a thought needs to be think! Or more accurately, because a thought can conjure that which in its absence is causing negative affect. Or, the wish is father to the thought. In this way it is possible to see how an anoetic consciousness embedded bodily in motor activity and primary emotion drives would lead to the first thoughts being wish fulfillment phantasies, responding to pre-conceptions (Bion, 1962) with pre-symbolic concrete mental phenomena (Segal, 1957) that fill in for the anticipated, desired experience. (When it is present there is no need for the thought because motor/affective responses are adequate for having the experience.) Affective forces, then, are the impetus that organise the mental apparatus into functionality, within critical windows of development that are proscribed by the physical maturation of the brain and depend on particular kinds of social experience, including gaps.

It is important to acknowledge some of the assumptions made about the mental life of infants in the theory discussed here. Klein believed that infants were ‘object related’ from the start, in that good experiences were associated with good objects and bad experiences with bad objects. This assumes that a notion of an-other-with-whom-one-is-in-relationship precedes the conception or perception of real, whole people. This ill-defined other could be a ‘part-object’ like the breast, but is thought to be experienced as having relational motivations like vengeance or benevolence. A leap has been made now with Klein from wish-fulfillment as the pre-cursor to the first thought, to attributing motivations to part-objects, and this needs to be broken down. The baby who experiences hunger or a need to be psychically pulled together by the breast (Bick, 1986) has a motor urge to suck – indeed Freud (1900) came to his theory

when he noticed that when the baby mouthed in anticipation he seemed to be partially meeting his need to discharge that urge by acting, and so feeling, as though he already had the nipple. This he termed a hallucinatory wish fulfillment. What is wished for, then, is the discharge of a motivation to act. He wants to suck as much as he wants the nipple, the milk, or relief from the clawing in his stomach etc. When it is claimed that relational motivations can be attributed by the very young infant, what is being claimed is that these sensori-affective-motor representations, can be attributed. This has been rejected, by many, on the grounds that young infants lack the cognitive complexity to manage propositional thought. However, developments in neuroscience support the notion that through simulation (Gallese, 2011), which precedes the cognitive capacity for propositional thought, such sensori-affective-motor representations can be attributed directly without need for a fully formed conception of self, other or theory of mind.

Bion's (1962) pre-conception is sensori-motor-affective and phylogenetically endowed and well described in the New Dictionary of Kleinian Thought:

‘The preconception is an ‘a priori’ knowledge of the breast. Bion also likens it to Kant’s concept of an ‘empty thought’. The ‘unexperienced’ pre-conception mated with a realisation produces a *conception*. A preconception mated with frustration, however, produces a thought, and from this thinking can develop’ (Bott Spillius et al, 2011, p.451)

A pre-conception met too readily, before a gap for the wish/thought to exist in opens up, does not lead to concepts but only percepts, and pleasurable perceptions of needs being met are of profound importance for physical survival and future psychic life, but do not require much mental processing in the moment because they do not move the infant away from homeostasis. It is the triangle of pre-conception, wish/phantasy/thought and realization that bears the fruit ‘concept’. It is also this that makes learning possible and a move from the pleasure principle to the reality principle and from primary process to secondary process possible. At the level of the brain this is the bottom-up activation from ancient brainstem and limbic generated, phylogenetically inherited drives. These drives demand experiences with the world/other to meet needs. These experiences activate higher cortical regions and in

time allow for top-down regulation as secondary process comes to dominate primary process because maturation leads to more success in actually getting needs met and less reliance on hallucinatory wish fulfillment. Having said that, we know that even healthy mature adults can be dominated by primary process at times and secondary process never completely gets the upper hand. Tronick and Beeghly (2011) illustrate beautifully how our once objectless drives, even after we have learnt to associate them with specific objects, can be set free again to become apparently inexplicable feeling states:

‘A large, noisy toy or an unfamiliar adult is neither a toy nor an adult to infants but rather something to be avoided; its meaning is fearfulness. Although it is challenging for adults to think about sensori-motor or sensori-affective processes as forms of meaning, adults, too, experience these kinds of meanings. Picture an adult alone in a dark, shadow-filled, unknown city, feeling fear and an urge to escape. This sensori-affective meaning exists side by side with other explicit meanings conveyed in words, such as reassurances from friends that the city is completely safe.’ (p.5)

What is under-acknowledged is that objectless drives do not wait patiently to be associated with the relevant actual objects. As Freud and Bion understood, they conjure a plausible object for their drive in lieu of accurately perceiving the actual object associated with that drive. Imagine a young infant waking in his cot and beginning to perceive the lack of holding arms around him. This activates fear because it increases vulnerability to predators or abandonment, neither of which would be survived. This is not ‘known’ by the infant but experienced as an anoetic unpleasure coupled with an urge to cry. This is designed to activate the other half of this functional unit to pick him up. He cannot ‘know’ or predict this activation of the other or ‘know’ the ways in which his vulnerability is reduced by being held but he feels the relief of returning to homeostasis in her holding arms – the warmth and softness of her skin, the scent and rhythmic heart beat of her presence. Before he can perceive her as mother each of these will be experienced and internalised as good part-objects. When an older child is left alone, they often conjure monsters. One explanation for this might be that the relationship between the PANIC and FEAR

system means that when separation distress is activated, so too is FEAR, and at a primitive level there is little to differentiate between the bodily experience of fear and the predator stimulus for it. As Piaget (1954) noted, there are no spoons only mouthable and bangable things. It is the 'doing' or 'being done unto' that is experienced not a category of thing – 'spoon' in primary process. This is why being told that there are no such things as monsters does little to alleviate the bodily experience of 'I'm about to be done unto by a monster'. The category 'predator' has no meaning so denying its existence has little meaning, only the bodily experience of being vulnerable to a predator has meaning and this is equivalent to being alone and is experienced as 'imminent attack' or, as Bion (1962) described it 'nameless dread'. As the infant gets older the stimulus 'alone' can conjure its correlate 'predator/monster' filled in with symbolic representations of monsters available to conscious recall.

Freud postulated that the infant experiencing a drive that has not yet been satisfied hallucinates the satisfying (part) object. For Klein the infant has innate unconscious phantasies about ways of relating to objects but it is not made clear in her writing why or how this would be so. However, it is not far-fetched to imagine that part-objects would have relational motives attributed to them once it is understood that they only exist to make sense of sensori-motor-affective drives. As Freud and Bion have shown, when present, a part-object does not need to be conceived of. It is likely to be registering at some level as a collection of percepts but this sort of perception process is not likely to be at the cutting edge of the latest in the infant's cognitive capacities, because it is not motivated by homeostasis drives. It is in their absence that part-objects that meet homeostasis drives are conjured. This is before they are fully or accurately perceived. The correlate to the drive is present, an endogenous anoetic embodied representation of a 'relational procedure'. This is what Bion described as a pre-conception. When the pre-conception does not meet its correlate, the (part) object, in reality, then it is conjured up. It is here that we see not only that phantasy precedes reality perception, but also why this would be so. It is not object as categorical item but object as part of a highly charged relational procedure that is the 'unthought known' (Bollas, 1987). If we go back to Bion, and the notion that the unexperienced pre-conception waiting for realization becomes a thought, then the infant has

imagined the object and based his phantom creation on the bodily expectation of it. What he creates then is a doing and being done unto thing. The thought doesn't need to be thought because the something must be known but because something must be done – a need must be met. When he next meets the object in reality – the nipple, say, he recognizes it as the object of his creation and this recognition is the 'mating' that Bion describes. So, by the time a part-object has been conceived of by the infant, it is, by virtue of its conception, a motivated and relational thing.

To summarise, implicit in Kleinian and post-Kleinian theory, is acknowledgement that an objectless drive spurs the infant to fantasise the object, which might satiate that drive. This places phantasy before reality perception in development. It then becomes very obvious why the reality principle can only come into ascendancy when the actual object in reality is dependable and the infant is not compelled to overuse phantasy. Also, once it is understood that originally phantasy was not a distortion of reality experience but the bridge to reality experience, this primacy of phantasy helps to explain why it is never completely eradicated by the enlightenment and progressive success of secondary process in getting needs met.

1.9 Object relations and the paranoid schizoid and depressive positions.

Klein (1929) posited that part-objects are fantasised but also that they are introjected and then come to people an internal world. What is introjected is not primarily a figure but, as we have seen, a highly affectively charged experience *with*, which implies a figure/object but it is shadowy and need only be the part of the object that that experience was with – eyes, breast, arms etc. This helps to explain the 'bizarre' and 'wholly divorced from reality' nature of those internalised part-objects when they are unearthed in the enactive procedures of play and the transference relationship in the consulting room. As Green (2000) asserts, it is not necessary to find evidence of part object relating in infancy to validate the usefulness of the concept clinically. However, in this study, the concept will be used to help make sense of an interaction the researcher is not part of and cannot act in and so cannot test the hypotheses as happens in clinical work. For this reason it does seem helpful to augment the supporting evidence from clinical work with findings from experimental research with infants.

Sternberg et al. (1983) showed that before 4 months babies who have the movement of their hand restricted exhibit frustration (or arguably RAGE) towards the hand that prevents their hand from moving. However, by seven months, they direct their negative affect to the face of the experimenter. This does seem to support that, during the interval, development has taken the baby from part-object relating to whole object relating. Also, given that interaction between infant and carer at 4 months is predictive of attachment status at 12 months (Beebe, 2012) and the state of their relationship at 3-5 years, this does seem to support the notion that early interactions with part-objects are introjected and create the internal world 'culture' which becomes the prism through which all later relationships with whole objects are experienced, or their internal working model.

Bower (1977), through his experimental research with infants, showed that there has to be work towards perceiving a unified whole object but also towards relating to an object that is singular. He showed that a very young infant will happily interact with 3 images of mother presented at once, relating to each in turn. This suggests that 'good' and 'bad' versions of a mother figure could be simultaneously conceived of but related to, and represented separately, thus preventing the good experience with the good object from being undermined by the bad experiences. However, by 5 months, multiple mothers are experienced as disturbing and by 8 months most babies express rage at the departure of their mother. Again this does seem to support the idea that there is a gradual development towards 'knowing' the mother as a unified, singular, irreplaceable and depended-upon whole, leading to profound separation anxiety. What is particularly interesting is that the part-objects were endowed with intentions well before they were put together and experienced as a single, permanent entity.

It is this early episodic mother who in each visitation is introjected and first furnishes the internal world. Again, it can seem that the notion of an internal world that becomes populated by distorted versions of external figures is rather convoluted, unlikely and would require symbolic thought. However, the contrary is true. It is, in fact, the anoetic, embodied nature of these experiences with external objects that

means that the only way they could come to be represented is in a concrete bodily way. He cannot know them. He can only feel them. To use a theatrical metaphor, what is introjected are not plausible characters with defined personalities but snippets of scenes, where what is most salient are the relational motivations, not the characters who are as yet unknown. To be known, they will need to be constructed out of many experiences and the infant does not yet have the cognitive capacity for this. What he does have is the apparatus to feel the drive to do, or be done unto, and he can attribute such relational motivations to part-objects, which are the correlates to his own drives. Crucially, these motivations only live in the live action. They are not properties of the actors and when the scene ends and the actor ceases to act, the character ceases to exist. The young infant does not have a store of symbolized representations that can be referred back to as yet, which is why he doesn't yet have a fully formed sense of self or other and yet, these experiences are literally *nothing*, if they are not inter-subjective, in the sense of being all about relational motivations.

Embodied social cognition can attribute motivations to a social partner in the here and now but they are not necessarily whole objects in the sense of anatomically whole or in terms of enduring over time. Goldman and Vignemont, (2009) review the literature showing that this kind of creation of a composite person with a personality based on many experiences over time requires propositional-attitude mentalising in the medial pre-frontal cortex – so if the very young infant is relational this could only be with something like a part-object. And he could only be storing these part-memory, part-imagined (Gallese, 2011) experiences with part-objects in unconscious procedural memory. 'Embodied Simulation theory provides a unitary account of basic social cognition, demonstrating that people reuse their own mental states or processes represented with a bodily format in functionally attributing them to others... This means that creating an imaginary world would be equivalent to remembering what never happened.' (Gallese, 2011, p1) This may not start as dynamically repressed, and indeed it expresses in the play of children. Arguably it would make sense that once such part-object experiences begin to be represented at a level of conscious, symbol proper representation, then their bizarre and disturbing quality would begin to require that they be dynamically repressed and only accessible through interpretation of unconscious phantasy mediating experience and driving behaviour.

1.10 Infantile defences and the dynamic unconscious

Lyons Ruth (1999) states that ‘Implicit relational procedures are often neither conscious and verbalisable nor repressed in a dynamic sense. They are not reducible to unacceptable drives or impulses and *do not have their origins or essence in fantasy*. However, implicit relational knowing is likely to be visible in the structure of fantasized interactions, as well as in the enactive structure of real interactions’ (p.589)

It is true that such implicit relational procedures are not acted on by a dynamic unconscious in the sense of being repressed by an introjected super-ego because that hasn’t happened yet. However, the literature reviewed thus far does suggest that ‘implicit relational procedures’ are forged under the influence of defensive failures to perceive and conceive of a reality that is not safe to be known. In this way they defend against psychic pain and terror in a way that forestalls development. This is the dynamic unconscious at work. Merger comes to be used as a defence against PANIC/GRIEF. What then happens when the mother’s reverie is hampered and she cannot recreate the intrauterine experience, only slowly presenting the infant with their separateness and dependency on another person? What happens when reality is not tempered through attuned care? That is when infantile defences are over-burdened and become mal-adaptive. Narcissistic identification on mother’s part as a defense against her own existential anxiety can also hamper recognition of separateness and empathic identification

While many have cautioned (Green, 2000) against the potentially reductionist direction of neuroscientific research, it seems that contemporary neuroscience and psychoanalysis converge in postulating that primitive states of mind retain power well into childhood and adulthood, running parallel to and in dynamic relation to, rather than being superseded by later cognitive developments. Contrary to being reductionist, this supports the notion of a complex dynamic unconscious. Also, neuroscience and infant research both point to ‘the separate and dissociable status of conscious symbolized knowledge and nonsymbolised and implicit or procedural knowing throughout the lifespan.’ (Lyons-Ruth, 1999, p.580). While she goes on to stress that a theory of implicit/enacted relational meaning should be delineated from the idea of a dynamic unconscious, it seems that the former provides the opportunity

for the latter to develop. Indeed, the mind's imperative to reduce psychic pain would make opportunistic use of such inbuilt limitations in the evolving brain highly likely. This is why no amount of highly sophisticated neo-cortex, top-down influence can eliminate bottom-up resistance, which can always assert the advantages of its primacy.

It is enactive representation that is the beginning of thought and memory as episodes of relational-sensori-motor-affective experience are registered as bits of wanting and doing and begin to be stored for learning from. This doing and wanting comes first and is assigned to the part-objects which the baby relates to, which is why the counter-intuitive notion that motivations come before whole objects has credence. Fear *is* the experience: 'coming to get me' or 'falling' before it is 'he is coming to get me' or 'she is not holding me' but somewhere in between, bridged by phantasy, is the enacted relational dialogue that is meaningful before a self or other have been 'distilled out' as Hobson (2002) has put it.

Lyons-Ruth (1999) argues that 'In both development and psychoanalysis, the increasing integration and articulation of new enactive 'procedures for being with' destabilize existing enactive organisation and serve as a primary engine of change; and collaborative forms of intersubjective interaction. Put another way, at the level of unconscious enactive procedures, the medium is the message; that is, the organisation of meaning is implicit in the organisation of the enacted relational dialogue and does not require reflective thought or verbalization to be, in some sense, known' (p. 579).

This is not the repressed unconscious but it is why we have the facility to repress from consciousness that which remains live and powerfully influences our patterns of relating. We first ever loved and hated through 'enacted relational dialogue' that had no symbolic or even conscious representation or even whole objects with whom to be in relational dialogue with. Most significantly, conscious representation of relational dialogue never supersedes the enactive or procedural unconscious representation but both underpins and often undermines our later conscious representations and motivations.

Others do not need to be fully conceived/perceived but could be part-objects with relational affects attributed to them. In the way described as ‘remembering what never happened’, an internal world of ‘figures wholly divorced from reality’ and yet based on actual experiences with real part-objects is created. However, this phantastical internal world is experienced through the prism of projected, simulated (Gallese 2009) relational affects. As premature, fourth trimester beings babies are not equipped for the world they find themselves in and states of terror and rage seem inevitable and are observable. In this way it seems unlikely that the ‘imaginary world’ would not be a grossly distorted version of the actual external world.

1.11 Concluding comments of literature review

Neuroscience and infant research broadly point towards ‘objectless relational affects’ as the primitive phenomena of the mind. In teasing out the paradox of how something can be both relational and objectless, it has been shown that early infantile phantasy and part-object relating are the theoretical constructs that offer the most parsimonious explanation of the observed phenomena. If it has been established that the dynamic unconscious mediates relational experience with part-objects from early infancy, in the next section the task is to specify how this mediates the intergenerational transmission of relational trauma and mental health vulnerabilities. The significance of each item in the six domains of the Psychoanalytic Infant Observation Scale will be expounded, building on the arguments made so far and in some cases making reference to additional relevant research and in other cases elaborating the theoretical models further to illustrate the potential significance of the behaviours being observed.

Literature Review:

Part 2

The following six sections are organised under the headings of the six domains of the Psychoanalytic Infant Observation Scale:

Making Contact,

Mutual Understanding,

Making Relationships,

Maintaining Relationships,

Making Sense of the World

Internal World Inferences.

As will be seen, in many ways the boundaries between these domains and between many of the items within each domain, is arbitrary and there will be much overlap. However, it is hoped that trying to link specific observable phenomena with specific theoretical models and areas of research will serve to justify why each item has a place on the scale. It is also hoped that it will build a picture that illustrates why a particular combination of observable phenomena might lead to particular inferences about the relationship and the internal world phenomena that mediate that relationship.

This section should serve as a bridge between Part1 of the literature review, which was an argument for the value of psychoanalytically informed close observation, and the observations and analyses that make up the main body of this project.

Making Contact

Item (1a):

‘They seek one another’ or ‘One is avoidant of the other’

To be the object of another’s attention is a highly charged experience. It is the first and most important clue that you exist for that person and is the starting point for coming to feel known by them. For a young infant it is also how he comes to know that he exists at all. Before his experience of being and acting in the world has coalesced into a coherent sense of ‘me’, it is a powerfully affirming experience to look into someone’s eyes and see that they see you. Trevarthen (2001) makes a powerful argument for infants being born with ‘intrinsic motives for companionship’. Anecdotally, in the moments after my first child was born and we looked into each other’s eyes I found it hard to get a sense of her experience, and so hard to know what being seen by her meant for me. In that moment my husband spoke and her eyes flicked in his direction. I felt a rush of pleasure as I realised that if she knew him, she knew me, and this made me feel quite differently about her. I had needed reassurance that her gaze was intentionally directed.

This problem of how to ascertain whether or not attention is directed is illustrated perfectly by the organisation of Reddy’s (2008) book ‘How Infants Know Minds’. The chapter on ‘experiencing attention’ comes after a chapter evidencing intentionality in communicative interactions with a two month old. We surmise that attention is directed because we know they are capable of intentionality through other experiences evidenced in action. Then, working back, we come to understand how early this gets going and what a powerful part it has to play in the trajectories of relationships and individual development.

Attention is so affectively charged that it needs to be regulated to remain pleasant and, if offered when the recipient is not in a receptive state, can be distressing. This is the other source of evidence for it being directed: we see very young infants avoiding gaze. It is important to recognize when glancing away is part of the ordinary pausing that allows the participants attending to one another a chance to regulate down in order to be able to sustain the mutual attention over a longer period and build up a meaningful experience. Indeed, when an infant is consistently avoidant of the gaze of the mother, it is often because she has been intrusive in not recognizing his need for ebb as well as flow between them.

Seeking behaviours can take many forms and at the beginning not all are likely to be consciously intentional or directed. If the other is being sought because the baby is hungry, cold or scared i.e. because he needs his carer to achieve homeostasis, then he is likely to cry out. At first he does not know what or whom he seeks; it is a reflex to cry out but very quickly he will learn to associate his action with a response.

Panksepp's (1998) SEEKING system shows that we are hardwired to activate the other half of our functional unit through these social SEEKING behaviours, which does much to ameliorate the high risk inherent in being born immature and having a prolonged dependency compared to other mammals. However, when care is not good enough and SEEKING behaviours do not bring homeostasis via the activation of a carer, noisy separation distress transforms into silent despair. This would have advantages, from an evolutionary perspective, if the distress calls of PANIC/GRIEF are made in vain, they might only serve to alert predators to the infant's status as easy prey, in this way the dampening of SEEKING behaviours is something like playing possum. However, this dampening to silent despair is a highly maladaptive response to social loss in contemporary society. Solms and Panksepp (2012) argue that this state of despair is both the origin of depression and linked to dissociation, because the despair state inhibits the dopamine mediated SEEKING behaviours, which are necessary to move out of the despair state. The insecurely attached infant can be thought of as existing in a chronic state of PANIC: Insecure-ambivalent or GRIEF: despairing insecure-avoidant. If we then consider that babies often become avoidant and dampen their SEEKING drive because the carer is perceived as a threat, yet they are hard wired, at least initially, to respond to threat with SEEKING, then this could

make sense of the paradoxical behaviours described in the attachment literature, like the toddler approaching his carer walking backwards, thus seeking proximity while avoiding gaze. In the pilot for this project, an interaction was observed between a baby at 4 months who, having been straining away to avoid his mother's intrusive gaze, was visibly soothed by her proximity and holding arms when she picked him up. She then began to talk into his ear and again he strained away. It would seem that the same paradoxical coping strategies are observable at four months. This is corroborated by Beebe's research (2010) showing that the relational trauma at the heart of attachment disorder is observable during interactions at 4 months and reliably predicts attachment status at two years, which in turn is strongly correlated to mental health outcomes. Beebe stresses that this observable phenomenon begins with how directed attention plays out between the pair from the first few months.

Item (1b):

‘They are in tune with one another - matching each other’s feeling states or even imitating one another.’

Research on adult facial expression-matching shows that, even after more complex propositional thinking about the thoughts and feelings of another are available, matching facial expression remains a potent way of attuning to the psychophysiological state of others and nurturing empathic responses to others, particularly in change of direction, either towards more positive or negative states (Beebe, 2010). This is thought to be partly because the expression of basic innate emotions in itself instantiates the experience of that feeling state – so that if we copy someone else’s facial expression our feeling state and then mood will begin to match theirs.

Meltzoff and Moore (1977) demonstrated that new-born babies not only attend preferentially to faces but sometimes imitate facial expression. This would seem to suggest that they too can come to experience the emotional state of another through imitating but it does not automatically follow that they can then attribute intentions based on these emotions to the other. They do, however, show preferential looking at positive facial expressions. While it could be argued that this is simply because it produces a more pleasant affect in them, it would seem that very quickly not only are another’s feelings felt but their intentions evaluated based on their behaviour. As Hamlin, Wynn and Bloom (2010) show ‘even 3-month-old infants evaluate others based on their social behavior towards third parties, and that negative social information is developmentally privileged’ (p.1). It would seem likely that at some level very young infants are interested in how others *feel in relation to them*. Intersubjectivity of some form does seem to be present from very early in life.

The mechanics by which both the feelings and intentions of another can be directly experienced simply by watching the other person were discovered by accident. Mirror neurons were famously stumbled upon when Rizzolatti (2006) had monkeys wired up to observe the neuronal activation when the monkey was engaged in goal-directed movement. By chance he noticed that some of the same neural networks were

activated when the monkey watched him eat as were activated when the monkey reached for food and put it to his mouth. It has since been demonstrated that humans have mirror neurons and they can produce this empathic, as if it were me, experience when we see pain, touch and disgust (cited in Gallese, 2011). This is because mirroring sets off particular interoceptive experiences, such as, change in body temperature or heart-rate, and that further instantiates one person's experience of having the other's feeling. In addition to this, when I match or imitate your state through facial expression or gesture I further underscore the effect by adding proprioceptor prompts to experience the associated affect.

Zeedyk (2006) has shown that, initially through expression-matching and then mutual imitation, the infant is given the experience of being the object of his carer's attention. Zeedyk explains that this experience leads to anticipation, for a contingent and therefore directed-at-me act, and that this anticipation is so psychologically and physiologically stimulating as to awaken a new level of consciousness. Matching and imitating provide a bridge between the experiences of two minds but crucially it does so in order to cement social bonds and enable the intersubjective experiences needed to elaborate neuronal connections and mind/brain development.

Item (1c):

‘Mother seems curious about her baby and can tolerate not knowing or understanding immediately’ or ‘Mother urgently needs to feel she knows or can control’

Daws (2015) has noted the importance of the capacity to bear negative feeling states and keep thinking about them. The motivation to be rid of negative affect is selected for evolutionarily and usually supports pro-survival behaviours. However, tolerating the often powerfully negative feeling states evoked by a baby’s distress is necessary in order to be able to stay close and available. In order to learn how to make sense of negative affect, a baby needs to know that his mother has understood his experience, usually through expression matching and sympathetic vocalizations. We have seen how, in expression-matching, a mother opens herself up to sharing his feeling state more fully and she will only find this tolerable if she can trust that she can regulate her own affect and not become overwhelmed. If she is fearful of such contagion she may avoid emotional contact or try prematurely to bring him out of his current state without adequate acknowledgement of it. She may also find his distress persecuting – a reproach for her inadequate care. In this way ‘negative capability’ is also about being able to tolerate one’s own limitations.

Daws (2015) has noted the significance of Keats’ ‘negative capability’, a term he coined to describe the capacity to tolerate doubt. Often we cannot know what troubles a baby when they are distressed or even be sure what will be most interesting to them when they are alert and at peace. A mother, who can make guesses and tolerate misunderstandings or communicative failures with their curiosity intact, will not foreclose her baby’s exploration of his own feeling states. When a mother cannot tolerate the messiness, the mis-steps in the dance as Stern (2002) terms them, and the gaps, she will become intrusive and seem to railroad the baby into a pre-determined trajectory that allows for no surprises for her but also no novel contribution from him. When a mother is reluctant to follow her baby’s interests and mood it is often because loss of control feels too dangerous.

In other mother-infant relationships, mother might be very good at guessing baby's needs and desires. She may be so finely attuned as to know before he does that he even has a need. Again, Stern captures the attitude beautifully in the term 'psychic hovering'. While this may reduce the amount of distress experienced in the here and now, the baby is nonetheless deprived of an important experience. Hopkins (1996) developed Winnicott's (1958, in 1975) ideas around the dangers of too-good mothering. 'She argues that if a baby never has the need to cry out in frustration he has been deprived of the opportunity to learn that he can express himself effectively and elicit a response. This will hamper the development of an autonomous sense of agency and the capacity to negotiate.' (de Rementeria 2015) Hopkins also found that it inhibited the development of the capacity for concern and the wish to make reparation. In short, too-good mothering produces children in a state of arrested development, stuck and unable to get on and grow in the social world in which we live. Indeed, it is likely that inadequate experiences to develop a sound sense of agency in the mother may be what undermines her tolerance of doubt and pain. Desperation for control and mastery are an expression of underdeveloped agency. The importance of gaps to development are at the core of Bion's (1962) theory that tolerable frustration, initially in the form of the absent breast, gives birth to the first thought; in the shape of a wish for the breast (see, discussion at beginning of this chapter).

Mutual Understanding

Item: (2a)

‘Mother is sensitive to baby’s emotional state and intentions or not’

The last section focused on the qualities a carer needs in order to be able to tolerate negative states in herself and her baby. In this section the focus will be on what happens when a carer can notice, acknowledge and build on the intentions of the baby, while remaining sensitive to his emotional state and need for regulation. This starts with being able to sense when the baby is open to mutual attention, noticing when gaze invites engagement and when averted gaze suggests a break in contact is needed. When a carer feels rejected, or to be failing when the baby breaks contact, they are likely to seek to re-establish that contact prematurely. This leads to what Beebe (2010) terms ‘chase and dodge’. Typically, when a baby averts his gaze, mother will swoop in, often causing the baby to look at her in fear as she looms or she will move her face to put it back in his line of vision. Here there is awareness, at least at an unconscious level, that the baby intends to break contact but there is a failure to respect this wish. Her need to maintain contact trumps his wish to break it.

If a mother’s depression prevents her from matching her baby’s more positive affect, some babies have been known to match their mother’s emotional state. Tronick and Beeghly (2011) explain that: ‘The infants may learn that ‘we can be sad together’ or face the dissipating alternative of infrequent or conflicted interactions. By co-creating this sad meaning, the infants and mothers can stay engaged, with some resulting increment in the complexity of infants’ biopsychosocial state of consciousness.’ (p.115) This is a high price for intersubjective experience, which speaks of how important it is. More hopefully, some depressed mothers benefit from the contagion of affect effect and are lifted by the sunny dispositions of their babies.

When a mutually enjoyable exchange has got going it can be difficult to appreciate how much went in to sensing the right moment and pitching the invitation to engagement just right. Also, it is a complex and generous act to allow a rewarding interaction to simmer down. Intrusive care often involves resisting signs that the baby is coming off the boil, insisting on repeating cues that are not being responded to. When this leads to the baby becoming distressed a vicious cycle can get going as the carer feels rejected and panicky about a loss of control. This is likely to compound the need to be controlling and intrusive when sensitivity to the direction of travel of the baby's affect and interest would allow her to predict what happens next, thus affirming her sense of agency, which in turn ameliorates the need for mastery. It is likely that a similar lack of negative capability in the mother's own mother is what has led to her being controlling to compensate for underdeveloped agency, learnt initially through prediction – see section 5a

Beebe (2010) has grouped into 'collaborative' and 'incoherent or contradictory' the kinds of dialogues that tend to get going depending on the carer's degree of sensitivity to the baby's emotional state and intentions. She also stresses how these different experiences of intersubjectivity impact on the burgeoning sense of self:

'Collaborative dialogue involves close attention the other's initiatives, openness to the other's state across the entire range of positive to negative emotions; attempts to comprehend the state, goal, or subjective reality of the other; the attempt to respond in a way that acknowledges, elaborates or comments on that state; ability to negotiate similarity and difference, and efforts to repair disruption. Such dialogues generate collaborative internal models. When both partners are represented as open to the experience of the other, each can know and feel known by the partner's mind' (2010, p.17).

'Incoherent or contradictory dialogues involve a collapse of intersubjective space in which only one person's subjective reality is recognised. The partner's initiatives are ignored, over-ridden or not acknowledged. ...I should accept your control, I should attempt to control you' (2010, p17).

Item (2b):

‘Mother contains distress or mother does not contain distress’

Based on his analytic work with adults, Bion (1959) postulated that something had gone awry in the earliest experiences of ordinary, but for the infant, intolerable anxiety. He looked at the apparently simple act of a mother soothing her distressed infant and understood that a complex and developmentally vital process was taking place. Infants are ill equipped to manage the powerful feelings of anxiety that grip them and must project them out. These he termed the ‘beta’ elements of their experience. They are anoetic – not hunger or sadness, which have cause and meaning and in this way are limited and can be mentally processed or digested. Instead they are an unruly mass of overwhelming negative sensations. As the heightened physiological arousal of anxiety adds further unpleasant interoceptive cues, the baby can quickly come to feel ‘nameless dread’ which Bion (1962) thought was actually the fear of dying. If the mother is able to ‘contain’ this anxiety, she does not sooth it away so much as takes it into herself. In this way she turns the projection into a communication. By letting his emotional state register in her, she comes to really know, quite viscerally, how he feels. If she can keep from being overwhelmed herself, and which parent has not feared their baby must be dying to scream like that, she can begin to use her adult capacity for rational thought to marshal the beta elements in her. This Bion called Alpha Function. A part of the baby, or a least a part of his experience, is now contained within her psyche. She can reason that he is not dying and begin to think about what he might need: holding? A feed? The baby has an experience that his feelings have been made tolerable by their ‘sojourn’ in her and he can re-introject the modified anxiety. The infant is no longer in the grip of debilitating anxiety and can continue with development. Crucially, the capacity to modify anxiety through alpha function is also taken in from the carer, thus providing for future mental health. Through containment, then, a ‘good object’ or ‘primal skin’, serving the function of containment is introjected. Containment is supported by ordinary or healthy projective identification. Projective identification bridges the gap between minds, allowing the mother to induct the baby in self-regulation. However, projective

identification can also contribute to self/other confusion and if used pathologically forms the basis of narcissistic disorders.

Primal skin, at the bodily level, is the holding arms and regulating body temperature of the carer. In her pioneering work developing the Tavistock model of infant observation, Esther Bick saw and described, live in the moment, what Bion (1959) had experienced in the transference relationship with adult patients. In the infant's quivering and trembling, which would cease the moment they were held in arms or pulled the nipple into their mouths, she inferred a state of terror. She reasoned that it was a fear of falling to bits, a sense that they were not sufficiently held together psychically and that this unintegration at the psychic level was experienced as a fear of liquefying, of physical dissolution. This vividly brings to life why the infant would have some primitive sense of their own physical vulnerability. Alone they are not viable and so at some level alone means dying, but as Bion stressed, they don't even have the mental capacity to formulate this and so it is 'nameless dread'. When the adult patient is put back in touch with it, it is beyond the reach of reason because it is of a time before reason but when fear was large as life. Bick (1986) proposed that the structuring of the mind required the development of a psychic skin, a mental equivalent to the holding arms, which is re-introjected by the infant and can delineate a space in the psyche for the work of alpha function (see section on introjection in this chapter).

Where psychoanalytic models have enriched our understanding of the psychological aspects of early experiences of care and the developmental significance of these experiences, neuroscience is enriching our understanding of the biochemical correlates of these experiences. The primitive autonomic nervous system enables the psychological experiences of avoidance or a dopamine-fuelled fight-or-flight response. Avoidance can sit anywhere on a spectrum from pretending not to feel, or pretending not to be there, to full dissociative states where perception is actually blocked. These automatic responses have been essential for survival in more physically hazardous times. However, these states can quickly become maladaptive and need to be regulated. An adult, who can acknowledge and remain calm in the face of the infant's distress acts directly on the infant's nervous system by influencing the

balance of hormones being released and processed. This in turn will determine what that infant's baseline or set-to-normal balance of biochemicals is. Once set this is very hard to change in later life and will determine automatic physiological and emotional responses to stress situations. There is, of course, innate variation in the way each brain creates and uses different biochemicals, leading to innate temperament, but adult care at this highly plastic time can redress the balance when someone is dealt a bad hand by their genes or ruin the game for someone who had a good hand to start. (Schoore 2001; Gerhardt 2004)

2(c)

‘Baby looks to mother for help’ or ‘Baby does not look to mother for help’

If baby looks to mother for help, even if he does not seem to receive it in this particular situation, this would suggest he has an expectation of containment, and so probably past experience of it and enduring hope for it. Temperament will determine how resilient the expectation of help is in the face of disappointment but it seems reasonable to assume that he has had good enough experiences of containment and continues to communicate his distress, thus evidencing his continued expectation that his communications will be responded to. He is demonstrating a sense of agency, which is strongly related to repeated experiences of one’s actions having an impact on the world.

When a baby is already heading away from stasis and communicating his discomfort this might activate mother’s expectation that she can meet her baby’s needs and lead to hopeful exploring with him about what those needs are in this moment. However, his cry might activate her fear that she cannot meet her baby’s needs and lead her to experience his communication as a rebuke. When this works, it works because the carer’s lot is thrown in with the baby’s, as it were. ‘We are in this together’ and ‘the quality of your cry gives me clues as to how to make it better’ (see section on projection as communication in this chapter). However, when it doesn’t work, the cry is persecuting and activates the carer’s fear that she cannot work out what he needs and probably cannot provide it even if she could work it out. She becomes overwhelmed by negative affect, guilt and probably rage about her predicament trapped in servitude to a persecuting baby. In this state there is little hope that she could get in touch with her own curiosity or capacity to bear pain and doubt. In such moments, a mother is likely to respond to the baby’s projections not with containment but by projecting his intolerable anxiety back into him, not ameliorated by its ‘sojourn’ in her mind but acerbated by the anxiety it stirred in her. Bion (1962) described this as the ‘convex container’ (see also 6b). To avoid this she might pick up her baby in an act of avoidance. This seems paradoxical but, as one mother told me ‘I

had to hold him tight to my chest, not because I wanted to but because if I didn't I thought I might kill him.' In picking up her screaming baby, a mother is likely to break visual contact, which might be stimulating a sense of persecution, while simultaneously using physical contact to calm her own hyper-arousal.

If a baby is in distress but does not look to mother for help, it seems likely that he is avoiding something. When neither understanding nor containment has come to be expected, he is likely to avoid contact as something potentially discordant and so disturbing or even threatening. In many cases it is threatening both because it disturbs through confounding expectation and because mother's actions convey aggression. In either situation the baby will shut down his SEEKING system because of prolonged activation of PANIC/GRIEF. As we have seen this is likely to make the baby more vulnerable to depression now and later in life. Through infant observation it has been possible to identify some infantile defences against this despair response and its tragic sequelae. Bick (1986) noticed that babies who could not rely on a carer to provide the primal skin they need for psychic survival could develop what she termed 'second skin' defences. She described how a baby could fix their eyes on a light in much the way he might latch on to the nipple or mother's gaze as a focal point. Through his bodily effort to focus, he then feels himself to be pulling his fragmenting parts towards this centre as though it had a magnetic force that would keep him from falling apart. Later in development a similar defence can be observed in the premature physical or intellectual muscularity of a 'false self' (Winnicott, 1960).

When a baby's need for containment is repeatedly unmet, he experiences repeated surges of cortisol, which can result in cell death in the hippocampus leading to difficulties in learning and explicit memory. When serious abuse or neglect occur, the infant's more primitive parts of the brain (brainstem and midbrain) become underdeveloped and repetitive maltreatment can lead to cell atrophy (Balbernie, 2001). These areas react to perceived threat of danger and, if consistently activated, this response can become embedded in neural circuitry within the brain, creating traits of either automatic hypervigilance or disassociation even in response to less stressful situations (Schoore, 2001). Dissociation induces the release of pain blunting opiates, leading to progressive impairment in the infant's ability to adjust or take defensive

action as the left hemisphere, the processing region, shuts down. This seems to describe the mechanics, at the level of the brain, of what Bion was describing at the level of the mind: how a failure of containment would prevent the introjection of the capacity for containment. The embedded response of fear to stressful situations is stored as an implicit, vestibular memory in the primitive areas of the brain, within the right hemisphere, without verbal or higher function processing. As such, the sensitised stress response impairs the amygdala, the fear centre in the limbic region, which governs all layers of the brain. All areas of the maturing brain are therefore affected (Schore, 2001). Advocates of neuropsychanalysis like Fotopoulou (2012) stress that relational trauma arrests development, hampering progression from primary process to secondary process, as Freud described in terms of the mind, which is now being evidenced through tracking the development of their correlates implicit/procedural and explicit/declarative neural networks in the brain.

Repeated activation of the stress response has been shown to result in maladaptive neural networks in areas that mediate empathy, humour, attachment and affect regulation (Perry et al., 1995). Unfortunately, neglect and abuse often occur together resulting in the 'worst case scenario' for the development of the infant. Such children have been forced to find ways to cope with their early experiences and findings from neuroscience are again in line with psychoanalytic ideas. Primitive defenses such as dissociation and splitting develop, which can prevent the child from moving from the more primitive paranoid schizoid position to the depressive position.

It is also interesting that neuroscience seems to support the notion of a necessary gap. A certain level of cortisol is expected and indeed necessary for adaptive brain functioning (Perry et al., 1995). Cortisol is produced by the adrenal cortex and is released in response to normal situations of stress. In psychoanalytic terms this may coincide with times when the 'good enough' mother (Winnicott, 1952) instinctively begins to leave a time lag before responding to her infant's needs and this gradually progresses as the infant learns increasingly to tolerate and manage their own levels of frustration. Cortisol is then produced to aid the infant back to homeostasis after a short period of stress. This is a normal process and important in aiding the infant to develop their ability to regulate affect.

Making Relationships

(3a)

‘Baby seeks to share experiences and/or feeling states with mother’

Seeking to share positive experiences like desire, satisfaction and pride are as important as the baby’s wish to get help with negative experiences or feeling states. These ‘Intrinsic motivations for companionship’ as Trevarthen (2001b) termed them resonates with Panksepp’s (1998) description of SEEKING. This primal appetitive-motivational system, energized by mesolimbic dopamine circuits, is a general-purpose foundation for all the life-sustaining desires of organisms. Panksepp makes it clear that there is no distinction between acquisitiveness and inquisitiveness at this level. The pleasure is in the activation of the SEEKING system and is not necessarily derived from the anticipation of having hunger or curiosity sated. In this way it chimes with Klein’s conception of the epistemological drive. This also links with Klein’s understanding that early libido was better understood as a generalised seeking of all life-sustaining nourishment or experience rather than a drive to seek pleasure through, say, oral gratification. When the object that can satisfy these urges is met, it is imbued with all the pleasure of having needs met and so becomes an ideal subjective experience ‘personified’ and then internalised as the foundation for hope and trust in the goodness of the world. The good object can be said to have been created by the loving impulse - a kind of ‘appreciative possessiveness’, which is taken in orally and retained anally (Likierman, 2001, p.76). Abraham moved on from Freud’s understanding of retaining or expelling being purely about physical pleasure. He observed that such physically pleasurable experiences were augmented by phantasies that brought together the physical sensations with relational subjective experiences to make meaning.

It is this meaning-making drive that makes us vulnerable to disorders of meaning-making. Excessive activity of this system promotes mania and omnipotence. Also, a disregulated SEEKING system is prone to excessive meaning-making, such as seen with paranoid schizophrenia, which is treated chemically by inhibiting dopamine receptors. However, what is most relevant to this study is that SEEKING is an innate urge to make sense of experience as well as to have certain kinds of experience.

When baby and carer are in sync, matching each other's level of excitement, acting and anticipating the other's reaction which is contingent, authentic and congruent, a biochemical reaction is set off in both of them. Beta-endorphin is released into the orbitofrontal cortex. As an opioid, it will be experienced as pleasure but it also stimulates neuron growth by regulating glucose and insulin. For the infant this will support connectivity in this late developing 'higher brain' (Gerhardt, 2004). Pally (2000) describes the similar role played by dopamine 'these high arousal states specifically induce the sprouting of dopamine-releasing axon terminals, which grow upwards from their cell bodies located in the midbrain [limbic], to sites deep in the prefrontal cortex. The increased release of dopamine into prefrontal areas, in turn, promotes a growth spurt of synapses and glial cells in this region' (p.10). These events, working bottom-up from our more primitive brain to stimulate the higher brain, pave or strengthen neural pathways that will enable top-down affect regulation in the future. Only with these experiences will reason blossom and come to be able to curtail greed and desire, rein in rage and temper sadness. This enables the infant to fulfill his potential by becoming an effective member of his social group.

(3b)

‘Mother tries to engage baby in play’

and (3c)

‘Mother succeeds in engaging baby in play’

The mind becomes structured to process being in the world, and the shape of that structure is determined by those experiences. However, it is not the world of things and their categories that take priority, it is the world of social interactions that come with the imperative to regulate affective experience in space and time by regulating attention (gaze direction in space) and intensity through pauses, ebb and flow in time that first grabs us. The part played by interactions around achieving homeostasis has been well covered here but, from very early on, play begins to be the architect of the mind, brain and relationships. Many of the previous sections have been describing playful interactions to illustrate other points. Here play itself will become the focus and it will be helpful to have a sequence of play in mind to bring the theory alive and banish any doubt that: ‘Even young infants have rudimentary intentions and organized and motivating emotions and are able to react to the meanings of others’ intentions and emotions’ (Tronick, 2011). This excerpt comes from interviews with parents about playing with their baby:

‘He’s five months and we can really get into a rhythm together now. Playing with a large plastic cup yesterday, I put it in front of my face for a few moments and then revealed my face saying ‘oh’ in a surprised voice. He broke into an excited smile and kicked his legs about. I covered my face again and, although I could not see his face, I could see that his body had gone very still. When I removed the cup I noticed his face was quite grave for a moment before he reacted to my reappearance with a laugh. We did this a few times and his laugh got louder and bolder. I began to realise that he was no longer grave when my face was covered. The game was not about surprise anymore. It was about him anticipating my cue, which meant it was his turn and he could do his laugh again. We did a few more rallies like that, getting faster and enjoying our competence at

it. I then introduced a longer pause. His body became very still. When I uncovered my face his mouth was serious, his nostrils were flared and his eyes were wide open and fixed on me. I wondered if I had left it too long, but then he laughed louder than ever and bounced his body with pleasure.’ (Daws and de Rementeria, 2015)

This sequence illustrates many of the key features of play. Zeedyk (2006) has illustrated the importance of a balance between predictability and surprise. Being able to predict another’s action is how a sense of agency gets going before a baby has the motor control to ‘act’ on the world and so be an agent of change. It is also the beginning of recognizing patterns – if this, then that. Causality and correlation, the basis of maths and science are both present in this evolving cup game. Prediction will also lead to acts of provocation in play which will further cement a sense of agency (see 4d). However, here most pleasure comes from the moments of surprise. There is the relief from tension, the tension of not knowing, and we have seen how learning to tolerate periods of not knowing will become important (see 1c). However, surprise itself is important in that it evidences the otherness of the other. When their action cannot be exactly predicted we know we are in the presence of a separate mind that can play with our mind. As Zeedyk (2006) points out, we cannot tickle ourselves. There is a particular pleasure in the kind of stimulation that can only come from being with another free agent. It is part of how we come to know about bodily and mental boundaries. None of this is fully cognitised but exists in the shape of the expectancy for playful interaction but it is the means by which we come to have the reflexive functions of higher cognition. The baby playing the cup game seems to experience something like: ‘I come to know that I have a mind because I experience you teasing it, showing knowledge of its working, and from this experience I also come to know that you too have a mind. Hobson (2002) describes this as the ‘primordial sharing situation between infant and carer’, from which the infant comes to ‘distil out self and other as persons-with-minds’ (p.258)

If the invitation to play is not spontaneous but a means of gaining mastery over the interaction, the play, if it can get going at all, will struggle to perform any of the functions described above. If mother is not responding to the reality of baby’s experience none of the subtle shifts and extensions described above could be

managed. What happens when mother's attempts to engage baby in play are not successful will be explored in more detail in the next section on congruence and authenticity. **(3d)**

‘Mother is authentic and congruent’

Authenticity and congruence would seem to be inextricably linked. If it is true that you can't fool all of the people all of the time, it is also true that you can't lie, even to yourself, with all of yourself all of the time. Main's (1984) Adult Attachment Interview classified pregnant women's recollections of their childhoods. The women's responses were not grouped according to how positive or negative what had happened to them was but rather the manner in which they recalled it. Some described awful memories but showed no emotional involvement in their own stories. They could 'know' what had happened to them but this knowledge was cut off from the feelings associated with those experiences. Others claimed to have had happy childhoods but went on to refer to bad experiences and were then dismissive about the significance of these experiences. Here the pain is avoided by impeding the 'knowing'. In both these categories the women had not processed the distress and much work was going on to keep from getting in touch with it. The former had performed a split between cognition and affect, which would lead to deficits in both systems, which work optimally in unison. The latter group had unconsciously but deliberately sabotaged their cognitive processes. Bion (1959) described this sort of defence as 'attacks on linking'. It can seem to isolate the distress in a sort of quarantine so that the person can apparently get on with their life without being too overwhelmed by their memories to function, but the sacrifices are great and limit emotional and cognitive development. Other women interviewed became very distressed, as though they were re-living the bad experiences with the same intensity as when they had first happened. The researchers were able to use these classifications to accurately predict the maladaptive attachment status of their unborn children at 18 months. More encouragingly, those women who had also had bad experiences but were able to talk about them and describe how they had felt then and now, were much more likely to have toddlers classified as 'securely attached' when put in the 'strange situation'.

Those women who could bear to know and feel the pain of what had happened to them but had not got stuck, overwhelmed by those beta elements, were the ones who were free to become ‘good enough’ mothers. They had managed to develop alpha function and so could safely admit into consciousness the full emotional impact of their experiences and process them. The researchers found that secure attachments in adult relationships, with a partner or a therapist, were often what had enabled this capacity for containment of one’s own distress to develop. This is a necessary development before any adult can become a container for the primitive terrors projected by a baby. It is also necessary in order to become a responsive and spontaneous partner in play. When an adult functions with splits between her own affect and cognition she will not be able to offer an integrated response to her baby’s actions. Incongruence between mother’s affective communications and her infant’s were observed in mothers of disorganized infants. For example: baby is distressed and mother is smiling brightly, or fails to respond to a change in baby’s communications (Lyons Ruth, 1999). When the links between what happens and how you feel have been undermined, the possibility of being curious about how the baby feels and why is going to be limited, even in the absence of negative affect.

Also, if mother’s actions are incongruent because of the splits in her, if she is using a friendly sing-song voice but has angry or frightened eyes, the pleasure in being able to make sense of her is lost to the baby. Mother’s invitations to play will be confusing and distressing. She, in turn, is likely to feel rejected.

If babies are great lie detectors, it is because they are working at the level of procedural enactments. They do not see a smile and recognize the category ‘happy mother’. If they did, they might be able to hold on to this idea even in the face of contradictory information. Instead, the embodied affect ‘feeling happy’ is set off in them. If two contradictory affects are simultaneously set off in them by whatever mechanism of embodied social cognition, they then have an unpleasant experience of discord and incongruence in their own sensori-motor-affective state. This is because, in the words of Trevarthen (2001b), ‘they are born with innate motives for companionship’ and the hardware to recognize in themselves and others the innate relational emotions which make companionship meaningful. If they were not, why would incongruence be distressing? Beebe (2012) states that coherent dialogue

between mother infant pairs conveys truthfulness or authenticity of affective states and awareness and receptiveness to the intentions of the other – all of which are communicated through movement, gestures, facial expressions, timing, tone and contour of vocalizations as procedural enactments of being with.

It is important to acknowledge an apparent contradiction in the argument being put forward in this literature review. While the capacity to relate in a meaningful way to part-objects has been stressed, it is also clear that a degree of congruence between modalities is expected. Although a baby can shrink from his mother's gaze while simultaneously taking refuge in her arms, there are some splits that do not work. It would seem that the irreducible unit is the unit of meaning. An intrusive hand makes enough sense for a baby at two months. It does not need to be linked to a mind to have motivations attributed to it yet. However, simultaneous multi-modal information will demand congruence from the very beginning because they will be simultaneously activated in the infant who will *feel* the incongruence. This is because it will not match or map onto the innate authentic relational emotions, which are meaningful to the baby. Experiencing an angry voice and smiling face is disturbing in the moment but also disturbs the development of emotion recognition in the self and others, which in turn disturb the development of empathy.

Congruence and coherence in interaction support integration in the organisation of the mind. Incongruence in interactions that break up units of meaning is likely to lead to fragmentation in the organisation of the mind (see 6b). Attempts to present an inauthentic emotional state are much more prone to modal incongruence - in that you can't lie with all of yourself all of the time. Most often in relational trauma the veiled feelings are around rage, fear and panic. It is likely that experiencing these emotions in others in a way that is hard to make sense of would contribute to the overuse of defensive mechanisms such as fragmentation and contribute to a vulnerability to dissociation and psychosis.

Maintaining Relationships

In many ways, all that enables contact to be made is what maintains the relationship. This item on the scale is a way of summarizing the concepts and prompting the observer to notice them in the interactions. To avoid repetition in this review, here only bullet points will be offered as a reference to the other relevant sections.

(4a+)

Mother understands or bears the full range of feelings expressed & responds appropriately

- Offers playful invitations to join her in inter-subjective joy and meaning-making.
- Offers containment - the capacity to bear projections and provide alpha function.
- Offers negative capability – the capacity to bear negative states in the baby and oneself and to bear the discomfort of not knowing and remain curious
- Offers authentic and congruent expressions of affect and responses to actions, be they positive or negative, which are congruent with the baby's expressed state.
- Offers responses that are contingent and reciprocal in ways that affirm boundaries and leave gaps for the baby and the relationship to grow into.

Or (4a-)

**Mother avoids, misunderstands and/or is overwhelmed by baby's feelings,
perhaps showing surprise at baby's distress**

- Undermines attempts at co-constructing meaning by bringing her own unprocessed distress and anxiety which confuses and confounds her capacity to notice and respond appropriately to his affects and intentions
- When his distress puts her in touch with her unprocessed pain, rage etc, she is doubly flooded by both and has no alpha function capacity to manage either. For her own psychic survival, she pushes back out as a convex container projecting back all his distress but now intensified by being mixed in with her own.
- Has limited curiosity as she cannot tolerate a state of not knowing, she will railroad him into exchanges that match a trajectory she has in mind, as this is the only kind of interaction that feels safe. These interactions will lack reciprocity, contingency and congruence.

4b

'Baby is resilient or tolerant around relational distress or not'

The importance of missteps in the dance of mother-infant interaction has been long understood, (Stern, 2002, Tronick et al, 1998). It is clear that learning to tolerate and repair miscommunications and negative affect emerging from the interaction is vital for building resilience. In his later writing, Tronick (2011) uses systems theory to elucidate the process. Below is the sequence of interaction he uses as an example.

'To illustrate the dynamics of meaning-making, let us present a microanalytic glimpse of a mother and her six-month-old infant interacting (see Figure 1). The mother bends down to nuzzle the infant with her hair. The baby tightly grabs her hair and won't let go when she tries to disengage herself. The

mother vocalizes in genuine pain ('Ow!') and pulls back with an angry, bared-tooth facial expression. Although the mother's vocal and facial display of anger lasts less than half a second, the infant immediately responds in a defensive fashion. He brings his hands up in front of his face and turns away. His reaction is reminiscent of the defensive ducking behaviors infants exhibit to looming objects (Schmuckler & Li, 1998). The mother's angry display is not just an interesting or novel display or one with no significance; rather, it has meaning for the infant. The infant appears to be apprehending danger. The mother immediately perceives the meaning of her infant's change in behavior and quickly changes what she is doing. She uses soothing, cajoling actions and vocalizations to try to repair the interactive rupture. At first, the infant stays behind his hands; then he tentatively peeks out at her. Gradually, over the next 30 to 40 seconds, he begins to smile, and then he smiles and looks at her, until they return to a state of mutual positive engagement' Tronick and Beeghly (2011) p.4.

The mother's expression of pain is authentic and congruent. It is disturbing to the infant who perceives that she has become a threat to him but it makes sense. He can continue to use his meaning-making system and can process it successfully, even if not enjoyably. Tronick (ibid) acknowledges that dysregulation like this, so long as it is quickly repaired can be growth-promoting because infants have an opportunity to learn that together they can repair ruptured interactions. However, if such disruptions and misunderstandings are chronic then the system cannot gain in complexity and coherence and will become less stable and less flexible. New mis-steps or perturbations are less likely to be repaired because the system has not had enough information that could be processed to increase its complexity and flexibility. This language has echoes of Bick's sense of a psyche that needs meaning making experiences to keep it from disintegrating.

The rate and intensity of the ordinary to and fro of this reparative work as revealed through micro-analysis is staggering. Gianino & Tronick (1988) report that mother/infant mismatches were repaired 70% of the time in the next interactive step. New reparations were observed about every three to five seconds and the newly formed dyadic matches were followed by the re-emergence of mismatches, which

were followed by reparation of mismatches to matches. What is missed out on, in terms of development, when this sort of repair is not possible must be deleterious in the extreme and is attended with the distress caused by ongoing discord both internally and within the relationship.

4c+

Baby's face expresses affection

Even very young babies can express affection in the quality of their gaze, usually while feeding but also in those moments of intersubjective joy when a meaning-making exchange has been successful. When a baby sees his mother's pupils dilate and her face lift into a smile, his body would read these signs of her aroused sympathetic system and his would begin to be pleurably aroused also. The biochemical manifestation of this intersubjective joy is known to promote connections between brain regions, connections that need to be made in infancy for the adult brain to work optimally. In a smile of affection, a baby evidences a multitude of developmental achievements and the presence of someone who can continue to draw that development out. Reddy (2008) describes smiling gaze aversion at two months. This suggests that very young babies can feel overwhelmed by the pleasure of being seen and the need to regulate that contact. Reddy also shows how this very quickly gets subsumed into a game of hide and seek, part of the baby's repertoire of provoking behaviours.

For Klein, love and gratitude are innate emotions that are expressed from early on and serve an important function in organizing the psyche or internal world of the infant. She understood that love and gratitude are spontaneous responses to loving care rather than a socially tidied-up derivative of sexual desire. With Klein the emphasis moved from Freud's pleasure-seeking to emotional relating. Piaget (1954) had understood that a spoon is not 'a spoon' but a 'mouthable thing'. Klein understood that the breast is not a provider of milk or even oral pleasure but a 'lovable thing' because it is defined by the experience it engenders. It is the infant's capacity for spontaneous feelings of love that make it possible for a good object to be co-created in the experience of feeding or inter-subjective joy, and this is the foundation for hope.

'Their behaviours are Contingent and reciprocal or not'

In infant research, contingency and reciprocity have been used to evidence intentionality and an expectation that the infant's behaviours be treated as having communicative intent. From this it is inferred that they are socially motivated. Trevarthen has done most to evidence that this involves complex relational emotions and begins from minutes after birth.

An innate, or very early expressing, hunger for contingency was suggested by research (Murray and Trevarthen 1985), where disturbances in contingency are contrived. Using a double TV link, the infants watch mother's face and hears her voice being animated and conversational, and in fact responding to his own communications. After a while, a short delay is introduced, disrupting the contingency of the response. The infants become avoidant and then distressed, experiencing what Trevarthen (2001b) describes as a sense of shame at the loss of a meaning-making exchange with another person. He cites research by Nagy and Molnar (1994) demonstrating intentionality of imitation in newborns by showing that their preparation to imitate is accompanied by an increase in heart rate while 'provocating' is followed by a deceleration in heart rate, suggesting that active anticipation is at play.

Reddy (2008) emphasises how these experiences, so crucial to the development of a sense of self and to increasing complexity and integration in the infant's mind, can only be instantiated in relationship to another: 'Intentions need something or someone to engage with in order to exist: they only emerge in engagement... What is less obvious is that becoming *aware* of intentions, one's own or someone else's, must also be totally dependent on engagement; that is it can only happen in engagement with intention' (p.179). When we then consider how demanding it is to offer contingency and reciprocity, it becomes all too easy to see how things can go wrong. Lyons Ruth (1999) describes what the carer needs to offer as the:

‘continuing attempt to apprehend the infant’s current subjective reality (affect state, current desired goal, and level of understanding) and an attempt to devise a response that acknowledges and comments or elaborates on that state... this requires close attention to the child’s initiatives’ (p. 583).

When what is required is so subtle and complex and emotionally charged it is easy to see how preoccupation or difficulty with accurate perception of feelings in others could derail the whole thing too often to be meaningfully repaired. Through micro-analysis of interactions between 4 month old infants and their mothers, then following them up at age two to assess attachment style, Beebe (2010) has been able to describe the identifying features of ‘future secure’ and future insecure’ dyads. Below, the summary of her findings around reciprocity and contingency are quoted in full:

‘Overall, future secure dyads may develop an internal working model of face-to-face interactions in which infants and mothers come to expect, ‘I can anticipate when you will look and look away; I know your rhythms of looking at me; I feel seen by you. I follow your feelings up and down as I feel more happy or more distressed; we go up to the top positive peak together; what I feel and what I do resonates in you’ (Estelle Shane, personal communication, November 12, 2006). In addition, future secure infants may come to expect, ‘I can count on you to share my feelings, to ‘get’ what I feel; I feel known by you. I know how your face goes, I know you. I know I can influence you to touch me more tenderly when I need it.’ Mothers of future secure infants may come to expect, ‘I know that when I touch you more affectionately, you will look at me and smile more. I know that moving forward and looming in is hard for you, and you orient away. I know that when I move back, you come back to me.’ Future disorganized (vs. secure) infants showed greater distress: more (1) vocal distress, (2) combined facial and/or vocal distress, and (3) discrepant affect (simultaneous positive and negative facial and vocal behavior within the same second). Discrepant affect was likely to be vocal distress, such as whimper, while simultaneously facially positive (smiling). These infants also showed lowered self-contingency in facial-visual engagement, a ‘self-destabilization.’ It is harder for future disorganized (vs. secure) infants to

sense their own next engagement ‘move,’ as well as harder for their mothers to anticipate infant engagement changes. Lowered infant engagement self-contingency occurred in the context of lowered maternal engagement coordination (discussed below), a maternal failure to adequately coordinate with infant engagement. This is an infant intrapersonal dysregulation linked to a maternal interpersonal dysregulation’ (Beebe 2012, paper II).

However, it is worth noting that she found that the highest and lowest levels of contingency were associated with insecure attachment. While the impact of low levels of contingency has been discussed, it is worth noting that too high contingency is linked to intrusiveness generally and will be thought about more under section 4e. Beebe also reports that the mothers of infants that would go on to develop the most severely disorganized attachments were those who showed positive affect or surprise in response to their infant’s facially and vocally expressed distress. She stresses that her findings go beyond disturbances of facial mirroring and identifies that mothers are ‘denying’ their infants’ distress. This is likely to be linked to the mothers’ denial of their own negative affect as discussed in relation to the adult attachment interview.

Beebe also stresses the significance of self-contingency in the mother. This is the degree to which the mother’s behaviour, from one moment to the next, could be predicted in an interaction with her infant. The degree of maternal self-contingency in an interaction with her 4 month old was predictive of attachment status at two years. This is not a measure of how sensitive her attunement to her baby is but simply whether what she does in one moment, let’s say smiling while taking in breath, is usually followed by another behaviour, like looming in towards her baby’s face. Beebe proposed that the infant’s emerging sense of agency depends on a social environment that is predictable, one in which he can actively participate by way of anticipation. She clarified that, like boxers, we do not base our response on what our partner has done or is doing, but on what we expect them to do. Attunement relies on ‘quasi simultaneous’ or ‘changing with’ moments. If one’s partner is grossly labile or lacking in an ordinary degree of self-contingency, we are deprived of the first step of being able to offer a contingent response, which is to guess what our partner is about to offer.

‘Mother sensitive and respectful of boundaries or intrusive’

Linked to the notion of a self, emerging in interaction with another, is the idea that boundaries between people are not entirely a perceptual given but must be co-created through experience. Individuation and differentiation are processes that require certain kinds of experience. Intrusiveness and enmeshment, on the part of the carer, suggest that this process did not reach maturity in her. She is likely then to employ narcissistic defences against existential anxiety and so be prone to narcissistic identification with her baby rather than empathic identification and this, in turn, is likely to exacerbate struggles to differentiate.

She may then respond badly to her baby’s need for ebb as well as flow. She may experience his need for pauses or breaks in their engagement as threatening. Evidence of his separateness threatens her narcissistic identification. This is seen with what Beebe and Stern describe as ‘chase and dodge’ where gaze aversion cannot be tolerated and is responded to with looming or touch rather than ‘watchful waiting’ (Lojkasek, Cohen and Muir, 2008)

Some intrusive behaviours are very evident. Looming and gaze-chasing have been described but talking directly into the ear of a baby who has broken eye contact, prodding, over handling, or too vigorous jiggling, even actual intrusion of a finger into the baby’s mouth are forms of intrusiveness observed in interactions. The intrusiveness of a failure to tolerate pauses is more subtle.

Tronick (1989) offers two hypothetical but highly familiar and resonant descriptions of interactions. They are quoted in full with my own comments inserted in bold, making links with ideas discussed so far.

‘Imagine two infant-mother pairs playing the game of peek-a-boo. In the first, the infant abruptly turns away from his mother as the game reaches its ‘peek’

of intensity and begins to suck on his thumb and stare into space with a dull facial expression. **[Positive affect needs regulation too]** The mother stops playing and sits back watching her infant. **[Negative capability, and the offering of a gap to grow/move into]** After a few seconds the infant turns back to her with an interested and inviting expression. The mother moves closer, smiles, and says in a high-pitched, exaggerated voice, 'Oh, now you're back!' He smiles in response and vocalizes. As they finish crowing Together, the infant reinserts his thumb and looks away. The mother again waits. After a few seconds the infant turns back to her, and they greet each other with big smiles. Imagine a second similar situation except that after this infant turns away, she does not look back at her mother. The mother waits but then leans over into the Infant's line of vision while clicking her tongue to attract her attention. The infant, however, ignores the mother and continues to look away. Undaunted, the mother persists and moves her head closer to the infant. The infant grimaces and fusses while she pushes at the mother's face. **[RAGE? Could this be rage in response to restriction of liberty to break contact?]** In the second illustration, the mother waits but then disregards the infant's message and makes a vigorous attempt to solicit the infant's attention. The mother comes in closer and actively signals her infant to change what she is doing and attend to her. **[Need for mastery and control?]** The infant responds by sharply turning away with strong negative affect, communicating to her mother that she should change what she is doing. The mother, however, ignores this message, and the infant becomes even more affectively negative as she tries to cope with her mother's continuing intrusiveness. (pp.112-3)

From a psychoanalytic perspective this could also be understood in terms of mother projecting her rage about the loss of a meaning making exchange, in the manner of a convex container (see section 2b). At an unconscious level she is ridding herself of the painful loss and associated rage by provoking in her baby the same rage at not getting what is needed or desired. When the carer is projecting into the baby, any work towards differentiation is undermined by further confusion about which feelings belong to whom.

(4f)

‘Baby regulates self and contact with mother or not’

Self-directed regulatory behaviours such as thumb sucking are an important part of developing agency and self-reliance but if the baby is having to rely too much too soon on these self-regulatory or self-soothing behaviours they may become associated with avoidance and denial of reality, or even a way of triggering dissociative states. As we saw with Tronick’s description of interactions in section 4e, self-regulatory behaviours can support self/other interactions by helping the infant to manage the risk of overstimulation. Beebe (2012) has shown that babies who have experienced interactions where their need for ebb as well as flow is respected develop better self-regulatory patterns. In a virtuous circle, this then makes their behaviour easier to predict for their carer and they are more likely to have ‘collaborative dialogues’ with them. ‘In social interactions, both intrapersonal and interpersonal rhythms provide ongoing temporal information necessary to predict and coordinate with one’s partner, so that each can anticipate how the other will proceed’ (p. 7). She stresses that it is a ‘continuous bi-directional exchange’ requiring ‘reciprocal regulatory control’ (p. 8). When a baby has poor self-contingency he is hard to predict and more likely to provoke controlling behaviour from his carer.

Making Sense of the World

(5a)

‘Baby seems curious about the world’

Fonagy (2002) cites research suggesting that the perceptual systems of very young infants have a bias towards exteroceptive over interoceptive stimuli. Also that it is these experiences of the world that first get represented. This makes intuitive sense given that even in adulthood, with a wealth of poetry to draw on, we still find much of our embodied experience ineffable, and mostly out of conscious awareness. It is also worth stressing again that, at the beginning, the world is the carer and the degree to which SEEKING and curiosity in relation to her have been rewarding will determine how much curiosity is then extended to the world beyond. Murray & Cooper (1997) have shown that infants of depressed mothers explore the inanimate environment less avidly than do infants of non-depressed mothers. Adequate containment to enable long enough states of homeostasis, as well as a world that is not perceived as mostly threatening, would all be necessary to develop the baby’s inborn SEEKING drive and the curiosity that comes with that. Panksepp’s SEEKING can be seen to resonate with Klein’s notion of the epistemophilic sense being innate and affect-laden, bound up with the drive to have one’s needs met. In this way, to talk of a hunger for knowledge is not so much metaphorical but actually acknowledging that they originate with the same drive and later become differentiated.

The very young baby’s experience of the inanimate world is fairly limited. Changes in light, temperature and fabric against the skin will all stimulate sensory experiences and it has been seen that young babies can use objects from the inanimate world as a safe or at least neutral focus. A light or sound can stimulate a sensory-motor-affective experience to pull a disintegrating experience of being into a coherent shape. Equally, very young babies also seem to be able to delight in the play of light in the leaves of a tree or the sound of music just for the pleasure of coming to know the world.

(5b)

‘Mother wants to bring in the world, or not’

This refers to triangulation, as expounded by Britton (2004), and is an enormously important and complicated area of psychoanalytic theory. It stresses the significance of a third, usually the father, in relation to the mother-infant dyad and the implications of this for development. It is the counter-balance to enmeshment and views the father’s function, in part, as getting between and opening up horizons to the world beyond. He offers the crucial experience of interacting with one parent while having the other in mind, in parenthesis. And this is how a baby’s mind will become structured for complex thought. It also offers experiences of being ‘on the lonely corner of the triangle’ in a situation where the couple, in good enough families, keep the baby in mind. This builds the baby’s confidence that he can go on being, even when not the object of another’s attention. For parents who have not had good enough experiences of being in threes, relinquishing the closed-up twoness can be challenging. This tendency can be seen in carers who can’t even tolerate introducing a toy into the play because it pulls attention out to a third.

However, in this study the only third is the camera/observer/clinician. It will be mostly from interpreting the transference to this third that the observer will have access to clues about the mother’s relationship to triangulation. Although the mother’s or their baby’s might bring their joint attention to inanimate things in the room and cultural phenomena that are brought in from the world beyond, nursery rhymes can also be thought about in terms of a third.

(5c+)

‘Baby shows fragmentation and vulnerability’

or (5c-)

‘Baby shows resilience and cohesion’

During the discussion of Main’s (1984) AAI, it was seen that the intergenerational transmission of attachment disorder can be halted when a parent is able to reflect on her experience in an emotionally congruent and narratively coherent way. In this section a closer examination of Beebe’s (2011) findings will elucidate *how* attachment disorder is transmitted when this has not been possible. Before doing this it seems important to acknowledge an important caveat identified by Stern (2002). Although he was convinced that the very early interactions he was studying could determine relational and mental health outcomes across populations, individual pairs could, through a happy coincidence of well matched temperament and parenting style defy predictions. Some babies have the capacity to down regulate in the face of overstimulation, which is a kind of resilience. Similarly, some babies have a high tolerance of under-stimulation or, to put it another way, can make a lot of the little they get.

If parenting is too frightening or confusing to be born then defensive social disengagement will be resorted to, with disastrous consequences. As was noted by the complex systems analogy, with a loss of input the system will lose organisation and begin to dissipate. This leads to a kind of psychic fragmentation. The alternative, of engaging with incoherent and incongruent behaviours, has an equally deleterious effect on intrapersonal organisation, which Beebe (2013) has shown to be observable in the interpersonal relationship:

‘In disorganized attachment infants show incomplete movements and expressions, simultaneous displays of contradictory approach/avoidance patterns, confusion and apprehension, and momentary behavioral stalling, considered a breakdown in behavioral organisation’ (p.6)

The mothers are thought to be, themselves, frightened of intimate relating because they fear they will be re-traumatized by their infant's distress. They are doubly triggered. Firstly through identification with the baby in a state of being overwhelmed by distress and by a sense of being, once again, the victim of an aggressor as they experience the baby's distress also as persecutory. It is the mother's wish to protect her infant from what is mobilized in her that will lead her to either avoid intimacy, with all the risks associated with emotional neglect, or she will try to override her own negative affect by 'acting' happy. As we have seen this leads to equally damaging self-incongruence between modalities of expression (i.e. angry eyes and smiling mouth). It is also likely to lead to her meeting his negative affect with positive i.e. smiling at his distress, in an attempt to 'ride negative into positive...derailing their communication' (Beebe, 2013, p.56). This robs him of the experience of feeling that the contents of his mind are known. It also provides confusing rather than affirming feedback about his affect states. Beebe (2012, II) quotes Cassidy observing that 'Mothers show the affective discrepancy interpersonally; infants show the affective discrepancy intrapersonally' (p.113). This process would interfere with the infant's capacity to have a coherent and meaningful experience of their own feelings. This contributes to unintegrated mental processes as the experiences cannot be made sense of and this is linked to the use of dissociative defences in early adulthood.

(5d)

Agency and sense of self in the world

Beebe (2010) argues that agency is built up through being able to predict the carer's behaviour. Before the infant has enough command of his body's communicative potential, being able to guess what's coming next is one of the first acts as an agent in the world. Beebe stresses that for the infant to have any success at being able to predict in this way, his partner's acts would need to be self-contingent and congruent.

If a sense of agency has not developed - a sense of a coherent self who can act on the world and predict the outcome in a fairly reliable way - this will massively compound dependency anxiety and defences. Without any real sense of volition or power, dependency is compounded, and this situation is likely to coincide with less than good enough care so dependency anxiety is exacerbated. Denial of dependency, rather than real steps towards independence, in the form of fantasies of omnipotence and narcissistic or projective identification, are likely to come to dominate.

Inferences about internal world phenomena

(6a+)

Engagement with the moment, openness curiosity, responsiveness and a capacity for linking/integration and coherence in mother and/or baby

This section will focus on the phantasy life of infants. It has been seen that innate instinctual behaviours create an expectation for certain kinds of experience. What Klein identified was that this expectation does not wait passively for realization but gives rise to phantasy objects and active relationships with them, which begin to populate an imaginary internal world. She held that instincts are represented as unconscious phantasies of relationships, or at least phantasies of doing to or being done unto by an object or part-objects. (The theories of embodied simulation discussed earlier help to make sense of why these representations would be so concretely experienced as existing within the mind/body because they are not yet purely mental phenomena but arising out of and represented at the level of the body.) Crucially these did not have to be representations of actual experiences in external reality. They could predate actual opportunities to suck, swallow, love, fear or attack, for example. This chimes with Gallese's (2011) description of the essentially creative nature of embodied simulation when he states that 'creating an imaginary world would be equivalent to remembering what never happened' (p.197). He does not make explicit links with phantasy life yet, in this statement, he captures how this phantasy world becomes the prism through which the external world is experienced and why reality perception is so prone to distortions. From a constructionist perspective on perception we rely on previous information, on memory, to make sense of the information received by our senses. What Klein understood is that this includes memories of imagined experiences. She proposed that the culture of this internal world was initially shaped by the intensity of innate sadistic impulses, which determine our expectation of objects through projection of our own impulses. The

culture quickly becomes an emergent property of the interaction between projected impulses and the actual behaviour of real carers.

In this way Klein predicted the findings from studies such as Beebe's (2011) in that she recognized the importance of very early interactions. However, she did not view the baby as being passively moulded by his experience of being cared for but as an agent bringing his own set of inborn or temperamental biases which play just as important a role in determining what he will make of the care he receives. For Klein the developmental task of the integration of the ego, at least in her later work, was understood as the task of integrating the internalised good and bad objects. The danger of doing this is that if a whole and flawed object is acknowledged then the source of all that is good is also the source of frustration and the good object will be vulnerable to the infant's attacks on the bad object. Psychic integration, then, is dangerous and can only be tolerated under two conditions. Firstly, that the innate sadism or capacity for RAGE, is not so strong as to threaten to obliterate the whole object, wiping out good along with bad. Secondly, experiences in the external world with real carers should not be so frustrating as to excite so much terror and/or rage that the infant feels the same danger of obliterating good with bad. (See sections on projection, introjection and whole and part-object relating and depressive and paranoid schizoid positions for a more detailed discussion of these themes.) Here the focus must be the tension between the dangers of remaining in a state of unintegration, as described by Bick (1986), and the potential dangers of psychic integration.

Through Beebe's work it has been seen that coherence through integration of the infant's psyche is something that must be instantiated in the throes of congruent and optimally contingent interactions. Freud identified the dynamic nature of the unconscious in that it is motivated to protect the ego from terrifying and so unthinkable thoughts, even if that is anti-developmental. When Klein brought this right back to the beginning of life, she realised that even the most primitive embodied cognitions could feel dangerous and be subject to inhibition. Only when integration of good and bad internal objects feels safe can the power of the infant's love for the good object be trusted to mitigate the hate or RAGE felt towards the frustrating

object. This is termed the depressive position because it depends upon having been able to mourn the idealised good object.

The state of unintegration in early infancy is a given of our premature birth, as compared with other mammals. This is then co-opted by a motivated unconscious to be put in the service of defence against psychic pain. Part-object relating initially arises out of the limitations in our perceptual apparatus and capacity to conceptualise. Very soon it is also the outcome of active splitting. This is necessary in order to build up a reliable and stable bank of experiences with a good object that can be introjected as coherent positive experiences evoking coherent, unconflicted feeling states. These are associated with good part-objects which become the basis for hope and a sense of self esteem. Only when splitting has served this purpose is the infant developmentally ready to proceed to mourning the ideal object and begin to relate to a whole object and to reality, not withstanding the fluctuations in tolerance of reality we all continue to be buffeted by.

Against this backdrop the capacity for curiosity and openness to experiences with a carer is revealed to be a staggering achievement, a triumph over inhibition and an act of faith in one's love and the goodness of our objects. Like any seedling, it is powerfully thrust into being with a life force that Panksepp captures in the SEEKING drive, but it is also soberingly fragile and delicate.

(6a-)

Denial of reality, avoidance, detachment and withdrawal or fragmentation/splitting and dissociation in mother and/or baby

It has been shown that affective states need to be affirmed through mirroring and appropriate attempts to enhance good or diminish negative states. This helps to build coherent narratives around feelings. Again, what Klein brings is an understanding that internal splits, i.e. active anti-coherence through dissociative defences, are used to deliberately not know what can't be borne. Whether it is frightening interactions with an actual carer or a frightening interaction with an internal object, efforts will be made to minimize the impact. At a physiological level, opiates are produced to dull perception of pain while the parasympathetic system causes stilling or a freeze response. At a psychological level, the dynamic unconscious prevents mental links. This works to isolate the source of disturbance. If it is an external world carer this might be done through gaze avoidance or attacks on the apparatus of perception – the blank stare of eyes that don't register what they see. If the source of disturbance is internal it cannot be escaped in these ways. Whether it be his own sadistic urges or the bad objects full of his own projected rage, that are then re-introjected, it is internal to his mind and he cannot flee it; he can only isolate it through attacks on his own capacity to make links and develop the mental apparatus for thinking, coherence and meaning.

Avoidance in the moment, then, can lead to a more profound psychic withdrawal from the world. This compounds internal fragmentation, that in turn hinders development from part to whole object-relating and from paranoid schizoid to depressive functioning, which in turn would make real world relating feel safer.

A clinical example might be helpful here. With one patient, PANIC and subsequently RAGE were activated by the end of the session. His fear of abandonment and existential terror were so extreme and his rage about being exposed to these experiences so intense that he could not trust that he would survive the fear or that his rage would not damage me. He was not able to repress all this so that it would be

beyond conscious awareness, where it might typically get expressed by forgetting to attend the next session. Instead, his only way out was to attack his own state of consciousness and he would have non-epileptic seizures five minutes before the end of sessions until we were able to bring the function of this defence itself into conscious awareness.

According to Panksepp, FEAR is a separate primal emotion system. Low-level electrical stimulation of the circuit promotes freezing, higher levels of stimulation lead to flight. Chronic arousal of this system in infancy can lead to neuroticism, anxiety disorders and depression. Appropriate levels of anxiety can promote learning and adaptation to environment. Anxiety is in part a capacity to perceive real threat and in part the infant's own RAGE or sadism projected out. He then adds to the real potential threats in the world an expectation of a retaliatory return of his own sadism. When interactions with a caregiver are frequently disturbing and provoke RAGE/sadism or the infant has a constitutionally low tolerance of anxiety, withdrawal from relationships and fragmentation or dismantling of the mental apparatus for perceiving relational intent is used to defend against anxiety-provoking experiences. This exacerbates the fearful experience of disintegration and lack of psychic skin as described by Bick and, in turn, is likely to compound the over-reliance on dissociative defences.

(6b)

**‘Themes of intrusion, pushing in, flooding, overwhelming, mastery or control’
and (6c)**

‘Themes of expelling, pushing out or back, or of rejection’

The infant research literature and the pilot for this study made clear how prevalent themes of intrusiveness and control are. Also, this can be manifest in the ‘riding negative into positive affect’ of the railroading kind of interaction described by Beebe and the more concrete physical intrusions of prodding and swooping.

There would seem to be various antecedents to intrusive behaviours on the part of the carer as well as different ways of thinking about the expelling or evacuating seen in both babies and carers. In the section on Containment it was noted that, when a carer has not introjected the capacity for containment, the baby’s projected anxiety has no internal space in which to be received. There is no digestive system for processing internal contents – no alpha function to work on those beta elements. This can lead to one or both of the following. Bion (1959) developed the idea of containment to include its opposite, the notion of a convex container. The carer may not only lack a concave psychical space but actually take on a convex shape. This not only bounces back the baby’s projections but also, through a perverse inversion of the nipple/breast, spout all the anxieties stirred in her through identification with the baby’s anxiety. The baby is then deluged by his own and his carer’s beta elements with no opportunity to introject the capacity to develop alpha function. There is a sort of flooding of the system, which breaks internal connections and leads to dissociative states. This flooding can look like a sort of intrusion as it speaks of a lack of boundaries between objects or around experiences.

The carer may then avoid emotional contact with the baby to prevent this happening or might become intrusive in the sense of being controlling. Here mastery of baby is resorted to in lieu of being able to marshal the mass of projected feelings. It is an attempt to stem the flow of projections for lack of trust that they could be contained, thought about, and made bearable.

If containment is available then the baby's projections can be thought about as a communication about his experience. If containment is not available, they are stripped of this potential and are simply psychic excreta. They are the evacuated contents of his mind that he cannot process. For the mother who cannot contain his projections this is concretely how it feels. One foster father told me that after his toddler son had finished raging against and denigrating him, 'he seems to be fine, but I feel dirtied and humiliated.' This carer had the capacity to use this information to come to know how his foster son felt. If he had not had this capacity he would have been vulnerable to retaliating or becoming controlling in an attempt to avoid these outbursts.

As has been discussed, intrusiveness is also an attack on the boundaries that separate people and support the process of individuation. For some carers the separateness of their infants provides a challenge to the narcissistic identification that they rely on to manage their own unmitigated existential anxiety. Their very early experiences of absolute dependency did not feel safe and so separateness was denied as a way of denying dependency. Panksepp shows how the SEEKING system can be over-aroused by perceived threat to survival leading to manic self-sufficiency and grandiosity or narcissism.

(6d)

‘Themes of trust, pride, seeking, desire or satisfaction and gratitude’

The kinds of narcissistic defences mentioned were thought by Freud to be the regressive return to states of primary narcissism. Behind the notion of primary narcissism is the assumption that early states of homeostasis would not require any mental processing because mental processing develops in order to bring the organism back to homeostasis. When all is good with the world, there is no need to discern a world or a self as separate entities; it is an unthought pleasure state. As Likierman puts it: ‘while he does imbibe maternal goodness, he does not differentiate it from the totality of his self-centered, bodily experiences’ (p.105). It seems likely that this state is often the dominant state for infants who have good enough care experiences. Similarly, it seems likely that those whose environment is not good enough would attempt to gain the state through defensive denial of separateness. However, it also seems necessary to acknowledge Trevarthen’s baby who is born with innate motives for companionship.

It seems likely that this sense-making SEEKING drive would accompany the experience of having one’s needs met. Why else would the feeding baby seek out his mother’s gaze? For Klein, there was no doubt that infants start life with relational emotions, even those considered complex, like gratitude and envy. This would seem to be in conflict with primary narcissism, which does not perceive that what is received is given by another. The capacity for envy and gratitude assume awareness that what is needed does not emanate from oneself. As discussed earlier, it seems likely that in moments when the infant is held aloft by his carer’s admiring gaze, he can perceive her separateness with pleasure, as detailed by Zeekyk (2006) and in these states is capable of love and gratitude. All these inborn capacities, sometimes augmented and at other times ameliorated by unconscious phantasies, would be part of the repertoire for managing the fluctuating affect states of early life. Likierman (2001) captures this when she describes how: ‘Goodness materializes to him, and then

vanishes, along with the feeding breast, leaving behind an impression that soon dissipates under the impact of new experiences. Retaining an inner sense of the object's goodness, or indeed having an established notion of goodness as an inner resource, are achievements for which all human individuals must struggle (p.106).

Perhaps it is not fanciful to think that such fleeting moments of gladness about goodness are a rudimentary sort of gratitude. Pride is also considered a contentious contender for innate emotions but pleasure in being seen or experienced as separate, in the ways that Zeedyk (2006) and Reddy (2008) show, are evident from teasing and playing with expectation and do look like pride. In these moments of play evidence that one exists comes simultaneously with the sense that one's existence is a good and pleasure-giving thing. This depends on trust that it is safe to be separate. Evidence of pride in the infant or mother is suggestive of trust in boundaries and dependable objects and the absence of a pull towards narcissistic defences in either.

(6d-)

‘Themes of persecution, frustration, rage/hate, fear, shame or envy’

For Klein, the main obstacle to forming a stable representation of a good object is the over-use of projective identification. Excessive projective identification both erodes the distinction between self and object and fills the object with badness that the baby has evacuated. Through projective identification, the baby can also feel himself to appropriate what is good in the object. This spoiling and stealing through identification was what Klein understood to be a primitive sort of envy, which will not allow anything to be both good and distinct from the self. The safety to know about one’s dependency and feel gratitude for what is bestowed is the only antidote to envy. As Gerhardt (2009) puts it ‘Envy is a fig leaf for desire’. To put it another way, frustration exacerbates envy, and in turn persecutory anxiety about the damage done through projective identification. Also, unmet desire produces a sense of abjection. Desire for someone or something that is not possessed is experienced as a shameful lack, which makes the baby feel abject. This is so intolerable as to spur further defensive projective identifications.

Frustration can be avoided through denial of need, as has been seen in avoidant and absenting behaviours, or it can lead to rage. According to Panksepp, RAGE is a primal emotion system that works in tandem with SEEKING to help with procuring and defending resources. The main trigger then is frustration and it is expressed as aggression. It is the precursor of anger and eventually can be distilled into hate but is, in its primitive form, thought to relate to resources. Likierman (2001) makes the link between this and Klein’s early Oedipus complex: ‘Any interference in the infant’s free access to the mother, such as normal delays in his care routine, triggers his apprehension of potential usurpers, and therefore stirs the most rudimentary Oedipal aggression’ (p71). Klein posits that there is an atavistic instinct driving the phantasy of mother’s body harboring rivals. This can seem rather far-fetched until we consider how much genetic inheritance we share with the hyena. Laurence Frank (1994) reports that:

‘The hyena produces infants that appear to be genetically programmed to attack and, in many cases kill their siblings. Even in captivity, their Cain-like tendencies are obvious. Newborn hyenas will try to ravage inanimate objects such as a rolled-up towel that are about the same size and texture as a sibling. Cubs may even attack a brother or sister that has not yet emerged from its amniotic sac.’

It seems unlikely that these cubs could provoke attack through threatening behaviour from within the amniotic sac. It does seem that it can only be understood as an instinct that has been selected for evolutionarily. It is such instincts that are thought to be the first material for phantasy life. The remnants of such an instinct seem a likely contender for the origins of primary envy or early states of paranoia and persecution, like those that typify the paranoid schizoid position. Klein argued that a phylogenetic explanation was the only possible explanation for the complex mental operations she saw evidence of in the phantasy lives of infants, operations that were not matched by their cognitive capacities for learning about the external world or their actual experiences in that world.

Again, Likierman (2001) describes how this becomes the greed and sadism that Klein saw in infants: ‘He has an inherent intuition that rivals and usurpers can be created within the mother, and this activates his possessive and controlling impulses towards the source of life supplies’ (p.70). So even if the mother’s body or person is not yet perceived as a whole, the infant has an emotionally charged, not just pleasure seeking, relationship with it or parts of it. It also follows that, where the hyena is born with sharp canines and the motor control to kill with them, the only ‘projectile’ in the newborn human’s motor repertoire is his faeces. One might argue that it is all he has with which to express his Oedipal aggression. So faeces become weapons in phantasy because the phylogenetic urge to use a weapon finds expression in the sensori-affective experience that is the best fit with the urge, in the young infant’s limited repertoire. The wish to attack is father to the thought (I attack) but via a concrete equation with a sensori-affective experience (in defecating I feel myself to be attacking you).

(6e)

Projection

And (6f)

Introjection

The concepts of projection and introjection have been integral to the discussion of previous sections and a definition here does not seem necessary. This section will focus on certain aspects of projection and introjection that have not been covered previously but do deserve consideration in their own right.

Gallese and Sinigaglia (2011) describe how 'Embodied Simulation theory provides a unitary account of basic social cognition, demonstrating that people reuse their own mental states or processes represented with a bodily format in functionally attributing them to others'. This theory is expounded to explain how we come to know the content of others' minds, that is to say how we read minds. However, it seems likely that such a mechanism would also bring with it the corollary of mind reading: a kind of mind writing. This mind writing – the business of projecting relational motivations, that we have experienced, into others, seems rather similar to the psychoanalytic conception of projection.

Projection and introjection, then are part of the act of creating the world through the medium of how 'I' feel about it. Sensori-affective drives meet satisfaction or frustration, leading to the projection of that experience into the object or part-object so that it becomes imbued with that emotional quality. These (part) objects are then introjected to create an internal world peopled with objects whose characters reflect the primitive and intense quality of the experiences they were forged in. Such encounters might have been dominated by sensori-affective anal or oral sadistic impulses or ideal encounters of bliss and pleasure. If we return to the observation of the 8 month old (p.14) with his mouse-doll it is easy to see that his phantasy of a

vengeful devouring was not excited by any actual qualities of the toy. The toy was not experienced as inflicting privation, but its nose in his mouth excited the urge to bite which put him in touch with his rage and then he seemed to project these depriving qualities on to the mouse doll. If we look at a feeding scene from around the same time in this mother and baby's life, as they prepare for her return to work, we can see the benefits of splitting and projecting in terms of preserving the good object.

He blinks a few times so lazily that he almost has his eyes shut but when he opens them he is looking into his mother's face. His hands are wondering up and down the bottle, and occasionally one reaches toward her face and lands, tapping gently, on her chest. Mother apologises to me for 'going quiet', explaining that he doesn't like her to talk to other people while he is feeding. I answer saying something about what a special time it is for him and it being understandable he wants her undivided attention. I am obviously not brief enough because, as though to prove the point, he pulls himself up spitting out the bottle to glare at me. I apologise and he returns to his feed, glancing back at me a couple of times out of the corner of his eye while Mother and I exchange a smile.

With the capacity to project the 'bad mother' qualities onto the mouse-doll toy, he has protected these precious moments with his actual mother from having to bear his attacks. Simultaneously, alongside this splitting and projection, something much more integrated is going on. The mind of the mother is wanted with the breast – she is becoming whole and flawed, flawed in that she is faithless in talking to me mid feed! This minor indiscretion on her part is not enough to derail his enjoyment of the good feed, or the process of it being introjected unsullied to sustain hope. His rage is discharged with the doll and will not interfere here. The simultaneous processing at various developmental levels is evident when he glares at me. In this moment he seems to be doubly motivated. Firstly, by a murderous instinct, perhaps related to that of the newborn hyena, killing me off with his eyes as a competitor for the vital resource of his mother's attention. However, simultaneously, something more conscious and

akin to the volition of social agency is happening. He knows he has put me in my place and I feel it.

Relational phenomena between the infant and part-objects are experienced at the sensori-motor-affective level. These are not events perceived and recorded in the mind but a concrete, or bodily, internalization of the experiences. This, in turn, is both the beginning of introjection and the first concrete symbolic equation that forms the basis for symbolism proper. Meaningful relational experiences can be co-created with real external figures and elements of those figures, and elements of the experience of relating to them, are concretely taken in as sensori-affective dynamic phenomena. These begin to 'take on a life of their own' in complicated ways, as has been seen. If the infant's carer can only offer a convex container then introjection of the model for containment is absent but the contents will also be blocked and this will lead to an impoverished and bizarre internal world, because of the lack of organizing experiences or coherent and complete experiences.

Bick (2011) also deepened our understanding of the significance for development of the capacity to introject. The uncoordinated, unintegrated self that feels to be dissolving into not being can become coherent and structured, with a delineated boundary that affords existence. Bick observed that as well as stimulation of the physical skin through holding, the mental corollary of feeding at the breast was an essential part of this work. As the nipple is taken into the open mouth and milk taken into the body, a sense of a space that can be taken into is developed and with this the beginning of an internal world into which good objects can be introjected.

(6g)

**Whole and part object relating and
the paranoid schizoid and depressive positions**

Continuing with the mouse-doll material from p14, according to Klein, we can assume that the attacked, and so vengeful, mouse-doll-part-object will be introjected and form that part of the super-ego that is vengeful and punitive. While the dominant mode of relating is part-object then this will remain a persecutory anxiety. When he is able to know that his attacks have been against the same object that he loves, he will experience depressive anxiety but he will also be able to develop concern out of this guilt.

Through containment, a 'good object' or 'primal skin', serving the function of containment is introjected. In turn, these help to further delineate an internal space into which further personality-enriching introjections can be made. The internal world then comes to be peopled by unconsciously experienced figures with capacities and attributes that come to make the sum of the individual (Klein, 1935). The projection by the infant in the process of projective identification and containment described above is thought to be the result of a primitive splitting. This is done in order to save the good object, on which the infant is so dependent, from being associated with or spoiled by the bad objects/bad experience. This is the paranoid schizoid position. From a Kleinian perspective then, the work of constructing a healthy self is thought, in part, to be the integration of good and bad experiences/objects so that the self and other can be perceived or conceived of as 'whole' and flawed. This is the depressive position (Klein, 1945). Likierman (2001) describes how 'the whole mother initially represents a despoiled perfection and provokes sorrow and indignant rage in turn. Recognising a whole mother thus amounts to a psychical weaning from the partially recognized mother, the good breast of early infancy' (p.101).

Excessive projective identification leads to a distortion in the perception of external objects and the introjection of bizarre objects who are Klein's 'Figures wholly divorced from reality'. In the depressive position there is less persecutory anxiety, which requires less splitting and projecting, so that relating can begin to be dominated

by 'identifications which approximate more closely to reality' (p. 82 Likierman). The degree to which infantile defences are essentially interpersonal and adaptive or intrapsychic and paranoid schizoid in nature is debatable (Stern, Green, Alvarez, 2000) but it seems likely that both are at play and interact to create the phenomena we can observe. It is hoped that this study will illuminate how such phenomena can be discerned through close observation and countertransference experience.

Chapter 2

Methods

Section 2: Overview of the aims and design of this study

The primary aim of this study is to capture the process by which psychoanalytic infant observation can inform clinical assessment of parent-infant relationships. The secondary aim is to begin to evaluate this approach through comparison with another well-evidenced assessment tool – the Care Index (Farnfield 2014). Care Index ratings were already available for the mother/infant pairs studied and the ratings were based on the same video-taped interactions that were observed through a psychoanalytic lens in this study. The data produced by infant observation is qualitative. An observation transcript is a narrative of the interactions observed, the feelings stirred in the observer by watching the interaction and deductions about the nature of the internal worlds of the mother and infant. In order to distill this rich qualitative data into quantitative data that can be readily compared with the Care Index scores, a Psychoanalytic Infant Observation Scale was developed. This is an amended version of Dr Anthony Lee's Relationship Scale (Franchi et al, 2014), which was developed to track the transference relationship between psychotherapist and child patient during a psychotherapy session. This tool may also have the potential to be developed as a clinical assessment tool (see chapter 5).

Section 2.1: Aims and methods of the qualitative arm of this study

One aim of this study is to make explicit the process of extrapolation by which knowledge about the unconscious phantasy life of psychoanalytic patients, as built up over decades of field research in the consulting room, enable us to estimate or infer the value or meaning of what is observed between mother and infant, beyond the range of the present observation. The clinical tool of tracking transference and countertransference phenomena is the means by which much psychoanalytic knowledge has been established. In this study, as with psychoanalytic infant observation generally, countertransference is also what illuminates the links between

the observable interpersonal phenomena and the intra-psychic phenomena that are thought to mediate it.

Participants

It had been hoped that the selection criteria for mother/infant pairs would limit the age range of babies on Admission so that differences in developmental stage would not confound differences between relationship quality and style of interaction. Similarly, it was hoped that the interval between Admission and discharge could be kept within a range between pairs so that the impact of treatment was not confounded by developmental shifts. In some ways this is a false separation because treatment always utilizes developmental drive to effect change.

It was also hoped that maternal diagnosis and gender of the baby could be controlled for. In practice, from the available sample it was not possible to limit the range of ages and only have mothers with a diagnosis of depression and no secondary diagnosis. It was possible to exclude mothers with secondary diagnoses of psychotic symptoms and only include those with secondary diagnoses of anxiety.

During their time on the Mother and Baby Unit (MBU), mothers were treated for their own mental health and offered treatment for their relationship with their baby. This treatment, in part, involved being filmed interacting with their baby and then watching the video back with a clinician who supported the mothers to reflect on their own and their baby's experience during the interaction.

The Care Index scores range from 0 to 14 for both maternal sensitivity and infant cooperativeness, with higher scores representing better functioning in these domains. The Care Index manual states (communication from Dr Susan Pawlby) that '5-6 generally indicates the need for simple parent education or short term intervention; 3-4 generally indicates the need for parent-infant psychotherapy; while 0 to 2 indicates the need for individual psychotherapy for problems of their own'. Out of a possible combined maternal sensitivity and infant cooperativeness score of 28, a pair with severe relational difficulties would score 4 or below and the mother would likely require individual psychotherapy and a pair with moderate relational difficulties

requiring parent-infant psychotherapy would have a combined score between 6-8. A pair with minimal relational difficulties would have a combined score between 10-12 and require parenting education. A score of 13 or above would suggest no need for intervention.

It was hoped that it would be possible to compare four pairs, two with Care Index scores on Admission indicating severe relational difficulty. One of these would be selected for having been responsive to treatment and the other for not improving during treatment. A third pair would be selected for only having minimal relational difficulties on Admission, either improving or not and the final pair would be selected for having scores above 6, which would suggest that there was no cause for concern about the mother-infant relationship on Admission or discharge.

In practice there was only one pair that met all the other criteria with a combined score of 4 or below on Admission so the second pair were selected for having a combined score of 5 on Admission. The latter pair's relationship did not improve a great deal and they had a combined score of 7 on discharge. The pair who scored 4 on Admission had a relationship that was markedly improved during their time at the MBU and they had a combined score of 13 on discharge.

The third pair were at the lower end of the 'moderately impaired relationship' range on Admission with a combined score of 6. Their relationship was only minimally responsive to treatment and a combined score of 8 on discharge meant that they were still in the same range deemed to be in need of parent-infant psychotherapy to help them with their relationship. The fourth pair were in the 13 – 24 range, indicating that the relationship did not require support yet there was still an improvement during their stay at the MBU from 15 to 19 combined score (See table 1 for details).

	Mother-infant pair				Infant	Mother
	Care Index scores					Maternal diagnosis
	Admission		Discharge		Age	
1 (292)	Maternal Sensitivity	Infant Co-operativeness	Maternal Sensitivity	Infant Co-operativeness	Gender	Admission
	2	2	7	6		Discharge
	Combined score		Combined score		weeks	weeks
	4		13		M	14
						23
						ICD9, F32.2
						Severe depressive episode without psychotic symptoms
2 (053)	Maternal Sensitivity	Infant Co-operativeness	Maternal Sensitivity	Infant Co-operativeness	Gender	Admission
	4	1	3	4		Discharge
	Combined score		Combined score		weeks	weeks
	5		7		M	19
						26
						DSMIV, 296.20
						Major depressive disorder
3 (090)	Maternal Sensitivity	Infant Co-operativeness	Maternal Sensitivity	Infant Co-operativeness	Gender	Admission
	2	4	4	4		Discharge
	Combined score		Combined score		weeks	weeks
	6		8		M	15
						22
						DSMIV, 296.33
						Major depressive disorder
4 (303)	Maternal Sensitivity	Infant Co-operativeness	Maternal Sensitivity	Infant Co-operativeness	Gender	Admission
	7	8	10	9		Discharge
	Combined score		Combined score		weeks	weeks
	15		19		M	16
						24
						ICD9, F32.
						Severe depressive episode without psychotic symptoms

Table 1 Participant characteristics

Development of the Relationship Scale to create the Psychoanalytic Infant

Observation Scale

Initially, a wide selection of videos were watched, not including any that were to be selected for this study, in order to get a feel for the range of relationship difficulties and the various different ways they manifested during the videos. This also provided an opportunity to reflect upon the differences between observing in person, and in real time, and observing via a video and, in particular, it highlighted the issue of how the transference and countertransference experience was present but changed by its journey through the clinician and lens in the room.

A pilot observation write-up was conducted using the form from the Relationship Scale for writing up psychotherapy sessions (see appendix i). The questions prompting reflection on countertransference experience and the speculation about internal world phenomena of the observed did much to draw out these aspects.

Section 2.1a: Development of a protocol for observing the video material and writing up the transcript

Before embarking on the pilot study the intention had been to adhere to the main tenets of Psychoanalytic Infant Observation. The researcher would prioritise being present for the viewing in the sense of being emotionally receptive to the impact of the whole experience. This would mean not taking notes or pausing the video. It had been predicted that the video would need to be watched many times in order to be sure that the fine grain detail of only three minutes of interaction was registering. In practice this did not seem to work. This method is very good at extracting a broad-strokes narrative of the salient moments, their order and relationship to one another from an hour-long observation. Indeed, such an observation would lose clarity if encumbered with too much second-by-second detail. However, it was not a good way to accurately perceive the sequence of events when each second counts. With Beebe's millisecond-by-millisecond microanalysis using advanced technology in mind, it was decided that a middle path needed to be taken and a new protocol devised. The videos would be watched through uninterrupted once then general impressions and countertransference experience recorded. They would be watched through again in a similar way, first with a focus on the mother and what seemed to be going on for her,

and then focusing on the baby and making clinical deductions about his experience. Following this, the first minute was watched again to try and pick up more of the shape of sequence, the contingency and reciprocity or lack of it. Subsequently, a narrative of that minute was written, and the same procedure repeated for the second then third minute. It was also then necessary to watch it through again, pausing at each moment that the narrative was inaccurate (and this happened a great deal!) to make corrections. The degree of inaccuracy with such short pieces of video was interesting in itself leading to speculations about how powerfully conscious recall was being impacted by gestures or facial expressions that were not registering consciously, as was shown in Beebe's work (see discussion in introduction). When the observation was considered complete, or complete enough because it became clear that this fine-tuning could go on almost infinitely, the questions pertaining to counter-transference and internal world deduction were answered.

Integrating Supervision

It was hoped that it would be possible to emulate the conditions of the Infant Observation Seminar by having one of the supervisors read the transcripts and associate to the material and to theory to deepen the researcher's understanding of what she had brought; that is, to draw out what the observer had brought in her write-up but had not understood. The new understanding would then be recorded in the 'Further Thoughts in the Course of Supervision' section of the transcript. This was not possible due to time restraints but any future projects to develop the Psychoanalytic Infant Observation Scale should include this process. However, the opportunity to return to the transcript at the textual analysis stage did replicate some of the advantages of supervision by creating a triangular space in the mind of the observer. (see chapter 4 for a fuller discussion of this). Future work with the Psychoanalytic Infant Observation Scale would also require normative testing, with raters being taught how to score pairs in the healthy and severely relationally disturbed ranges.

Section 2.1 b Development of a protocol for doing textual analysis of observation write-up

The original intention had been to do an observation write-up and use Grounded Theory to analyse the text of that write-up. The researcher became concerned that as a method of textual analysis Grounded Theory might put too much emphasis on what emerges from the text and not give enough explicit acknowledgement to what is brought to the text. The researcher was concerned that the unconscious, inter- and intra-personal phenomena would not be captured using this method. An entirely bottom-up method would be the only place to start with completely novel phenomena. However, it seemed disingenuous to claim that the emergent themes proceeded along a linear and unidirectional path out of the material. Clearly they were a product of an interaction between the text and the researcher's knowledge and training in psychoanalytic theory and Infant Observation. This was also true of the observations themselves, which had been informed by this background. The researcher intended to use her knowledge and experience to provide an organizing framework for making sense of the material and wanted a form of analysis that would capture rather than obscure this. Without too much worry about adhering to a particular method of textual analysis, the researcher returned to the transcripts to see what emerged. It was striking how this opportunity of returning to the transcript of the observation after a period of time enabled her to look afresh at the same material and compare this with what she remembered and what was stirred by both the transcript and her memories of the experience of doing the observations and writing the transcripts. It became clear that this was an important opportunity to enrich the data with these later reflections and their hindsight perspective. It also became clear that this was not truly a textual analysis but could be more accurately described as a reflective space.

It was at this point, that the researcher was struggling to know how best to mine the data produced by the transcripts, that Dr Anthony Lee, one of the supervisors for this study, suggested amending his Relationship Scale. This is a scale he had developed to track the relationship, including the transference relationship, during a session of child psychotherapy. Many of the items on the scale needed to be adapted to work for an observation of an interaction between two others. However, perhaps surprisingly, many of the items remained similar or the same in essence, although there were

deletions and additions, based on the literature from psychoanalytic theory and infant research. The items on the scale made implicit reference to theoretical models and research findings, and so the top-down path was also made clear. Using the scale also brought the enormous advantage of being able to capture some of the qualitative data as quantitative data, which opened up the possibility of comparison with the Care Index scores, and potentially other quantitative data in the future. It was decided that an attempt should be made to capture numerically the qualitative data on internal world inferences and transference phenomena from the questions at the end of the observation write-up form. This meant a 6th domain with seven items in it was added. **As the researcher simultaneously developed the scale and organised the literature review, it became clear that the labels for items on the scale and headings for the literature review coincided. In this way the part of Grounded Theory that requires emerging themes to be identified had happened but in a way that acknowledged the bidirectional flow from theory to observation material and vice versa.**

Before having to withdraw from her role as clinical supervisor, Louise Emmanuel watched the pilot Admission and discharge videos and her comments were incorporated under the relevant section of the observation write-up form. The supervisor's comments enriched the researcher's understanding and there was broad agreement about the salient themes and areas of concern within the observed relationship.

Section 2.1c: Test of clinical usefulness of transcript for informing formulation

Dr Goldberger, the subsequent clinical supervisor of this study and a senior Child Psychotherapist specializing in parent-infant psychotherapy, used the transcripts of videos on Admission and discharge for a sample of two mother/infant pairs to try to develop a formulation and treatment plan for them. He was asked to reflect on whether or not the transcripts provided sufficient information of the kind that would enable him to use them as the basis for an assessment of care needs. To help him evaluate this, he used the items on the Psychoanalytic Infant Observation Scale as a way of checking whether the transcript did touch on all the issues represented by the items on the scale. This exercise suggested that there was enough relevant information pertaining to the issues identified as salient in the Literature Review. At the end of the

clinical formulation form (see appendix (x)) he was asked explicitly whether the internal world deductions made by the observer, mostly informed by her countertransference experience, were important in helping him to formulate the relational difficulties described.

Section 2.2 Aims and methods of the quantitative arm of this study

Section 2.2a: Development of the PIOS

There is much evidence that the intergenerational transmission of mental health difficulty is mediated by maternal care and in particular the degree of maternal attunement. As stated, this study hopes to illustrate how this, in turn, is mediated by the infant's internal world. While the Psychoanalytic Infant Observation Scale does attempt to capture maternal sensitivity, it also speculates about the defences employed by the baby to manage relational stress. Any convergence in the findings is likely to only reflect similar ratings of maternal sensitivity but this in itself would be encouraging, in terms of the validity of those items on the scale, because there is a wealth of published evidence supporting the validity of the CARE-Index (Farnfield et al., 2014).

Organisation of scale

- 6 domains
- 5 of which describe observable aspects of the relationship:
- 1 Making contact, 2 Mutual understanding, 3 Making relationships, 4 Maintaining relationships, 5 Making sense of the world
- 6th domain describes Inferences about the internal world phenomena mediating the behaviours observed and the observer's countertransference experiences
- Each domain contains between 3 and 6 items

Measurements for comparison

- Degree of polarity on each item of the scale. A score is given for each of the three minutes of each video and the mean calculated to represent the overall

functioning for that item taking into account the fluctuation over the course of the 3 minutes. The range is 20 spanning -10 to +9 (inclusive zero).

- Differences between relationship difficulty during Admission interaction as compared to discharge interaction.
- Differences in severity of relationship difficulty between mother-infant pairs selected.

- Differences/similarities between PIOS ratings and Care Index ratings
- Differences between PIOS scores and salient themes of observations of same video made by different observers.
- Differences/similarities between PIOS ratings and Care Index ratings

Developing the PIOS through trying to code the pilot observation transcript

The pilot observation was then coded using the Psychoanalytic Infant Observation Scale and this led to further amendments to the items as certain items seemed to be duplicated in that they were always scoring similarly and lacked clear differentiating features. These were deleted while others were added to capture salient themes of the observation that were not being captured by the scale. Through this process, the researcher came to realise that there was no opportunity in this process to make it clear why a particular observed event was given the score it got on the scale. It became evident that some form of textual analysis was necessary to explicate the rationale behind scoring decisions. (See appendix v). A few lines of observation, including responses to the questions about transference and deductions about the internal world, were put into one column. In the next column the relevant item from the scale, and whether it was positively or negatively charged in this instance, was recorded. For example 4a+ meaning that mother *does* understand or bear the full range of feelings expressed by the baby. This, in turn, led to the researcher noticing that the act of scoring, i.e. the act of considering each line of the observation and which items on the scale might be relevant to it, in itself enriched the analysis of the material. It also made it much clearer what was missing from the scale. There were themes that were fruitful, in that they were leading to more attuned clinical

deductions, but had no relevant item in the column next to it. This led to further amendments and additions to the items.

Section 2.2b: Inter-rater reliability test for PIOS scoring of two transcripts

In order to test the reliability of the Psychoanalytic Infant Observation Scale an inter-rater reliability tester, who was already trained in Psychoanalytic Infant Observation and Video Interaction Guidance, was trained in using the PIOS. The tester was talked through the rating scale, then given 1 minute from the pilot transcript and asked to rate it. The researcher went through this with the tester, taking her questions and uncertainties. The researcher was then able to judge, from the ratings that had previously been applied, whether the tester was apprehending the meaning of each item. The tester was then given the next minute and this process was repeated until the tester was trained up to a standard where she was adequately familiar with the scale. The tester was then asked to score the transcripts for a discharge video and the Admission video for a different pair, representing 25% of the whole sample. With a sample size this small there is a potential problem in that individual variance may be such that differences between groups may not come through. This also affects the inter-rater reliability test as well as the comparison with the Care Index score.

Pilot inter-rater reliability testing

The pilot video was taken to the Infant Mental Health workshop - a group of trainee child psychotherapists and allied professionals meeting weekly at the Tavistock to discuss work with parents and infants. All but one had done the Infant Observation Course. The researcher hoped to test whether a number of observers (8) would give similar scores for some of the items in the 6th domain. Most items, being based on the Relationship Scale had been found to have good inter-rater reliability in previous studies (Franchi et al. 2014) but, understandably, the group wanted to discuss the themes that were most salient to them, not what the researcher wanted them to focus on. This did at least confirm that there was broad agreement about the most salient themes. Some struggled with the notion of transference relationship in this situation and it became clear that inter-raters would have to be trained using the pilot and given the opportunity to score all items to build up to the 6th domain items, as the researcher had.

2.2c Development of PIOS out of the Relationship Scale

The PIOS was developed in this study in order to describe numerically the findings of the observation material so that it could be compared with the Care Index scores available for those dyads observed in this study. It was conceived to meet this challenge of evaluating the findings of the qualitative data. The primary aim was not to develop an assessment tool for clinical use or other research projects. The aim was to capture numerically, the focus of the qualitative arm of the study, which was not only the intra-personal and inter-personal phenomena of an interaction but also something of how this is inferred from transference phenomena. For this reason, Dr Anthony Lee's Relationship Scale (see appendix i) was chosen as the appropriate starting point.

The relationship Scale was originally developed from a clinical perspective to capture the progress made by a child in the course of a therapeutic relationship. The original dimensions were worded to represent the hypothesized aspects of the growing relationship between the child and therapist, understood from a psychoanalytical perspective, that would indicate the development of a greater emotional, inter-personal connection. The items of the Relationship Scale were modified to produce a scale for caregivers as a means of evidencing whether the development witnessed between the child and therapist could also be detected in the child-caregiver relationship.

As my supervisor, he suggested I try using it because it had been developed to capture the transference phenomena from which clinical deductions could be made about the internal worlds of participants. It was clear that amendments would need to be made to take account of basic differences. The subject of study for the Relationship Scale is the relationship between psychotherapist and child patients in psychotherapy, as such the clinician using the scale is a participant observer. This is not so for the clinician using the PIOS and the transference to the observer/clinician travels through the clinician and camera in the room, taking on particular distortions there. Many items remained the same or very similar but some had to change to reflect these differences. Some irrelevant items were removed and many items were added, based on themes emerging from the observation write-ups and the literature review. The structure of the literature review and the items on the scale emerged simultaneously as it became

clear that labels for items in the scale were also helpful headings for sections in the literature review, and vice versa. The researcher further developed the scale during the 'Further Reflections' analysis by noting the codes of the relevant scale items in a column between each line of the observation and the column with the 'later reflections' column (see appendix v). When it was noticed that two codes were always applied together, they could often be collapsed into one new item. Conversely, when a line of the observation seemed important but there was no relevant code to apply, a new item was developed to describe whatever had been captured in that line. As the new scale evolved into something very different from the Relationship Scale, Dr Lee suggested that it might have outgrown the working title of 'Amended Relationship Scale'. The purpose of the scale is to capture what is seen during a psychoanalytic infant observation, as taught using the method developed by Esther Bick at the Tavistock. In recognition of this the name Psychoanalytic Infant Observation Scale (PIOS) was chosen.

2.2d Existing assessment tools for identifying risk and strengths in the parent infant relationship

Although PÍOS was developed for the primary purpose of rendering numerically the observation write-ups of this study, the possibility of exploring its potential for clinical assessment or research, has also emerged. However, any future development of the PÍOS in this way would need to be informed by a review of existing tools in the field of infant mental health. What follows is a preliminary review of some of those tools.

The main difference between the approach taken in this study and the others to be described is the explicit use of countertransference experience to inform the observer about that which cannot be directly observed.

The Care Index was the tool used to assess the relationship between the dyads in the videos studied here and to monitor their progress during treatment at the MBU. The Care Index was originally developed by Crittenden in the early eighties as a research tool but since has been used widely in just this way in clinics across the world. It was developed out of attachment research and Crittenden's work with Bowlby and Ainsworth. The Care Index is premised on understanding that certain parenting styles

make infants vulnerable to distress which they attempt to protect themselves from by developing strategies adapted to a particular parenting style in order to minimise distress.

The coding is based on maternal sensitivity, control and unresponsiveness. Coding of the child's behaviour is around co-operation, compulsivity, difficultness and passivity. Maternal sensitivity is defined as the capacity to accurately perceive and interpret the infant's behaviours and to offer appropriate responses that alleviate distress and promote positive interactions that give pleasure. The coding of the behaviours of both carer and infant are from the perspective of their interactive partner, so there is recognition that the baby brings temperament and strategies that impact the carer. Thus, the direction of causality is not only from carer to baby but also from baby to carer. The carer's bodily, vocal and facial expression of affect and affection are coded. Also her capacity for contingency, turn-taking and awareness of what might be developmentally appropriate. The degree of the carer's need for control and her unresponsiveness are also coded. The function, not frequency, of behaviours is coded so that misleading behaviours such as false smiles can be coded correctly. This implies that inferences are being made about internal phenomena that are not directly observable, although this is not made explicit. The Care Index also enables observers to code the dyad's capacity for reparation; the ability to repair communication failures in their interaction, as described by Tronick (1989). There has been some criticism around a gap between maternal sensitivity and infant attachment status (Belsky and Fearon, 2008) and Dr Pawlby has since developed a tool that she now uses at the MBU which also takes into account maternal mind-mindedness (Pawlby, et al, 2010), as specified by Mainz et al (2001). Mind-mindedness has much in common with Fonagy's (2002) work identifying mentalisation as the maternal capacity that most promotes infant attachment security. However, the decision to use the Care Index codes available for our dyads was based on the strength of 40 publications supporting the validity of the CARE-Index in identifying dyads at risk across the world and over 4 decades.

Another of the earliest tools to systematically use videotaping was the Parent-Child Early Relational Assessment. It was developed by Clarke (1985), on the principle that

close observation of a particular set of interactive episodes could reveal a great deal about the past and likely future patterns of relating between mother and infant. It was initially developed for use with parents suffering with psychiatric illness but has since been shown to have universal application. It studies the child's experience of the carer and the carer's experience of the child as well as the behavioural and emotional characteristics each bring to the interaction. Four types of interaction are filmed over a period of 20 minutes including free play with toys, an age appropriate structured or teaching task, a brief separation and a feed. A successful teaching activity requires scaffolding, which in turn requires that the adult notice where the baby is at in order to offer experiences in their 'zone of proximal development' (Vygotsky, 1978). Free play with toys, on the other hand, requires that the pair can negotiate something open-ended and evolving. Such play is only likely to succeed if each partner can balance spontaneous or novel offerings with a capacity to take account of what the other brings and then offer contingent responses so that the interactions are characterized by reciprocity. The feed is likely to illuminate issues of control and sensitivity. It is also an interaction repeated many times daily from birth and so comes to be a particularly rich source of information about the dyad's relationship. The brief separation functions in a similar way to the Strange Situation, in that it reveals the baby's capacity to make use of his carer in a stressful situation, which in turn reveals something about the quality of their relationship as well as his temperament.

A training manual sets out how to code duration, intensity and overall amount of parental affect, attitudes expressed toward the child, parenting style and various kinds of involvement with the child including social initiation, physical and eye contact, verbalizations, reading cues and emotional availability and connectedness. Coding of the child's behaviour covers social initiation and affect, bodily communication and responsiveness. The functioning of the dyad as a system is also coded in the areas of mutual involvement, joint attention, reciprocity, enjoyment and tension. The manual stipulates, that in order to code all 65 items, the four episodes should be watched 8 times and raters must be trained to establish inter-rater reliability. PCERA has been shown to be effective at identifying risk in parent-child dyads (Clarke, 1999). It is used to inform formulation and diagnosis and to monitor progress and evaluate interventions.

The Parent-Infant Relational Assessment Tool (PIRAT) was developed within the Parent-Infant Project (PIP) at the Anna Freud Centre. PIP is a multi-disciplinary approach to work with severe relational trauma between parent and infant in the context of severe parental mental disturbance, often also in the context of other traumas such as intergenerational trauma and historical abuse and/or flight from political persecution and even genocide. The project is psychoanalytically informed and built upon an understanding that the birth of an infant awakens a parent's own infantile vulnerability, which in such contexts feels to be extremely dangerous – a threat to the parent's psychic survival. Attachment depends upon such identification with the baby feeling safe. The PIP has developed this psychodynamic and attachment-based model to work successfully with this high-risk population. PIRAT was developed to systematise this clinical understanding so that the practitioners at PIP making home visits, such as health visitors, could pinpoint observed behaviours that suggest defences are being used that put the quality of the parent-infant relationship at risk.

It differs from PCERA and is more like the Care Index and the PIOS in that it can be applied to any clinical encounter with a dyad or other naturalistic observation opportunity and does not require that specific activities be observed. It looks at the interaction from the perspective of each partner in the dyad. The infant is coded according to the degree to which he seeks contact and responds to it; his ability to communicate needs and to be comforted. The quality of this contact is also coded in terms of whether it is predictable; aggressive/attacking; clinging; frightened/wary; sexualized; dissociative or lacks pleasure. The parent is coded according to her initiation of physical and emotional contact, her playfulness and pleasure in parenting and the quality of this contact in terms of how consistent and so predictable she is, how controlling/intrusive; frightening; sexualized or avoidant she is.

In a chapter of 'Relational Trauma in Infancy' (2010, ed. Baradon) by Broughton called Measuring Trauma in the Primary Relationship, the PIRAT and how it is used is very well illustrated. The chapter describes a study in which a team of clinicians each use the PIRAT to rate video-taped interactions and then film their discussions

about the scoring decisions they had made. The chapter uses transcripts of these discussions to highlight the highly complex process of trying to infer the infant's state of mind based on their observable behaviour. For example, can we conclude that avoidance must be born of fear of contact or might it be the infant's way of preserving equilibrium until 'good' contact is available? While the clinicians use phrases like 'I didn't feel that he was.....' there is no explicit reference to any attempt to mine countertransference phenomena. There was one example where the clinician offered that if she had not known he was sleeping she would have thought the baby was dead, and this was thought about in terms of picking up on an absence of liveliness. Broughton does also write about the clinicians 'struggling with their countertransference feelings' and goes on to speculate about the kinds of fantasies the mother may have about a baby conceived through rape. Yet, neither transference phenomena nor the role of conscious or unconscious fantasy get articulated in the PIRAT as a tool in the way that they are in the PIOS. In the PIOS the observation pro-forma has an explicit prompt to describe transference phenomena and the rating scale has a domain of items describing unconscious phantasy phenomena. It is this difference that might earn it a place in the field of parent-infant relationship assessment. However, it is when assessment tools take account of their theoretical backgrounds that reliability is compromised because of loss of agreement between raters (see Chapter 5 for further discussion). Here a degree of agreement between the Care Index and the PIOS is being presented as borrowed validity. However, it would be interesting to see if some of the inevitable differences emerge *because* certain theoretical underpinnings sharpen a tool's sensitivity to particular relational risk factors. This would require a longitudinal study observing the trajectory of relationships after early assessment using a variety of tools with different theoretical backgrounds.

Below are listed all the aspects of relating covered by the PIRAT, the PCERA and the Care Index. Next to them is noted the code for an equivalent in the PIOS. Where there is no equivalent, or that aspect of relating is not explicitly covered by a PIOS item, it is highlighted in bold. If the PIOS were to be developed for wider uses it would be important to consider incorporating these aspects.

List of aspects of relating that are represented by items on the Pirat, PCERA and Care Index

Controlling – 6b	Clinging - 5c (not explicit)	Tension (not explicit)
Intrusive - 6b	Wary – 1a, 6d	Responsiveness 2a, 4a
Frightening – 6d	Dissociative – 6a	Mutual involvement 1b, 4d
Sexualized – 4e (not explicit)	Seeking – 1a	Joint attention -5a, 5b
Avoidant -1a	Can be comforted – 4b	Reciprocity- 4d
Physical contact – not explicitly coded	Social initiation – 3b	Contingency- 4d
Emotional contact – 1b, 2a, 4a, 4c	Eye contact – 1a, 1b (not explicit)	Reparation (not explicit)
Playfulness – 3b	Verbalizations – 3a	Mentalisation (not explicit)
Pleasure/unpleasure – 6d	Reading cues – 1b (not explicit)	Bodily, vocal and facial expression of affect and affection – 4c
Predictable – 4d (not explicit)	Emotional availability – 4a	Turn-taking – 4d (not explicit)
Aggressive/attacking – 6d	Connectedness – 4a	
Joint attention -5a, 5b	Affect – 2a, 6a	Developmentally appropriate – 3c (not explicit)
Reciprocity- 4d	Bodily communication (not explicit)	Maternal sensitivity – 1c, 2a, 2b, 4a, 6a
Control -6b	Unresponsiveness – 2a, 4a, 5c	
Co-operation	Passivity – 5d, 4f, 2c,	Misleading behaviours such as false smiles – 3d
Compulsivity		
Difficultness – 6b, 6c, 6d		

Chapter 3

Results

3.1. The Psychoanalytic Infant Observation Scale

In this section, the principle findings derived from the Psychoanalytic Infant Observation Scale will be considered. This will be undertaken by examining the raw data from the scale drawn from the transcripts and textual analysis for the four cases. For each case, the Admission and discharge data will be contrasted, with attention given to the nature of the mothers' presenting issues, and the profile across the Psychoanalytic Infant Observation Scale. In this way, the primary aim of this study can be explored. i.e., to capture the process by which psychoanalytic infant observation can inform clinical assessment of parent-infant relationships.

Further, as an adjunct to this primary aim and as a tentative examination of the clinical utility of the transcripts, a senior clinician read and reflected on the transcripts as a possible source of material to make a clinical formulation of the mother-infant pair and his comments will be presented.

		Case 1	Case 2	Case 3	Case 4
		292	053	090	303
Making Contact	Adm.	+38	-32	-33	+57
	Dis.	+18	+29	+23	+79
Mutual understanding	Adm.	-14	-26	-42	+45
	Dis.	+8	+43	-17	+63
Making relationships	Adm.	+17	-16	-37	+50
	Dis.	+11	+42	+19	+101
Maintaining relationships	Adm.	+69	-17	-19	+119
	Dis.	+14	+43	+19	+163
Making sense of the world	Adm.	+34	+35	+20	+53
	Dis.	+92	+48	+26	+64
Countertransference	Adm.	-36	-63	-63	+42
	Dis.	-33	-17	-23	+77

Table 1 Psychoanalytic Infant Observation Scale (summary of data across the four cases)

3.2 Results from the clinician using the transcripts as a source of clinical material

The clinical supervisor was asked explicitly whether the internal world deductions made by the observer, mostly informed by her countertransference experience, were important in helping him to formulate the relational difficulties described. He responded that they were. Furthermore, in this small sample of two, the treatment plans that he described as appropriate for the pairs coincided with the treatment plans suggested by their Care Index score.

For pair 053 at Admission Dr Goldberger commented that: ‘The transcript has completely guided my formulation and on the basis of this I feel that one would be able to offer a treatment that focused on both the manic presentation of mother and her defence against disappointment as well as the relational difficulties this infant is suggesting and to hopefully build more confidence between the two of them as a base to a firmer relationship.’ The Care Index score of 5 for this video, which is on the borderline between a combined score of 4, indicating the need for individual psychotherapy for mother, and a combined score of 6 indicating the need for parent-infant psychotherapy is interesting. Dr Goldberger identifies areas to be worked on in the relationship and in mother’s defensive organisation, which seems to be in line with this borderline score.

For pair 303 at discharge Dr Goldberger suggested that ‘One might think that this dyad would be able to manage well without further intervention.’ This is in line with the Care Index score of 19, which is well above the cut off of 13. The Care Index manual states that scores above 13 suggest no need for further intervention.

3.3 Comparison of Psychoanalytic Infant Observation Scale and Care Index

Rationale: The purpose of this comparison was to examine the broad agreement between the standardised Care Index and the non-standardised Psychoanalytic Infant Observation Scale, thus addressing the secondary aim of this study, i.e., to evaluate this approach through comparison with another well-evidenced, standardised assessment tool. Comparison between PIOS ratings and Care Index ratings would have been much richer if it had been possible to get a breakdown of the ratings for each item on the Care Index. This was requested but was not available. It was, therefore, only possible to compare the overall scores.

While it may be that the items on each scale attend to qualitatively different aspects of the relating pair, both offer a broad indication of interpersonal functioning. The initial examination used the rankings of the total scores from each measure for Admission and Discharge (see Table 2). For this examination, the comparison of the total scores has been made across Admission and discharge.

	Case	Care Index	Infant Obs. Scale
Admission	292	4	16
	053	5	12
	090	6	11
	303	15	21
Discharge	292	13	16
	053	7	18
	090	8	15
	303	19	24

Table 2 Comparison of Psychoanalytic Infant Observation Scale and Care Index
(ranked total scores)

It cannot be assumed that ranked data is normally distributed, therefore non-parametric statistical testing is appropriate. A Spearman Rho Test was performed and

yielded a value of +0.68265 (the two-tailed value of P is 0.062). This indicates that the association between the two variables, while not statistically significant, is strongly directional.

A further examination of this data set considered whether the two measures broadly captured the relative shift in presentation between Admission and discharge (see Table 3).

Discharge Score – Admission Score		
	Care Index	Infant Obs. Scale
Increase	4	3
No increase	0	1

Table 3 Comparison of Psychoanalytic Infant Observation Scale and Care Index (Discharge – Admission total scores)

This descriptive comparison indicates that both measures are broadly comparable in terms of detecting a change in the interpersonal relating between Mother and Infant from Admission to Discharge. Thus, while the two measures indicated an improvement in three cases from Admission to Discharge, on video 292 the Psychoanalytic Infant Observation Scale measured a relatively good functioning on Admission (i.e., 16/28), which remained constant to the point of Discharge (i.e., 16/28). The Care Index measured a relatively poor functioning on Admission (i.e., 4/28), which improved substantially at Discharge (i.e., 13/28).

A final, more fine-grained examination between the two measures was undertaken that took into consideration those items in each measure that indexed either solely infant phenomena (see Table 4.) or solely maternal phenomena (see Table 5). In this

way, the items unique to the Psychoanalytic Infant Observation Scale pertaining to Mother-Infant relating and indexing ‘countertransference’ were excluded. This was done with the intention of examining whether on this ‘basic’ level of observation the two measures were more comparable.

	Case	Care Index	Infant Obs. Scale
Admission	292	2	6
	053	4	6
	090	2	5
	303	7	8
Discharge	292	6	7
	053	4	7
	090	4	6
	303	9	10

Table 4. Comparison of Psychoanalytic Infant Observation Scale and Care Index (ranked infant scores only)

A Spearman Rho Test was performed and yielded a value of +0.91139 (the two-tailed value of P is 0.0016). This indicates that the association between the two variables is statistically significant.

A further examination of this data set considered whether the two measures broadly captured the relative shift in presentation between Admission and discharge (see Table 5).

Discharge Score – Admission Score		
	Care Index	Infant Obs. Scale
Increase	3	4
No increase	1	0

Table 5. Comparison of Psychoanalytic Infant Observation Scale and Care Index (Discharge – Admission: Infant items only)

This descriptive comparison indicates that both measures are broadly comparable in terms of detecting a change in the infant only phenomena from Admission to Discharge. Thus, while the two measures indicated an improvement in three cases from Admission to Discharge, on video 053 the Psychoanalytic Infant Observation Scale measured a relatively good functioning on Admission (i.e., 6/14), which improved slightly at Discharge (i.e., 7/14). The Care Index measured a relatively poor functioning on Admission (i.e., 4/14), which remained poor at Discharge (i.e., 4/14).

	Case	Care Index	Infant Obs. Scale
Admission	292	2	6
	053	1	4
	090	4	4
	303	8	8
Discharge	292	7	7
	053	3	8
	090	4	6
	303	10	9

Table 6 Comparison of Psychoanalytic Infant Observation Scale and Care Index (ranked maternal scores)

A Spearman Rho Test was performed and yielded a value of +0.6830 (the two-tailed value of P is 0.0619). This indicates that the association between the two variables, while not statistically significant, is strongly directional.

A further examination of this data set considered whether the two measures broadly captured the relative shift in presentation between Admission and Discharge (see Table 7).

Discharge Score – Admission Score		
	Care Index	Infant Obs. Scale
Increase	3	4
No increase	1	0

Table7. Comparison of Psychoanalytic Infant Observation Scale and Care Index (Discharge – Admission total scores)

This descriptive comparison indicates that both measures are broadly comparable in terms of detecting a change the Mother only phenomena from Admission to Discharge. Thus, while the two measures indicated an improvement in three cases from Admission to Discharge, on video 090 the Psychoanalytic Infant Observation Scale measured a relatively poor functioning on Admission (i.e., 4/14), which improved slightly at Discharge (i.e., 6/14). The Care Index measured a relatively poor functioning on Admission (i.e., 4/14), which remained poor at Discharge (i.e., 4/14).

These broad examinations comparing the two measures seem to offer a reasonable level of evidence to validate the non-standardised Psychoanalytic Infant Observation Scale. Of course, the process of validation is a far more involved process than this study can hope to achieve. However, the results from this simple examination provide some support for our hypothesis that psychoanalytic infant observation identifies a

similar level of concern for dyads as the Care Index and so is likely to be a reliable way of informing clinical assessment of parent-infant relationships, as the Care Index has been evidenced to do.

3.4 Reliability of the psychoanalytic Infant Observation Scale.

The principal researcher undertook to apply the Psychoanalytic Infant Observation Scale on all the close observation transcripts between mother and infant at both Admission and discharge. To examine the inter-rater reliability of the Psychoanalytic Infant Observation Scale, a person blind to the hypotheses underlying the study was trained in the use of the Psychoanalytic Infant Observation Scale. This person subsequently applied the scale independently to the transcripts of one randomly selected case for both the Admission and discharge time points.

Rationale: The purpose of this analysis was to examine inter-rater reliability for the non-standardised Psychoanalytic Infant Observation Scale. Reliability generally refers to the consistency of a measuring instrument (i.e., the measure offers accurate, reproducible and consistent scores across testing conditions). Thus, a measure that provides similar results across similar conditions is considered to be reliable.

Generally, a reliability statistic (such as Kappa) is used to determine the measure's significance. For these purposes, however, a correlation statistic was employed to offer a crude index of the similarity in rating between the primary rater (Rater 1) and the blind rater (Rater 2) (see Table 8). The disadvantage of using a correlation is that the statistic does not take into account the agreement or the difference between the variables that might have occurred by chance. Thus, the proportion of variability common to both Rater 1 and Rater 2 (achieved by squaring the correlation coefficient) was also calculated to offer a more conservative index of reliability.

As the data can be assumed to be normally distributed, a parametric statistical test is appropriate. The Pearson's correlation coefficient (R) analysis was conducted. The value of R was found to be +0.8187 (the two-tailed P is 0.0011). This is a strong

positive correlation, which means that high items scored highly by Rater 1 are highly likely to be scored highly by Rater 2, and vice versa. Further, the proportion of common variability between Rater 1 and Rater 2 (i.e., $0.8187 * 0.8187 = 0.6703$) was 67 percent, which again may be taken as a reasonable indication of the Psychoanalytic Infant Observation Scale's reliability at this stage in its development.

	Case	Rater 1	Rater 2
Making Contact	292	22	21
	303	16	12
Mutual understanding	292	20	20
	303	15	11
Making relationships	292	20	20
	303	16	16
Maintaining relationships	292	24	22
	303	16	16
Making sense of the world	292	21	22
	303	25	18
Countertransference	292	18	15
	303	12	12

Table 8 Reliability data for the Psychoanalytic Infant Observation Scale

As the data can be assumed to be normally distributed, a parametric statistical test is appropriate. The Pearson's correlation coefficient (R) analysis was conducted. The value of R was found to be +0.8187 (the two-tailed P is 0.0011). This is a strong positive correlation, which means that high items scored highly by Rater 1 are highly likely to be scored highly by Rater 2, and vice versa.

The exceptions to this broad agreement are 292 discharge (making contact) where rater 1 gave a score of 16 while rater 2 gave a score of 12. Also, for 292 discharge (making sense of the world) the rater 1 gave a score of 25, while rater 2 only gave 18. The reason for this is unclear but further reliability testing would help to tease out

whether there are any particular ambiguities about these domains. The fact that both pertain to the 292 discharge video might suggest that the two raters had differing understandings of this interaction, rather than there being an issue with the domains and their capacity to capture the raters' views.

Researcher's Experience

Section 4

In this chapter I will give a first-person account of the experience of planning and conducting this research. I hope this narrative will help to make sense of the decisions made by putting the process in context. I expect that some of the issues that emerge will require further exploration in the discussion in the following chapter.

Section 4.1 Opportunity

During my training I had the opportunity to take two parent-infant psychotherapy cases at the Maudsley under Dr Danny Goldberger. He told me about Dr Susan Pawlby and the wealth of rich video material she has amassed over many years of clinical work and research at the Bethlem MBU in SLAM. As he described what she had, three-minute interactions between mother and baby on Admission and discharge at the unit, I was reminded of a powerful experience the year before at a symposium by Beatrice Beebe held by the Association of Infant Mental Health.

Section 4.2 Inspiration

Working alongside Daniel Stern, and others, Beatrice Beebe has been at the forefront of developing the technique of video microanalysis of mother-infant pairs. This has revealed the precise patterns of interaction, all taking place at the 'procedural' or 'implicit processing' level, that constitute a precursor to disorganised attachment. As the methods of coding and analysing the data have become more sophisticated, now relying on a slightly smaller but more computer-savvy army of research assistants, so the findings have become much more fine-grained. This new 'microscope onto the social world' will undoubtedly inform the development of technique of parent-infant psychotherapists. Beebe stressed that disorganised attachment has been shown to predict adult psychopathology as well as childhood mental health problems, confirming the far-reaching potential impact of such early interventions.

Showing us a film, in real time, of an interaction between a pair with a disorganised attachment, Beebe asked us what we felt we'd seen. We all felt uneasy. Some felt we'd seen frustration on the mother's face, others shame. One or two ventured that it was aggression. When we were shown stills of the mother's expressions, so fleeting that we had not consciously registered them, a wave of concerned muttering passed over the audience. The cause of the baby's distress was now more obvious to us. We saw contempt, anger and a sardonic sort of mocking of the baby's distress. What I had taken to be a clumsy attempt by the mother to match and then lift the affect of her baby turned out to contain moments of violently incongruent affect. To drive home how disturbing this experience would be for the infant, Beebe had us pair up and act out some interactions. In turn each partner offered surprise, withdrawal and a still and unresponsive face to our partner's expression of distress. We were adults in a friendly place, dependent on each other only for a pleasant afternoon, not for our survival, yet we *were* distressed as participants in this exercise. 'Affect congruence' and 'attunement', both familiar ideas to the audience of child psychotherapists, became potent lived experience.

Communication and processing at this subconscious, implicit or procedural level is clearly powerful and prone to dysfunction but its potential for healing when harnessed is becoming more evident, thanks to the work of Beebe and her colleagues. She cited a piece of research that illustrated how easily we waste this potential. Psychiatrists interviewing patients after a suicide attempt, to assess the risk of further attempts, were filmed but not the patients. Coding and analysis of the level of concern expressed on the clinician's face was more accurate at predicting future risk than the conscious 'declarative' predictions made by the same psychiatrists. We know more than we think we do, but we need to attune to these countertransference experiences to mine that knowledge. Inspired by Beebe, I knew that I wanted my study to focus on self and other contingency and congruence and to make explicit use of countertransference as our in-built subconscious microanalysis mechanism.

Section 4.3 First impressions

My initial visit to the MBU –

As I watched a dozen or so 3-minute videos I had a range of uncomfortable feelings. The setting and the medium were unfamiliar to me having never used video clinically

nor worked in an inpatient setting. I had also never designed a research study and was overwhelmed with a sense of inadequacy to the task. I feared that I would see nothing when I looked at the pairs, that my observation skills would desert me. It had been almost ten years since I'd completed the Infant Observation course as part of my pre-clinical training. To my horror I did not see much at first. Yes, I felt uncomfortable watching the videos but this seemed to have more to do with my own preoccupations than the interactions I watched. About one pair I thought irritably: 'oh for God's sake they seem alright' yet I knew this could not be true. If they were fine they'd be at home. Later I realised that if they had been fine, I would enjoy watching them, but this sort of common-sense understanding was as absent as my capacity for clinical observation. Slowly, as my blunted intellect and sense of panic gave way to something more like boredom, boredom with a deathly quality, I recognised where I was. This unpleasant state of mind was familiar to me from my clinical work doing psychotherapy with very disturbed children. I was emotionally cut-off. However, the more I watched and the more I attuned to my countertransference experience, the clearer it became that this was defensive on my part. Being in touch with profoundly disturbing infantile anxieties, both those of the baby and those stirred in the mother by her baby, were to become almost intolerable at times during this project but at the beginning I underestimated how powerfully the projections could get into an observer, even through the screen.

Once I'd acknowledged this to myself I began to see much more and I began to see patterns that interested me. One such moment came when I had the opportunity to attend the discharge meeting of a mother and baby whose videos I had seen that morning. In the video mother and baby were struggling to be together. Mother's gaze and voice were intrusive and the baby would often shut her eyes and feign sleep. In response mother would allow her focus to drift away. As baby sensed this she would peek at her mother's face, apparently wanting to take something in from her but only daring to when she was not in danger of catching her mother's eye and interest again. At the pair's discharge meeting I was fascinated to hear the nursery nurse describe how this baby, several months older now, would 'play dead' when she didn't want to comply with what was being asked. With a tone of affectionate chastisement the nurse described noticing a faint smile beneath the baby's closed eyes and slumberous

breathing. I was struck by how this defence, one I'd seen develop in response to her mother's intrusiveness, had then gone on to develop into something more playful in relation to adults who were more emotionally available and less frightening. I began to wonder what could be learnt about the trajectory of infant defenses by close study of the two video clips from Admission and discharge.

Section 4.4 Collecting the data

Because of all I'd learned about how effecting the videos could be, and how this could overwhelm and flood an observer's emotional receptivity, I planned to collect my data over a long period of time. I intended to visit the MBU one afternoon a week to watch one video and write it up, giving myself a week to reflect and recover before doing the next one. In practice this was not possible due to time restraints and I ended up watching all eight videos and writing up the transcripts over a period of 6 consecutive days. This impacted on the process in ways that needed to be understood and ameliorated, as will be discussed below, but there was also something about the context of viewing the material on site that seems important to acknowledge too. For reasons of confidentiality and data protection, I was not able to take the material off site and watching them at the MBU created a very particular backdrop. The video suite is adjacent to the communal areas of the MBU and I could often hear distressed mothers or babies on the ward. This immediacy thickened the anxiety emanating from the screen and at times I would be trying to tune out the 'live' distress to focus better on the screen, only to realise that I was holding my breath and could no longer think at all. At the same time, because of the particular participant characteristics required by the design of my study, we had had to include some very old videos. They were dated by the hairstyles and the format, which lent an unreal or detached quality. Yet, I also heard staff discuss the impact on the mothers on the ward of two recent mother-infant separations, again bringing the gravity of the situation home and making me painfully aware of the enormity of having one's relationship with one's baby assessed in this context. The whole experience of being at the MBU and viewing the material was disorientating and overwhelming at times.

Section 4.5 Occupational hazards of working in the transference

As has been described, one of the main tenets of this study was to make explicit the use of countertransference as an effective and economical assessment tool. As with

any highly sensitive tool used to measure complex phenomena, it is prone to being overwhelmed and disabled by careless use. This is a risk that was acknowledged and understood during the planning of this study and yet, again, I fell into that trap. Having lost the planned space and time between write-ups I did become defended and my capacity to read my own countertransference experience was compromised.

The textual analysis, which had originally been included as a way of explicating the thinking during the scoring on the scale, became much more. It became a distinct part of the process of investigating the transference relationship. The write-ups served as an object of study to reflect on in themselves, and as a prompt to link up with memories of the experience that were not recorded because they were being repressed at the time of writing up the observations. These memories began to surface in a way that was familiar to the researcher because it echoed the way that such memories were drawn out in Infant Observation seminar groups. What is omitted from the write-up is often what is too emotionally disturbing or unprocessed to be thought about. The seminar group provides containment in the sense that the observer brings the beta elements in her countertransference experience, which the group, in turn, draws out and organises through its collective alpha function. This often leads to recall of forgotten phenomena, which it has come to feel safe to think about. In this way the textual analysis also replicated some of the functions of clinical supervision.

As I described this experience to my supervisor, Dr Anthony Lee, he suggested that I was describing the creation of a much-needed triangular space, as conceptualised by Britton (2004). The powerful impact of that space, of a period of time away from the initial experience of observing and writing up the observation, surprised me. On returning to the questions in the transcript write-up form asking me to reflect on how much the experience of observing had impacted my capacity to think, it was clear that I grossly underestimated the impact. When I came back to the same questions a week later I realised that I was minimising both my own overwhelmed state and need for defensive strategies, and the degree of distress in the relationship being observed (see discussion for further detail).

As I read more about triangular space I came to recognise the linear quality of my observation and write-up process, and the problems with this. There was the point at which I watched the video and the point at which the observation was written up. The space between these two points was linear and kept collapsing and expanding again as these points moved apart and back together again through the process of watching, writing, watching again and amending the write-up. The attempt at textual analysis provided a third point. This point kept its distance from the other two and created a three dimensional space. From this position I could access my current recall of the video, and my current recall of my experience of watching the video, while simultaneously reflecting on my write-up of the observation. This opportunity to engage with one point while keeping the other in mind, in parenthesis, was extremely illuminating. It was possible to reflect on the idea that during the write-up I had, necessarily, been so much in the grip of the countertransference experiences that I could not yet fully employ my capacity to reflect on these experiences. In retrospect, I felt that I had been employing defences against the disturbance to my own psychic equilibrium that the projections from mother and baby were causing me. I had been defensively cut-off from the full emotional impact of watching the videos. Only at a safe distance could the countertransference experience be accessed and reflected on. Simpson (2012) describes Britton's conceptualization of triangulation thus: 'Knowing that one holds a belief, and is not in the presence of a fact, requires psychological development, namely the capacity to bring together subjective experience, with objective self-awareness so that one can see oneself believing. He suggests this requires the presence of triangular psychic space with a third position from which the subjective self can be observed having a relationship with the idea. This is required for reality-testing and depends upon the toleration of an internal version of the Oedipus complex'. (<http://melanie-klein-trust.org.uk>) It seems that I experienced a temporary loss of triangular psychic space. The impact of receiving disturbing projections, even via the screen, severed internal links, which might have collapsed my internal Oedipus situation and my capacity for objective self-awareness in that moment. I also experienced a profound sense of loneliness over the six days I was collecting the data. I missed my colleagues from the busy CAMHS clinic I usually work in and have now come to recognise that this was intensified by the severing of internal links with internal objects during the phase in which my internal

triangular space collapsed under the strain of intolerable infantile anxiety stirred by the material.

When I realised that the value of this part of the data analysis had little to do with the principles of Grounded Theory, I started to feel anxious about having done it wrong. The main purpose of Grounded Theory is to identify emerging themes. However, as noted in the methods section above, in this study the simultaneous process of organizing the literature review and labeling the items on the scale had already identified the salient themes. This was done a way that acknowledged that they actually emerged out of the interaction between theory and the observation material. Perhaps this process usurped the role that Grounded Theory might have had in this study.

Certainly others have used Grounded Theory very successfully in conjunction with psychoanalytic observation, notably Wakelyn's (2011) thesis where four metaphors are used to organise the material around themes familiar from psychoanalytic theory and practice to describe her experience of observing a baby's journey through the care system. 'Matrix' refers to incidence of connectedness and containment; 'Tornado' describes the conflation of identities and experiences, a "squashing together of thoughts and ideas the one hand and unresolved splits in the baby"; 'Machine' describes the denial of and dissociation from emotional meaning and experience characterising the functioning of services and 'Limbo' captures the sense of suspension and waiting, an arrest of normal functioning (ibid). Wakelyn's thesis is a powerful evocation of how psychoanalytic observation can help to identify institutional dynamics that prevent services from seeing and meeting the needs of the child. When she presented her thesis to my year of trainees, it was at once familiar and unfamiliar. Our reading on the training consisted mostly of traditional psychoanalytic papers that did not include tables with lists of themes. However, there was something familiar about it. I found myself noticing that whenever I write about observations or clinical material I start by identifying themes and assigning each theme a coloured highlighter, which I go on to use to highlight all the excerpts pertaining to a particular theme. When this process had served its purpose of helping me to organise my thoughts, I then set about writing it out in prose, embedding the

tables and headings in the text of the paper, the colour coding having become redundant as the structure needed to convey meaning becomes embedded in the narrative. These reflections led me to wonder if the immense power of Wakelyn's work might have come through just as well if she had written a paper about it in the traditional style. I asked her this, whether showing her working out in this way, describing the system she used to organise her ideas had really added anything. She felt that it had, that holding on to the system had helped to draw out more detail. I remain concerned, however, that using Grounded Theory might not be different enough from the traditional methods of our field. There is a risk that, in adopting other methods of analysis, we are implying that our own traditional methods are wanting. If the difference, or added value, is actually not very pronounced perhaps this is a risk we should be wary of? It was only when I renamed the 'Textual Analysis' column 'Further Reflections' that I regained confidence in the value of owning my own psychoanalytic skin as opposed to aping other social sciences.

Balancing the potential risks against the potential gains of trying to do things differently was a recurring theme throughout this study. As stated, the original aim was to use psychoanalytic observation, with an emphasis on reading countertransference experience, to capture moments when the infant's unconscious phantasies seemed to be impacting their experience of interactions with their mother. My purpose was to investigate whether certain phantasy phenomena postulated in the Kleinian and Post-Kleinian theories described in the literature review could be illustrated by my observation material. Despite my reservations, I let daddy into the nursery. In the hope of highlighting the value of clinical deductions about phantasy phenomena, I expanded my study to include a question about whether such phenomena can help us predict risk in the mother-infant relationship. In order to attempt to answer this, a comparison with the Care Index scores available for the pairs observed was needed. In order to make that comparison possible the qualitative data of the observations needed to be rendered as numerical data. This required the development of a scale, requiring inter-rater reliability testing and producing numerical results requiring statistical analysis. Once the scale was developed its possible potential for use clinically or in future research loomed into view and it also became necessary to review other similar tools used in the field of infant mental

health. Very soon this arm of the study grew to be so prominent that it became a cuckoo, threatening to displace my original thesis. There were moments that I regretted having sought to borrow validity from without. Perhaps it would have been wiser to present my qualitative findings in the traditional format of a psychoanalytic paper. The validity of my findings would have been judged by whether or not my senior colleagues thought they had clinical relevance to our field. While I remain open to learning from other fields of study and applying new ways of doing things that might help the field of psychoanalytic child psychotherapy to develop, I have also experienced some of the dangers inherent in such openness. Green's (2000) caution against undermining our field from within is left ringing in my ears.

Chapter 5

Discussion

The primary aim of this study is to capture the process by which psychoanalytic infant observation can inform clinical assessment of parent-infant relationships. The secondary aim is to begin to evaluate this approach through comparison with another well-evidenced assessment tool – the Care Index. Care Index ratings were already available for the mother-infant pairs studied and the ratings were based on the same videotaped interactions that were psychoanalytically observed in this study. The data produced by infant observation is qualitative. An observation transcript is a narrative of the interactions observed, the feelings stirred in the observer by watching the interaction and speculations about what might be happening in the internal worlds of the observed. In order to distill this rich qualitative data into quantitative data that can be readily compared with the Care Index scores, a Psychoanalytic Infant Observation Scale was developed.

5.1 Discussion of findings in relation to aims and rationale

Rationale for this study

- Psychoanalytic infant observation uses close observation of interactive and individual emotional phenomena and countertransference to make inferences about the emotional development of the infant as mediated through his internal world. This methodology, that investigates internal world phenomena such as phantasy distortions and dynamic defences, is a powerful clinical tool for assessing difficulty and planning treatment.
- The Care Index has established that specific interactive behaviours are indicative of poor maternal sensitivity and poor infant co-operativeness. These behaviours can be coded and are predictive of poor outcomes for the relationship and the child.
- It is known that unattuned maternal care at 4 months predicts disorganised attachment at 2 years (Beebe 2012), which predicts poor mental health outcomes in childhood and adulthood. This study takes as its premise that

this effect is mediated by the internal world of the infant, which is peopled by introjected objects, who are versions of actual external objects and part-objects that have undergone phantasy distortions.

- The Psychoanalytic Infant Observation Scale attempts to capture numerically the valency and intensity of intrapersonal and interpersonal phenomena on a polarity represented by an item on the scale, which has been suggested to be salient by the literature review.

Very broadly, and bearing in mind how small-scale this study is, the results do seem to suggest that:

- Infant observation does identify concerns about the same mother-infant pairs as the Care Index, and this is confirmed when the data is rendered numerically by the PIOS.
- The combination of descriptions of interactions and clinical inferences about internal world phenomena and psychic defences were found to be a useful source of information for a clinician formulating the relationship difficulties of a mother-infant pair.
- The Psychoanalytic Infant Observation Scale did seem to capture the quality of the relationship observed and there was good inter-rater reliability for the small sample tested.
- There were important themes observed that were not captured and the Psychoanalytic Infant Observation Scale would need much further work if it were to be developed to be used for further research or as clinical tool.
- Perhaps surprisingly, given the premise of this study, the degree to which the observer focused on the internal world and psychic defences of the infant, as opposed to the mother, was low, although such speculations were present.

- Babies can clearly be seen to be using avoidance and sometimes mania or highly focused attention as defences but what needs to be unpicked is whether these defences can be said to be unconscious, dynamic and mediated by phantasy.

In this chapter each of these points will be elaborated to form a discussion of the findings in relation to the aims and rationale of the study. However, before discussing the findings of this study, it is important to outline the methodological issues that arose, so that the findings can be thought about in the context of those methodological issues, as well as in relation to the aims of this study.

5.2 Discussion of findings in relation to methodological issues

5.2a Discussion of issues in research in psychoanalysis generally

Rustin (2016) proposes that the evidential problem facing all psychoanalytic researchers 'arises from the central presupposition of their field, namely that unconscious mental states exist and exercise substantial causal powers over human thoughts, feeling and actions. Since almost by definition, unconscious states of mind are not transparent to observers, or indeed to the self, and are known only by inferences from their effects, this has always constituted a methodological challenge for researchers' (p.190). Rustin then invokes Occam's razor as a justification for speculations about unconscious phenomena because they are often the most parsimonious explanation for the often bizarre or contradictory behaviours and cognitions of patients, what Rustin names 'unexpected conjunctions of behaviour'. To illustrate he asks: 'Why, for example, do adoptive placements with apparently loving and well-balanced families sometimes encounter severe difficulties? It has been found that explanations in terms of the 'internalised beliefs' (or phantasies) of adopted children, regarding the expected behaviour of parental figures, are the most adequate to this situation. This is especially the case where it is found that such beliefs can be modified through being brought to conscious recognition in psychoanalytic therapy and where, as a result, improvements in actual relationships ensue' (p. 191). One such case was the twin described in the literature review, who had lived almost his whole 3 years of life with loving adoptive parents who met all his needs warmly and appropriately. Yet, he could not move on from a preoccupation with his own faeces.

In psychotherapy his omnipotent denial of dependency became apparent. It was an archaic defence, one that would have been adaptive and helped him to survive his first 8 days of life with a seriously unwell mother. It was only when this unconsciously held belief, that it is not safe to be ordinarily dependent, was brought to conscious awareness and worked through in the transference, that he could let go of his omnipotent phantasy of self reliance manifest in his over-valuation of his faeces. While psychoanalytic theory proposes that all infants pass through an anal phase in which some idealisation of faeces is ordinary, the trauma experienced by this baby prevented him from passing through that phase and he got stuck there. This developmental stagnation would not have been directly observable at the time that it happened yet it might have been inferred by a psychoanalytically informed observer. If so it would have emerged out of an interaction between what was observable, the theoretical ideas available to her and the countertransference feelings stirred by the observation. Such an observation might have been able to make predictions about the kinds of pathology that might develop and what sort of support the infant and his carers might need.

When Fonagy challenges the demands for “extraclinical verification of psychoanalysis ... since much of human behaviour, whether sustained by conscious or by unconscious mental states, is complex, multiply determined and specific to unspecifiable external conditions, to a point that defies replicable studies with adequate controls” (1996, p.5) he rejects the burden of positive proof. In the same paper, Fonagy (1996) uses a similar argument to the one put forward by Rustin to challenge Wolff’s assertion of the incompatibility of observational methods and psychoanalytic understanding. He shows how experimental methods can contrive situations that are “impossible to understand” (1996, p3) without making inferences about the cognitive capacities of the infant that cannot be known directly. If researchers were not prepared to bridge the inferential gap with common sense then the world of cognitive psychology would be as impoverished as psychoanalysis. The research that Fonagy used in this argument was carefully chosen in that it also provides strong evidence that infants attribute an intentional stance. An assumption made by Kleinian theory that had previously been thought unsupported by the evidence describing the cognitive capacities of infants. Taken together these two

points can be read as a caution against rejecting psychoanalytic assumptions that have yet to be supported by observational or experimental methods because we are often one ingenious experiment away from a sea-change in our appreciation of infant capacities.

As has been set out in the introduction and rationale, psychoanalytic research has not been delineated from clinical practice. There is no tradition for investigating psychoanalytic ideas anywhere other than the consulting room. For Green (2000) admitting findings from sources other than the consulting room will make a pincer movement with the pressure from a wider push towards empirical research and threaten the traditional methods of research in our field. For those working in multidisciplinary teams where a multiplicity of voices is valued, although of course often discordant, Green's warnings about naivety can seem rather persecuted. Engaging with researchers who value the methods we have traditionally used, but who might also bring to bear alternative ways of enriching our understanding of what we do, seems an exciting prospect. Similarly, the possibility of using analytic tools in applied contexts is likely to be clinically useful but might also reveal new insights. This was the case in the work of Beebe, where using countertransference to intuit relational distress then led to micro-analysis, which revealed the importance of maternal self-congruence.

Psychoanalytic infant observation, as research, fails to meet the criteria set out by both the positivists and the analytic purists. For the purposes of this study, perhaps it is permissible to take inspiration from Beebe and sidestep these issues to a certain degree because what is being asked is not 'What can infant observation do for psychoanalytic theory?' but 'What can psychoanalytic theory do for infant observation?' Many assessment tools have been developed out of the tradition of attachment research and developmental psychology involving observation of parent-infant interactions (see lit rev for discussion of some of these). What this study explores is the potential of developing such a tool but one that draws on all that cannot be gleaned through direct observation; one that is informed by what we understand about intra-psycho life from psychoanalysis. Green emphasises the value of specificity in the analytic setting, but universals are also agreed, such as the

significance of the Oedipus situation. Even with the extreme limitations of no direct transference relationship and no opportunity to test hypothesis through interpretation, it is the relationship between the material and the observer's body of knowledge, importantly mediated by an imaginative emotional engagement, that is most important in this research and it is one of the factors that Green argues is unique to the analytic situation. There is no attempt to claim that infant observation as research can test, prove or disprove psychoanalytic theory. As Green rightly argues this can only be done in the field where the theories were discovered – in the analytic situation, but the findings of this study do suggest that such research can support and supplement findings from the couch.

Stern (2000) suggests that an exclusive focus on what happens within the baby's mind when he is alone betrays a lack of interest in the baby in relation to his object. This seems to miss the point that it is the intra-psychic response to the absence of the object that is the kernel of most infantile defensive life. It is the adjustment to extra-uterine life with its physical separation and the possibility of unmet needs that all dynamic psychic life is built upon.

As has been stated, in psychoanalysis it is interpretation, and observation of how interpretations are received, that test the validity of inferences, in a piecemeal way throughout an analysis. This allows for understanding to build on previous understanding and for novel or contradictory ideas to be developed simultaneously as analyst and patient feel out a path. It is both bottom-up and top-down in that formulations based on theoretical models are top-down but they are reached for to make sense of the phenomena in the room, which are bottom-up. These are then tested through the impact of an interpretation, which is another bottom-up process. In observation research this means of testing out hypothesis is not available. There is a greater need to be able to hold a multiplicity of possible meanings in mind without succumbing to the pull to collapse the tension and come to premature conclusions. Hollway (2012) cites Urwin and Sternberg who concede that infant observation 'lacks the means for validating claims to truth available to psychoanalysis' because 'knowledge belongs to the processes of co-construction and evaluation that

takes place with the analytic relationship' (p.6). However, this study does confirm Michael Rustin's assertion that 'observers do nevertheless inhabit, in the observation setting, a field in which transferences exist and may be recognised' (2012, p.182). In this study the transference is being made to the camera and clinician in the room, as well of course to the baby. Yet, perhaps surprisingly, the projections are powerful enough to produce a countertransference response in the close observer of the video material, as was explored in the Researcher's Experience Chapter.

Green (2000) argues that the subtlety of understanding emerging from an analytic encounter can only happen in one particular mind, in response to a very specific moment, anchored by a deep knowledge of the patient's personal and analytic history. The veracity, validity and reliability of the understanding belong to that complex context that is held within the analytic relationship. It seems reasonable that no other form of research could or should try to replace this. It is also clear that the transferential relationship, including transference made to the camera and the scant contextual knowledge available to the observer in this study could not hope to come close to what happens in an analytic relationship. However, through studies such as this one, where applied psychoanalytic theory and observation can generate rich qualitative data, the findings might add to the body of knowledge mined on the couch. Also, when using tools usually used when doing research 'on the couch', but in less contextually bound situations than the analytic relationship, we might learn more about those tools, such as countertransference, by studying them out of their usual context. Simultaneously, hopefully, we demonstrate the usefulness of these tools in other 'applied' contexts such as assessment of mother-infant relational disturbance in frontline services.

5.2b Discussion of methodological issues in qualitative research generally and for Infant Observation as research

In his critique of qualitative research methods, Woolgar (1988) lists indexicality, inconcludability and reflexivity as the source of both the method's strengths and weaknesses. These all refer to issues of interpretation – the action that bridges but also separates the object of study from the way it is to be represented in the research. In infant observation, indexicality refers to the fact that any meaning constructed in an observation is tied to that particular infant's experience in that particular moment with

that caregiver. Similar actions and emotions may have quite different meanings in different situations. This affords the method good ecological validity. Generalising from the findings, however, may be more problematic, and replication impossible.

However, in this study, the use of video recording means that the same moment in time can be replicated and different observers used to test the reliability of the method of psychoanalytic observation. It is possible to test whether similar meanings are inferred when a number of observers, drawing from the same body of psychoanalytic and infant research knowledge, let this knowledge shape their understanding of the exact same phenomena. Reflexivity refers to the fact that there can be no neutral perceiving of phenomena. The personal history and theoretical framework from which the observer approaches the subject, informs the way she perceives what she sees. However, this is true of all interpretation. The strength here is a self-scrutinising acknowledgement of this fact. Also, it can be argued that the free-ranging attention of a naturalistic observation, which does not have specific questions to answer, encourages faithfulness to the emergent issues over theoretical ideas. Having said that, it would be disingenuous not to acknowledge that approaching the material from within a psychoanalytic framework does prime the observer to notice particular phenomena. Indeed, the notion that a human exchange could be captured in all its rich detail but somehow directly, without any interference, is a falsehood. This is, of course, true for the writing of the transcript in that each inference, conscious or not, primes the observer to interpret the next observed phenomenon in a particular way. Again, this is both an advantage in that it builds a rich understanding based on many complex interacting factors, but it can also be thought of as a form of confounding bias. The very flexibility, which affords ecological validity and integrity of the material, opens the door to bias. As Parker (1994) comments: ‘...the way we characterise a phenomenon will change the way it operates for us, and that will then change our perception of it.’ (p.4)

It might be helpful to borrow and expand Rustin’s analogy to note that if an astronomer and a layperson both view the same night sky through a telescope, we are less inclined to devalue the meaning made by the astronomer on the grounds that he is contaminated by his learning. Of course, the great leaps in all enquiry are made when

investigators are not too shackled to the current understanding in their field. In infant observation, and in this study, there is an attempt to record all that registers with the observer. What registers is likely to be that which can be made sense of, which creates a bias to recording phenomena that confirms theory. However, what is most salient is that which is emotionally stirring and this is not always readily understood in terms of theory. In this study, the theoretical framework is made explicit in the items on the scale and the subjectivity of the observer utilised through reflection on countertransference. This is a tool that has been honed through training in a similar way to the power of the astronomer's telescope being developed to give access to more detail of that which cannot be directly accessed.

In classical Infant Observation, what is perceived is recorded, shared with a seminar group, re-read in order to write papers and, at each re-visiting, the meaning may mutate to accommodate new ideas or so that a deeper understanding might be reached. In this way it is inconcludable and this is a feature that can be a strength and a weakness. In this project, a similar process of mutation occurred through each stage of recall, articulation, reflection and speculation. At each of these stages different factors were influencing the nature of these mutations as was discussed in the Researcher's Experience chapter.

5.2c Methodological issues arising from the quantitative arm of the study

There were many methodological issues arising from the attempt to develop an Psychoanalytic Infant Observation Scale. It was a great advantage to have the Relationship Scale to work with and with it was inherited all the work that had gone into capturing the subtleties of an interaction. However, it would need a great deal more work before it had been properly adapted to the task of describing a parent-infant interaction. There were certain items that appeared to be a replication in that they almost always received the same score for any particular interaction. These were 1b: 'They are in tune with one another- matching each other's feeling states or even imitating one another.' And 2a: 'Mother is sensitive to baby's emotional state and intentions'. For video 292, the distinction between being in tune with the baby's intentions and his emotional state was crucial because mother was very finely tuned to

his intention to imitate. However there seemed to be almost no receptivity to his emotional state and he was offering very little to indicate what his emotional state was. Pair 292 also drew attention to the need for an item that specifically addresses lack of affect as a concern – not just unsmiling and not necessarily withdrawn but worryingly emotionally neutral. Another possible item to be added would be one pertaining to the ebb and flow in the interaction, or lack of it. This can be a useful way of picking up the interactive contingency when there is not the opportunity for microanalysis.

There was also a difficulty in capturing ambivalence or ambiguity in either mother or infant using a + or – polarity. If baby went from smiling and affectionate to very distressed during the course of the three minutes, he might end up with a score of 0, or near to it. He could also get this score if his expression had remained emotionally neutral throughout the three minutes. Clearly this is misleading. Similarly, where items like 1b mentioned above refer to the pair as a unit, it is not possible to record accurately when mother and baby are opposite. Therefore, mother may be preoccupied and struggling to attune to her baby but baby may be exquisitely attuned to mother's emotional state due to a need for hyper-vigilance. Also, items 5b, pertaining to mother's desire to bring in the world and baby's and 5c, pertaining to resilience and cohesion, are generally signs of health in the relationship and the infant. However, they can also be used defensively to avoid undiluted direct emotional contact, as was the case with pair 292.

The item pertaining to the baby's capacity to recover from relational distress often reflected the mother's capacity, or lack of capacity, to repair ruptures in the interaction. An item addressing this specifically would be helpful in order to help differentiate between the infant's constitutional endowment and the mother's capacities. The scale would also benefit from an item that addressed the maternal transference to the camera/clinician specifically. Also, an item that asked specifically about what kind of transferences it was thought the mother was making to her baby would help as a preliminary to some of the items in the 5th domain on internal world inferences and transference phenomena.

5.2d Issues with trying to translate qualitative data into quantitative data

The researcher, and the reliability rater, found it extremely difficult to assign a numerical value to the phenomena described in the transcripts. The subtlety and complexity of the phenomena seemed to require an extremely complex scale with a large number of items. Despite this complexity it still felt like forcing square pegs into round holes and the complexity and sheer amount of detail in the scale made it cumbersome to use. Both reliability rater and researcher reported experiencing great anxiety around many of the decisions leading to strong doubts that any inter-rater reliability could be achieved. Arguably this captures the struggle in the consulting room to hold uncertainty, manage doubt and examine one's own experience and this struggle reflects the fact that the scale does require engagement of clinical judgement, with all that this brings. This might explain why the findings suggest that there was reasonably good agreement between the two raters overall and within each domain, despite the raters' reported anxiety about their judgements. **However, if the PIOS were to be developed for either clinical or research purposes it would need to be standardised. Such a process would likely run in to the difficulties described by Crittenden (2001) in the Care-Index Manual :**

'The usefulness of the CARE-Index method rests on the reliability of a group of coders and the validity of their results in studies assessing relations between CARE-Index scores and other meaningful aspects of infants' lives.....Because judgements are called for and different people make these differently, training is essential to enable coders to 1) discern which details are relevant to these judgements (because the details are not always obvious), 2) make interpretations that are similar to everyone else's, i.e., to reduce personal biases and replace them with reliable judgements, and 3) teach a process for accomplishing that. Unfortunately, those observations on which there is very high agreement tend to depend on the morphology of behaviour and are not usually relevant to its interpersonal psychology, i.e., its function. That is, they are reliably made, but are not psychologically valid. Those judgements that [are] most needed. i.e., the psychologically meaningful ones, are often less reliable. There is, in other words, a loss of reliability in the effort to get validity. The CARE-Index is an attempt to balance these and the instruction is intended to reduce the otherwise completely unreliable (and therefore invalid) judgements that would be made if the manual were applied without instruction.

The development of the PIOS was an attempt to capture those judgments 'most needed, i.e., the psychologically meaningful ones'. The premise being that it is the psychoanalytically informed judgments that can go beyond the morphology of

behaviour to bring to bear our understanding of how internal world phenomena informs behaviour. The necessary work to improve reliability would likely smooth out the very complexities that the scale derives its power from. The power of this tool lies in its psychological validity, its specificity and meaningfulness. If it loses this it has nothing to offer that is not already very well provided for in the tools described earlier such as the Care Index, PIRAT and PCERA.

The purpose of creating the scale in this study was to provide data which could be compared with the Care Index, but it is possible that a tool could be developed that combines elements of the transcript and scale but in a more focused or 'light touch' way. Such a tool would harness Psychoanalytic Infant Observation skills to provide a structured assessment focusing on the themes that this research, and psychoanalytic practice/research have shown to be salient, as described in the literature review. These would include: attention to transference phenomena; attention to self congruence and self-contingency as well as contingency on the infant's actions and intentions; a recognition of the task of individuation and the primary two-person bodily self; recognition that the perception of reality is mediated by unconscious phantasy and the internal world of introjected objects from the very beginning of life. This constitutes a dynamic unconscious, which employs psychic defences against the earliest difficult experiences associated with post partum life. The next section in this chapter will be a discussion about the degree to which the transcripts and reflections did reflect these themes that have been posited as salient in the literature review.

5.2e Discussion of findings of methodological issues arising for the qualitative arm of the study –

Using video

There were methodological issues around the use of video and how the videotaping was set up which were, of course, inherited with the video material and could not be changed but it is worth acknowledging how they impacted on the data. The use of a mirror to enable the viewer to see both mother's and baby's faces, head-on and in real time, affords accurate sequencing of phenomena and accurate analysis of facial expression, both of which inform the degree of contingency and reciprocity being

achieved. However, what is lost is ecological validity because this is not how a clinician would experience a mother-infant pair in an ordinary assessment or therapeutic encounter. This may have distorted the transference phenomena.

The attempt to use grounded theory, and why it ran aground in this project.

The researcher had been reluctant to adopt a formal method of textual analysis. Papers using grounded theory to ‘reveal’ emergent themes from clinical material had seemed too similar to traditional psychoanalytic papers for comfort. The journal of Child Psychotherapy is full of papers using this traditional method, in which a clinician reviews their process notes to help them gather their thoughts and populate a narrative that has been building in the author’s mind about the meaning of the work. The process of noticing emerging themes and weaving a narrative happens automatically and informally, partly because it is a human impulse and partly because honing this impulse into a skill is part of the what psychoanalytic clinicians are trained to do. It seemed disingenuous to claim that what emerged from a formal textual analysis was somehow more reliable. If the claim is made on the grounds of the rigour of only admitting bottom-up salience, then this was not going to be possible in this project and the researcher had often wondered if the meaning made of clinical material in other published papers using grounded theory would have been significantly different if the authors had just written a paper in the traditional way. Rustin (2016) argues that a good fit between psychoanalytic clinical material and Grounded Theory is made possible by the ‘softening of an early ‘anti-theoretical’ demand by Grounded Theory’s pioneers that empirical data should be collected and analysed without theoretical preconceptions about their possible meaning’ (p.189). He argues that this softening was a result of a growing recognition in qualitative research in the social sciences, expounded by Charmaz (2006). Rustin (2016) summarises thus:

‘There is no such thing in research as a *tabula rasa*, since data cannot be identified and specified without some criteria of selection. There is no reason for psychoanalysis to be an exception to this principle. The requirement of Grounded Theory is not to have a blank mind in the face of data, but rather that a researcher should hold in abeyance her expectations about possible meanings, and to allow inferences to emerge from the encounter with the material itself. Similarly, when Bion asked psychoanalysts to ‘eschew memory

and desire' on entering a clinical setting, he surely did not mean that they should forget everything they had previously learned about psychoanalysis' (p. 189).

Here Rustin describes how social sciences, beyond the field of psychoanalysis, are catching up with the principles and methods that have been long established in our field. In psychoanalysis, where the clinician is also researcher, it is accepted that the subjective experience of the researcher/clinician, and the theoretical framework from within which she operates, cannot and should not be controlled for, but should be admitted as data to be scrutinized as part of reflexive practice.

The question then becomes - why 'soften' the demands of Grounded Theory to make it fit better with psychoanalytic methods of research rather than sticking to and advocating for the value of our traditional methods? In this project the researcher found herself subverting the space for a textual analysis of the transcripts by using it as an opportunity to return to the material at a distance, only then could powerful countertransference phenomena be safely seen (see Researcher's experience Chapter). The function it came to serve had more in common with clinical supervision or an Infant Observation seminar discussion than Grounded Theory. Rustin (2016) argues that when used well, Grounded Theory 'enables its practitioners to recover and re-imagine their original clinical experience'. This really does seem to capture what was so powerful and enriching about this stage in the process of data collection and data analysis in this project. However, the phrase 're-imagine' is so apt because it acknowledges that something creative is born of the interaction between what is on the page of the transcript, the memories stirred in the researcher of her original experience of observation and the theoretical frameworks that make sense of the interpersonal dynamics being observed and the impact they have on the observer. If traditional Grounded Theory, and its claims to potency, are based on dogged loyalty to that which is recorded in the transcript, and only allowing connections between what is recorded there to be given value, this seems quite at odds with what is being described by Rustin and experienced by the researcher; namely, the matrix moment where many points in time and theoretical constructs come together in the mind of the researcher to create new meanings. This experience resonated with Green's

description of the moment of meaning-making in the psychoanalyst's mind, which relies so much on the specificity of that moment and all that the patient and analyst bring to that moment, so that any aspiration to replicability becomes absurd. The claims to generalisability are validated when many such moments recorded over decades of clinical papers identify a core of recurring themes which go on to become the theoretical tenets of the discipline. During the course of this project, the researcher changed the name of the column that had been titled 'Textual Analysis' to 'Further Reflections' as a gesture of reclamation of psychoanalytic clinical methods as roadworthy for research.

This question of the relative value of top-down and bottom-up attempts to make meaning is relevant to one of the troubling findings of this study. The theoretical framework within which the researcher operates was made explicit in the Literature Review, including an emphasis on the assertion that infants have a dynamic unconscious and that their experiences are mediated by phantasy distortions. The researcher identified the lack of research focusing on the infant's internal world and openly set out to make this the focus of her study. However, as will be seen later in this chapter, the transcripts and reflections do make some reference to the infant's internal world but much more space is devoted to making sense of the mother's unconscious defences. This could be taken as evidence that Stern was right when he asserted that the infant is 'unapproachable by psychodynamic considerations' (1998 p.255). The researcher has argued that infantile defences are evident in the reconstructed infant, the infant reconstructed from the evidence of his influence on the adult and child on the couch. Yet, when she held this conviction in abeyance enough to be receptive to what unfolded during those three-minute videos, the infant's dynamic internal world was described but it was not the most salient or dominant theme emerging, neither in the transcripts nor in the 'further reflections'. It could be argued that this is evidence that Infant Observation and traditional psychoanalytic methods of research are not so top-down. It could also be argued that these findings should be pitted against the evidence from psychoanalysis of an infant influenced by phantasy distortions. These issues will be returned to later in this chapter.

As discussed in the Researcher's Experience chapter, the 'further reflections' column

created a triangular space, as conceptualized by Britton (2004), in which it was possible for the researcher to reflect on her own transcript as representing her conscious beliefs at the time of writing which, with the distance of time, she was able to view more objectively as beliefs which were serving to protect her from difficult projections as well as providing a description of the videotaped interaction. Clinicians using video as part of psychoanalytically informed parent-infant psychotherapy (Jones (2006), Lena (2013) have identified that the clinical power of the method is that watching back the videotaped interactions with the mother creates a similar kind of triangular space to that described above. Drawing on Fraiberg's seminal paper, Lena (2013) notes that:

‘When observing, the parents become gradually more able to think about the impact of their own childhood experiences on the relationship with their child. The ‘ghosts in the nursery’ can be thought about and placed in the past. The recording of a play interaction can foster the creation of a narrative container for a relational story to unfold, and to be told. Moreover, the video provides a powerful sensory experience, which can confront the viewer with visual evidence that can be perceived by some as surprising and new’ (p. 79).

This element of surprise really underscores how triangular space can afford an objective view of one's subjective view, and how surprisingly different these two might be. The unconscious defences of the parent and the researcher become visible because they are thrown into relief by this experience of surprise.

Beebe (2013) has shown how these ghosts from the nursery can haunt interactions in the present in a way that is so frightening that it becomes impossible to learn from new positive experiences or, from a Klenian perspective (1946), it is not possible to introject good objects with whom positive internal world experiences could be had. In the Researcher's Experience chapter, the first half of Beebe's symposium (2013) was described as the inspiration for putting transference phenomena at the heart of psychoanalytic research. The clinical material she presented in the second half of that symposium will be described here because it teases out how the camera can be used to create a safe triangular space because a moment in time can be revisited once the live interaction, with all its potential dangers, is actually safely in the past.

Beebe (ibid) introduced a piece of work she had done with an adult patient whose psychotic mother had not only believed that her daughter was evil but that this evil

was evident in her eyes. As well as this emotional abuse, the patient had suffered physical and sexual abuse from her mother. The patient was married and working as a teacher - functioning well despite being very unwell. The analysis took place in chairs facing one and other but the patient did not ever look at the face of her analyst. She said that she could not for fear of seeing evil – either her own or her mother's.

Beebe tried filming her own face, but not the patient's, during sessions and they would watch it back at the end of the session. The patient was powerfully moved to discover the empathy and sympathy she saw on the filmed face but still could not look at Beebe in real time. Just like all infants, Beebe's patient had come to know about what kind of thing she was by experiencing her mother's experience of her. Even though her mother's response was not congruent with her own experience of herself, or her sister's experience of her, it remained an enduring idea that perhaps her mother was right about her. While this patient could take in the good mother/face on film and use it to strengthen the alternative version of her sense of self as not evil, in real time this would not have felt safe. In real time the contingency would be live. Her expectancy that, at any moment, her analyst might see the evil in her and change was potent. Such a change in the analyst's face could not be survived. On videotape it was all already over and she had survived it. She could afford to look at the 'good' mother/face and seek confirmation of her 'good' self, without fear of destroying both in the act of making this contact in real time. Similarly, the observer had already psychically survived watching the video and could afford to be more open to her own countertransference experiences once the material that stirred them was at one remove.

5.3 Qualitative analysis: Did the transcripts and 'further reflections' actually reflect those themes identified as salient in the literature review?

Qualitative analysis of observations: Phantasy distortions

In the following sections of this chapter, observation material will be discussed that informed clinical deductions about internal world phenomena, including phantasy distortions and dynamic defences. The defences observed included second-skin (Bick, 1968), manic, dissociative and narcissistic. The mother's capacity for containment,

contingent responses and self-congruence were seen to be important protective factors and, as predicted, examination of transference phenomena was a vital source of information about intra and inter personal dynamics. The observer was also struck by the degree to which unattuned or hostile parenting created a psychic abandonment with all the sequelae Panksepp describes around prolonged separation distress leading to dampening of SEEKING and associated risks in terms of mental health.

It will be helpful to recap, here, some of the more contentious theories outlined in the literature review. Advances in infant research evidencing relational capacity have been used to discredit notions of primary narcissism on the grounds that evidence of 'being with' precludes self-other confusion. This was pitted against the researcher's experience of infant observation in which the baby often seemed to be in a state of mind that straddles the border between an oceanic feeling of merger with the object, and a state that acknowledges separateness but only under certain conditions. When the infant is calm and alert and a face full of love and desire looms over him, separateness is tolerable because he feels secure as the object of her desire. In that moment of aesthetic experience (Reid, 1990) and active intersubjectivity, his fragile selfhood is held aloft by her reverie and he feels viable. These relational states have their roots in an innate readiness to relate, even intra-utero, to the part-objects of distant maternal and paternal voice (Maiello, 1995). However, when she drops him from her gaze during the ordinary mis-steps in the dance (Stern, 2002) then it seems that a return to less differentiated states might ensue to avoid the pain of falling from grace. This fall is experienced as mortifying; a mortal threat to psychic survival and an experience of shame at a sense of lack or being cast out. Gerhardt (2009) describes this as a state of abjection. It seems likely that this is when narcissism, as a motivated failure to perceive separateness and all the dependency and vulnerability that separateness entails, may be used defensively. In this way the weaknesses of an immature perceptual apparatus are co-opted into the service of defence against psychic pain.

Similarly, the relative un-integration of infantile states can be readily regressed to as part of dissociative defences against psychic pain, particularly FEAR and PANIC. With narcissistic defences, perception of self in relation to other is distorted by a

phantasy that brings relief. In dissociative defences, perception of the experiencing self is thwarted so that what cannot be avoided in external reality can be quarantined internally and avoided by one's perceptual apparatus. The phantasy is of a protective internal split which if articulated would sound something like 'I'm not here; this is not happening to me'.

Phantasy distortions that affect the way the object or part-object is perceived were also outlined in the literature review. Freud postulated that the infant experiencing a drive that has not yet been satisfied hallucinates the satisfying (part) object. From this starting point it makes sense that part-objects would have relational motives attributed to them because, before they are actually perceived, they are imagined into being in order to make sense of sensori-motor-affective drives. As Freud and Bion have shown, when present, a part-object does not need to be conceived of. It is likely to be registering at some level as a collection of percepts but this sort of perception process is not likely to be at the cutting edge of the latest in the infant's cognitive capacities, because it is not motivated by homeostasis drives. It is in their absence that part-objects must be conjured. The correlate to the urge or drive is imaginatively brought into being – the hallucination is an endogenous anoetic embodied representation of a 'relational procedure'. The urge to suck is inborn and this action implies a nipple which, in its absence, must be stood-in-for by a concept; a psychic entity. This is what Bion described as a pre-conception. It is not object as categorical item but object as part of a highly charged relational procedure that is the 'unthought known' (Bollas, 1987). The infant has imagined the object and based his phantom creation on the bodily expectation of it. So, by the time a part object has been conceived of by the infant, it is, by virtue of its conception, a motivated and relational thing.

To summarise, implicit in Kleinian and post Kleinian theory is acknowledgement that an innate drive spurs the infant to phantasise the object that might sate that drive. This places phantasy before reality perception in development. It then becomes very obvious why the reality principle can only come into ascendance when the actual object in reality is dependable and the infant is not compelled to overuse phantasy. Also, once it is understood that originally phantasy was not a distortion of reality experience but the bridge to reality experience, this primacy of phantasy helps to

explain why it is never completely eradicated by the enlightenment and progressive success of secondary process in getting needs met.

For Klein, these relationally motivated part-objects take form as figures in the infant's internal world. This phantasy world becomes the prism through which the external world is experienced and why reality perception continues to be prone to distortions even as the apparatus for perceiving external reality matures. From a constructionist perspective on perception, we rely on previous information, on memory, to make sense of the information received by our senses. What Klein understood is that this includes memories of imagined experiences. She proposed that the culture of this internal world was initially shaped by the intensity of innate sadistic impulses, which determine our expectation of objects through projection of our own impulses. The culture quickly becomes an emergent property of the interaction between projected impulses and the actual behaviour of real carers.

It will help to return to Ruben, the infant observed by the researcher during pre-clinical training, to make a link between these theories and the observation material collected in this study. This is because the opportunity to observe an infant over two years allows for meaning to emerge out of a sequence of events in a way that is more persuasive than the snapshot of three minutes.

‘The baby is playing with a soft toy mouse-doll and then has a bottle. At around this time his mother was preparing to return to work and was, in various ways, beginning to create some emotional distance between them. It was felt in the seminar group that this was a way of preparing them for, or even an attempt to inoculate them from, the anticipated pain of loss.

Mum leaves the room to prepare his bottle. The mouse doll is made of a patchwork of brightly coloured fabric. It has enormous long floppy ears and a sausage-like stuffed snout with spindly arms and legs that hang limply. He puts the nose in his mouth. I imagine that it gives a satisfying amount of resistance. He bites harder into it, wrinkling his nose and shutting his eyes with the effort. Taking an ear in each hand, in order to get a better purchase on it, he pulls the mouse away from him and holds the nose fast in his mouth

so that he is yanking it so hard in two directions that he starts to wobble. The mouse arms and legs swing violently until eventually he topples over...

Moments later the feed begins and Maria's role in creating distance during feeding becomes evident, as does his anger about it.

Maria sits cross-legged on the floor opposite me and lifts him into her lap but facing out towards me! She puts the bottle to his mouth and he takes in the teat and sucks and swallows at a fast rate taking half the bottle without a pause. Then he begins to slow the pace and, as he does so, he turns a little so that he is facing side-on and can glance up at her face. He also begins to reach up her body with his left arm so that the back of it gently rubs her breast as he feeds. His face relaxes, as his eyelids flutter and close momentarily. All this is lost when she suddenly props him up again. The arm that had been against her body he now brings round to cup the bottle. Soon he begins to tap the bottle, at first in the distracted and sensual way he had moved it up and down her body but increasingly the tapping gets harder and faster until it is more like hitting. He is no longer drinking the milk but holding the bottle in place by biting down on the teat while he hits it from the side

Once his hunger is sated Ruben attempts to bring the couple together again through his positioning and caresses. However, when she returns him to his outward-facing disconnected place, the bottle becomes the recipient of a punitive attack on the withholding mother/breast. Likierman (2001) describes Klein's observation about feeding and weaning: 'When the object becomes available again the infant is simultaneously relieved yet vengeful...these two contradictory impulses are united in the single phantasy of a vengeful devouring.' (p.104). Ruben's play with the mouse-doll seems to betray just such a phantasy.

(8months)'

(de Rementeria, 2012, p242.)

Obviously this is an older baby who might be said to have developed some symbolic functioning. However, if it is posited that his experience went something like: 'I have a feeling state – the combined wish to punish and to possess. In order to give this

expression, I will act out the composite ‘devouring’ with this toy pretending that it is the breast.’ This would involve the capacity to make one thing stand in for another while it is known that it is not actually that thing. This would involve suspending disbelief in order to behave ‘as if’ it were the same thing. That is not what the observer felt she saw. To her it felt that the unprocessed or undischarged devouring urge was awakened by the feeling of the mouse-doll snout in his mouth and he imbued it with, or projected into it, the intention ‘withholding’ because withholding was the relational antecedent to his sensori-affective state.

This material was brought to mind when the researcher reflected back on the following excerpt from the Admission video for pair 090. Mother has been dangling the dummy just out of his reach, apparently unaware of his mouthing and his wish to get it into his mouth. He has just caught hold of it with his hand and she has kept hold of it too:

‘He grabs her little finger and tries to bring it to his mouth. She resists this and pulls away but because he holds on her hand starts to bounce. Now she is holding the dummy aloft and bouncing his arm by bouncing her hand. He is looking at the whole two-hand-and-dummy combination bouncing up and down in front of his face and seems very interested but I am aware of his mouth, still tight shut having clamped down when he did not manage to pull her finger or the dummy into it. The tension and aggression around frustration is there but he does not become overwhelmed with anger or distress. I wonder about the afterlife of these unspent aggressive impulses though – will he come to feel his internal world is peopled with objects he has attacked in phantasy? Whom does he believe to be clamped within that gummy bite?’ (090 Admission)

In the observer’s question ‘Whom does he believe to be clamped down within that gummy bite’ is the implication that he is phantasising the corollary to his frustrated impulse to bite – a bitten thing, or even an angry or bad breast. For Klein, this phantasised part object is not transitory but continues to live in the psyche, populating the infant’s internal world. The way the child learns about the world, then, is not a

stimulus-response system with incremental gains or losses depending on whether experiences are positive or negative. This is the process by which a self-perpetuating internal world culture gets going, where historical events become more potent as symbols than they were as one-off events. The corollary or subject of his gummy bite inhabits his internal world and will presumably be felt to be in retaliatory mood. When he next meets the nipple or bottle-teat, how will this internal object colour his perception of it? Such phantasy distortions offer a compelling explanation for the ubiquitous yet puzzling scene of a hungry but equitable baby who, on being readily offered the breast, is suddenly too full of woe and rage to feed.

5.3a Transference phenomena

It was claimed that tracking transference phenomena would be a rich source of information about internal world phenomena for both mother and infant. In this study transference phenomena included the transferences made by the mother on to the camera and clinician, and on to her baby. It also included the transferences made by the baby from internal objects on to the part-objects and/or whole mother he experienced in the interactions. Finally, the observer's countertransference experiences, what was stirred in her and the states of mind she found herself inhabiting in response to watching the material and later reflecting on the transcripts. As predicted, this was a much used tool in both stages of observation and reflection and, as discussed above, the power of defensive countertransference phenomena was highlighted by the opportunity to come back at a later date and reflect on the initial countertransference effect.

For pair 292, the most striking countertransference experience was the lack of feeling evoked by watching the pair. The researcher's expectations about the kinds of emotions that viewing the material should produce in her was violated. *'His eyes are very wide open but he does not look startled. He looks full of curiosity and his right thumb and forefinger make a slight grabbing motion where his hand is resting on his knee. He seems to be suspended in animation, just about to take in something yet he does not seem excited or hungry. It is the little hand movements that suggest his anticipation and his wide open eyes his receptivity. There is purpose and something of the poised tension keeps it from being perfunctory, yet, something is missing.'*

Watching such intense joint attention and effort ought to produce a fluttery butterflies feeling but I don't feel it' (292 adm). This was echoed in a similar sense of violated expectations about the kinds of feelings mother and baby should be experiencing. After a long period of mother trying to get baby to imitate her, he finally does manage to produce a sound that is clearly an approximation of the one she was making. The observer comments: *'I am thrilled but neither of them smile or look away. There is no sense of crescendo – no relief, no joy no arriving. There is just approval, given evenly and apparently to encourage him to remain engaged.'* (292 adm) Later in the discharge transcript and reflections

'She begins to commentate on what he's looking at and comments that he's very strong when he pulls on bits. It is appreciative and calm and notices the detail of what he's doing without interrupting him but it does not seem to add much pleasure for either of them. This seems very appropriate yet it is dull, like painting by numbers, there is no risk and so no joy, even though there will be no mistakes.' (292 Discharge)

There is something very disconcerting about the apparently successful social interactions being accompanied by such dulled affect. It is possible that this is what is behind the discrepancy between the Care Index scores for this pair and the Psychoanalytic Infant Observation Scale scores, particularly for the discharge video. Perhaps this attention to transference phenomena was able to pick up on something that the behaviour-focused scale did not? The observer goes on to notice how the baby's gritty determination and tirelessness compounds her own sense of feeling exhausted. It is possible that while baby had adapted to mother's task focused defence against depression, the observer is receiving and experiencing the state of mind that both mother and baby are defending against but will not, ultimately, have worked through. If this is true, then their attentive and contingent interacting has been co-opted in the service of defence against difficulties associated with mother's depression. On the surface, this could very easily be confused with being free of those difficulties enough to be able to relate in an authentically attuned way. The lack of infectious pleasurable affect is the clue to its inauthenticity and this is what the Care Index might not be able to register.

This pair also struggled to express negative feelings directly. The observer had to rely on her own bodily experience for clues about what was being projected:

‘When she changes her vocalisations to ‘oohh’ sounds he does not pause by looking away, perhaps he blinks very briefly but his eyes are busy flitting between her mouth and eyes, and his body twitches very slightly with each peak of her vocalisations. There does not seem to be any sense of ebb and flow. This is full force forward, even if we change course. He seems to be able to keep up the pace but I begin to feel slightly uncomfortable about the amount of tension and wonder if it is pleasurable, or if he is even able to avoid unpleasure. Is the twitching a sign of arousal? Perhaps the excitement that is not expressed by his face? Based on what’s happening in my body I feel most persuaded that it is an aborted urge to break contact.’ (292 Admission)

Similarly, there is a point during the lesson when she is cycling through the sounds and does not notice that he is just about to try one sound when she moves on to the next.

‘His eyebrows start to lift in the centre in little anticipatory puffs and the muscles around his mouth seem to be poised for action. He looks like he is about to try saying ‘oohh’ but she does not leave a pause for him and moves seamlessly on to gentle ‘eeh’ sounds. The preparatory tension in his face slides away and I register a moment of disappointment in me and, I think, in him too. His face is so devoid of feeling that I really cannot tell if I am projecting my disappointment on to him. I feel that my feeling must be in sympathy with his feeling, but actually maybe he is not having an affective response to his experience. Whether his affective life is dampened or his capacity to express emotion is hampered, something seems to be wrong.’

Here the observer uses the mismatch between what she sees the baby express and what she feels he ought to feel as a clue to possible defensive dampening of affect, which Panksepp (1998) associates with the dampening of the SEEKING drive and vulnerability to depression (see discussion in section 5.4 of this chapter).

For pair 090 the transference to the camera and clinician was very evident:

'Her next comment reminds us that she must also be very aware of the camera and clinician in the room. Perhaps she is worried that her wish she had not had to bring him to the MBU might sound rejecting of the care she is getting and says something about 'we need to let the nice people here help us, help mummy get better, yeah mummy get well'. I am reminded how hard it must be for her to see her baby for himself through the sense-dulling depression and the distortions of her own projections. But perhaps it is even more difficult to adjust to the distortions of seeing yourself with your baby through the eyes of clinicians. While the 'benign third eye' provides a therapeutic opportunity, it is also bound to be experienced as persecuting at times. At such moments the camera may compete with the baby for mother's preoccupation and so interfere with the spontaneous responses that might otherwise develop. I begin to feel that she has been in a reverie about their predicament, her illness and their being at the MBU, and it is almost as though he has to share her with all this, almost as though it were another demanding baby.' (090 admission)

The 'benign third eye' refers to Lena's (2013) paper about psychoanalytic parent-infant psychotherapy using video where it is acknowledged that the camera inevitably draws the negative transference from a punitive superego but that as the therapeutic alliance builds with the clinician, so the camera can come to stand for a 'benign third eye' that allows the mother to watch herself in parenthesis. When this third position is imbued with a more positive transference, she can discover that she was holding particular beliefs about her baby, and his feelings and intentions, that she can now weigh up and evaluate in way that might free them from being trapped in ways of relating that belong to her own early attachment relationships.

During the same observation, the researcher was aware of her wish to defend against the feelings stirred by the observation, which helped to inform in terms of just how dangerous the feelings were to the mother and baby being watched.

'I think I became rather immobilised by the chanting trance feel of the interaction and could only write the bare bones of what happened while watching the videos. I had to come back the next day and add the emotional

quality and my countertransference experience, once I'd got away from the atmosphere enough to be able to reflect back on it. This is quite informative in that it supports the idea that the function of her prayer was to anaesthetise. She did not want to feel her feelings or be in touch with his. I, in turn, struggled to be in touch with either of their experiences and even my own. I felt intruded upon and my capacities compromised. I needed space and distance to get in touch with my own lively internal objects.' **(090 Admission)**

Then again with the discharge video transcript:

I felt a bit unsettled and found it hard to focus. I kept getting up to make tea or go to the loo while writing up. Perhaps I didn't want to settle long enough to let the feelings below the surface register? The murderousness in severe depression, which can of course lead to fantasized or actual suicide or infanticide, seemed to be present under the surface and difficult to think about in the context of a mother and baby trying to build something lively together.
(090 discharge)

The observer had discovered, with the distance that afforded triangular space, that she had been engaged in fairly pronounced psychic avoidance behaviour and was then in a position to re-search the material for themes that might have been too distressing to let register consciously at the time of writing up the observation.

With pair 090 there was also a question around what mother was transferring onto or into her baby. Phantasy distortions seemed to be getting in the way of her experiencing him in the way that the observer did:

'Mother is leaning in close, resting on the table with her elbows. It is very intimate and mother is speaking in a soft sad voice. She is slumped to one side, her chin resting on one hand and she is looking over the length of him, and into his face. Her expression conveys pride and love but it is bitter-sweet. It is almost as though she feels he is out of reach to her for now. In fact he is bright-eyed and wriggling a little.'

The observer comments:

'I have written that it is intimate because mother is so close and her tones so soft but, because baby is avoiding her gaze, it actually feels that she has

created intimacy with the idea of the baby, rather than the actual baby. She is admiring him from a distance even though she is inches from him. Yet, it is not quite pining. There is something resigned about the melancholy as her smile is wistful and the calmness in her voice is hypnotic. This atmosphere is delicately expressive of her state of mind but has nothing to do with his. He seems as though he were ready for something interesting or exciting to happen.'

What at first appears to be maternal reverie, an unwavering devotion to the baby at the exclusion of all other concerns has, in fact, lost the baby. The observer begins to find this obscuring transference onto the baby of disturbing preoccupations quite distressing:

'Mummy's determined to get well and take you home and look after you for the rest of your life. Mummy would die without you. She would... die without out you.' She is saying this in a ghostly version of motherese. As with motherese there is the gently lilting tone and pleasantly exaggerated cadence but this is so at odds with the content of what she says as to be quite disturbing and deeply sad to observe. There seems to be an attempt to warp the deathliness of her depression into a romantic and melodramatic declaration of love.' **(090 Admission)**

The observer goes on to speculate that mother may be suicidal and that this is the deathly preoccupation that gets presented as devotion. Similarly the observer notes that there is:

'Something about the almost worshipful way she looks at him and kisses him is actually distancing in that it is as though she is caressing a precious possession, rather than engaging with a person. The self-soothing feel to mother's affection is solidifying into something more ritualistic and less spontaneous or of their interaction.' **(090 Admission)**

Later the observer describes this as having the quality of a prayer, instead of offering up her mind as a psychic space into which she might take his projections. She is busy using the idea of him as a sort of talisman to ward off her own anxieties. Later she is holding his dummy just out of reach as he mouths and reaches for it:

‘My feeling is that she is not conscious that she is frustrating him. Again there seems to be a disconnect between the idea of a baby who she is smiling on lovingly, and an actual baby with desires and demands who she is smilingly tantalising.’ (090 Admission)

It would seem that she cannot see her actual baby because he has been obscured by all she has transferred on to him. She can only see the role she has cast him in, a role that makes sense in the terrible preoccupations of her drama but not his.

5.3b Containment, Contingency and Congruence

Containment

In the literature review, it was noted that when a carer has not introjected the capacity for containment, the baby’s projected anxiety has no internal space in which to be received. There is no digestive system for processing internal contents – no alpha function to work on those beta elements. Bion (1959) developed the idea of containment to include its opposite, the notion of a convex container. The carer may not only lack a concave psychical space but actually take on a convex shape. This not only bounces back the baby’s projections but also, through a perverse inversion of the nipple/breast, spout all the anxieties stirred in her through identification with the baby’s anxiety. The baby is then deluged by his own and his carer’s beta elements with no opportunity to introject the capacity to develop alpha function.

The mother in pair 292 seemed to function in this way. Not only did she do little that was contingent on his actions but, when her anxiety was provoked by his oral urges and she admonished him, she sent back his distress about this mixed in with her own unprocessed distress.

‘She then waggles [the toy] about and he takes it by the paw and tries to pull it towards his mouth. Again she laughs and he startles and stops, glancing at her and looking a little anxious and hurt. I think he feels rebuked. She continues to laugh gently but there is no mirth in it. There is no recognition of

his expression of these negative feelings that she has provoked. The fact that she is unable to sympathise with his feelings of shame, suggests quite strongly that these are feelings she has projected because she cannot tolerate them herself. In this case she is like Bion's convex container in this moment, bouncing back his distress and adding her own unprocessed pain to his before she returns it.'

(292 discharge)

Similarly, in the following excerpt the baby's withdrawal seems to provoke retaliation.

'She swings back into an upright position when he breaks contact, but she immediately starts to make 'agogogoggo' noises to regain his attention. When that doesn't work she calls his name and claps loudly. Initially, she responds appropriately to his withdrawal by pulling back too, but the force of the swinging back may suggest that this has a slightly rejecting or retaliatory edge to it. That she then immediately tries to regain contact, and when that fails tries harder/louder, suggests, again, that she can perceive his need for a pause but cannot tolerate it and act on it. Perhaps she feels rejected and needs to project that feeling into him while simultaneously demanding his attention? In this context there is something slightly violent about a loud clap.'

(053 Admission)

The mother in pair 292 seemed to be using the structure of a game, or lesson in how to imitate sounds, as a way of controlling the emotional contact between her and her baby. The observer wondered whether she was aware of her struggle to contain her own feelings, let alone his feelings. She becomes intrusive, in the sense of being controlling, as mastery of baby is resorted to in lieu of being able to marshal the mass of projected feelings. It is an attempt to stem the flow of projections for lack of trust that they could be contained, thought about and made bearable. In the following excerpt he has been doggedly trying to imitate her and finally manages it. She does not allow for any celebration, there is a glancing acknowledgement but then the lesson continues. The observer notes:

'Keeping on keeping on seems to be what matters. I start to wonder what they fear might happen if they let the train stop?'

(Admission 292)

Throughout both the Admission and discharge video this baby does not smile or complain once. She nurtures his cognitive development and they are almost continuously engaged with one another but the affective side of their relationship is completely constrained and stifled.

Contingency and Congruence

Self-contingency in the mother is the degree to which her behaviour, from one moment to the next, could be predicted in an interaction with her infant. The degree of maternal self-contingency in an interaction with her 4 month-old was predictive of attachment status at two years (Beebe 2013). This is not a measure of how sensitive her attunement to her baby is but simply whether what she does in one moment, for example smiling while taking in breath, is usually followed by another behaviour, like looming in towards her baby's face. Beebe proposed that the infant's emerging sense of agency depends on a social environment that is predictable, one in which he can actively participate by way of anticipation. She named these expectancies. The researcher noticed that the score for each video on the item pertaining to contingency and congruence was correlated to the overall score on the Psychoanalytic Infant Observation Scale for that video. This correlation between a low score on item 3d and a low overall score, does seem to confirm the findings from Beebe's research (Ibid).

During the course of the Admission video for pair 053, the impact of her cross-modal incongruence on her baby becomes clear. It is not possible to analyse accurately the degree of maternal self-contingency without applying Beebe's very involved method of microanalysis but she does identify a correlation between cross-modal incongruence and poor self-contingency.

'The lyrics 'naughty boy smiling', sung while apparently showing great pleasure and pride in him, feel incongruent and jar somewhat. Perhaps she is acting out her ambivalence. Ordinary maternal ambivalence, experienced in the depressive position, is tolerable because the negative feelings do not threaten to obliterate the positive ones. If paranoid schizoid position functioning is dominant then the splits will be more profound, to protect the positive feelings, and both extremes are more likely to need expression. This might account for the slightly denigrating lyrics delivered with extreme cheer.'

It is also possible that she is projecting her own anxieties around shame and humiliation, which are bound to be aroused by a parenting assessment, in the threat to 'tell the world' about his being a 'naughty boy smiling'.

(053 Admission)

A little later in the observation it is noted that *'He is smiling but his eyes are a little wary'* The observer goes on to speculate that:

'His cross modal incongruence suggests a loss of internal cohesion and resilience. This may make him vulnerable to fragmentation. That he is not able to show straightforward wariness or fear suggests he does not feel he can look to her for help with difficult feelings in this moment.' **(053 Admission)**

There is now a feeling that the baby has introjected objects characterised by extreme aggression and objects full of cheerful hopefulness but that they do not relate to one another and the positive does not ameliorate the negative. They co-exist in conflict with each other, creating a conflicted state of mind that cannot be made sense of. He cannot settle on feeling distressed and then seek help from his actual external mother with this feeling of distress because he is caught straddling two opposite feelings, which make for a confusing communication that she is unlikely to be able to respond to. Here it is possible to track how the infant's internal world, peopled by distorted versions of actual part-objects of voice and facial expression, are mediating his experience with his actual mother. This is still not explicitly described in the transcript or reflection section. This in itself draws attention to just how difficult it is to make these speculations explicit in an observation. The observer did comment that:

'He seemed to be trying to make contact with and enjoy the fun mum while increasingly needing to avoid the intrusive and potentially threatening mum. This led to bizarre, fragmented and incongruent actions on his part like smiling and hiding without coyness. I wondered if he was trying to persist in a part-object relating mode in order to be able to preserve the fun mum. Unfortunately the threatening mum and fun mum presented in tandem, rather than in turn, so that this became impossible to manage in space and time. The

development of his perception of space, time and affect expression may suffer as a result of these struggles. **(053 Admission)**

The degree of concern appropriate to such speculations is made accessible through the description of the impact on the observer of watching the interaction. In this moment mother is available and receptive to him yet:

'He is looking at her and away and looking back but it feels a bit uneasy. Although his smile fades, somehow it seems to take a while to catch up with his eyes and remains in a lifeless way on his face for a few moments too long.'

Then in the reflection section:

'They have lost an opportunity to build trust and pride in themselves and each other and it is that opportunity that seems to fade on his face. This feels deeply sad.' **(053 Admission)**

It does seem that the opportunity was lost to the phantasy distortions impinging from his internal world and this continues to prevent him from making use of what she can offer.

'She then tickles his tummy and he smiles again but keeps his face firmly pressed into the wing and his eyes averted. He is smiling around his hand, again he has a finger in his mouth, and is glancing to her and away.'

(053 Admission)

In the reflections section

'This time the finger in his mouth feels more like something to block her. There is something a bit discordant about his face. His eyes are very bright and in the context of his smile could easily be taken as smiling. Yet his behaviour, the pattern of his looking and looking away seems more vigilant, and in that context his eyes might be bright with hyper arousal. This would make his smile completely incongruent. I feel quite worried about his being in a fragmented state.' **(053 Admission)**

Even when the observer sees a benign mother the baby is responding to a sense of threat, which is not properly split off from a sense of safety. Such a split might afford a sense playfulness to be protected but here it is not.

Through Beebe's work, it has been seen that coherence through integration of the infant's psyche is something that must be instantiated in the throes of congruent and optimally contingent interactions. Freud identified the dynamic nature of the unconscious in that it is motivated to protect the ego from terrifying and so unthinkable thoughts, even if that is anti-developmental. When Klein brought this right back to the beginning of life, she realised that even the most primitive embodied cognitions could feel dangerous and be subject to inhibition. Only when integration of good and bad internal objects feels safe can the power of the infant's love for the good object be trusted to mitigate the hate or RAGE felt towards the frustrating object. This is termed the depressive position because it depends upon having been able to mourn the idealised good object. The opposite of integration is fragmentation and that is what the observer fears for the baby of pair 053. Mother is playing a game which involves her swooping in on him:

'His startle suggests this was not what he wanted in that moment, yet he almost immediately recovers with a smile. This suggests that he has learnt to enjoy a little jeopardy in the manner of enjoying a funfair ride. This could be adaptive and show resilience but equally it might lead to his struggling to identify and differentiate between positive and negative affect, which would leave him vulnerable to fragmentation.' **(discharge 053)**

Pair 090's interactions lead to the baby appearing to lose self-contingency. Again, the observer speculates around the possible implications for his internal sense of coherence and cohesion:

'He smiles and clouds over and brightens again so rapidly in response to her during this exchange that it is a bit dizzying. The incongruence seems to have a scrambling effect on his experience. He cycles through such a rapid change of affective states that as an observer one feels disorientated and unsafe, which might give an insight to how he feels. Perhaps he has introjected an

incongruent object that cannot be made sense of, or assist him to make sense of any new experiences ' (090 discharge)

For pair 053 the impossibility of keeping up with mother's manic intrusive playfulness and staying true to his own experience is collapsed when he breaks with her to preserve his own self-congruence.

'He sighs and goes a little still. She lets go of his hand and waggles his ear. She becomes desperate, trying to find a way in through another modality as he shuts down and shuts off from her. He glances back and she is in full manic smile and raised eyebrows while he is quite subdued now. He seems more self-congruent but they are now completely at odds with each other. He looks away and she calls out his name then, 'naughty boy', which he looks at and she quips 'you know your name'. She seems angry with him for collapsing the tension to own his own authentic state of mind and in so doing, abandoning her. She cannot yet follow him to somewhere more sober.' (053 discharge)

Having to choose between a needed object and internal coherence seems a desperate place to be. When both contingency and containment are available, both a sense of self and that one's feelings can be borne are developed. Yet this description lacks the joyousness of coming to know that one exists and that this is a joyous thing. In the Admission video for pair 303 we see mother's contingent acts repair interactive rupture and draw out the lively awareness in him that he exists for her. From the observer's countertransference we come to know how this also bestows grace on him.

'He is looking from eye to eye and lets go of her hand, perhaps trying to pull back slightly, the expression on her face is friendly but quite intense, not as relaxed as her voice. They both look away and her smile is less pronounced but her face still friendly. He lifts his right foot and she then tickles it, both responding to his action in the here and now and developing the theme of stimulating his extremities. She is able to let him withdraw without darkening or chasing. She remains available and receptive so that when he lifts his foot she can offer a contingent response. I also seem to have a sense that she is offering some continuity from the last bit of interaction. There was something

almost balletic about the way their bodies responded to one another and I felt the dance had started up again.' (Admission 030)

Her capacity to wait for him, and hold on to the thread of what they had co-created, nurtures his internal organisation and integration of experiences but it also protects his SEEKING drive because he has no need to dampen it. He can also afford self-congruence because she can afford for him to have his feelings, even if they are negative in relation to her:

'When she looks to his eyes and realises she has his gaze, she responds with a very expressive smile and raises her eyebrows in an exaggerated way twice. This seems too much for him and he looks back down. He is able to regulate contact with her and protect himself but looking down, as opposed to away to the side, might suggest that there is some experience of shame at not being able to bear the intensity of her gaze, the brightness of her smile. She enquires about something in an attentive but not demanding way and sits back a little, giving him some space. She seems to realise that he needs more space. She does not respond to rejection by pursuing him, a bid to undo the rejection. She accepts it and adapts her own style to what he needs. He makes a conversational if still slightly grumbling sound and she treats it like a communicative sentence, saying something like 'oh I see, really?' in an interested but appropriately sedate way. She has repaired the rupture and he is able to continue to communicate what he feels, he does not have to brighten up to match her or become avoidant.' (Admission 030)

5.3c Infantile defences and the early dynamic unconscious

Infantile defences – manic and second skin.

One example of an implied infantile defence was against an experience of being tantalised. In pair 292, mother has tapped baby's nose with her finger and he reaches for it with his mouth.

'Again this looks like a rooting reflex and when she repeats the nose tap he reaches for her with his mouth over and over a few times. It begins to look a little insensitive to his obvious desire for oral satisfaction and I wonder if he may be feeling tantalised, and perhaps even humiliated by being tantalised.'

(292 Admission)

The baby does not express shame or rage, which would be the appropriate response to feelings of humiliation. However, the intensity with which he applies himself to the task of the imitation lesson that follows immediately after the nose tapping seemed to suggest a manic defence. Manic defences both stave off the depressive humiliated feelings and simultaneously give an outlet to the energy and tension of rage.

'She does a few 'aahhs' then a few 'oohhs' and he forgets about his want for something in his mouth. He is utterly focused on her face again. His eyebrows are raised so high he looks like he might pop. His head bobs a little with the pent up potential as his mouth almost twitches and eventually he manages an 'ooh'. He seems to have pulled himself together around the effort of making this sound; it focuses all of his being there, and then there is no part of him left to feel anything else. When he makes the sound I feel he has triumphed, triumphed over the task but also over his pain or frustration.'

(292 Admission)

Whether it can be claimed that this is evidence of a dynamic unconscious is a vexed question. It seems reasonable to say that he is avoiding experiencing his shame and rage but does this equate to repressing them? It could be argued that he was simply responding to the opportunity to be distracted from those feelings. Again, the question of whether this phenomenon was mediated by phantasy is not easy to answer. Arguably he was spurred to lock onto the task-focused mummy in front of him because of his relationship to an internal object that demands unwavering attention but repays in kind. However, it is also arguable that he is responding to this in his actual mother. Later the observer comments:

'In fact when he does experience a little discomfort, through the frustration of not being able to make a humming sound, he seems to ride through the discomfort, remaining engaged with her rather than breaking off to mourn the

failure...his attempts to replicate it are not successful and his body twitches a bit with the effort'

The observer comments:

'I feel exhausted and that he is tireless'

(292 Admission)

This seems to chime with the idea that he is employing manic defences against mourning and not only responding to this tendency in his mother. If introjected part-objects are the corollary to the most salient sensory-affective experiences, then this baby would have frustrating internal objects but ones who must not be crossed. Given that the innate response to frustration is RAGE, as conceptualized by Panksepp (1998), the injunction against the only authentic and meaningful affect response to a situation would lead to attacks on linking (Bion, 1959) and an undermined internal structure, which gains its strength from coherence. The researcher goes on to comment that this dogged perseverance:

'...puts me in mind of second skin formation (Bick, 1986), when bodily or intellectual muscularity provide exoskeletal support where there is a lack of a coherent and so cohesive internal emotional structuring.' **(292 discharge)**

Again, the qualitative difference between defensive and appetitive seeking is revealed by the countertransference experience of the observer. In another moment, when things are going better between this pair:

'She then makes some really lovely 'ooh' sounds which are a little like doves cooing. He seems to enjoy this so much that his right leg bounces and he lifts his face towards hers.'

The observer comments:

This is extremely moving. It feels as though they are finally being enlivened by something fluid and supple passing between them, rather than fixed on each other in a rigid 'holding on for dear life' sort of way. Although he has not once looked away from her this is the first time I feel he is really seeking her and it is expressed by his body. **(292 discharge)**

Another pair who rely heavily on manic defences are pair 053. At the end of the discharge video this strategy appears to be faltering:

'He flops his head to one side and watches, again he might be interested but there is also something resigned about his expression. I worry now that he is feeling despondent. It feels like she overused his capacity for excitement and arousal and now he is burnt out. He seems to embody the depression her mania sought to keep at bay. It would appear that he has introjected her depression through the very mechanism she used to try and protect both of them from it.' (053 discharge)

Here what is being suggested is that the very affective states that the observable behaviours seek to keep at bay do get transferred, here to the baby and in the earlier observation to the observer who feels exhausted in the face of the baby's apparent tirelessness. These mechanisms assume a dynamic unconscious at play in the mother, infant and observer.

Infantile defences – dissociative.

It has been shown that affective states need to be affirmed through mirroring and appropriate attempts to enhance good or diminish negative states. This helps to build coherent narratives around feelings. Again, what Klein brings is an understanding that internal splits, i.e. active anti-coherence through dissociative defences, are used to deliberately not know and feel what can't be borne. Whether it is frightening interactions with an actual carer or a frightening interaction with an internal object, efforts will be made to minimize the impact. At a physiological, level opiates are produced to dull perception of pain while the parasympathetic system causes stilling or a freeze response. At a psychological level, the dynamic unconscious prevents mental links. This works to isolate the source of disturbance. If it is an external world carer, this might be done through gaze avoidance or attacks on the apparatus of perception – the blank stare of eyes that don't register what they see. If the source of disturbance is internal it cannot be escaped in these ways. Whether it be his own sadistic urges or the bad objects full of his own projected rage, who are then re-

introjected, it is internal to his mind and he cannot flee it. He can only isolate it through attacks on his own capacity to make links and develop the mental apparatus for thinking, coherence and meaning. Observations of such phenomena are described in the sections headed: 5.3b Containment, Contingency and Congruence and 5.4 Concilience with Neuroscience.

5.3d Two-person bodily Self (and its legacy – narcissistic defences)

As described in the literature review, the first embodied cognitions are stimulated by interoceptive cues about loss of homeostasis, but these are also the first relational experiences because homeostasis can only be achieved through activation of the carer – the other half of the functional unit. In this way, the first self is a bodily self but it is also a two-person unit/self. From this perspective, boundaries between people are not a perceptual given but must be co-created through experience. Individuation and differentiation are processes that require certain kinds of experience. This has been well described by Hobson (2002) and Reddy (2008) and is the kind of playful protoconversation that allows the infant to come to experience that he has a mind because he notices his carer playing with the expectations held in his mind. This also allows him to perceive that his carer has a mind that can know his mind but is separate from it. It is the mis-steps in this dance (Stern, 2002) that usher in the gentle disillusionment (Winnicott, 1952) from the denial of, or failure to perceive, separateness. Intrusiveness and enmeshment, on the part of the carer, suggest that this process did not reach maturity in her. She is likely then to employ narcissistic defences against existential anxiety and so be prone to narcissistic identification with her baby rather than empathic identification and this, in turn, is likely to exacerbate struggles to differentiate.

Regarding the Admission video for pair 303, in which there was a striking mismatch between the mother's voice and her facial expression, the researcher commented on her struggle to recall the detail when writing the transcript:

'I found that although I had a general impression of the interactions that I felt was about right it was very difficult to recall the detail. This improved as the observation went on and the cross-modal mismatch lessened. Incongruence is

hard to recall because isolated actions and gestures do not coalesce into chunks of meaning.' **(303 Admission)**

This increases the burden on recall and obscures meaningful links between individual actions. It is worth noting that the researcher extrapolated this possible issue for the mother-infant pair from her countertransference experience of struggling to recall the detail that was informing her impression of the pair's relationship.

The researcher went on to reflect: *How might this hamper the infant's struggle to 'distil out a self and other' from the anoetic experience of the functional unit?* It is expectancies that support the development of clear perception of separateness because expectancies presuppose a boundary, with its innate possibility of communicating across that boundary. Self-incongruence and lack of self-contingency (see above) would make the predicting part of having expectations of the other's behaviour impossible. Maternal self-incongruence would undermine the baby's development of agency but this is also bound up with the developmental task of individuation.

For pair 292, the theme of individuation was prominent throughout. The Admission video was a lesson in imitation. The researcher comments that:

'Perhaps her focus on what she can teach him to do is a way of avoiding emotional contact while remaining closely bound together by the task in hand. This would allow merger through matching, rather than coming together and apart and together again, as separate people who need to be contingent and reciprocal. This would, in turn suggest paranoid schizoid rather than depressive position functioning. When she touched his nose and told him it was his nose, then framed her face to tell him this was mummy, I wondered if she might have felt the need to try to delineate their boundaries precisely because she struggled to acknowledge their individual intentions because both were subsumed by the intention to succeed in the task.' **(292 Admission)**

In the discharge video she is not leading a lesson in the same way but somehow something similar happens. She has been asked to play with her baby without a toy so her decision to ignore this request is significant. The researcher speculates that mother may be trying to avoid direct contact with her baby, which can also be a motivation

for enmeshment because it is the coming together as separate people that is feared. In this scene she is watching him play with the toy, apparently allowing him to take the lead and follow his own interests. However, as the researcher describes:

'He then starts to pull at the foot and she says 'that's right, now try to pull it'. She seems to be responding to evidence of his own volition with a commentary that suggests he is doing what she suggested. There seems to be a paradox in that she seems in a hurry to teach him how to be an agent in the world, yet struggles to attune to or respond to evidence of his already having agency. Again I wonder whether fears about him having to manage without her contribute to a wish to avoid separateness through merger. This might explain why she seems to push him towards premature independence while simultaneously pulling him into merger through denial of his separateness.'

(292 discharge)

Here the observer speculates that mother's depression, and their situation as patients on the mother and baby unit, may mean that fears of them being separated are very present for her and are spurring her to ready him for such an eventuality. It may also speak to a much more primitive difficulty with individuation informed by her own formative experiences. What is also striking is that all the examples given describe speculations about the mother's motivation to prevent individuation rather than the infant's. Despite the express intention to focus on the internal world of the infant and how this mediates his experience of his mother, on returning to the transcripts and the reflections, it is clear that speculations about the mother's internal world dominate.

What is more readily observable is the infant's struggle to individuate and distill out his own feelings from the experience of being together. From the same observation:

'He turns right into the wing of the chair and looks at his hands, which he has brought over there so that his body is orientated as far away as is possible in the chair. Finally he has acted to regulate his contact with her. It seems likely that he senses her distress and is avoiding further projections. I am relieved to see that he does have a sense of what might be too much and can act to protect himself.... He looks at her with what might be interest or anxiety. It is hard to

tell. Perhaps this ambiguity reflects his own lack of coherent response to her. If he is beginning to separate out it might take some time before he can identify his feelings and let them take their course.’ (292 discharge)

There are ways in which a lack of differentiation can be thought to support caregiving. Babies are resource expensive and emotionally demanding, requiring great parental altruism to meet these needs. One way of thinking about how the wellsprings of altruism get replenished is that the infant in the parent enjoys all that is lavished on the baby through projective identification. Towards the end of the discharge video for pair 090, the observer notes that he has come off the boil, is no longer interested in playing and is mouthing his hand and frowning. She wonders if he is hungry and just then his mother comments that she will need to get his bottle ready soon.

‘...adding that that is all she is doing at the moment, feeding him all the time. As she says this she kisses his fingers while making an exaggerated eating sound, adding that its costing her a fortune... She makes a face with protruding lips and he grabs at her mouth and gets a fistful of her lips. She exclaims in pain and he jumps but continues to squeeze.’

The observer speculates that mother had been unconsciously communicating her anxiety around resources, particularly perhaps emotional resources, given her depression. The observer wonders if her apparent playful eating of him actually represented her need to get back all that she is giving him, her panic that she does not have enough for herself let alone him. Here a potentially helpful unconscious merger seems to have broken down, leaving them rivals for scarce emotional resources. His violent outburst that follows her cannibalistic play is suggestive of such a dynamic. In this excerpt, it seems both infant and mother experience one another through distorting unconscious phantasies around primitive needs and urges.

Behind the notion of primary narcissism is the assumption that early states of homeostasis would not require any mental processing because mental processing develops in order to bring the organism back to homeostasis. When all is good with

the world, there is no need to discern a world or a self as separate entities; it is an unthought pleasure state. As Likierman puts it: ‘while he does imbibe maternal goodness, he does not differentiate it from the totality of his self-centered, bodily experiences’. (p.105). It seems likely that this state is often the dominant state for infants who have good enough care experiences. Similarly, it seems likely that those whose environment is not good enough would attempt to gain the state through defensive denial of separateness.

It is true that such implicit relational procedures are not acted on by a dynamic unconscious, in the sense of being repressed by an introjected super-ego, because that hasn’t happened yet. However, the literature reviewed thus far does suggest that ‘implicit relational procedures’ are forged under the influence of defensive failures to perceive and conceive of a reality that is not safe to be known. Thus, they defend against psychic pain and terror in a way that forestalls development. This is the dynamic unconscious at work. Merger comes to be used as a defence against PANIC/GRIEF. What then happens when the mother’s reverie is hampered and she cannot recreate the intrauterine experience, only slowly presenting the infant with their separateness and dependency on another person? What happens when reality is not tempered through attuned care? That is when infantile defences are over-burdened and become maladaptive.

5.3e Internal objects and how they mediate interpersonal experiences.

Going back over the transcripts and reflections, there was only one explicit reference to the way in which introjecting good experiences with good objects takes the pressure off the current interpersonal interaction, because there is a bank of good experiences to see them through the ebb until the flow replenishes again.

‘She looks proud as he makes a couple more vocalisations and they smile excitedly at each other at the end of the song. They then enjoy a rally. When he then glances away, slightly down and to the side, she is able to sit back but remain open and cheerful in her facial expression and tone of voice, verbally acknowledging that he’s had enough for now in an accepting way. The ease with which each of them are now able to enjoy something, then let it go,

suggests that they are introjecting those good experiences and don't need to try to hold on to them too tightly in the moment and risk spoiling the experience.' **(303 discharge)**

The observer explicitly comments on a sense that this pair are making use of good internal objects:

'They seem to be having a cross-modal conversation. She verbalises her exploration of his experience – what's happening for him, while he explores her hand. They both seem to feel they have all the time in the world to do this, which conveys a sense of trust in each other and probably in internal objects.'
(303 Admission)

For Klein, the main obstacle to forming a stable representation of a good object was the overuse of projective identification. Excessive projective identification both erodes the distinction between self and object and fills the object with badness that the baby has evacuated. Through projective identification, the baby can also feel himself to appropriate what is good in the object. This spoiling and stealing through identification was what Klein understood as a primitive sort of envy, which will not allow that anything could be both good and distinct from the self. It is possible that the excerpt described earlier, in which the hungry baby attacks mother by taking a fistful of her mouth after she has been tantalising him, was a concrete expression of this sort of primitive envy.

The safety to know about one's dependency and feel gratitude for what is bestowed is the only antidote to envy. In the following excerpt from pair 303 we see the kinds of experiences that might make dependency and SEEKING safe and could even foster gratitude so that it might triumph over envy.

'She tickles his right foot some more and he is watching her fingers moving on his foot and at the same time the fingers on his left hand move too. He has a slight smile on his face and it looks as though he is both interested in what is happening to him and enjoying the feel of it. All the while her softly enquiring voice adds to the sense of something flutteringly sensual. Trust, desire,

satisfaction and perhaps gratitude all seem to be expressed by his smile and her tone.'

(Admission 303)

Similarly, she uses flexible structures to scaffold their play, to lend predictability within which they can have novel experiences and risks can be taken.

'She then asks if he wants to do 'hands and feet' as she takes his right hand in her other hand. He smiles a more anticipatory smile and looks to her. She pauses, singing out the question again to pleurably build tension and his smile widens. As she brings his hand and foot together so that they touch each other he makes an explosive little sound which she then matches with her laugh and they share a few moments of open-mouthed laughing, each taking a turn. His head is right back on the headrest and her shoulders are up around her ears as she shakes them with laughter. The whole exchange has a really expansive feel to it. She then does his left foot and left hand, building the tension with a crescendo of 'look, look, look!' (discharge 303)

The observer comments:

'This is enjoyable to watch for many reasons. It is partly the intimacy and confidence of shared knowledge. Each knows that the other knows what is coming but it has not happened yet. It is the pleasure of mind-reading. Then there is the way she uses this to build excitement and then the synchronised climax and matched laughing behaviours. It is a dance with no missteps, perfectly timed and expressing authentic pleasure in being with and knowing the other. It starts with a reciprocal, caller-response, pattern then through to synchronised moves and back to something more conversational before repeating the cycle. The length and complexity of this exchange suggest they are accustomed to successful interactions. They are reaping the rewards of their intimate knowledge of one another. It becomes clear that this has been possible because neither is too preoccupied and because it has been safe enough to attend to the other for long periods of exploration, of trial and error. For many pairs too much error would have been too destabilising to risk.'

(discharge 303)

There were also references to part object relating, and how this could impact interpersonal relating, but this did not always lead to speculations about the introjection of these part-objects for the 303 transcripts:

'The good correspondence between his actions and her vocalisations created a sense of congruence and security at one level but this was simultaneously undermined by her facial expression, which was so often at odds with both of these. This was quite discombobulating for me as I had to try to take it all in at once. His strategy of avoiding her face but apparently allowing her voice and hands to stimulate and sooth him seemed quite successful. His having to respond to her self-incongruence by relating in different ways to different aspects of her may have kept him regressed to part object relating when he might otherwise have been ready to begin to perceive her as a whole object. Also, this strategy meant that there were times he missed her more spontaneous and authentic expressions of positive affect and his play might have been more bold and enriched if he'd been able to see and feel her pride and pleasure in him.' **(303 Admission)**

The following excerpt, from the Admission video for pair 090, identifies a slightly different mechanism by which an object is introjected. In this case, the object is not formed as the corollary to the feeling provoked in the baby by an interaction. Instead, it is the experience of being related to as though he is an existing significant object, internal and/or external of his mother's. Here she is lamenting her depression and their predicament but apparently looking forward to a time when she will be better:

'She goes on to say 'We'll have good times then, good-times. Mummy's not well at the minute, mummy's not well at all. Aay? Tom, Tom? Her voice as she says this has the ring of sentimental reminiscence. Again, very wistful - as though something cherished has been lost, not as though exciting plans for the future were being made.' This feels very confusing. It is a promise for the future, a promise to get better and be there for him and yet it has the atmosphere of mourning. There is a sense of a lost loved object and an acknowledgment of one's dependency on a lost object. All this is in the

wistfulness of her voice. At one level this feels quite promising because bearing the pain of loss, without recourse to denial of dependency, is the work of mourning that might alleviate her depression. Yet, something is wrong here. The live baby in front of her seems to be confused with the lost loved object – this might just be because she feels she can't reach him, or can't meet his liveliness in her current state but there might also be a more profound and worrying muddle around who the baby is. She may have projected un mourned dead objects into him and be relating to them when she interacts with him.'

(090 Admission)

If he comes to have an internal world peopled by dead objects who can neither be brought to life nor let go of, one wonders about how this will impact on the way he perceives his impact on external objects.

The following excerpts, both from the Admission video for pair 053, illustrate how positive experiences can lead to transformational reorganisation through new links being made across the whole sensori-affective-social system. In the first, mother has been chatting conversationally to him.

'He has one finger in his mouth and his free arms and legs are moving about quite a lot. He then makes a lovely conversational sound himself. The emotional authenticity and reciprocity in this exchange seems to build his confidence in himself as a communicator and in them as a communicating pair. His oral self-stimulation and moving limbs suggest that he is quite lively inside. When he offers the lovely sound to her it feels that this is the product of the internal connections and creativity that the previous contact inspired.'

(053 Admission)

The good connections between his different body parts seem to map on to the good connections between good internal objects which, in turn, spur good connections with his external object in turn. The following scene brings to mind Zeedyk's (2006) description of how intersubjective joy actually spurs new synaptic growth and

connectivity like no other of a baby's experiences – it builds the brain as well as the mind and the internal world that that mind is host to:

'The baby is looking at mother with an enormous open-mouthed smile around the four fingers he has crammed into his mouth. His eyes are wide open and twinkling too. He seems to be stimulated by mother and by his fingers in his mouth. There is something expansive about the wide-open mouth and eyes that create a sense that it is safe to take in the emotional atmosphere as well as his fingers and the sight and sound of her. There is a pleasurable urgency about his apparent hunger for all these things and his twinkling eyes suggest that what is being introjected is good for him and shines back out through them.'

(053 Admission)

5.4 Consilience with neuroscience: themes emerging from the transcripts.

Neuropsychanalysis is showing how innate affective forces demand and support primitive but powerful relational phenomena even before a 'self' or 'other' are fully conceptualized or even apprehended by the infant. In 'From the couch to the lab' Solms and Zellner (2012) assert that: 'Certainly we are hard-wired to respond to particular classes of stimuli with specific emotions, but there is little evidence of having elaborated images of unique objects when we are born; rather, we learn that the attachment feeling we have belongs with this particular person, the scary feeling arises when that particular thing happens, and so on. There is a feeling there, first of all, and then you have to learn what the feeling is about. Its specific 'aboutness' is acquired, and has everything to do with early experience' (p140).

These authors focus on consilience between Freudian psychoanalysis and neuroscience. However, this description seems to be on the verge of capturing the way in which sensori-affective phenomena lead to the *construction* more than *perception* of agents endowed with the corollary of these sensori-affective states. This is the 'aboutness' that is learned through early experience with part-objects. The phantastical quality of these part-objects comes from the fact that they are constructed, and so phantom-like. Once introjected, these part-objects colour the perception of actual objects of early experience, meaning that the 'learning about' is

not straightforward and is prone to phantasy distortions. The findings of this study suggest that it is concilience between neuroscience and Kleinian psychoanalytic theory that is most exciting and under-explored. The section above explores examples of such phantasy distortions that can be inferred from the transcripts with brief links with Panksepp's basic drives theory. Here these links will be explored a little further with reference to infantile defensive phenomena described in the transcripts.

Carroll (undated web article) has indicated that what will be most interesting to therapists is an exploration of the interactions between Panksepp's seven basic emotions. What emerged from the transcripts was precisely that: the complex interaction between SEEKING, FEAR and PANIC was most striking. It has long been understood that the paradox of dependency on a dangerous carer leads to disorganized attachment characterized by contradictory behaviours such as approaching a carer by backing towards them. This is an attempt to resolve the problem of the FEAR system and the SEEKING system making opposing demands simultaneously. What the transcripts highlighted was another paradox, namely that the PANIC system can be activated in the presence of a carer if that carer is preoccupied, aggressive or grossly misattuned. SEEKING in such situations is not used to bring the absent carer nearer, as with a distress cry. Instead, SEEKING goes into the service of attempts to regain or maintain psychical proximity, to stave off PANIC. Infants were seen to attempt to attune to the parent, risking their own self-congruence and negotiating at the boundaries of their tolerance of FEAR, in order to protect that psychical proximity.

5.5 Despair- inhibition of seeking and depression in response to prolonged PANIC in the face of hostile or unattuned care.

From an evolutionary perspective, if the distress calls of PANIC/GRIEF are made in vain, they might only serve to alert predators to the infant's status as easy prey. However, this dampening despair response is highly maladaptive to social loss in contemporary society and Solms and Panksepp (2012) argue that this state of despair is both the origin of depression and linked to dissociation. Because the despair state inhibits the dopamine-mediated SEEKING behaviours, which are necessary to move out of the despair state, it is easy to get stuck there. The insecurely attached infant can

be thought of as existing in a chronic state of PANIC/GRIEF. ‘From this point of view, depression may be an evolutionarily selected mechanism (present in some form in virtually all mammals) to terminate protracted and unsustainable separation distress, as first formulated by John Bowlby (1960, 1980)’. (Solms and Panksepp, 2012, p.5)

Paradoxically, even in the presence of an unattuned and/or rejecting parent, the infant’s PANIC/GRIEF system will be activated and after initial protests, will dampen the SEEKING system. In the following observation the baby in pair 292 has been rebuked by mother’s disapproving laugh for mouthing a toy. What happens next seems to document that moment when lively SEEKING gives way to despondency.

‘She scrunches a bit between her fingers to stimulate his interest in it again. He is interested and excitedly tries to pull that bit towards his mouth. Again there is a warning laugh and he drops it and searches her face. He then leans into the wing of his chair and looks at the toy in his hands with some sadness. Finally he seems to have succumbed to a state of despondency. He cannot get it right and is repeatedly frustrated and rebuked and he does not know why. It is an intolerable situation and I am relieved to see him able to let it resonate and be expressed. However, he is not looking at her and I doubt that he expects this expression to be picked up as a communication.’

(292 discharge)

Something similar happens with pair 053. Their game has been derailed and mum is trying to regain his attention:

‘You not going to look at me?’ He looks at her mouth and smiles a little. Just as she says ‘yeah, that’s better’, he looks away, grabbing his toes in his hands. The whole thing feels quite muscular and tense. Perhaps he is using bodily muscularity to compensate for an increasingly dissipating mental state. This would be bodily defence against the fragility of linking within a still relatively inchoate mind.’

She becomes more intrusive and eventually

'He sighs and goes a little still. Finally he seems to go into a sort of dissociating or despairing state.' **(discharge 053)**

More hopefully, the observer often noted that the baby seemed to be using avoidance as a way of preserving or protecting a potential. In the Admission video for pair 090

It already looks like he is avoiding her gaze and the limits on how much power he has to orientate away with so little muscle tone is striking. He is not staring blankly into space but at his hands. This feels more like he's holding a space, ready to rejoin her when it feels OK, rather than a dissociative cutting off completely. (090 Admission)

Through this avoidance of the evidence that a PANIC or FEAR response might be appropriate, what is protected is the lively capacity to make associations, to link up with another and to link up ideas or events. He is keeping this SEEKING system active in the safe act of exploring his own hands. Moments later the observer comments:

'There is something resigned about the melancholy - her smile is wistful and the calmness in her voice is hypnotic. This atmosphere is delicately expressive of her state of mind but has nothing to do with his. He seems as though he were ready for something interesting or exciting to happen.'

(090 Admission)

So far this seems hopeful - better than allowing the loss of the carer's mind to trigger PANIC. However, even when care is good-enough, there is always what the body therapist Carroll (undated web article) describes as: 'the shadow side of SEEKING – frustration, disappointment, lack' (unpaginated). She points out that although SEEKING can be in the service of relationships, it can also be self-sufficient and obsessive; a means of denying the risk of this shadow side of SEEKING and relationships. When SEEKING is a manic defence against PANIC or FEAR, the fact that it is mediated by dopamine becomes very interesting. This may be the biochemical manifestation of the ways in which vulnerability to mental illness is transmitted intergenerationally beyond the level of genetic inheritance. A vulnerability to paranoid schizophrenia, which is characterised by overuse of

dopamine leading to bogus and too numerous associations, might be mediated by defensive overuse of SEEKING in response to mothering that triggers FEAR and/or PANIC. Similarly, depression and dissociative states can be understood as the opposite – a giving in to, rather than a manic fight against the despair when the distress cry is futile and potentially endangering. Although it is being argued that the SEEKING system is dampened in order to avoid discovering cause for PANIC or FEAR, in order to protect the potential for future SEEKING, perhaps in the way that ‘states become traits’ (Perry, 1995) this dampening actually becomes a precursor or primer for depression. There were many examples of where this seemed to be happening and the one below is typical. Mother and baby have managed some playful exchanges but it has been hard work because her actions are rarely contingent on his. He is trying to withdraw a little but she pursues so it becomes what Stern (2002) describe as ‘chase and dodge’. Finally he stops trying to dodge her but instead appears to let go of his internal cohesion and powers of perception – something like ‘if I can’t avoid you I will try and avoid the experience of being me’.

She swoops in with the next line and he looks away again. She is swinging his left hand as she sings. For a while he turns to her again and might really be smiling again but she swoops again and he looks away. She continues to bounce his arm, which now looks quite detached from the rest of him, which he is pressing down in the opposite direction to get away from her. He sighs and goes a little still. Finally he seems to go into a sort of dissociating or despairing state. (053 Admission)

The transcripts also had many examples of interactions where PLAY is being used to try and make the activation of FEAR tolerable. This is probably is one of the functions of PLAY generally but, when it is with a disturbing carer, it is also about retaining psychical proximity at the cost of feeling safe. The excerpt below is from the discharge video of pair 090. After some exciting play together he has come off the boil and she is not able to let him have some space:

He is looking away again. She looms a bit and he has to avert his face far to the right and she follows him slightly. He turns back to her a little and she backs up a little but he is looking at her out of the corner of his eye. When he looks at her out of the corner of his eye it is not clear if it is done out of vigilance or hope that he might find something lively to connect with. The

former seems more likely given that he does not turn his head to offer her his open face. It seems to be enough for her to feel able to retreat a little and then they can hold each other's eye for a moment. However, things have gone from excitably attuned to edgy glancing connections that jangle. (090 Admission)

Later in the Admission video for pair 090, and as described earlier in this chapter, mother begins to frustrate the baby by holding his dummy just out of reach. She does not seem to be consciously aware of what she is doing but the observer is acutely aware of his anticipatory mouthing that eventually is replaced by a tightly clamped shut mouth. Perhaps she does register his frustration and the RAGE it engenders because she goes on to comment on the expense of feeding him and the sharpness of his nails. Thus she makes reference to her ambivalence about providing for him and his primitive weapons for expressing rage. At the end of the discharge video for this pair similar themes are present and he ends up grabbing a fist-full of her mouth, hurting her with his sharp nails and continuing to bat at her face when she pulls back in pain.

It is arguable that this angry baby is less vulnerable because his RAGE system subdues his PANIC system, but this itself can become an ultimately self-defeating defence, where the risk of PANIC activates RAGE so that attachment disorder presents as conduct disorder. Also, as the observer notes, there is a cost in terms of internal world culture: *'Who does he believe to be clamped within that gummy bite?'*

Summary of qualitative analysis.

The links made here between the observation material and the theories described in the literature review do suggest that psychoanalytic infant observation can identify certain internal world phenomena. These were phantasy distortions impacting interactions and various infantile defences, including manic, second skin, dissociative and narcissistic. These were not directly observable but inferred from countertransference experience and observable behaviours. The researcher is persuaded this material supports some of Klein's most contentious theories. In particular that excessive projective identification leads to a distortion in the perception of external objects and the introjection of bizarre objects who are: *'Klein's figures wholly divorced from reality'* (Likierman, 2001, p.82). In the depressive position,

there is less persecutory anxiety, which requires less splitting and projecting so that relating can begin to be dominated by ‘identifications which approximate more closely to reality’ (Likierman, 2001, p.82). The degree to which infantile defences are essentially interpersonal and adaptive or intra-psychic and paranoid schizoid in nature remains debatable (Stern, Green, Alvarez, 2000) but it seems likely that both are at play and interact to create the phenomena we can observe. It is hoped that this study has illuminated the importance of close observation and countertransference experience as research methods for investigating these issues.

5.6 Usefulness of transcripts and PIOS domains for informing clinical formulations

In this section the apparent success of the Clinical Formulation Test part of this study will be discussed. Dr Goldberger, the clinical supervisor to this study and experienced child psychotherapist specialising in parent-infant psychotherapy, used a sample of observation transcripts to attempt a clinical formulation with recommendations for treatment. As was described in the results chapter, these were in line with the treatment plans the Care Index scores would have suggested. This lends some support to the claim that the observations did provide adequate information to make an adequate formulation and treatment plan.

Dr Goldberger used the transcripts of the observations made of videos for Admission and discharge for pairs 303 and 053 to try and formulate the pairs’ difficulties and to suggest possible treatment plans. He also used the table of items from the Psychoanalytic Infant Observation Scale to organise his responses. He did not have the Psychoanalytic Infant Observation Scale score sheet for the videos. The table of items from the Psychoanalytic Infant Observation Scale served as a prompt to think about all the themes and issues that had been identified as important to assessing parent-infant relational health by the literature review. While this approach proved time-consuming, it did afford confidence that there was sufficient relevant information on which to base a formulation. His responses confirm that the attention given to transference phenomena and the internal world of infant and mother was important to his understanding of their relationship. This suggests that the training in Psychoanalytic Infant Observation does equip practitioners to identify relational disturbance and plan appropriate treatment for those whose social and emotional wellbeing is at risk. In practice, this is understood and applied in the NHS through a

post-graduate diploma in Infant Mental Health (M9) offered by the Tavistock and Portman NHS Trust to Health Visitors, Mental Health Nurses, Family Nurses, midwives and many other professionals in allied fields. What this study offers is a small contribution to the evidence base for the efficacy of training frontline staff in Psychoanalytic Observation (in line with NICE Guidelines- <https://www.nice.org.uk/guidance/ph40>) The Guidelines also recommend that the interventions should be structured. Generally, the application of Infant Observation skills to assessing need has been fairly unstructured. What might warrant further investigation is whether the Psychoanalytic Infant Observation Scale could be developed to provide a structured assessment and intervention tool for such frontline practitioners.

5.6 Discussion of findings of this study in relation to NICE Guidelines and recommendations for research into improving attachment relationships.

The ‘NICE Guidelines for improving Social and Emotional wellbeing: Early Years’ states that: ‘Social and emotional wellbeing forms the basis for child development and readiness for school. It can also help prevent poor health and improve education and employment outcomes in adolescence and throughout adulthood’. They acknowledge that historically child development policy and practice has focused on physical health and cognitive development but now take into account ‘a series of independent reviews on early intervention, early education and child protection [which] have underlined the importance of social and emotional wellbeing’ (Nice Guidelines). They stress the importance of maternal sensitivity and mother-infant attachment and recommend baby massage and Video Interaction Guidance as evidence-based interventions. They identify insufficient evidence on which to make further recommendations and so recommend further research into the ‘factors that pose a risk to, or protect, the social and emotional wellbeing of children aged under five’. They state that ‘practitioners’ experience and expertise will be paramount in assessing the needs and risks of individual children and their families’. They also stress that future interventions should be ‘targeted, evidence-based and structured interventions’ and monitored against outcomes. They identify Children’s Centers, nurseries, GPs, health visiting services and maternity services among many services that should be taking action to

improve social and emotional wellbeing. They cite the cost savings made by the Family Nurse Partnership in the US, which were estimated to be five times the cost of the intervention, as evidence that early intervention focused on social and emotional wellbeing can be cost effective.

Chapter 6

Concluding comments and recommendations for future research

This study supports the assertion that psychoanalytic infant observation is a clinically useful tool for formulating parent-infant relational difficulties. The observation transcripts were rich in clinical deductions about the internal world of the infant and mother, although disappointingly more attention was paid to the internal world of the mother than the infant. However, the mind of the mother is the world of the infant:

‘What does the baby see when he or she looks at the mother’s face? ... ordinarily, what the baby sees is himself or herself ... the mother is looking at the baby and what she looks like is related to what she sees there ... (but what) of the baby whose mother reflects her own mood, or worse still, the rigidity of her own defences ... They look and they do not see themselves’ (Winnicott, 1958, pp. 131-132)

Our findings do suggest that the intergenerational transmission of mental health vulnerability is demonstrably mediated by unconscious, internal-world phenomena, which can be inferred from close observation of mother-infant interactions. Also, this study suggests that close attention to transferential phenomena is the method by which unconscious phenomena can be accessed and tracked, making such inferences possible. It has been argued that psychoanalytic observation is strengthened by reference to a psychoanalytic framework, which primes the observer to notice the kinds of behaviour from which unconscious phenomena can be inferred.

When the qualitative data of the observation transcripts was rendered as numerical scores on a scale of items, there was a good fit with the Care Index ratings for the same parent-infant pairs. There is strong evidence that the Care Index has validity as an assessment tool and the high correlation between Psychoanalytic Infant Observation Scale scores and Care Index scores suggests reasonable concurrent validity. Preliminary testing also suggested that good inter-rater reliability could also be achieved for a Psychoanalytic Infant Observation Scale.

Potential to develop the Psychoanalytic Infant Observation Scale as a research tool?

The findings of this study suggest that we can stand by the premise that the infant is approachable by psychodynamic considerations, but we must acknowledge that infantile defences remain relatively illusive to the observer of live interactions. The reconstructed infant of psychoanalytic work with children and adults seems to offer up the contours of these dynamics in the imprint left behind so much better than attempts to capture the moment - live, as it were, when these dynamics are actually taking shape.

The task, then, might be to hone the Psychoanalytic Infant Observation Scale to improve its power to draw the observer to notice the relevant phenomena. While the Psychoanalytic Infant Observation Scale should remain flexible enough to allow emergent themes to be drawn out in a bottom-up fashion, it might be necessary to release ourselves from Bion's bequest and own our 'memory and desire' in research. If the reconstructed infant offers up his dynamic unconscious much more readily than the live observed infant, perhaps the evidence from the 'fossils' of the infant mind in the older patient's mind gives us permission to actively seek to pick out those patterns where they are not so pronounced. The Psychoanalytic Infant Observation Scale could be developed to include more items designed to prompt the observer to notice those patterns. The rationale for such an approach would be that the infant is approachable by psychodynamic considerations. We just need to find the right angle from which to approach him.

Another potential study, striking out in the opposite direction, would be to ask a lay researcher, with no particular psychoanalytic knowledge or training, to do a grounded theory textual analysis, to see what themes emerged, and use this to amend the Psychoanalytic Infant Observation Scale. This would be a much more rigorously bottom-up approach but runs the risk of being as fruitless as disregarding the astronomer's interpretation of the night sky in favour of the lay star gazer's interpretations.

Potential to develop Psychoanalytic Infant Observation Scale as a clinical tool.

It is possible that, with further work, the Psychoanalytic Infant Observation Scale might have the potential to become a clinical, as well as research tool. One possibility is that it might be developed to be a helpful supplement to writing an observation transcript; a way of capturing numerically the insights gained through psychoanalytic observation. The Psychoanalytic Infant Observation Scale could be used as a helpful standardised index of the shift over time in the mother-infant relationship – an adjunct to the notes, but allowing comparison within and between different mother-infant pairs. It is also possible, however, that it might be developed as a tool that could replace the time-consuming process of writing up a full narrative. The Psychoanalytic Infant Observation Scale can provide a structure that frames salient interpersonal and intrapersonal phenomena as they register in the mind of the observer. Such a tool would have much in common with the Care Index in its observation of maternal sensitivity and infant relational behaviour. However, the inclusion of internal world speculations could enrich clinical formulations by facilitating understanding of unconscious infantile defensive processes and how these mediate present and future relating and present and future mental health.

While the potential gains of developing such a tool have been enumerated, it is necessary to be cautious and acknowledge the risks of throwing away the baby with the bathwater. Lena (2013) identified that it was the time she took to study the video and write up what she observed that created the triangular space in her mind. It was only then that she was able to bring the parents into such a triangular space where they could helpfully watch themselves, in parenthesis, and reflect on their thoughts and feelings and those of their baby during an interaction. Rustin (2016) writes about grounded theory as a ‘re-imagining of the clinical experience’. Actually, that might be better conceived as the re-re-imagining given that the write-up is the first re-imagining. This is the moment in the therapist’s mind when all the relevant information coalesces as part of her attempt to make sense, to make a meaningful narrative out of all the disparate beta elements of observable phenomena and countertransference experience. What Bion described as alpha function, the marshalling of the mass into coherently sequenced ideas. This is also storytelling and the psychological benefits of containment are dependent on this naming of feelings

and linking through causal relationships between interpersonal and intrapersonal events. There may not be a short-cut for this process, which is as old as humanity, but it might be possible to capture the salient points of the story coming together in the observer's mind without her having to give grammatical form to the whole.

The Tavistock have a tradition of training professionals in frontline services dealing with infant mental health such as health visitors, midwives and childcare and early education staff in infant observation (M9). There is evidence that this experience improves the practice of these allied professionals but the mechanism by which this happens is less well understood. It is assumed that they become sensitised to, and begin to notice, unconscious phenomena, which inform their understanding of their clients' needs. However, this is not measured or supported formally with any clinical tool based on the principles. More research, like this study, helping to explicate and evidence the power of psychoanalytic observation could increase funding and take-up for places on such courses. Also, if the Psychoanalytic Infant Observation Scale were developed into a useable clinical tool, these professionals may also be supported to make more explicit use of the skills they've developed in a way that can be recorded systematically and numerically and inform outcome monitoring, as set out in the NICE guidelines.

Possible follow-up studies

There is a wealth of observational material from the Tavistock course in Infant Observation. One possible study might be to use a developed Psychoanalytic Infant Observation Scale to do a systematic analysis of some of that data to identify explicitly those moments when infantile defences and phantasy distortions are inferred by the observer.

Another potential study could look into testing the validity of the inferences made about infant defences, and how they might impact development. The Psychoanalytic Infant Observation Scale might serve as an index of the future mental health of mother and baby. It would be necessary to do a follow-up study to see if there was any relationship between what was captured about this aspect of the interactions and the long-term outcomes for these babies. However, to make this worthwhile a much larger sample would need to be taken, focusing on the earliest recordings in order to

see any effects over the longest period. Many of the babies from the early recordings would be in their teens by now, which would make a truly longitudinal perspective possible.

Consilience between Kleinian and affective neuroscience understandings of infant development

One intention of this study was to explore the data from within the framework of consilience between a Kleinian and an affective neuroscience understanding of infant development. It has been argued that an early phantasy life, spurred by phylogenetic forces and experienced as strong affective states, which promote behaviours that bring care responses securing survival, both pre-dates and shapes reality perception, including separateness post-partum. This study has described the ways in which infant defences against disturbing mothering rely on part object relating. It also describes, how this may hamper the progression to whole object relating and exacerbate the use of splitting, both of which are associated with risk in relation to mental illness. The exploration of Panksepp's theory of basic emotions also offers a description of what occurs at the biochemical level when infantile defences impact on the developing mind and brain in ways that may underwrite vulnerability to mental illness. There was scope for a minimal exploration of these issues in this study but this data could yield more with further study.

References

- Adolphs, R., Damasio, H., Tranel, D., Cooper, G., & Damasio, A.R. (2000). A role for somatosensory cortices in the visual recognition of emotion as revealed by three-dimensional lesion mapping. *Journal of Neuroscience*, 20, pp2683–2690. cited in Schore, A. N. 2001a, “Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health”, *Infant Mental Health Journal* vol. Special Contributions from the decade of the brain to infant mental health, no. 1-2, pp7-66
- Ainsworth, M (1967) *Infancy in Uganda: Infant care and the growth of love*. Baltimore, MD: The John Hopkins University Press.
- Ainsworth, M.. (1968), Object relations, dependency, and attachment: A theoretical review of the infant mother relationship. *Child Development*, 40, 969-1025.
- Ainsworth, M. I and Wittig, B. A. (1969). Attachment and the exploratory behaviour of one-year-olds in a strange situation. In B. M. Foss (Ed.), *Determinants of infant behaviour* (Vol. 4, pp. 113-136), London: Methuen.
- Ainsworth, M. I. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.
- Alvarez, A. (2012) *Live Company : Psychoanalytic Psychotherapy with Autistic, Borderline, Deprived and Abused Children*. Hoboken: Routledge.
- Alvarez, A. (2000) ‘Discussion’. In *Psychoanalytic monograph 5. Clinical and observational psychoanalytic research: Roots of a controversy*, Edited by: Green, A., Stern, D., Sandler, D. J., Sandler, A., M. and Davies, R. London: Karnac, The Psychoanalysis Unit of University College London and the Anna Freud Centre.
- Balbernie, R. (2001) 'Circuits and Circumstances: The Neurobiological Consequences of Early Relationship Experiences and How They Shape Later Behaviour', *Journal of Child Psychotherapy*, 27(3), pp. 237-255.
- Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., Bahrnick, L., Andrews, H. and Feldstein, S. (2010) 'The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction', *Attachment & Human Development*, 12(1-2), pp. 6-141.
- Beebe, B., Lachmann, F., Markese, S. and Bahrnick, L. (2012) 'On the Origins of Disorganized Attachment and Internal Working Models: Paper I. A Dyadic Systems Approach', *Psychoanalytic Dialogues*, 22(2), pp. 253-272.
- Beebe, B. et al (2013) ‘On knowing and being known in the 4-month origins of disorganized attachment: an emerging presymbolic theory of mind’ in Metcalfe, J. and Terrace, H. S. (eds) *Agency and Joint Attention* New York: Oxford University

Press

Beebe, B.(2013) 'A Symposium on Infant Research and Adult Treatment' given by AIMH UK at Hallam Conference Centre London, on 25th May 2013

Belsky, J., & Fearon, R. M. P. (2008). Precursors of attachment security. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 295-316). New York, NY, US: Guilford Press.

Bick, E. (1986) 'Further Considerations on the Function of the Skin in Early Object Relations: Findings from Infant Observation Integrated into Child and Adult Analysis', *British Journal of Psychotherapy*, 2(4), pp. 292-299.

Bick, E. (1968) 'Chapter Nine: The Experience of the Skin in Early Object Relations' *International Journal of Psychoanalysis* 49, p. 484

Bion, W. R. (1952) 'Group Dynamics: A Re-View', *International Journal of Psycho-Analysis*, 33, pp. 235-247.

Bion, W. R. (1959) 'Attacks on Linking', *International Journal of Psycho-Analysis*, 40, pp. 308-315.

Bion, W. R. (1962) *Learning from Experience* London: Karnac

Bion, W. (1962). 'A Theory of Thinking' *International Journal of Psycho-Analysis* 43, pp. 306-310.

Bollas, C. (1987) *The shadow of the object: Psychoanalysis of the unthought known* London: Free Association Books

Bott, Spillius, E., Milton, J., Garvey, P., Couve, C., Steiner, D. (2011) *The New Dictionary of Kleinian Thought* London: Routledge

Bower, T. G. R. (1977) *A primer of infant development*. San Francisco: W.H.Freeman

Bowlby, J. (1944). Forty-four juvenile thieves: Their characters and home-life. *International Journal of Psychoanalysis*, 25, 107–128. Bowlby, J. (1949). The study and reduction of group tensions in the family. *Human Relations*, 2, 123–128.

Bowlby, J. (1973). *Attachment and loss. Volume 2: Separation*. New York, NY: Basic Books. Bowlby, J. (1980). *Attachment and loss. Volume 3: Loss, sadness and depression*. New York, NY: Basic Books.

Bowlby, J. (1983). *Attachment and loss. Volume 1: Attachment*. New York, NY: Basic Books (Original work published 1969)

Brenman Pick, I (1985) Working through in the countertransference. Reprinted in: Bott Spillius, E (ed) *Melanie Klein Today, Developments in Theory and Practice*:

Mainly Practice (1988) Hove, Routledge

Britton, R. (2004). 'Subjectivity, Objectivity, and Triangular *Space*' *Psychoanalytic Quarterly* 73, 47-62.

Britton, R. (2015). *Between Mind and Brain: Models of the Mind and Models in the Mind*. London: Karnac.

Broughton, C. (2010) 'Measuring Trauma in the Primary Relationship: The Parent-Infant Relational Assessment Tool (PIRAT)' in *Relational Trauma in Infancy* (ed) Baradon, T.

Carroll, R. (unpublished) 'Panic, Seeking and Play in psychotherapy' on 'Thinking Through the Body' website: <http://www.thinkbody.co.uk/papers/panic-seeking%20-play.htm> [accessed 22.09.17]

Charmaz, K. (2014) *Constructing grounded theory. Introducing qualitative methods*: 2nd ed. London: Sage

Clark, R. (1985). *The Parent-Child Early Relational Assessment: Instrument and manual*. Madison: University of Wisconsin Medical School, Department of Psychiatry

Crittenden, P. (2001) **awaiting reference from Joanna Tucker**

Crittenden, P. (2017) 'Gifts from Mary Ainsworth and John Bowlby' *Clinical Child Psychology and Psychiatry* 22(3) 436-442

Daws, D. (2015) *Finding your way with your baby. [electronic resource] : the emotional life of parents and babies*. London: Routledge, 2015.

de Rementeria, A. (2012) 'Managing intimacy and distance: An exploration of links between the experience of an observed mother and baby and that of her observer', *Infant Observation*, 15(3), pp. 231-245.

Farnfield, S. and Holmes, P. (2014) *The Routledge Handbook of Attachment: Assessment*. Hoboken: Routledge.

Fonagy, P. (1996) 'The irrelevance of infant observations for psychoanalysis': Commentary.' *Journal of the American Psychoanalytic Association*, 4d (2), pp 404 - 422

Fonagy, P., Gergely, G., Jurist, E. L., & Target, M. (2002). *Affect regulation, mentalization, and the development of the self*. London, UK: Karnac.

- Fonagy, P., Gergely, G. and Target, M. (2007) 'The parent-infant dyad and the construction of the subjective self' *Journal of Child Psychology and Psychiatry*, 48:(3), pp 288-328
- Fordham, F. (1967) 'The maturational process and the facilitating environment: studies in the theory of emotional development (Book)', *Journal of Analytical Psychology*, 12(2), pp. 182.
- Fotopoulou, A., Pfaff, D. and Conway, M. A. (2012a) *From the couch to the lab : trends in psychodynamic neuroscience*. [S.l.] Oxford: Oxford University Press
- Fotopoulou, A., Pfaff, D. and Conway, M. A. (2012b) *From the couch to the lab : trends in psychodynamic neuroscience*. [S.l.] Oxford: Oxford University Press
- Fraiberg, S. H., Adelson, E. and Shapiro, V. (1980) *Ghosts in the nursery. A psychoanalytic approach to the problems of impaired infant-mother relationships*. London: Tavistock Publications
- Fraiberg, S. (1982) 'Pathological defences in infancy' *Psychoanalytic Quarterly* 51, pp 612 - 624
- Frank, L. (1994) 'When hyenas §kill their own: For many of Africa's spotted hyenas, life begins with a struggle to survive the murderous attacks of a twin sister' article in *The New Scientist* at: <https://www.newscientist.com/article/mg14119153-800> (accessed 11/09/17)
- Franchi, V., Lee, A., Verdi, M., Nanzer, N. and Marion-Moron, I. (2014). *The Impact of Observation when combined with psychoanalytic treatment and training of early childhood special needs educators: A case study in Geneva*. Conference Presentation: Teaching Infant Observation and Thinking about Wider Applications of the Method, London: Tavistock Centre
- Freud, S. (1900) *The Interpretation of Dreams*, Third Edition. Trans. by A. A. Brill. New York: The Macmillan Company, 1913; Bartleby.com, 2010. www.bartleby.com/285/. (accessed 11/09/17)
- Freud, S., Strachey, J. t. and Richards, A. (1973) *Introductory lectures on psychoanalysis. Translated by James Strachey. Edited by J. Strachey and A. Richards*. Harmondsworth: Penguin Books
- Gallese, V. and Sinigaglia, C. (2011) 'What is so special with Embodied Simulation' Article in *Trends in Cognitive Sciences* · November 2011 DOI: 10.1016/j.tics.2011.09.003 · Source: PubMed (accessed 12/09/17)
- Gerhardt, S. (2004) *Why Love Matters*, London: Routledge
- Gerhardt, J. (2009) 'The roots of envy: The unaesthetic experience of the tantalised/dispossessed' in *Psychoanalytic Dialogues* 19 (3): p 267–278.

- Goldman, A. and de Vignemont, F. (2009) 'Is social cognition embodied?' *Trends in Cognitive Sciences*, 13(4), pp. 154-159.
- Gianino A, Tronick E. Z. (1998) 'The mutual regulation model: The infant's self and interactive regulation, coping, and defensive capacities'. In: Field T, McCabe P, Schneiderman N, editors. *Stress and coping*. Hillsdale: NJ: Erlbaum pp. 47-68.
- Green, A. 2000. 'Science and science fiction in infant research'. In *Psychoanalytic monograph 5. Clinical and observational psychoanalytic research: Roots of a controversy*, Edited by: Green, A., Stern, D., Sandler, D. J., Sandler, A. M. and Davies, R. London: Karnac, The Psychoanalysis Unit of University College London and the Anna Freud Centre.
- Hamlin, J. K., Wynn, K. and Bloom, P. (2010) 'Three-month-olds show a negativity bias in their social evaluations J. Kiley Hamlin et al. Social evaluation by 3-month-old infants', *Developmental Science*, 13(6), pp. 923-929.
- Heimann, P. (1950) 'On Countertransference', *International Journal of Psycho-Analysis*, 31, pp. 81-84.
- Hinshelwood, R. D. and Spillius, E. B. (2011) *The New Dictionary of Kleinian Thought*. Hove, East Sussex: Routledge.
- Hobson, P. (2002) *The Cradle of Thought: Exploring the Origins of Thinking* London: Macmillan
- Hollway, Wendy (2012). *Infant observation: opportunities, challenges, threats*. *Infant Observation: International Journal of Infant Observation and its Applications*, 15(1) pp. 21-32.
- Hopkins, J. (1987) 'Synthesis in the Imagination: Psychoanalysis, Infantile Experience, and the Concept of an Object.' In J. Russell, (ed.), *Philosophical Perspectives on Developmental Psychology*. Oxford: Blackwell
- Hopkins, J. (1996) 'The Dangers and Deprivations of Too-Good Mothering', *Journal of Child Psychotherapy*, 22(3), pp. 407-422.
- Isaacs, S. (1948). *The nature and function of phantasy*. *International Journal of Psycho-Analysis*, 24(2), pp.73-97.
- Jackson, J. Nowers, E. (2002) 'The skin in early object relations revisited' in Briggs, A. edited *Surviving Space: Papers on infant observation*, London: Karnac
- James, W. (1892) *Psychology; the briefer course*, New York (published in 1961 by Harper and Row)

- Jones, A. (2006). 'How video can bring to view pathological defensive processes and facilitate the creation of triangular space in perinatal parent-infant psychotherapy' *International Journal of Infant Observation*, 9(2), pp.109-123.
- Joseph, B., Feldman, M. and Spillius, E. B. (1989) *Psychic equilibrium and psychic change. [electronic resource] : selected papers of Betty Joseph. New library of psychoanalysis: 9*: London: Tavistock/Routledge
- Joseph, B. (1985) Transference: the total situation. Reprinted in: Bott Spillius, E (ed) *Melanie Klein Today, Developments in Theory and Practice: Mainly Practice* (1988) Hove: Routledge
- Klein, M. (1929) 'Personification in the Play of Children', *International Journal of Psycho-Analysis*, 27, pp. 99-110.
- Klein, M (1946) 'Notes on some Schizoid Mechanisms' *International Journal of Psycho-Analysis*, 10, pp. 193-204.
- Lena, F. E. (2013) 'Parents in the observer-position: a psychoanalytically informed use of video in the context of a brief parent-child intervention' *International Journal of Infant Observation* 16 (1) pp.76-94
- Likierman, M. (2001) *Melanie Klein: Her work in context*. New York, NY, US: Continuum.
- Lojkasek, Mirek & Cohen, Nancy & Muir, Elisabeth. (1994). Where is the Infant in Infant Intervention? A Review of the Literature on Changing Troubled Mother—infant Relationships. *Psychotherapy: Theory, Research, Practice, Training*. 31. 208-220.
- Lyons-Ruth, K. (1999) 'The Two-Person Unconscious: Intersubjective Dialogue, Enactive Relational Representation, and the Emergence of New Forms of Relational Organization', *Psychoanalytic Inquiry*, 19(4), pp. 576-617.
- Maiello, S. (1995) 'The sound-object: A hypothesis about prenatal auditory experience and memory' in *Journal of Child Psychotherapy* 21 (1): p. 23-41.
- Main, M., & Goldwyn, R. (1984). Predicting rejection of her infant from mother's representation of her own experiences: A preliminary report. *Monograph of the International Journal of Child Abuse and Neglect*, 8, 203-217
- Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. In T. B. Brazelton & M. W. Yogman (Eds.), *Affective development in infancy* (pp. 95-124). Westport, CT, US: Ablex Publishing.

- McLeod, J. (1996) 'Qualitative approaches to research in counselling and psychotherapy: Issues and challenges', *British Journal of Guidance & Counselling*, 24(3), pp. 309.
- Mead, G. H. (1934) *Mind, Self and Society*. Chicago, University of Chicago Press.
- Meins, E., Fernyhough, C., Fradley, E., & Tuckey, M. (2001). Rethinking Maternal Sensitivity: Mothers' Comments on Infants' Mental Processes Predict Security of Attachment at 12 Months. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(5), pp. 637-648.
- Meltzoff, A. N. and Moore, M. K. (1977) 'Imitation of facial and Manual gestures by human neonates', *Science*, 198, pp.75 – 8.
- Money-Kyrle, Roger (1956) 'Normal countertransference and some of its deviations.' Reprinted in: Bott Spillius, E (ed) *Melanie Klein Today, Developments in Theory and Practice: Mainly Practice*(1988) Hove: Routledge
- Murray, L. and Trevarthen, C. (1985) 'Emotional regulation of interaction between two-month olds and their mothers' in Field, T. M. and Fox, N. A. (Eds) *Social Perception in Infants*, Northwood, New Jersey: Ablex
- Nagy and Molnar (1994) cited in Trevarthen, C. (2001) 'Intrinsic motives for companionship in understanding: their origin, development, and significance for infant mental health' in *Infant Mental Health Journal* vol. Special Contributions from the decade of the brain to infant mental health, no. 1-2, pp.95-131
- NICE Guidelines for Infant Mental Health- <https://www.nice.org.uk/guidance/ph40>
- Pally, R. 2000, *The mind-brain relationship* London, Karnac Books
- Panksepp, J. (1998) *Affective Neuroscience*, Oxford University Press, New York
- Parker, I. in Banister, P., Burman, E., Parker, I., Taylor, M. and Tindall, C. (eds) (1994) *Qualitative Methods in Psychology, a research guide*, Maidenhead, Open University Press
- Pawlby, S. and Fernyhough, C. and Meins, E. and Pariante, C.M and Seneviratne, G. and Betall, R.P. (2010) 'Mind-mindedness and maternal responsiveness in infant-mother interactions in mothers with severe mental illness', *Psychological medicine*, 40 (11) pp. 1861-1869
- Perry, B. D. (1995) 'Childhood Trauma, the neurobiology of adaptation, and 'use dependent' development to the brain: How 'states' become 'traits'.' *Infant Mental Health Journal* 16 (4) pp.271-91
- Piaget, J. and Cook, M. (1954) *The construction of reality in the child*. New York: Basic Books.

- Reddy, V. (2008) *How infants know minds*. Cambridge, Mass: Harvard University Press
- Rustin, M. (2016) 'Grounded Theory Methods in Psychoanalytic Research' *Journal of Child Psychotherapy* 42 (2) pp.179-197
- Reid, S. (1990) 'The Importance of Beauty in the psychoanalytic experience' in *Journal of Child Psychotherapy* 16 (1): p 29-52
- Rizzolatti, G. (2006) 'The mirror neuron system and its function in humans', *Anatomy & Embryology*, 210 (5/6), pp. 419-421.
- Sandler, J., Sandler, A.-M., Davies, R., Green, A. and Stern, D. N. (2000) *Clinical and observational psychoanalytic research: roots of a controversy. Psychoanalytic Monographs: No 5*: London, Karnac Books, 2000.
- Schore, A. N. 2001a, "Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health", *Infant Mental Health Journal* vol. Special Contributions from the decade of the brain to infant mental health, no. 1-2, pp7-66
- Schore, A. N. 2001b, 'Effects of early relational trauma on right brain development, affect regulation, and infant mental health', *Infant Mental Health Journal* vol. Special Contributions from the decade of the brain to infant mental health, no. 1-2, pp 201 - 269
- Segal, H. (1957) 'Notes on Symbol Formation', *International Journal of Psycho-Analysis*, 38, pp. 391-397.
- Siegel, D. J. 2001, "Toward an interpersonal neurobiology of the developing mind: attachment relationships, "mindsight", and neural integration", *Infant Mental Health Journal* vol. Special Contributions from the decade of the brain to infant mental health, no. 1-2, pp 67-94
- Simpson, D. (2012) 'Ronald Britton: furthering the psychoanalytic theory and technique of Melanie Klein; on the *Melanie Klein Trust Website* http://melanie-klein-trust.org.uk/?location_id=23 (Accessed 12/09/17)
- Solms, M. and Panksepp, J. (2012) 'Primary-Process Separation-Distress (PANIC/GRIEF) and Reward (SEEKING) Processes in the Ancestral Genesis of Depressive Affect and Addictions: Why does Depression Feel so Bad? Why does Addiction Feel so Fine, for a While?' on IDC Herzliya University (Israel) Website: portal.idc.ac.il/en/symposium/hspsp/2012/documents/cpanksepp12.pdf (accessed 14/09/17)

Solms, M. and Zelner, M. 'The Freudian Unconscious today' in *From the couch to the lab : trends in psychodynamic neuroscience*. [S.l.] Oxford: Oxford University Press

Stern, D. 2000. 'The relevance of empirical infant research to psychoanalytic theory and practice'. In *Psychoanalytic Monograph 5. Clinical and observational psychoanalytic research: Roots of a controversy*, Edited by: Green, A., Stern, D., Sandler, J., Sandler, A. M. and Davies, R. London: Karnac Books, The Psychoanalysis unit of University College London and the Anna Freud Centre.

Stern, D. N. (2002) *The first relationship. Infant and mother. The Developing Child*: Cambridge, Mass: Harvard University Press

Sternberg, C.R., Campos, J., Emde, R.N. (1983) 'The facial expression of anger in seven-month-old infants' in *Child Development*, 54 (1): pp.178-84

Trevarthen, C. (2001) 'Intrinsic motives for companionship in understanding: Their origin, development, and significance for infant mental health', *Infant Mental Health Journal*, 22(1-2), pp. 95-131.

Trevarthen, C. and Aitken, K. J. (2001) 'Infant intersubjectivity: research, theory, and clinical applications', *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 42(1), pp. 3-48.

Tronick, E. and Beeghly, M. (2011) 'Infants' meaning-making and the development of mental health problems', *American Psychologist*, 66(2), pp. 107-119.

Tronick, E. Z. (1989) 'Emotions and emotional communication in infants' in *American Psychologist*, Vol 44 (2) p112 -119

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* Cambridge, Mass.: Harvard University Press.

Wakelyn, J. (2011) 'Therapeutic observation of an infant in foster care' in *Journal of Child Psychotherapy*, 37:3, 280-310

Winnicott (1952) Anxiety Associated with insecurity in (1958) *Collected Papers, Through Paediatrics to psychoanalysis*. London: Tavistock and Hogarth Press (1975)

Winnicott, D. W. (1965). 'Ego Distortion in Terms of True and False Self', in *The Maturational Process and the Facilitating Environment: Studies in the Theory of Emotional Development* London: Hogarth Press

Winnicott, D. W. (1958). Transitional objects and transitional phenomena. *Collected papers*. London: Tavistock.

Wolff, P.H. (1996). The irrelevance of infant observation for psycho-analysis. *Journal of the American Psychoanalytic Association*, 44: 369-473 Woolgar, S. (1988) *Science: the Very Idea*. Chichester: Ellis Horwood; London: Tavistock

Woolgar, S. (1988) *Science: the Very Idea*. Chichester: Ellis Horwood; London: Tavistock

Zeedyk, M.S. (2006) 'From Intersubjectivity to Subjectivity: The Transformative roles of Emotional Intimacy and Imitation', *Journal of Infant and Child Development* 15: 321 -344

Appendices

- Appendix (i) Relationship Scale form p.163
- Appendix (ii) PIOS for each transcript p. 166
- Appendix (iii) Overview of the six domains of PIOS p.174
- Appendix (iv) Sample of one transcript without further reflections p. 175
- Appendix (v) All eight transcripts with further reflections p.
- Appendix (vi) Formula for working out comparable score p.
- Appendix (vii) Data & formulation for calc. inter-rater reliability p.
- Appendix (viii) Maternal and Infant scores p.
- Appendix (ix) Care Index information p.
- Appendix (x) clinical formulations by Dr Danny Goldberger p.

Appendix (i) Relationship Scale form
(Original scale by Dr Lee)

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents your present experience of the child.

Making Contact

I feel emotionally connected to the child	_____	I feel emotionally distant from the child
Most of the time I feel in tune with the child	_____	Most of the time I feel out of tune with the child
On the whole, I feel the child ignores me	_____	On the whole, I feel the child responds to me
The child seems interested in me	_____	The child seems uninterested in me

Making Sense of Each Other (Mutual Understanding)

I do not have a sense of what the child wants or needs	_____	I have a sense of what the child wants or needs
My words contain the child when she / he is upset	_____	My words fail to contain the child when she / he is upset
I can predict what the child is about to do	_____	I am unable to predict what the child is about to do
The child is insensitive to my, the therapist's emotional state	_____	The child is sensitive to my, the therapist's emotional state
The child does not turn to me for help	_____	The child turns to me for help

Making Relationships

I feel that the child communicates well with me	_____	I feel that the child does not communicate well with me
The child does not share her / his experiences with me	_____	The child shares her / his experiences with me
The child engages me in her / his play	_____	The child does not engage me in her / his play

Maintaining Relationships

The child takes a long time to recover after being angry	_____	The child can quickly recover after being angry
I understand the reason(s) why the child may get upset	_____	I am left unsure of the reason(s) why the child may get upset
The child is affectionate	_____	The child is unaffectionate
The child is indifferent to my attention	_____	The child responds to my attention
The child responds well to me setting boundaries	_____	The child responds badly to me setting boundaries

Making Sense of the World (Learning)

The child is curious about her / his world	_____	The child seems uninterested in her/his world
The child takes some time to learn from her / his experience	_____	The child learns quickly from her / his experience
I find myself worrying about the child in ways hard to articulate	_____	I feel confident in the child's capacity / resilience to cope

Session Material

Your observations of the session

Experience of the therapist

Please comment on the sensory images, the associations, adjectives that come directly to your mind in relation to the session material (even at the point of writing up).

Please comment on your feeling states in the course of the session. Did you detect a movement in these states as the session progressed?

Please comment on your judged capacity to think in the course of the session (e.g., clarity, muddle, confusion, fractured). Did you detect

a movement in these judgements as the session progressed?

Do you feel you 'acted in' in the course of the session? Can you describe this?

The child's experience

What do you judge the child needed to project into you, which may serve to give a sense of the model of the world they hold in their mind?

How do you feel your interventions / interpretations were received? Could you discern that the child's model was reconsidered or reflected on following your comments?

Making sense of your experience

What do you make of the clinical material? Working to draw the above aspects together, does a model gather in your mind (e.g., digestion, Oedipal realisations)?

Further thoughts in the course of supervision

Appendix ii
Psychoanalytic Infant Observation Scale
Observer Forms

Infant Observation Scale Observer Form

Coding of admission Video for pair number: 292 Please consider each of the following dimensions.
Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (admission)	
1a+ Baby seeks mother's attention	1a- Baby is avoidant of mother
1 3 2	
1b+ They are in tune with one another-matching each other's feeling states and/or imitating one another.	1b- They are not in tune with one another and there is no evidence of matching or imitating.
3 1 2	
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately	1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby
1 3 2	
+38 ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9	
Making sense of each other - mutual understanding (admission)	
2a+ Mother is sensitive to baby's emotional state and intentions	2a- Mother is insensitive to baby's emotional state and intentions
1 3 2	
2b+ Mother is able to contain baby's distress	2b- Mother struggles to contain baby's distress
1 2 2	
2c+ Baby does look to mother for help	2c- Baby does not look to mother for help
1 2 3	
+ ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -14	

Making relationships (admission)	
3a+ Baby seeks to share experiences and/or feeling states to mother	3a- Baby does not seek to share experiences and/or feeling states to mother
1 2 3	
3b+ Mother tries to engage baby in play	3b- Mother does not try to engage baby in play
1 3 2	
3c+ Mother succeeds in engaging baby in play	3c- Mother fails to engage baby in play
1 3 2	
3d+ Mother is authentic and congruent	3d- Mother is not authentic and congruent
3 1 2	
+17 ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9	

Maintaining relationships (admission)	
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately	4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress
1 2 3	
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement	4b- Baby does not seem resilient and has little tolerance around relational distress
1 2 3	
4c+ Baby's face expresses affection	4c- Baby's face does not express affection
3	1 2
4d+ Mother and baby's behaviours are reciprocal or contingent on one another	4d- Mother and baby's behaviours are not reciprocal or contingent on one another
1 3 2	
4e+ Mother is sensitive to and respectful of baby's boundaries	4e- Mother is intrusive or apparently unaware of baby's boundaries
1 2 3	
4f+ Baby appears to be able to regulate himself and his contact with mother	4f- Baby struggles to regulate himself and his contact with mother
1 2 3	
+69 ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9	

Making sense of the world - learning (admission)	
5a+ Baby seems curious about his world	5a- Baby seems uninterested in his world
1 2 3	
5b+ Mother seems to want to bring the world into her relationship with her baby	5b- Mother seems to want to keep the world out of her relationship with her baby
1 2 3	
5c+ Baby appears to have resilience and cohesion	5c- Baby appears to be fragmented and vulnerable
1 3 2	
5d+ Baby demonstrates a sense of agency	5d- Baby does not demonstrate a sense of agency
1 3 2	
+34 ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9	

Countertransference and relational inferences (admission)	
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship	6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship
3 1 2	
6b+ Or not	6b- The interaction conjures themes of intrusion, pushing in, flooding, overwhelming, need of mastery or control
/ / / / / / / / / /	3 1 2
6c+ Or not	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting
	1 2 3
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride	6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy
1 3 2	
6e+ Or not	6e- Behaviours suggest the use of negative projection by mother and/ or baby
	3 1 2
6f+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby	6f- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby
	1 2 3
+ ⁺ ₁₀ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -36	

Results:16

Total IOS score: 108 Comparable score 96.3 divided by 6 = 16.05

Domain	score	comparable score
Making Contact	+38 (out of a possible range of -90 to +90)	19.9
Mutual Understanding	-14 (out of a possible range of -90 to +90)	11.8
Making Relationships	+17 (out of a possible range of -120 to +120)	16
Maintaining Relationships	+69 (out of a possible range of -180 to +180)	19.4
Making Sense of the World	+34 (out of a possible range of -120 to +120)	18
Countertransference and relational inferences	-36 (out of a possible range of -180 to +180)	11.2

total

maternal	1c	-10	2a	-4	2b	0	3b	23	3c	17	3d	-11	4a	14	4e	15	5b	0	44
infant	1a	26	2c	-10	3a	-12	4b	-23	4c	-4	4f	1	5a	0	5c	17	5d	17	12

Infant Observation Scale Observer Form

Coding of Discharge Video for pair number: 292

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (discharge)																					
1a+ Babt seeks mother's attention		2	1	3		1a- Baby is avoidant of mother															
1b+ They are in tune with one another-matching each other's feeling sates and/or imitating one another.			2	3		1b- They are not in tune with one another and there is no evidence of matching or imitating.				1											
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately		2				1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby					1										
+18	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of each other - mutual understanding (discharge)																					
2a+ Mother is sensitive to baby's emotional state and intentions		1		3	2		2a- Mother is insensitive to baby's emotional state and intentions														
2b+ Mother is able to contain baby's distress				1	2		2b- Mother struggles to contain baby's distress				3										
2c+ Baby does look to mother for help		1			2		2c- Baby does not look to mother for help				3										
+8	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making relationships (admission)																					
3a+ Baby seeks to share experiences and/or feeling states with mother					1		3a- Baby does not seek to share experiences and/or feeling states to mother														
3b+ Mother tries to engage baby in play		1		3		3b- Mother does not try to engage baby in play															
3c+ Mother succeeds in engaging baby in play			1		2		3c- Mother fails to engage baby in play				3										
3d+ Mother is authentic and congruent			1			2	3d- Mother is not authentic and congruent				3										
+11	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Maintaining relationships (discharge)																					
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately			1	3	2		4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress														
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement			1		2		4b- Baby does not seem resilient and has little tolerance around relational distress				3										
4c+ Baby's face expresses affection						1	4c- Baby's face does not express affection				2										
4d+ Mother and baby's behaviours are reciprocal or contingent on one another			1			2	4d- Mother and baby's behaviours are not reciprocal or contingent on one another				3										
4e+ Mother is sensitive to and respectful of baby's boundaries						2	4e- Mother is intrusive or apparently unaware of baby's boundaries				1										
4f+ Baby appears to be able to regulate himself and his contact with mother			1			2	4f- Baby struggles to regulate himself and his contact with mother				3										
+14	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of the world - learning (discharge)																					
5a+ Baby seems curious about his world		1		2	3		5a- Baby seems uninterested in his world														
5b+ Mother seems to want to bring the world into her relationship with her baby			1		2		5b- Mother seems to want to keep the world out of her relationship with her baby				3										
5c+ Baby appears to have resilience and cohesion			1			2	5c- Baby appears to be fragmented and vulnerable				3										
5d+ Baby demonstrates a sense of agency						1	5d- Baby does not demonstrate a sense of agency				2										
												3									
+92	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Countertransference and relational inferences (discharge)																						
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship			1		2		6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship															
6b+ Or not						1	6b- The interaction conjures themes of intrusion, pushing in flooding, overwhelming, need of mastery or control				2											
6c+ Or not						1	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting				2											
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride						1	6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy				2											
6e+ or not						1	6e- Behaviours suggest the use of negative projection by mother and/ or baby				2											
6f+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby						1	6f- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby				2											
-33	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9	-33

Results:16

Total IOS score:110 comparable score: 90.53 /6 =16.4

Domain	score	comparable score
Making Contact	+18 (out of a possible range of -90 to +90)	16.80
Mutual Understanding	+8 (out of a possible range of -90 to +90)	15.24
Making Relationships	+11 (out of a possible range of -120 to +120)	15.28
Maintaining Relationships	+14 (out of a possible range of -180 to +180)	15.08
Making Sense of the World	+92 (out of a possible range of -120 to +120)	24.73
Countertransference and relational inferences	-33 (out of a possible range of -180 to +180)	11.43

total																			
maternal	1c	4	2a	4	2b	2	3b	19	3c	13	3d	-3	4a	0	4e	-7	5b	28	60
infant	1a	12	2c	6	3a	-18	4b	17	4c	-18	4f	13	5a	22	5c	19	5d	18	71

Infant Observation Scale Observer Form

Coding of Admission Video for pair number: 053

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (admission)											
1a+ Baby seeks mother's attention	1	2	3	1a- Baby is avoidant of mother							
1b+ They are in tune with one another-matching each other's feeling states and/or imitating one another.				1b- They are not in tune with one another and there is no evidence of matching or imitating.							
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately				1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby							
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											-32

Making sense of each other - mutual understanding (admission)											
2a+ Mother is sensitive to baby's emotional state and intentions			1	2	3	2a- Mother is insensitive to baby's emotional state and intentions					
2b+ Mother is able to contain baby's distress						2b- Mother struggles to contain baby's distress					
2c+ Mother does look to mother for help						2c- Baby does not look to mother for help					
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											-26

Making relationships (admission)											
3a+ Baby seeks to share experiences and/or feeling states to mother			1	2	3	3a- Baby does not seek to share experiences and/or feeling states to mother					
3b+ Mother tries to engage baby in play						3b- Mother does not try to engage baby in play					
3c+ Mother succeeds in engaging baby in play						3c- Mother fails to engage baby in play					
3d+ Mother is authentic and congruent						3d- Mother is not authentic and congruent					
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											-16

Maintaining relationships (admission)											
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately			1	2	3	4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress					
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement						4b- Baby does not seem resilient and has little tolerance around relational distress					
4c+ Baby's face expresses affection						4c- Baby's face does not express affection					
4d+ Mother and baby's behaviours are reciprocal or contingent on one another						4d- Mother and baby's behaviours are not reciprocal or contingent on one another					
4e+ Mother is sensitive to and respectful of baby's boundaries						4e- Mother is intrusive or apparently unaware of baby's boundaries					
4f+ Baby appears to be able to regulate himself and his contact with mother						4f- Baby struggles to regulate himself and his contact with mother					
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											-17

Making sense of the world - learning (admission)											
5a+ Baby seems curious about his world			2	1	3	5a- Baby seems uninterested in his world					
5b+ Mother seems to want to bring the world into her relationship with her baby						5b- Mother seems to want to keep the world out of her relationship with her baby					
5c+ Baby appears to have resilience and cohesion						5c- Baby appears to be fragmented and vulnerable					
5d+ Baby demonstrates a sense of agency						5d- Baby does not demonstrate a sense of agency					
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											+35

Countertransference and relational inferences (admission)											
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship			1		2	3	6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship				
6b+ Or not	/	/	/	/	/	/	6b- he interaction conjures themes of intrusion, pushing in flooding, overwhelming, need for master or control				
6c+ Or not	/	/	/	/	/	/	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting				
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride							6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy				
6e+ I did not note any observable behaviour suggesting projection by mother or baby	/	/	/	/	/	/	6e- Behaviours suggest the use of projection by mother and/ or baby I did not note any observable behaviour suggesting projection by mother or baby				
6g+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby							6g- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby				
$\begin{matrix} + \\ 10 \end{matrix}$ +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9											-63

Total comparable score: 11.9

Total IOS score: -119

Total comparable score: 71.6/6=11.9

		comparable score:
Making Contact	-32 (out of a possible range of -90 to +90)	9.02
Mutual Understanding	-26 (out of a possible range of -90 to +90)	9.95
Making Relationships	-16 (out of a possible range of -180 to +180)	12.75
Maintaining Relationships	-17 (out of a possible range of -180 to +180)	12.67
Making Sense of the World	+35 (out of a possible range of -120 to +120)	18.08
Countertransference and relational inferences	-63 (out of a possible range of -180 to +180)	9.10

total														
maternal	1c	-18	2a	-11	2b	-5	3b	27	3c	-5	3d	-21	4a	-9
infant	1a	4	2c	-10	3a	-17	4b	8	4c	1	4f	15	5a	2
													5b	12
													5c	7
													5d	12
														22

Infant Observation Scale Observer Form

Coding of Discharge Video for pair number: 053

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (discharge)																					
1a+ Baby seeks mother's attention	1									2 3	1a- Baby is avoidant of mother										
1b+ They are in tune with one another- matching each other's feeling states and/or imitating one another.	2	1	3								1b- They are not in tune with one another and there is no evidence of matching or imitating.										
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately	1	2	3								1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby										
+29	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of each other - mutual understanding (discharge)																					
2a+ Mother is sensitive to baby's emotional state and intentions	1	2	3								2a- Mother is insensitive to baby's emotional state and intentions										
2b+ Mother is able to contain baby's distress	1	2	3								2b- Mother struggles to contain baby's distress										
2c+ Baby does look to mother for help	2	1	3								2c- Baby does not look to mother for help										
+43	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making relationships (admission)																					
3a+ Baby seeks to share experiences and/or feeling states to mother	2	1	3								3a- Baby does not seek to share experiences and/or feeling states to mother										
3b+ Mother tries to engage baby in play	1	2	3								3b- Mother does not try to engage baby in play										
3c+ Mother succeeds in engaging baby in play	1	2	3								3c- Mother fails to engage baby in play										
3d+ Mother is authentic and congruent	1	2	3								3d- Mother is not authentic and congruent										
+42	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Maintaining relationships (discharge)																					
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately	1	2	3								4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress										
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement	2	3	1								4b- Baby does not seem resilient and has little tolerance around relational distress										
4c+ Baby's face expresses affection	1	3	2								4c- Baby's face does not express affection										
4d+ Mother and baby's behaviours are reciprocal or contingent on one another	2	1	3								4d- Mother and baby's behaviours are not reciprocal or contingent on one another										
4e+ Mother is sensitive to and respectful of baby's boundaries	1	3	2								4e- Mother is intrusive or apparently unaware of baby's boundaries										
4f+ Baby appears to be able to regulate himself and his contact with mother	1	3	2								4f- Baby struggles to regulate himself and his contact with mother										
+43	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of the world - learning (discharge)																					
5a+ Baby seems curious about his world	2	1	3								5a- Baby seems uninterested in his world										
5b+ Mother seems to want to bring the world into her relationship with her baby	3	2	1								5b- Mother seems to want to keep the world out of her relationship with her baby										
5c+ Baby appears to have resilience and cohesion	3	2	1								5c- Baby appears to be fragmented and vulnerable										
5d+ Baby demonstrates a sense of agency	2	3	1								5d- Baby does not demonstrate a sense of agency										
+48	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Countertransference and relational inferences (discharge)																					
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship	3	2	1								6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship										
6b+ Or not	/	/	/	/	/	/	/	/	/	/	3	2	1								6b- The interaction conjures themes of intrusion, pushing in flooding, overwhelming, need off master or control Or not
6c+ Or not	/	/	/	/	/	/	/	/	/	/	3	1	2								6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride								2	3	1								6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy			
6e+ I did not note any observable behaviour suggesting projection by mother or baby										1	2	3								6e- Behaviours suggest the use of negative projection by mother and/ or baby	
6g+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby								1	2	3								6g- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby			
-17	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Comparable total score: 17.9

Total IOS score: 188 Total comparable score: 107.7/6=17.9

Domain	score	comparable score
Making Contact	+29 (out of a possible range of -90 to +90)	18.51
Mutual Understanding	+43 (out of a possible range of -90 to +90)	20.68
Making Relationships	+42 (out of a possible range of -120 to +120)	18.90
Maintaining Relationships	+43 (out of a possible range of -180 to +180)	17.34
Making Sense of the World	+48 (out of a possible range of -120 to +120)	19.60
Countertransference and relational inferences	-17 (out of a possible range of -180 to +180)	12.67

														Total					
maternal	1c	19	2a	15	2b	16	3b	14	3c	8	3d	23	4a	3	4e	7	5b	20	125
infant	1a	-2	2c	12	3a	7	4b	3	4c	5	4f	10	5a	16	5c	4	5d	8	63

Infant Observation Scale Observer Form

Coding of admission Video for pair number: 090

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (admission)											
1a+ Baby seeks mother's attention	3	2	1								1a- Baby is avoidant of mother
1b+ They are in tune with one another-matching each other's feeling states and/or imitating one another.							2	1	3		1b- They are not in tune with one another and there is no evidence of matching or imitating.
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately		1					3		2	3	1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">-33</p>											

Making sense of each other - mutual understanding (admission)											
2a+ Mother is sensitive to baby's emotional state and intentions				1	3						2a- Mother is insensitive to baby's emotional state and intentions
2b+ Mother is able to contain baby's distress	1				3						2b- Mother struggles to contain baby's distress
2c+ Baby does look to mother for help						3		1	2		2c- Baby does not look to mother for help
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">-42</p>											

Making relationships (admission)												
3a+ Baby seeks to share experiences and/or feeling states with mother				2	1						3a- Baby does not seek to share experiences and/or feeling states with mother	
3b+ Mother tries to engage baby in play	3						1	2				3b- Mother does not try to engage baby in play
3c+ Mother succeeds in engaging baby in play							1	2	3			3c- Mother fails to engage baby in play
3d+ Mother is authentic and congruent			3					1	2			3d- Mother is not authentic and congruent
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">-37</p>												

Maintaining relationships (admission)													
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately				1				2	3		4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress		
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement			2		1		3					4b- Baby does not seem resilient and has little tolerance around relational distress	
4c+ Baby's face expresses affection								2	1	3	4c- Baby's face does not express affection		
4d+ Mother and baby's behaviours are reciprocal or contingent on one another										3	2	1	4d- Mother and baby's behaviours are not reciprocal or contingent on one another
4e+ Mother is sensitive to and respectful of baby's boundaries								1	2	3	4e- Mother is intrusive or apparently unaware of baby's boundaries		
4f+ Baby appears to be able to regulate himself and his contact with mother			1							2	3	4f- Baby struggles to regulate himself and his contact with mother	
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">-19</p>													

Making sense of the world - learning (admission)												
5a+ Baby seems curious about his world				1				2	3		5a- Baby seems uninterested in his world	
5b+ Mother seems to want to bring the world into her relationship with her baby								1	2	3	5b- Mother seems to want to keep the world out of her relationship with her baby	
5c+ Baby appears to have resilience and cohesion			1							2	3	5c- Baby appears to be fragmented and vulnerable
5d+ Baby demonstrates a sense of agency			1					2	3			5d- Baby does not demonstrate a sense of agency
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">+20</p>												

Countertransference and relational inferences (admission)														
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship									2	1	3	6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or disassociation causing a sense of hopelessness about the relationship		
Or not	/	/	/	/	/	/	/	/	/	3	1	6b- The interaction conveys themes of intrusion, pushing in flooding, overwhelming, need for mastery or control		
Or not	/	/	/	/	/	/	/	/	/	1	2	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting		
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride								1	2	3	6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy			
N/A											1	2	3	6e- Behaviours suggest the use of projection by mother and/ or baby
6f+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby									3	1	2	6f- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby		
<div style="display: flex; justify-content: space-between;"> +10+9+8+7+6+5+4+3+2+10-1-2-3-4-5-6-7-8-9-10- </div> <p style="text-align: center;">-63</p>														

Total comparable score: 10.65

Total IOS score: -174

Total comparable score 64/6=10.65

Domain	score	comparable score
Making Contact	-33 (out of a possible range of -90 to +90)	8.9
Mutual Understanding	-42 (out of a possible range of -90 to +90)	7.5
Making Relationships	-37 (out of a possible range of -120 to +120)	9.7
Maintaining Relationships	-19 (out of a possible range of -180 to +180)	12.5
Making Sense of the World	+20 (out of a possible range of -120 to +120)	16.3
Countertransference and relational inferences	-63 (out of a possible range of -180 to +180)	9.1

Total

maternal	1c	-12	2a	-22	2b	0	3b	-3	3c	-16	3d	-18	4a	-2	4e	0	5b	0	-73
infant	1a	-3	2c	-19	3a	-10	4b	4	4c	-9	4f	10	5a	15	5c	-7	5d	12	-7

Infant Observation Scale Observer Form

Coding of Discharge Video for pair number: 090

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (discharge)																					
1a+ Baby seeks mother's attention	1	3	2								1a- Baby is avoidant of mother										
1b+ They are in tune with one another- matching each other's feeling states and/or imitating one another.	1		2	3							1b- They are not in tune with one another and there is no evidence of matching or imitating.										
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately				2	1	3					1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby										
+23	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of each other - mutual understanding (discharge)																					
2a+ Mother is sensitive to baby's emotional state and intentions	1										2a- Mother is insensitive to baby's emotional state and intentions										
2b+ Mother is able to contain baby's distress	1				2	3						2b- Mother struggles to contain baby's distress									
2c+ Baby does look to mother for help				1			2	3					2c- Baby does not look to mother for help								
-17	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making relationships (admission)																					
3a+ Baby seeks to share experiences and/or feeling states to mother	1				2	3					3a- Baby does not seek to share experiences and/or feeling states to mother										
3b+ Mother tries to engage baby in play	1	3	2								3b- Mother does not try to engage baby in play										
3c+ Mother succeeds in engaging baby in play	1					2	3					3c- Mother fails to engage baby in play									
3d+ Mother is authentic and congruent	1		2				3					3d- Mother is not authentic and congruent									
+19	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Maintaining relationships (discharge)																					
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately				2	1	3					4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress										
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement	1	2	3								4b- Baby does not seem resilient and has little tolerance around relational distress										
4c+ Baby's face expresses affection	1			2				3				4c- Baby's face does not express affection									
4d+ Mother and baby's behaviours are reciprocal or contingent on one another	1			2				3				4d- Mother and baby's behaviours are not reciprocal or contingent on one another									
4e+ Mother is sensitive to and respectful of baby's boundaries						2	1	3				4e- Mother is intrusive or apparently unaware of baby's boundaries									
4f+ Baby appears to be able to regulate himself and his contact with mother				1	2				3				4f- Baby struggles to regulate himself and his contact with mother								
+19	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Making sense of the world - learning (discharge)																					
5a+ Baby seems curious about his world				1	2	3					5a- Baby seems uninterested in his world										
5b+ Mother seems to want to bring the world into her relationship with her baby				3	1	2					5b- Mother seems to want to keep the world out of her relationship with her baby										
5c+ Baby appears to have resilience and cohesion	1	2				3					5c- Baby appears to be fragmented and vulnerable										
5d+ Baby demonstrates a sense of agency	1			2	3						5d- Baby does not demonstrate a sense of agency										
+26	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Countertransference and relational inferences (discharge)																					
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship				1	2				3			6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship									
Or not	/	/	/	/	/	/	/	/	/	/	1	2	3	6b- The interaction conjures themes of intrusion, pushing in flooding, overwhelming, need for mastery or control							
Or not	/	/	/	/	/	/	/	/	/	1	2	3	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting								
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride						1	2	3				6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy									
Or not	/	/	/	/	/	/	/	/	/	/	1	2	3	6e- Behaviours suggest the use of negative projection by mother and/ or baby							
6f+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby				2	1				3			6f- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby									
-23	+	10	+9	+8	+7	+6	+5	+4	+3	+2	+1	0	-1	-2	-3	-4	-5	-6	-7	-8	-9

Total comparable score:15

Total IOS Score +47 Total comparable score 90 ÷ 6 =15

Domain	score	comparable score
Making Contact	+23 (out of a possible range of -90 to +90)	17.6
Mutual Understanding	-17 (out of a possible range of -90 to +90)	11.3
Making Relationships	+19 (out of a possible range of -120 to +120)	16.2
Maintaining Relationships	+19 (out of a possible range of -180 to +180)	15.5
Making Sense of the World	+26 (out of a possible range of -120 to +120)	17.03
Countertransference and relational inferences	-23 (out of a possible range of -180 to +180)	12.21

Total

maternal	1c	0	2a	-4	2b	-3	3b	17	3c	-2	3d	1	4a	5	4e	-10	5b	12	16
infant	1a	16	2c	-10	3a	3	4b	10	4c	4	4f	1	5a	2	5c	5	5d	7	38

Infant Observation Scale Observer Form

Coding of admission Video for pair number: 303

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (admission)	
1a+ Baby seeks mother's attention	1a- Baby is avoidant of mother
3 1 2	
1b+ They are in tune with one another- matching each other's feeling states and/or imitating one another.	1b- They are not in tune with one another and there is no evidence of matching or imitating.
3 1 2	
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately	1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby
3 1 2	
+57	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Making sense of each other - mutual understanding (admission)	
2a+ Mother is sensitive to baby's emotional state and intentions	2a- Mother is insensitive to baby's emotional state and intentions
3 1 2	
2b+ Mother is able to contain baby's distress	2b- Mother struggles to contain baby's distress
3 2	1
2c+ Baby does look to mother for help	2c- Baby does not look to mother for help
3 2	1
+45	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Making relationships (admission)	
3a+ Baby seeks to share experiences and/or feeling states to mother	3a- Baby does not seek to share experiences and/or feeling states to mother
3 1 2	
3b+ Mother tries to engage baby in play	3b- Mother does not try to engage baby in play
1 3 2	
3c+ Mother succeeds in engaging baby in play	3c- Mother fails to engage baby in play
2 1 3	
3d+ Mother is authentic and congruent	3d- Mother is not authentic and congruent
2 1 3	
+50	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Maintaining relationships (admission)	
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately	4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress
2 1 3	
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement	4b- Baby does not seem resilient and has little tolerance around relational distress
2 1 3	
4c+ Baby's face expresses affection	4c- Baby's face does not express affection
	2 1 3
4d+ Mother and baby's behaviours are reciprocal or contingent on one another	4d- Mother and baby's behaviours are not reciprocal or contingent on one another
2 1 3	
4e+ Mother is sensitive to and respectful of baby's boundaries	4e- Mother is intrusive or apparently unaware of baby's boundaries
2 1 3	
4f+ Baby appears to be able to regulate himself and his contact with mother	4f- Baby struggles to regulate himself and his contact with mother
2 1 3	
+119	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Making sense of the world - learning (admission)	
5a+ Baby seems curious about his world	5a- Baby seems uninterested in his world
	1 2 3
5b+ Mother seems to want to bring the world into her relationship with her baby	5b- Mother seems to want to keep the world out of her relationship with her baby
2 1 3	
5c+ Baby appears to have resilience and cohesion	5c- Baby appears to be fragmented and vulnerable
2 1 3	
5d+ Baby demonstrates a sense of agency	5d- Baby does not demonstrate a sense of agency
2 1 3	
+53	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Countertransference and relational inferences (admission)	
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship	6a- Mother and/or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship
	1 2 3
6b+ Or not	6b- The interaction conjures themes of intrusion, pushing in flooding, overwhelming, need for master or control
	1 2 3
6c+ Or not	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting
	1 2 3
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride	6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy
	2 1 3
6e+ Or not	6e- Behaviours suggest the use of projection by mother and/or baby
	1 2 3
6g+ Behaviours suggesting whole object relating and/or depressive position functioning in mother and/or baby	6g- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/or baby
	1 2 3
+42	+ 10 +9 +8 +7 +6 +5 +4 +3 +2 +1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9

Results:21

Total IOS score: +366

Total comparable score 124/6 =21

Domain	score	comparable score
Making Contact	+57 (out of a possible range of -90 to +90)	22.86
Mutual Understanding	+45 (out of a possible range of -90 to +90)	21.00
Making Relationships	+50 (out of a possible range of -120 to +120)	19.83
Maintaining Relationships	+119 (out of a possible range of -180 to +180)	23.25
Making Sense of the World	+53 (out of a possible range of -120 to +120)	20.18
Countertransference and relational inferences	+42(out of a possible range of -180 to +180)	17.26

		Total																	
maternal	1a	16	2c	-10	3a	3	4b	10	4c	4	4f	1	5a	2	5c	5	5d	7	38
infant	1a	19	2c	13	3a	19	4b	14	4c	7	4f	23	5a	0	5c	23	5d	23	141

Infant Observation Scale Observer Form

Coding of Discharge Video for pair number: 303

Please consider each of the following dimensions. Please mark on each dimension where you feel most accurately represents the emotional engagement between the pair at the for the first minute (1), for the second minute (2) and for the third minute (3).

Making Contact (discharge)	
1a+ Baby seeks mother's attention	1a- Baby is avoidant of mother
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
1b+ They are in tune with one another-matching each other's feeling states and/or imitating one another.	1b- They are not in tune with one another and there is no evidence of matching or imitating.
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
1c+ Mother seems curious about her baby and can tolerate not knowing/ understanding immediately	1c- Mother cannot tolerate not knowing and seems to need mastery/control or appears to lack curiosity about her baby
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
<div style="display: flex; justify-content: space-between;"> +79 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Making sense of each other - mutual understanding (discharge)	
2a+ Mother is sensitive to baby's emotional state and intentions	2a- Mother is insensitive to baby's emotional state and intentions
<div style="display: flex; justify-content: space-between;"> 321 </div>	<div style="display: flex; justify-content: space-between;"> 321 </div>
2b+ Mother is able to contain baby's distress	2b- Mother struggles to contain baby's distress
<div style="display: flex; justify-content: space-between;"> 312 </div>	<div style="display: flex; justify-content: space-between;"> 312 </div>
2c+ Baby does look to mother for help	2c- Baby does not look to mother for help
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
<div style="display: flex; justify-content: space-between;"> +63 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Making relationships (admission)	
3a+ Baby seeks to share experiences and/or feeling states to mother	3a- Baby does not seek to share experiences and/or feeling states to mother
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
3b+ Mother tries to engage baby in play	3b- Mother does not try to engage baby in play
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
3c+ Mother succeeds in engaging baby in play	3c- Mother fails to engage baby in play
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
3d+ Mother is authentic and congruent	3d- Mother is not authentic and congruent
<div style="display: flex; justify-content: space-between;"> 312 </div>	<div style="display: flex; justify-content: space-between;"> 312 </div>
<div style="display: flex; justify-content: space-between;"> +101 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Maintaining relationships (discharge)	
4a+ Mother understands or can bear the full range of baby's feelings and responds appropriately	4a- Mother avoids, misunderstands or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress
<div style="display: flex; justify-content: space-between;"> 321 </div>	<div style="display: flex; justify-content: space-between;"> 321 </div>
4b+ Baby seems resilient recovering quickly from distress or anger and/ or is tolerant of misattunement	4b- Baby does not seem resilient and has little tolerance around relational distress
<div style="display: flex; justify-content: space-between;"> 321 </div>	<div style="display: flex; justify-content: space-between;"> 321 </div>
4c+ Baby's face expresses affection	4c- Baby's face does not express affection
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
4d+ Mother and baby's behaviours are reciprocal or contingent on one another	4d- Mother and baby's behaviours are not reciprocal or contingent on one another
<div style="display: flex; justify-content: space-between;"> 321 </div>	<div style="display: flex; justify-content: space-between;"> 321 </div>
4e+ Mother is sensitive to and respectful of baby's boundaries	4e- Mother is intrusive or apparently unaware of baby's boundaries
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
4f+ Baby appears to be able to regulate himself and his contact with mother	4f- Baby struggles to regulate himself and his contact with mother
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
<div style="display: flex; justify-content: space-between;"> +163 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Making sense of the world - learning (discharge)	
5a+ Baby seems curious about his world	5a- Baby seems uninterested in his world
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
5b+ Mother seems to want to bring the world into her relationship with her baby	5b- Mother seems to want to keep the world out of her relationship with her baby
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
5c+ Baby appears to have resilience and cohesion	5c- Baby appears to be fragmented and vulnerable
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
5d+ Baby demonstrates a sense of agency	5d- Baby does not demonstrate a sense of agency
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
<div style="display: flex; justify-content: space-between;"> +64 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Countertransference and relational inferences (discharge)	
6a+ The pair seem able to engage with the moment, showing openness, curiosity, responsiveness and a capacity for linking and coherence within their interactions inspiring hope about their relationship	6a- Mother and/ or baby appear to be avoidant or detached perhaps withdrawing from or denying reality possibly leading to fragmentation or dissociation causing a sense of hopelessness about the relationship
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
6b+ Or not	6b- Their interaction conjures themes of intrusion, pushing in flooding, overwhelming, need for master or control
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
6c+ Or not	6c- Their interaction conveys a sense of expelling, pushing out or back, of rejecting
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
6d+ Their interaction conveys a sense of seeking, desire, pleasure, trust and/ or pride	6d- Their interaction conveys a sense of persecution, frustration, rage, fear or panic, shame or envy
<div style="display: flex; justify-content: space-between;"> 231 </div>	<div style="display: flex; justify-content: space-between;"> 231 </div>
6e+ Or not	6e- Behaviours suggest the use of projection by mother and/ or baby
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
6f+ Behaviours suggesting whole object relating and/ or depressive position functioning in mother and/ or baby	6f- Behaviours suggesting part object relating and/ or paranoid schizoid functioning in mother and/ or baby
<div style="display: flex; justify-content: space-between;"> 123 </div>	<div style="display: flex; justify-content: space-between;"> 123 </div>
<div style="display: flex; justify-content: space-between;"> +77 ⁺₁₀ ⁺₉ ⁺₈ ⁺₇ ⁺₆ ⁺₅ ⁺₄ ⁺₃ ⁺₂ ⁺₁ 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 </div>	

Results:24

Total IOS score:547 Total comparable score:144/6=24

Domains	score	comparable score
Making Contact	+79 (out of a possible range of -90 to +90)	26.28
Mutual Understanding	+63 (out of a possible range of -90 to +90)	23.80
Making Relationships	+101 (out of a possible range of -120 to +120)	25.78
Maintaining Relationships	+163 (out of a possible range of -180 to +180)	26.67
Making Sense of the World	+64 (out of a possible range of -120 to +120)	21.46
Countertransference and relational inferences	+77 (out of a possible range of -180 to +180)	19.98

		Total																	
maternal	infant	1c	2a	2b	10	3b	26	3c	26	3d	25	4a	27	4e	28	5b	7	202	
		1a	2c	2b	3a	24	4b	27	4c	26	4f	28	5a	7	5c	26	5d	24	215

Making contact	Mutual Understanding	Making relationships	Maintaining Relationships	Making sense of the world	internal World Inferences
<p>1a+ They seek one another's attention</p> <p>1a- One is avoidant of the other</p> <p>1b+ They are in tune with one another - matching each other's feeling states or even imitating one another.</p>	<p>2a+ Mother is sensitive to baby's emotional state and intentions</p> <p>2a- Mother is not sensitive to baby's emotional state and intentions</p>	<p>3a+ Baby seeks to share experiences and/or feeling states with mother</p> <p>3a- Baby does not seek to share experiences or communicate feeling states</p>	<p>4a+ Mother understands or bears the full range of feelings & wishes expressed & responds appropriately</p> <p>4a- Mother avoids, misunderstands and/or is overwhelmed by baby's feelings perhaps showing surprise at baby's distress</p>	<p>5a+ Baby seems curious about the world</p> <p>5a- Baby seems uninterested in the world</p>	<p>6a+ Engagement with the moment, openness curiosity, responsiveness and a capacity for linking and coherence in mother and/or baby inspiring a sense of hopefulness</p> <p>6a- Denial of reality, avoidance, detachment and withdrawal or fragmentation and dissociation in mother and/or baby, inspiring a sense of hopelessness</p>
<p>1b- They are not in tune with one another and there is no evidence of matching or imitating</p> <p>1c + Mother seems curious about her baby and can tolerate not knowing or understanding immediately</p> <p>1c- Mother urgently needs to feel she knows or can control</p>	<p>2b+ Mother contains distress</p> <p>2b- Mother cannot contain baby's distress</p> <p>2c+ Baby looks to mother for help</p> <p>2c- Baby does not look to mother for help</p>	<p>3b+ Mother tries to engage baby in play</p> <p>3b- Mother does not try to engage baby in play</p> <p>3c+ Mother succeeds in engaging baby in play</p> <p>3c- Mother does not succeed engaging baby in play</p> <p>3d+ Mother is authentic and congruent</p> <p>3d- Mother is not authentic and congruent</p>	<p>4b+ Baby recovers quickly from distress and/or is tolerant of misattunement</p> <p>4b- Baby is not resilient or tolerant around relational distress</p> <p>4c+ Baby's face expresses affection</p> <p>4c- Baby's face does not express affection</p> <p>4d+ Their behaviours are contingent/reciprocal</p> <p>4d- Their behaviours are not contingent/reciprocal</p> <p>4e+ Mother sensitive and respectful of boundaries</p> <p>4e- or intrusive</p> <p>4f+ Baby regulates self and contact with mother</p> <p>4f- or not</p>	<p>5b+ Mother wants to bring world in</p> <p>5b- Mother wants to keep world out</p> <p>5c+ Baby shows resilience, cohesion</p> <p>5c- Baby shows fragmentation and vulnerability</p> <p>5d+ Baby demonstrates sense of agency or self</p> <p>5d- Baby does not demonstrate a sense of agency or self</p>	<p>6b- Themes of intrusion, pushing in, flooding, overwhelming, need for mastery or control</p> <p>6b+ or not</p> <p>6c- Themes of expelling, pushing out or back, rejecting</p> <p>6c+ or not</p> <p>6d+ Themes of trust, pride, seeking, desire or satisfaction and gratitude</p> <p>6d- Themes of persecution, frustration, rage, fear, shame or envy</p> <p>6e- Behaviours suggesting the use of projection from mother and/or baby</p> <p>6e+ or not</p> <p>6f+ Behaviours suggesting whole object or depressive position relating from mother or baby</p> <p>6f- Behaviours suggesting part object or paranoid schizoid relating from mother and/or baby</p>

Appendix (iii) Table 9 Overview of the six domains of PIOS

- **Appendix (iv)**
**Sample of one transcript with questions and without
further reflections**

Observation Material from Admission Video 053

First Minute

The baby is looking at mother with an enormous open-mouthed smile around the four fingers he has crammed into his mouth. His eyes are wide open and twinkling too. She is singing in a very animated way, leaning over him and dancing about, while waggling the toes on both his feet. She is singing 'naughty boy smiling, naughty boy now, naughty boy laughing, gonna tell the world'. She leans back and does a circular wave with both hands in the style of the Charleston and sings 'all these things a naughty boy does'. Her long hair is loose and accentuates all her lively movement by swinging around. She then swoops in and he startles but continues smiling – it all feels very exciting if a little scary. She continues the song, swaying from side to side singing 'bad girl mummy, gonna tell the world, I'm a little boy but she treats me like a girl!' As she sings this she waggles his toe and at the point of the climax she jumps back to accentuate the ending and thus lets go of his toe. He laughs at the climax and grabs his toe. She starts singing again and he watches her eagerly with the big smile ever there. On 'bad girl mummy' she does a slightly seductive/coquettish gesture, making an S of her body and tilting her chin down to one side. This feels quite out of place here. He glances away but does not seem distressed and retains an open expression. She swings back into an upright position when he breaks contact, but she immediately starts to make 'agogogoggo' noises to regain his attention. When that doesn't work she calls his name and claps loudly. When he looks past her shoulder, which is more directed at her than he had been, she says a lovely sing-song 'hello' which he likes and smiles looking back to her face. She welcomes him back with a big smile. He has one finger in his mouth and his free arms and legs are moving about quite a lot. He then makes a lovely conversational sound himself. At first her eyebrows raise and she sits more upright, apparently wanting to communicate to him that she is paying attention to his vocalisation. She answers with her own appreciative sound but then he frowns slightly and she immediately starts to respond as though his vocalisation was a complaint or expression of distress. She makes a sympathetic

sound and then he makes definite complaining sound and his face drops in a wobbling way so that his hand gets in the way of his nose and he screws his face up a bit. She then asks if he's not feeling himself today and adds 'are you a bit moody?' Perhaps there is reproach in her face, there is certainly in her voice, and he looks away. This is all rather disorientating. She seems to have pounced on the idea that he might not be happy but then reproved him for that.

Second minute

Immediately she takes his left foot and starts playing 'this little piggy'. He instantly looks at her and smiles a knowing smile with slightly narrowed eyes as his body goes a little still in anticipation. As it goes on he starts to look a little strained and ultimately pulls his foot away. She ends the song by gently pinching and wobbling the flesh on the underside of his thigh and it is not clear if there is anything punitive about this. She rubs where she has done this repeating the refrain 'all the way home, while looming in. She immediately starts tapping the table and asking him 'what's that?' She swings her head about pretending to look for the origin of the sound. This seems to be a bit like a parody of his looking away to break contact. He does not look at her so she repeats it then starts the song again 'bad girl mummy'. She waggles his foot and then looms in saying 'I don't treat you like a girl, what's your daddy talking about? Load 'a' rubbish, that's what he's talking about'. She says all of this to him as though she were teasing him about getting something wrong, wagging his foot and shaking her head while she swings in and out for emphasis on each line. He is smiling but his eyes are a little wary. He then makes a little protest sound and hides his face away from her behind his hands. She bangs on the table and says his name. He turns with some curiosity. She then looms right in and makes kissing noises in his face, he turns his face away and buries it in the chair wing. She asks if he's 'going all shy' but it seems to be a way of sanitising the more rejecting avoidance of her that evident in the gesture. There is nothing coy about his retreat, it is self protective, not provoking. She is still smiling but the very corners of her smile are turned down and she is very slightly frowning. I feel she is not convinced by her own spin on it but she is determined to engage him. She swoops down to try and get in his eye line. He glances at her but continues to keep his face turned away. She then starts to pretend to eat his feet and this makes him look at her and smile slightly. She then sits up again

grinning at him, then does it again. He is looking at her and away and looking back but it feels a bit uneasy. Although his smile fades, somehow it seems to take a while to catch up with his eyes and remains in a lifeless way on his face for a few moments too long.

Third Minute

She gets back in to his line of vision when he looks more permanently away and starts to make a teasing sound, he smiles but does not look. This could be coy but actually I get the feeling it is just confused. She then tickles his tummy and he smiles again but keeps his face firmly pressed into the wing and his eyes averted. He is smiling around his hand, again he has a finger in his mouth, and glancing to her and away. There is something a bit discordant about his face. His eyes are very bright and in the context of his smile are easily taken as smiling. Yet, his behaviour, the pattern of his looking and looking away seems more vigilant, and in that context his eyes might be bright with hyper arousal. This would make his smile completely incongruent. She calls his name and says with mock (but I think real) reproach 'you not going to look at me?' He looks at her mouth and smiles a little. Just as she says 'yeah, that's better', he looks away, grabbing his toes in his hands. The whole thing feels quite muscular and tense. She says 'you're more interested in your feet, aren't you?' She accompanies this with a prod to his side, then asks 'what's this, fat boy, naughty boy'. It is again supposed to be mock aggression but I feel it is genuinely retaliatory because she feels rejected and probably humiliated in front of the camera and clinician. She turns this into the song 'naughty boy' and he does now look at her and smile. She swoops in with the next line and he looks away again. She is swinging his left hand as she sings. For a while he turns to her again and might really be smiling again but she swoops again and he looks away. She continues to bounce his arm, which now looks quite detached from the rest of him, which he is pressing down in the opposite direction to get away from her. He sighs and goes a little still. She lets go of his hand and waggles his ear. He glances back and she is in full manic smile and raised eyebrows while he is quite subdued now. He seems more self-congruent but they are now completely at odds with each other. He looks away and she calls out his name then, 'naughty boy', which he looks at and she quips 'you know your name'. She seems angry with him for

collapsing the tension to own his own authentic state of mind and in so doing, abandon her. She cannot yet follow him to somewhere more sober.

Experience of the observer (Admission)

Please comment on the sensory images, the associations, adjectives that come directly to your mind in relation to the session material (even at the point of writing up). Please note any changes to these during the course of the interaction.

There was something brittle and jagged about the cheerfulness. I thought of Punch and Judy – the uncomfortable laughter about supposedly mock violence.

The danger that the aggression and denigration being joked about would poke through and make a real wound seemed to be around. As the interaction progressed things became more disorientating and surreal.

Please comment on your feeling states in the course of the observation. Did you detect a movement in these states as the interaction progressed?

I went from hopeful enjoyment of his bonny smiles and confidence that his resilience would compensate for her intrusiveness to a sense that even *his* smiles could not be trusted

Please comment on your judged capacity to think in the course of the observation or write-up (e.g., clarity, muddle, confusion, fractured). Did you detect a movement in these judgements as the session progressed?

My capacity to think was not too disrupted. The intrusiveness was quite overt and the narrative of his avoidance of this made sense. I was not at all persuaded by her cheeriness so I was not confused by mixed messages until he started to try and seek and avoid simultaneously, then I felt thrown.

The baby's experience (Admission)

What do you judge the baby needed to defend against and perhaps project into mother, which may serve to give a sense of the model of the world they hold in their mind?

He seemed to be trying to make contact with and enjoy the fun mum while increasingly needing to avoid the intrusive and potentially threatening mum. This led to bizarre, fragmented and incongruent actions on his part like smiling and hiding without coyness. I wondered if he was trying to persist in a part-object relating mode in order to be able to preserve the fun mum. Unfortunately the threatening mum and fun mum presented in tandem, rather than in turn, so that this became impossible to manage in space and time. The development of his perception of space, time and affect expression may suffer as a result of these struggles.

The mother's experience (Admission)

What do you judge the mother needed to defend against and perhaps project into baby, which may serve to give a sense of the model of the world she holds in her mind?

Mother seemed to be full of a sense of being 'bad', 'naughty' and perhaps generally not good enough. It is possible that she felt he was revealing all of this shameful hidden side of her to the clinician/camera and needed to project to be rid of these feelings but perhaps also to punish him for exposing her. While a wish to bring the father in can be a healthy readiness for triangulation, here it felt more like a preoccupation with a judgemental figure, preventing her from genuine reverie. Her bringing in a dispute with his father suggested that she might have quite a rivalrous relationship with him too. Her attempts to play with him were very controlling and were not contingent on his actions, but they were also so lively as to sometimes be successful despite this.

Appendix (v)
Transcripts with further reflections for the eight observed videos

-
- Transcript and further reflections on
- Admission Observation 292
-

Observation	Code	Comment
The video starts and they are looking directly into each other's eyes. Mother is leaning in quite close and baby is in a relaxed reclining position with his hand resting on his legs.	1a+	Mother's position conveys her intense focus on him. Baby's body, relaxed but not limp, and his receptive eyes suggest that he is completely relaxed and open to her and the intensity of the moment. He looks unguarded but not vulnerable.
His head is supported at the back but it feels like his spine is quite actively holding his head too because he has such an alert look to him.	4c-	There is the sense of endoskeletal strength, something internally held together but also his eyes are wide open with curiosity and concentration. It looks like he is taking in every detail of her face, yet it is without passion.
Mother uses the length of her forefinger to give a jiggling little stroke to the base of his right cheek. His head gives a slight wobble at this and he blinks but does not break eye contact.	1a+ 3c-	This contact through another modality seems to throw him slightly. It is not a novel act that augments and adds interest to what has already been established between them, it feels like he experiences it as a sort of interference on the line.
They both have round faces with round eyes and almost permanently raised eyebrows.	1b+ 4c- 4d-	This mirroring of physical facial features is compounded by their matched expressions. There is little variation in their expressions so one can only say they are matched rather than contingent, there is not enough fluctuation to notice if a change in one is in response to a change in the other, yet there is definitely a sense of joint attention and joint purpose.
She is greeting him with a hello and takes his left hand in her right hand, cupping his fist with two of her fingers while he holds her thumb in his fist.	3d-	This is done supremely delicately, without any change in the tone or intensity of her facial expression or voice.
She begins making long drawn out 'Aaahhh' sounds, looming very slightly forward with each one and back again. I realise that	1a+ 3b+ 4e+	This action seems to accentuate the cadence rather than being intrusive. It is all extremely controlled and her focus on him is intense. It is charged rather

she is actually saying his name but drawing out the middle vowel.		than lively but does not feel at all threatening.
His eyes are very wide open but he does not look startled. He looks full of curiosity and his right thumb and forefinger make a slight grabbing motion where his hand is resting on his knee.	5a+ 5c+ 3d-	He seems to be suspended in animation, just about to take in something yet he does not seem excited or hungry. It is the little hand movements that suggest his anticipation and his wide open eyes his receptivity. There is purpose and something of the poised tension keeps it from being perfunctory, yet, something is missing. Such intense joint attention and effort ought to produce a fluttery butterflies feeling but I don't feel it.
They seem to have immediately found a way to be together and have embarked on an interaction.	1c-	I am struck that in most of the films there is a sense of needing to get something going, connecting and disconnecting and trying to reconnect but here they are locked on to each other from the off.
Her face is smiling through all she does in a steady way. His mouth opens when she makes a slightly louder 'aahhh' sound.	3d- 4d-	This feels benign, and predictable yet there is a sense that she is setting the tone and the agenda. He is trying to match her and it does not seem odd that this does not involve returning the smile. Somehow the smile is part of the guidelines for the interaction rather than an invitation to reciprocate or elaborate in some novel way.
It is not entirely clear at first if this is done in surprise but very quickly it becomes clear that he is mirroring her – his mouth opening almost in synchrony with hers, just a moment's delay between hers and his.	4d+ 1c-	His attempt to make an 'aaaah' sound could be a spontaneous response but it turns out that it is not. He is mirroring and matching but there is no turn taking. It is a game of 'follow my leader' rather than a conversation in which either partner can bring a change in direction.
Then it seems obvious that as well as wonder at his mother's animated face, his face expresses the extreme concentration he is using for this task.	4c- 5d+	The absence of a sense of intersubjective joy is confirmed. Perhaps awe is a better word than wonder. This is work, which has its own satisfaction, a sense of achievement and perhaps the satisfaction of earning approval. However, approval is not the same as pride.

When she changes her vocalisations to 'oohh' sounds he does not pause by looking away, perhaps he blinks very briefly but his eyes are busy flitting between her mouth and eyes, and his body twitches very slightly with each peak of her vocalisations.	4f- 1c- 2c- 4b+	There does not seem to be any sense of ebb and flow. This is full force forward, even if we change course. He seems to be able to keep up the pace but I begin to feel slightly uncomfortable about the amount of tension and wonder if it is pleasurable, or if he is even able to avoid unpleasure. Is the twitching a sign of arousal? Perhaps the excitement that is not expressed by his face? Based on what's happening in my body I feel most persuaded that it is an aborted urge to break contact.
She taps his nose and then frames her face with her hand and says 'look, mummy's here' then taps his nose and says 'your nose'.	3c- 4c-	It is not clear if this is mother noticing the impersonal atmosphere and trying to draw out their separateness, their capacity to be subjective agents experiencing each other. Perhaps she is trying to be playful but he does not respond immediately and she does not persevere.
She then goes back to doing 'oohhs'. After a moment his mouth shape changes slightly, not quite into an O shape but away from the wide open 'aaahh' shape and out of neutral.	4d- 4d+	He is completely absorbed by her, yet there is not much sense of how being together makes them feel. It is a very task focused interaction. His actions are contingent on her actions but somehow not on her, there is no building on one another's responses, they do not quite reciprocate.
His eyebrows start to lift in the centre in little anticipatory puffs and the muscles around his mouth seem to be poised for action. He looks like he is about to try saying 'oohh' but she does not leave a pause for him and moves seamlessly on to gentle 'eeeh' sounds.	2a- 4d+ 4d-	If he is not able to keep pace with her, his opportunity is lost. She is clearly trying to draw out his capacity to imitate by offering sounds that he might copy but she does not seem to be able to adapt the lesson to respond to the rhythms of his learning. She sails on through to the next round of sounds, apparently unaware of his intentions or if not then unable to respond to them.
The preparatory tension in his face slides away and I register a moment of disappointment in me and I think in him too.	4c- 2c- 5c-	His face is so devoid of feeling that I really cannot tell if I am projecting my disappointment on to him. I feel that my feeling must be in sympathy with his feeling, but actually maybe he is not having an affective response to his

		experience. Whether his affective life is dampened or his capacity to express emotion is hampered, something seems to be wrong.
He still does not look away but starts to focus on the shape of her mouth during the 'eeeh' sounds.	4b+	He is not derailed, or perhaps he has been but gets himself back on track by holding fast to her, or rather her actions.
He is very still, then makes a little 'eh, eh' sound. She acknowledges this with a nod and says 'yes, yes' to him giving him a little stroke with the length of her forefinger on the side of his face. This has the feel of a way of saying 'well done'.	4c- 4d+ 1b+	This is the first time he actually manages to produce a sound and it is clearly an approximation of her last sound. I am thrilled but neither of them smile or look away. There is no sense of crescendo - no relief, no joy, no arriving. There is just approval, given evenly apparently to encourage him to remain engaged. Keeping on keeping on seems to be what matters. I start to wonder what they fear might happen if they let the train stop?
She starts to waggle his hand and say his name in a way that I realise is an invitation for him to speak but she still does not leave any pauses.	1c-	It feels like he would have to get the timing just right, like boarding a moving train.
Again he seems to take a few goes to ready himself but finally manages a little 'eh, eh' sound. This time she seems more impressed and makes an appreciative 'ooh' sound and gives a slightly excited little dancing sway from side to side.	3d+	Suddenly she is there and she can see him and <i>feel</i> something about his achievements. She is energised and spontaneous. I wonder what has been pre-occupying her – the camera and clinician? The idea of being assessed? Or is she troubled with intrusive thoughts?
She then does a really exaggerated long drawn out 'aaaahh' sound and he goes to answer. He bobs a little with the effort and breathes in, his eyes widen as his mouth widens and I realise I am holding my breath, but she goes on to another sound.	2a-	The attunement to him is short lived, her own excitement at making real contact seems to have bounced her out of her receptive state again. I feel crest-fallen and dropped.
His chin juts out slightly and as his raised eyebrows fall his eyes	2c+ 5d+	I am relieved to see him express something and be able to actually assert

darken slightly. He could almost look angry.	5c+	his separateness through difference, by asserting his experience as different to hers.
She taps his nose with her forefinger. He blinks as it approaches but does not look away from her or laugh.	1c- 2c- 4a- 3c- 1b-	It feels like she has seen his protest, subtle and fleeting though it was. She appears to wipe it away by tapping his nose, or perhaps she is just obscuring his face. This makes me feel that she is aware of his states and his intentions; she just cannot let them steer the course of their interaction. He does not find it amusing as a surprise event neither does he express distress, he just seems momentarily thrown by it.
She does the 'aahh' sound a couple more times and he continues to glance between her mouth and eyes, apparently enjoying the impact of both.	4c+ 4b+	He has recovered, and or distracted himself with the next task. He seems to be drinking in her face. This time it feels more like it might be pleasure in her, rather than focus on the task.
He starts to make open-shut mouthing gestures accompanied by frowning. She does not acknowledge this and continues with her sounds.	1c- 2a-	I wonder if I was wrong, if he was just getting ready to try to imitate again. When she does not pick it up I feel that something is slipping away. Perhaps his intentions do not fit with today's lesson?
He then offers a single 'eh' which she does not acknowledge and instead moves into a new range of sounds. He does not seem perturbed by the lack of response and soldiers on.	6b+ 3a-	I feel rather sad about this soldiering on now. I am beginning to feel that his determination betrays something desperate, a need to keep things going. After all, without spontaneous mutual pleasure building and feeding on itself, something needs to keep things going.
She is still smiling and while he seems to like this he has not actually smiled yet.	3a-	He is not expressing a very wide range of feelings – just, concentration and some gratification at his achievements and at her approval of them.
As she continues with the sounds he opens his mouth but to the side, it looks a little like a rooting reflex but in this context also like an attempt to say something	1b- 2a-	This is a novel behaviour from him and catches my attention, although it is not easy to read. I don't feel certain about his intentions or desires, I just have a sense that they might be changing.
She responds to this by tapping	3a+	Again, she also seems to register the

his nose again and this time he reaches for her finger with his mouth.		change and her reaction gives him an opportunity to make a clearer communication about an oral desire.
Again this looks like a rooting reflex and when she repeats the nose tap he reaches for her with his mouth over and over a few times.	2a- 6d-	It begins to look a little insensitive to his obvious desire for oral satisfaction and I wonder if he may be feeling tantalised, and perhaps even humiliated by being tantalised.
She does a few 'aahhs' then a few 'oohhs' and he forgets about his want for something in his mouth. He is utterly focused on her face again. His eyebrows are raised so high he looks like he might pop. His head bobs a little with the pent up potential as his mouth almost twitches and eventually he manages an 'ooh'.	6a- 6c+	He seems to have pulled himself together around the effort of making this sound, it focuses all of his being there and there is no part of him left to feel anything else. When he makes the sound I feel he has triumphed, over the task but also over his pain or frustration.
She nods and makes a really impressed face and he almost smiles. They then get a real to and fro going with their sounds and she acknowledges his contributions, sometimes by saying 'good, good' and nodding, sometimes by actually mirroring back what he's said.	4c+ 1b+ 4b+ 4d+ 3d+	Once again they seem to have broken through a barrier and be making real contact with one another. She is able to respond to him and he is ready to make the most of it.
She then makes some really lovely 'oohh' sounds which are a little like doves cooing. He seems to enjoy this so much that his right leg bounces and he lifts his face towards hers.	4f- 4c+ 3d+ 3c+ 6a+	This is extremely moving. It feels as though they are finally being enlivened by something fluid and supple passing between them, rather than fixed on each other in a rigid 'holding on for dear life' sort of way. Although he has not once looked away from her this is the first time I feel he is really seeking her and it is expressed by his body.
He then also makes a little sound of his own. She does not touch his leg, or move in closer but just moves on to 'aahh' sounds.	2a- 4d-	This connection with him and her positive feelings towards him is short lived. The sanitising shroud of the imitation lesson is pulled back over the interaction, spontaneity and affect are smothered but perhaps some sort of feared risk also.

He opens his mouth wide but then it turns into a yawn. It seems a little odd that she does not acknowledge this but continues with her sounds.	1b- 2a-	Her sensitivity to changes in his behaviour is blunted again. She goes on regardless.
He then manages to make an 'aaahh' sound. She nods but does not pause in her loop of sounds.	4d- 2a-	She has built up her own rhythm again and he will have to do all the work if he wants to board now.
She does, however, introduce a novel sound. It is a 'hum' sound that reverberates a little.	3b+ 4d-	It does not seem that inspiration for this change emerged from the interaction and I am reminded again that she seems gripped by events that are off stage for me - her internal world drama.
He almost startles, again without looking away but his eyebrows go even higher while his eyes are less open and his top lip goes over the bottom one. I think this is surprise with a little uncertainty.	4f- 5c- 3a-	Again, I think, but cannot be sure that I detect some discomfort in him but there is no avoidance, which is what would usually confirm the theory. The ambiguity of his actions may betray a lack of internal cohesion.
He seems to pull back in his seat and then he begins to watch her mouth intently and we see his tongue moving about inside his open mouth.	6a- 3c+	He cannot break contact but is pulling back, Is he in thrall? Does he just not want to miss anything? In no time he is so caught up with his effort to imitate the idea that he might need to avoid seems lost, except that it is avoidance of the feeling of being with her. Avoiding the wood by studying the trees, almost.
She recognises his interest and offers lots more of these sounds. His attempts to replicate it are not successful and his body twitches a bit with the effort.	4f-	I feel exhausted and that he is tireless.
Again I am surprised he does not look away for a pause to relieve his discomfort and frustration. In fact they are able to regain a turn taking conversation.	4f- 4b+	He holds out, or maybe can't let go, but either way he is eventually rewarded by her returning capacity to be receptive and responsive. Even in these brief moments, neither become as emotionally heightened as any of the other pairs, for either negative or positive feelings. They keep their range small.

Further thoughts in the course of supervision (Admission)

The almost continuous flow of her honeyed voice gave rise to an almost pleasurable feeling of being flooded by or even drowning in honey.	6a+
	6a-

The breathtaking beauty of the imitation leading to conversation also had, at times, a feeling of breathlessness, as though there were no pauses in which to gasp for air- perhaps even a risk of being smothered.	6d+
	6b-

If he had not been able to break into the flow, his burgeoning capacities might have been flooded. Yet, they were not and he did break in and have his say.	6b+
	4b+

It was impressive and exciting to see her bring out his skills yet it felt more like a training session in imitation than a spontaneous exploration of each other's capacities and intentions. There was satisfaction but no joy.	3d-
---	-----

Their sustained mutual attention and the sophistication of their conversation were gratifying to observe and write about yet the absence of joy about this degree of intersubjectivity seemed odd and a bit flattening. My initial excitement quickly gave way to boredom and a sort of irritable low mood.	6a-
	6b+

It is somehow perfunctory and with no sense of the risks involved in sustained contact – no coyness or even ordinary pauses through breaking eye contact momentarily to recover from the intensity and be able to enjoy re-finding one another.

My capacity to think and recall was unimpaired by any countertransference experience.	6a-
---	-----

In retrospect I don't think this claim is true. I think that although I was not feeling confused or that my thinking was fractured, I had underestimated how strained my efforts to think had become. When I returned to the observation after replenishing myself with lively contact with other people I found I had a much more lively engagement with my observation. The method of triangulating between the video, the observation write-up and the textual analysis had created a space within which something novel could happen. In the direct line between observer and video material I became so absorbed by the culture of the interaction that I could not take up a third position.

Having said that, I wonder if my wanting a break was to do with his need for a pause as well as my writing this up just before lunch! If so it was not the kind of projection that interfered with my capacity for making links and remembering sequences.	6b+
He does not appear to find his mother threatening at all and is very open to being engaged by her. However, his cognitive development is strangely advancing ahead of and apparently independently of his emotional development. It is usually intersubjective joy that seems to spur the intellectual development needed to scaffold ever more sophisticated interactions. Here, however, the two seem to have been cut asunder.	5c-
However, I wonder how well he will be able to develop original and authentic meaning making exchanges as time goes on. Although she offers him a revolving menu of different sounds, the change from one sound to another is not at all contingent on his last vocalisation.	3d- 5c-
She shows her approval of his offerings but does not comment on their content and this, I think, betrays her failure to see that they might be a means to come to know his state of mind rather than an exercise in demonstrating his cleverness. They are both motivated by the extrinsic reward of feeling he is clever and being proud about that, rather than the intrinsic reward of having access to one another's mind and so feeling states	2a- 3a-
In fact when he does experience a little discomfort, through the frustration of not being able to make a humming sound, he seems to ride through the discomfort, remaining engaged with her rather than breaking off to mourn the failure.	6a-
While there was nothing threatening about mother, her captivating him did have something controlling about it and nothing very spontaneous got going between them	6b+ 3d-
Perhaps her focus on what she can teach him to do is a way of avoiding emotional contact while remaining closely bound together by the task in hand. This might suggest that merger through matching, rather than coming together and apart and together, as separate people who need to be contingent and reciprocal rather than just in unison. This would, in turn suggest paranoid schizoid rather than depressive position functioning.	6a- 6g+
When she touched his nose and told him it was his nose, then framed her face to tell him this was mummy, I wondered if she might have felt the need to delineate their boundaries because she	6g-

struggled to acknowledge their individual intentions because both were subsumed by the intention to succeed in the task.

There are moments that I am surprised he does not look away and 4f-
I wonder if the lack of pauses in her vocalisations has set the 6d-
expectation that one just stays connected, riding through the
discomfort. If so this might betray that she is worried about what
might happen if she lets the connection break or allows a loss to
be mourned.

-
- Transcript and further reflections on
- Discharge Observation 292
 -

Observation	Code	Comment
They have a soft toy with various textures on the surface and different stuffing in different sections so that it makes lots of different sounds as well as offering different sensations and lots of bright colours.	5b+	The presence of a toy means that I don't start with the pair – my attention has been deflected to all the potential experiences offered by the toy.
Mother would have been instructed to play with him without a toy so her choice to disregard this and the fact that the clinician felt unwilling to insist is, in itself, interesting in terms of what is being avoided.	6a- 6b+	This is a powerful communication that what ever it is about being observed interacting directly with her baby, that she is avoiding must be quite worrying for her to push her to disregard instructions in an assessment situation. It may also communicate a wish to defy and express anger about the indignity of being assessed but given the calmness of the scene this motivation, if present, must be fairly well repressed and unconscious.
He is sitting forward in his seat and looking over the toy in his lap with great interest, head wobbling slightly with the effort of holding it off the headrest to see the toy better.	5a+ 5d+	He seems to have a sense of curiosity and agency but when his body struggles to support his head to pursue his exploration I am reminded of feeling that his cognitive development seemed to be out ahead of his emotional development. The way that his physical development lags behind is, of course, not unusual but the wobble it causes puts me in touch with the wobble I fear will follow on from building on shaky foundations in his emotional development. It puts me in mind of second skin formation, when bodily or intellectual muscularity provide exoskeletal support where there is a lack of a coherent and so cohesive internal emotional structuring.

<p>She immediately starts demonstrating the different sounds it can make. She encourages him to 'grab it for your self'.</p>	<p>1c- 6a-</p>	<p>She does not 'watch, wait and wonder'. She shows him what is of interest, there is no sense that she might be able to wait to see what emerges from his independent exploration. Even the command that he grab it for himself, seems to lack trust that he would have his own curiosity and agency. I found myself wondering if she was giving him a crash-course on being in this world because of some sense that he might need to be able to survive without her. The sense of an impending separation would also make sense of her reluctance to offer herself as part of the world that he might explore</p>
<p>I notice then that she is clutching a tissue in one hand.</p>	<p>6e+</p>	<p>I wondered if she was projecting into him her own sense that life had to be held on to very tightly. Perhaps conveying a lack of trust in the going on being of life and what happens in it.</p>
<p>He is watching her hands play with the toy and his hands bob over it too.</p>	<p>5a+ 3b+ 4d-</p>	<p>He seems to understand that they will not explore it, and each other's reactions to it together. She is preparing to pass it to him and he is impatient to start.</p>
<p>When she makes an encouraging and interested sound he looks up at her face but he looks like he is on a fact finding mission rather than taking pleasure in her wide eyes and open-mouthed smile. She jiggles the toy under his hand and he glances between it and her face, without emotion.</p>	<p>3a- 4c- 5c-</p>	<p>The motivated but affectless attention he had fixed on her during the Admission video is now turned out to the world of things. When he does look to her it still lacks any emotional charge.</p>
<p>When he does get hold of it she makes an approving sound which he glances at but registers no pleasure in his face.</p>	<p>4c- 4d-</p>	<p>Her approval seems to function as a compass to guide his behaviour. This must be mediated by some feeling that her approval gives him but this is not expressed on his face. His behaviour is contingent on her</p>

		actions but it does not feel reciprocal, there is no sense of an exchange, it could almost be like a lab rat having its behaviour conditioned.
He then pulls it towards his mouth and she does an explosive little laugh, which makes him startle and then frown. He stops trying to bring it to his mouth. She laughs in a slightly embarrassed way and he looks away and downwards	4d+ 1c- 2a- 2c-	If he were a lab rat, this would have been a mild electric shock. He seems to understand that she disapproves of his bringing the toy to his mouth and changes his behaviour accordingly. It is contingent, but again it does not feel reciprocal, it is one way. When he looks away I think he feels ashamed. He does not then look to her to help him with this feeling.
She chuckles again 'are you? Trying to eat it? Hmm?' I wonder if he feels ashamed	3d- 6d- 6e+	That she responds to his shame by emphasising her disapproval and laughing more makes me feel his shame much more acutely. Perhaps she is feeling persecuted and needs to project into him feelings of getting it wrong or being stupid. The use of laughter to rebuke, although common enough, feels quite cruel here.
She scrunches a bit between her fingers to stimulate his interest in it again. He is interested and excitedly tries to pull that bit towards his mouth. Again there is a warning laugh and he drops it and searches her face.	4a- 3c+ 2c-	They recover by moving on. She distracts him from his pain rather than acknowledging it and bearing with it with him. The distraction is successful but the new exploration aborted almost immediately because he wants it in his mouth. The way he searches her face makes me wonder if he has not worked out what it is she doesn't want him to do and he is desperately looking for a sign. What he seems to be seeking is clearer instruction rather than help with his distress.
He then leans into the wing of his chair and looks at the toy in his hands with some sadness.	2c- 3a- 6d-	Finally he seems to have succumbed to a state of despondency. He cannot get it right

		and is repeatedly frustrated and rebuked and he does not know why. It is an intolerable situation and I am relieved to see him be able to let it resonate and be expressed. However, he is not looking at her and I doubt that he expects this expression to be picked up as a communication.
He then starts to pull at the foot and she says 'that's right, now try to pull it'. She seems to be responding to evidence of his own volition with a commentary that suggests he is doing what she suggested.	1c- 6g-	There seems to be a paradox in that she seems in a hurry to teach him how to be an agent in the world, yet struggles to attune to or respond to evidence of his already having agency. Again I wonder whether fears about him having to manage without her contribute to a wish to avoid separateness through merger. This might explain why she seems to push him towards premature independence while simultaneously pulling him into merger through denial of his separateness.
She then watches for a while and her hand hovers, as though she is resisting the temptation to get in and do something with the toy.	1c- 6b+	She struggles with negative capability. There is potential to be explored in the toy and she seems so anxious that this opportunity might be lost that she struggles to find the patience to let him be the one to discover the potential. There is so little trust in the unknown.
She is not smiling or talking, just watching and this feels quite a strain.	1c-	The tension and strain of this effort to use negative capability feels costly and I feel perhaps too much is being sacrificed in terms of her mood.
Her hand is suspended in mid air and suddenly the descending gloom is dispelled as she rubs her fingers together in two swift movements and asks brightly 'which way do you want to go now? Play with the blue one?'	1c- 6b+	She collapses the tension and I feel like a structure is literally tumbling down but she sweeps aside the emotional debris with her brisk finger movements and jumps back into the driver's seat.
He glances at her and answers with	4d+	Perhaps he is responding to the

a small sound’.		relief in her voice but this seems to be the first conversational interaction in this video.
After a moment of watching him she turns the toy upright and he tips back in his seat to take in the look of it now that it has a potentially recognisable head on a body with a face.	3b+	She cannot resist leading again but it does seem to give him an interesting and novel perspective.
She then waggles it about and he takes it by the paw and tries to pull it towards his mouth.	3b+ 5c+	He responds to her making it more interesting by wanting it more, wanting to explore it orally.
Again she laughs and he startles and stops, glancing at her and looking a little anxious and hurt. I think he feels rebuked	4a-	This is not acceptable to her and once again he seems to be left with a feeling of shame and he probably still doesn’t know what it is he is feeling ashamed about. This is dangerous as it is more likely to become associated with the self than with avoidable behaviours.
She continues to laugh gently but there is no mirth in it. There is no recognition of his expression of these negative feelings that she has provoked.	2a- 3d- 6e+	The fact that she is unable to sympathise with his feelings of shame, suggests quite strongly that these are feelings she has projected because she cannot tolerate them herself. In this case she is like Bion’s convex container in this moment, bouncing back his distress and adding her own unprocessed pain to his before she returns it.
Her honey laughter seems to be too smooth over his discomfort rather than sooth him.	3d- 4a- 6b+ 6a-	The apparent confidence and calm suggested by this laugh is likely to be deeply misleading and actually obscuring her own extreme distress.
He turns right into the wing of the chair and looks at his hands, which he has brought over there so that his body is orientated as far away as is possible in the chair.	4f+ 5c+	Finally he has acted to regulate his contact with her. It seems likely that he senses her distress and is avoiding further projections. I am relieved to see that he does have a sense of what might be too much

		and can act to protect himself.
His face is now behind the toy but it is possible to see that he is moving his mouth and she swoops around to the side to get a better look.	4e- 6b+	This really does feel like she is pursuing him, hunting him down to catch him committing the crime. It may be that she is anxious about his safety – that he might pick-up germs that could be harmful to him, yet, in the moment, she feels to be the threat.
She goes to speak then seems to still herself and puts an open mouthed smile on her face that feels like a mask.	3d-	She seems to be trying to inhibit her urge to control his behaviour, again the strain of this self-restraint is palpable.
He glances at her and she asks him if he's trying it bite it again. Her voice is gently teasing and the smile is fixed there but he seems to respond to the injunction beneath and flicks his face away from the toy and her to the other side of his chair.	4f+ 3a- 2c-	He is not reassured by her smile and gentle voice. He feels the disapproval but now does not want to understand but wants to escape it. This feels like a development in his capacity to regulate contact with her but also sad because in avoiding her he now loses the possibility of her being able to move them on.
She then watches him pull at various parts and says 'try to pull again, that's it'. She is back in teacherly mode but apparently relieved to be able to be approving.	6d- 6b+ 6g-	The capacity to bear with negative feelings and conflict is absent. She needs to move on rather than think about the discord. She needs to evidence her positive affect through approving, perhaps lacking confidence that her loving feelings are strong enough to ameliorate the hating feelings. She is not functioning in the depressive position in this moment and has little negative capability.
He looks at her with what might be interest or anxiety. It is hard to tell.	5c-	Perhaps this ambiguity reflects his own lack of coherent response to her. If he is beginning to separate out it might take some time before he can identify his feelings and let them take their course.
She watches in silence for a while as he pats and pulls at different	1b- 5c-	This feels really tragic. Even when she seems to have a spontaneous

parts of it. Something about this makes her laugh, this feels more spontaneous but he scans her face blankly. I think he has come to read laughter as a signal to stop what he's doing.		lively response to him he cannot join her in it. It seems likely that this is because he is so used to laughter being shaming that its other associations are lost. However, it might also be an organic or temperamental limitation in him contributing to their difficulties.
He frowns very slightly; perhaps he can't make sense of her smile and looks away again.	1b- 3a-	It is becoming clear that his difficulties with expressing emotion are matched by his difficulties in reading emotion.
She asks if he is 'trying to find it? Hey? This is quite loud and he looks at her but looks back to the toy very quickly. She sighs and then makes a cheerful 'hmmm?' sound as though to cover up the sigh.	3d- 4c-	I am now beginning to wonder whether the impetus to keep things going originates with the anxieties she brings to being with him or whether she may also be responding to something in him. Her sigh betrays how effortful and unrewarding this exchange seems to be for her.
He tugs at various parts of the toy and eventually at the ear in a more determined way. When the toy lifts towards his face she asks if he's trying to bite it again in a honeyed yet warning tone.	4e- 6b+	Yet, she is so quick to curb him that it is hard not to assume a causal relationship between her behaviour and his lack of spontaneity and joy.
He glances at her, perhaps anxiously? Then she comments that he's pulling on its ear.	4c- 6d- 6a-	She responds to his looking at her with a comment about his relationship to the toy. It feels she is desperate to keep some distance but also not let him go. Again it is has this static, suspended feel that smothers any liveliness.
He seems to struggle with the toy for a moment, frowning slightly wobbling in his chair. I can't tell what he's trying to do but mother asks him if he's trying to turn it around adding that that's the head he has now.	1c- 4c-	She is so aware of him and what he's doing yet the atmosphere seems to be of mutual vigilance rather than mutual attention.

<p>He pulls at it a little harder and the whole jumps up into his face. She laughs and he startles and checks her face. There is still no expression on his face.</p>	<p>3a- 2c-</p>	<p>He does not recognise the experience of laughter after a surprise, an ordinary response to the relief that what seemed like danger was not. Most babies of his age will do this spontaneously or join a partner when they do it. He seems disinterested, not even confused, as he does not seem to expect to understand.</p>
<p>The toy is now resting on his chin. He mouths it a little, glancing at her but she just says 'oh, you've got his head, yes, that's his head'.</p>	<p>1b- 3b+ 3c-</p>	<p>Her attempts to enrich his experience with her descriptions seem rather doomed.</p>
<p>He then pats the other end with his free hand and she laughs. He glances at her then pulls his head back to look at the face of the toy.</p>	<p>1a- 2c- 3a-</p>	<p>It is not clear why she laughs this time. It seems unlikely that she disapproves, although I am aware that it looks a little like he is smacking the bottom of the toy. Again, he checks her face for clues but does not stay connected for anything to develop. He has become quite avoidant.</p>
<p>She begins to commentate on what he's looking at and comments that he's very strong when he pulls on bits. It is appreciative and calm and notices the detail of what he's doing without interrupting him but it does not seem to add much pleasure for either of them</p>	<p>3d- 1c- 6b+</p>	<p>This seems very appropriate yet it is dull, like painting by numbers, there is no risk and so no joy, even though there will be no mistakes.</p>
<p>He then starts to thrust the whole away and then pull it back towards him. She backs up to give him space and comments encouragingly that he is so strong, adding 'good, good'.</p>	<p>2a-</p>	<p>Her emphasis on his strength echoes the feeling that she needs him to be prematurely independent and without vulnerability. Also, what she picks up on is the quality or skill she can admire rather than his experience of the act.</p>
<p>Further thoughts in the course of supervision (discharge)</p>		

There is something stultifying about this scene. Mother is broadly appropriate in all her responses yet there is an absence of liveliness between them.	6a- 6d-
His exploration of the toy is rather earnest and he is denied the pleasure of oral exploration of it.	6b+
I found the middle minute very hard to recall the detail of or get a sense of the atmosphere. It was a little deadening.	6d-
The baby was as circumspect as before and in the presence of a toy was actually avoidant of mother in a way he had not been in the Admission video.	6a-
When he did look at her, he seemed to be checking that she was not disapproving more than hopefully seeking out her approval for the pleasure it might bring. There was no point when he seemed to want to share his experience for the sake of it.	6d-
His exploration of the toy was determined but curtailed by mother's injunctions and lacked any sense that they might share pleasure in playing with it together.	3c-
She was his guide but not his companion. The almost complete absence of any expressed affect on his part was quite worrying. I began to wonder if he might be developing ASD traits?	4c-
That mother wanted to bring the toy in suggests that she had reservations about unmediated interaction. She seemed to be avoiding direct contact, and perhaps emotional intimacy.	4a- 6a+
Whether she was trying to protect him from being contaminated by her own state of mind or whether she was trying to avoid more hostile feelings towards him, was not clear. Her need to 'train' him might have betrayed an anxiety that he needs to be able to fend for himself in a world that will not help him.	4a-
It was when I returned to the write up that I began to see this might point to a fear he might need to manage without her.	
This might suggest she does not have a 'good' or 'helpful' internal object to sustain her hope for him and her.	6g-
I was particularly struck that she was clutching a tissue in her	6e+

hand as she urged him to ‘grab hold of it your self’ as he showed him the toy. I wondered if she was urging him to learn how to hold on tight for himself as she doubts her own capacity to ‘keep a grip’.	
The use of laughter to communicate an injunction suggests that she may have fears about feeling stupid and getting things wrong. Perhaps she needed to project a sense of humiliation about being little or not knowing on to him and experience herself as the big one who knows best.	6e+ 6d-
This would also explain her focus on competence at the technical skills of communicating rather than demonstrating the purpose, which is to understand one another better. Being <i>with</i> seemed to be an opportunity to develop skills rather than to be known and to know the other – this might have been what made oral exploration uncomfortable for her – the sense of a sensual carnal kind of knowing.	4a- 6a-
This might have put her in touch with her passions - her love and hate but also her desires and hungers, which would have left her vulnerable to disappointment. Her all knowing mother/teacher role may be part of an omnipotent defence against dependency anxiety – that is anxiety about her own dependency and his dependency on her.	4a- 6a-
On first viewing there seemed to have been a shift from holding his attention fast to her during the Admission video, which seemed in stark contrast to the discharge, where he barely looked at her. What began to transpire was that both times doing <i>something</i> - learning to imitate or exploring a toy -were both being used defensively to avoid being with one another.	4a- 6a-
His apparent lack of affect began to make more sense in the context of her having offered herself as something like a robot – cognitively sophisticated and able to respond in order to correct his behaviours, even using apparently appropriate tones but without any emotional engagement with his experience of her.	2c- 3a- 2a-
It is, of course, likely that he brings his own valencies and limitations and may have required a pre-programmed approach rather than one that relied on feedback from him	
This felt like a psychic retreat solution to not being able to bear the tension between PS>D positions. By avoiding emotional contact and spontaneity, nothing surprising or overwhelming was likely to happen. She would not be put in touch with her own ambivalence about her baby or his about her.	4a- 6a-
The depressive position would require mourning an ideal self	6g-

with (perhaps merged with) an ideal object. Mother seemed to be driving him to perfection in her relentless teaching, perhaps hoping to produce an ideal mother and baby pair. Such splitting would exacerbate a sense of persecution so that this drive towards the ideal might have been compounded by a sense that she needed to be a model mother for the camera and clinician, whom she would likely experience as full of her projections of a judgmental and punitive super ego.

6e-
6d-

As with all psychic retreats they allow the ego to function well enough to obscure the stagnation and lack of developmental progression. This seemed to be reflected in the deterioration of my countertransference experience, despite the pair seeming to be functioning well, apart from his strange lack of emotionality.

6g+

Where the first video seemed hopeful if rather intense and hard work, the second was deadening. Both had the atmosphere of a lulling that is superficially reassuring but leaves the observer feeling uneasy.

6a-

- **Transcript and further reflections on**

Admission Observation 090

Observation	Code	Comment
This baby is younger than the others and needs the support of the headrest. This means his face has to be tilted up but he is looking down with his eyes, towards his hands, which rest on his tummy.	1a- 4f+ 5a+	It already looks like he is avoiding her gaze and the limits on how much power he has to orientate away with so little muscle tone is striking. He is not staring blankly into space but at his hands. This feels more like he's holding a space, ready to rejoin her when it feels OK, rather than a dissociative cutting off completely.
Mother is leaning in close, resting on the table with her elbows, it is very intimate and mother is speaking in a soft sad voice.	3b- 4e-	I have written that it is intimate because mother is so close and her tones so soft but actually because baby is avoiding her gaze it actually feels that she has created intimacy with the idea of the baby, rather than the actual baby.
She is slumped to one side, her chin resting on one hand and she is looking over the length of him, and into his face. Her expression conveys pride and love but it is bitter-sweet. It is almost as though she feels he is out of reach to her for now. In fact he is bright eyed and wriggling a little.	1b- 2a-	She is admiring him from a distance even though she is inches from him. Yet, it is not quite pining. There is something resigned about the melancholy as her smile is wistful and the calmness in her voice is hypnotic. This atmosphere is delicately expressive of her state of mind but has nothing to do with his. He seems as though he were ready for something interesting or exciting to happen.
Baby has a dummy but it keeps falling from his mouth and she keeps gently returning it and gazing on him with this steady sad but affectionate expression as she talks:	2a-	She returns his dummy and superficially it would seem she is aware of his needs but she is so absent minded that I have no confidence that if he had let the dummy fall in order to vocalise, she would sense this and encourage him.
'Mummy's determined to get well and take you home and look after you for the rest of your life. Mummy would die without you. She would... die without out you.' She is saying this in a ghostly version of motherese.	2a- 4d- 6a-	As with motherese there is the gently lilting tone and pleasantly exaggerated cadence but this is so at odds with the content of what she says as to be quite disturbing and deeply sad to observe. There seems to be an attempt to warp the deathliness of her depression into a romantic and melodramatic declaration

		of love. This does not sit comfortably at all because suicidality, all though not directly acknowledged, is the unseen white heat that sears the surface of what she says.
As she reiterates, ‘she would, she would’ in a slightly playful way she also tickles his tummy but her eyes betray the content of what she says, the terrible sadness, tinged with jeopardy, and it is all too much.	3d- 6d-	At this moment I feel protective over the baby – it feels like she is playing with fire, bringing something dangerous into their play – and the recklessness of this itself may speak of an unconscious wish to harm herself and/or her baby. I also wonder if the statement ‘I would die without you’ is a veiled counter threat to the threat she might perceive that her baby will be taken away. Her sense of panic and anger about this, if it is present, is completely repressed but might be adding to the sense of danger.
He had looked at her momentarily but has to look away.	4f+	I feel that he is having to protect himself, presumably from the incongruence and the fearful sadness itself.
She goes on to say ‘We’ll have good-times then, good-times. Mummy’s not well at the minute, mummy’s not well at all. Aay? Tom, Tom? Her voice as she says this has the ring of sentimental reminiscence. Again, very wistful - as though something cherished has been lost, not as though exciting plans for the future were being made.	6e+ 6g-	This feels very confusing. It is a promise for the future, a promise to get better and be there for him and yet it has the atmosphere of mourning. There is a sense of a lost loved object and an acknowledgment of one’s dependency on a lost object. All this is in the wistfulness of her voice. At one level this feels quite promising because bearing the pain of loss, without recourse to denial of dependency, is the work of mourning that might alleviate her depression. Yet, something is wrong here. The live baby in front of her seems to be confused with the lost loved object – this might just be because she feels she can’t reach him, or can’t meet his liveliness in her current state but there might also be a more profound and worrying muddle around who the baby is. She may have projected unmourned dead objects into him and be relating to them when she interacts with him.

[there are 8 seconds missing
from the video tape at this point]

He is mostly looking down at the dummy in his mouth or at his hands but definitely avoiding looking at her face, although he does not look distressed himself.	1a- 5a+	His avoidance seems to be serving him well for now in that he is not distressed and his curiosity about the world (in this case his hands) remains lively.
--	------------	--

When she returns the dummy and says 'there you go' in a slightly brighter tone with more intonation, he does glance at her and then between her eyes, briefly, before looking away again. His expression is not fearful or sad. Perhaps he looks like he is looking for something?	3a+ 4b+ 5c+	He seems to be on the look out for opportunities to connect with a more lively mother. He is still seeking and has not become despairing. I still feel quite hopeful about the baby.
--	-------------------	--

She continues to talk in a similar tone and vein to before. She kisses his feet and when they are both holding the dummy she pulls his hand to her mouth with it and kisses that	6d+	Her affection feels authentic, if slightly self-soothing-like cuddling a teddy.
--	-----	---

He keeps checking back to her face but does not let his gaze settle there.	4f+ 5c+ 5d+	He seems to still be hopeful about the possibility of a satisfying interaction, or perhaps he is vigilant but that is not how it feels.
--	-------------------	---

Something about the almost worshipful way she looks at him and kisses him is actually distancing in that it is as though she is caressing a precious possession, rather than engaging with a person.	6a-	The self-soothing feel to mother's affection is solidifying into something more ritualistic and less spontaneous or of their interaction.
--	-----	---

Baby starts to suck on the handle of the dummy and she tells him that that's the wrong end and goes to turn it around.	1c- 6b+ 6d-	She does not seem to accept his interest in the handle as valid. It is the first time she has overtly responded to an act of his and it is to correct it.
--	-------------------	---

He jiggles a bit at the change in her voice. She is gently teasing	6e+	Her tone is gently teasing but it is none the less a rejection of what he's doing
--	-----	---

<p>'you got it the wrong way around silly' and he looks down to watch her hand as she tries to change the position of it in his hand.</p>		<p>and a negative characterisation 'silly'.</p>
<p>She realises she can't while he's holding it and changes her mind. She brings her hand away and wraps it around the side of his chair pulling him a little closer to her.</p>	<p>6b+ 4e-</p>	<p>She is able to stop herself being too intrusive or using her strength to overpower him but the urge to do that seems to need to be spent in the action of drawing him closer. She responds to evidence in a difference between their intentions by trying to remove the distance between them. Perhaps tolerance of separateness and difference are problematic if she is struggling with themes of loss and mourning?</p>
<p>She sniffs pulls her self up a little straighter -perhaps she looks like she is trying to shake off feeling a little dejected about not being able to act on her intention?</p>	<p>6b+ 6d-</p>	<p>She seems to be struggling with feelings of frustration but perhaps also shame, the sniffing feels like a wish to cover-up or be rid of a bodily held shameful feeling.</p>
<p>If so she does not seem aware of it and if anything gazes even more wistfully at him. This makes me wonder whether she might be developing a romanticised fantasy about how it will be when she's better as a defence against the ordinary frustrations and disappointments of being together now. [another few seconds missing]</p>	<p>1c- 2a- 6a- 6b+ 6e+</p>	<p>This kind of splitting and idealisation may be a way of protecting her love for her baby but it also makes it hard for her to see and respond to his actual experiences and intentions in the moment.</p>
<p>Baby is looking at her when the picture returns and she is saying 'Mummy's sorry she had to bring you in here, sorry she had to go in to hospital and leave you, see Mummy's not well at the minute.' This is heart breaking and it feels right that baby looks away.</p>	<p>2a- 4f+</p>	<p>Clearly she is expressing a sense of guilt and her resolve to make reparation but, again, there is something about the quality of the regret that feels quite comforting. It is a pledge but also a prayer, something for her to hold on to rather than a communication to him. He seems to sense that either what she says is not really about him or perhaps the sorrow and regret are too much for him to bear. He seems to be able to protect himself by avoiding her.</p>

<p>She then says ‘help mummy get well?’ in a more singsong way and he looks back at her and smiles, then offers a lovely vocalisation. She nods and smiles but does not make a particularly marked response to it.</p>		<p>Again, he remains hopeful and tries to engage her when he judges she is receptive. She does seem to be attuned to him and notice what he does, and it makes her smile but the smile is distant – as though she were perceiving him through a thick fog, muffling the impact of what he does.</p>
--	--	---

<p>Her next comment reminds us that she must also be very aware of the camera and clinician in the room. Perhaps she is worried that her wish she had not had to bring him to the MBU might sound rejecting of the care she is getting and says something about ‘we need to let the nice people here help us, help mummy get better, yeah mummy get well’.</p>	<p>5b- 5b+</p>	<p>I am reminded how hard it must be for her to see her baby for himself through the sense-dulling depression and the distortions of her own projections. But perhaps it is even more difficult to adjust to the distortions of seeing yourself with your baby through the eyes of clinicians. While the ‘benign third eye’ provides a therapeutic opportunity it is also bound to be experienced as persecuting at times. At such moments the camera may compete with the baby for mother’s preoccupation and so interfere with the spontaneous responses that might otherwise develop. I begin to feel that she has been in a reverie about their predicament, her illness and their being at the MBU, and it is almost as though he has to share her with all this, almost as though it were another demanding baby.</p>
--	--------------------	---

<p>This thought about the staff seems to bring her out of her trance-like state and she says the last bit much more brightly, having sat up straighter too</p>	<p>5b+</p>	<p>In this moment she seems to have pulled herself up out of the fog so that she can see more clearly. This is reflected in the new clarity of her voice. I begin to wonder if she has really been put in touch with how helpful to her and her baby the staff might be. What had felt perhaps a little pat ‘the nice people here’ begins to feel more like an authentic wish to let in a third and be enriched by triangulation. If she can trust the third, and not be distracted by a wish to stage manage what is seen, she will come to</p>
--	------------	--

		realise that letting in a third affords some perspective enhancing distance. (Or as one father put it to me: ‘ you need two vanishing points for a three dimensional perspective’)
Baby notices this and looks back, she gives a brighter smile and he responds with a ready smile and a nice vocalisation. Her brightness is not tinged and strange but has an authentic lightness to it, which he responds to immediately.	1a+ 3d+ 4b+ 4c+ 4d+	I am aware that he was poised, ready to catch her eye in the moment she came out of that state. They then seem to have more direct access to one another and respond with spontaneity and joy.
Mother then smiles much more broadly back and baby looks down again.	4f+	Perhaps all this contingency, the experience of truly being seen, is too stimulating and he has to break the contact? It is not clear whether he breaks away so quickly because he can only manage small portions of this suddenly very rich food, or whether there is something about the quality of her response to his smile that is still mixed in some way that feels a little threatening.
I feel quite hopeful that he is getting enough to bide his time and remain open to what she might be able to offer. When he breaks contact he does not seem to be shaken or confused and quickly finds something else to interest him. He is avoidant but organised and coherent.	6a+ 3a+ 5c+	This hopefulness and sense of the baby’s resilience and internal coherence and organisation bodes well. He seems to have the courage to keep seeking and the wit to avoid what is overwhelming without collapsing the tension and becoming manic or dissociative.
The dummy has fallen from his hand and she has picked it up. She is holding it between thumb and forefinger.		
He then grabs her little finger and tries to bring it to his mouth.	5a+ 5d+	He demonstrates his desire and interest but also a sense of agency
She resists this and pulls away but because he holds on her hand starts to bounce. Now she is holding the dummy aloft and	2a- 3d- 4a-	It is not clear if this is meant to be playful withholding. She is looking into his eyes smiling but it is quite ambiguous. My feeling is that she is not

bouncing his arm by bouncing her hand.		conscious that she is frustrating him. Again there seems to be a disconnect between the idea of a baby who she is smiling on lovingly, and an actual baby with desires and demands who she is smilingly tantalising.
He is looking at the whole two-hand-and-dummy combination bouncing up and down in front of his face and seems very interested but I am aware of his mouth, still tight shut having clamped down when he did not manage to pull her finger or the dummy into it.	6d- 6f- 6g-	The tension and aggression around frustration is there but he does not become overwhelmed with anger or distress. I wonder about the afterlife of these unspent aggressive impulses – will he come to feel his internal world is peopled with objects he has attacked in phantasy? Whom does he believe to be clamped within that gummy bite?
She goes back to her pledge: Mummy's gonna take care of you. Help mummy get well, and mummy take care of you all her life. Mummy get well and play with you and take you out. She will.'	4e-	This is a prayer, a pledge but now also a bargain. There is, of course, an ordinary truth to the fact that their relationship must be part of her recovery but here it also carries the weight of his being responsible for her life. This is a gross violation of the generational boundaries.
He lets go and she lifts the dummy out of his reach. Apparently because she is so absorbed in her prayer, she does not notice that she is very defiantly frustrating his efforts now. She starts to bounce the dummy just above his eye line so that he has to tip his head back a bit to track it. Seeing that his eyes follow it seems to please her and she smiles, perhaps satisfied to be providing him visual stimulation. She waggles it and watches his eyes track it nodding and smiling but she does not seem to notice that his hands also reach for it and that he is mouthing in anticipation.	2a- 4b+ 5a+ 6a+	Again it is not clear the degree to which she is aware of his wish to get hold of the dummy and have it in his mouth. If she is aware then it might be playful with a hint of sadism but if she is not aware then it might be a more straightforward act of aggression outside her conscious awareness. He remains focused on the dummy, perhaps as a way of avoiding his feelings about being tantalised? Perhaps he is drawing on reserves of innate temperamental resilience or tolerance of frustration?
Her bouncing motion with the dummy has morphed into a	4e- 3d-	The flicking feels more overtly aggressive. Perhaps as her aggression

<p>flicking motion, and she starts to blink a lot at that moment too. Perhaps she is suffering intrusive thoughts as she mutters ‘mummy’s not a well woman at the moment and pulls back, putting down the dummy and gathering up his hands in hers, commenting that she needs to cut his nails because she can’t have him scratching his face.</p>	<p>6d- 6e+</p>	<p>comes into her conscious awareness she is able to resist it, putting it to one side as she does the dummy. In gathering up his hands she may be making an effort to gather up her love for him, an attempt to ameliorate her aggressive impulses though her loving ones. This has a depressive position feel to it. However, then she notices his nails. Nails and teeth are our most primitive weapons. Here it seems that she might be unconsciously projecting her aggression into him, or just slipping into a muddle about who wants to hurt whom or even where one person ends and another begins. This is much more paranoid schizoid, with poorly delineated boundaries between part-objects. This would allow her aggression to become muddled with his potential for accidental self-harm. This would also helpfully disconnect the idea of harm from intention, thus protecting mother from the potentially crushing depressive anxiety wrought by getting in touch with her ambivalence.</p>
--	--------------------	---

<p>I begin to wonder if her agony at feeling tantalised by the thought of being well and able to leave the unit and be there for him is being acted out in tantalising him with the dummy.</p>	<p>It might be this that put her in touch, at an unconscious level, with aggressive feelings towards him, which she might then need to project into his sharp nails.</p>
--	--

Further thoughts in the course of supervision (Admission)

<p>The images that come to mind are around the religious theme mentioned. Images of someone gently chanting a prayer, or rocking before an altar or rhythmically pulling rosary beads through their fingers. All</p>	<p>4b+ 6a- 6a+</p>	<p>It is trancelike and makes me think of the passive smile of some patients in dissociative states that belies the panic within. Having said that, this splitting and idealising, treating the baby as a talisman, a symbol of hope but not yet a source of joy, created a a benign space</p>
--	----------------------------	--

these share self-soothing and idealising aspects that seemed to be a part of how she was relating to him.		within which the baby could preserve his hopefulness and readiness to relate.
The poignancy and sadness of her words provoked pity and sadness but there was also some alarm about the repressed aggression that might have pierced through at the end and was there in the implication that he was responsible for keeping her alive in the phrase ‘I’d die without you’.	6b+ 6d- 6e+	Again this feels very uncomfortable. Baby seems to be being pulled into the morbid atmosphere of her depression. Perhaps it feels right to place him at the heart of the darkness. She may be defending against her rage towards him as the possible cause of her depression, and the associated guilt. In this case a reversal allows the idea to be admitted but neutralised – ‘not the cause of my deathliness but the cure for my deathliness’.
I think I became rather immobilised by the chanting trance feel of the interaction and could only write the bare bones of what happened while watching the videos. I had to come back the next day and add the emotional quality and my countertransference experience, once I’d got away from the atmosphere enough to be able to reflect back on it.	6a- 6b+	This is quite informative in that it supports the idea that the function of her prayer was to anaesthetise. She did not want to feel her feelings or be in touch with his. I, in turn, struggled to be in touch with either of their experiences and even my own. I felt intruded upon and my capacities compromised. I needed space and distance to get in touch with my own lively internal objects.
The baby did not seem to be projecting but instead avoiding mother’s projections in order to preserve his readiness for something lively with her.	4a- 6e-	His not using projection seemed to be related to her lack of capacity for alpha function. The inborn impulse to use projection to evacuate unpleasant feelings has not been met by a container who turns those beta elements into communications that can be understood. It is possible that a combination of temperament and his experience with her have led to this impulse repressed and there is a risk that it will atrophy. She may get better at receiving his projections as she regains her mental health but he may have lost his facility for sending them.
She could manage very little in the here and now but he made	1a- 3a+	He did not, however, drop his guard in those moments but continued to regulate

the most of it when she was available.	4f+ 5c+	his contact with her so that he would not be overwhelmed by too much negative or positive affect. He was employing the defences of avoidance but in an organised and coherent way.
It was hard to tell if mother was simply overwhelmed and preoccupied with her own depression or whether there was something more perverse going on.	6e+ 6g-	At times she seemed to be projecting into him a sense of something deathly and beloved. As though the beauty she was so touched by emanated from the tragedy of lost love not from the liveliness and loveliness of love or the beloved. This might have been something like a fetishisation of mourning, in lieu of being able to manage the painful work of mourning.

- **Observation transcript and further reflections on
discharge Observation 090**

Observation	Code	Comment
Mother looks much more animated, her shorter choppy hair accentuates her choppy movements. She is initiating an exciting game of 'spider'.	1a+ 3b+	She seems much more lively and present but she also seems to be enjoying her baby as a communicative partner.
Her hand, held high above and behind her shoulder with the fingers wagging, has his excited stare. She holds the moment, building anticipation and his legs waggle like her fingers as he glances between her bright smiling face and the dancing fingers, he does an explosive little laugh and both legs shoot out with it.	1b+ 2a+ 3a+ 3c+ 4d+	This is very clearly deliberate teasing and tantalising but it feels very different in this context. This atmosphere, where he feels seen and that her playing with his expectations is clearly a way of demonstrating that she knows what they are, now it is fun to be teased. It is playful not thwarting.
She then swoops in to tickle his tummy and then 'peck off his nose'. It is both exciting and a little scary.	2a- 4e- 6b+	The speed and force of her decent and entry into his space seem to startle him. What had been pleasurable scary tips into something more worrying for him. She has misjudged where he is at slightly. It is not clear if this is accidental or again an unconscious expression of her unacknowledged aggression towards him.
She takes her hand back up for another round. He stills with a look of worry as he watches it up in the air.	3c- 5a+	He is not sure about the game anymore but keeps his focus on the hand. He does not look away or to her face. He does not cry to communicate his distress, he remains focused on the world of things (I think at this time her hand is a thing its own right). This might be the vigilance of one who feels he lives in a potentially dangerous world, or it might be avoidance of sharing negative feelings, holding out for the game to improve rather than registering and communicating distress around it having been derailed?

She realises he's not in the right frame of mind so brings her hand down normally and touches his chin saying an encouraging 'come on choppy chops'. This does the trick and he beams at her.	2a+ 4a+	Actually she is sensitive to his state and can step out of the game to reassure him, her hand belongs to a protective and caring mother again, it moves slowly and touches him gently accompanied by a congruently reassuring voice.
Now she has him ready her hand goes back to being a spider dangling above him, a smile blooms as he's waiting for it to swoop.	4b+ 4c+ 5c+	Anticipation is exciting again, apprehension has been dissolved by her reassurance. He is quick to reconnect with his good object
He jiggles with excitement as it arrives and then laughs but looks slightly shaken and worried for a moment after.	5c+ 5c-	Here he shows a little confusion again. Is it that pleasure turned, and he expressed two discreet consecutive feelings in a coherent way or was it that he found it hard to distinguish between positive and negative feelings in him self, producing a jumbled expression?
She does a few more tummy tickles to drive home that it was fine, that he is fine, and eventually he brightens and they share a smile.	1c- 4a- 6b+	Some reassurance and jollying up is helpful but here it might verge on a failure to acknowledge his negative feelings and validate them.
Then she does it again and again he darkens a little afterwards and even makes a barking sort of sound that might be a protest.	5b+ 5c+ 6a- 6b+ 6c+	It is hard to know if she repeats this action to reassure herself that she can repair their interactions, or to reassure herself that she is in control, or to punish him for exposing her frailty or for rejecting her. Probably it is a mixture of all these things but it is no longer contingent on his actions in anyway and must feel incongruent and intrusive now. It is hopeful that he is able to communicate his displeasure, even a protest. He seems to have developed a sense of agency and confidence that he can be understood.
She taps his nose and takes his hands and he laughs and she waggles his hands saying 'you can laugh, you can', in a slightly challenging way.	6b+ 4a-	Again her response is not to back-up but to continue to intrude, but in a jolly way, railroading him into joining her. At first this does seem to work but then she prompts him 'you can laugh'. This does feel a bit like a rebuke.

He looks away and frowns, kicking his legs in a frog-like way.	3c- 1a- 4f+ 5d+ 6c+	He seems to take it as such and breaks contact. He is able to regulate contact with her and he seems to be expressing some of his wish to expel the intruding object through his kicks. This feels hopeful. He has self-congruence and agency even in a negative state.
He is really focused on something over her shoulder and she asks what he's looking at, in an exciting singsong way, and follows his gaze	2a+ 5a+ 5b+	She seems to be able to accept that he has orientated away from her to something else. Her wish to follow his line of interest and join him with shared attention feels healthy, a willingness to let him lead rather than pursuing him when he's in retreat.
When she realises it is the camera that he is looking at, she gives an explosive laugh, which he joins and she tickles his tummy calling him a poser.	5b+	At first her apparently amused surprise seems to add to his enjoyment of looking at the camera. They have reconnected through it.
As she elaborates 'you think you're photogenic' he seems to sense that she is not just responding to him now. I also think a whole world of judgements about seeing and being seen has flooded in.	6e+	It is not clear if she really believes that he understands what the camera lens is. She is behaving as though she did. This might be a joke for the clinician in the room but it may also signal that she has lost her focus on him as an actual baby with a particular perspective and understanding. She seems to be projecting qualities like vanity into him, which are not developmentally feasible.
Her fingers seem a little too insistent as she tickles his tummy and teases him with her singsong voice.	3d- 6b+ 6e+	The cross-modal incongruence here may betray her confusion about who he is for her in this moment. Perhaps he is both her baby in need of protection and gentle drawing through her voice and a self-serving poser rival for affection.
He smiles and clouds over and brightens again so rapidly in response to her during this exchange that it is a bit dizzying.	6f+	The incongruence seems to have a scrambling effect on his experience. He cycles through such a rapid change of affective states that as an observer one feels disorientated and unsafe, which might give us an insight to how he feels. Perhaps he has introjected an

		incongruent object that cannot be made sense of or assist him to make sense of any new experiences?
She continues to prod and stroke him on his tummy and arm while saying 'you're like your daddy, he was a poser' She then scratches at the corner of her eye and her face betrays some tension.	6b+ 6e+	Her intruding finger seems to give physical form to the intrusion of projections. When she says 'he was a poser' she seems to be identifying where this poser that was, now resides. Her ways of relating to the 'poser father' are triggered by her son and then she needs to feel that the corollary or cause of her relational affects must reside within the one who triggered them in her. This is further suggested by her use of the past tense. If the original object is absent, his imago must be conjured and projected into the baby to make sense of what she is feeling. Her anxious scratching seems to betray her discomfort in the moment of this psychical slight of hand.
He is looking away again. She looms a bit and he has to avert his face far to the right and she follows him slightly. He turns back to her a little and she backs up a little but he is looking at her out of the corner of his eye.	4f+ 5d+ 6b+ 6c+	It seems appropriate that he would look away and hopeful that he is still able to regulate their contact in this way. When she looms his resilience is stretched as he has to strain away. When he looks at her out of the corner of his eye it is not clear if it is done out of vigilance or hope that he might find something lively to connect with. The former seems more likely given that he does not turn his head to offer her his open face. It seems to be enough for her to feel able to retreat a little and then they can hold each other's eye for a moment. However, things have gone from excitably attuned to edgy glancing connections that jangle.
She goes on calling him a poser and rubbing his leg and then moves on to making 'ooh' sounds and pulling back a bit.	3b+	She has recovered herself and seems to be trying to reconnect with him as an agent, someone who needs to be invited into a dialogue rather than railroaded into a part.
He watches her looking like he could break into a smile but doesn't before looking down.	3b- 4f+	He is more cautious now, tempted but wary. She seems able to accept his withdrawal now and does not chase him

When he looks down she follows his gaze and then she bends to kiss his leg.		or punish him. She expresses her unspoiled affection unintrusively by kissing his leg.
She is now saying 'you're a good boy aren't you, yeah, a good boy' as she nuzzles her face into his leg and he watches her peacefully.	6g+	This feels more reparatory. She seems to be back in touch with who he is. He is a good boy, her baby and not his father.
She is saying 'look at your legs' and talks about his weight then 'wait 'til I tell your dad what you weigh. He'll tell me to put you on a diet, he'll say he can't have you being the same as him with a beer belly'	6g+	She is chatty, conversational and acknowledging that he and his father are separate people, that similarities do not have to lead to identity confusions.
Her face conveys her amusement about this and he laughs and she smiles in a natural way. The pleasure of one is building on that of the other and I feel they are on much firmer ground again.	3d+ 4c+ 4d+	The reciprocity and contingency of their acts is so mutually affirming that the pleasure in being together is an expansive, self-perpetuating thing.
After a while the atmosphere changes and I find I am wondering about the switch from present to past tense in relation to father. Perhaps whatever confusion or conflicting feelings caused this to come into her speech is present non-verbally too because again he breaks contact to stare away towards the camera.	2c- 1a-	Something has derailed their interaction and it is not clear what. My mind having wondered may reflect that something similar may have happened for mother. Whether it is the content of the thoughts that have come in or simply his sensing that he has lost her attention is, again, not clear. Either way, he breaks contact again rather than making a protest or expressing anger or distress.
She prods his tummy saying about the beer gut and he looks down at his tummy frowning. She then blows a raspberry on his tummy and he laughs.	6b+ 6c-	She is able to bring him round through a familiar game but as ever, it is very physical and does not give him much space to decline, he must either be amused or feel intruded upon.
She gives him a conspiratorial smile then swoops in to kiss his nose. She actually moves his whole chair with the force of it and he startles.	6b+	The rather forced nature of her playfulness is evident in her crashing into him. Perhaps it even betrays some unconscious aggression that remains?

She pulls the chair back around and he is looking down frowning. She goes down to his feet and blows raspberries on them, which makes him smile and look at her.	6b+	Once more her reaction to realising she has been too forceful is to lessen the gap between them rather than give him more space. Again they seem to be chopping about between very exciting fun together and something a bit too unpredictable.
She then takes up his feet and pretends to eat them.	3b+ 4d+	She has noticed his pleasure at the raspberries and builds on this to try 'eating'. It shows awareness of his experience and a capacity to incorporate that into her decision-making.
He laughs and bobs about in his seat, when she looks up he smiles and makes a cheerful vocalisation but then his face drops and he looks quite troubled.	1b- 1c- 3a+ 3a-	This really lovely spontaneous act from him, spontaneous and initiating something new, conveying confidence that his contributions will be valued, fills me with hope but then it falters. It is not clear if he loses faith in what he's done, if he just feels it is unfamiliar and so risky, or whether she rejects it in some way that escapes my notice. If the latter is true it may be that she lacks the negative capability to be able to tolerate unpredictable acts from him, even when they are positive.
Then her laughing seems at odds so she stops by making a strange drawn out sound and doing a spider like finger waggle in his face, then turning this into a nose tap, perhaps wanting to obscure the look on his face?	3d- 4d-	She is now expressing what feels like a jumble of feelings and intentions in no particular order. There feels to be a lack of coherence in her behaviour.
And then goes very quickly into the spider game proper. There is no apparent pleasure in the anticipation bit.	3d- 4d- 1c- 6a-	It feels as though she grabs onto this game as an organising structure to pull her own dissipating state together. She does not wait for or nurture his enjoyment in anticipation. The structure of the game is not a scaffold to support spontaneously emerging growth, but a straight jacket to keep wayward intentions from getting acted out.
He watches her dancing fingers but he is frowning, looking quite worried and his hands twitch a little, but he does smile when	2a- 2a+ 4e- 6b+	His communication is there but it is subtle and her need to plough on obliterates her receptivity to him. Also, he is so ready to enjoy what she offers

<p>she pecks off his nose, so she does that bit again but the smile is only brief and then his scrunched up frown returns and she sighs.</p>		<p>that he gives her just enough encouragement for her not to have to reflect on what is going wrong. When finally it registers with her that this has not been a very satisfying game of spider for either of them her sigh expresses her despondency about this.</p>
<p>She says that she needs to go and put on his bottles, adding that all she's doing is feeding him all the time. As she says this she kisses his fingers and then makes an eating sound, adding that its costing her a fortune.</p>	<p>6e+ 6g-</p>	<p>This seems to be an unconscious communication about her anxiety about resources. This is a very reasonable anxiety. How can there be enough to go round when she cannot meet her own emotional needs? Her pretending to eat him up while thinking about the difficulty of feeding him seems to speak of a metaphorical cannibalism at the heart of altruism. It is arguable that the wellsprings of altruism are replenished by a narcissistic identification with the baby. When love and resources are lavished on the beloved baby they are felt to be bestowed upon the self because part of the self is in projective identification with the baby.</p>
<p>He throws himself away from her face and brings his hand to his mouth and mouths his fingers and rubs his nose. I wonder if he is tired or hungry too.</p>	<p>2a+</p>	<p>His behaviour makes me aware of his state of hunger and possibly tiredness. I then realise that mother had detected it before me, that she is finely attuned to him. This throws into relief how hard it must be for her to be so aware of his needs and to then have to be aware of how hard it is for her to meet them.</p>
<p>She makes a face with exaggerated protruding lips and he grabs at her mouth and gets a fist full of her lips.</p>	<p>6d-</p>	<p>She seems to be trying to empathise with him but he does not seem to feel understood but rather provoked. Now his aggression comes. His apparent tolerance of frustration has found its limit. Now her worry, about the sharpness of his nails at the end of the Admission video, seem like a premonition.</p>
<p>She exclaims in pain and he jumps but continues to squeeze.</p>	<p>6d- 5c+ 5d+</p>	<p>His doggedness is as evident in his expression of aggression as it was in his hopefulness of being seen.</p>

She pulls her head back a bit and says she needs to cut his nails. She is frowning at him and he is frowning also but staring at her mouth where he is now trying to reach it with a smacking down motion.

6b+

It is him now who is pursuing her and being intrusive. I feel both relieved to know that he can express his anger as a coherent reaction to frustration but I also feel terrible worry for how persecuted mother will feel by this attack and how much worse her persecutory anxiety will be in the context of her unconscious wish to retaliate.

Further thoughts in the course of supervision (discharge)

Transcript and reflections for Admission video for pair 053

Observation	Code	Comment
<p>The baby is looking at mother with an enormous open-mouthed smile around the four fingers he has crammed into his mouth. His eyes are wide open and twinkling too.</p>	<p>1a+ 3a+ 4c+ 6a+ 6d+ 6f+</p>	<p>He seems to be stimulated by mother and by his fingers in his mouth. There is something expansive about the wide-open mouth and eyes that create a sense that it is safe to take in the emotional atmosphere as well as his fingers and the sight and sound of her. There is a pleasurable urgency about his apparent hunger for all these things and his twinkling eyes suggest that what is being introjected is good for him and shines back out through them.</p>
<p>She is singing in a very animated way, leaning over him and dancing about, while wagging the toes on both his feet. She is singing ‘naughty boy smiling, naughty boy now, naughty boy laughing, gonna tell the world’.</p>	<p>1a+ 1b+ 2a+ 3b+ 3d- 6d+ 6d- 6g-</p>	<p>She is stimulating him in lots of ways, through her voice, her proximity, her movement her touching – it is dazzling and potentially overwhelming. After focusing on her I wonder if the apparent urgency with which he is taking it all in is actually because a binge-like feeding frenzy is the only way to take it in: a more measured approach might lead to a sort of bottle neck and possibly cause him to choke on it all. They are matched in terms of emotional tone but we have no sense, in this moment, of his intentions. However, he seems happy to be taking her lead. She is certainly engaging his attention but not yet playing with his intentions. The lyrics ‘naughty boy smiling’, sung while apparently showing great pleasure and pride in him, feel incongruent and jar somewhat. Perhaps she is acting out her ambivalence. Ordinary maternal ambivalence, experienced in the depressive position, is tolerable because the negative feelings do not threaten to obliterate the positive ones. If paranoid schizoid position functioning is dominant then the splits will be more profound, to protect the positive feelings, and both extremes are more likely to need expression. This might account for the slightly denigrating lyrics delivered with extreme cheer. It is</p>

also possible that she is projecting her own anxieties around shame and humiliation, which are bound to be aroused by a parenting assessment, in the threat to ‘tell the world’ about his being a ‘naughty boy smiling’.

<p>She leans back and does a circular wave with both hands in the style of the Charleston and sings ‘all these things a naughty boy does’. Her long hair is loose and accentuates all her lively movement by swinging around.</p>	<p>1b+ 2a+ 4d+ 4a+ 4a- 4e+</p>	<p>Perhaps she senses that he needs a breather and that is why she pulls back and makes movements that seem to mime her feeling out the surface of a boundary between them, rather than crossing that boundary by leaning in or touching him. If so her action is contingent on him and evidences her sensitivity to his emotional state. She is, however, still highly animated and will still be reaching through the boundary in that she will still be stimulating him. This might suggest that while she is able to attune to his state and needs she may struggle to prioritise them over her own need to keep stimulating him in order to be affirmed through feedback from him.</p>
---	--	---

<p>She then swoops in and he startles but continues smiling – it all feels very exciting if a little scary.</p>	<p>2a- 3c+ 3c- 4b+ 4c+ 4e- 5c+ 5c- 6b+</p>	<p>Perhaps this is why she cannot resist swooping in after pulling back. After acknowledging the boundary between them, and his need for some space, she does something intrusive. His startle suggests this was not what he wanted in that moment, yet he almost immediately recovers with a smile. This suggests that he has learnt to enjoy a little jeopardy in the manner of enjoying a funfair ride. This could be adaptive and show resilience but equally it might lead to his struggling to identify and differentiate between positive and negative affect, which would leave him vulnerable to fragmentation.</p>
---	--	--

<p>She continues the song, swaying from side to side singing ‘bad girl mummy, gonna tell the world, I’m a little boy but she treats me like a girl!’ As she</p>	<p>3b+ 3d- 4e-</p>	<p>Her voice, facial expression and actions are all congruent. She is building excitement with a cheerful ascending tone and preparing for a pleasing contrast between the swaying from side</p>
---	----------------------------	--

sings this she waggles his toe
and at the point of the climax
she jumps back to accentuate the
ending and thus lets go of his
toe.

to side, which is echoed by the
wagging of his toe from side to side,
and the swing back she will do when
she lets go. In this way she is enabling
them to share a mirrored experience of
physical stimulation, which creates a
sort of assonance. Simultaneously,
however, her lyrics talk of
misunderstanding – or more precisely
refusing to acknowledge the otherness
of the other – that he is a boy and she is
'a girl'. This seems to be about a sort of
dissonance. But it might be more
complicated yet. Perhaps unconsciously
she is exploring a struggle around the
boundary – where she both asserts and
dissolves the boundary in one notion.
Then she would dissolve the
generational boundary in the parallel
naming 'naughty boy' and 'naughty
girl', while directly addressing a
struggle to acknowledge gender
difference.

She starts singing again,
repeating the refrain, and he
watches her eagerly with the big
smile ever there. On 'bad girl
mummy' she does a slightly
seductive/coquettish gesture,
making an S of her body and
tilting her chin down to one
side. This feels quite out of
place here. He glances away but
does not seem distressed and
retains an open expression.

1a+
3b+
3d-
4b+
4d-
4e-
4f+
6a+

Whatever might be being stirred and
explored by her, he seems to be able to
enjoy the face value of the show. It is
still not quite a game in that his part is
limited to passive enjoyment of her
actions. This is expressed though his
smile, which is affectionate and
encouraging. She then responds with the
inappropriately seductive gesture, again,
perhaps betraying a struggle with
generational boundaries or knowing
how to develop intimacy that is not
sexual? His glancing away suggests that
he does expect the tone of her actions to
be predictable and consistent with his
emotional tone, even if he does not yet
expect his actions to be treated as
communicating his own intent. That he
looks away and retains an open
expression suggests that he has some
capacity to regulate himself and contact
with her to maximise their chances of a
successful interaction. Her
incongruence and possible difficulty
with generational and sexual boundaries

		may suggest some degree of internal fragmentation on her part.
She swings back into an upright position when he breaks contact, but she immediately starts to make ‘agogogoggo’ noises to regain his attention. When that doesn’t work she calls his name and claps loudly.	1a- 2a- 4a+ 4a- 4d- 6b+	Initially she responds appropriately to his withdrawal by pulling back too but the force of the swinging back may suggest that this has a slightly rejecting or retaliatory edge to it? That she then immediately tries to regain contact, and when that fails tries harder/louder, suggests, again, that she can perceive his need for a pause but cannot tolerate it and act on it. Perhaps she feels rejected and needs to project that feeling into him while simultaneously demanding his attention? In this context there is something slightly violent about a loud clap.
When he looks past her shoulder, which is more directed at her than he had been, she says a lovely sing-song ‘hello’ which he likes and smiles looking back to her face. She welcomes him back with a big smile	1c- 2c+ 3d+ 4b+ 4c+ 4f+ 5d+	His curiosity about the sound, and perhaps his hopeful wish to, re-establish enjoyable contact with her, make him resilient enough not to be deterred by the latent aggression. He makes a guarded, partial re-orientation toward her. She is then so relieved that her authentic pleasure and gratitude imbue her voice with enough welcome to draw him back in and they are able to build on this mutual pleasure through mutual gazing and smiling. Baby’s careful management of their re-establishing contact seems to warrant the claim that he is demonstrating a sense of agency.
He has one finger in his mouth and his free arms and legs are moving about quite a lot. He then makes a lovely conversational sound himself.	3a+ 5a+ 5d+ 6d+	The emotional authenticity and reciprocity in this exchange seems to build his confidence in himself as a communicator and in them as a communicating pair. His oral self-stimulation and moving limbs suggest that he is quite lively inside. When he offers the lovely sound to her it feels that this is the product of the internal connections and creativity that the previous contact inspired.
At first her eyebrows rise up and	1c+	This is the first time that she shows

she sits more upright, apparently wanting to communicate to him that she is paying attention to his vocalisation.	2a+ 3d+ 4d+ 6a+	curiosity about what is going on inside his mind. It is not just positive or negative feedback on her actions but a novel action of his own, and she appears to be ready to receive and think about it.
She answers with her own appreciative sound but then he frowns slightly and she immediately starts to respond as though his vocalisation was a complaint or expression of distress.	1b+ 2a+ 4a+	She offers what feels to be an appropriate response. To an observer it would seem her action is contingent on his, yet something has slipped. He frowns and she is able to bear this down turn, perhaps being a little too quick to affirm the negative? Yet it is an achievement.
She makes a sympathetic sound and then he makes definite complaining sound and his face drops in a wobbling way so that his hand gets in the way of his nose and he screws his face up a bit.	2a+ 2b+ 2c+ 3a+ 4a+	Perhaps he senses that her capacity to contain his negative feelings is more available now and it affords him a collapse he may not have felt was safe up until now?
She then asks if he's not feeling himself today and adds 'are you a bit moody?' Perhaps there is reproach in her face, there is certainly in her voice, and he looks away. This is all rather disorientating. She seems to have pounced on the idea that he might not be happy but then reproved him for that.	2a+ 2b- 4a- 6c+	She is able to detect the change in his mood and acknowledge it but she is also rejecting of it, denigrating negative feelings rather than bearing with them. She seems to want to push back out his distress, rather than take it in and contain it. The apparent availability of containment was short lived.
Immediately she takes his left foot and starts playing 'this little piggy'.	1c- 3b+ 4a- 6c+ 6d-	It would seem that she hopes to jolly him out of his distress rather than try to contain it. Perhaps she feels too persecuted by his distress to be able to bear it. In this situation with a clinician and camera present it is quite likely that she will experience his distress as a condemnation of her mothering, which is shaming. In this context jollying up can carry a jolly-hockey-sticks brutality to it but that is not my countertransference experience.
He instantly looks at her and smiles a knowing smile with	1a+ 1c-	His readiness to move on and join her in their shared knowledge of what is to

slightly narrowed eyes as his body goes a little still in anticipation	3a+ 3b+ 3c+ 3d- 4d+ 5c+ 6d+	come suggests that he did not receive too much in the way of negative projection along with the invitation to play. His stilling and knowing smile show his pleasure in knowing that she knows, that he knows what she is about to do. Despite the apparent success of this invitation to play, it is still unlikely that her actions are really congruent with how she feels about him right now – it feels like she is trying to ‘fake it ‘til you make it’. This can be helpful but also betrays a need to be in control.
As it goes on he starts to look a little strained and ultimately pulls his foot away.	3c- 3d- 5c+ 5d+ 6b+ 6c+	Perhaps the strain of faking it breaks through and spoils the enjoyment, or he senses the degree of control being exercised and wants to break free – as he seems to demonstrate by freeing his foot. In so doing he demonstrates agency and internal cohesion. He can recognise his wish and act on it, pushing back and rejecting her control.
She ends the song by gently pinching and wobbling the flesh on the underside of his thigh and it is not clear if there is anything punitive about this. She rubs where she has done this repeating the refrain ‘all the way home, while looming in.	3d- 4a- 6b+ 6d-	The song is about who gets to consume what and pinching can be an expression of a greedy gobbling sort of love and affection but here it seems that it might also have something more punitive in it too. The repetition of the line ‘all the way home’ while looming seems to ‘drive home the message’ that she will retain control.
She immediately starts tapping the table and asking him ‘what’s that?’ She swings her head about pretending to look for the origin of the sound.	1b- 1c- 2a- 3b+ 4d- 6b+	She drives them on to the next game, there is no sense of a space for them to gather their thoughts or work out how they feel about what has just passed. Her swinging movements, although ostensibly playful, also serve to underline her physical strength and agility in relation to him.
This seems to be a bit like an unintentional parody of his looking away to break contact.	3d- 6a- 6d-	Again, she may be acting out what can’t be thought about in relation to her feeling rejected by him and humiliated by that rejection.

<p>He does not look at her so she repeats it then starts the song again 'bad girl mummy'.</p>	<p>2a- 2c- 3c-</p>	<p>She repeats the failed attempt to engage him and, again without pause, tries something else. She cannot think about his withdrawal so she tries to undo it by re-engaging him. It is all action without thought. Perhaps the lyric she has chosen to come in on here betray her awareness at some level that the generational boundary has collapsed again and she is engaged in a power struggle with an adversary rather than an adult trying to contain an infant's distress.</p>
<p>She waggles his foot and then looms in saying 'I don't treat you like a girl, what's your daddy talking about? Load 'a' rubbish, that's what he's talking about'. She says all of this to him as though she were teasing him about getting something wrong, wagging his foot and shaking her head while she swings in and out for emphasis on each line.</p>	<p>1b- 2a- 3d- 4d- 6e+</p>	<p>Now it is possible that he has become identified with his father in her mind. She seems to be teasing her son while talking about a difference of opinion with his father. This is done in such a way as to suggest squabbling rivals, rather than an enriching binocular vision of two perspectives coming together. Again, the sense that all three are squabbling children is suggested by her behaving as though it would be appropriate to make an ally of her baby son against his father. The discomfort of this discord and conflict is subsumed into a playful teasing that feels incongruent and inauthentic so that her looming feels a little threatening.</p>
<p>He is smiling but his eyes are a little wary.</p>	<p>5c- 6a- 2c-</p>	<p>His cross modal incongruence suggests a loss of internal cohesion and resilience. This may make him vulnerable to fragmentation. That he is not able to show straightforward wariness or fear suggests he does not feel he can look to her for help with difficult feelings in this moment.</p>
<p>He then makes a little protest sound and hides his face away from her behind his hands</p>	<p>2c- 6a- 6b+ 6c+ 6d-</p>	<p>Now he is more straightforwardly expressing fear but he does not seem to feel that this is something he could or should communicate helpfully to her. He is trying to hide himself and</p>

	6e-	possibly this feeling. He may also hope to shield himself or even push back projections he feels are coming from her.
She bangs on the table and says his name.	6b+ 6d-	She is made impatient by his avoidance and defensiveness. She insists that he attends to her with the hard sound of knuckle on table. I feel that she experiences his avoidance as shaming.
He turns with some curiosity. She then looms right in and makes kissing noises in his face, he turns his face away and buries it in the chair wing.	1c- 2a- 3d- 3a+	She responds to a glimmer of curiosity on his part with intrusiveness rather than fostering it. This sequence has the 'chase and dodge' feel described by Stern and Beebe. He clearly feels persecuted and pursued. Again the looming attack is a parody of kissing – the ambivalence is acted out in the most disconcertingly incongruent expressions.
She asks if he's 'going all shy' but it seems to be a way of sanitising the more rejecting avoidance of her that evident in the gesture.	3d- 4d- 6a- 6b+ 6d-	This apparently willful misunderstanding of his actions feels annihilating of his reality rather than simply being inaccurate.
There is nothing coy about his retreat; it is self protective, not provoking.	1b- 2a- 3a-	As above
I feel she is not convinced by her own spin on it but she is determined to engage him. She swoops down to try and get in his eye line. He glances at her but continues to keep his face turned away. She then starts to pretend to eat his feet and this makes him look at her and smile slightly.	3c+ 3d- 4b+ 4c+ 4e- 5c+ 6d+	She pursues him despite apparently knowing that he wishes to retreat from her. She is railroading him and he is trying to resist her but ultimately her playfulness, even if it is quite out of tune with his current state of mind, does win him over.
She then sits up again grinning at him, then does it again.	4d- 6b+	She only pulls back when she feels she has won. The lack of pleasure in his pleasure is noticeable, her pleasure feels triumphant rather than reciprocal.
He is looking at her and away	4f-	Now his incongruence and in

and looking back but it feels a bit uneasy. Although his smile fades, somehow it seems to take a while to catch up with his eyes and remains in a lifeless way on his face for a few moments too long.	5c- 5d- 6a-	authenticity hint at his showing some fragmentation and vulnerability. They have lost an opportunity to build trust and pride in themselves and each other and it is that opportunity that seems to fade on his face. This feels deeply sad.
She gets back in to his line of vision when he looks more permanently away and starts to make a teasing sound, he smiles but does not look.	4f- 5c- 5d- 6a-	His could be the behaviour of someone feeling coy but actually I got the feeling he was just confused or rather his actions were uncoordinated, lacking coherence and meaning.
She then tickles his tummy and he smiles again but keeps his face firmly pressed into the wing and his eyes averted. He is smiling around his hand, again he has a finger in his mouth, and glancing to her and away.	4f- 5c- 5d- 6a-	This time the finger in his mouth feels more like something to block her. There is something a bit discordant about his face. His eyes are very bright and in the context of his smile are easily taken as smiling. Yet, his behaviour, the pattern of his looking and looking away seems more vigilant, and in that context his eyes might be bright with hyper arousal. This would make his smile completely incongruent. I feel quite worried about his being in a fragmented state.
She calls his name and says with mock (but I think real) reproach 'you not going to look at me?'	3d- 6d-	Her aggression and sense of shame are much more close to the surface here.
He looks at her mouth and smiles a little. Just as she says 'yeah, that's better', he looks away, grabbing his toes in his hands.	5c- 6a-	The whole thing feels quite muscular and tense. Perhaps he is using bodily muscularity to compensate for an increasingly dissipating mental state. This would be bodily defence against the fragile linking within a still relatively inchoate mind.
She says 'you're more interested in your feet, aren't you?' She accompanies this with a prod to his side, then she asks 'what's this, fat boy, naughty boy?'	6a- 6b+ 6d- 6e+	It is again supposed to be mock aggression but I feel it is genuinely retaliatory because she feels rejected and probably humiliated in front of the camera and clinician. She is literally, and probably mentally, intruding into him with prods, pokes, insults and projections.

<p>She turns this into the song 'naughty boy' and he does now look at her and smile.</p>	<p>6a-</p>	<p>Again the negative is assimilated into something positive but I fear brings the warping of reality that compounds all the incoherence and fragmentation going on.</p>
<p>She swoops in with the next line and he looks away again. She is swinging his left hand as she sings. For a while he turns to her again and might really be smiling again but she swoops again and he looks away. She continues to bounce his arm, which now looks quite detached from the rest of him, which he is pressing down in the opposite direction to get away from her.</p>	<p>1b- 1c- 3d- 5c- 6b+</p>	<p>She is pursuing and railroading again. It feels less like he is holding out to be won over and more like his response to her intrusiveness is disorganised with all the incongruence of simultaneous contradictory behaviours associated with disorganised attachment.</p>
<p>He sighs and goes a little still.</p>	<p>5c-</p>	<p>Finally he seems to go into a sort of dissociating or despairing state.</p>
<p>She lets go of his hand and waggles his ear.</p>	<p>6b+</p>	<p>She becomes desperate, trying to find a way in through another modality as he shuts down and shuts off from her.</p>
<p>He glances back and she is in full manic smile and raised eyebrows while he is quite subdued now.</p>	<p>4d-</p>	<p>He seems more self-congruent but they are now completely at odds with each other.</p>
<p>He looks away and she calls out his name then, 'naughty boy', which he looks at and she quips 'you know your name'.</p>	<p>4a- 6d-</p>	<p>She seems angry with him for collapsing the tension to own his own authentic state of mind and in so doing, abandon her. She cannot yet follow him to somewhere more sober.</p>
<p>Further thoughts in the course of supervision</p>		



Observation transcript and reflections for discharge video for pair 053

Observation	Code	Comment
The baby is looking at mother with an enormous open-mouthed smile around the four fingers he has crammed into his mouth. His eyes are wide open and twinkling too.	1a+ 3a+ 4c+ 6a+ 6d+ 6f+	He seems to be stimulated by mother and by his fingers in his mouth. There is something expansive about the wide-open mouth and eyes that create a sense that it is safe to take in the emotional atmosphere as well as his fingers and the sight and sound of her. There is a pleasurable urgency about his apparent hunger for all these things and his twinkling eyes suggest that what is being introjected is good for him and shines back out through them.
She is singing in a very animated way, leaning over him and dancing about, while wagging the toes on both his feet. She is singing 'naughty boy smiling, naughty boy now, naughty boy laughing, gonna tell the world'.	1a+ 1b+ 2a+ 3b+ 3d- 6d+ 6d- 6g-	She is stimulating him in lots of ways, through her voice, her proximity, her movement her touching – it is dazzling and potentially overwhelming. After focusing on her I wonder if the apparent urgency with which he is taking it all in is actually because a binge-like feeding frenzy is the only way to take it in: a more measured approach might lead to a sort of bottle neck and possibly cause him to choke on it all. They are matched in terms of emotional tone but we have no sense, in this moment, of his intentions. However, he seems happy to be taking her lead. She is certainly engaging his attention but not yet playing with his intentions. The lyrics 'naughty boy smiling', sung while apparently showing great pleasure and pride in him, feel incongruent and jar somewhat. Perhaps she is acting out her ambivalence. Ordinary maternal ambivalence, experienced in the depressive position, is tolerable because the negative feelings do not threaten to obliterate the positive ones. If paranoid schizoid position functioning is dominant then the splits will be more profound, to protect the positive feelings, and both extremes are more likely to need expression. This might account for the slightly denigrating lyrics delivered with extreme cheer. It is

also possible that she is projecting her own anxieties around shame and humiliation, which are bound to be aroused by a parenting assessment, in the threat to 'tell the world' about his being a 'naughty boy smiling'.

<p>She leans back and does a circular wave with both hands in the style of the Charleston and sings 'all these things a naughty boy does'. Her long hair is loose and accentuates all her lively movement by swinging around.</p>	<p>1b+ 2a+ 4d+ 4a+ 4a- 4e+</p>	<p>Perhaps she senses that he needs a breather and that is why she pulls back and makes movements that seem to mime her feeling out the surface of a boundary between them, rather than crossing that boundary by leaning in or touching him. If so her action is contingent on him and evidences her sensitivity to his emotional state. She is, however, still highly animated and will still be reaching through the boundary in that she will still be stimulating him. This might suggest that while she is able to attune to his state and needs she may struggle to prioritise them over her own need to keep stimulating him in order to be affirmed through feedback from him.</p>
---	--	---

<p>She then swoops in and he startles but continues smiling – it all feels very exciting if a little scary.</p>	<p>2a- 3c+ 3c- 4b+ 4c+ 4e- 5c+ 5c- 6b+</p>	<p>Perhaps this is why she cannot resist swooping in after pulling back. After acknowledging the boundary between them, and his need for some space, she does something intrusive. His startle suggests this was not what he wanted in that moment, yet he almost immediately recovers with a smile. This suggests that he has learnt to enjoy a little jeopardy in the manner of enjoying a funfair ride. This could be adaptive and show resilience but equally it might lead to his struggling to identify and differentiate between positive and negative affect, which would leave him vulnerable to fragmentation.</p>
---	--	--

<p>She continues the song, swaying from side to side singing 'bad girl mummy, gonna tell the world, I'm a little boy but she treats me like a girl!' As she</p>	<p>3b+ 3d- 4e-</p>	<p>Her voice, facial expression and actions are all congruent. She is building excitement with a cheerful ascending tone and preparing for a pleasing contrast between the swaying from side</p>
---	----------------------------	--

sings this she waggles his toe
and at the point of the climax
she jumps back to accentuate the
ending and thus lets go of his
toe.

to side, which is echoed by the
wagging of his toe from side to side,
and the swing back she will do when
she lets go. In this way she is enabling
them to share a mirrored experience of
physical stimulation, which creates a
sort of assonance. Simultaneously,
however, her lyrics talk of
misunderstanding – or more precisely
refusing to acknowledge the otherness
of the other – that he is a boy and she is
'a girl'. This seems to be about a sort of
dissonance. But it might be more
complicated yet. Perhaps unconsciously
she is exploring a struggle around the
boundary – where she both asserts and
dissolves the boundary in one notion.
Then she would dissolve the
generational boundary in the parallel
naming 'naughty boy' and 'naughty
girl', while directly addressing a
struggle to acknowledge gender
difference.

She starts singing again,
repeating the refrain, and he
watches her eagerly with the big
smile ever there. On 'bad girl
mummy' she does a slightly
seductive/coquettish gesture,
making an S of her body and
tilting her chin down to one
side. This feels quite out of
place here. He glances away but
does not seem distressed and
retains an open expression.

1a+
3b+
3d-
4b+
4d-
4e-
4f+
6a+

Whatever might be being stirred and
explored by her, he seems to be able to
enjoy the face value of the show. It is
still not quite a game in that his part is
limited to passive enjoyment of her
actions. This is expressed though his
smile, which is affectionate and
encouraging. She then responds with the
inappropriately seductive gesture, again,
perhaps betraying a struggle with
generational boundaries or knowing
how to develop intimacy that is not
sexual? His glancing away suggests that
he does expect the tone of her actions to
be predictable and consistent with his
emotional tone, even if he does not yet
expect his actions to be treated as
communicating his own intent. That he
looks away and retains an open
expression suggests that he has some
capacity to regulate himself and contact
with her to maximise their chances of a
successful interaction. Her
incongruence and possible difficulty
with generational and sexual boundaries

		may suggest some degree of internal fragmentation on her part.
She swings back into an upright position when he breaks contact, but she immediately starts to make ‘agogogoggo’ noises to regain his attention. When that doesn’t work she calls his name and claps loudly.	1a- 2a- 4a+ 4a- 4d- 6b+	Initially she responds appropriately to his withdrawal by pulling back too but the force of the swinging back may suggest that this has a slightly rejecting or retaliatory edge to it? That she then immediately tries to regain contact, and when that fails tries harder/louder, suggests, again, that she can perceive his need for a pause but cannot tolerate it and act on it. Perhaps she feels rejected and needs to project that feeling into him while simultaneously demanding his attention? In this context there is something slightly violent about a loud clap.
When he looks past her shoulder, which is more directed at her than he had been, she says a lovely sing-song ‘hello’ which he likes and smiles looking back to her face. She welcomes him back with a big smile	1c- 2c+ 3d+ 4b+ 4c+ 4f+ 5d+	His curiosity about the sound, and perhaps his hopeful wish to, re-establish enjoyable contact with her, make him resilient enough not to be deterred by the latent aggression. He makes a guarded, partial re-orientation toward her. She is then so relieved that her authentic pleasure and gratitude imbue her voice with enough welcome to draw him back in and they are able to build on this mutual pleasure through mutual gazing and smiling. Baby’s careful management of their re-establishing contact seems to warrant the claim that he is demonstrating a sense of agency.
He has one finger in his mouth and his free arms and legs are moving about quite a lot. He then makes a lovely conversational sound himself.	3a+ 5a+ 5d+ 6d+	The emotional authenticity and reciprocity in this exchange seems to build his confidence in himself as a communicator and in them as a communicating pair. His oral self-stimulation and moving limbs suggest that he is quite lively inside. When he offers the lovely sound to her it feels that this is the product of the internal connections and creativity that the previous contact inspired.
At first her eyebrows rise up and	1c+	This is the first time that she shows

she sits more upright, apparently wanting to communicate to him that she is paying attention to his vocalisation.	2a+ 3d+ 4d+ 6a+	curiosity about what is going on inside his mind. It is not just positive or negative feedback on her actions but a novel action of his own, and she appears to be ready to receive and think about it.
She answers with her own appreciative sound but then he frowns slightly and she immediately starts to respond as though his vocalisation was a complaint or expression of distress.	1b+ 2a+ 4a+	She offers what feels to be an appropriate response. To an observer it would seem her action is contingent on his, yet something has slipped. He frowns and she is able to bear this down turn, perhaps being a little too quick to affirm the negative? Yet it is an achievement.
She makes a sympathetic sound and then he makes definite complaining sound and his face drops in a wobbling way so that his hand gets in the way of his nose and he screws his face up a bit.	2a+ 2b+ 2c+ 3a+ 4a+	Perhaps he senses that her capacity to contain his negative feelings is more available now and it affords him a collapse he may not have felt was safe up until now?
She then asks if he's not feeling himself today and adds 'are you a bit moody?' Perhaps there is reproach in her face, there is certainly in her voice, and he looks away. This is all rather disorientating. She seems to have pounced on the idea that he might not be happy but then reproved him for that.	2a+ 2b- 4a- 6c+	She is able to detect the change in his mood and acknowledge it but she is also rejecting of it, denigrating negative feelings rather than bearing with them. She seems to want to push back out his distress, rather than take it in and contain it. The apparent availability of containment was short lived.
Immediately she takes his left foot and starts playing 'this little piggy'.	1c- 3b+ 4a- 6c+ 6d-	It would seem that she hopes to jolly him out of his distress rather than try to contain it. Perhaps she feels too persecuted by his distress to be able to bear it. In this situation with a clinician and camera present it is quite likely that she will experience his distress as a condemnation of her mothering, which is shaming. In this context jollying up can carry a jolly-hockey-sticks brutality to it but that is not my countertransference experience.
He instantly looks at her and smiles a knowing smile with	1a+ 1c-	His readiness to move on and join her in their shared knowledge of what is to

slightly narrowed eyes as his body goes a little still in anticipation	3a+ 3b+ 3c+ 3d- 4d+ 5c+ 6d+	come suggests that he did not receive too much in the way of negative projection along with the invitation to play. His stilling and knowing smile show his pleasure in knowing that she knows, that he knows what she is about to do. Despite the apparent success of this invitation to play, it is still unlikely that her actions are really congruent with how she feels about him right now – it feels like she is trying to ‘fake it ‘til you make it’. This can be helpful but also betrays a need to be in control.
As it goes on he starts to look a little strained and ultimately pulls his foot away.	3c- 3d- 5c+ 5d+ 6b+ 6c+	Perhaps the strain of faking it breaks through and spoils the enjoyment, or he senses the degree of control being exercised and wants to break free – as he seems to demonstrate by freeing his foot. In so doing he demonstrates agency and internal cohesion. He can recognise his wish and act on it, pushing back and rejecting her control.
She ends the song by gently pinching and wobbling the flesh on the underside of his thigh and it is not clear if there is anything punitive about this. She rubs where she has done this repeating the refrain ‘all the way home, while looming in.	3d- 4a- 6b+ 6d-	The song is about who gets to consume what and pinching can be an expression of a greedy gobbling sort of love and affection but here it seems that it might also have something more punitive in it too. The repetition of the line ‘all the way home’ while looming seems to ‘drive home the message’ that she will retain control.
She immediately starts tapping the table and asking him ‘what’s that?’ She swings her head about pretending to look for the origin of the sound.	1b- 1c- 2a- 3b+ 4d- 6b+	She drives them on to the next game, there is no sense of a space for them to gather their thoughts or work out how they feel about what has just passed. Her swinging movements, although ostensibly playful, also serve to underline her physical strength and agility in relation to him.
This seems to be a bit like an unintentional parody of his looking away to break contact.	3d- 6a- 6d-	Again, she may be acting out what can’t be thought about in relation to her feeling rejected by him and humiliated by that rejection.

<p>He does not look at her so she repeats it then starts the song again 'bad girl mummy'.</p>	<p>2a- 2c- 3c-</p>	<p>She repeats the failed attempt to engage him and, again without pause, tries something else. She cannot think about his withdrawal so she tries to undo it by re-engaging him. It is all action without thought. Perhaps the lyric she has chosen to come in on here betray her awareness at some level that the generational boundary has collapsed again and she is engaged in a power struggle with an adversary rather than an adult trying to contain an infant's distress.</p>
<p>She waggles his foot and then looms in saying 'I don't treat you like a girl, what's your daddy talking about? Load 'a' rubbish, that's what he's talking about'. She says all of this to him as though she were teasing him about getting something wrong, wagging his foot and shaking her head while she swings in and out for emphasis on each line.</p>	<p>1b- 2a- 3d- 4d- 6e+</p>	<p>Now it is possible that he has become identified with his father in her mind. She seems to be teasing her son while talking about a difference of opinion with his father. This is done in such a way as to suggest squabbling rivals, rather than an enriching binocular vision of two perspectives coming together. Again, the sense that all three are squabbling children is suggested by her behaving as though it would be appropriate to make an ally of her baby son against his father. The discomfort of this discord and conflict is subsumed into a playful teasing that feels incongruent and inauthentic so that her looming feels a little threatening.</p>
<p>He is smiling but his eyes are a little wary.</p>	<p>5c- 6a- 2c-</p>	<p>His cross modal incongruence suggests a loss of internal cohesion and resilience. This may make him vulnerable to fragmentation. That he is not able to show straightforward wariness or fear suggests he does not feel he can look to her for help with difficult feelings in this moment.</p>
<p>He then makes a little protest sound and hides his face away from her behind his hands</p>	<p>2c- 6a- 6b+ 6c+ 6d-</p>	<p>Now he is more straightforwardly expressing fear but he does not seem to feel that this is something he could or should communicate helpfully to her. He is trying to hide himself and</p>

	6e-	possibly this feeling. He may also hope to shield himself or even push back projections he feels are coming from her.
She bangs on the table and says his name.	6b+ 6d-	She is made impatient by his avoidance and defensiveness. She insists that he attends to her with the hard sound of knuckle on table. I feel that she experiences his avoidance as shaming.
He turns with some curiosity. She then looms right in and makes kissing noises in his face, he turns his face away and buries it in the chair wing.	1c- 2a- 3d- 3a+	She responds to a glimmer of curiosity on his part with intrusiveness rather than fostering it. This sequence has the 'chase and dodge' feel described by Stern and Beebe. He clearly feels persecuted and pursued. Again the looming attack is a parody of kissing – the ambivalence is acted out in the most disconcertingly incongruent expressions.
She asks if he's 'going all shy' but it seems to be a way of sanitising the more rejecting avoidance of her that evident in the gesture.	3d- 4d- 6a- 6b+ 6d-	This apparently willful misunderstanding of his actions feels annihilating of his reality rather than simply being inaccurate.
There is nothing coy about his retreat, it is self protective, not provoking.	1b- 2a- 3a-	As above
I feel she is not convinced by her own spin on it but she is determined to engage him. She swoops down to try and get in his eye line. He glances at her but continues to keep his face turned away. She then starts to pretend to eat his feet and this makes him look at her and smile slightly.	3c+ 3d- 4b+ 4c+ 4e- 5c+ 6d+	She pursues him despite apparently knowing that he wishes to retreat from her. She is railroading him and he is trying to resist her but ultimately her playfulness, even if it is quite out of tune with his current state of mind, does win him over.
She then sits up again grinning at him, then does it again.	4d- 6b+	She only pulls back when she feels she has won. The lack of pleasure in his pleasure is noticeable, her pleasure feels triumphant rather than reciprocal.
He is looking at her and away	4f-	Now his incongruence and

and looking back but it feels a bit uneasy. Although his smile fades, somehow it seems to take a while to catch up with his eyes and remains in a lifeless way on his face for a few moments too long.	5c- 5d- 6a-	inauthenticity hint at his showing some fragmentation and vulnerability. They have lost an opportunity to build trust and pride in themselves and each other and it is that opportunity that seems to fade on his face. This feels deeply sad.
She gets back in to his line of vision when he looks more permanently away and starts to make a teasing sound, he smiles but does not look.	4f- 5c- 5d- 6a-	His could be the behaviour of someone feeling coy but actually I got the feeling he was just confused or rather his actions were uncoordinated, lacking coherence and meaning.
She then tickles his tummy and he smiles again but keeps his face firmly pressed into the wing and his eyes averted. He is smiling around his hand, again he has a finger in his mouth, and glancing to her and away.	4f- 5c- 5d- 6a-	This time the finger in his mouth feels more like something to block her. There is something a bit discordant about his face. His eyes are very bright and in the context of his smile are easily taken as smiling. Yet, his behaviour, the pattern of his looking and looking away seems more vigilant, and in that context his eyes might be bright with hyper arousal. This would make his smile completely incongruent. I feel quite worried about his being in a fragmented state.
She calls his name and says with mock (but I think real) reproach 'you not going to look at me?'	3d- 6d-	Her aggression and sense of shame are much more close to the surface here.
He looks at her mouth and smiles a little. Just as she says 'yeah, that's better', he looks away, grabbing his toes in his hands.	5c- 6a-	The whole thing feels quite muscular and tense. Perhaps he is using bodily muscularity to compensate for an increasingly dissipating mental state. This would be bodily defence against the fragile linking within a still relatively inchoate mind.
She says 'you're more interested in your feet, aren't you?' She accompanies this with a prod to his side, then she asks 'what's this, fat boy, naughty boy?'	6a- 6b+ 6d- 6e+	It is again supposed to be mock aggression but I feel it is genuinely retaliatory because she feels rejected and probably humiliated in front of the camera and clinician. She is literally, and probably mentally, intruding into him with prods, pokes, insults and projections.

<p>She turns this into the song 'naughty boy' and he does now look at her and smile.</p>	<p>6a-</p>	<p>Again the negative is assimilated into something positive but I fear brings the warping of reality that compounds all the incoherence and fragmentation going on.</p>
<p>She swoops in with the next line and he looks away again. She is swinging his left hand as she sings. For a while he turns to her again and might really be smiling again but she swoops again and he looks away. She continues to bounce his arm, which now looks quite detached from the rest of him, which he is pressing down in the opposite direction to get away from her.</p>	<p>1b- 1c- 3d- 5c- 6b+</p>	<p>She is pursuing and railroading again. It feels less like he is holding out to be won over and more like his response to her intrusiveness is disorganised with all the incongruence of simultaneous contradictory behaviours associated with disorganised attachment.</p>
<p>He sighs and goes a little still.</p>	<p>5c-</p>	<p>Finally he seems to go into a sort of dissociating or despairing state.</p>
<p>She lets go of his hand and waggles his ear.</p>	<p>6b+</p>	<p>She becomes desperate, trying to find a way in through another modality as he shuts down and shuts off from her.</p>
<p>He glances back and she is in full manic smile and raised eyebrows while he is quite subdued now.</p>	<p>4d-</p>	<p>He seems more self-congruent but they are now completely at odds with each other.</p>
<p>He looks away and she calls out his name then, 'naughty boy', which he looks at and she quips 'you know your name'.</p>	<p>4a- 6d-</p>	<p>She seems angry with him for collapsing the tension to own his own authentic state of mind and in so doing, abandon her. She cannot yet follow him to somewhere more sober.</p>
<p>Further thoughts in the course of supervision</p>		

**Observation transcript and later reflections for
Admission video for pair 303**

Observation	Code	Comment
There is one and a half minutes of interaction, which is interrupted because mother decides that baby is hungry. After the feed the filming recommences. The mother is French and my French is poor so I have to guess at some of what she says.		This might suggest a wish to stall the filming but equally it might suggest the confidence to advocate for her baby in a potentially stressful situation.
He's in the chair and the empty bottle is next to him. It is not clear if he's had a nap or come straight back for a play		On reflection, the proximity of the bottle suggests the feed happened in the room and he was put straight back in the chair.
He brings his left hand to his mouth and then to his left eye and makes a brief sound of complaint.	3a+	He looks tired. Perhaps he does want a nap. I worry a bit about how this will pan out if it is not a good time for him.
She asks with sympathy if he is tired and he makes a slightly louder sound.	1a+ 1b+ 2a+ 2b+ 3a+ 3d+ 4a+	She notices and puts his difficulty in words with a sympathetic tone and he responds to feeling understood by continuing to try and communicate his state.
As his hand comes down she catches it with her little finger and he grips onto it and looks at it. Simultaneously she makes a sympathetic low sound, then asks if he is unwell after all. Her voice seems very well attuned to his state of mind and to each of his actions but her face is still in a fixed bright smile.	3d- 1c+ 4a+ 4a- 4d+	She seems to be so well attuned to him that there is something graceful about the way their movements coordinate. She is wondering if he is unwell, bearing with uncertainty and continuing to think. Yet there is this incongruence between the fixed bright smile and her sympathetic tone. This might be the deft work of a mother who is confident that she can meet his pain and simultaneously invite him to be lifted out of his state, without compromising his experience of having his feelings validated. However, it might mean that she has not been able to really let his feelings

		resonate in her for fear of being pulled under by them. The bright smile might reflect the part of her that is not in touch with him, which might mean that her empathy is a little shallow. It could also suggest that she lacks internal coherence and struggles to have congruent responses because of the attacks on linking in her.
She asks if he's tired again in a friendly way and he continues to play with her finger. She is asking him lots of questions but in a gently rhythmic tone, there is no urgency about it.	6d+ 6g+	They seem to be having a cross-modal conversation. She verbalises her exploration of his experience – what's happening for him, while he explores her hand. They both seem to feel they have all the time in the world to do this, which conveys a sense of trust in each other and probably in internal objects.
He then looks at her face with a slightly more curious expression and holds her gaze for a moment longer. She asks if he likes playing with her finger, matching his enquiring facial expression through her vocal intonation. He is looking from eye to eye and lets go of her hand, perhaps trying to pull back slightly, the expression on her face is friendly but quite intense, not as relaxed as her voice.	1b+ 1c+ 2a+ 2c+ 3a+ 3d- 5d+	Again she is matching his state with her voice, showing her interest in his experience and intentions through the things that she says but there is a slight mismatch between all this and her face. He has sought her, he seems hopeful and I think he does feel met. Yet, there is something else he is not sure about. Something else coming in with all the good things that makes him drop her finger and pull back.
They both look away and her smile is less pronounced but her face still friendly. He lifts his right foot and she then tickles it, both responding to his action in the here and now and developing the theme of stimulating his extremities.	1c+ 2a+ 3b+ 4a+	She is able to let him withdraw without darkening or chasing. She remains available and receptive so that when he lifts his foot she can offer a contingent response. I also seem to have a sense that she is offering some continuity from the last bit of interaction. There was something almost balletic about the way their bodies responded to one another and I felt the dance had started up again.
His right arm comes up and he seems to shift slightly in his seat while making a little 'mmmah'	2a+ 3b+ 3a+	Whatever he offers she acknowledges with interest and a sense that she is pleased he has something to say.

sound. She looks at him and smiles making a comment to acknowledge his vocalisation.

He then does another, more pronounced, 'mmmah' and glances up with a slight little smile at her. Her joy at this is expressed in a more natural smile and softly lifted 'mmnah' sound. He is dribbling and puts his right hand to his mouth and makes a complaining sound.

1b+
2a+
2c+
3a+
4c+
4d+

She responded to his vocalisation as a conversational act and now they are in a proto-conversation. The pleasure of this seems to help her cohere and she is able to offer a more authentic smile that is congruent with the tone in which she mirrors back his vocalisation. Despite the apparent success of this interaction he complains and self-sooths or self-stimulates at his mouth. The dribble might suggest he is teething and in pain.

She does a slightly exaggerated version of his complaining sound but it is not mocking. He seems interested and glances at her again.

1c+
2a+
2b+
4a+

She shows him that she is receiving his communication and that she might know something of what he feels. This means that their conversation is not derailed, she can let him change the subject.

She is wiping his mouth at that moment and the concentration of this act has replaced the fixed smile and means she is not looking at his eyes but his mouth. This seems to give him the chance to look at her for a little longer. His hands are resting on his legs and he seems relaxed and at peace to explore her face with his eyes.

4e-
4f+
5d+
6d+

Her smile must have become a little more fixed again but I only notice when it goes and her gaze shifts to his mouth. The opportunity this affords him seems welcome. Perhaps he needs a little more ebb, some pauses in which he can become curious rather than responsive. It is only when this happens by chance that I notice its absence and that she may be being slightly intrusive in the constant attention.

When she looks to his eyes and realises she has his gaze she responds with a very expressive smile and raises her eyebrows in an exaggerated way twice. This seems too much for him and he looks back down.

2a-
4f+
4e-
6d-

He is able to regulate contact with her and protect himself but looking down, as opposed to away to the side, might suggest that there is some experience of shame at not being able to bear the intensity of her gaze, the brightness of her smile.

She enquires about something in an

1b+

She seems to realise that he needs

attentive but not demanding way and sits back a little, giving him some space.	1c+ 4d+ 4e+ 6d+ 4a+ 6a+	more space, she does not respond to rejection by pursuing him, a bid to undo the rejection. She accepts it and adapts her own style to what he needs.
He makes a conversational if still slightly grumbling sound and she treats it like a communicative sentence, saying something like ‘oh I see, really?’ in an interested but appropriately sedate way.	1b+ 1c+ 2c+ 2a+ 4a+ 4b+ 4d+ 6a+	She has repaired the rupture and he is able to continue to communicate what he feels, he does not have to brighten up to match her or become avoidant.
He starts to move the fingers on his left hand and study them closely. He then starts to make a ‘mmnah, mmnah’ sound and his arms and left leg bounce a little in time to this. She then tickles his left foot, again following his lead. He starts to look at his foot too.	1b+ 1c+ 2c+ 2a+ 4a+ 4b+ 4d+ 6a+	He is suffering in some way but his communications about this have been received and this seems to free him to become interested in the world, including the potential experiences that his body can afford him. She follows him and joins him with a novel act of tickling but where his interest is – at his bouncing foot.
She notices his feet are warm and asks if he’s feeling hot. She adds that it is quite hot in the room. She tickles his right foot some more and he is watching her fingers moving on his foot and at the same time the fingers on his left hand move too.	1b+ 1c+ 2c+ 2a+ 4a+ 4b+ 4d+ 6a+ 5c+	She is wondering about his experience, imagining how he might feel. The way that his hand mirrors the action of her hand suggests that he might be doing a similar exploration of what she is experiencing. They seem to be able to access and explore one another’s experience in a way that does not collapse their separateness. There is mirroring but also contingency and reciprocity.
He has a slight smile on his face and it looks as though he is both interested in what is happening to him and enjoying the feel of it. All the while her softly enquiring voice adds to the sense of something flutteringly sensual.	6a+ 6d+ 3d+ 3c+ 4c+	Trust, desire, satisfaction and perhaps gratitude all seem to be expressed by his smile and her tone.
He glances up and his smile seems to be unfurling a little more as he has caught her looking down at his foot and smiling. She looks up and	4c+ 4f+ 3d- 1a-	He definitely likes to make his approach under cover. There is no doubt about his pleasure in being with her but he does not want too

there is a brief connection before he looks away, again perhaps her smile was too bright?		much direct mutual attention, he needs it to be slightly oblique. Perhaps this is to do with his temperament or perhaps there is something a little forced about her smile still. It is not possible to tell.
This time he does not look down and it seems less defensive and more about regulating the right temperature or distance between them. She seems to have taken in the smile and is encouraged to allow him some more space.	4f+ 4a+ 2a+ 5c+ 1c+ 1a-	She is learning from him about the pace and rhythm he needs their interactions to have and she is able to take his lead and learn. She has negative capability in that she can remain receptive in a state of not knowing.
She pulls back and stops tickling his feet while still smiling and acknowledging that he'd liked it. He is then able to bring the soles of his two feet together and rub them. As he does this, his hands splay out and a small smile comes onto his face as he watches his feet.	6d+ 6a+ 4e+ 2c+ 5a+ 5d+ 5c+	She gives him the space but there is no withdrawal of approval or pleasure in him, no punishment for asking for something different. He feels safe and is able to continue exploring what he can do with his body. Her receptive but undemanding presence protects his psychic space for exploration.
After a while she tries tickling his tummy but he makes a slightly protesting sound and she stops and repeats back the sound, a little mocking but mostly acknowledging and accepting it. After a moment she wipes his mouth and he opens it.	1c+ 2a+ 3a+ 4a+ 6c+	She is able to bear having got something wrong and correct it, with only a slight retaliation for the discomfort it would have caused her. Her moving quickly to an act of practical care might be a wish to connect with her sense of herself as a competent mother. It happens to stimulate him to open his mouth.
She puts the cloth by his hand and he grabs it while making a fairly loud sound. She affirms it, repeating it back to him. He's dropped the cloth and she puts it back in his reach but he is not interested and she does not insist.	1c+ 2a+ 3a+ 4a+ 4b+	I wonder if she noticed his mouth opening and at some level understood that he might be asking for something, some oral stimulation, which might be why she offered him the cloth. When he does not seem interested she is able to accept this too.
His sounds begin to be more grizzly and she makes a sympathetic sound in response and offers her little finger for him to hold, which he takes. She bounces	1c+ 2a+ 3a+ 4a+ 4b+	Whatever ails him comes to the fore after these 'missteps in the dance'. She does not seem to be persecuted by this and adapts her tone to reflect back his mood. She also offers

it asking what is wrong.		physical contact with her, but in a way that he could chose not to take up –unlike, say, stroking his face. He does take it up and the gentle bouncing seems like an attempt to distract him again, but it does not feel like she needs him to be distracted from his suffering. I feel like she can bear it.
He starts to make a complaining sound but it is in time to the bouncing of her hand and he is looking at her. She makes more sympathetic sounds and it feels like he is having a good moan, confident that she will listen and bear it with him.	1c+ 2a+ 3a+ 4a+ 4b+	This is attuned and reciprocal. The way he is matching his vocalisations with her bouncing seems to mirror back his sense that she has matched and understood his experience. There is that consonance that gives the balletic feel to their interactions. She is also demonstrating her negative capability, that she is not overwhelmed by his distress, will remain robust and receptive.
She then asks if it is wind, with a slightly comical face. He is highly amused and a big smile explodes across his face. She is so thrilled that her shoulders come up as she leans in to share a laugh with him about it.	6d+ 6a+ 4c+ 3b+ 3c+ 3d+	This is such fun to watch. For the first time they are both authentically highly stimulated in a very pleasurable way and able to manage direct contact in that moment of intense affect. It makes me feel very hopeful about their relationship.
He enjoys this and makes a less complaining version of the bouncing sound but soon glances away, again not down, and it feels like an appropriate pause after all the excitement. She is still rather high with a big grin and has to simmer herself down as he does not look back for some time.	4f+ 1b+ 5c+ 2a- 2a+ 1a-	He offers a novel sound and it is the brightened version of what he'd said before she'd made the great joke. He is showing her how she is helping him but in her excitement she does not predict his need for a pause. When he prompts her by looking away she does adapt.
He bounces his feet and then says something else. She leaves gaps for him to speak and if he speaks while she is she stops to let him speak and then responds. He then makes an explosive little complaining sound and she asks again, but this time with a frown and sympathy, if he has wind.	4b+ 4d+ 4e+ 2a+	Through his capacity to regulate himself and his contact with her and her respecting this and adapting he, once again is free to start exploring his body and playing and talking with her. She remains alert to his still suffering with something.

Further thoughts in the course of
supervision (Admission)

**Observation transcript and later reflections for
discharge video for pair 303**

Observation	Code	Comment
The video starts and they both have heads thrown back. Mum is smiling and he has an open mouth and his eyes are shut. The atmosphere suggests there has been an excited exchange, which is climaxing.	1a+ 1b+ 3c+ 6a+ 6d+	They are in tune with one another and sharing a pleasurable and exciting moment. I feel like I've walked in to a room just after a joke has been told. You want to smile because the atmosphere is infectious but you also feel a little excluded.
He is holding onto the forefinger of her right hand and as he opens his eyes mum offers his right hand her left forefinger. Just at this moment he makes a slightly boisterous declaration and then looks to the side of her face, suddenly breaking the contact.	3a+ 5d+	As the laughter fades and they seem to be coming back together through eye contact and possibly more bodily contact there is a sudden loss. Baby breaks eye contact with a sound that suggests he feels he can assert his need for space quite openly. It is surprising but not deadening like some gaze aversion can be.
She falls back in surprise and removes both hands and makes a part curious, part disappointed exclamation. He then drops his face down cutting her off from his face more completely. Her hands drop and she sits up, apparently feeling rejected.	3d+ 6d- 1a-	Mother seems to feel rejected and expresses it. This is authentic and she is not aggressive but it seems to be difficult for him and now his avoidance of her feels like it might be less assertive and have a hint of shame and/or some anxiety in it.
She recovers and notices his gaze has settled on his right foot and she waggles it, asking what he's looking at. He then looks at her with an open expression, moving quickly into a smile. Encouraged she waggles it and repeats something sing-song a few times as she does this.	4b+ 3a+ 2a+	She has been able to recover her own affect state and quickly moves to repair the rupture. He is receptive to this and clearly expects that they will be able to recover easily.
When his pleasure at this fades she goes back to his right hand and taps that asking him what he thinks and watching to see his response. He watches his hand but does not look at her or smile. She goes back to his feet, taking one in each hand and	1c+ 2a+ 3b+ 4d+ 4e+	Mother is attuned to his response. When his response is neutral she tries something else, apparently robust enough to bear getting it wrong and trying again. This persistence does not feel intrusive because it is so responsive to his communications.

wagging them both with a confident refrain about his feet.		
He beams glancing between her face and his feet and the atmosphere is quite uplifting. He is a little sick and she wipes it away acknowledging it in a relaxed and cheerful way. She then goes back to his feet, stroking the underside of his right foot, which makes him smile and glance at her in an almost bashful and affectionate way	1c+ 2a+ 3a+ 3c+ 4a+ 4c+ 4d+ 5c+	He rewards her efforts with his generously expressed pleasure. Her calm response to his sick means that 'care' does not threaten to derail their play. They are able to continue to explore what he likes and his awareness of her awareness of him and his experience is palpable in his coyness
She then asks if he wants to do 'hands and feet' as she takes his right hand in her other hand. He smiles a more anticipatory smile and looks to her. She pauses, singing out the question again to pleurably build tension and his smile widens. As she brings his hand and foot together so that they touch each other he makes an explosive little sound which she then matches with her laugh and they share a few moments of open-mouthed laughing, each taking a turn. His head is right back on the headrest and her shoulders are up around her ears as she shakes them with laughter. The whole exchange has a really expansive feel to it. She then does his left foot and left hand, building the tension with a crescendo of 'look, look, look!'	1b+ 2a+ 3a+ 3c+ 4c+ 6a+ 6d+	This is enjoyable to watch for many reasons. It is partly the intimacy and confidence of shared knowledge. Each knows that the other knows what is coming but it has not happened yet. It is the pleasure of mind reading. Then there is the way she uses this to build excitement and then the synchronised climax and matched laughing behaviours. It is a dance with no missteps, perfectly timed and expressing authentic pleasure in being with and knowing the other. It starts with a reciprocal, caller response pattern, then through to synchronised moves and back to something more conversational before repeating the cycle. The length and complexity of this exchange suggest they are accustomed to successful interactions.
His laugh is not quite as dramatic as last time and she lets him simmer down. After a little while of less excited looking at each other and a few glances away on his part he starts to look at her more intently and his mouth starts to open slowly as his eyes widen.	4f+ 2a+ 1c+ 4e+	He can regulate himself and contact with her and she can let him do this. She does not need to be in control and is able to follow his lead. He can then bring them back together again.
I suddenly realise that he is doing a much more natural version of her manic grin of the first video. She recognises that he is building to a	3d+ 3c+ 3a+ 4c+	They are reaping the rewards of their intimate knowledge of one another. It becomes clear that this has been possible because neither is too

big laugh and joins him in it. This has the feel of ‘I know that you know, what I’m going to do next, and that feels great!’	4d+ 6a+ 6d+	preoccupied and because it has been safe enough to attend to the other for long periods of exploration, of trial and error. For many pairs too much error would have been too destabilising to risk.
She then jiggles his feet and repeats a staccato refrain and they remain animated with laughter for a few more moments. This is less effortful for him than the provoking had been and is a nice way of extending the pleasure of the thrill of the previous moment.	2a+ 4d+ 1b+	She seems to sense exactly what sort of exchange would best match where he is in his cycle of arousal and calming, offering something he can make use of at each point.
He then looks up to the ceiling, this breaks the contact without any sense of collapse or let-down. She is able to look up too, asking what he’s looking at. When he looks back to her she is not disappointed or upset but looking at him expectantly.	5b+ 4f+ 4e+	When he needs to calm she is not thrown or rejected. She is hopeful that he wants to bring something new in to their conversation but when she realises he is not looking at anything in particular, she can wait for him to be ready again.
He is pleased and gives her a massive open-mouthed smile and congratulatory exclamation. This inspires her to sing him a song that must be familiar because his smile develops into something more knowing. When it gets to the bit where she taps his head he opens his mouth, perhaps in anticipation.	5c+ 5d+	Again, they are clearly benefiting from all the banked previous experiences of being together. They have a shared history, which enriches their experiences in the present. This must also help baby to develop a sense of himself, both as the object of her experience and as a subject that goes on being in time. Both of these support a narrative sense of self, which is crucial to identity development.
She is bobbing about to the song and when she realises he is vocalising she stills. This feels like a way to show that she is paying attention to his contribution without stopping the song.	3c+ 3a+ 3c+ 4d+ 5d+	She has sophisticated ways of validating his contributions through contingent acts. He is confident about offering a novel contribution, probably because he has come to expect that it will be received and well received at that.
She looks proud as he makes a couple more vocalisations and they smile excitedly at each other at the	6d+ 6f+ 4a+	The ease with which each of them are now able to enjoy something, then let it go, suggests that they are

end of the song. They then enjoy a rally. When he then glances away, slightly down and to the side, she is able to sit back but remain open and cheerful in her facial expression and tone of voice, verbally acknowledging that he's had enough for now in an accepting way.	4f+	introjecting those good experiences and don't need to try to hold on to them too tightly in the moment and risk spoiling the experience.
After a pause he looks back and she offers the first line of another song, like a question. She is holding his feet as she does this. He beams and she continues with the song, now bouncing his feet along to the tune.	1b+ 2a+ 3c+ 4c+ 5d+	She has waited for him to indicate that he is ready to re-engage and then she invites him to play, only continuing and building on the theme when he encourages her with a smile.
At one moment his smile wanes a little and she continues to sing and smile but her eyebrows rise into a question at the same time. She seems to be asking him if this is still good. She also tries switching to bouncing his hands and one or both of these things seem to do the trick and his face peels back into a wide smile.	1c+ 4d+ 4a+ 5c+	She notices the slightest change in him and tries making a few adjustments so that the game does not have to be derailed.
It is a very lively song and she is really making him 'dance' along to it with her. This seems to be very exciting and he smiles throughout, giving explosive little laughs along the way.	3b+ 4c+	There is enough trust for them to get quite excited without it feeling manic.
At the end there are three cheers, for which she lifts his hands right above his head. There is a little pause between each, which both adds to the sense of anticipation but also seems to serve as a space in which he might express his wish to stop if he wanted to.	6g+	There is still space and permission for him to have a different view.
When it is over he seems to try to raise his hands once more and makes a sound with it. She repeats it back and raises her hands but they have lost each other's hands because she had not anticipated his last move, although she does try to validate it	5d+ 6a+	He is feeling confident enough to offer a completely novel act in their game. Even with her careful attunement she could not have predicted it and it almost gets lost but she makes a point of repeating back his sound, letting him know she

by repeating back the vocalisation.		received it and it was welcome.
She continues to offer her outstretched forefingers in a wagging dance, which he watches for a moment. She stills them to see if he wants to grab one. When he does not she wonders aloud what he might like, then she touches his left foot with one hand and then suggests they play the hand to foot game.	3d+ 1c+	She seems to have run out of ideas for the moment but it also feels like this is an acceptable part of the ebb and flow. She does not seem troubled by this and eventually inspiration comes.
He glances at her with what looks like anticipation and when she brings his hand and foot together he giggles, she does a big appreciative laugh and he does his open mouthed beam with a loud vocalisation. She does the other hand and foot and he squeals with delight.	3c+ 6a+ 6d+	There is such pleasure in watching them, the lightness and ease with which they respond to each other is partly made possible by the supporting structure of previous games, there is enough predictability to make a little novelty exciting.
She matches this with a similar vocalisation and goes back to the first hand and foot but his response is a little more sober. She then matches this with her next vocalisation and lets her smile fade naturally into something more neutral. He rewards her with an affectionate smile.	4d+ 3a+ 4c+ 4a+	Again, she can let him come off the boil. She does not have to hold on too tight to what they have together.
They have a pleasurable rally of facial and vocal expressions of excitement and it feels like they are really enjoying each other's company.	3d+ 3a+ 3c+ 4d+	There is cross modal self-congruence and they are congruent with one another. There exchange is also reciprocal and each offers an action that is contingent on the last action of the other.
It is a bit of a surprise to me when he then makes quite a determined sort of announcement. She is also surprised but goes on to validate this with a version played back to him with nodding head and frown. This makes him laugh and then he makes an even bolder, very assertive sound. She really frowns and nods and his face becomes very watchful for a	1c+ 2a+ 3a+	He is able to break from this predictable pattern and say something new and something quite challenging. She is not thrown. She shows authentic surprise but goes on to show that she recognises the change in tone and accepts it. He seems momentarily distressed to see his tone expressed back in her facial expression. Perhaps he thinks she is

<p>moment but the way she is also saying something along the lines of ‘yes, that’s right, you know your mind’ is so affirming that he then does a more conversational vocalisation and puts his arms up to the wings of the chair.</p>		<p>rebuking him for expressing negative affect. After a while he seems to come round to feeling that she is not attacking him and he does not break the contact. In fact, when he explores the wings of his chair it is as though he were exploring the parameters of that space as well as the parameters of what sort of communication she can receive from him.</p>
--	--	--

<p>She chatters sedately to him in a way that suggests she is waiting for his next cue when he is a little sick. She makes a surprised sound and wipes it away. He fidgets as though he wants to shake off the wiping cloth and makes a slightly protesting sound.</p>	<p>4a+ 3a+ 1c+</p>	<p>It makes sense now that he may have been responding to internal physical discomfort and he continues to be rather irritable. She accepts this.</p>
--	----------------------------	---

<p>She says, ‘yes, I know’ in acknowledgement of his unpleasure but is not taking offence or belittling or expanding on it. As he starts to vocalise in a really animated way she sees that he has more sick-up in his mouth and prepares the cloth in her hand asking if there is more coming. It is a friendly question but perhaps her focus has moved away from what he’s communicating with his voice to what might be brought up from his stomach and he starts to vocalise in a really insistent way.</p>	<p>4a+ 3a+ 1c+</p>	<p>Her negative capability is being tested but she remains open and calm. Perhaps she is a little distracted now by the care tasks and he feels it. Perhaps it is building physical discomfort he is responding to. It is not possible to know.</p>
--	----------------------------	---

<p>She seems surprised and laughs but affirms what he says by nodding and saying ‘yes, yes’ with a slight smile. This is somehow not incongruent but captures the subtlety of the good-natured complaint that he is making and her readiness to hear that complaint. (3mins and 15 seconds)</p>	<p>1c+ 2a+ 2c+ 3d+ 4a+ 4b+ 6a+</p>	<p>Despite their struggle, he with whatever ails him and she with finding and appropriate response, they do remain engaged with one another and seem to want to muddle through together.</p>
---	--	--

Further thoughts in the course of supervision (discharge)

Appendix (vi) Formula for working out comparable score

Care Index possible range of combined maternal sensitivity and infant cooperativeness scores: 0-28

Range for each domain

Making contact:	(-90 to +90)	range of	180
Mutual Understanding	(-90 to +90)	range of	180
Making relationships	(-120 to +120)	range of	240
Maintaining relationships	(-180 to + 180)	range of	360
Making sense of the world	(-120 to +120)	range of	240
Countertransference...	(-180 to + 180)	range of	360

$$28 \div (\text{range}) = (x)$$

Step 1

$$28 \div (\text{range}) = (x)$$

Divide 28 by the range, i.e.

$$28 \div 180 = 0.155$$

Step 2

For a positive number score add the score to half the range, i.e.

$$+14 +90 = 104$$

For a negative number score take half the range and minus the score, i.e.

$$90 - 14 = 76$$

Step 3

Multiply your new score by (x), i.e.

$$76 \times 0.155 = 11.8$$

Step 4

Add each domain comparable score then divide by 6, i.e.

$$(8.9+7.5+9.7+12.5+16.3+9.1) = 64 \div 6 = \mathbf{10.7}$$

- Appendix (vii) Data & formulation for calculating inter-rater reliability scores

Inter-rater reliability test score for: Video 303 Admission		Comparable score: (out of 28)
Making Contact	+49 (out of a possible range of -90 to +90)	$(90 + 49) \times 0.15 = 21$
Mutual Understanding	+45 (out of a possible range of -90 to +90)	$(90 + 45) \times 0.15 = 20$
Making Relationships	+47 (out of a possible range of -120 to +120)	$(120 + 47) \times 0.12 = 20$
Maintaining Relationships	+98 (out of a possible range of -180 to +180)	$(180 + 98) \times 0.08 = 22$
Making Sense of the World	+61 (out of a possible range of -120 to +120)	$(120 + 61) \times 0.12 = 22$
Countertransference and relational inferences	+3 (out of a possible range of -180 to +180)	$(180 + 3) \times 0.08 = 15$
Inter-rater reliability test score for: Video 292 Discharge		Comparable score: (out of 28)
Making Contact	-12 (out of a possible range of -90 to +90)	$(90 - 12) \times 0.15 = 12$
Mutual Understanding	-13 (out of a possible range of -90 to +90)	$(90 - 13) \times 0.15 = 11$
Making Relationships	+10 (out of a possible range of -120 to +120)	$(120 + 10) \times 0.12 = 16$
Maintaining Relationships	+26 (out of a possible range of -180 to +180)	$(180 + 26) \times 0.08 = 16$
Making Sense of the World	+27 (out of a possible range of -120 to +120)	$(120 + 27) \times 0.12 = 18$
Countertransference and relational inferences	-25 (out of a possible range of -180 to +180)	$(180 - 25) \times 0.08 = 12$

Researcher score for Video 303 Admission		Comparable score (out of 28)
Making Contact	+57 (out of a possible range of -90 to +90)	$(90 + 57) \times 0.15 = 22$
Mutual Understanding	+45 (out of a possible range of -90 to +90)	$(90 + 45) \times 0.15 = 20$
Making Relationships	+50 (out of a possible range of -120 to +120)	$(120 + 50) \times 0.12 = 20$
Maintaining Relationships	+119 (out of a possible range of -180 to +180)	$(180 + 119) \times 0.08 = 24$
Making Sense of the World	+53 (out of a possible range of -120 to +120)	$(120 + 53) \times 0.12 = 21$
Countertransference and relational inferences	+42(out of a possible range of -180 to +180)	$(180 + 42) \times 0.08 = 18$

Researcher score for: Video 292 Discharge		Comparable score (out of 28)
Making Contact	+18 (out of a possible range of -90 to +90)	$(90 + 18) \times 0.15 = 16$
Mutual Understanding	+8 (out of a possible range of -90 to +90)	$(90 + 8) \times 0.15 = 15$
Making Relationships	+11 (out of a possible range of -120 to +120)	$(120 + 11) \times 0.12 = 16$
Maintaining Relationships	+14 (out of a possible range of -180 to +180)	$(180 + 14) \times 0.08 = 16$
Making Sense of the World	+92 (out of a possible range of -120 to +120)	$(120 + 92) \times 0.12 = 25$
Countertransference and relational inferences	- 33 (out of a possible range of -180 to +180)	$(180 - 33) \times 0.08 = 12$

Formula for getting comparable score

Care Index possible range of combined maternal sensitivity and infant cooperativeness scores: 0-28

$$28 \div (\text{range}) = (x)$$

Step 1

$$28 \div (\text{range}) = (x)$$

Divide 28 by the range, i.e.

$$28 \div 180 = 0.15$$

Step 2

For a positive number score add the score to half the range, i.e.

$$+14 + 90 = 104$$

For a negative number score take half the range and minus the score, i.e.

$$90 - 14 = 76$$

Step 3

Multiply your new score by (x), i.e.

$$76 \times 0.155 = 11.8$$

Step 4

Add each domain comparable score then divide by 6, i.e.

$$(8.9 + 7.5 + 9.7 + 12.5 + 16.3 + 9.1) = 64 \div 6 = \mathbf{10.7}$$

- Appendix (viii) Maternal and Infant scores

292 Admission																			Total	Comparable score out of 14
Maternal	1c	-10	2a	-4	2b	0	3b	23	3c	17	3d	-11	4a	14	4e	15	5b	0	44	6
Infant	1a	26	2c	-10	3a	-12	4b	-23	4c	-4	4f	1	5a	0	5c	17	5d	17	12	6

292 discharge																			Total	Comparable score out of 14
Maternal	1c	4	2a	4	2b	2	3b	19	3c	13	3d	-3	4a	0	4e	-7	5b	28	60	7
Infant	1a	12	2c	6	3a	-18	4b	17	4c	-18	4f	13	5a	22	5c	19	5d	18	71	7

053 Admission																			Total	Comparable score out of 14
Maternal	1c	-18	2a	-11	2b	-5	3b	27	3c	-5	3d	-21	4a	-9	4e	-21	5b	12	-51	4
Infant	1a	4	2c	-10	3a	-17	4b	8	4c	1	4f	15	5a	2	5c	7	5d	12	22	6

053 discharge																			Total	Comparable score out of 14
Maternal	1c	19	2a	15	2b	16	3b	14	3c	8	3d	23	4a	3	4e	7	5b	20	125	8
Infant	1a	-2	2c	12	3a	7	4b	3	4c	5	4f	10	5a	16	5c	4	5d	8	63	7

090 Admission																			Total score	Comparable score out of 14
Maternal	1c	-12	2a	-22	2b	0	3b	-3	3c	-16	3d	-18	4a	-2	4e	0	5b	0	-73	4
Infant	1a	-3	2c	-19	3a	-10	4b	4	4c	-9	4f	10	5a	15	5c	-7	5d	12	-7	5

090 discharge																			Total	Comparable score out of 14
Maternal	1c	0	2a	-4	2b	-3	3b	17	3c	-2	3d	1	4a	5	4e	-10	5b	12	16	6

090 discharge																				Total	Comparable score out of 14
Maternal	1c	0	2a	-4	2b	-3	3b	17	3c	-2	3d	1	4a	5	4e	-10	5b	12	16	6	
Infant	1a	16	2c	-10	3a	3	4b	10	4c	4	4f	1	5a	2	5c	5	5d	7	38	6	

303 Admission																				Total	Comparable score out of 14
maternal	1a	16	2c	-10	3a	3	4b	10	4c	4	4f	1	5a	2	5c	5	5d	7	38	8	
Infant	1a	19	2c	13	3a	19	4b	14	4c	7	4f	23	5a	0	5c	23	5d	23	141	8	

303 discharge																				Total	Comparable score out of 14
Maternal	1c	26	2a	27	2b	10	3b	26	3c	26	3d	25	4a	27	4e	28	5b	7	202	9	
Infant	1a	27	2c	26	3a	24	4b	27	4c	26	4f	28	5a	7	5c	26	5d	24	215	10	

Appendix (ix) Care Index information

‘The CARE-Index assesses parent-infant interaction (C-I, Crittenden, 1981, 2007). It is a videotaped 3-5 minute free-play observation in which the adult is asked ‘to play with your child as you usually would’. Unlike the Strange Situation, it highlights parental behavior, but because the procedure does not contain any threat, it tends to show parents at their best. Moreover, adults do what they think is the right thing to do with children, thus, giving an assessment of the best of their potential interaction at times of low stress. It should be noted, however, that in the context of court assessment, all assessments are somewhat threatening to the parents. The infant CARE-Index is unique because it can be used from birth to 15 months (after which the Toddler version should be used) and with adults who are not the child’s parents.

There is also flexibility regarding where it can be carried out, e.g., home, office, laboratory, contact room. Reliable coders who are blind to all information about the dyad code the videotapes. Based on directions in the manual, adults are evaluated in terms of sensitivity, control, and unresponsiveness, children in terms of cooperation, compulsivity, difficultness, and passivity. The outcome includes a rating of dyadic synchrony. This is tied to the degree of risk to the child’s future development. The CARE-Index was designed as a screening tool and should always be considered in the light of other evidence. ‘There are more than 40 publications supporting the validity of the CARE-Index, including those addressing its use in situations of maltreatment and maternal psychiatric disorder ‘(Farnfield et al., 2010.)’

‘

Appendix (x) clinical formulations by Dr Danny Goldberger based on observation transcripts and organised around the 6 domains of PIOS.

Clinical formulation based on observation transcript Material from Admission Video 053 (Dr Danny Goldberger)

Making contact

In the first minute mother initially does make contact with her baby. At the very beginning he has a mouthful of fingers and seems expectant and anxious. Mother sings a song and initially this provides joint enjoyment.

There are repeated attempts throughout the three minutes to make contact. However they are increasingly coloured with hostility and anxiety and therefore do not have desired effect of contact.

Mutual understanding

This is fleeting. When mother sings the song there is some evidence of this in the mutual gaze

The playing of 'this little piggy' elicits a moment of mutual understanding as 'He instantly looks at her and smiles a knowing smile with slightly narrowed eyes as his body goes a little still in anticipation.'

Making relationships

Mother manages this initially and then loses contact with her baby. She repeatedly tries to engage him again.

In the first minute, baby continues to watch his mother in her song, but as she veers in to her own thoughts and feelings his attention is lost.

In the second minute an attempt to make contact
'Immediately she takes his left foot and starts playing 'this little piggy'

A little further on, mother tries to make contact but this is more desperate on her part. Her baby has moved from her gaze and attention and:

She immediately starts tapping the table and asking him 'what's that?' She swings her head about pretending to look for the origin of the sound.

Maintaining Relationships

In terms of maintaining the relationship there is little evidence of this here. Baby does present an open face at times, and this could be an invitation to mother to respond. However the desperation of mother and mixed messages that are communicated seem to shift baby in to a more avoidant position where he tries to turn his head and keep out of mother's gaze and voice.

Making Sense of the World

There are attempts to try and make sense of the world, but these are rarely of a contingent kind.

For example, in the second minute

‘He turns his face away and buries it in the chair wing. She asks if he’s ‘going all shy’’

This attempt to find some meaning in his actions sadly misses the evidence that he is struggling with her intrusive nature, but does indicate a mother with some capacity to notice her child’s avoidance.

Internal world inferences based on transference and countertransference phenomena as observed between the pair, and as experienced and described by the observer.

This three-minute observation finds mother and baby with the possibility of making contact. Early on, despite the ambivalent anxiety of baby, there is some evidence that they can find a place together. The singing of this mother invites her baby and his open face indicates that he is still willing to have meaningful contact.

This falls away throughout the three minutes. Mother’s tendency to be intrusive leads to evasion and part-object defences on the part of baby.

For example in the first minute:

‘She sings this she waggles his toe and at the point of the climax she jumps back to accentuate the ending and thus lets go of his toe. He laughs at the climax and grabs his toe.’

Later ‘He has one finger in his mouth and his free arms and legs are moving about quite a lot’

The use of primitive defences is seen in the final minute as he resorts to a more muscular kind of holding together:

‘He looks at her mouth and smiles a little. Just as she says ‘yeah, that’s better’, he looks away, grabbing his toes in his hands. The whole thing feels quite muscular and tense.’

This ending is painful as mother can no longer bear the discordant nature of their time and she seems to feel humiliated in turn humiliating her son as a ‘fat boy, naughty boy’

Formulation:

This mother and baby fall away in to a discordant and mis-attuned dyad. The possibilities of the first minute have been washed away by the third minute. I will focus on the infant who makes use of primitive part-object defences to initially keep hold of a positive experience of his caregiver. Mother's difficulty in marking this moment and her need to continue in a more active at times manic kind of activity means that there are repeated actions on the part of baby to maintain some internal integrity.

At the end, this baby is more vigilant in company with his mother and in keeping with this, he has been evasive of her gaze and voice for about two minutes, which has impacted profoundly on his mother who struggles to contain her own sense of disappointment and perhaps humiliation.

His mother's attempt to recreate some contact with her baby make use of swooping in rather suddenly to his face, banging a table to try and elicit attention. She does also try and use the more appropriate nursery rhyme 'this little piggy' but seems to struggle when he does not look at her and perhaps pinches him. The baby that needs an adult to try and make sense of these moments is left without this continuing kind of object and he resorts to self-regulation.

My own feelings were complicated. Overall one is left feeling sad at the end of the observation, as there is such a gap between mother and baby. There is something impressively resilient in the baby's use of defences, but a worry about what this kind of repeated experience might create.

Please comment on the degree to which the transcript provided speculation about the infant's internal world and how this might be mediating his experiences with his mother.

The transcript was helpful in thinking about the infant's internal world. The observation of the differences between mother's voice and the infant's reactions to it, in particular lead one to think about what is being projected in the relationship and not so obviously heard in the voice.

Finally, please comment on whether you felt the transcript provided enough of the right kind of information for you to formulate and think about appropriate treatments.

The transcript also helped with formulating a treatment for this dyad. Whilst there is plainly a great deal of positive and developmentally appropriate care, the occasional sense that this infant is trying to manage something slightly awry in the contact. I think that Video Interactive Guidance might help quickly with this dyad and enable there to be thought about what is going well and noticing some of these slightly jarring experiences

**Clinical formulation by Dr Danny Goldberger
based on observation transcript by researcher**

053 dis

Making contact

1. Mother is patient as they wait at beginning. She asks quietly what is wrong as he makes a complaint.
2. Mother makes a noise and repeats infant's name. He glances at her and then away quickly.
3. Mother waggles a toe and makes a sound. He leans forward and to her mouth and there is genuine contact.
4. Mother says something in a sing-song and he vocalizes and flaps.
5. She likes this and taps his nose. He does not like this and shakes his head. Contact seems lost.
6. Mother is able to stay with her son despite the change. His complaint turns to a cough and she comments on this in a way that quietens him.
7. She looks down and strokes his legs and talking affectionately which leads to his the stroking his legs – perhaps embodying the feeling.
8. Mother feels they have lost contact and perhaps misses the moment of contingency.
9. The final part of this first minute they come back together as mother notices his dummy to the side and he appreciates this in his mouth and this is repeated by mother.

10. Mother reflects her son's interest in his dummy.
11. Infant does not look at mother and she taps his nose, which irritates him.
12. She asks 'don't you want it?' which reflects something of the moment but misses the sense of distance.
13. Although looking dejected, she kisses his foot and he coos. She copies the sound.
14. This continues as she mimics him and he finds amusement.
15. He frowns and she wonders about his teeth and she frowns for him, which allows for his complaint.
16. Momentarily she acknowledges his pain and then needs a diversion and gets a toy.

17. Baby watches as the toy is played with and there is contact. He indicates the ambivalent sense of things with sounds and looks that seem a mixture of pleasure and pain.
18. Noticing this, mother gives him his dummy and ends play by placing toy in between his legs, perhaps ending contact.
19. As though back in touch mother notices his disturbed equilibrium and uses the toy to stroke his arm, mimicking soothing perhaps.
20. Little contact as he flops to one side and an attempt to regain attention is perhaps lost in the pain of his teeth.
21. Mother sympathetically mimics the cough and there is contact again.
22. They meet eye to eye and there is a more energetic play, which has genuine gurgle.
23. Hard to retain contact as physical pain seems to resurface

Mutual understanding

- 1) Not mutual understanding to begin with as mother seems unaware of his gaze.
-

-
- 2) Not yet understanding although there is acknowledgement of each other.
 - 3) There is mutuality here as infant looks at the mouth making the noise.
 - 4) There is a genuine shared moment as he responds positively to mother's singsong. There is to and fro for a moment.
 - 5) Understanding slips away, as mother seems premature and perhaps experienced as intrusive.
 - 6) As mother sympathises with his cough there is a chance for mutuality as he responds.
 - 7) The stroking of his legs momentarily allows for him to mark the feeling of mutuality.
 - 8) Mother does not initially understand the move of her son's gaze.
 - 9) She recovers and they have a moment of mutuality again as they both appreciate the dummy in his mouth.

 - 10) Mother acknowledges her son's satisfaction with dummy.
 - 11) Mother seems to miss the understanding as she taps his nose and disturbs him.
 - 12) Mother appreciates something is up but perhaps not the emotional content.
 - 13) Mother appreciates need for contact and kisses foot and is affectionate.
 - 14) They have a joined moment of amusement as she mimics him.
 - 15) As he frowns, mother seems attuned to something for her son and wonders about his pain.
 - 16) Having acknowledged pain, mother requires a diversion.

 - 17) Mother tries to avoid the physical pain with play.
 - 18) Mother then notices this and ends play. Seems to give up momentarily.
 - 19) Mother understands they have lost contact and tries to join in the soothing sensations.
 - 20) Little sense of understanding as infant seems resigned.
 - 21) Mother initiates sense of understanding as she mimics cough.
 - 22) Meet eye to eye and there seems to be some genuine mutuality.
 - 23) Leading to energetic play.

Making relationships

1. No comment
 2. Infant not yet ready for relationship
 3. Infant looks at hand and then mother's mouth, reminiscent of Trevarthen's proto-conversation.
 4. Sing-song and then his vocalization is the classic serve and return of mother-infant communication.
 5. Relationship is interrupted as mother misjudges readiness for more physical contact.
 6. Mother recovers and sympathises in such a way that they can make a relationship – recovering from losing contact.
 7. As she strokes his legs and talks with sympathy the infant seems to take something in with the stroke of his leg.
 8. Mother seems to initially feel there is something lost as her son looks down.
 9. There is some recovery as they seem to share his internal moment of appreciation for the dummy in his mouth.
 10. Mother more in touch with son's needs with his dummy.
 11. Relationship is always precarious as mother touches his nose and interferes
-

-
- in sense of calm.
12. In noting something is wrong there is precursor to re-establishing contact.
 13. In kissing foot there is move to relate
 14. IN mimicking him they have a joint moment and relationship foundation.
 15. Continues a smother wonders aloud about son's physical pain.
 16. Mother diverts form contact
 17. Uses play but this keeps them away from physical pain.
 18. Infant flops and seems to use self-soothing
 19. Mother reinitiates and joins soothing by gently tickling.
 20. Infant still self-oriented.
 21. Mother notices this and mimics.
 22. Relationships is enlivened.
 23. Mark fun in relationship and joined experience.

Maintaining Relationships

1. No comment
2. No comment
3. A relationship is apparent to be maintained now.
4. Mother's singsong is inviting and there is a moment of development.
5. This is not maintained as mother flicks nose and this seems a disturbance.
6. Mother maintains relationship in her sympathetic attitude.
7. The repeated stroke of his leg suggests that he is introjecting something of this moment.
8. Mother struggles to maintain the relationship, missing the sense that there might be connection even if they are not eye-to-eye.
9. Mother does not collapse and in helping him to his dummy there seems maintenance of something between the two of them.
10. Uses dummy to bring them together
11. Irritates the contact
12. Tries to understand son, but perhaps does not appreciate his needs.
13. Mother stays with the relationship and in kissing foot seems to establish again.
14. Maintains as she mimics him and he finds amusement.
15. Mother able to allow for infant's complaint by interest in his state.
16. Unable to maintain contact in the moment of acknowledging pain and finds a diversion.
17. Use of toy seems to allow for some maintenance of relationship, as there is evidence of ambivalence.
18. A moment of contact made and lost as mother gives son dummy and then places toy between his legs seeming to end contact.
19. Mother then tries to re-establish contact tickling arm and perhaps involved in soothing.
20. Hard to maintain relationship as infant flops perhaps due to physical pain.
21. Mother re-establishes contact as she mimics cough
22. Maintenance of relationship as they share enjoyment.

Making Sense of the World

-
1. No comment
 2. Seems as though infant is gauging the safety of this situation
 3. Infant is more situated to the relationship and not so cautious.
 4. Mother seems to understand that there is a place for them to communicate and invites infant in, seeming to help with an understanding of the pace for relating.
 5. This is lost as mother flicks him and one wonders what this might mean for his meaning making.
 6. Mother seems to join him in understanding there is something wrong and offers a sympathetic tone.
 7. The infant repeating the stroke of his leg suggests a moment of being joined and potentially of them making sense of the world in the sense that one can lose interpersonal contact and then regain contact
 8. Initially mother misses opportunity to make sense of the world in the sense that her infant might be internalizing a good feeling.
 9. In noticing his dummy and offering it to him there seems to be some making sense of the world in the sense that there was something missing and she has found some way of filling a gap.
 10. Reflections of son's interest and perhaps understanding of soothing as managing oneself.
 11. Mother intrusive to infant when not looking at her. Experience is dissonant one in terms of meaning making.
 12. Mother attempt to reflect son's state but seems to miss the intent and dejection.
 13. Attempt at meaning making as mother mimics cooing.
 14. They share amusement.
 15. Mother seems to understand that there is something wrong and this allows for his complaint.
 16. In diverting from physical pain is the meaning made one of the need to avoid some sensations of pain.
 17. A sense that infant remains in his own world with pain as mother tries to cheer him up.
 18. Mother does notice his eye line and offers dummy and ends play by placing toy in between his legs, perhaps missing the moment to continue contact. There is a dejected sense to this.
 19. Mother seems to understand need for soothing. (Auxiliary ego?)
 20. He flops to one side. Meaning of sometimes help not being enough.
 21. Mother sympathetically mimics the cough and there is contact again. Meaning that mother can understand?
 22. They meet eye to eye and there is a more energetic play which has genuine gurgle.

Internal world inferences based on transference and countertransference phenomena as observed between the pair, and as experienced and described by the observer.

Formulation:

Infant still struggles to confidently trust mother to understand, attune and contain his emotional states. However, there is little evidence of resorting to primitive defences in the face of paranoid-schizoid states. This is more ambivalent in nature and there is a feeling that this infant still resorts to self-soothing at times but is better able to rely on mother to understand and attend to his emotional states.

Mother and infant seemed to move through ambivalent states throughout. In general there was hope in the relationship and one felt that this infant was building confidence in his caregiver.

Please comment on the degree to which the transcript provided speculation about the infant's internal world and how this might be mediating his experiences with his mother. Also, please comment on the degree to which this helped to inform your formulation.

The transcript was helpful in speculating about the infant's internal world. One could see that he seemed to slip in to moments of internal dejection and soothing and that his mother was catching up a little. There was also evidence that he was buoyed by times when his mother either reflected or mirrored his states and that she could lift his mood to the degree they were mutually enjoying play in the third minute.

This observation indicates significant improvement in the relationship between parent and infant and also of mother to be more receptive to her infant's cues and less intrusive. I would recommend a lengthier parent-infant psychotherapy to work on the parent-infant psychotherapy, improving on consistency in response from mother and continuing to strengthen the infant's internal world. In this excerpt there remained a feeling that he did not feel safe in terms of what he might receive from his main caregiver.

Clinical formulation by Dr Danny Goldberger based on observation transcript by researcher

303 adm

Making contact

1. Begins with interruption and statement that filming 'is interrupted because mother decides that baby is hungry.' Is mother trying for contact
 2. Mother asks sympathetically about tiredness and infant responds with sound (some contact)
 3. He brings his left hand to his mouth and then to his left eye and makes a brief sound of complaint. She asks with sympathy if he is tired and he makes a slightly louder sound. As his hand comes down she catches it with her little finger and he grips onto it and looks at it.
 4. Mother's sympathetic sound to indicate understanding
 5. Mother asks a number of questions in gentle tone
 6. He looks at mother and holds her gaze momentarily
 7. She asks if he likes holding her finger matching his facial look with her vocal intonation.
 8. He looks eye to eye and lets go. Perhaps what is seen is more intense than
-

-
- the voice despite sense of contact.
9. They look away
 10. Lifts his foot and she tickles it. Responding to each other
 11. An interchange that is interpersonal occurs with mother following son's vocalization.
 12. Then he makes a complaining sound and mother copies this again in a gentle tone.
 13. This catches his attention and with mother focused on wiping his mouth, son has a chance to take in his mother visually a little more.
 14. As she holds his legs, he explores her face.
 15. When mother offers him her gaze, which seems intense this leads to him looking down.
 16. Mother responds by giving him space, still attuned.
 17. Infant makes a more conversational – if grumbling – sound and mother responds conversationally.
 18. Then she tickles his foot again.

 19. In the second minute mother makes contact in a more three dimensional sense. She links temperature of room to son's hot foot. As she tickles his foot, he watches her fingers on his foot and hand.
 20. His look is one of enjoyment and her voice seems to add to the sensuality of the moment.
 21. He looks at her and smiles, reflecting mother's smile.
 22. Mother looks up and again her direct smile seems too much. Temperature of mother's comment is reflected in his need to manage their mutual temperature.
 23. Mother understands and allows for space. She acknowledges verbally that he had liked the tickles.
 24. Infant seems to make something of the experience rubbing his soles together and there is a physical sense of excitement.
 25. When mother tries to tickle him he complains, and mother is able to manage this protest.
 26. Mother wipes his mouth and gives infant the cloth, which he takes.
 27. When he loses interest mother tries and then accepts this.
 28. As he grizzles she offers a finger and he takes this whilst she wonders what is wrong.

 29. IN this minute, the infant is allowed to moan and given license to do so.
 30. When mother asks if it is wind with a comical face he is amused and they join in the amusement.
 31. Infant again manages the intensity of contact.
 32. Mother needs to wait and calm down for a short while.
 33. They have a conversational interchange
 34. Again son moans and mother tries to understand what this is about

Mutual understanding

1. No indication of mutuality
 2. Mother tries to state what might be happening for infant
 3. Mother is often indicating understanding of her son or at least attempts to.
 4. ‘
 5. ‘
-

-
6. Infant demonstrates interest and perhaps feels understood
 7. Mother indicates understanding by matching vocalization to his look
 8. Not mutual as he looks away
 9. Mother perhaps intuits need for space and looks away
 10. A chance to reconnect
 11. Mother and son interact positively
 12. Mother indicates some appreciation of son's complaint
 13. As mother's face is diverted he has a look.
 14. He explores her face.
 15. Her returned gaze seems to much and lack of mutuality
 16. Mother understands need for space again
 17. Son responds and they have a genuinely interactional period
 18. Mother returns to the sensual as well
-
19. Beings with mother understanding something of the physical temperatures
(does this unconsciously link to their relational temperature?)
 20. Mother adds to the sensuality with her voice
 21. Mutuality in son's smile
 22. Mother's smile is managed by son looking away
 23. Mother understands this and reflects on the experience they shared.
 24. Mutuality is a moment to be marked physically perhaps by son rubbing feet
 25. Mother manages her son's complaint
 26. Mother seems to understand son also needs to have some control over cloth
and body
 27. Mother accepts son losing interest
 28. Mother offers a finger to help with the complaint and again tries to
understand
-
29. Mother understand son need to complain
 30. Mother's amusement seems to catch and they share something
 31. Infant manages the contact and distance
 32. Mother responds appropriately
 33. Allows for conversation
 34. As son moans mother tries to understand

Making relationships

1. Not possible to assess
 2. Attempt to establish relationship
 3. Mother lets son know she is trying to understand both verbally and
physically
 4. Mother seeks to let son know she is available
 5. Mother continues to establish relationship
 6. Son responds by looking at mother
 7. Mother again lets son she is trying to be with him and understand and create
relationship
 8. Perhaps her face has something less welcoming
 9. Mother understands and looks away
 10. Mother takes opportunity to tickle foot and make more relating possible
 11. The relationship takes on a conversational aspect
 12. Complaint is mimicked by mother in a gentle tone
 13. Son takes in mother with a little space
-

-
14. He continues to take in mother
 15. Mother's gaze again seems intense for son
 16. Mother understands and also gives son space
 17. This leads to more opportunities to make relationship in a conversational period
 18. More physical contact

 19. Mother is in contact with son's physical state and that of environment
 20. Mother adds something to their experience
 21. Son indicates inter-relating with his smile
 22. Son then manages the intensity and maintains something of their relationship
 23. Mother can respond and they learn something
 24. Son seems to internalize something of this positive contact
 25. Mother better able to manage complaint
 26. Mother gives son some agency with the cloth
 27. Mother can accept the to and fro of this relationship
 28. Mother offers finger to maintain the relationship

 29. Mother now is in tune and allows for the complaint
 30. Mother's amusement allows for something to be shared
 31. Infant manages distance
 32. Mother's response is appropriate
 33. Conversational aspect to their relationship
 34. Mother tries to understand meaning of son's communication

Maintaining Relationships

1. Not possible to assess
 2. Not possible to assess
 3. Mother maintains contact letting son know she is trying to be with him
 4. This relating continues
 5. Mother has to establish contact and is consistent
 6. Response from son
 7. More maintenance by mother
 8. Gaze seems to break contact
 9. Mother offers understanding of this intuitively
 10. Mother tickles foot and re-establishes contact
 11. This allows for an extra dimension of conversational interaction
 12. Mother continues to keep contact with son
 13. Son now takes mother in visually
 14. '
 15. Mother's gaze again seems intense for son
 16. Mother's understanding helps to establish contact
 17. The relationship seems to have a development in this moment
 18. Physical contact to add to the vocal

 19. Mother consciously and unconsciously mirrors understanding and maintenance of relationship
 20. Mother's fluttery voice maintains sense of understanding
 21. Son responds to this
 22. It is son that manages the intensity
-

-
23. Mother responds appropriately
 24. Son then seems to internalize and mark this moment
 25. Mother manages complaint and
 26. Then gives son some agency with cloth. Allows for mutuality
 27. Mother accepts the relationship can be intense and need space
 28. Mother's finger seems appropriate to maintain contact

29. Mother's attunement is positive in maintain their contact
30. Mother's amusement truly does draw them together
31. Infant also manages some space for himself
32. Appropriate maternal response
33. Leads to conversational contact
34. And mother can allow for the final complaint

Making Sense of the World

Throughout the first minute, mother shows repeated attempts to make sense of her son's world and in turn to offer her understanding to him. They have some mutual moments, and yet there is something difficult to hold in her gaze.

Mother indicates a link as she connects son's heat to temperature in the room. This conscious and unconscious understanding seems to lead to the two of them coming together and having space. Although space is directed by the infant, mother really is responsive to this and in the final minutes there is a making sense of the world where some management of interpersonal distance, allowing for mutuality and agency seems to move to conversational interactions.

Internal world inferences based on transference and countertransference phenomena as observed between the pair, and as experienced and described by the observer.

1. In the first minute, the transference comments seem to elicit the sense that mother is trying to understand her son and to be available as a meaning maker. Equally there is something in her gaze that is difficult for her son to bear.
2. The nature of this dyad able to come together and take space and come together again has a balance and rhythm to it. Although at time one wonders what the infant sees in mother's face, there is also a lot to be enjoyed in the projections between them, which end in mutual enjoyment, excitement and reciprocal understanding.

Formulation:

Broadly the mother and infant demonstrate positive relational aspects. This infant is intact enough to manage the times when he finds the contact with his mother to be too much. There is something to be thought about in the way that he struggles with direct visual contact and what is experienced in her gaze. I would speculate that there is something less balanced, which is a contrast to her voice, which seems to invite contact.

This infant is able to manage with the developed defence of giving himself space and also demonstrates the capacity to internalize some of the good experience in this brief interchange.

Please comment on the degree to which the transcript provided speculation about the infant's internal world and how this might be mediating his experiences with his mother. Also, please comment on the degree to which this helped to inform your formulation.

The transcript was helpful in thinking about the infant's internal world. The observation of the differences between mother's voice and the infant's reactions to it in particular lead one to think about what is being projected in the relationship and not so obviously heard in the voice.

Clinical formulation by Dr Danny Goldberger based on observation transcript by researcher

303 dis

Making contact

1. Mother and son begin in obvious contact, enjoying their time
 2. This builds still briefly with all senses engaged
 3. Infant manages contact breaking briefly. Mother responds both physically and vocally, indicating reluctant acceptance
 4. Infant continues the need for distance management and drops face down. Contact is momentarily lost mother seems to feel rejected.
 5. Mother recovers and re-engages him waggling foot which moves infant to look at mother and smile
 6. This pleasure fades from infant and mother moves to tap his hands looking out for any response.
 7. Mother is resilient and uses different parts of body with open questions to enquire about his world. This does draw him back in and the feeling of observer is uplifted
 8. The sense of something too much reflected in a little sick that mother wipes up maintaining contact throughout
 9. Mother returns the sensuous play to underside of feet and she then introduces a game they both know, seen in his anticipation
 10. The game is one they both know and the contact and excitement build throughout
-

-
11. Mother continues this game and the initial excitement is slightly more muted which mother can respond to
 12. Mother acknowledges the need to manage the excitement and respectfully allows this in the room, creating a different kind of contact
 13. In the final moments, the build-up of excitement is initiated by the infant and the glee is more natural on his part, allowing for generous and enjoyable contact.

 14. Infant is able to look up to the ceiling and find a controlled method of breaking contact
 15. As he rejoins contact, mother is waiting and he responds with huge smile and exclaims
 16. She then offers a song they both know and anticipation and enjoyment are engaged again
 17. Mother notices that her son is also vocalizing to the son and gives him this space.
 18. As infant requires a break, mother is respectful and the sense is she has maintained internal contact with son
 19. Mother then offer the invitation of another song and this is taken up by infant.
 20. Mother seems to be aware that contact can wax and wane and whilst singing she is scanning her son to ensure it is still a welcome joint activity
 21. At the end of a build-up mother raises his hands and cheers and seems to mark the moment and allow for her son to have a break if necessary.

 22. Close contact is lost momentarily. Mother continues to validate son's experience vocally and then to offer herself physically
 Mother offers another familiar game and contact is regained as he giggles and mother offers appreciative laugh.
 Mother is now matching the rise and fall of infant's emotional states a little more accurately.
 This contentment seems to continue and is burst a little when he makes a 'determined sort of announcement'.
 Mother however reflects this back to him and maintains contact. There is an interchange where mother tries to validate with her face his vocalisations
 There is a sense of getting to know each other and as this builds a little he is sick, perhaps it had been too much
 23. Mother wipes this and reflects the unpleasantness of it for her son
 24. Mother is then able to focus on chance of more sick and she is attending to his needs, having allowed the focus to shift from the intensity of their face to his more physical needs.

Mutual understanding

1. Seems to begin with mutuality
 2. Building of joint experience
 3. Mother responds to infants needs to manage contact and there is a sense of her understanding something of his needs
 4. Mother seems to feel rejected here and there is a sense they are momentarily in their own experiences
 5. In between mutuality
 6. Mother respects his need for distance whilst inviting something else. Is this
-

-
- mutual understanding – perhaps not?
7. Mother builds understanding offering a genuine inquisitive tone and stance
 8. Mother responds to the physical sickening up – in between mutual understanding?
 9. Mutual understanding as mother introduces a game they both know and there is genuine anticipation
 10. Mutual understanding is reflected in play
 11. Mother appreciates the way that excitement can fade a little
 12. Mutual understanding as mother responds appropriately to need for distance
 13. Mutual understanding is more natural as play is directed more by infant

 14. Mutual understanding as mother respects infant's control of environment – internal and external slightly
 15. Mother waits for his return and this is to and fro of relational contact
 16. Mutual understanding in anticipation again
 17. Mother understands her son is learning and gives him space to vocalise the song.
 18. In this moment one sense there is internal mutuality and not just what one sees
 19. Mother again searches for mutuality offering a familiar song..
 20. Mother understands that contact can wax and wane and whilst singing she is scanning her son to ensure it is still a welcome joint activity
 21. At the end mother accentuates mutual understanding marking the crescendo of this moment.
 22. Although close contact is lost momentarily, mother continues to validate son's experience vocally and then to offer herself physically
 23. Mutual understanding in another familiar game and contact is regained
 24. Mother is now matching the rise and fall of infant's emotional states a little more accurately.
 25. Misunderstanding seems marked by a 'determined sort of announcement' and one feels that the excitement might have masked some internal upset – physical or emotional..
 26. There is an interchange where mother tries to validate with her face his vocalisations.
 27. There is a sense of getting to know each other and as this builds a little he is sick, perhaps it had been too much, but there was mutuality
 28. Mother wipes this and reflects the unpleasantness of it for her son. Mother is then able to focus on chance of more sick and she is attending to his needs, having allowed the focus to shift from the intensity of their face to his more physical needs.

Making relationships

1. Enter the scene with established enjoyment
 2. This builds still briefly with all senses engaged. How relationships can be multi-sensory
 3. Infant manages contact breaking briefly. Mother responds both physically and vocally, indicating reluctant acceptance. To and fro are seen here
 4. Infant continues the need for distance management and drops face down. Contact is momentarily lost mother seems to feel rejected. Something is lost
 5. Mother recovers and re-engages him waggling foot, which moves infant to look at mother and smile. The sense that relationships can recover seems
-

-
- marked by this moment.
6. Mother respectful that infant can now build and control contact and relating
 7. Mother is active in building relationship in this brief moment.
 8. Mother attends to physical need
 9. Mother uses familiarity to build the relationship in the sense of mutual enjoyment
 10. Son engages in a game they both know
 11. Mother builds sense that relating can be high and then a little more muted without loss of contact
 12. Mother respects capacity for infant to manage relationship
 13. Here one can see that making and maintaining relationship is part of infant's role too.
-
14. This moments leads to
 15. Building understanding in son that mother can wait for him to be available to her
 16. Build relationship via familiarity again
 17. Mother allows for her son's learning and to vocalise the song.
 18. In this moment one feels that mother is building the projective and introjective sense of relating in the non-verbal communication
 19. Mother offers familiar game again to build again to mutuality
 20. Mother seems to be aware that contact can wax and wane and whilst singing she is scanning her son to ensure it is still a welcome joint activity
 21. At the end of a build-up mother raises his hands and cheers and seems to mark the moment and allow for her son to have a break if necessary.
-
22. Close contact is lost momentarily. Mother continues to validate son's experience vocally and then to offer herself physically
 23. Mother offers another familiar game and contact is regained as he giggles and mother offers appreciative laugh.
 24. Mother is now matching the rise and fall of infant's emotional states a little more accurately.
 25. This contentment seems to continue and is burst a little when he makes a 'determined sort of announcement'.
 26. Mother however reflects this back to him and maintains contact. There is an interchange where mother tries to validate with her face his vocalisations
 27. There is a sense of getting to know each other and as this builds a little he is sick, perhaps it had been too much. Sense relationships can also be a little overwhelming if this is not an oxymoron
 28. Mother wipes this and reflects the unpleasantness of it for her son. Mother is then able to focus on chance of more sick and she is attending to his needs, having allowed the focus to shift from the intensity of their face to his more physical needs. Multi-sensorial nature of relationships again impacts here and mother's role as caretaker

Maintaining Relationships

1. Seem to begin with something being maintained
 2. They join in enjoyment together
 3. Mother understands need for a break
 4. Although mother seems rejected she does not lose hope.
 5. Mother re-engages and in this way maintains relationship as one that can
-

-
- shift
6. Mother continues to seek contact and understanding.
 7. Mother maintains contact looking for open contact between them
 8. The sense of something too much reflected in a little sick. Mother attends to this in a relational way
 9. Mother then builds anticipation of something they can both enjoy
 10. Maintenance of relationship seems to build through this period
 11. Mother allows for the excitement to shift a little
 12. Mother and son seem to understand need to maintain relationships by shifts in intensity
 13. In the final moments, the build-up of excitement is initiated by the infant and the glee is more natural on his part, allowing for generous and enjoyable contact. There is genuine maintaining of relationship here

 14. Infant is able to break contact
 15. As he rejoins contact, mother is waiting and he responds with huge smile and exclaims
 16. She then offers a song they both know and anticipation and enjoyment are engaged again
 17. Mother notices that her son is also vocalizing to the son and gives him this space. Maintaining the need for learning and agency
 18. As infant requires a break, mother is respectful and the sense is she has maintained internal contact with son
 19. Mother then offer the invitation of another song and this is taken up by infant.
 20. Mother seems to be aware that contact can wax and wane and whilst singing she is scanning her son to ensure it is still a welcome joint activity. Builds sense of mutual attempt to understand
 21. Maintaining the relationship in marking something momentous in the moment.

 22. Maintenance of relationship in mother marking son's vocalisations
 23. Relationship builds through familiarity to genuine joint enjoyment.
 24. Mother is now matching the rise and fall of infant's emotional states a little more accurately.
 25. This contentment seems to continue and is burst a little when he makes a 'determined sort of announcement'. A moment when there is a loss of mutuality
 26. Mother however reflects this back to him and maintains contact. There is an interchange where mother tries to validate with her face his vocalisations
 27. There is a sense of getting to know each other and as this builds a little he is sick, perhaps it had been too much
 28. Mother wipes this and reflects the unpleasantness of it for her son. Mother is then able to focus on chance of more sick and she is attending to his needs, having allowed the focus to shift from the intensity of their face to his more physical needs.

Making Sense of the World

Throughout this period, there is clear evidence that mother is respectfully trying to understand the world for herself, through her son, and from him. This allows them to have obvious moments when they both have similar

understanding.

At the end when he is sick, this seems to have punctured them both having a mutual understanding. However, in attending to his needs and reflected the difficulty one is left feeling that they do have mutual understanding and that mother is crucially important in his care.

Internal world inferences based on transference and countertransference phenomena as observed between the pair, and as experienced and described by the observer.

Throughout this period one can feel how drawn in the observer to the enjoyment on display. It is perhaps therefore secondary that one notices the breaks in contact and proximity and how the need for distance is part of the drive for closeness. One is reminded of Meltzer's time and distance and the work of Stern in noting the 'dance' between parent and infant.

The shock of his declaration at the end of the excerpt made me wonder at how difficult it is to be aware of all that is going on and our wish for something good to continue without break.

Formulation:

Mother seems emotionally intact and able to respond to her son's invitations and also his need to moderate their intense contact.

I am struck by the potent way this child can manage moments when he needs a break from the closeness. He equally is very welcoming of their play and the enjoyment they have is genuine. The second minute where he directs the contact is especially rewarding to all concerned.

One might think that this dyad would be able to manage well without further intervention.

Please comment on the degree to which the transcript provided speculation about the infant's internal world and how this might be mediating his experiences with his mother. Also, please comment on the degree to which this helped to inform your formulation.
