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MATERNAL SENSITIVITY AND EGO DEFENSE DEVELOPMENT

City University of New York

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MATERNAL SENSITIVITY AND EGO DEFENSE DEVELOPMENT

by

William F. Fischer

A dissertation submitted to the Graduate
Faculty of Psychology in partial fulfillment
of the requirements for the Degree of Doctor
of Philosophy, The City University of New
York.

1985

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This manuscript has been read and accepted for the Graduate Faculty in Psychology in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

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Abstract

MATERNAL SENSITIVITY AND EGO DEFENSE DEVELOPMENT

by

William F. Fischer

Adviser: Professor Arietta Slade

This dissertation is a longitudinal, naturalistic study of the relationship of early maternal sensitivity to toddler communications and the later quality of ego defense development. The central hypothesis tested is that mothers who are rated less sensitive during the second year will have children in their sixth year who have less effective, less mature ego defense organizations when compared to subjects with more sensitive mothers.

Maternal sensitivity was measured qualitatively and quantitatively. A modified version of a scale from M.S. Ainsworth's System For Rating Maternal Care Behavior (1976) was used to generate sensitivity means for each of the four mothers in the study. The measure was applied to data from time and event samples on the four mother-toddler pairs as they interacted socially in a nursery between twelve months and twenty four months old. The four mothers had sensitivity means that differed at a statistically significant level.

Each toddler subject was again studied when they were five and a half years old to assess the maturity and efficacy of their ego defense organization. This was accomplished by analyzing data from: a) a full battery of psychological tests; b) current and former teacher observations and c) a series of naturalistic observations of each subject in their kindergarten classroom. The aim of the ego defense analysis was to discern the varying degrees to which each subject utilized either immature, alloplastic defenses (projection, denial, projective identification, avoidance, primitive identification with the aggressor), or mature, autoplasic defenses (repression, reaction formation, isolation).

The central hypothesis correlating the less sensitive mothers with children who had more immature ego defense organizations in the sixth year was confirmed unequivocally in two subjects and to a more limited degree in the two other subjects. This results supports views that emphasize the actual quality of early social relations as a central determinant in ego defense organization. This dissertation's specific interpretation of the result is that the interactive patterns during the second year of the primary caretaker's being unaware of, not responding to, not recognizing and not accepting aspects of the toddler's self-presentation are identified with by the toddler and form the core of that child's ego defense organization.

Dedication

Philip Michael Kelleher, M.D.

1926 - 1985

Psychiatrist-In-Charge
North Belnap II
McLean Hospital
Belmont, Massachusetts

In honor of his achievements in
integrating biology; neurology;
psychoanalysis; and developmental
psychology into a unique framework
for the treatment of major mental
illness.

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I. INTRODUCTION: STATEMENT OF THE DISSERTATION PURPOSE

What I am saying, then, is that not only are the defense mechanisms created, or at least decisively influenced, as a result of the mother-child relations, but also that these mechanisms make use for this purpose of certain properties, of modes of functioning, either actually or potentially present at birth.

Defense mechanisms are at the very origin of man's capacity to think, to speak, to perform mental operations. It must be our concern to discover how they originate and what may lead to disturbances in their formation. (Spitz, 1961)

The purpose of this dissertation is to make a naturalistic, longitudinal research contribution to the study of the maternal interactive behaviors with her infant/toddler that may influence that child's later ego development, particularly his ego defense organization.

This study has selected variables of mother-infant interactive processes, ego development and developmental epoch that an overview of the theoretical and research literature suggests should be interdependent.

Maternal sensitive responsiveness to her toddler's communicative signals is the variable of mother-infant interactive behavior under study. The area of ego development selected to be studied is the ego mechanisms of defense. The developmental epochs selected for naturalistic study

are the second year and the late oedipal period (Ages 5-6). The second year of life will be studied to assess the quality of maternal responsivity and sensitivity to the communicative signals of her toddler. The sixth year of life (late oedipal period) will be studied to determine the quality, efficacy and developmental level of the ego defense organization.

This study's central hypothesis is that deficient maternal sensitive responsivity during the second year will result in an ineffective, immature, less differentiated, more primitive organization of defense mechanisms in the sixth year and, that, correspondingly, adequate maternal sensitivity and responsivity will result in an organization of ego defense mechanisms that is mature, effective, well differentiated, and primarily adaptive. A secondary hypothesis is that mothers who are rated overall less sensitively responsive to their toddler during the second year will show the greatest difference in sensitivity during the rapprochement subphase of Separation - Individuation, a critical period in early development identified recently. (Mahler, 1972) An additional secondary hypothesis is that mothers who are rated overall less sensitively responsive will have interactions with their toddler that have fewer moments of mutual responsiveness than mother's rated more sensitively responsive.

The basis for this project is the theory and research of two disparate but related areas in current developmental psychology; psychoanalysis and mother-infant interaction

developmental research. A limited number of prominent psychoanalysts have made explicit their belief in a linkage between real qualities of the early mother-infant relation and the quality and type of ego organization of mechanisms of defense. (Winnicott 1960a, 1960b; Spitz 1961; Mahler & McDevitt 1968; Pine 1982)

A complementary line of research to the psychoanalytic studies cited is the veritable explosion of research on mother-infant interaction that highlights the crucial contributions of maternal interactive behaviors to her infant's social and cognitive development. (Sander 1980; Lozoff 1977) A major discovery of this recent infant development research is the exquisite temporal synchrony of numerous mother-infant behaviors such that mother and infant create an ongoing reciprocal, mutually regulated behavioral system. (Sander 1962, 1977; Stern, 1974a, 1974b; Brazelton, Koslowski and Main 1974; Condon 1977)

Asynchrony in this mutually regulated interaction between mother and infant has also begun to be scrutinized. This has highlighted specific maternal interactive behaviors leading to less than optimal development. (Stern 1971; Beebe and Stern 1977; Massie 1982; Tronick, Als, Adamson, et al. 1978; Beebe and Sloate, 1982; Cohn and Tronick 1982)

These rigorously empirical studies complement earlier psychoanalytic hypotheses about the importance of an harmonious, need-satisfying relationship between mother and

infant. These earlier psychoanalytic hypotheses include the concepts of: an ongoing psychological "symbiosis" between mother and infant during the first year of life (Benedek, 1949); that of the "emotionally available" mother (Mahler, Pine and Bergman 1975); "communicative matching" (Pine and Furer 1963); "mutual affective identifications" (Jacobson 1964); "primitive dialogue" of the mother-infant relation (Spitz 1963); "primary maternal pre-occupation" (Winnicott 1956); the mother as "holding environment" (Winnicott 1960); and the "mirror role of mother's face." (Winnicott 1967) This study's measure of maternal sensitive responsivity to her toddler's communicative signals is a construct combining the qualitative attributes of mothering articulated in the psychoanalytic literature and the need for accuracy, appropriateness and timing in maternal behavioral responses, recently discriminated in mother-infant interaction research, to facilitate optimal ego development.

The researchers whose work is both the basic inspiration for this study as well as model this dissertation attempts to parallel closely are Donald Winnicott, F.R.C.P. from the field of psychoanalysis and Daniel Stern, M.D. from the mother-infant interaction observational research sphere. In a recent article attempting to integrate psychoanalytic object relations theories and the psychoanalytic theory of defense, the authors conclude that it is Winnicott's work, in contrast to all others in his field, that:

The intimate relationship between aspects of the actual mother-infant configuration, as opposed to fantasy-laden inner representations of that configuration, and the development of specific defensive structures is graphically represented... (Lerner and Lerner 1982)

It is this intimate relationship between the early object relation and later defensive structure that this dissertation intends to elaborate. In the past ten years, Stern (1971, 1973, 1974a, 1974b, 1975, 1976, 1977a, 1977b, 1980, 1982) offered considerable documentation of the importance of the quality of mother-infant interaction for overall ego development and, as well, has articulated in a sensitive, evocative fashion, reminiscent of Winnicott, the wonders and realities of this first human relationship.

In a recent unpublished paper on the results of observing maternal responses to infant expression of affect Stern noted that: "The mother appeared to be matching the inner feeling, not the external form of the child's affect experience." (Stern, et al. 1982) Stern calls this phenomenon "attunement" and elaborates that:

This process refers to the non-cognitive, direct elicitation of feeling in the viewer which occurs out of awareness. By itself, attunement is not conceived here as a process concerned with acquisitions of knowledge about the other. Rather, it is concerned with permitting or assuring the participation or sharing with another in a feeling state. (Stern, et al. 1982)

This longitudinal research is not a study of the "attunement" phenomenon identified by Stern, et al. (1982) but is based on the assumption of just such an interactive process. The

sensitive responsivity construct of the mother's behavior towards her toddler in this study is a phenomenon mediated by cognition and is the integration of maternal thought and behavior into a consistently available empathic, appropriate responsiveness. It is not exclusively focused on the out of awareness matching of the mother's behavior to the internal state of her infant, although it assumes this kind of relatedness as the condition that creates the possibility for sensitive responsivity to her toddler's flow of behavior. The sensitive responsivity measure of this study will hopefully capture the phenomenon of the mother being with her toddler in "ordinary" time that is observable without the micro-momentary analysis necessary for Stern, et al (1982) to document the phenomenon of "attunement." A mother's "being with" her toddler in sensitive responsivity involves her observable, self-aware acknowledgements of toddler communication and her sharing in, as well as amplifying them, if appropriate. Thus, sensitive responsivity, as defined in this study, is the mother's particular way of creating a "holding environment" (Winnicott, 1960) or a "framing function" (Sander, 1977) for her toddler. Her behavior should minimize unnecessary intrusions, provide reliable support when necessary, sustain herself as a reasonable and communicative social partner and maximally encourage both her toddler's autonomous functioning and their expectancy for satisfactory communication.

This study assumes that these early experiences, partic-

ularly in the second year with the sensitively responsive mother holding, mirroring and tolerating her toddler's nascent affective and communicative gestures, will be internalized and become part of that child's self-generated defensive methods of managing its affective life first manifest during the oedipal period. Pine (1982) articulates how it is that this momentous development takes place stating:

When needs arise and are accompanied by the expectation of gratification (rather than the anticipation of sorely mounting needs) we have delay, and delay is the situation in which higher order defenses can gradually develop. Pine (1982)

These recent formulations of Pine (1982) and Stern, et al. (1982), as well as the earlier concepts of Winnicott (1960), provide the foundation for new integrations in traditionally disparate schools of developmental psychology around the issue of ego development in general and ego defense formation in particular. As the study of the development of affects and their function in self regulation and in regulating exchanges with the environment progresses, there is an increasing potential for such an integration, given that no less a stalwart of psychoanalytic theory than Otto Fenichel asserted categorically that when it came down to operationalizing the ego mechanisms of defense "... all defenses are essentially defenses against affects." (Fenichel, 1945) This longitudinal, naturalistic, exploratory study is a contribution to this newly emerging integrated perspective in psychoanalytic developmental psychology.

II. REVIEW OF THE LITERATURE

A) Continuity of Individual Adaptation

A major assumption of this research project is the continuity of development in the individual's adaptation to the issues of the second year and the sixth year. The recognition of the role of critical developmental issues in shaping a child's personality organization began when Freud postulated a genetic sequence of inevitable anxieties faced by the child in relation to his original objects.

(Freud, 1923) Most importantly, particularly for the theoretical assumptions of this study, Freud also hypothesized that the impact of these anxieties on the child as well as the child's active attempts at mastering each of these successive developmental anxieties will be reflected in that individual's psychic structure throughout its mental development. (Freud, 1923, 1926)

The implicit notion in Freud's theory that effective adaptation at earlier developmental phases supports and shapes later adaptive efforts became a truism in developmental psychology, even among diverse theoretical perspectives (Piaget, 1952; Werner, 1940; Bridges, 1933; Benedek, 1938; Hartmann, 1939; Ribble, 1943; Erikson, 1950; Mahler, 1952; Murphy, 1962; Witkin, et al. 1962)

As indicated, this study presupposes continuity of individual adaptation between the second year and the sixth year. More specifically, this continuity is assumed to occur across a three year span (2-5) in the general area of the child's effective, adaptive management of his needs, impulses and affects, which in the psychoanalytic community is designated the ego defense organization. During the second year, the mother is an essential partner in this task of adaptive self regulation. (Witkin, et al. 1962) During the sixth year the child has typically achieved the capacity to handle these same tasks of self regulation much more autonomously and in a way that reflects his overall organization of ego defenses. (Smith and Danielsson, 1982; Loewald, 1952)

Recent research supports this notion of continuity in specific areas of development between infancy and preschool. (Main, 1977; Matas, Arend & Sroufe, 1978; Waters, 1978; Waters, Wippman & Sroufe, 1979; Arend, Gove & Sroufe, 1979) Matas, Arend and Sroufe, (1978) documented a linkage between quality of adaptation at 18 months and 24 months. Infants judged to be securely attached at 18 months (securely attached in Ainsworth strange situation test, see Ainsworth, et al. 1978), were more enthusiastic, persistent, less easily frustrated and less oppositional at 24 months than infants judged anxiously attached at 18 months. Main (1977) presented similar findings.

Waters, Wippman and Sroufe, (1979) examined continuity

of adaptation between 15 months and 3½ years and found significant relationships between the earlier quality of attachment relationship and later competence in engaging with peers and in overall ego strength.

Very few studies have attempted to demonstrate continuity of adaptation across three or more years as we have in this project. Block and Block (1980) documented continuity of adaptation between ages 3 and 7 with their constructs of ego-resilience and ego-control. Ego resilience is a competency construct used to assess the ability of an individual to respond flexibly, persistently and resourcefully, especially in a problem situation. Ego control is closely related and refers to:

The disposition or threshold of an individual with regard to the expression or containment of impulses, feelings and desires. (Block & Block, 1980)

Arend, Gove and Sroufe, (1979) study is more similar in concept, if not design, to this project than any other in the literature. They studied the relationship between individual differences in security of attachment at 18 months and both the efficacy of autonomous functioning at 2 years and in the quality of ego-control and ego-resilience at 4-5 years. Their results were an impressive confirmation of the hypotheses of continuity of individual adaptation across a considerable age span (3 years). Children earlier classified as securely attached were, as predicted, significantly higher on ego-resilience than anxiously attached infants.

They were also higher on three independent measures of curiosity. Competence at 2 years correlated significantly back to the infants judged securely attached at 18 months and forwards to those judged to be more highly ego-resilient at 4½ years. Finally, and significantly for the central hypotheses of this study, measures of maternal support and quality of assistance at 2 years correlated significantly with the variability in ego-resilience manifest by the preschoolers (ages 4-5). As predicted, mothers rated less supportive and giving lower quality assistance to their 2 year olds had 4½ year olds rated lower on overall ego-resilience.

B) Ascendent Developmental Issues in the Second Year.

Numerous crucial developmental issues are active during the second year that justify focusing on this period as a data base for predictions about later more autonomous ego functioning. Pine (1982) articulated those areas of development that are particularly sensitive to the quality of exchanges with the mother and the wider social environment. He reminds us that earlier research emphasized the emergence of self-awareness during the second year (Mahler, Pine, Bergman, 1975), and states that:

Ownership of experience, rather than experience coming and going in a random world, would seem to be the direction of growth from the earliest months into the second year of life, crystallizing as self-awareness crystallizes.

Pine notes the emphasis on a period of vulnerability

in self development by Mahler (1963, 1965, 1967) and Kohut (1971), and points out that the self awareness that emerges during the second year makes for the profound vulnerability of this newly crystallized self to its social environment and, in particular, its primary caretaker during this time. These considerations lead Pine to hypothesize that "the failed parental response to the child's initiatives after the achievement of a more articulated self awareness can have new levels of destructiveness." (Pine 1982)

Mahler's research highlights the predictable intrapsychic process during the second year called the "rapprochement crisis" where the newly achieved self is accompanied by fantasies that it is small and powerless. The inevitable results, according to her theory, are episodic sad moods in the toddler and contradictory demands placed on the caregiver. According to Mahler (1972) the three major anxieties of childhood; loss of the object, loss of the object's love and castration anxiety, are felt all at once during this period and its outcome shapes all the ego development that follows.

Kohut, in distinction to Mahler's focus on intrapsychic demands, focuses on the parental role in maintaining their toddler's self-esteem during this developmental epoch. The parents achieve this by consistently mirroring and confirming their toddler's flickering pride in his autonomous functioning. In contrast to Mahler's hypotheses of an inevitable ego de-

flating experience during the second year, Kohut emphasizes the parent's role in gradually titrating their mirroring responses until the child can take over these self-esteem sustaining functions himself. Neither author, however, would quarrel with the notion that the caregivers interactions with the toddler during the second year have a profound impact on later ego functioning due to the emergence of self-awareness during this time.

Although the ascendancy of the capacity for self-awareness in the context of continued dependency on caretakers resulting in an "internalization" of patterns of exchange with the environment, particularly the mother, are the critical factors in choosing the second year's social experience as a data base for predicting later quality of ego functioning, there are a number of other developmental issues relevant to this study that emerge during the second year. The capacity for negation and the beginnings of super-ego development are characteristic of the anal phase of psychosexual development during the second year and make a critical contribution to psychic development. (Freud, 1905; Erikson, 1950; Spitz, 1957) The development of the cognitive capacity for focal affective expression is a critical precursor of self-aware interchanges with the social environment and the development of self-generated methods of defense emergent during the third year. (Resch, 1976) Correspondingly, the emergence of capacities for symbol formation and symbolic

communication also makes possible self-aware exchanges with the social environment at more highly complex and potentially ambiguous levels. (Piaget 1952, 1954; Werner and Kaplan 1963; Drucker 1975; Nelson 1979) In summary, during the second year critical periods in cognitive, social, affect, linguistic and self development are in ascendancy and an adaptive outcome for the infant/toddler is a crucial building block for further normal ego development.

C) Ascendent Developmental Issues of the Oedipal Period

Despite the central importance of the oedipal complex in psychoanalytic theory, there are no systematic empirical studies of the impact of this period on the child's developing psychic structure. Freud's clinical view of the oedipus complex as the "nucleus of neuroses" (Freud 1916), and his theoretical position that it influences all areas of personality development (Freud 1931) is the reason for choosing this period as the later developmental epoch in this longitudinal study. In addition, our central hypothesis regarding the continuity of adaption will carry more weight if psychic development has been subjected not only to the passage of time (3½ years), but also to the reshaping influence of a major developmental task like the oedipal phase. Our particular focus on the late oedipal/early latency period (age 5-6) will maximize the possibility of seeing the overall results of the oedipal complex for the child without being

too distant from the parental and familial context of the earlier phase also under study.

Despite the lack of systematic developmental research on the oedipal phase by modern psychoanalytic developmental psychology, one can cull from Freud and his followers' writings the salient issues which arise and the developmental consequences of their resolution by "every new arrival on this planet." (Freud, 1905)

A review of Freud and his followers shows significant advances in psychic structure development in five major areas of personality functioning during the oedipal phase; the psychosexual; identity formation; object relations; the superego and culturalization. From the beginning Freud maintained that the oedipus complex occurred during the primacy of the phallic phase of psychosexual development, a fact that made a special contribution to the heightened anxieties of this period and provides the core motivating issue that helps the child resolve the oedipal dilemma through identification, sublimation and deferring genital gratification to the future. (Freud, 1923)

The contributions of the oedipus complex to the formation of identify are numerous and complex. There are advances in the awareness of generational differences that support the child's firmer grasp of its own identify independent of his parents. In the specific area of sexual identify, the identification with the same sex parent and sublimated desires for the opposite sex parent provides the psychic structure for

core gender identity. (Freud, 1916)

Developments in the sphere of object relations closely parallel those in identity formation as the acceptance of the prohibition against incest both firms up self-object boundaries between parent and child and demands that the child develop new non-sensuous ways of relating to his love objects. (Freud, 1916) The development of firmer self-other boundaries and the child's implicit acceptance of the reality of their love objects' interests unrelated to themselves provides the basis for relating to others as "whole persons", an aspect emphasized by later theorists. (Heimann, 1952; Lacan, 1945) Furthermore, the emergence of the triangular situation in the oedipal phase forever complicates the comparatively simpler tasks involved in dyadic relationships. That is, from this phase on, elaborate scenarios inevitably arise in the child and adult to complicate relations with one's love objects in addition to the powerful dyadic strivings the child has already become somewhat familiar with. (Kaplan, 1982)

"Culturalization", another hypothesized result of the oedipal complex, is the process whereby an individual in his development becomes subject not only to the prohibitions and ideals of his family, but to those of the wider culture as well. It is, of course, artificial to separate too sharply the internalization of familial versus cultural values, but nonetheless, Freud did emphasize the centrality of the oedipal

struggle in his hypothesis regarding the genesis of human society. (Freud, 1918) In this work, he attempted to raise the oedipal complex from an important childhood developmental force into a cultural force. Later theorists have continued to emphasize how the child's entry into the oedipal complex brings about an inevitable and permanent link between law (originally prohibition of incest) and desire (originally for the opposite sex parent) and that this linkage provides the basis for human civilization. (Levi-Strauss, 1969; Lacan, 1968)

Perhaps the most widely acknowledged developmental sequelae of the oedipal phase is the superego. (Freud, 1914, 1923, 1924) Freud himself designated the superego as the "heir of the oedipus complex." (Freud, 1923) He saw conscience, self-observation and the formation of ideals as functions of the superego and believed it was constituted by a gradual internalization of the parents prohibitions and ideals as they are interpreted by the child's unconscious fantasy-life during this period. (Freud, 1933) A less emphasized role of the superego structure is its operational functioning in exercising unconscious controls over needs, wishes, impulses and affects. These internal controls have their structural roots in the parents earlier role in providing the necessary ego supports for infant and toddler. (Hartmann, 1939, Witkin, et al 1962)

This study will concentrate on this last noted develop-

mental sequelae of the oedipus phase, the superego, since it plays such a central role in the particular pattern of self-generated controls over intrapsychic processes that Anna Freud (1936) systematically identified as "ego mechanisms of defense." The beginning as well as the passing of the oedipus complex ushers in, then, a relatively autonomous, self-generated ego defense organization. (Resch, 1976) It is the quality of this ego defense organization which will be compared with the quality of maternal social behavior in acknowledging and helping to modulate her toddler's needs, impulses and affects as they are communicated during the second year.

D) Mother-Infant Interaction Research and Ego Development

The quality of the mother-infant relationship has long been implicated as a critical variable for optimal human development. The study of the effects of maternal availability and sensitivity on early psychological development was pioneered by psychoanalytic researchers and theoreticians. The deleterious effects of gross deprivations of maternal care on infant development were the areas first researched and documented. (Burlingham and Freud, 1942; Ribble, 1943; Spitz, 1945) Soon thereafter the contributions of the normal mother-infant relationship to overall psychic development began to be elaborated and the relationship between ongoing sensitive and responsive mother-infant interaction and the quality of ego development was established.

(Benedek, 1949; Mahler, 1952, 1955; Winnicott, 1945, 1953, 1954)

Subsequent to psychoanalytic researchers and theorist's emphasis on the importance of the quality of the mother-infant relationship for normal psychic development diverse schools of developmental psychology began studying the phenomenon of mother-infant interaction and its consequences in detail. This research has grown geometrically over the past twenty years and currently there is an unusual unanimity across all major schools of developmental psychology that a critical variable for the emergence and maintenance of core developmental achievements is the quality of the caregiver-infant relationship. The core developmental achievement related to the mother-infant relationship is articulated in different ways by different schools of thought and includes the: "competence motive," (White, 1959); "coping and mastery," (Murphy, et al. 1962); "generalized expectance and personal effectance," (Watson, 1966; Lewis and Goldberg, 1969); "adaptation and self-regulation," (Sander, 1962, 1964); "separation-individuation" (Mahler, 1963b, 1968); "secure attachment," (Bowlby, 1969; Ainsworth, et al. 1978); "ego and character formation," (Brody and Axelrod, 1970, 1978); "ego-control and ego-resilience." (Arend, Gove and Sroufe, 1979)

The increasing specificity of mother-infant interaction studies in identifying which aspects of maternal interactive

behaviors tend to influence which specific aspects of the infant's developing ego organization has characterized this area of research and it is possible now to point to the underpinnings of the generalized notions of early core developmental achievements. Although psychological development is all of a piece, for the sake of an organized presentation three areas of the infant/child's development influenced by mother-infant interaction can be discriminated; the physiological, psychophysiological, and psychological. In the psychological development category mother-infant interaction research can also be separated, albeit artificially, into three subdivisions; social, cognitive and affect development. An example of how, in fact, these categories and subdivisions are artificial and development is all of a piece is the development of the ego function of attention. It's precursor is physiological and identified in the literature as arousal. Nonetheless, as will be shown later, the manifestation and organization of these episodes of arousal are profoundly influenced by the quality of the mother-infant relationship from the first hours and days of life. Further up the developmental ladder, mutually regulated states of alertion are coordinated and integrated with motility for the earliest manifestations of purposeful behavior, this achievement also being mediated by the quality of the mother-infant interaction. Still further on in development the capacity for sustained active attention is coordinated

with beginning awareness of cause and effect and differential awareness of human vs. inanimate objects in active exploratory and social behavior, the achievements of which are, again, mediated by the quality of the mother-infant relationship. Still later, sustained, effortful concentration and problem solving abilities become a prominent part of the infant's repertoire, both of which have been correlated with the quality of earlier mother-infant interactions. Thus, these aspects of the development of the ego function of attention cut across the physiological, psychophysiological, social, cognitive and affect areas of development and are all profoundly influenced by the quality of mother-infant interaction over time.

Numerous areas of physiological development have been identified as regulated by the quality of mother-infant relationship. (Sander, 1964, 1970) Nonetheless, the relationship of the developing central nervous system to the uniquely human stimulus world of infancy that recently has been discovered is just beginning to be studied and is a vast area for research. (Robinson, 1970; Stern, Beebe, Jaffe and Bennett, 1977) Sander (1964) shows how reflex activities of the infant (feeding, postural maintenance, quieting, arousal) become coordinated and organized to widely varying degrees of optimal adaptation as a function of the quality of ongoing mother-infant relationship. Later research demonstrated dramatic differences in the developing differentiation

of sleep-wake cycles as a function of the quality of exchange in ongoing infant-mother interaction. (Sander, 1970; Sander, Julia, Stechler, et al. 1970; Sander, Stechler, Burn, 1972)

This same research showed significant differences in the development of predictable, mutually regulated and hence organized bouts of motility, crying and quiescence as a result of the quality of the interaction of caretaker and infant. That is, infants with less sensitive exchange with their caretaker showed unstable, disorganized and excessive bouts of activity and crying in comparison to other infants whose behavior had become modulated and regulated through optimal interaction with the caretaker. (Sander, 1970; Sander, Julia, Stechler, et al. 1970) The organization of feeding behavior is another area of early biological process documented to be influenced by the quality of maternal interactive behavior. (Kaye and Brazelton, 1970; Kaye, 1977) Serious childhood eating disorders have been related to deficient maternal interactive behavior during feeding. (Massie, 1982) Specifically accountable was mother's lack of rhythmical involvement with her baby's feeding rhythm and a lack of positive affect when feeding was accomplished.

The roots of psychophysiological development lie in the successful mutual regulation of the infant's biologic processes. The psychophysiological functions emerge when implicit structures, be they in the infant or in the relation-

ship, serve to coordinate biologic functions to new levels of complexity in interaction with the environment and in self-regulation. The contribution of maternal behavior to this coordination was demonstrated dramatically by Condon and Sander, (1974), who showed that neonatal motor movements were coordinated with adult speech patterns. Here, paradoxically, we have a biological function, motor activity, coming under the structuring and regulating influence of social, cognitive stimuli, the pattern of human speech.

The major discovery in the area of psychophysiological development is the clear modulation of stimulation by the infant through micro-momentary control of eye gaze behavior within the mother-infant interaction. (Robson, 1967; Stern, 1971, 1974a, 1974b; Stern, et al. 1977; Beebe and Stern, 1977b) These studies document the infant's earliest active efforts at regulation of state, arousal, and relationship with the environment and therefore constitute the earliest manifestation of ego mechanisms of defense. (Beebe and Stern, 1977)

The coordination of earlier mutually regulated physiological functions (arousal, motility) leads to developments of prolonged bouts of attention that subsequent maternal behavior can either augment or diminish. (Beckwith, 1971; Bloom, 1974; Korner and Thompson, 1966; Brazelton, Koslowski and Main, 1974, Brazelton and Als, 1979) The importance of sustained alert states in the infant as the basis for learning about and constructing the external and human world has been

emphasized in some studies. (Bloom, 1974; Brazelton, Koslowski and Main, 1974; Stern, et al. 1977a)

Maternal social behaviors towards her infant have been shown to organize both the crucial developmental achievement of integrating motility, physiological states and states of consciousness as well as coordinating transitions between these organized states. These developments signal the emergence of more complex, purposeful social behaviors and is thought to occur in normal mother-infant pairs by the fourth month of life becoming:

A rich base for the infant's affective and cognitive development as well as his awareness of himself, developmental accomplishments which might be equated with early ego development. (Brazelton and Als, 1979)

It is the sensitive responsivity of the mother's interaction with her infant from the first days of life which provide the crucial environmental exchanges organizing physiological and psychophysiological processes that lead to the infant's behavioral repertoire being regulated by primarily psychologically mediated processes (i.e. affect, meaning, intersubjectivity, expectation, anticipation, intentionality, etc.). (Sroufe, 1979; Sander, 1977) As noted earlier, research into the differential effects of varying degrees of maternal sensitive responsivity on her infant's psychological development can be subdivided, artificially, into social, affect and cognitive areas of development. Recently, ego organization itself has been defined as the integration of

these areas of cognition, affect and purposeful acts.

(Loevinger, 1976) Developmental researchers utilizing an interactive model would have it that this integration that is the ego is a product of ever more complex, synchronous, mutually regulated interaction between mother and infant.

(Brazelton and Als, 1979; Korner and Thomson, 1972) Inadequate maternal responses to emerging psychological function (affect expression, intentionality, etc.) is thought to be a crucial determinant in the development of serious psychopathology.

(Massie, 1982) This is not to say that maternal behavior imposes psychological organization on the infant. Rather it sustains it by providing stimulus that maintains the infant's behavioral inclinations. This view is strongly supported by recent studies showing that infants' initiate both the seeking out of stimulus and the maintenance of a relationship with affectively salient stimulus. These studies relied on the infant's strengths in relating in a self-regulated way with stimuli, their visual and sucking skills. (Stern, 1980) It is maternal sensitive availability to the stimulus seeking infant that is the crucial variable regulating overall behavioral and hence ego development. (Sander, 1977; Stern, et al. 1977)

Maternal social behaviors that have an organizing influence on infant social development have received considerable attention recently. The analysis of mother-infant social interaction has revealed important, predictable periods at both the split second, micro-momentary level (.33 sec. duration),

accessible only through frame by frame analysis of films, and the macro-level, accessible to unaided observation, wherein the infant is dominated by neither internal or external stimulus and is free to have direct experiences of environmental contingencies resulting from his behavior. These periods have been called "open space" in the mother-child interaction (Sander, 1977), or part of a process of "engagement-disengagement" at the split second level of temporal organization (Beebe and Stern, 1977), or as part of a cycle of "attention/non-attention" inherent in early social relations. (Brazelton, Koslowski and Main, 1974) All the above noted researchers drew conclusions similar to Brazelton, Koslowski and Main (1974) who stated:

Unless mother responded appropriately to these variations in his behavior, it appeared to us that his span of attention did not increase, and the quality of his attention was less than optimal.

These researchers emphasize that when maternal response deficiencies occur in this area, they are necessarily occurring during the limited and delicately sustained time periods when her infant is most alert and hence accessible to social stimuli during its entire 24 hour cycle of behavioral and central nervous system rhythms. Thus, all these researchers consider such periods of "open space" or "engagement-disengagement cycles" as critical for the development of firm self-object differentiation, an achievement, needless to say, on which all social development is founded. It is thought

that self-object differentiation occurs as a result of maternal sensitivity during these periods because it is believed that only if the infant has opportunities for self-regulated interaction free from the direct influence of immediate external or internal stimuli, will he begin to experience and hence differentiate between his own activities and those in the social environment. (Sander, 1977; Beebe and Stern, 1977b)

In addition to self-object differentiation, the other core social development achievement mediated by maternal sensitive responsivity are the patterns of give and take, back and forth reciprocal interaction that characterizes all human interpersonal behavior. This early mother-infant social reciprocity has been discovered to be a subtly orchestrated and mutually synchronized series of communicative acts that becomes suffused with varying degrees of positive affect. (Sander, 1962, 1964, 1969, 1977; Stern, 1971, 1974a, 1977, Perry and Stern, 1976; Brody and Axelrod 1970; Brazelton, Koslowski and Main, 1974) It has been documented that the sustaining of affectively positive arousal and attention in early social interaction (3-4 months old) requires the constant sensitive responsivity of the mother to her infant's behavior. (Stern, 1974b) A recent case study dramatically illustrated failures in numerous aspects of early social reciprocity, and as well, the startling re-emergence of these interaction needs two years later in therapy in the trans-

ference relationship. In addition, this study highlighted recovered or newly developed ego functions that directly resulted when these needs for social reciprocity in specific areas (mutual gaze, affect expression) were finally met appropriately by the therapist. (Beebe and Sloate, 1982)

Experimental research, illuminating the interrelated areas of social and affect development, has also shown the dramatic disorganizing effect of a lack of normal maternal social and affective reciprocity. (Tronick, Als, Adamson, et al. 1978; Cohn and Tronick, 1982) These researchers found that when affective and social reciprocity was withdrawn during the first half year through presentations to the infants of their mothers with stony, non-reactive faces and bodies, or role playing a depressed state, even for brief periods (3 minutes), there were significant and pervasive negative reactions compared to the normally interacting mother-infant pairs. The negative reactions were characterized first by briefly sustained, positive interactions aimed at eliciting maternal response, then increased wariness and finally withdrawal and "inhibition of responsivity." (Beebe and Stern, 1977) In the Cohn and Tronick (1982) study there were findings with profound implications for the potential vicious cycle effect of early disturbed mother-infant interaction in that there was a carry over in infant behavior of the negative effects of the simulated depressed social stimulus to the next interaction where the mother was again interacting

normally. The researchers concluded that:

The strategies the infant employs to bring his mother out of her immobility demonstrate his growing confidence in his effectiveness as a social partner; the seriousness of the infants reaction when the mother remains unresponsive despite his efforts demonstrates how critical reciprocity is to him.

The still face mothers in our study remained unresponsive for only 3 minutes, yet their infants found even such a temporary violation greatly disturbing. This suggests that reciprocity and mutual achievement of the goals of social interaction form a necessary basis for the growth of affective well being in early infancy. (Tronick, Als, Adamson, et al. 1978)

Naturalistic studies using macro-analytic techniques have confirmed some of the implications of the Cohn and Tronick (1982) and Tronick, Als, Adamson, et al. (1978) studies. Main, Tomasini and Tolan (1979) studied thirty eight infant-mother pairs, first at 12 months to judge whether the infants were securely attached, insecurely attached or intermediate in security and then when they were 21 months old for the degree of maternal sensitivity, acceptance and expression of affect in interactions. They found that mothers of securely attached infants were significantly more sensitive, accepting and expressive of affect than mothers of insecurely attached infants. Furthermore, they found that mothers of insecurely attached infants were significantly more angry than mothers of securely attached infants.

The aforementioned research highlights a growing focus

on the differential effects of varying degrees of maternal sensitive responsivity on affect experience, differentiation expression, communication and organization. Earlier studies made important findings about the role of mother-infant interaction in assisting growing self-regulation in general and tension regulation in particular. (Brazelton, Koslowski, and Main, 1974; Stern, 1974a; Perry and Stern, 1976) These studies showed how it is through the flow of maternal interactive behaviors that the infant first experiences and has the opportunity for the self-regulation of arousal states and affects. Affect maintenance and modulation as key functions structuring interactions and visa versa was clearly established recently when infants, utilizing their visual skills and sucking on an instrumented nipple, sought out and maintained a relationship with stimulus, debunking traditional views of affect as a discharge process and the infant as primarily discharge seeking. (Stern, 1980) Needless to say, a sensitive caregiver responding contingently to her infant's stimulus seeking behavior is required for furthering the development of these early skills at affect evocation, maintenance and modulation. In a recent longitudinal study of a mother's relationship with her blind infant, researchers found that highly attuned affective reciprocity maintained by a continuous auditory ambience prevented the development of early canalization and rigid stereotype of behavior common to blind infants. (Als, Tronick and Brazelton, 1980)

Moving to the macro-level in affect development research, the ethological/attachment school has demonstrated that securely attached infants at 12 months had mothers who were significantly more sensitive and responsive than the mothers of the insecurely attached infants. At 24 months these same securely attached infants showed more enthusiasm and a greater capacity for maintaining organization in the face of problems than the insecurely attached infants. (Matas, Arend, and Sroufe, 1978; Main, 1977) The capacity for affect sharing has been documented as more characteristic of the securely attached group of infants at both 18 and 24 months. (Waters, Wippman and Sroufe, 1979) In addition, affect over-control and undercontrol at 4-5 years old was correlated with a lack of optimal maternal sensitivity and responsivity at 18 and 24 months. (Arend, Gove, and Sroufe, 1970)

The development of positive affect itself, let alone affect sharing or modulation, has been definitively correlated with the degree of synchrony and responsivity in the mother-infant interaction in the first six months of life. (Brazelton, Koslowski, Main, 1974; Stern, 1974a; Sander, 1962, 1964, 1969; Beebe, 1973; Clarke-Stewart, 1973) The predominance of negative affect during separations in the home, an intolerance of separation in general, as well as a weak capacity to recover a positive mood after any separation characterizes insecurely attached infants and toddlers. (Ainsworth and Slayton, 1974; Ainsworth, et al.

1978) Research observations of the great disturbance in positive affect during violations of social and affective reciprocity (Stechler and Latz, 1966; Carpenter, 1974), formed the backdrop for the detailed study and documentation of rule governed exchanges in affective reciprocal interactions between mother and infant. (Cohn and Tronick, 1982) As already mentioned, these studies identify affect reciprocity per se as a critical factor in overall ego development, a determinant not captured in the strictly contingent responsiveness model of early interaction. This finding confirmed an earlier hypothesis of Stechler and Carpenter (1967) regarding the operation of a "sensory-affective intelligence" in early infancy.

Although her studies show only short term results, Demos (1982a, 1982b) also hypothesizes that affect phenomena have a primary role in regulating transactions between mother and infant. She postulates that transactions around affect are the foundation of the motivational structure of the child's personality and that the style of mother-infant interaction around affect leads to later styles of self-regulation by the child. Her short term results were that those mothers who interacted sensitively with their toddler elicited a greater frequency and duration of verbal interchange with an affective content. In addition, toddlers with mothers who were inconsistently sensitive to maintaining affective exchanges were less inclined to pursue

their interests.

In a series of ingenuous, retrospective studies involving micro-analysis of home movies of the infancy and toddlerhood of children who later came under his care due to serious psychopathology Massie (1975, 1977, 1978a, 1978b, 1980, 1982) showed how the lack of maternal following and support of infant affect expression leads to a series of developments where infant affect first became dysphoric (clear facial expressions of depression, confusion and despair), then constrained and restricted, eventually affect being withdrawn altogether from the world of human interaction. In Massie's view, maternal affective reciprocity provides the infant the opportunity for gradual coordination and integration of emotion, meaning and intention. Experimental and naturalistic studies support this notion in their observing a tendency for entrainment of behaviors around moments of affective interchange occurring from the very beginning of neo-natal life. (Spitz, 1965; Kagan, 1967; Stern, 1974a; Tronick, Als and Brazelton, 1977) These studies also provide data supporting the view that it is from the earliest experiences of mutual gazing with the responsive, available mother that the infant acquires a schemata of human emotions as reflected in facial expressions, an achievement on which all later entrainment of social/affective behaviors are based.

Virtually all the basic foundations of cognitively

mediated functions have been related to the variable of parental sensitivity to the developing infant. (Lamb, 1981) Research has shown that infant's develop the capacity for behavior mediated by anticipation, expectation and early cause-effect thinking as well as an enduring sense of personal effectance as a result of maternal contingent responsiveness. (Rheingold, 1961; Watson, 1966; Lewis and Goldberg, 1969) Sroufe, (1979) outlines how the coordination of infant attention to context and to the awareness of its own emotional reactions, regulated by the mother-child interaction, gives birth to the phenomenon of meaning in the infant's psychological life. The development of intentionality as a mediating process in infant behavior organization is seen as resulting from the synchronous mutual regulation of attentive focus manifest in normal mother-infant pairs. (Sander, 1970, 1977; Stern, 1974b) The crucial development of object permanence, both human and inanimate, has been determined to be influenced by the degree of harmony in early mother-infant interaction. (Bell, 1970)

Problem solving capacities, competence with peers, active curiosity and overall flexible responsiveness in both toddlers and preschoolers have been documented to vary according to the degree of maternal support, acceptance and sensitivity during the first two years of life. (Sander, 1964, 1969; Main, 1973; Arend, Gove and Sroufe, 1979; Waters, Wippman and Sroufe, 1979)

The development of competence in communication in general and language in particular is perhaps the sine qua non of cognitive development. Longstanding views of innate, genetic capacities for language acquisition have been challenged by researchers identifying the preverbal "dialogue" of mother-infant interaction as a critical factor in language development (Brunner, 1975a, 1975b, 1977) In his 1977 study, Brunner observed patterns of joint action in mother-infant interaction governed by rules that parallel those required to master syntax and grammar. Other researchers have emphasized the importance of how mothers use a conversational style with reciprocity as a goal in structuring interactions with their infant long before their children possess adequate language skills. (Snow, 1976; Richards, 1971; Stern, 1974a, 1974b; Brazelton, Koslowski and Main, 1974) The precursors of more complex social communication, smiling and vocalizing during early social interchanges, has been observed to be stimulated through maternal responsivity to her infant during his alert states. (Spitz and Wolff, 1946; Rheingold, et al. 1959; Emde and Harmon, 1972)

Adult communication patterns towards infants have been observed to be dramatically different in many of its features from normal adult communication patterns. Stern, Beebe, Jaffee and Bennett (1977) observe how the normal mother attunes and sensitizes her verbal, kinesic and visual stimuli presentations to be subtly attuned to the cognitive limits of her infants.

They state:

...it is interesting that the caregivers provide the infants with phrases that are only about one half as long as they would provide for an adult and they separate these phrases with pauses that are almost twice as long as those given an adult. The total duration of the phrase plus pause, i.e. the duration of the phrase period, is less different for adults compared to infants than is distribution of time into phrase and pause. In other words, caregivers act as if the infant can take in smaller chunks of information and needs more time to process them before receiving the next.

Returning to a "macro" level of observation and analysis, Ainsworth and Bell (1974) document numerous correlations between maternal sensitive responsiveness and later orientation towards and competence in verbal communication. They found that prompt responsiveness to crying during the first three months correlated to significant decreases in the frequency and duration of crying during the second six months when compared to the later crying patterns of infants of mothers who were less promptly responsive to distress signals in the first three months. In addition, they discovered that infants of mothers who responded most promptly to these earliest communicative signals developed a significantly wider repertoire of communication with their caregiver in the second six months than those infants of mother's who responded less sensitively to these earlier signals. Related to these findings of increased flexibility and maturity in communication of infants from more responsive mother-infant pairs, Sander, Julia and Stechler (1970), and Ainsworth (1980), documented how the

transition from a demand mode to a request mode of communicating needs is dependent on the consistent sensitivity of the caregiver.

In summary, we have shown how critical aspects of ego development rooted in physiological, psychophysiological, social, cognitive and affect development are dependent on the sensitive responsiveness of the mother in interacting with her infant/toddler. In the discussion of their study on early mother-infant reciprocity, Brazelton, Koslowski and Main (1974) make evident the fact that the mother's provision of a "holding environment" (Winnicott, 1960) responsive to their infant's needs is the critical factor influencing optimal development across all its aspects (physiological, psychophysiological, social, cognitive, affective) that were artificially subdivided in this section. This study is a contribution to the view that considers the following description of the mother's "holding" function to be as valid for the period of toddlerhood as it is for infancy.

The mother tends to provide a "holding" framework for her own cues. That is, she holds the infant with her hands, with her eyes, with her voice and smile, and with changes from one modality to another as he habituates to one or the other. All these holding experiences are opportunities for the infant to learn how to contain himself, how to control motor responses, and how to attend for longer and longer periods. They amount to a kind of learning about organization of behavior in order to attend. With more disruptive mothering or with none at

all, one might expect this kind of learning about self-organization to be delayed. Not only in a disturbed environment would the experiences be sparse that contribute to learning in the sphere of social interaction, but the crossover to learning the organization necessary for cognitive acquisitions may not be provided, hence learning would be delayed in an infant who had to acquire this organization by maturation alone, without appropriate environmental experiences. (Brazelton, Koslowski, Main 1974)

E) The Development of Ego Mechanisms of Defense

The proposition that the development of ego mechanisms of defense has an essential relationship to overall ego development has a theoretical and research history stretching back to the origins of psychoanalysis. As a matter of fact, Freud postulated that it was through the primary need for "mechanisms of defense" that, almost as an accidental sequelae, the ego as an agency of adaptation came to exist in the first place. (Freud, 1895) Although ego mechanisms of defense were postulated at the same time as the first formulations on ego development, a great deal of complexity and confusion regarding the determinants of their development is present in both Freud's work and that of his followers.

Freud's earliest theory of defense was woven into the central problem he was addressing in the "Project for a Scientific Psychology", the regulation of internal and external stimulation by the developing ego in such a way that homeostasis could be maintained. Freud held that these attempts at self-regulation were the beginning of psychic structures. He argued that mechanisms of "inhibition" or

"defense" were required for this task of maintaining homeostasis and their development resulted in the differentiation of primary and secondary process levels of mental life. The current predominant view of the ego as the central-agency of adaptation has its roots in the earlier theory. Despite the fact that the theoretical formulation of the Project for A Scientific Psychology were not available for scientific dialogue until after his death, theories of ego development and those of the development of defenses remained interwoven, both in Freud's own work (Freud, 1896, 1905, 1915a, 1915b, 1915c, 1923, 1926) and in the research of his early followers (Klein, 1926, 1928, 1930, 1932; Nunberg, 1930, Riviere, 1936; Freud, A. 1936; Fenichel, 1937; Hartmann, 1939; Fairbairn, 1941 Lacan, 1949)

Despite there being no systematic presentation in his writings of the concept of defense and how it is manifest at various stages of development, Freud, nonetheless, did have numerous and varied hypotheses about the development of defenses. A reading of his non-systematic presentation of the theory of defenses indicates that Freud's hypotheses can be usefully categorized according to whether they reflected his conviction that defenses were mediated by physiological, psychophysiological or psychological development or a combination thereof. Furthermore, psychological development can be usefully broken down into social, cognitive and affect development. For example, Freud's earliest clinical dis-

cussion of defense and its emergence was part and parcel of an individual's social, cognitive and affect development. (Freud, 1894) The essence of Freud's view of defense here is that the mobilization and acting out of a wish to forget (a cognitive process), a traumatic event (a social process) was due to the wish to avoid the unbearable pain that would result from its acknowledgement (an affective process). Later in his research, when Freud was more oriented to developing the instinct theory, he hypothesized that defense mechanisms arose from biological or physiological processes that were genetically programmed. In his Three Essays on The Theory of Sexuality (1905) Freud refers to defenses as emerging from "inborn apparatus that inhibit instinctual expression." In Analysis Terminable or Interminable (1937), he goes even further with this genetic/physiological hypotheses including all of ego development. He states:

But we must not overlook the fact that id and ego are originally one and it does not imply a mystical overvaluation of heredity if we think it credible that even before the ego exists, its subsequent lines of development, tendencies and reactions are already determined. (Freud, 1937)

In The Ego and The Id (1923) Freud emphasizes that defense mechanisms are mediated by psychophysiological development. He states:

The ego is the actual seat of anxiety. Threatened by dangers from three directions, it develops the flight-reflex by withdrawing its own cathexis from the menacing perception or from the similarly regarded process in the id, and emitting it as anxiety. This primitive reaction is later replaced by the carrying-out of pro-

tective cathexes (the mechanism of the phobias). What it is that the ego fears from the external and the libidinal danger cannot be specified; we know that the fear is being overwhelmed or annihilated, but it cannot be grasped analytically. The ego is simply obeying the warning of the pleasure principal. (Freud, 1923)

Further elaboration of the psychophysiological fight-flight reflex origins of the ego mechanisms of defense can be found in Freud (1926) where he states:

I think it is probable that there are some defensive processes which can truly be likened to an attempt at flight, while in others the ego takes a much more active line of self-protection and initiates vigorous counter measures. (Freud, 1926)

Still later in his theorizing Freud returns to the psychological origins of his concept of defense and proposes that they are mediated solely by social development. He states:

Since we have come to assume a special agency in the ego, the superego, which represents demands of a restrictive and rejecting character, one may say that repression is the work of this superego and that it is carried out either by itself or by the ego in obedience to its orders. (Freud, 1933)

Freud even more explicitly connects the development of the most important ego mechanism of defense, repression, to the child's social development in relation to its mother. He states:

At the time at which the child's mother becomes his love-object the psychical work of repression has already begun in him, which is withdrawing from his knowledge awareness of part of his sexual aims. (Freud, 1916)

Thus Freud's theories of the development of defenses involves

a complex, multiply determined view revealing defenses to be mediated by physiological, psychophysiological and psychological (social, cognitive, affect) developmental processes. Freud's followers developed theories of defense development that selected one or more aspects of his complex, non-systematic, multi-determined position as models for their own particular theories of defense development.

The outstanding representatives of the view that ego mechanisms of defense develop out of and are mediated by physiological regulatory processes are Hartmann (1939, 1946, 1950), Spitz (1957, 1961, 1970) and Greenacre (1958)

Hartmann's Ego Psychology and the Problem of Adaptation set forth the rationale for modeling ego development in general on physiological regulatory processes. Regarding defenses he argued that the "stimulus barrier" operative in infancy was the prototype of repression since it involved the "withdrawal of cathexis," one aspect of the later functioning of repression. Hartmann (1950) proposed that the "closing of the eyelid" in reaction to disturbing stimuli was the prototype for both ego restrictive (externally oriented) and ego inhibitive (internally oriented) defenses. Although not noted by Hartmann, presumably he developed this view based on Freud's (1915b) position that all acts of repression involve "turning something away" from consciousness.

Greenacre (1958) develops a three stage model of defense development, all of which are based on physiological developmental processes. In the first stage, which is singularly somatic, she identifies physical withdrawal and a reduction

of responsiveness to external stimuli manifest at birth and in satiation, fatigue and sleep as the earliest roots and model for defense development. Her second stage is that of defenses dominated by the primary process and she believes these defenses are based on a physiological regulatory process she identifies as the "watery defense." This concept refers to the body's use of water in different locations for physiological regulation and, in her view, forms the basis for displacement and somatic symbolization, characteristics of the primary process. Her third stage is the development of defenses dominated by the secondary process and these, in her view, are rooted in the physiological development of the body's musculature, particularly the sphincter muscles, all of which contribute to the child's increased autonomy in self-regulation.

Spitz (1961) initially posits sleep as the prototype of only some defenses (repression, denial). He agrees with Hartmann (1939) in viewing the "stimulus barrier" of infancy as the precursor of repression and the "closing of eyelids" as a prototype of both denial and repression. Spitz (1961), also identified the sleep/wake cycle itself as the physiological process that made ego mechanisms of defense possible. In Spitz, et al. (1970) they hypothesize that sleep is the prototype for all defense mechanisms through some ingenious experimentation with infants. Using a group of infants who

were to be circumcised and another group of infants that weren't to be circumcised as a control, he measured sleep/wake EEG patterns before and after this minor surgery and found a significant increase in NREM sleep during the four following 24 hour periods in the circumcised infants in comparison to the control group. Spitz, et al. (1970) viewed the NREM response to persistent painful stimuli over the course of a few days as a prototype for defense against instincts since in both cases neither flight nor fight, per se, is effective in warding off the disturbance thereby necessitating internally generated defenses. More specifically, this research group saw the NREM response as the physiological regulatory process underlying the ego defense mechanisms of denial, repression, withdrawal and regression.

Regarding other defenses, Spitz (1961) saw the physiological process of food intake and regurgitation and vomiting as the prototype for introjection and projection, mechanisms he viewed as available in primitive form at three months old. This is distinguished from Abraham's (1924) view that introjection and projection were based on the physiological processes that come under voluntary control in anal and urinal elimination.

The view that psychophysiological developmental processes mediate the emergence of ego mechanisms of defense is represented, as mentioned, by Freud (1905, 1923, 1926), and also by Deutch (1933); Fenichel (1945); Hoffer (1954); Shur (1955);

Greenacre (1958); Lewis (1963) and Stern (1963) All these authors saw somatic responses to painful stimuli as it is regulated by the autonomic and central nervous system to form to basis for the development of ego mechanisms of defense. These views range from Fenichel (1945) postulating fainting as the psychophysiological reaction upon which all defenses are patterned due to the cessation of adaptive ego functioning to Stern's (1963) position that all defenses are patterned on the failure of homeostatic regulation due to trauma manifest in various forms of psychophysiological shock, an example of which is the stupor in the catatonoid reaction being the prototype of primary repression, repression proper and denial.

The view that the ego mechanisms of defense are primarily mediated by psychological developmental processes are, as mentioned, well represented in Freud (1884, 1896, 1916, 1933), and in his followers. Hartmann (1939) championed not only physiological regulatory processes as the model for ego development but also directed attention to the development of autonomous ego functions (intelligence, perception, memory) and their importance in adaptation. Hartmann pointed out that these and other ego functions develop first in adaptative ways and only later are used for defense. The position that ego mechanisms of defense have their roots in autonomously developed ego psychological functions has been well established and documented. (Freud, A. 1936; Brierly, 1947; Hoffer, 1953; Lamplde Groot, 1957; Mahler, 1966)

Hartmann's (1939) break through in ego development theory was taken up by Gardner, et al. (1959) who emphasized the cognitive aspect of autonomous ego development in their theory of 'cognitive control principals-representing basic schemata of organization in adaptive behavior-may thus be preconditions for the emergence of defense structures."

(Gardner, et al. 1959) Lichtenberg and Slap (1972) and Stolorow and Lachmann (1980) are the most recent adherents of the view that ego mechanisms of defense at any developmental level are mediated by perceptual-cognitive maturation and development. Supporting the cognitive mediation view is Freud's (1926) view that the ego defense mechanism of isolation had its source in and made use of the adaptive capacity for logical thinking.

Brenner (1981, 1982) argues that there are no specialized cognitive mechanisms in the ego used solely for defense and develops the position that any ego function can be used to accomplish the central purpose of defense, the avoidance of painful affect.

The intermingling of affect development and social development is a predominant contemporary theme in the understanding of ego defense development. As Modell (1980) states: "A defense against affects is a defense against objects, a view that commits us to the recognition that the subject and object are an indissoluble system." The roots of this perspective are in clinical psychoanalytic research (Klein, 1946, 1952; Fairbairn, 1944, 1952; Winnicott, 1960; Jacobson, 1964; Kernberg, 1975, 1976, 1977) as opposed to psychoanalytic develop-

mental research, with the exception of Mahler and McDevitt (1968). In that longitudinal study of three children from 8 months to 20 months they observed the development of maladaptive ego defense mechanisms and connected this with maternal lack of empathy and/or emotional modulation in relating to their infants and toddlers. Mahler and McDevitt's (1968) empirical contribution to defense development mediated by affect and social development stands in stark contrast to the lack of empirical child studies in the field of psychoanalytic developmental psychology. This is despite strong theoretical positions on the issue, as exemplified in Spitz's (1961) statement that:

Psychoanalyst's need hardly be reminded that the nature of the mother-child relations, the vicissitudes of their unfolding, and their ultimate fate determine the selection of the particular set of defense mechanisms which the child will elaborate and from which he will mold his individual character structure.
(Spitz, 1961)

or in Greenacre's (1958) opinion that:

From a biological point of view it is noteworthy that the first psychophysical defense of the human infant—largely constitutionally determined, are practically secondary to the superior protective ability of the mother. (Greenacre, 1958)

In addition to the general lack of empirical child studies, there are not systematic, longitudinal, naturalistic psychoanalytically oriented studies of defense organization development that encompass both the early mother-child relationship and the later consolidation of a defense organi-

zation in the late oedipal period.

Despite the lack of knowledge regarding the development of defense mechanisms, per se, there is considerable understanding of the organization of defenses at higher versus lower levels of adaptive functioning. (Freud, 1915; Glover, 1937; Klein, 1946; Hartmann, et al. 1946; Jacobson, 1964, 1971; Semrad, 1967; Gedo and Goldberg, 1973; Kernberg, 1975; Ross and Dunn, 1980; Lerner and Lerner, 1982) Needless to say, all of these studies postulating a hierarchy of defenses are based on reconstructions from adult data.

The primary contemporary representative of the view that early social development mediates the development of various levels of defensive structure is Kernberg (1975, 1976, 1977) He argues that social development manifest in internalized object relations is organized around specific defensive structures. Thus, preoedipal object relations are organized primarily by splitting, the inability to maintain a whole person internal representation manifest by split representations of others corresponding to a particular affective disposition to that part image (either positive or negative). He sees splitting as bolstered by defenses of primitive denial, primitive idealization, primitive grandiosity and projective identification. These defenses are pathological only if they are operative subsequent to the preoedipal phase, indicating a fixation at that level. During the oedipal phase, Kernberg holds that repression supplants splitting in normal

development and it is aided by higher level defenses of intellectualization, rationalization, undoing and higher forms of projection. In Kernberg's view, the strength of the defenses at either of the developmental levels and the reasons for fixations in the defensive structure are the combined results of constitutional givens and the quality of the early mother-child relationship. This dissertation is a contribution to the study of this latter early social relations determinant of defense organization development.

CHAPTER III

METHODOLOGY

A. General Design

This is a naturalistic, longitudinal, exploratory study of the ego development of four female children who participated in both the New York University Mother-Infant Research Nursery, directed by Louise J. Kaplan, Ph.D.*, from February 1975 until May 1976 and in the City University of New York Separation - Individuation Follow-Up Study, also directed by Louise J. Kaplan, Ph.D., from October 1979 through May 1980. Both the N.Y.U. Research Nursery and the C.U.N.Y. Follow-Up Study were naturalistic in design and orientation.

In this dissertation earlier data from the N.Y.U. Mother-Infant Research Nursery, hereafter referred to as the toddler data, is utilized beginning when the subjects turn 1 year old. They attended the nursery two times a week with their mothers for the following year. Each mother-toddler pair was observed intensively using standard ethological methods once every 3-4 weeks. The nursery observations end in late May 1976, when the four subjects are approximately two years old.

* I want to thank Louise J. Kaplan, Ph.D. for generously allowing me access to the earlier data from the N.Y.U. Study and for supervising the data collection phase of the C.U.N.Y. Study which ended as a formal project when Dr. Kaplan regrettably left the C.U.N.Y. Doctoral Program in Clinical Psychology in June 1981.

These same four female subjects participated in the C.U.N.Y. Separation-Individuation Follow-Up Study, hereafter referred to as the child data, three and a half years after the research nursery ended and when the four subjects were approximately five and a half years old. The Follow-Up Study investigated the subjects overall personality development using research instruments including psychological testing, teacher interviews, and classroom observations.

The analysis of the toddler and child data will be done separately using both quantitative and qualitative methods. The results from both developmental phases will be compared using each child as their own controls and then the four subjects will be studied in comparison to one another. The data analysis will be qualitative to retain the richness, subtlety and fullest meaning of the developing person and her primary relationship. The data analysis will be quantitative, as well, to assure a greater degree of reliability and objectivity than is usually possible in studies that are strictly descriptive and clinical in nature.

B. Setting*

1. Toddler Setting

All of the behavior under study during the toddler period

* I wish to thank Steve Migden, Ph.D. for permission to use his description of the N.Y.U. Mother-Infant Research Nursery setting. (Migden, S., 1978).

was observed in the standard setting of the N.Y.U. Mother-Infant Research Nursery. Physically, the nursery consisted of a 17 foot by 21 foot playroom and an adjacent reception area, measuring 9 feet by 16 feet. Located on the tenth floor of 6 Washington Place (NYU's Psychology Building), the nursery was equipped with numerous small toys, larger toys such as a slide, and a large open play area in the center of the playroom. There was a couch and two chairs for the mothers and the participant-observer at one corner of the room, and a row of chairs for the observers at the opposite corner. Movement throughout the playroom was unimpeded for both mothers and children. Typically, the mothers spent most of their mornings conversing with each other and the participant-observer, occasionally stopping to care for and play with their children. The children were generally free to play in and explore the nursery room, doing so either alone, with another child, or with an adult. Despite the continual presence of the participant-observer and other nursery staff, each mother was primarily responsible for the care of her child, much as she would have been on an everyday outing to a public park. (Anderson, 1972) In short, the nursery's goal was to be a natural, informal setting for all of its participants, including mothers, children and staff.

2. Child Setting

The psychological testing component of the child study was conducted in the homes of each of the children. The teacher

interviews were conducted in the school or nursery that the child had or currently was attending. The classroom observations were done in the kindergarten classroom each of the children were attending in the '79-80 school year.

C. Subjects*

The subjects for this dissertation are four white, female children all of whom come from families in the middle class or higher. While the four subjects and their mothers participated in the N.Y.U. Mother-Infant Research Nursery, each of the families resided in the Grammercy/Greenwich Village/Chelsea area of Manhattan, New York. When the C.U.N.Y. Separation-Individuation Follow-Up Study began three and a half years later, one of the families still resided in lower Manhattan, another had moved to an outer borough, and two had moved to the suburbs. Some details about environmental changes and new siblings between ages two and five and a half for our subjects can be found in the brief description of each.

In terms of the toddler phase of this study the subjects and their mothers were recruited by posters and advertising

*I want to thank Steve Migden, Ph.D. for permission to utilize data on the subjects he gathered during the N.Y.U. Study. (Migden, S., 1970).

placed in local newspapers during the fall of 1974. Only those children born between April 1 and August 14, 1974 were considered for selection. Applicants were interviewed by nursery staff, and were selected on the basis of age and sex of the child, intended involvement of the parents, and compatibility of the group. Once selected, parents were fully advised of the purposes and methods of the nursery, and written informed consent for their participation was obtained.

The nursery met in two groups. Group A consisted of children who were six to seven months old at the start of the first session; Group B consisted of children about three months older. Each group met on two different mornings each week that the nursery was in session. Although the children generally attended with their mothers, they were occasionally brought to the nursery by their fathers. Naturally, all instances of child - father interaction are excluded from the quantitative data analysis. In the sample of four subjects selected for this dissertation, Diana, and Zena were from Group A and Helen and Flo were from Group B.

In July 1979 Louise Kaplan, Ph.D. contacted the families of four females who participated in the N.Y.U. Mother-Infant Research Nursery and requested that they take part in the C.U.N.Y. Separation-Individuation Follow-Up Study. Parents were advised in writing of the research methods and time commitment for the child study and a written informed consent was obtained. In addition, the parents gave written permission

for one of the research team members to observe their child in school and to interview their current and former teachers.

Brief descriptions of the children and their families at the time of the N.Y.U. Nursery and the C.U.N.Y. Follow-up Study follow. All four families were middle to upper-middle class in economic status.

1. Diana

Diana was approximately six months old on entry into the N.Y.U. Nursery in February 1975. Her mother was a housewife with a college degree. At the time, her father was studying for a professional degree and doing semi-skilled labor. When the C.U.N.Y. Follow-up Study was initiated four and a half years later, Diana's father had obtained his professional degree and had successfully begun his career. Unlike the fathers of the other subjects, Mr. D. often accompanied his daughter to the nursery. In September 1976 the Diana family moved to an outer borough of N.Y.C. Between ages two and four, Diana attended a nursery for half the day. A younger brother, John, was born in 1978 when Diana was four years old. There were no other siblings nor pregnancies by Mrs. Diana in the period between or during the studies. Between ages four and five Diana attended a preschool fulltime. In October 1979 when the C.U.N.Y. Follow-up Study was beginning, Diana was 5.3 years old and had just started kindergarten.

2. Zena

Zena entered the N.Y.U. Nursery in April 1975, when she was about eight months old. Her mother was a housewife and her father was a white collar employee. Between ages two and three Zena attended a nursery school for half the day. Zena attended preschool full-time between ages 3 and 5. The Zena family had not moved from their lower Manhattan apartment since the early study at the N.Y.U. Nursery. Zena had no siblings nor had Mrs. Z. had any pregnancies in the period between or during the studies. When the C.U.N.Y. Follow-up Study began in October 1979, Zena was 5.3 years old and had just begun kindergarten.

3. Helen

Helen was ten months old when she entered the N.Y.U. Nursery in February 1975. After the N.Y.U. Nursery ended when she was two years old, Helen did not again go to a nursery school until she was three years old, after the family had moved to Baltimore in April 1977. In addition, a younger sister, Patricia, was born in May 1977. Helen currently has no other siblings nor has Mrs. H. had any other pregnancies. Helen's mother worked mainly as a housewife, but before and during the toddler study, she was an aspiring performing artist. When Helen was four years old and Patricia one year old, Mrs. H. began some part-time work outside the home. For the last six

months that the family was in Baltimore, before returning to the N.Y. Metropolitan area (July-December 1978), the father stayed in N.Y.C. for business during the week and returned to home on the weekends. Her father is a white collar professional. When the C.U.N.Y. Follow-up Study began in October 1979, Helen was 5.6 years old and had, like the others, just begun kindergarten.

4. Flo

Flo was nine months old when she entered the N.Y.U. Nursery in February 1975 and continued in it until it closed in June 1976 when she was twenty-five months old. Flo attended preschool between ages 3 and 4 as well as between ages 4 and 5 before entering kindergarten at age 5½. Flo has an older sister, Ann, who was five years old at Flo's birth. The family moved from an urban to suburban setting when Flo was five years old. Thus, she began kindergarten in a new community. Currently Flo has no other siblings than ten year old Ann nor has her mother had any other pregnancies. Flo's father is a white collar professional and has consistently worked outside the home since Flo's birth, while her mother, also a professional, has consistently worked part-time in the home since Flo began preschool.

D. Data Collection

1. Toddler Data Collection*

The data for the toddler study consists of written observational records of child behavior that were collected by the participant-observers and observers on the research nursery staff. At each nursery meeting there were generally two or three observers and one participant-observer, all of whom collected observational data on that day's target child. Observations were scheduled so as to insure that each subject was observed at least one morning a month during the course of the academic year. All of the participant-observers and almost all observers were clinical psychology doctoral students at N.Y.U.

The nursery observers were instructed to have little interaction with the children and mothers. Working as quiet and unobtrusive "potted Palms", their major role was simply to watch the whole nursery scene, but especially the target child, from their seats at the corner of the playroom. While doing this, they gathered the event and time samples to be described below. The participant-observers, by contrast, inter-

* I want to thank Steve Migden, Ph.D. for permission to use his articulation of the data collection procedures used in the N.Y.U. Mother-Infant Research Nursery (Migden, S. 1978).

acted freely with the mothers and children, and they compiled their observational records only after the end of each nursery session. However, even the participant-observers intervened in child-care duties quite minimally, and only at the request of a mother or in her absence. The types of data gathered by the nursery staff are as follows:

Participant-Observer-Records-After each nursery meeting, it was the task of the participant-observer to summarize his impressions of the target child's behavior in four areas. Under "Newly Emerging Capacities", the participant-observer was to note the emergence of consolidation of developing ego functions, such as locomotion, speech, and cognition, as well as the child's and mother's attitudes toward these new-found abilities. In their descriptions of "Similarities and Differences" the participant-observers recorded the outstanding behavioral similarities and differences between mother and child. Under "Distress-Pleasure/Mood-Affect", the child's major distressing and pleasurable experiences were described, as were her prevailing mood or affective state during the morning, which may have varied from depressed to elated. Finally, in "Approach-Distancing" the participant-observer summarized the patterning of the mother-child pair's physical interactions, with special emphasis on average distance, preferred interaction modalities, and the fit between the two partners. Adapted from Mahler's Nine Orienting Questions (Mahler, et al. 1975, pp. 260-66), the participant-observer records

rely on the participant-observer's clinical sensitivity and their experience with the mothers and children. Representative examples of participant-observer records are contained in Appendix A.

Observer Records

Event-Samples-These, like the time samples described below, were gathered by the nursery observers. As Wright (1960, p.104) says, "Event sampling begins with a plan to study integral behavioral events of a given class . . . The investigator stations himself where children can be seen and heard, waits for the events to happen, and then describes them if and when they do occur." The events that nursery observers were instructed to describe in their event samples were Self-Awareness Indicators (e.g., possessiveness, use of the pronoun "I"), Play, Stranger Reactions, and Mother-Child Interaction. Event sampling in the N.Y.U. nursery was not restricted to the target child study only, and so observers were free to compile event samples on any child. Event samples provide a picture of behavior in context, and also have the advantage of combining aspects of on-the-spot, objective description with aspects of impressionistic, inferential description. Most studies have found high reliability and agreement among event sample observers (Wright, 1960). Samples from the N.Y.U. Nursery are contained in Appendix B.

Time Samples-A time sample (called a specimen description by Wright, 1960) is an on-the-spot, objective

running account of all that a child does within a specified period of time. This "sequential, unselective, plain, narrative description of behavior with some of its conditions" (Wright, 1960) is probably the most objective of the open-ended observational tools. With a minimum of inference and a maximum of behavioral description, time samples attempt to sample a part of the "stream of behavior." (Barker, 1960)

At each nursery meeting, usually four, but occasionally three or five, equally spaced time samples were gathered on the target child by one observer. In addition, at least one of these time samples was randomly chosen to be a "matching observation," in which a second observer joined the first to do an independent time sample on the same child at the same time; these matching observations allowed for ongoing checks of inter-observer reliability and agreement. During February 1975 the time samples were three minutes in length; during September and October of the same year they were four minutes in length. At all other times the time samples were five minutes long. Thus, not including the matching time samples, there are some twenty minutes of time sample data for each day's target child. Examples of time samples can be found in Appendix C. Like the event samples and participant-observer records, they contain information on the child, date, and observer at the top of the page. The time of observation is also noted, and there is a brief statement concerning the child's (and occasionally the mother's) general situation

or affective state prior to, and occasionally just after, the observation period. Slashes in the text indicate the end of either a thirty or sixty second period.

2. Child Data Collection

The data collection for the C.U.N.Y. Separation-Individuation Follow-Up Study was done by a research team comprised of Murial Frischer, Ph.D., Barbara Bernstein, Ph.D. and the author. At the time all of us were graduate students in the doctoral program in Clinical Psychology, C.U.N.Y. Louise Kaplan, Ph.D. directed the data collection portion of the child study which ended as a formal project in June 1981. The author, in conjunction with the present dissertation committee, is responsible for all aspects of this dissertation other than the data collection.

In order to prevent the data collected from one source (e.g., teachers) from biasing observations or testing of the subjects, data collection was divided among the three members of the research team. The investigators worked independently and did not share their findings or impressions until all the data had been collected.

The child data collection had the following components which will be described individually: psychological testing, teacher interviews, and classroom observations.

Psychological Testing

A comprehensive standard battery of psychological tests

were administered to each subject. This battery consisted of the Wechsler Preschool and Primary Scale of Intelligence (WPPSI), the Rorschach, the Thematic Apperception Test (TAT), the Children's Apperception Test (CAT), the Bender-Gestalt Test, the House-Tree Person and Kinetic Family Drawing Tests, and Despert Fables. Testing was conducted in two or more sessions.

Teacher Interviews

Each child's current and former teachers or day-care-takers were interviewed to obtain descriptions of the current or former level of psychosocial adjustment, particularly to the school environment, and the child's strengths and weaknesses as well as their characteristic patterns of interacting with both peers and adults. The format of the structured interviews with current and former teachers can be found in Appendix D.

School Observations

With the consent of the school principal and the child's teacher, each child was observed in the classroom on four occasions, usually within a two to three week span of time. Typically, the teacher would introduce the observer to the class as a visitor who would spend some time with them. The study child had not previously met the observer and was unaware that she was the focus of observation.

Observations were recorded using a method of time

sampling. A description of the time sample method of behavioral observation can be found in the preceding section on Toddler Data Collection. In the time sampling done during the classroom observation portion of the Child Data Collection all behavior was recorded for each alternate five minute segment. Brief impressionistic descriptions of the events which occurred between the time samples were recorded to give greater continuity and readability to the observations. These were necessarily rather selective and therefore subjective.

The length of each observation was partially dictated by the class schedule and the teacher. Observations covered a period of at least one hour, twenty minutes. They were typically longer and often spanned the entire school day. Following the completion of each observation, an impressionistic summary was written. The scope of the summaries varied from one observation to another and from one child to another. Typically they included an initial impression of the child, description of the child's mood, interactions with peers and with adults, and similarities to, or differences from previous observations. Questions that occurred to the observer about the child were also noted. A sample of an observation may be found in Appendix E.

E. Data Analysis

1. Toddler Data Analysis

The analysis of the toddler data was focused on aspects

of the mother-toddler interaction that reflect maternal sensitive responsivity. Each cycle of interaction was identified by the author and subsequently rated on a scale of maternal sensitive responsivity by trained raters who had no knowledge of the subjects, the other data or the purpose of this dissertation.

An interaction cycle is a natural unit of mother-toddler interaction made up usually of some form of communicative initiative by one member of the pair, followed by a series of reciprocal communicative interchanges and then concluded, either for reasons inherent in the ongoing "dialogue" or because there is an externally imposed interruption. Analyzing data on the basis of naturally formed interaction cycles inherent in the mother-infant relationship is a common practice in current developmental research. (Spitz, 1963, 1964, 1965; Schaffer, 1977; Newson, 1977) There were not a uniform number of ratable interaction cycles for each subject and her mother. There were 161 ratable interactions for Flo; 175 for Zena; 130 for Helen; and 87 for Diana, all occurring between 12 months old and 24 months old.

These interaction cycles were rated on a five point scale of maternal sensitivity adapted from Ainsworth's (1976) scale of "Sensitivity Versus Insensitivity to the Baby's Communication." This scale is part of her comprehensive approach to assessing maternal care behavior during the first year entitled, System for Rating Maternal Care Behavior. (Ainsworth, 1976)

Although not published, this system has been made available for professional use by Ainsworth through Educational Testing Services, Princeton, New Jersey. The description by Ainsworth of the maternal behavior patterns identifiable with the use of her Maternal Sensitivity Versus Insensitivity Scale can be found in Appendix F and was used to train the raters of the toddler data. Two trained raters applied the scale to a sample of forty interactions, ten from each of the four subjects, and achieved interrater reliability for the scale at $p < .01$. The duration scale also achieved an interrater reliability at $p < .01$ and is described in Appendix H. The duration scale was created by the author. The reliability of the sensitivity scale has also been confirmed both by Ainsworth, Belhar, Waters and Wall (1978) and Main, Tomasini and Tolan (1979) who found that this particular scale differentiated mothers of insecure versus mothers of secure infants more reliably and significantly than any other maternal care scale they used.

This particular Ainsworth scale is so successful because it clearly delineates the essential components of maternal sensitivity and includes these components within the scale itself. The variables of maternal interactive behavior that this scale focuses on are: a) maternal awareness of the infant/toddler communicative; b) the degree of accurateness in her interpretation of these communicative signals; c) the appropriateness of her response to them; d) the promptness of her response to them; and e) the degree of her temporal synchronization with her infant/toddler's communicative tempo. The

modifications in the Ainsworth scale for this dissertation were superficial ones whose purpose was to make the scales more suitably worded so they could apply to the judging of a series of moments of interaction rather than to the continuous two hour home observation for which it was originally designed. In Ainsworth (1976) there is an explicit note that the scale of Maternal Sensitivity vs. Insensitivity "may be more generally applicable." The modified scale called Maternal Sensitive Responsivity vs. Insensitive Responsivity to her Toddler can be found in Appendix G.

The results of the rating of maternal care behavior were analyzed to find out how sensitive the mothers were and how much interaction occurred while they are relating to their toddlers. The results showed how sensitive the mothers are overall during the second year as well as whether there is a qualitative shift in sensitivity and the amount of interaction during the Practicing versus Rapprochement Subphase of Separation-Individuation. The practicing subphase is defined as occurring between 12 months and 16 months while the rapprochement subphase includes the period between 17 months to 24 months. The quantitative aspects of the toddler data analysis were as follows:

- a) Overall mean scale score of maternal sensitive responsivity was obtained for each of the mothers of our four subjects as well as two other mean scale scores of maternal sensitivity for the practicing subphase and the rapprochement subphase, respectively.

- b) Mean scores for duration were obtained including overall, practicing and rapprochement.
- c) Statistical tests were performed to determine significant differences between both overall means and between the practicing and rapprochement means for each subject.
- d) Finally, a statistical test was performed to determine any significant differences between subjects regarding the frequency distribution of their sensitivity scores.

The qualitative analysis of the toddler data involves the author's study of the participant observer records to obtain their views on the quality of maternal sensitivity to her toddler's communications during the second year. A summary of the participant observer views is presented in the Clinical Profile on each subject.

2. Child Data Analysis

The primary aim of the child data analysis is to establish the quality of each subject's ego defense organization. The psychological test data and the classroom observational data are analyzed specifically to highlight each subject's ego defense organization. The teacher interviews, current and former, are used to provide a validation and contrast with the results of these specific analyses.

The concept of defense in the child data analysis is

defined according to its traditional psychoanalytic meaning.

A thorough definition is provided by Schafer (1954):

People cannot flee from their impulses as they can from a storm or a snake. Accordingly, they must rely on intrapsychic maneuvers or operations by means of which they may block any and all discharge of the threatening impulses. These operations usually entail denying conscious representation to ideas, affects and other impulses associated with the threatening impulses, as well as blocking discharge of the threatening impulses themselves. Otherwise, if these impulse representations gained consciousness, they would bring the individual that much closer to being dominated by the rejected impulses themselves, and would tend to stir up intense anxiety, guilt, and other painful feelings.

The operations by which impulses and their representations are blocked from expression in consciousness and action are known as defenses. Defenses differ from controlling or regulating ego functions in that the latter are relatively autonomous, conflict-free functions facilitating the discharge of impulses, even if in partial, modulated or indirect form. In contrast, defenses ultimately are desperate, thoroughgoing, uncompromising attempts to 'eliminate' the rejected, threatening impulses and their representations. Of course, a defensive operation may fail partially or totally, in which case more or less discharge and conscious awareness of the rejected impulse result along with more or less anxiety.

In brief, defense is understood to refer to any psychological operation that is intended to block discharge of threatening, rejected impulses and thereby to avoid the painful emotional consequences of such discharge.

Many defense mechanisms of varying effectiveness and developmental maturity have been identified. (Freud, A. 1936; Hartmann, 1939; Fenichel, 1945, Klein, 1946; Kernberg, 1975). A distinction between "primitive", "archaic" or immature mechanisms versus higher level, mature mechanisms

is present throughout the literature on defense. For this thesis, immature defenses are those that accomplish their purpose with alloplastic mechanisms while mature defenses are those which accomplish their purpose autoplastically. That is, ego defenses which significantly distort or ignore external reality (alloplastic) to accomplish ends (i.e., projection, denial, primitive forms of identification with the aggressor, avoidance, etc.) are considered immature while ego defenses which alter aspects of the self (autoplastic) to accomplish their ends (repression, reaction formation, isolation, undoing, etc.) are considered mature ego defenses. Developmentally, autoplasic ego defenses begin developing during the early stages of the oedipus complex parallel with superego consolidation. Alloplastic defenses predominate preoedipally and when high level defenses fail.

The child data collected from the comprehensive standard battery of psychological tests administered during the subject's sixth year were analyzed by a senior clinical child psychologist who produced a test report (Appendix I) including the following:

a) the degree and kind of anxiety evident in each child's intrapsychic function ("degree of anxiety" meaning whether it is mild, limited, and transitory or overwhelming, diffuse and persistent; "kind of anxiety" referring to its hypothesized developmental origins, for example "superego anxiety" being characteristic of latency, "castration anxiety" being representative of oedipal development, and anxiety

regarding loss of self and its boundaries being representative of preoedipal development.

- b) the preferred defenses of each child
- c) the effectiveness of defenses in controlling and modulating impulses and affects and maintaining optimal adaptation
- d) the developmental level of the defenses evident.

That is, are defenses employed in a primitive, undifferentiated, rigid fashion compromising effective coping and distorting reality? Do these defenses that are used in a more primitive fashion have their origins in preoedipal developmental eras (for example, primitive denial, projection, early identification) oedipal development (ex. repression, reaction formation, isolation), or latency age (ex. sublimation, intellectualization).

- e) the balance of emotional health versus psychopathology in each child. That is, how deeply engrained are the less effective, more primitive, more rigid mechanisms of defense used in coping with internal threats.
- f) the rank order of the four subjects according to the overall effectiveness and maturity of their respective ego defense organizations.

This child psychologist had no prior knowledge of the subjects nor of the purpose of this dissertation. The test report

will be summarized and integrated in the Clinical Profiles on each subject.

The child data collected by classroom observation was analyzed by the author for the ego defense organization reflected in the classroom behavior of each subject. A full report of the ego defense analysis based on classroom behavior can be found in Appendix J. A summary of these findings will be presented in the Clinical Profile on each subject.

3. Comparative Analysis of Toddler Data and Child Data

Due to the small sample size statistical methods of comparative analysis will not be used. First, overall findings of the toddler data analysis and child data analysis are presented. Second, Clinical Profiles on each subject are presented. The Clinical Profile involves: a summary of the participant observer records regarding the quality of maternal sensitivity during the entire second year; a comparison of these findings with the statistical findings; a summary of teacher assessments for the current and previous school years; a summary of the analysis of ego defenses based on classroom behavior (Appendix J); a summary of the analysis of ego defenses based on psychological testing (Appendix I); and a comparison and integration of these findings.

CHAPTER IV

RESULTS

A. Summary of Overall Findings

First, a summary of the results of the quantitative and qualitative toddler data analysis will be presented. Second, an overview of the results of the quantitative and qualitative child data analysis will be presented. Finally, the four subjects will be ranked according to the finding on maternal sensitivity and on the quality of ego defense development. In the next section of this chapter (B. Clinical Profiles) the findings on the mother-toddler relationship and later ego defense development will be presented in detail on each subject. The Clinical Profiles compare and integrate the quantitative and qualitative findings from the toddler phase and the late oedipal phase.

The results of the quantitative toddler data analysis were based on a total of five hundred and fifty four observations of mother-toddler social interactions by four mother-toddler pairs. There were differing numbers of rateable interactions for each mother-toddler pair (see Table 1). Each interaction was rated on a five-point maternal sensitivity scale (Appendix G) and a three point duration of

interaction scale (Appendix H). Mean scale scores for sensitivity and duration for each mother-toddler pair were generated and are presented in Table 1.

Table 1

Sensitivity and Duration Means for Each Subject

Subject	Measure	Number of Interactions	Mean	Standard Deviation	Minimum Value	Maximum Value
Diana	Sensitivity	87	3.68	0.67	2.0	5.0
	Duration	87	1.92	0.81	1.0	3.0
Helen	Sensitivity	130	3.64	0.68	1.0	5.0
	Duration	130	1.99	0.80	1.0	3.0
Flo	Sensitivity	161	3.48	0.82	1.0	5.0
	Duration	161	1.93	0.80	1.0	3.0
Zena	Sensitivity	176	3.47	0.72	1.0	5.0
	Duration	176	1.91	0.82	1.0	3.0

All statistical procedures used on this research data are from Statistical Analysis Systems, 1982-1983. Using SAS procedures, statistics were computed on an IBM 43-41 at the Harvard School of Public Health. Given the small sample of subjects, the probability values resulting from the statistical procedures that follow are not presented to make meaningful statements about the general population. Rather, they are presented only to highlight apparently meaningful differences between the four subjects. The attempt to discriminate meaningful differences between subjects on the measures of sensitivity and duration is required if we are

to meaningfully test our longitudinal hypothesis that less socially sensitive mothers during toddlerhood will have kindergarten age children who have a lower quality ego defense organization when compared with children of mothers who were more socially sensitive during toddlerhood. While it is true that this hypothesis could have been confirmed or disconfirmed simply by presenting the statistical results on a descriptive level (e.g., comparing subjects on level of greater or lesser sensitivity means or percentages of 1's, 2's, 3's, 4's and 5's), I believe the results are more meaningful if differences on a descriptive level are also shown to be differences at statistically significant levels of probability. Finally, the results that follow that do show statistically significant levels of probability make it reasonable to test the hypotheses in the general population.

Returning to the results, an F-Test was done on the four groups of sensitivity means to determine if there were meaningful differences between them. The results of this F-Test are presented in Table 2.

Table 2

F-Tests on the Four Groups of Sensitivity Means

Dependent Variable: Sensitivity				
<u>Source</u>	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F Value</u>
Model	3	4.495	1.498	2.76
Error	550	298.966	0.544	PR>F 0.041
Corrected Total	553	303.460		

The results of this F-Test are that the sensitivity means of each mother-toddler pair are different at $p < .04$. This F-Test does not characterize where or in what way the sensitivity means differ significantly, just that they do. In essence, this result says the null hypotheses of $M_1 = M_2 = M_3 = M_4$ can be rejected at $p < .04$ level. The means are not alike but where are the differences?

The Tukey-Kramer method for pairwise comparisons was used to discriminate differences between pairs. The Tukey is essentially a multiple comparison of means of groups with unequal numbers of means. It was done according to the General Linear Models Procedure of SAS. Table 3 presents the results of comparing differences in sensitivity means among subjects.

Table 3

Tukey's Studentized Range (HSD) Test for the Variable: Sensitivity

Comparison	<u>Simultaneous</u>	<u>Difference</u> <u>Between</u> Means	<u>Simultaneous</u>
	<u>Lower</u> <u>Confidence</u> Limit		<u>Upper</u> <u>Confidence</u> Limit
Diane-Helen	-0.2235	0.0397	0.3029
Diane-Flo	-0.0529	0.1999	0.4527
Diane-Zena	-0.0367	0.2123	0.4612
Helen-Diana	-0.3029	-0.0397	0.2235
Helen-Flo	-0.0638	0.1602	0.3842
Helen-Zena	-0.0472	0.1726	0.3923
Flo-Diana	-0.4527	-0.1999	0.0529
Flo-Helen	-0.3842	-0.1602	0.0638
Flo-Zena	-0.1948	0.0124	0.2195
Zena-Diana	-0.4612	-0.2123	0.0367
Zena-Helen	-0.3923	-0.1726	0.0472
Zena-Flo	-0.2195	-0.0124	0.1948

Note: This test controls the type I experimentwise error rate. Alpha = 0.05 Confidence = 0.95 DF = 550
MSE = 0.543574 Critical Value of Studentized Range = 3.644

Comparisons significant at the 0.05 level are indicated by ***

The above results show that no pairwise differences between sensitivity means are significant at $p < .05$. Similarly, no pairwise differences between duration means were found to be significant when a Tukey-Kramer test was done on that data. The F-Test (Table 2) showing significant differences between the sensitivity means is an indication it is warranted to proceed with further statistical tests. Given the similar sensitivity means for Diana (3.68) and Helen (3.64) versus the equally similar Flo (3.48) and Zena (3.47), a two sample T-Test with unequal N's was done in a further effort to discriminate meaningful differences. This T-Test comparing Diana and Helen as a group with the group of Flo and Zena showed a significant difference between the two groups at $p < .01$. Hence, there are great differences between these two groups of mothers regarding their sensitivity to their toddlers.

In another attempt to detect differences in sensitivity the five-point sensitivity scale was re-scaled to sharpen the difference on the basis of sensitivity versus insensitivity alone rather than on varying gradations of sensitivity. To accomplish this re-scaling, social interactions originally rated 4 or 5 on the five point sensitivity scale were condensed to one rating of "sensitive" since they all were meant to capture sensitive or highly sensitive interactions. Social interactions rated 1 or 2, or 3 which originally were used to rate inconsistently sensitive, insensitive, or highly

insensitive interactions, were condensed to one rating of "insensitive". A Tukey-Kramer Test for pairwise comparisons was done on the newly generated means and the results can be found in Table 4.

Table 4

Tukey's Studentized Range (HSD) Test for the Re-Scaled Variable: Sensitivity

Comparison	Simultaneous Lower Confidence Limit	Difference Between Means	Simultaneous Upper Confidence Limit
Diana-Helen	-0.10042	0.07011	0.24065
Diana-Flo	0.02244	0.18626	0.35008 ***
Diana-Zena	0.06899	0.23034	0.39169 ***
Helen-Diana	-0.24065	-0.07011	0.10042
Helen-Flo	-0.02902	0.11615	0.26132
Helen-Zena	0.01785	0.16023	0.30261 ***
Flo-Diana	-0.35008	-0.18626	-0.02244 ***
Flo-Helen	-0.26132	-0.11615	0.02902
Flo-Zena	-0.09019	0.04408	0.17834
Zena-Diana	-0.39169	-0.23034	-0.06899 ***
Zena-Helen	-0.30261	-0.16023	-0.01785 ***
Zena-Flo	-0.17834	-0.04408	0.09019

Note: This test controls the Type 1 experimentwise error rate. Alpha = 0.05 Confidence = 0.95
DF = 550 MSE = 0.228258 Critical Value of Studentized Range = 3.644

Comparisons significant at the 0.05 level are indicated by ***

The above Tukey-Kramer Test reveals a number of significant differences. Mrs. Diana was significantly more sensitive to her toddler than was Mrs. Flo to hers at $p < .05$. Mrs. Diana was also shown to be significantly more sensitive to her toddler than Mrs. Zena was to her toddler, also at $p < .05$.

Mrs. Helen was shown to be significantly more sensitive to her toddler than was Mrs. Zena to hers, also at $p < .05$. The difference in sensitivity of Mrs. Helen compared to Mrs. Flo shows a trend approaching significance.

Finally, although Mrs. Flo was not statistically more sensitive to her toddler than was Mrs. Zena to hers, again there were trends in the data approaching a significant difference between the two mothers. Thus even the two mothers who form the less sensitive subgroup show trends towards a significant difference in the balance of sensitivity versus insensitivity.

In summary, Mrs. Diana and Mrs. Helen form a subgroup of maternal care that is significantly more sensitive to their toddler's communication than Mrs. Flo or Mrs. Zena, who form another subgroup of less sensitive maternal care. In addition, when the four subjects are studied solely on the basis of the balance of overall sensitive versus insensitive interactions differences at $p < .05$ level are evident between three pairs (Mrs. Diana-Mrs. Flo; Mrs. Diana-Mrs. Zena; Mrs. Helen-Mrs. Zena). In order to help put these four mother-toddler pairs in some perspective, Table 5 presents the frequency

distribution of social interactions rated 1, 2, 3, 4 or 5 for the degree of maternal sensitivity evident.

Table 5

Frequency Distribution of Sensitivity Ratings

<u>Subject: Diana</u>				
<u>Sensitivity Rating</u>	<u>Frequency</u>	<u>Cum Frequency</u>	<u>Percent</u>	<u>Cum Percent</u>
1	0	0	0	0
2	9	9	10.35	10.35
3	11	20	12.64	22.99
4	66	86	75.86	98.85
5	1	87	1.15	100.00
<u>Subject: Helen</u>				
<u>Sensitivity Rating</u>	<u>Frequency</u>	<u>Cum Frequency</u>	<u>Percent</u>	<u>Cum Percent</u>
1	1	1	0.77	0.77
2	9	10	6.92	7.70
3	29	39	22.31	30.00
4	88	127	67.69	97.69
5	3	130	2.31	100.00
<u>Subject: Flo</u>				
<u>Sensitivity Rating</u>	<u>Frequency</u>	<u>Cum Frequency</u>	<u>Percent</u>	<u>Cum Percent</u>
1	5	5	3.11	3.11
2	13	18	8.06	11.18
3	49	67	30.44	41.62
4	88	155	54.66	96.27
5	6	161	3.73	100.00
<u>Subject: Zena</u>				
<u>Sensitivity Rating</u>	<u>Frequency</u>	<u>Cum Frequency</u>	<u>Percent</u>	<u>Cum Percent</u>
1	1	1	0.57	0.57
2	16	17	9.09	9.66
3	64	81	36.36	46.02
4	90	171	51.14	97.16
5	5	176	2.84	100.00

It is important to note that a majority of all rated responses for all four mothers are in the unequivocally sensitive range, that is, are rated 4 or 5 (Mrs. Diana 77%; Mrs. Helen 69%; Mrs. Flo 59%; Mrs. Zena 54%). The fact that a majority of all interactions for all the mothers were considered unambivalently sensitive supports the fact that these mothers were all considered in the normal range when the study was initiated. As we found, however, in this "normal" range significant differences in sensitivity are present.

In addition to performing statistical tests to determine overall differences between subjects regarding maternal sensitivity and the duration of interaction, t-tests were performed to compare sensitivity and duration means during the practicing subphase and rapprochement subphase within each mother-toddler pair. Comparing the duration means within each mother-toddler pair for each of the two subphases of Separation-Individuation showed no statistically significant differences for any of the four mother-toddler pairs.

The comparison of sensitivity means within each mother-toddler pair for the two subphases showed no significant difference for three of the four mother-toddler pairs. Mrs. Flo and Flo were the only mother-toddler pair that showed a significant difference in sensitivity between the practicing subphase and rapprochement subphase and did so at $p < .01$.

These results are presented in Table 6.

Table 6

T-Test Comparing Sensitivity Means During Two Subphases

<u>Subject: Flo</u>				
<u>Variable: Sensitivity</u>				
<u>Phase</u>	<u>N</u>	<u>Mean</u>	<u>Std Dev</u>	<u>Std Error</u>
Practicing	38	3.86842105	0.52869307	0.08576534
Rapprochement	123	3.35772358	0.86013801	0.07755603
<u>Variances</u>	<u>T</u>	<u>DF</u>	<u>Prob > ITI</u>	
Unequal	4.4166	101.6	0.0001	
Equal	3.4593	159.0	0.0007	
For H ₀ : Variances are equal, F' = 2.65 with 122 and 37 DF				
Prob > F' = 0.0011				

Mrs. Flo is dramatically less sensitive to Flo during rapprochement when compared to the sensitivity of her responses during the practicing subphase.

In terms of the qualitative data analysis, the findings of the participant observers regarding the sensitivity of each mother to her toddler's communications confirm the statistical findings. That is, Mrs. Diana and Mrs. Helen were seen as consistently sensitive to, respectively, Diana and Helen throughout the second year. Mrs. Flo was seen as quite sensitive to Flo during the practicing subphase and as abruptly becoming insensitive with the onset of rapprochement and this continued, with modest improvements,

until the end of the second year. Mrs. Zena was seen as insensitive to Zena throughout the second year by the participant observers. She was viewed as particularly unavailable emotionally during practicing, gradually becoming more sensitive as Zena became more skilled, especially verbally, during rapprochement. Despite some improvements during rapprochement, major areas of insensitivity remained in Mrs. Zena's relationship to Zena throughout the second year according to the participant observers.

The analysis of childhood data (5y.o.-6y.o.) involved three components. First, teacher assessment of each subject in their kindergarten classroom, and where available, from earlier preschool years. Second, an analysis of each subject's ego defense organization based on naturalistic observations of the child in school (Appendix J). Third, another analysis of each subject's ego defense organization based on psychological test data (Appendix I).

The kindergarten teacher observations saw Helen and Diana as basically well adjusted in the classroom both socially and academically and viewed each as generally happy, healthy and very competent. Flo and Zena, on the other hand, had more mixed assessments from their kindergarten teachers. They were both seen as independent and competent at impersonal tasks. However, both had significant trends toward overall unsatisfying social

relations with their peers, showing regressed tendencies in this area. The teacher observations from the third, fourth and fifth years tended to show earlier manifestations of the current problems or strengths in kindergarten for Flo, Zena and Diana.

The analysis of ego defenses on the basis of kindergarten observations showed only Helen to be consistently sustaining a high level of ego defense organization. That is, her repertoire of high level obsessional defenses were employed flexibly and were effective in warding off impulses, modulating affect, eliminating anxiety and maintaining an optimal developmental level of adaptation both socially and cognitively.

On the basis of classroom observations, Diana was seen as oscillating between higher and lower level ego defenses depending on the degree of structure her environment offered. With such environmental support, Diana was able to sustain a high level ego defense organization. She did regularly regress to less mature or more rigid defenses during transitions in activities. On the positive side, she recompensated quickly and the less mature defenses were not engrained in her character structure.

Flo was the most anxious of the four children as they were observed during kindergarten. She predominantly used lower level defenses (denial, projection, avoidance) which

prevented further regression but did not eliminate her anxiety. Flo, in effect, seemed suspended between higher level obsessional defenses that were chronically failing and lower level defenses that left her anxious, withdrawn and socially maladapted. Like Diana, Flo's ego defense organization was in flux and basically unsettled. Unlike Diana, however, Flo relied more heavily on immature defenses to maintain her equilibrium.

From the perspective of the classroom observations, Zena's ego defenses were stably organized, similar to Helen. Zena, however, had a stable organization incorporating both higher and lower level defenses. The classroom observations indicated that the less mature defenses (projection, denial, projective identification, primitive forms of identification with the aggressor) had become part of her character structure, effectively eliminating anxiety but at great cost to her social and emotional integration.

The analysis of ego defenses on the basis of psychological testing (Appendix I) unambiguously confirm the analysis based on kindergarten observations for Helen and Zena. Helen was ranked the highest of the four subjects in terms of the effectiveness and developmental level of her ego defenses and Zena the lowest. Zena, in fact, was seen as quite disturbed with both her attempts at higher level

defenses and her more primitive defense mechanisms being ominously ineffective. Flo was ranked second and Diana third in terms of the effectiveness of ego defenses based on the psychological testing.

In contrast to the results from kindergarten observations, Flo's ego defense organization was seen as effective with only scattered and circumscribed regressions to less mature mechanisms. Diana, on the other hand, was seen as relying primarily on lower level hysterical defenses (avoidance, projection, denial, displacement) with only a modest reliance on higher level defenses. This assessment also differs from that based on the classroom observations regarding the balance of primitive vs. mature ego defense mechanisms. However, a point of agreement between Diana's assessments from testing and from the classroom observation is the conclusion that her ego defenses are situationally effective. There is also agreement in the two assessments on Flo regarding her current dilemma involving an intense struggle of power and assertiveness versus equally intense dependency yearnings. The result of the conflict being an underlying depression and some compromises in usually conflict free ego functions.

Table 7 (pg.89) demonstrates in summary fashion the results from the toddler data analysis and the childhood data analysis.

The four subjects are placed in rank order for each category of assessment with the first place representing either most sensitive mother, or longest interactions or most effective ego defense organizations. The last place (4th) represents the least sensitive mother, the shortest interaction or the least effective, most immature ego defense organization.

Table 7

Comparative Rankings of Subjects for Maternal Sensitivity;
Duration of Interaction and Quality of Ego Defense Organization

Rank	Overall Sensitivity Means	Practicing Sensitivity Means	Rapprochement Sensitivity Means	Overall Duration Means	Practicing Duration Means	Rapprochement Duration Means	Effectiveness of Defenses, Classroom	Effectiveness of Defenses, Testing
1st	Diana	Flo	Diana	Helen	Helen	Helen	Helen	Helen
2nd	Helen	Helen	Helen	Flo	Diana	Flo	Diana	Flo
3rd	Flo	Diana	Zena	Diana	Zena	Zena	Flo	Diana
4th	Zena	Zena	Flo	Zena	Flo	Diana	Zena	Zena

B. Clinical Profiles

Helen

Helen entered her second year well into the practicing phase of separation-individuation with its exuberant celebration of a beginning sense of self, manifest particularly in the discovery of the joys of independent locomotion. Helen was the earliest walker in the nursery at 11 months. During early practicing and practicing proper, Mrs. H. was consistently very sensitive to Helen's wishes and moods, always making herself emotionally available in an unobtrusive manner. Helen and her mother were clearly a happy and secure pair.

During weaning at approximately 12-13m. Helen had some periods of low keyedness towards which her mother was empathetic. Mrs. H's sympathy however did not transform itself into an anxious attempt to use other foods as a substitute satisfaction for the essentially emotional loss involved. This is in contrast to Mrs. F. who almost compulsively used food or drink to help her daughter Flo modulate dysphoric affect. Helen quickly recovered her previous radiant sense of well being, her fundamental healthy narcissism surviving weaning intact.

Helen was happiest when she controlled the approach-distancing pattern during practicing. She would venture further away from "home base" than any of the other toddlers and would then characteristically woo her mother to catch

her, being filled with delight when Mrs. H. did so. During her 13th and 14th months, Helen showed acute distress reaction at passively experienced physical separations from her mother. Helen was the only toddler who showed such focused distress reactions to separations. All the other toddlers had more diffuse reactions commonly referred to as low keyedness and involved lowered activity levels, subdued affect and a turning inward of attention. These early, focused distress reactions may have been due to a vulnerability in Helen's sense of self brought about by her early locomotion. In addition, Helen had recently adjusted to being weaned which in addition to the early locomotion may have evoked a temporary, but intense, need for mother's constant presence. Soon Helen began showing the more typical diffuse reaction as well as a delighted and happy greeting response when her mother would return. As practicing continued, Mrs. H. allowed Helen to create more distance between them without intruding or becoming anxious. This is in contrast to Mrs. D., who despite her exquisite sensitivity to Diana, sometimes became overprotective when Diana would attempt to take exploratory excursions, independent of her watchful eye.

The beginning of the rapprochement subphase was signalled by an upsurge of anxiety in Helen about sleeping alone at home and by increased, focused attempts to share her exploits and achievements with mother in the nursery. For a few weeks at home Helen was unable to sleep alone in her room without

becoming very distressed. She was only comforted by Mrs. H. sleeping with her in a separate room. Subsequent to Mrs. H.'s responsiveness to this rapprochement crisis, Helen began to tolerate increased separations from her mother both at home and in the Nursery. Helen began, at times, to even ignore her mother's presence and primarily gravitate towards other people and the wider world. As Helen became more independent and assertive she also became demanding of Mrs. H. in a more focused way. For example, insisting her mother respond immediately to her requests to play. Mrs. H. then began to set limits to her immediate availability. The result of Mrs. H.'s reasonable no-saying was an even further increase of Helen's ability to say no when she wished to her peers and to adults. When Helen was 22 months Mrs. H. became aware she was pregnant and due to fatigue and morning sickness was temporarily less able to actively be involved both physically and emotionally with Helen. Helen's and Mrs. H.'s moods mirrored each other for approximately a month with Helen showing less exuberance and less focused social play than was characteristic of her. Helen persisted during these difficult weeks in attempting to involve her mother in her exuberant achievements and when she wasn't successful continued her activities only with less liveliness. By 23rd and 24th months both Helen and Mrs. H. had recovered their narcissistic equilibrium and this happy pair moved forward together.

During the entire second year Helen was generally an

alert, content, exuberant, secure and curious toddler. Throughout the year she derived great pleasure from interacting with people. As a matter of fact, Helen enjoyed social interactions with peers and adults to a greater degree than all the other toddlers in the nursery. She consistently reacted in a focused way to disappointments and recovered quickly from them throughout the year. Helen also demonstrated a striking capacity for empathy, although at different developmental levels, during the second year. In practicing subphase she usually would become upset when another toddler was upset or, if a toddler was particularly happy, she would respond in kind. For example, when another toddler, Jane, walked for the first time, Helen was excited and clapped her hands. Later in the year Helen would actively comfort those children who were distressed, remembering their favorite objects or activities (i.e., giving a cookie to Flo or a cowboy hat to Kris). Helen babbled more than the other toddlers and was the first to engage in symbolic play as well as attempt cooperative play with her peers. During her rapprochement she continued to be exquisitely sensitive to and watchful of the other toddlers sharing their triumphs and discomforts. One child, Jane, was particularly frightened of everyone in the nursery but Helen seemed to have a way with her. Helen was more skilled than all the other toddlers at cooperative play. Especially evident in the late rapprochement subphase was Helen's skill at following the rhythm of another toddler's play and then joining in at an opportune moment, succeeding in transforming

it into mutually satisfying cooperative play. Also during late rapprochement Helen showed early signs of a coherent defense organization. For example, in one interaction she was about to hit another child when she glanced towards her mother and almost instantaneously transformed the aggressive hit into a gentle, warm pat that appeared quite genuine. The precursors of reaction formation were coming into place at this time. Throughout most of the second year Helen's considerable affective, social and cognitive competencies became less sharp and available to her when her mother was absent either physically or emotionally. This pattern began changing in late rapprochement subphase when mother's absence precipitated neither ego or id regression. Her peak performance, however, still required her mother's presence and emotional availability.

Mrs. H.'s type of responsivity was basically sensitive, as were all the mother's to greater or lesser degrees. However, the quality of her relatedness to Helen stood out in a number of ways. The primary difference was the degree to which Mrs. H. allowed Helen to set the pace of interactions, rarely imposing her own preconceived plans or needs on her toddler. She was basically non-structuring, non-demanding and non-intrusive in her interactions up and through the rapprochement crisis. Subsequently, during the later rapprochement stage Mrs. H. would consistently set limits on Helen when she was excessively demanding.

This limit setting complemented Mrs. H.'s previous pat-

tern of wholeheartedly responding positively to both Helen's need for closeness and security and her independent functioning. In essence, Mrs. H. was content to hold Helen in her lap or maintain visual or verbal contact as long as Helen needed and was equally aware of and supportive towards Helen's needs to leave her lap or perceptual sphere and play autonomously.

A successful pattern of refueling throughout the second year epitomizes the nature of this mother-toddler pair. Throughout practicing and rapprochement Mrs. H. never imposed her lap and bottle on Helen, rather she was available to Helen's initiative and responded when needed with great warmth and affection. These moments of refueling came to be known as "snuggle-bottles". Inevitably, after a few minutes of refueling, Helen would be re-energized and off for further exuberant exploration. A new refueling pattern emerged in late rapprochement signalling the emergence of two autonomous persons in the mother-child pair. In the new pattern Helen would take the bottle and remain standing facing outwards with her mother's arms around her. Both Helen and Mrs. H. were no longer preoccupied with the intense bond between them excluding the rest of the world, rather they maintained the security of their closeness and alertness to the wider world at one and the same time.

Statistical analysis of the sensitivity ratings for Helen and her mother confirms the views of the participant observers in the nursery. Though ranked second overall in terms of sensitivity (3.64 vs. 3.68 for Mrs. D.), Mrs. H. does not differ

from Mrs. D. in a statistically significant way. As noted in the overview of the results when Mrs. D.'s and Mrs. H.'s means are treated as a pair, they differ significantly from Mrs. F. and Mrs. Z. a $p < .01$. These are the only pair-wise significant differences. Attesting to her availability and consistency, Mrs. H. had the longest interactions in both the practicing subphase and the rapprochement subphase.

Finally, Mrs. H. showed the greatest stability across rankings in the second year data of any mother-toddler pair (Sensitivity: ranked 2nd overall-3.64; ranked 2nd in practicing 3.70; ranked 2nd in rapprochement subphase 3.63; Duration: ranked 1st overall-1.99; ranked 1st in practicing 2.26; ranked 1st rapprochement 1.96). The consistent sensitivity of Mrs. H. in adapting to the changing needs of her toddler is reflected in her stable high quality interactions across the entire second year.

During her sixth year Helen was seen by her kindergarten teacher to be even tempered, secure, happy and highly competent in the classroom. She was thought to be a child without any difficulties and with exceptional intellectual and social resources. She was empathic with her peers in a way that made her stand out. She would attempt, usually effectively, to make new students feel welcome. The rare times she was upset usually had to do with her reaction to another child being disciplined or chastized. She almost never got into overt conflict or was directly angry or disruptive. This is not to say she was not

assertive. She had a strong sense of self, knew what she liked and stood up for herself.

The analysis of the detailed classroom observations (Appendix J) revealed just such a socially and academically competent child, who was basically happy and able to enjoy herself. Detailed analysis of behavioral sequences revealed the defensive aspects of her "good girl" behavior and a more realistic picture of her strengths and weakness as a person emerges than from the idealizing eyes of the teacher. In essence, Helen was such a success in her kindergarten classroom because of her flexible employment of a high level defense organization. She, more than any of the other subjects, was remarkably flexible in making transitions from leader to follower, one activity to another or individual to group play. Her high level defense organization rarely interfered with her sensitivity and respect for other children's feelings. She used the tetrad of obsessive compulsive defenses, most prominently reaction formation and undoing. More infrequently, there was the classic regression to passivity of the obsessive compulsive when she was faced with a direct challenge to her reaction formations against hostility. Nonetheless, she was ranked first in terms of the effectiveness of ego defenses as evident in classroom behavior.

An analysis of her defenses based on psychological testing (Appendix I.) also revealed Helen as a child having well developed social skills and coping mechanisms which enabled her to manage her impulses effectively. She was thought to be on the reso-

lution side of the oedipal complex with evidence of sex role differentiation, superego anxiety and a consolidated self. The testing also showed Helen had effectively integrated anal defenses (reaction formation, etc.) in her current developmental task of oedipal resolution. A degree of compulsivity was evident in her character structure as it was emerging from the oedipal phase.

The testing identified her major conflict to be between phallic initiative vs. dependency, a conflict which she managed effectively without significant regression. Helen's overall ego defense organization was seen as very effective in eliminating anxiety, warding off impulses, modulating affect and maintaining her appropriate developmental level of adaptation. She was ranked highest of the four subjects in terms of the effectiveness of ego defenses as evident in the psychological testing.

Continuities between the second year data and the sixth year data are the fact that the mother was seen as one of the most sensitive to her toddler's communication and Helen had the most mature, most stable and most effective ego defense organization. More particularly, in terms of continuity, evidence of the precursors of reaction formation and undoing were evident behaviorally in the 23rd and 24th months where Helen would internally transform aggressive behaviors to affectionate supportive ones in her interactions with peers. A discontinuity is the degree of tendencies toward compliance and control struggles evident

in the six year old when the two year old and her mother had apparently found a mutually satisfactory autonomy within their relationship. It is probable that the occasional surrender of autonomy through passivity and the competitively motivated control struggles originate in the struggles of the oedipal phase and do not reflect weaknesses in basic identity formation.

Diana

Diana entered the second year as a happy, energetic toddler who was affectionate and easily approached other children. By the 13th month she already had a well established and satisfying refueling and checking back pattern with her mother. Mrs. D. and Diana were exquisitely matched to each other. They both enjoyed physical contact and were emotionally responsive to people. During her 14th through 16th months Diana demonstrated more and more graphically the elated celebration of self and world characteristic of the practicing subphase of Separation-Individuation. Diana was precocious in language development having a vocabulary of 70 words by 15 months. Diana showed clear cut diffuse separation reactions from the beginning of the second year until the end. She would remain alert when either parent left the nursery room but would become less focused and active as well as show a lowering of her usual exuberant mood in her parents presence. This pattern of diffuse low keyedness was more pronounced when mother left the scene than father. In addition, when Mrs. D. was in the room but not directly involved with Diana, her play, while competent, was not as spirited or

directed as when her mother was directly involved.

There were times when Mrs. D.'s emotional availability had a controlling as opposed to supportive quality. For instance, during the 15th month when Diana was disappointed Mrs. D. always encouraged passivity and dependency rather than further play. In effect, both Mrs. D. and the father had greater than optimal influence over the initiation of approach in Diana's refueling pattern. Diana contributed to this in frequently going to her mother or father for help. Diana made it clear she was happiest and most secure when in her mother's presence. During the 16th month, Diana peaked in her practicing displaying frequent elation in her locomotive exploration. Diana was even able to sustain this pleasurable pride in herself when her mother was out of the room.

At 17 months, shortly after the onset of symbolic play, there was an upsurge of aggression directed at her mother which Diana had a difficult time modulating. She would hit her mother, half smile, half grimace at the nursery staff as a marked aggressive quality became part of her relatedness to the social world. Mother remained a steady home base during this difficult period, calmly tolerating Diana's anger and always earnestly attempting to find out what was wrong. Mrs. D. was aware of the profound psychological differentiation being enacted and would verbalize her longing for the earlier phase when she and Diana were more directly in tune with each other. Diana used language during the rapprochement crisis to help her deal

with her frustrations of not having her wishes granted immediately. She was able to utilize her developing cognitive anticipatory capacity to accept reasonable delays. Mrs. D., during rapprochement, rarely misread Diana's signals. Diana longed for the unspoiled exuberance of practicing and made active controlling efforts to capture and sustain her mother's attention. At 18 months sudden regressions to fearfulness and virtual hysteria at mild threats were common. At this time Diana developed a pattern very disturbing to her parents where she would hit herself a few times after phobically avoiding a mildly threatening event (like another child swinging a toy or throwing something, never close enough to Diana to warrant such a strong reaction). There were also rapid shifts in Diana's autonomous functioning changing suddenly from happy, alert and directed playing to clinging tearfully to her mother. Diana also became more possessive of toys during this rapprochement crisis than any other subject. At 19 months apparent oedipal anxieties were occasionally present. She was observed putting bandages on her doll's genital area and, while viewing her own genitals, saying "No, Daddy". It was reported that Mr. D. showered with Diana well into her second year.

Another stress during rapprochement was weaning. Diana was not weaned from breast feeding at night until she was 20 months old. Mrs. D. had nursed Diana daytime and at nighttime up and through her 17th month. At that time Diana began weaning herself asking for the bottle when she and mother were

out for a walk or in the park. Diana didn't want to nurse during the day but did at night and that pattern continued, as indicated, until the 20th month. During the 18th to 20th months, a few times a week, Diana would demand feeding five or six times in the same night. Mrs. D. wasn't getting enough sleep and she ended the nighttime nursing gradually over a few weeks. Diana was quite subdued and inward turned during this time in the nursery. There was also an increase of aggression towards other children subsequent to complete weaning. By her 21st month Diana had recovered her previous alert, active, exuberant self and incorporated the entire mother-infant caretaking experience in symbolic doll play (nursing, soothing, holding, putting to sleep). She was noted at this time to use verbal phrases and tones echoing her mother's actual ministrations. During her 21st and 22nd months there was a decrease in unmodulated aggression and Diana had access to a full range of affect from elation to contentment to focused anger. Very little missing or misinterpretations of communicative signals on Mrs. D.'s part were observed in the rapprochement crisis or later rapprochement. Diana consistently was good humored, alert, even-tempered and took genuine pleasure in herself and others after the resolution of the rapprochement crisis. The underlying flaw in the practicing subphase of somewhat encouraging passivity continued in subtle ways through the entire year. In the following example at 24 months old, Diana's anger is handled by a regression to passivity with mother's support.

Since coming in late with her mother, has been sitting over by the wall at 2b in the chair next to M., looking out quietly at the room. Ed has just started riding on the horse and her mood changes abruptly. She becomes more and more bothered as she watches him ride, then she shifts her position in the chair and shouts "No!" She's looking at the horse very intently now. Then she says "Horse . . .no!" She has a worried look as she keeps watching Ed and it seems like she wants him to get off immediately because she says so. M. sees how upset she is and leans over to talk to her about the matter. She's amused by Diana's anger and explains to her that the horse isn't hers; then Diana asks her for the bottle and M. takes out her sack. As Diana rummages through M.'s sack looking for the bottle, her anger about Ed's riding the horse has subsided. Once she's done with that, she seems much lighter. Even though Ed's still riding the horse, she doesn't mind.

Statistical analysis of the sensitivity and duration ratings for Mrs. D. confirm the views of the participant observers in the nursery. She was ranked most sensitive overall to her toddler's communicative signals. During the difficult rapprochement subphase which Diana experienced in a focused and powerful way, Mrs. D. was also ranked the most sensitive of the four subjects. This confirmed participant observations of her continued emotional availability during this confusing, stressful time. In terms of direct comparisons to other mother-toddler pairs Mrs. D. was more sensitive to her toddler's communications than Mrs. F. and Mrs. Z. at $p < .05$. Mrs. D. was not significantly different in sensitivity from Mrs. H. who ranked above Mrs. D. in the practicing subphase (mean=3.70 vs. 3.64) and below Mrs. D. during rapprochement subphase (mean=3.63 vs. 3.71).

During her third year, Diana's teacher saw her as a

charming and sensitive yet moody and occasionally volatile child. She was subject to experiences of diffuse anxiety when she would alternately withdraw, suck her thumb and finger her navel or become somewhat agitated, angry and demanding. In general, she was viewed as over-reacting and over-sensitive. The teacher observed that Diana's mood reflected her mother's. Needless to say, Mrs. D. and Diana continued to have an intense relationship during her third year. Diana was more imaginative and verbal than the other two year olds in the class. She had a sharing problem typical for children between ages 2 and 3. Mrs. D. was observed to have, at times, more difficulty separating than Diana and to be over anxious in general toward her.

At three years old Diana was seen by her teacher as more relaxed than the previous year. In addition, she had two obvious friends in the school year between ages 3 and 4, while in the two year old group she had no friends. Diana continued to be quite imaginative and worked out interpersonal or emotional issues through imaginative play. She enjoyed other children and was happiest when something positive was happening with other children. She continued to be demanding and bossy at times. When her ideas were not followed by others she would become nervous and withdrawn. She tended to have difficulties at the end of activities becoming more tense during transitions. Despite showing less tension than when two years old, she continued to have trouble letting go and relaxing. Mrs. D. continued to have trouble with anxiety at separations seemingly

more effected by them than Diana. Mrs. D. continued to be seen as over-identified, over-anxious, over-concerned and overly attentive with Diana.

Struggles around aggression between 3 and 4 years old continued to be evident and were reminiscent of Diana's phobic reactions during her rapprochement crisis. For example, Diana would often misinterpret a child's moving towards her as an aggressive action revealing tendencies to projection of her aggressive urges. Mrs. D. also demonstrated phobic/hysterical patterns at this time becoming excessively distraught about each of Diana's struggles and chronically berating herself for not being more patient with Diana. Mrs. D. verbalized that she felt she'd done terrible damage to Diana by weaning her too quickly and that Diana's episodic angry/depressed reactions must have resulted from that experience.

Between 4 to 5 years old, Diana's teacher saw her as strong and competent but too "tightly wound". Her frustration tolerance had improved as had her flexibility in relating to friends. There were no longer any separation problems. The teacher believed the birth of a younger brother when Diana was 4½ attenuated some of the control struggles she and her mother had been having. During this fifth year Diana had a good self image. She was consistently helpful and sympathetic with other children having difficulty. All in all, she was seen as bright and competent from 4 to 5 years old.

Between ages 5 and 6, her kindergarten teacher also

viewed her as quite bright and socially skilled. She enjoyed group activities. In contrast to previous years, she was able to express anger more directly, even towards friends. She was consistently sensitive and empathic towards her friends. Diana preferred quiet activities like reading or games or fine motor tasks. She was seen as assertive and would not let herself be bullied which contrasts with passivity in the face of aggression in previous years. She was quite independent in the classroom, able to balance well, taking initiative to meet her own interests and joining in group activities.

An analysis of Diana's ego defense organization as manifest in her classroom behavior (Appendix J) confirmed this view of Diana as a basically happy and competent child. However, a close look at behavioral sequences shows periodic regressions from high level and effective defenses to less mature and less effective mechanisms. Behaviorally, these shifts in defense organizations are evident in rapid changes in Diana from a highly sensitive, socially oriented, happy, competent child to a petulant, preoccupied, dependent, mildly depressed child. Diana's yearnings for passive nurturance would always emerge in transitions between structured activities and they seemed too overwhelming for her to resist as she would begin orbiting and shadowing the teacher. Diana did show constant signs of diffuse anxiety with her almost continuous tactile self stimulation. At times of id regression to oral dependency Diana rigidly repressed libidinal investment in anyone or thing other than her primary

object (or its substitute, i.e., teacher) and denied reality demands at this time.

However, she did not hold rigidly to these defensive regressions but would quickly recompensate to higher levels if given adequate environmental supports.

The analysis of Diana's ego defense organization from the test data (Appendix I) also showed her use of primitive defenses but saw Diana as more pervasively regressed in her psychological functioning than evident in the reports from the kindergarten teacher and the kindergarten observations. The test report emphasizes Diana's use of projective defenses and her phobic style. Although not prominent in the naturalistic observations when 5½ years old, Diana had regular phobic reactions and relied on projection from her rapprochement crisis at 18 months until she was 4 years old. Testing did confirm Diana's current struggles with dependency that are so evident in the classroom. In addition, conflicts about her aggressive impulses handled by a regression to passivity and denial are emphasized in the testing and are evident in the classroom observations as well. The test report does conclude that Diana's defense organization regression is a reaction to phallic/oedipal conflicts rather than reflective of earlier, unresolved pre-oedipal conflicts. The reality seems to lie somewhere in between given the continuity of problems with aggression and dependency evident from as early as 15 months old and remaining active in various forms up to 5½ years old.

Diana's current ego defense organization with its shifts between higher and lower level mechanisms is reflective of the strengths and weakness of her relationship with her mother during the second year. The strength obviously was the reliable, warm, secure relatedness Mrs. D. offered to Diana. A weakness is the degree to which Diana was left to her own resources to handle and modulate her individuating and aggressive urges. For example, Diana completely controlled the early weaning and toilet training. Mother never seemed quite in touch with her own individuating wish to say no to Diana's dependency needs and when she finally did at 20 months and stopped the nighttime nursing she was guilt ridden, believing she had psychologically damaged Diana. It seems that the pattern of Diana turning the aggression against herself and becoming depressed, or projecting it and becoming phobic, or identifying with the aggressor and becoming bossy may be results of mother's earlier anxiety about being a target of her aggression and her active encouragement of Diana's regression to dependency and passivity. Mother was able to attenuate normal aggressive responses from Diana through her exceptional sensitivity to Diana's emotional needs. The unstable defense organization evident at 5½ years old may be reducible to an ongoing boundary problem wherein Diana's higher level defense functioning is still field dependent, relying on external structure to remain active. If Diana were less conflicted about her aggressive urges, ego boundaries would naturally firm up and her higher level ego defenses would be less

field dependent.

Flo

Before beginning her second year Flo was seen as one of the more passive and less affectively expressive of the four subjects. However at 12 and 13 months old dramatic changes were observed as Flo became very interested in and curious about her environment and distinctively exuberant in her locomotive explorations. She had been more of an observer from 10 to 12 months old but in the first few months of her second year Flo became a full fledged vibrant participant in the world. Mrs. F. was consistently warm and encouraging of these developments. The foundation for a satisfying refueling and checking back pattern had been laid by Mrs. F. in her prompt warm consolations of Flo whenever she was distressed or hurt. During practicing Mrs. F. and Flo were a warm, mutually responsive relaxed mother-toddler pair. By 14 and 15 months there were effective and satisfying refueling and checking back patterns established.

In later practicing Mrs. F. continued to be emotionally available and very attentive to Flo. She readily gave reassuring eye contact to Flo during checking back episodes. However, soon after the beginning of the rapprochement subphase, as Flo was becoming consistently more verbal, more possessive and more aggressively assertive Mrs. F. withdrew her emotional availability abruptly and control struggles with Flo took the place

of her previous sensitive emotional responsiveness. Mrs. F. did not withdraw her attention, she always seemed aware of Flo's needs, rather she became intrusive and controlling rather than supportive. For example, when Flo was 17 months old the following interaction took place.

Flo is playing a simple game with mailbox at mother's feet, is content and interested in her activity. Mother intervenes instructing Flo how blocks go with mailbox. Flo with look of discomfort. Mother continues to encourage learning of new task. Flo makes no overt sign of protest but her face has lost its vigorous attentiveness and she's become distracted and glum. Flo wets self and moves away from mother towards toy shelf. Mrs. F. notes this outloud and picks up Flo in a determined fashion. Flo is unhappy and cranky. Cries when changed by mother.

Mrs. F. regularly took up an active teaching role as Flo began to show increasing skills. The above example was typical of their interactions over the next few months. While mother was teaching, Flo was clearly more tense than usual. When mother would attempt to restructure Flo's play so she did it "properly" Flo would become listless and much less energetic than when she wasn't interacting with her mother. When Flo was between 17 and 20 months old there was chronic low level anxiety in Mrs. F. and Flo that intensified when they interacted directly.

One prominent aspect of mother's lessened emotional availability was her not responding promptly to Flo's emotional distress. She no longer swooped Flo up for comfort when she cried, rather would expect her to stop on her own. During this

time Flo developed a pattern of self-stimulatory behavior, typically going to the rocking horse and rocking tensely after crying or being without mother's attention for a while. As Mrs. F. became less emotionally available the striking exuberance of the practicing period disappeared for a time. Between 17 and 20 months their earlier effective refueling pattern disappeared. A negative form of checking back for disapproval predominated. Flo continued to be spontaneous and good humored, but only when interacting with someone other than her mother. As Mrs. F. increased her efforts to get Flo not to be possessive, greedy or aggressive, Flo thwarted her at every turn. But despite such assertiveness, Flo was basically constantly alert to signs of her mother's carefully administered approval or disapproval. Thus, Flo's anxiety level increased in direct connection with mother's introduction of strong prohibitions and adult-like regulations.

At 18 months there were signs of precursors of ego inhibition in Flo as she would stand paralyzed between a temptation (a Zwieback or a pretzel) and the absence of an overt sign of approval or disapproval from her mother. Either mother's permission or prohibition would eventually come forth and Flo would behave accordingly. During these difficult three months Flo regularly had a look of wariness, as if anticipating mother's disapproval constantly.

Besides early inhibition, Flo developed other defensive patterns during this difficult period. In particular, she

attempted to control her environment and schedule her activities in a rigid and compulsive fashion, very much like her mother. At 20 months, Flo's verbal skills had increased significantly and she now began again to actively look to her mother for approval of her new competencies in discriminating and naming objects. Their more positive refueling pattern resurfaced as Flo and her mother were able to have more mutually satisfying interactions. As Flo became more competent with symbolic activities her possessiveness decreased, another factor contributing to a decrease in the anxious, controlling interactions between Mrs. F. and Flo.

Flo was now quite a different toddler than a half year earlier during practicing. In contrast to the earlier time, at 21 months, Flo had increased her individual, now symbolic play and decreased her involvement in cooperative group play. Although more reserved, Flo had not fully adopted mother's subdued, controlled and proper demeanor. Flo, unlike her mother, still had bursts of exuberance. Flo began to be more focused and active in her efforts to have Mrs. F. join in her activities. While she was usually successful, Mrs. F. was much more ambivalent about Flo's initiatives for contact than during practicing. This ambivalence was most evident in Mrs. F. rarely initiating affectionate contact, previously a hallmark of her relationship with Flo. Flo's way of handling these changes was to keep constantly busy, and this, as indicated, gave her behavior a compulsive quality. At 22 months, Flo's play became more and more purposeful and symbolic. All her play needed to be complete

and she took great care to follow her plans. Her constant activity and absorption in individual symbolic play appeared to fulfill Mrs. F.'s wish for a child who was self-reliant and proper. When Flo would do something that she knew to be improper in her mother's eyes she would avoid looking in her direction. Thus, through denial in action and constant business Flo was able to sustain some degree of narcissistic equilibrium.

At 23 months, Flo continued to be basically happy but these feelings were always contained. Flo's range of emotional expressiveness was now less than other children in the nursery. The pattern established at the beginning of rapprochement of Mrs. F. responding positively primarily to intellectual achievements continued to the end of the year. Paralleling this pattern was her decreased responsiveness to Flo's dependency needs. For example, when Flo was 23 months she got caught on the horse and fell while dismounting and was obviously distressed and scared. Mrs. F. acted as if Flo had nothing to cry about, held her loosely and kept coolly reminding her she wasn't hurt. Instead of comforting Flo, Mrs. F. tried to distract her with a toy. Flo was tense and serious for some time after this. Mrs. F. was not content to simply praise intellectual accomplishment and skilled social interactions that Flo accomplished on her own. Rather, whenever Flo was involved in interactions with another child where a toy, or most usually food, was involved, Mrs. F. would step in to verbally orchestrate the proper manners and propriety. Flo's mood would vary directly with the degree of approval or

disapproval expressed verbally and non-verbally by Mrs. F. For example, when 23 months old Flo was in a group with other toddlers and was smiling while eating the grapes as she popped them in her mouth. As soon as Flo looked at her mother her smile faded and her expression became tense and serious. Mother intervened and began busily ordering Flo to "say thank you to Jane," or "don't eat Helen's grapes," etc. Needless to say this markedly decreased the pleasurable interaction with her peers. This pattern became internalized to some extent during this period in that there was, as indicated, a decrease in playful interactions with other toddlers, and an increase in solitary symbolic play. At 24 months Flo was noted to have less healthy narcissistic reserve than the other toddlers in dealing with disappointment and frustration. This was believed to be related to mother often disapproving of her.

Flo's needs for acceptance and comfort tended to be revealed in her symbolic play. That is, she affectionately cuddled, cradled a doll, or played games with it and fed it; all activities that mother had seemingly arbitrarily set limits on with Flo with the onset of rapprochement. This is clearly both adaptive in that it maintains her narcissistic equilibrium and defensive in that it denies in fantasy the distressing lack of opportunity to met her needs directly. In effect, Flo clearly did for the toys what she liked done for herself.

Much to her mother's chagrin, Flo showed little concern for others in her possessiveness. She tried to control the

other toddlers by intervening if they were interested in a favorite object of hers (i.e., rocking horse) even if she had been occupied with something else. Although all the other toddler's were egocentric to some degree, Flo was the most egocentric when it came to favorite possessions, aggressively trying to protect from "intruders" anything she had an established interest in. In the same way that she previously had chronically been wary of incurring her mother's disapproval, in her 24th month Flo was constantly on guard against any intrusions from the other toddlers in her solitary symbolic play. Whenever mother was less demanding and more relaxed and generous with her approval, Flo's mood would improve and she would initiate and enjoy more social interactions and be generally less egocentric.

Statistical data from an analysis of Mrs. F.'s sensitivity and duration ratings confirm the participant observer views of the strengths and weaknesses of this mother-toddler pair. Mrs. F.'s sensitivity rating was ranked third in the group of four mother-toddler pairs. Her sensitivity mean for the entire second year was not significantly different from the mother ranked lowest in sensitivity (3.48 vs. 3.47). Mrs. F.'s sensitivity rating for the practicing subphase was the highest (most sensitive) of the four subjects. This confirms the participant observers account of a sensitive and responsive relationship with Flo during practicing. Mrs. F.'s sensitivity rating for the rapprochement subphase was lowest (least sensitive) of

the four mother-toddler pairs. This confirms the participant observers accounts of great difficulty between the 17th and 20th months and continued problems with the relationship until the 24th month. The change in sensitivity by Mrs. F. between practicing and rapprochement was the only one of the four subjects that was statistically significantly different ($p < .01$). This confirms the participant observers account of a sudden and abrupt decrease in sensitivity on Mrs. F.'s part beginning when Flo was 17 months old.

Teacher observations are available for Flo beginning at 3 years of age. At that time she was a bright, energetic, verbal and happy girl who liked going to school. The main problem in her adapting was a strong need to be the leader and in control of group activities. She easily felt very rejected and cried, whined, screamed or pouted when things didn't go the way she preferred. The teacher was concerned that Flo spent too much time withdrawn after she'd been disappointed in this way. Although basically happy, Flo was also chronically nervous and worried. This would come out in various ways like being excessively concerned with rules being followed exactly or unrealistically worrying that something would hurt her. Flo had two special friends during her fourth year, one who had trouble with others and outbursts similar to Flo's and another who was very quiet.

When Flo was 4 years old she again had difficulty coping in the classroom. In the beginning of the year she was tense,

excitable and had trouble listening to the teacher. Over the course of the year, however, Flo became more relaxed and controlled and her whining reactions decreased. Throughout the year she was outgoing, gentle and affectionate. The most prominent problem was the same as the previous year being an excessive need to dominate situations and be the leader. She had to have things as she wanted when she wanted them or she'd whine and withdraw. Flo used intellectual defenses to cope with the need to accept frustrations. That is, the teacher found that if she reasoned with Flo about the logic of a more reasonable way of doing things, she would cooperate. There were signs of compulsivity in that Flo liked to keep the doll corner in perfect order. In addition, similar to the end of her second year, Flo immensely enjoyed solitary symbolic play. For example, when the rest of the class was in gym Flo would return to the doll corner alone and play dress up. Her compulsivity became more prominent as the year went on and her originally sloppy projects became more neat and complete. In addition, she showed signs of increasing flexibility in that she was willing to share her favorite roles in dramatic play.

Her ability to cope effectively in school again became questionable during her sixth year. Flo was bright, independent, and competent but socially she had great trouble. Similar to her fourth and fifth years, the primary social problem was her insistence on doing things her way. The teacher felt this was experienced as bossiness by the other children and she was

ostracized for this. Flo was able to get along much better with adults than peers. Flo tended to be teased and used as a scapegoat by some of the other children. Flo, similar to previous years, continued to show what the teacher called "nervous habits" like sucking her thumb or putting her finger in her nose. Flo was happiest when she was listening to a story or music or reading a book. The teacher felt Flo was set apart from her peers by her reading skills and because she was "too grown up, not child like." In general, the teacher believed Flo has a positive sense of herself that was sustained by her knowledge and skills and the approval this generated in adults.

An analysis of Flo's ego defense organization as reflected in her classroom behavior in her sixth year (Appendix J) confirms her teacher's view but finds the problems identified more pervasive. The compromises in her adaptation resulting from failing higher level defenses and regression to less mature defenses are the most prominent aspects of her behavior rather than her independence, intelligence or high self regard. The failure of higher level defenses (intellectualization, isolation) has resulted in Flo constantly interrupting her teacher and classmates, being subject to chronic diffuse anxiety and being unable to establish satisfying relationships with her peers.

Except when engaged in an impersonal, intellectual task, Flo's higher level defenses are ineffective in the classroom and she must resort to denial (in action, fantasy and word),

projection and avoidance. The egocentric quality in her regression is prominent as she not only constantly interrupts the class but then goes on to express a cascade of personal associations as she is unable to fit smoothly in the context of the discussion at hand. For example, while a classmate was talking about skiing Flo blurts out interrupting with the following cascade.

Tomorrow . . . maybe my sister is going to go skiing today and where Hemlock Park is I went ice skating in the park before 2:30 yesterday, me and my mother were the only people, but she didn't have ice skates and had to watch til I got the hang of it . . . I took a piece of ice that was loose . . . (talking too fast to record) . . . and put it in freezer.

Besides her constant interrupting and anxiety, Flo's lack of mutually satisfying, warm, affectionate peer relations is the most striking aspect of her classroom behavior. During classroom time there is little, if any, joint planning, cooperative play or ongoing conversation. Flo maintains this status quo by a seemingly generalized rigid repression against warm, affectionate or even exciting relations with her peers. She augments this rigid repression with a more primitive defense, active avoidance of peer contact outside of school.

An analysis of Flo's ego defense organization based on psychological testing (Appendix I) reveals her to use an admixture of high level hysterical defenses as well as pre-oedipal (anal) defenses. The functioning of this mixture of high and low level defenses is seen as very effective, in contrast to the analysis based on her classroom behavior. The

central conflict, from the test data, is believed to be around phallic assertive issues versus dependency with concomitant anxiety over bodily integrity and devouring compulsions. She is, in the testing, seen as actively in the midst of the dilemma of power versus dependent identification.

Again in contrast with the analysis of classroom behavior, Flo was seen as mildly neurotic at best. Her excellent cognitive capacities were noted as were her developmentally advanced capacity to construct and represent inner states with the use of imagery. It was also observed that Flo may have been prematurely thrust into a position of adult identification and that she still hungers for nurturance (but feels guilt as well as anger about this). There were also signs of encroachment of inhibition onto conflict free areas of ego functioning. Finally, there appeared to be an underlying depressive tone and it was not clear whether this had to do with earlier frustrated dependency needs of current interpersonal issues.

There are striking continuities between areas of insensitivity on Mrs. F.'s part during the second year and areas of significant conflict and defensive compromise in the sixth year. Flo's domineering, controlling, emotionally removed style of relating during her sixth year mirrors her mother's behavior towards her during rapprochement. Flo's current difficulties with establishing emotionally satisfying peer relations also appears directly connected with her tendencies towards decreased pleasure with peers and increased solitary symbolic

play during rapprochement. This latter form of withdrawal served both to gain mother's much sought after approval as well as to insulate Flo from the narcissistic injuries inflicted by her mother's frequent and rigid disapprovals. In addition, the central conflict picked up in the testing between phallic assertiveness and powerful dependency urges is reminiscent of conflicts generated by mother's sudden withdrawal of emotional availability and only selective approval of various forms of Flo's assertiveness (i.e., greedy and possessive trends were actively disapproved of whereas independent, self-reliant functioning was rewarded with approval). The general ineffectiveness of her higher level ego defense organization noted in the analysis of classroom behavior is based primarily on Flo's maladaptive interpersonal relations. The highly effective rating of her defenses given in the psychological testing was based on Flo being able to manage her impulses and affects without restricting her range of affectivity, cognitive processing and self-expression. It is notable that the effectiveness rating was not based, nor could it be, on the actual capacity for healthy interpersonal integrations with others. A prominent reliance on identification with the aggressor (i.e., mother as experienced from age 17 months on) is the probable explanation for such poor social relations in such a bright, competent, basically happy young girl.

Zena

Before her entry into the second year Zena and her relationship with her mother were troubled. During the last quarter of the first year Zena was often observed to have a walled off, withdrawn, glassy eyed facial expression. She rarely smiled maintaining a wooden expression toward people. She maintained a more alert, focused state only with inanimate objects. Her first clear cut smile in the nursery was observed at nine months, much later than the other subjects. Entering the second year her affective range remained flat and narrow compared to the others. She usually had a serious, watchful look on her face. At many times this serious face looked on the verge of a scowl. Zena was typically very contained when interacting with people or objects. Despite the surface animation and social orientation of her mother, she was thought to be depressed. Zena's depressed mood and occasional open negativism was seen as mirroring the mother's mood and behavior during this time.

The displays of joy, exuberance and deep pleasure characteristic of early practicing and practicing proper were absent in Zena. In contrast to other subjects Zena rarely approached her mother during the latter part of the first year and early in the second. There was little to no interaction of a warm affectionate kind. Both Zena and her mother contributed to the maintenance of this mutually rejecting, mutually avoiding pattern. Zena, with her precocious independence and intolerance of cuddling and Mrs. Z., with her inconsistent responsive-

ness, negative projections, misinterpretations and egocentric framework for understanding her daughter's behavior. Zena and Mrs. Z. appeared significantly mismatched entering the second year.

Early in the second year when Zena and her mother would interact, Mrs. Z. would tend to end the play abruptly after a relatively short time on the basis of her own needs, ignoring Zena's feelings at the moment. For example, after briefly pulling Zena in the wagon or helping her ride the horse she'd suddenly state "I'm tired" pick Zena from the wagon or horse and they'd go their separate ways.

Also continuing from the first year were struggles over feeding. Mrs. Z. had Zena on scheduled rather than demand feedings. No playfulness was ever observed in the feeding. Mrs. Z. would be businesslike and methodical while Zena would be alternately aggressively devouring of the food or angrily rejecting of her mother's efforts to feed her.

As soon as Zena could move under her own power she tended to avoid her mother, always refusing to let her hold her. If Mrs. Z. swooped in to pick up, Zena would quickly struggle to be put down. Mrs. Z. frequently verbalized her feelings of disappointment and rejection, and always with a cutting, sarcastic edge aimed at Zena.

This mutually rejecting, joyless and generally dissatisfying pattern of interaction continued into practicing proper. Thus, even at 14 months Zena was not displaying any of the ex-

uberance and self-delight characteristic of the other toddlers at this stage. Zena was a toddler determined not to ask for much nor express much to her mother. These unsuccessful interaction patterns severely interfered with the usual use of the mother as a home base to take off from on temporary adventures in independence as well as to return to for re-energizing and soothing. Zena behaved as if she had no need for soothing from her mother.

At 15 months Zena still did not refuel with her mother. Nor did she have the usual checking back pattern either visually or auditorily. Zena tended to become less affective and focused when she would interact with her mother. When Zena moved away from her mother she was usually more purposely alert and verbal. Throughout these difficulties there were moments when Zena approached her mother. Typically, however, Zena's approach would be responded to inappropriately, misinterpreted or missed altogether. For example, at 16 months there was the following interaction.

Zena picks up a book from the table and carries it to mother, who is sitting on the couch, and hands it to her. She holds it, but is talking to Mr. D. not paying much attention to Zena. Zena stands there for a while, talking, asking tone. Then she moves away. Mrs. Z. is still talking to Mr. D. but he has become involved with Dee, his daughter and is now holding her on his lap and reading to her. Mrs. Z. is sitting rather limp, looking at Zena looking at Mr. D. and Dee.

Mrs. Z.'s regular protestations that Zena doesn't need

her or like her are clearly defensive and involves her selective inattention to anything that contradicts, essentially, her own projections.

During her 15th and 16th month Zena became and remained acutely aware of her social environment. She would observe ruefully the pleasurable interactions of other mothers (or fathers) and their toddlers. Perhaps in response to this Mrs. Z. became more active in her relationship with Zena. Zena responded quickly when her mother made an effort to engage her during this stage in contrast to earlier in the year when Zena avoided her mother under almost all circumstances in the nursery. However, Mrs. Z. would easily become bored or negativistic after a brief interaction. The following long example from the 16th month shows Mrs. Z.'s inconsistent availability, her inability to respond to and nurture Zena's developing narcissism, and her egocentricity in controlling the rhythm of the interaction in tune with her own needs rather than Zena's.

11:04: Zena is walking up and down the slide. Mother comes over, holds her hand, stands next to her. Then, briefly, Zena walks around on the floor - mother moves away - then Zena returns to the slide, climbs, is halfway up, turns to mother, sees her coming, and continues up by herself. Zena climbs down; mother stands next to her but doesn't touch her. At the bottom, Zena falls and bangs her face on the slide. Mother bends over, says, "Oh, Zena did you hurt your face?", kisses her. Zena wrinkles her face, gets very red, then recovers without crying, and continues climbing up and down, up and down. Mother is talking with another adult, walks away. Zena looks at her, reaches toward her (meaning "Come back"). When she

sees mother coming, she runs down the slide alone. She slips a little and half slides down on her feet. It looks like she's going to fall, and Mrs. Z. gasps and runs to catch her, but she doesn't fall. They continue - Zena climbing up and down, holding her mother's hand. Than mother says, 'Zena come on, I don't want to do this,' and tries to lead Zena away. She starts to cry and scream. Mother says annoyedly, 'Oh come on, Zena, I don't want to chase you, let's stop.' But Zena wants to climb, so they continue. Mrs. Z. changes her tone, says (to whoever is listening), 'Well, a new skill, you learn something; this is what happens when you learn something.' Then Zena walks to the corner, goes behind the door and talks to herself. Mrs. Z. goes and sits down. Zena comes out and goes back to the slide. Mr. D. is with her now. Mrs. Z. is sitting in a chair, talking to Mrs. B. (11:11)

11:15: Zena is climbing up and down on the slide, holding on to P.O. (Arietta) this time. She gurgles. She is carrying some of the plastic stacking boxes. Mrs. Z. sits in a chair. Zena says, 'oooh, oooh,' a high gurgling noise, half singing. She totters, goes up and down. Mrs. Z says, 'I hate to stop her, cause she'll be afraid, the way I was. But then they get a little restless.' Zena continues up and down, babbling, 'oooh'. (11:23)

Clearly, there is no deficiency in Zena's ability to enjoy her new found skills as is evident in the gurgling and babbling when playing with the participant observer.

Despite the obvious difficulties in their relationship, developmental forces in Zena in late practicing (16m.) pushed her to higher levels of skill and hence pleasure. The great pleasure Zena began to have as she mastered the coordination of gross motor activity (rocking horse, scooter) tended to

blunt mother's essentially embittered and reluctant responsiveness. At 16 months Zena was for the first time showing the characteristic exuberance of the practicing subphase. As Zena showed more and more pleasure in her locomotive explorations, her mother became more and more attentive. As mother began to respond more quickly and accurately to Zena's needs, for the first time in the nursery moments of elation (albeit brief) were observed in Zena. Zena developed a checking back pattern at this time and approached her mother more often, though still not as often as the other subjects. Zena also started manifesting diffuse separation reactions at this time, becoming subdued in mood and lowering her activity level. Despite these increases in a positive affective bond, Mrs. Z. still, at times, gave up quickly after starting an interaction with Zena such as reading or play. Evidence of a fundamental unpredictability and inconsistency in Mrs. Z.'s responsivity is the fact that a refueling pattern never emerged in the second year. All the other toddlers had obvious and satisfying refueling patterns. Zena created a substitute for refueling in her 16th month when she would eagerly hug and cuddle with a large teddy bear. This refueling pattern with the teddy bear continued till the end of the nursery observations at 22 months old. A sad result of Zena not being able to directly meet her needs for tenderness and soothing from her mother was the activation of these needs in a distorted, ultimately punishment inducing manner. For example, one of the few caretaking tasks that Mrs. Z. accomp-

lished in a relaxed, confident manner, all the while maintaining relatedness to her daughter through affectionate verbalizing, was diaper changing. During her 22nd month after a period of interacting with her mother and others to get juice, her mother leaves the table to go back to the couch. Zena looks around and then intentionally pours the rest of the juice on her chair and pants saying "wet" to her mother and a participant observer who re-approached, noticing the wetness. Neither mother nor the participant observer observed the purposefulness of Zena's act believing it to be an accident. Even this rouse, however, didn't work as Mrs. Z. stated she'd have to change her and use the other pair of slacks, but then neglected to do so for the rest of the morning.

Despite the continuation of these basic flaws in their relationship, the increased positive affective bond from late practicing continued into rapprochement. At 18 months Zena was getting quite verbal and Mrs. Z. was able to respond well to her verbal cues. This sensitivity greatly contrasts Mrs. Z.'s ineptness and chronic lack of success in responding appropriately to Zena's earlier prelinguistic ways of communicating. Mrs. Z. welcomed Zena's verbal demands, their seeming to pull her out of her own narcissistic, depressed regression. Mrs. Z. had chronically complained of Zena not needing her and she took her verbal focusing and demands as a welcome sign of being needed. During rapprochement Zena was much more successful in getting and maintaining her mother's attention

than during practicing.

For the first time in the relationship, at approximately 19 months old, Zena and her mother were observed having a smooth and natural approach-distancing pattern. For the first time in the nursery observations at approximately 21 months, Mrs. Z. was unabashedly positive about Zena and how much she was enjoying her. Mrs. Z. was noticeably more prompt in responding to Zena as well as being much more relaxed and accepting of her in general. There was little of her sarcastic, off-color humor that had often made others in the nursery wince. Zena, on her part, was showing increased excitement in play as well as becoming more assertive in her interactions with others.

Despite this significant progress there were still many interactions where Mrs. Z. failed to be attuned to and to respond appropriately to Zena's communications. A telling symptomatic pattern, demonstrating the flaws in this mother-toddler relationship, continued throughout the latter half of the second year. It was a regular pattern for Zena to wander close to her mother, obviously hoping to be actively approached by her mother. Typically, Zena would either be ignored by Mrs. Z. or noticed but not responded to, or responded to ineffectively. Zena would then drift over to another mother (or father)-toddler pair to receive what that parent was giving their toddler. When included by the other than mother parent she would respond with pleasure and warmth.

A statistical analysis of the sensitivity and duration ratings of the time and event samples confirms the above picture of the relationship of Zena and her mother during the second year. Mrs. Z. was ranked least sensitive overall (fourth) of the four mothers to her toddler's communications. In addition, she had the shortest interactions overall of the four mothers. The degree of difference in her sensitivity to Zena's communications and Mrs. D.'s as well as Mrs. H.'s sensitivity to their toddlers was significant $p < .05$. Although quantitatively Mrs. F. was ranked higher than Mrs. Z. (3.48 vs. 3.47 sensitivity mean; 41% vs. 46% of responses insensitive to some degree) there was no statistically significant difference between the pair. This does not confirm the participant observations in the nursery which saw Mrs. Z. in a category by herself in terms of insensitivity to her toddler.

The positive change in terms of more prompt, accurate and appropriate responsiveness during rapprochement noted for Mrs. Z. and her daughter is confirmed by the statistical data as she is one of the two mothers whose sensitivity increased from the practicing subphase to the rapprochement subphase.

Her sensitivity increased the greatest degree between practicing and rapprochement when compared to the other mother whose sensitivity increased (Mrs. D.). In so doing Mrs. Z. moved from least sensitive during practicing (ranked fourth) to the third place ranking during rapprochement. Mrs. F. was ranked least sensitive of the four subjects during rapprochement.

Finally, the underlying problem of insensitivity between Mrs. Z. and Zena is reflected in the stability of her low or lowest rankings in both overall sensitivity and duration as well as in the respective subphases examined.

Teacher observations from her 3rd, 4th, 5th and 6th years show Zena continued on a troubled course, though less and less severely each year. Zena's teacher between ages 2 and 3 reported that Mrs. Z. was constantly responding inappropriately to Zena's communicative cues. Zena was not happy at all during her third year, actually seeming quite depressed compared to the other children. Zena was constantly hurting herself falling or banging into things. Similar to her second year in the nursery, she continued to never cry when hurt. Rather, she would stiffen her body, her jaw jutting out and assert "No, no, I'm fine" rejecting comfort. Neither could Zena bear being touched or comforted, even when in obvious discomfort. The teacher was struck by the fact that Zena didn't respond appropriately or seem to understand others affective facial expressions or reactions. Similar to the practicing subphase Zena was more involved with toys than with other children. In contrast to all the other children in the class Zena still hadn't developed any friends by the time she was 3 years old. Zena was very aggressive at times during her third year, pinching and biting other children. In contrast to the other children the teacher observed "there was no internal stopping herself, I always had to intervene." The teacher was distressed to ob-

serve pinch marks on Zena's shoulders when she'd come to school and even more concerned when she observed Mrs. Z. pinch her in class. This was a cooperative preschool class where parents would assist. The teacher found Mrs. Z. unhelpful to the other kids and preoccupied with her own personal problems when it was her turn in the nursery. Zena always verbalized during her third year that she didn't like her mother but liked her father alot. Mrs. Z. always appeared to be furious when observed by the teacher. Zena interacted predominantly with the only other disturbed child in the class, a girl who was very quiet and withdrawn.

Zena was very curious about her teacher during her third year, once asking if she were a mother and, "do you hit?"

Zena was less disturbed during her fourth year in the classroom but there is no data on her relationship with her mother, though it presumably improved. Her teacher found her academically competent and able to play in various and satisfying ways. The teacher's major concern and Zena's only serious problem was her seeming inability to understand other people's feelings. She couldn't accept things not going her way, always wanting to interact on her own terms. She would push or scream at another child who thwarted her plans by having a mind and feelings of their own. Despite this major flaw, the teacher saw Zena having alot of strengths including persistence, imaginativeness and a confident independence. In contrast to her third year, Zena was observed to be generally happy during her fourth

year except when her anger was aroused toward other children, which was frequently.

Just after turning 5 years old Zena had developed more skills and her summer school teacher felt she was a big help in the classroom. This was mainly reflected in her leadership skills in organizing and planning things. She continued to insist on having her own way and frequently had severe temper tantrums. The teacher noted she would remain in a contained fury for long periods. Zena also usually arrived at the class in an angry mood. She slowly became more relaxed and positive as she joined in activities of the day. Zena was quite outgoing and sociable, liking to be with friends.

Zena's kindergarten teacher during her sixth year saw Zena as bright, sassy and independent. She was also controlling, always insisting on the last word in conversation. She was ego-centric as well, insisting on having her own way in any play interaction.

The kindergarten teacher thought her major problem was her insistence in having her needs met without regard for others' feelings. In addition, her interactions often had a taunting or teasing quality, even with children she was most friendly towards. Being involved in social interactions and doing things for herself were very important to Zena.

An analysis of Zena's behavior in the classroom to determine the quality of her ego defense organization (Appendix J) was consistent with her teacher's viewpoints on Zena's

strengths and weaknesses. She was quite good at impersonal tasks like reading, drawing or listening to music. She shifted unpredictably between a higher level defense organization characterized by reaction formations against passivity and hostility and lower level preoedipal defenses characterized by identification with a punitive, retaliatory, taunting aggressor, projection and primitive denial. Much of the time Zena functioned effectively and adaptively in the classroom. She was able to engage in comfortable, mutually satisfying relationships. These satisfying interactions, however, usually involved a rigid form of cliqueishness where Zena could project unacceptable aspects of herself onto other children. There was a narcissistic element in all of Zena's relationships in that she appeared to not understand, to greater or lesser degrees, that other children had feelings and ideas of their own. She often would arbitrarily intrude on others, pressing her demands as if others were there simply to be available to fulfill her needs. The following example shows this narcissistic element and its basis on a primitive form of identification with the aggressor.

She continues copying the letters then flips through pages of book, and is talking to those near her. Then says, 'I'm up to her. I'm up to her.' referring to where her friend is in the book. Working in book. Grabs a pencil from girl next to her, tries to get it out of her hand. She holds onto it and they struggle. The other girl unclasps Zena's hand from the pencil. Zena says, 'I need it.' The other girl uses the pencil, writes something, then puts it down for Zena to use. Zena uses the eraser and

returns the pencil. Uses her own pencil to continue copying letters. Turns the page, says 'Oooh, this is the tuffie.' Repeats that. (the page has numbers rather than letters). Bites her pencil, leans forward. Writes 1, 2, 3, 4. Bell looks over Zena's shoulder, Zena pushes her back, pushing on her neck. Bell says, 'Zena, (rest inaudible). Then twice grabs at the pencil of the girl near her (same one as before). Misses, says, 'I need that eraser.' The other girl gives it to her and Zena erases the numbers she's written. Holds book up to wipe away erasures.

When faced with conflicts around more personal issues such as loss of approval of her peers or teacher Zena's higher level defenses collapse as she retreats to primitive, pathological uses of identification with the aggressor, denial and projection.

Watching Sleeping Beauty film. No words. Look at the pictures. Teacher comes over and says it was good that Zena was able to change the film but next time should call the teacher. The film is very fragile.

Trying to shut viewer. Turns switch. Doesn't shut. Tries several times. Finally turns off. Melvin wants the Cinderella film. Zena unrolls Sleeping Beauty, looks at it, puts it down. Takes Cinderella. Threads film. Melvin tells her not to do it again (i.e., ask teacher). Zena says to him, 'I'm telling on you.' Melvin asks why. 'Because.' Melvin: 'Why?' No answer. Melvin: 'Tell me.' Zena: 'Secret.' Melvin: 'Why?' Zena: 'Because it's a secret.' Melvin: 'Really gonna tell on me?' Zena: 'Yes.' Melvin: 'No, It's a trick. Won't.' Zena: 'No, not a trick.' They then start discussing Snoopy characters.

The blatant distortion of reality, the aggressive and confusing turning of the table on her peer and her relentlessly holding to her projection despite the opportunity for reconciliation are such strong and primitive defenses that

it suggests the stimulation of powerful preoedipal anxieties regarding the loss of her primary object's love and that object's retaliation for misdeeds. Given that Zena immediately ignored the teacher's admonition to not thread the film without help it is clear that her superego is not functioning effectively at this time. It seems likely that Zena's using the preoedipal form of defense of primitive identification with the aggressor momentarily insulates her from reality and then when that primitive introjected aggressor is re-projected she must rely on denial of reality and projection to ward off her overwhelming anxiety. This oscillation between introjection (of omnipotent, punitive introject in identification with the aggressor) and projection has apparently interfered with the superego development expected in the late oedipal period. The rigidity of her employment of lower level defenses when personal issues are stirred up suggest that the shifts from oedipal to preoedipal forms of defense have become an enduring part of her character structure.

An analysis of Zena's ego defense organization based on psychological test data at 5½ years old (Appendix I) reveals a disturbed young girl reminiscent of the teacher's view during the third year of life. This overwhelming degree of pathology highlighted reflects only some of the current functioning. The testing showed her cognition being unable to modulate her affect resulting in rapid and extensive regressions to a bodily level of tension expression and need regulation

(i.e., hunger, elimination). She was pervasively conflicted around issues of autonomy, mastery, initiative and intimacy. Situations evoking these personal vulnerabilities were handled with primitive defenses of massive inhibition, avoidance, denial and projection. Even these primitive defenses were not effective in distancing her from dysphoric affect, consequently, she is chronically subject to feelings of emptiness, hunger and depression. Zena views the world as an ungiving, unpredictable and dangerous place. She was seen, as well, to be struggling with severe annihilatory anxiety. Overall, she was seen as a very troubled child who has yet to crystallize a dominant mode of object relation or a consolidated sense of self. Threats to self integrity were handled by either a depressed, passive dependent stance or an impulsive stance with primitive identification with the aggressor, projection and denial. Zena was ranked lowest of the four subjects in terms of the effectiveness and developmental level of her ego defense organization. In fact, her ego defenses were seen as ominously ineffective.

Although the conclusions from the testing confirm the narcissistic object relations and the regular use of primitive defenses seen by the kindergarten teacher and the observer of kindergarten classroom behavior, Zena is not as pervasively disturbed in the classroom as the test report indicates. Interestingly, the test report mirrors exactly Zena's pervasively troubled psychological condition as reported by her

preschool teacher two and a half years earlier (age 2½-3½).

There are notable continuities between interactive patterns during the second year and her ego defense organization in her sixth year. Primarily, Zena's narcissistic triad of primitive defenses (denial, projection, primitive identification with the aggressor) are a internalization of her mother's egocentric, unaware, distorting and aggressive patterns of responding to Zena during the entire second year, particularly during practicing. Zena's lack of understanding of other children's feelings and a respect for their autonomy mirror her mother's inability to empathize with her successfully when her self was emerging during the prelinguistic era. Another prominent continuity with the second year is Zena's strong investment in independent functioning and overall self-reliance.

CHAPTER V

DISCUSSION

A. Discussion of Overall Findings

This dissertation set out to study the relationship of maternal sensitivity to her toddler's communications and the later quality of her child's ego defense organization. The central hypothesis was that deficient maternal sensitivity during the second year would result in her child having an ineffective and immature ego defense organization in the sixth year. Correspondingly, adequate maternal sensitivity will result in her child having a mature, effectively and primarily adaptive organization of ego defenses. These hypotheses were confirmed in the following fashion. Helen was assessed during her sixth year as having the most effective, mature and stable ego defense organization of the four subjects. During her second year, Mrs. H. was highly sensitive to Helen and rated significantly more sensitive than either Mrs. F. or Mrs. Z. Mrs. H.'s rarely used immature defenses of her own in interacting with Helen. Rather, boundaries between Helen and Mrs. H. were consistently firm and there were few misinterpretations or distortions in her responses to Helen. Thus, in the case of Helen, the central hypothesis of this dissertation was borne out.

Zena was assessed during her sixth year and was found to have an ineffective ego defense organization based primarily on immature defense mechanisms. Her capacity to adapt socially was compromised in particular due to immature defenses. Mrs. Z. was overall the most insensitive of the four mothers rated. Observations showed Mrs. Z.'s insensitivity to Zena was a manifestation of primitive mechanisms of defense in her (denial, projection, primitive identification with the aggressor) that predominated while she would interact with Zena. Due to Mrs. Z's projection there was chronic boundary confusion between her and Zena as well as gross misinterpretation and distortion. Moments of her ignoring Zena or general obliviousness to aspects of Zena's self presentation reflected the operation of lower level denial in Mrs. Z. Mrs. Z. also relied regularly on the primitive form of identification with the aggressor to handle her disappointment and anger towards Zena. This was particularly evident in her patterns of sullen withdrawal, of over-intrusiveness and abrupt, egocentrically motivated endings of play interactions with Zena. The compromises in interpersonal functioning evident in Mrs. Z.'s insensitive patterns of response during the second year were duplicated in Zena beginning late in her second year and continuing through her sixth year. Zena's egocentric and unempathetic patterns of interaction, similar to her mother, are based on her predominant reliance on immature ego mechanisms of defense (i.e., projection, denial, projective identification,

primitive identification with the aggressor). It is notable that as Zena grew older and interacted less solely with mother, she became less disturbed in relation to others and herself. Nonetheless, the earlier predominant reliance on primitive defenses late in her second and during her third year resulted in a stable personality structure relying both on primitive and higher level defenses. Thus, for Helen and Zena the central hypotheses of this dissertation relating early maternal sensitivity to the later quality of a ego defense organization were borne out.

The correlation is less straightforward in the cases of Diana and Flo. Overall, Diana's mother was rated as more sensitive to her daughter's communication than any other mother in the study. Thus, we would have expected Diana to have the most effective, mature and stable ego defense organization. However, the classroom and psychological testing assessments showed an admixture of higher and lower defenses that were not stably organized but were situationally determined. The assessment from the classroom saw predominantly high level, effective defenses with predictable but circumscribed regressions to lower level defenses while the psychological testing saw the reverse, (i.e., lower level predominating). In any case, her current ego defense organization has unexpected vulnerabilities from the perspective of this study's central hypotheses.

Flo's mother was rated significantly less sensitive

to her daughter's communications than Mrs. D. or Mrs. H. Also significant is that Mrs. F. was least sensitive of the four mothers during the rapprochement subphase. One would have expected Flo, according to our central hypotheses, to have a generally ineffective, immature and unstable ego defense organization during her sixth year. This hypotheses is borne out in the classroom where Flo's behavior showed a chronic failure of higher level obsessional defenses and a predominance of immature defenses, particularly denial (in fantasy, word and act). However, in the psychological tests Flo was seen as having an effective admixture of higher and lower level defenses without any compromises in functioning due to utilization of immature defenses. The test report did note, however, problem areas that were also seen in the classroom. That is, despite her competencies, Flo was seen as having an underlying depression, inhibition in successfully applying her intellectual potential and an intense, excessive need to demonstrate competence. Nonetheless, we would expect the insensitivity of Mrs. F. during rapprochement to have had a more pervasive impact. How is it, then, that the most sensitive mother's child (Diana) has a less than optimal ego defense organization during her sixth year and one of the least sensitive mother's children (Flo) appears so integrated and well adapted in the psychological testing?

A possible explanation is the limits of the measures used to assess sensitivity and ego defenses. That is, even

though Mrs. D. had the highest rating for sensitivity during the second year, there were a number of participant observations pointing out Mrs. D.'s inappropriate encouragement and cultivation of Diana's dependency. That is, she sometimes encouraged Diana's refueling behavior on the basis of her own needs for closeness and not on communicative cues from Diana. Given that teacher assessments from the third and fourth year showed Mrs. D. to be more upset about separations than Diana, and generally over anxious and over involved, it is clear that something was askew during the second year that the adapted Ainsworth scale of sensitivity vs. insensitivity did not pick up. This may be due to the Ainsworth scale being originally designed for the first year when prompt response to dependency needs is unambiguously appropriate. During the second year, maternal responsivity requirements are different and it is probable that a scale not specifically designed for the second year would not pick up Mrs. D.'s overindulgence of Diana's dependency needs.

A discrepancy arose for three of the four subjects (Flo, Zena, Diana) in regards to the testing measure. That is, the testing assessments tended to be very accurate regarding each subjects vulnerability to regressed functioning at some point in their development but they did not discriminate accurately whether the vulnerability was current or represented past developmental crises. For example, the test report on Zena reflected all of her current problems in coping but none

of her strengths. Quite interestingly, the testing assessment as a whole in the sixth year uncannily reflected Zena's level of functioning during her third year (based on teacher observations). In a similar fashion, Diana was seen as highly phobic and relying predominantly on projective defenses in her sixth year testing assessment, yet this was not reflective of her current functioning but of Diana's fearfulness and phobias between 3 years old and 4 years old which resulted in the family having a professional consultation. The test assessment on Flo quite accurately identifies her as a child for whom adult standards were prematurely applied. This harks back to Mrs. F.'s excessive demands for adult behaviors from Flo during rapprochement, and was the core issue in her abrupt turn towards less sensitive relating at that time. It appears to be no accident that Flo's behavior in the classroom, showing chronically failing attempts to effectively use obsessive-compulsive defenses, is a mirror image of her mother's consistent failures in imposing adult standards derived from an obsessive-compulsive orientation on Flo during her rapprochement subphase. Given mother's relentless emphasis on adult-like competence in Flo it also is no accident that Flo might appear more integrated in testing done for an adult than in a naturalistic setting like the classroom where she is more reliant on coping resources she generates independently.

Thus, in the case of Flo, if one keeps in perspective the inherent indeterminacies of the testing assessment, the specific dynamics of Mrs. F.'s early insensitivity, the

current and former teacher assessments, and the unambiguous compromised adaptation observed in the current classroom, a fairly strong correlation is evident between the quality of her mother's earlier sensitivity and Flo's later ego defense organization. In the case of Diana, if one takes into account an inherent weakness in the Ainsworth sensitivity vs. insensitivity such that it would overvalue Mrs. D.'s nurturant responses, as well as the difficulties in the testing measure discriminating current conflictual functioning from past vulnerabilities in development, a fairly strong correlation again emerges between the quality of Mrs. D.'s responsiveness during the second year and Diana's ego defense organization in her sixth year.

A secondary hypothesis in this dissertation was that mothers who are rated overall less sensitive to their toddler during the second year will show the greatest difference in sensitivity from the others during the rapprochement subphase. There were conflicting results on this hypothesis. On the one hand, Mrs. Z. rated least sensitive overall, actually improved her sensitivity rating during rapprochement and narrowed the gap between herself and the other mothers. On the other hand, Mrs. F., rated significantly less sensitive overall than Mrs. D. or Mrs. H., did become abruptly less sensitive than the other three mothers during rapprochement. As already indicated, the difference in sensitivity between practicing and rapprochement was statistically significant only for Mrs. F.

($p < .01$). Thus, the case of Mrs. F. confirms the secondary hypothesis while Mrs. Z.'s case does not. This result indicates, in effect, that sensitivity to communication is not a stable variable across time nor does it vary according to an a priori notion about a particularly demanding developmental stage (i.e., rapprochement). Rather, a mother's sensitivity to toddler's communication varies mainly according to which aspects of personality functioning that particular mother is most conflicted about. That is, mother's react less sensitively when primitive defenses of their own are mobilized in response to their child's expressed needs, impulses, affects and attitudes. In the case of Mrs. Z., she appeared to be most conflicted about issues of intimacy and dependence. Thus, she had great difficulties being adequately sensitive during the first 18 months of Zena's life when supporting adequate closeness and security using prelinguistic tools is a central task of mothering. From 18 months on (rapprochement) Zena quickly developed ways of communicating directly but from a distance (i.e., language), much to her (Mrs. Z.'s) relief. At this point her reliance on primitive defenses in interactions with Zena decreased. Mrs. F. appeared most conflicted about issues of autonomy and competence. Thus, she did fine during the first 18 months, but when Flo arrived at rapprochement with its characteristic combination of forward thrusts in development and inevitable ego and id regressions, she rigidly applied adult standards for self reliance, propriety and compe-

tence development, neglecting Flo's emotional needs.

An additional secondary hypothesis was that mothers who were rated as less sensitive overall, would have interactions with their toddlers that have fewer moments of mutual responsiveness than mother's rated more sensitively responsive. This hypothesis was not confirmed as there were no significant differences between subjects' duration means. There were trends towards the confirmation of the hypothesis with Mrs. H. and Helen having the longest interactions overall and a higher sensitivity rating while Mrs. Z. and Zena, having the shortest interactions overall, also had the lowest sensitivity rating.

There were also trends evident in the participant-observer data that indicated the children with more sensitive mothers (Helen and Diana) approached their mothers more overall as well as had peak positive moods and made their most complex cognitive efforts while mother was present and emotionally available. In contrast, Zena and Flo at various times actively avoided their mothers, had fewer active approaches and showed more regressed behavior (low mood, diminished alertion, regressed cognition) while interacting with their respective mothers. A measure of maternal behavior discriminating both duration of interaction and degree of enhancement of functioning would probably have come closer to finding significant differences between mother-toddler pairs on this issue.

The primary ancillary finding is the pervasiveness with which interpersonal patterns between mother and toddler during the second year, particularly rapprochement, are wholly incor-

porated by the child and tend to structure the quality of their later social relations, particularly with peers. Although our hypothesis expected a correlation between the sensitivity of early interpersonal relations and later quality of ego defense organization, it is unexpected that later manifestations of immature, ineffective defenses are seen primarily in the interpersonal sphere in ways analogous with earlier insensitive maternal behavior. The conclusion that ego defenses are psychic structures mediated primarily by social relations with mother during the second year must be considered.

Another ancillary finding involves potential diagnostic signs in second year social relations between mother and child. The two children whose mothers were rated consistently more sensitive (Diana and Helen) and who later had relatively high level ego defense organizations both had well established, successful and mutually satisfying patterns of refueling and checking back during the entire second year. Zena, the child of the least sensitive mother, who had the most problematic ego defense development, had no refueling pattern to speak of during the second year and did not have visual and auditory checking back until rapprochement. Even this delayed checking back pattern was weak and not consistently successful. Flo, whose mother was one of the less sensitive mothers and had some significant ego defense development problems had an excellent refueling and checking back pattern during practicing that altered dramatically for the worse after mother's emotional

withdrawal and increased intrusiveness during rapprochement. During these crucial months of rapprochement, refueling ceased and checking back was negatively oriented. That is, Flo was checking back warily for mother's disapproval rather than eagerly for support and sharing. Thus, patterns of refueling and checking back seem to be crucial indicators of early troubles in the mother-toddler relations and predictive of later psychopathology.

B. Relevance in the Literature

The results of this dissertation confirm aspects of recent findings in the attachment literature as well as long standing views on the development of ego defenses in the field of clinical and developmental psychoanalytic psychology.

In terms of the attachment literature, our results are very similar to those of Waters, Wippman and Sroufe (1979) who also found significant relationships between the quality of mother-toddler attachment and later competence in engaging with peers and in overall ego strength. The results of this dissertation also indirectly supports the findings of Arend, Gove and Sroufe (1979) who found that toddlers: who were insecurely attached at 18 months had less competency in responding flexibly, persistently and resourcefully in problem situations at 4½ years old than those toddlers who were securely attached.

In terms of the psychoanalytic literature the results of this dissertation supports viewpoints and research that

hold social relations between mother and toddler to be the primary mediating factor in the development of ego mechanisms of defense. Specifically, our results support Freud's views that the development of ego defenses are intimately related to superego development and are actually a manifestation of superego operations. (Freud, 1933) With this theory, Freud emphasizes the crucial role of the internalization of social relations with one's parents for the development of ego defenses. There is insufficient data in this study to evaluate whether the results support Freud's views on the physiological and psychophysiological origins of ego defense (Freud, 1895, 1905, 1923, 1926).

A predominant view in modern ego psychology is that ego defenses originate primarily in the defensive use of earlier developed autonomous ego functions. (Freud, A, 1936; Hartmann, 1939; Brenner, 1981) In effect, this view emphasizes how defenses originate and are generated from within a subject and with their available internal resources. The results of this thesis do not support this view. Rather, ego defenses appear to originate to a significant degree from the external primary object (i.e., mother). That is, the primary determinant in ego defense development appears to be the identification of the nascent self of the toddler with their primary object's defenses against the toddler's impulses, affects and attitudes. That is, the patterns of the primary object's being unaware of,

not recognizing and not accepting aspects of the toddler's self are identified with and form the core of the toddler's ego defense organization. Thus, our results support views that emphasize the actual quality of early object relations as a central determinant in ego defense development. This includes Mahler and McDevitt (1968), who did the first naturalistic research correlating maternal insensitivity in the second year with later maladaptive ego defense mechanisms and other object relations theorists who have emphasized the impact on psychic structures of actual object relations. (Fairbairn, 1944; Winnicott, 1960; Jacobson, 1964; Modell, 1980)

The potency of social processes between mother and toddler during the second year can be attributed to the combined effect of beginning self awareness and a lack of firm ego boundaries between the toddler and its mother. (Mahler, Pine, Bergmann, 1975; Pine, 1982) The results of this thesis support this view that the second year is a critical period in self-development. In particular, our results support Mahler's (1972) view of a critical phase (rapprochement) in this self development period where, depending on the quality of maternal responsiveness, earlier difficulties can be ameliorated or the foundation for later troubles created.

C. Considerations for Further Research

This study demonstrates a need for a greater emphasis in child development research on observing any form of psychological development in its social (naturalistic) context. As careful consideration must be given to developing adequate measures of the quality of social interaction in the first three years of life as have been given to the accurate assessment of subtle developments and changes in perceptual and cognitive development.

There are many ways of strengthening the validity and enriching the results of this dissertation. Longitudinal data on the quality of mother-child interactions between 0-12 months and 24 months to 36 months needs to be utilized as well as the 12 month - 24 month period. This will aid in the discrimination of which maternal interactive behaviors at which stage of development particularly enhance or inhibit optimal ego development. How earlier interactive problems impact on later stages of ego development incorporate and organize earlier successes and difficulties would be clearer if the longitudinal data were more complete.

The development of a measure of the degree of maternal ego regression to immature defenses at various points in her caretaking would help considerably. This could take the form of periodic psychological testing at both smooth and unsettled

phases in their child's development. Needless to say, a baseline measure of the quality of the mother's ego defense organization would be useful. This could be obtained either early in pregnancy or during a smooth period in her caretaking experience. A greater number and variety of mother-child pairs, including of course male children, would add considerably to the quality of this line of research. An ongoing assessment of father's involvement from 1 year old to 3 years old would also considerably enrich the findings.

An objective measure for preschool and kindergarten teacher assessments between 3 years old and 6 years old would help in utilizing more fully the valuable data from classroom behavior. Finally careful assessment of each child's ego development and the quality of the relationship with their parents during the potentially smoother and more settled phases of development would help in discriminating temporary problems attributable to a developmental crises and more enduring difficulties. In particular, a careful assessment after separation-individuation (3 years old to 4 years old) and after the oedipal phase (6 years old to 7 years old) would be an invaluable contribution towards understanding the actual impact of the struggles during those respective developmental stages.

APPENDIX A

Sample Participant Observer Records

Child: Zena
Age: 17 months
Date of Observation: 1/7/76
Obs: M.W.

Approach-Distance, Records

Mother and Zena were relatively distant today, having little contact both physically and across space. M. was most interested in keeping distance except for necessary contact such as feeding, helping on slide or horse, while Zena rarely glanced at M. as she charged about the nursery intent on own activity. Zena was all over the room, going from one thing to another in a not particularly focused manner. She was most interested in "other than mother" with some focused intense time playing peek-a-boo with other children in the tunnel.

Even though M. spoke several times of how Zena ignores her or doesn't respond to M. as she would wish, M. made little attempt to close the gap between them. She paid little attention to Zena and did not respond when Zena sent cues to get closer (see Sim-Diff). Zena's way of dealing with this distance is to maintain a high activity level and "ignore" mother, preferring push toys the most with the go-cart horse, slide and tunnel the next most popular, but she seemed easily distracted, especially by some interaction between another mother-child couple. She would approach the couple and watch, then sometimes join in. She cried once in a half-hearted way when a twin cried at the door for his mother.

Zena had difficulty relating to M. and she was able to turn somewhat successfully to others, though with an awkwardness and a hint of sadness and of one looking on as others interacted. This indirect theme was carried out in her hugging the bear in the corner (refueling with inanimate object?) and in a touching scene at the end of the morning of Zena holding onto a toddler-sized sad-eyed stuffed basset hound that Mrs. Dee brought in. She went from person to person alternately cuddling the dog in a swaying motion and making ruff-ruff noises at people. (It reminded me of how M. likes to relate through puppets.) I got the impression she would have liked more contact with M. but could only indicate it in this indirect way.

Zena was really most successful and spontaneous in her play with other children, particularly the tunnel games and a ring-around-the-rosie with Bea -- both unprompted by adults. She followed other children around quite extensively and copied their activity. A large part of Zena's activity today was following,

imitating and copying movements of others, particularly other children. (This had a parallel play feel to it.)

Distress, Pleasure/Mood and Affect

Zena was relatively bright, alert and active today taking most pleasure in moving about physically. She was relatively constant in mood going into exuberant loud shrieks of delight with tunnel and rosey games and plunging into rage-filled crying when M. put hat on to go. She seemed to be reacting to others by imitating them, particularly in giving "forced-cry" when twins were crying for their mother.

Zena's mood sometimes verged on "hyper-alert" and her activity seemed driven. There was a stiffness to Zena's frequent smiles. They did not seem like natural smiles, but had a nervous anxious quality about them.

I got the sense of a searching quality from Zena, she did not remain focused for long on anything and seemed distracted. There was also the occasional return of the wall-like glassy look that used to be her primary expression as an infant.

Emerging Ego Capacities

Zena continues to practice at a great rate -- particularly involved with large muscle groups, pushing toys, riding on cart, play with others is becoming large part of activity and this was noticed by M. and commented on positively. This play was accompanied by wild shrieks of delight (from Zena, not her Mom).

Mother focused derisive comments at Zena when she said "Nana" for something she wanted . . . M. complaining that Zena wasn't saying "Mama". Zena is babbling, but I did not catch much differentiated words or syllables.

Zena's sense of self may be firming as her response to the mirror image -- she spent some time in front of it and seemed very focused, patting the mirror and looking closely at her face and hand as reflected in mirror.

Also a rise in imitative behavior . . . copied movements, a activity and even crying of other children. She also copied M.'s "play-relating" through furry puppets in her holding stuffed dog. (N.B. the latter "copying" was not preceded by M. playing with puppets. Is she responding to an internal image of M., perhaps as a way of "conjuring" her up when attempts at contact fail. Note in future when these activities occur. (I.e., what preceded them).

Similarities-Differences

There were some major mismatching of cues today between Zena and her mother. Zena indicated indirectly her need for less distance (with teddy and dog) and directly reaching out her hand and saying "Mama" while on the slide. Zena did not persist or raise her voice when M. did not respond, but turned and gave her hand to me several times with no vocalization. M. was tense and negative, complaining about Zena's tantrums over vacation. Mrs. Z. seemed angry and rejected by Zena because she said "Nana" when she wanted something and did not yet say Mama. M. seemed fed up with demands Zena made and though she wants Zena to be more responsive to her, Mrs. Z. did not respond to Zena's calling her "Mama" nor did she initiate any activity with Zena.

M. gave little encouragement to Zena and was, in fact, quite hostile and rejecting. Zena responded to this by increased activity and, in fact, made few demands on M . . . which I think was experienced by M. as rejecting.

As usual, Zena is much more active than M. who is overweight and tends to stay in one place most of the morning.

APPENDIX B

Sample of Events Sample

Child: Flo
Age: 12.5 months
Date of Observation: 5/16/75
Obs. R.D.B.

Mother and Child - the Independent Way

11:08

Flo is still in the cart after her mother has pushed her around the room (see second time sample). She wants to get out but can't and Mrs. F., seated across the floor watching the girl, looks on as she tries. Frustrated by her inability to get out of the cart on her own, Flo begins to express distress with a low, quiet kind of cry that grows steadily louder. Mrs. F. watches Flo as the cry grows louder. She has a removed, distant kind of look while she watches the child. When Mrs. Hope comments on Flo's crying ("I wonder why she's crying?"), Mrs. F. says that the girl wants some help in getting out of the cart" but I think she can get out herself." A few moments later, as Flo continues to cry, Mrs. F. gets up from the floor, walks over and helps Flo out. 11:10

APPENDIX C

Sample Time Sample

Child: Flo
 Age: 23 months
 Date of Observation: 4/21/76
 Obs. L.F.

M&C: M. seated in a chair. Flo has been playing ball.

Flo stands hitching up her diaper and looking about her and then to Mrs. H. She picks up a ball and throws it, hitting her. She runs to get it and throws again to Mrs. H. She feels her diaper pants. Mrs. H. throws a ball to Flo. Flo appears pleased and goes to get it. She drops it. She grabs at her diaper again. She turns and approaches M. M. asks, "Do you want to go to the bathroom?" M. quickly takes her hand and they leave rapidly. (15 sec.)/

They return to the playroom. M. puts Flo down. 11:38 She arrives saying "Hi James. Hi Steve." She stands eating a cookie, saying "wet" in Steve's direction. Steve and James are both crouched by the couch working at getting a ball from out under it. Steve, thinking that Flo wants to know what he's doing explains that he's getting a ball. She requests, "ball" from M. who gives one to her. Ball in hand, she exits . . .

She enters and runs behind the door. She stops, changes directions, and walks up the sliding ramp. She then walks over to the horse and mounts it, saying "Moo horse." She starts to rock. "My moo horse." She turns around on the horse. M. is engaged in conversation behind her. She says, "moo horse", "my moo horse" several times, looking in the distance and towards M. M. doesn't repeat what F. is saying or in any way acknowledges the horse or Flo. She dismounts and distracted looking she exits.

Flo enters and climbs on the horse saying (11:42) "My moo horse. Bye, bye moo horse." She rocks softly. "Dow." With that she starts to dismount. "Bye, bye" (to Hope). She remains on the horse. I approach and hold its tail. Flo says, "Ivan", complainingly. She continues rocking./

Jane has come in from R. and reminds Flo that it's time to leave by saying "Bye, bye" to her. Flo and H. (from the slide ramp) converse. I can't quote it because most of it is in fast sense making babble. The discussion begins around the subject of H.'s bottle. Flo points out, "bottle" to H. H. responds "bottle", gesturing with the bottle -- holding it out

to Flo and they continue. Flo stops rocking during the conversation and then resumes./

M. enters saying, "I thought we were going to say good-bye." They exit to R, Flo saying, "Bye, bye" to the O.'s.

APPENDIX D

Format for Teacher Interviews

The following questions were used as a guide in interviewing teachers. Each interview varied as a function of the material provided by the teacher.

- How would you describe the girl? Her temperament, persistence, appearance, mood, and so on?
- When she did not get her way, how did she deal with it? Did she persist? Give in?
- How did she react to frustration? competition?
- What kinds of children was she attracted to as friends?
- How did she play? What were her favorite activities? What was she best at? worst at? When she was good at something would she try to teach her skill to others? flaunt it? ignore it?
- Do you remember any of her made-up stories? Can you describe her fantasy play with dolls? What roles did she usually take in dramatic play? What kind of mother or child was she?
- What was her art work like?
- What kinds of things did she do that were disobedient? How did you handle this? How did she react? How did she generally react to limit setting?
- How would you describe her type of intelligence? Was she mostly verbal? mostly interested in activity? a balance?
- Did she ever talk about dreams? nightmares? daydreams?
- What made her happy? sad? angry? What disappointed her? scared her?
- When she was unhappy did she approach anyone for consolation? Who? What were her self-comforting mechanisms? What actions or attitudes from others would comfort her?
- What situations tended to elicit her aggressiveness? How did she express it?

Format for Teacher Interviews (con't)

- Did she talk about gender differences? Did she talk about herself as a girl?
- Did she like animals? Which ones?
- Would you describe her as a competent child? In what way?
- How do you think she saw herself? How would you describe her self-image? her self-esteem?
- What role did she play in the group? How did she relate to peers? Was she able to share things?
- If another child was upset, did it seem that she could place herself in their position? How did she react?
- How did she relate to teachers and to other adults?
- What kinds of things would she say about her mother? father? other people at home?
- How did her parents describe her?
- How was she like/unlike her mother? father?
- What was snack or lunch time like for her.
- Was she toilet trained? Were there any problems?

APPENDIX E

Sample Classroom Observation

Child: Flo
Age: 5½ years
Date of Observation: 1/29/80
Obs. B.B.

9:00

Class is sitting in a circle, general conversation. It seems people are relating what has happened since yesterday. Two of the children had minor accidents and are telling about them. T. asks one if his mother used ice as soon as he hurt himself; that school nurse tells them to do that in case of injury. Flo is sitting and listening, her hands are crossed in front of her and she is sucking fingers of both hands simultaneously. Then begins to pick her nose. Then raises one hand and when not immediately recognized, begins to wave it around. Looks around room. Is called on. Smiles somewhat shyly and coquetishly. Tells about a toy that she has that requires hitting a ball, but yesterday she got hit in the eye with the ball. (There is no mark). T. asks where and if it hurt? Flo says yes. T. asks if she used ice. "No." T. takes attendance -- the count is not right and Flo shouts out that they are only 16 now as Thomas remained in the afternoon. Laura says (as part of group discussion) that it has been a long time since Flo invited her to come over and visit and would she please invite her. L. goes on to say "We had a good time together, didn't we? Please invite me." (This was directed at Flo, but said in circle at large.) Flo replies that one time L. was fussing about Flo's not coming over to L's house. T. suggests that the mothers should speak and make plans for the girls to get together. Flo replies, "maybe sometime". Another girl issues the same invitation to Flo. T. remarks on her popularity. Flo says that Kim's mother already made plans and that Kim was visiting Flo that afternoon. Listens as someone else begins to talk, then calls out T's name as others talk. Conversation turns to snowflakes -- each being different shape and size. Flo shouts out "But not different color." T. asks what color they are and Flo replies "White." T. comments it is white until it gets dirty and Flo says until "people walk their dogs." Flo then watches as Pam shows a graph from an audiometer test that the doctor gave to her. Sucking her fingers. 9:05

Talking to girl sitting next to her. Tapping her finger into her chest as she talks. Looks at the graph as Pam shows it around.

9:10 Watches Pam pass graph around. Flo asks T, if they can do pledge. Scratches her nose. Talking to Hero (boy next to her). Stands and walks across circle to T. Says something which I couldn't hear. Returns to her seat and sits. T. tells class to stand. Flo does so, scratching herself through the fabric of her skirt, and seems to hike up her underwear. Stretches her arms behind her head. Class does their exercise routine. Flo follows along. They then turn toward flag for pledge of allegiance. Flo has no trouble deciding which is right hand (some others do) and recites along with class. Class sits and they recite a poem about being an American. Flo doesn't join in for the first line, but says the rest. Stands in front of her chair briefly. Walks over to T. Says something about T.'s pearls and says that she also has pearls. T. says she'll have to wear them to show. 9:15

Following a conversation about the school buses and their drivers during which T. described one driver as having a long beard, Flo is sitting and stroking chin and drawing her hand down toward her lap, as though stroking a beard. Does this repeatedly. Then bends and stretches from chair. T. tells class they will go to gym with new gym T. Flo says she has to change her shoes. T. asks if she has her sneakers. Flo says yes and gets up to get carton in which class keeps their sneakers. Returns carrying it with assistance of one of the boys. She finds hers, sits and begins to put them on.

9:20 Tying her laces, able to do so herself. Conversation generally about tying laces; seems many just learned how. Flo says "I already know how to tie, only single knots." Then gets up to show T. the job she did. Tells T. that someone changed the label on the side of the carton with the sneakers -- the label differentiated between a.m. and p.m. classes. T. then has each child in the class introduce themselves to me. One of the first boys uses his middle name and they all follow suit, including Flo. She says her full name and then says "My middle name is _____". She interrupts introductions two times to interject something. 9:25

Stands and goes over to T. Talks about her mother's name and how when she got married her original name became her middle name. Standing. Listens as T. reads out list of jobs for the day. They line up to go to gym. Flo is in rear of line, jumping around. Walking to the gym, Flo asks T. if she should take her sneakers home so that next time they have gym she can wear them to school. T. says no, better to leave them in school and wear heavy shoes during winter.

9:30 Class meets new gym T. who then tells them to find spots on floor. Flo sits up front, cross-legged. Watches as gym T. puts things away from last class. She then asks children

to introduce themselves. Flo then sits with her legs bent and feet directly on floor. T. tells them how to find a spot in gym, keep distance from others, etc. Then has class run and stop. Flo running with class listens to directions. T. tells them about the difference between stop and freeze. Trial "freeze" and Flo assumes a very exaggerated caricatured pose. 9:35 T. continues to have them run, stop, run, freeze, etc. Each time, Flo takes on a very exaggerated pose. Arms outstretched, legs far apart, slightly off balance. Is more exaggerated than if she actually froze in the position she was in. They then skip. Flo seems to be enjoying the activity.

9:40 She gallops around with class, then hops on one leg to direction. Then jumps. Is very exuberant. T. tells them to jump on their strong foot and Flo says "My right." She jumps on it. When told to jump on weak foot, changes to left. T. says they have been going in forward direction, what other direction is there? Flo yells out, "Sideways." T. has class sitting down but Flo gets up and jumps around. 9:45

Walking backward, running backward, jumping up and down. Follows along with class. Does jumping jacks. As she does so, she counts out loud, shouting out each number. Is pretty coordinated. T. then has them do bear walk -- two feet and two hands on floor and walk. Flo practically walks across the T.'s feet.

9:50 Doing crab walk, then running. Her run is controlled, not full out as some others. They then skip, run, gallop. T. tells them to freeze and Flo assumes a very exaggerated pose and falls. They do jumping jacks, hops. She is smiling as she does them. When T. tells them to stop she lies down on floor, spreadeagled. While the others are still lying down, she stands and walks around. Several ask for water and T. has them line up to get drink. As she is walking out, Flo says to one of her friends, "I don't have very much energy." 9:55

Takes a small sip of water and walks back to floor spot slowly. Listens as T. tells them not to run and slide. Flo stands, skips around, swings around in a circle, lies down on floor. Lying on her back, she pushes herself around, T. then has them stand and touch various body parts; starting at head and working way down toward ankles. Has them re-do it with eyes closed. Flo follows along with no problem.

10:00 Touching body parts, shoulder, elbow, tummy, chest, waist, backside, legs, knees, ankles, toes, stand up. Do it again with eyes closed. As she follows along she doesn't just touch each part, but rubs or pats it. Is very dramatic. Class lines up to return to classroom. She puffs up her cheeks and pats them as she walks. 10:05

Return to class. Takes off her sneakers then takes them to T. to have her unknot them. Throws them into box and walks around room. Picks up wooden toaster, takes it to T. as something is stuck in it. Goes to housekeeping corner.

10:10 In the housekeeping corner. Is rearranging things and moving them around. Holding the wooden slices of "toast". Pam is playing with a large doll and talking to Flo. Flo is playing with the wooden toaster, pushing the toast in and out, moving the lever up and down. Walks around the space. "Fixes" hair by pretending to wet her hands and slicking it down. Picks up a broom and "sweeps" with short choppy strokes. Says something about "fixing up the house so no one will trip." Then says something about "I've gotta get the food out." Continues sweeping. Picks up the wooden arm of the rocking chair. It is broken and comes off the body of the chair. Then picks up the telephone and says, "Operator, I need (rest is inaudible)". Hangs up. Picks up phone again. Says, "All right, 100 pounds of it." Puts down phone and picks up several watering cans. "Got 100 pounds of glue here -- fix the chairs." Lifts the seat of one chair and "pours" glue from the coffee pot. Replaces the seat.
10:15

Does the same with the arms of the rocking chair and for a smaller rocking chair. One of the boys says "You're gluing chairs with coffee." Flo says, "Got it from the glue department." One of the other girls says, "No you didn't. Got it from the hospital." Flo says "That ought to fix it" as she is gluing things down. Glues the hood on a large baby carriage. Pam is washing dishes nearby. Flo turns to me and says "This looks like a real one" referring to the carriage. I agree. There are several others (children) in the area. For the most part she is not interacting. Glues the foot part of the carriage. Picks up "toast" saying, "I need a break." Pretends to eat it and fixes her hair as before. Wets her hand and slicks down her hair. When finished with the toast, returns it to the toaster. Picks up phone and talks. Kim asks Flo if she had seen the green bag. Flo says, "No, I didn't." She then takes a mat out of the smaller carriage and says "It's dirty." Runs across the room. Sees T. is carrying a large valentine and stops, looks at it, then gets dust cloth from T. Returns to carriage and wipes it out. Is really cleaning it. Shakes out the cloth and skips across the room to return it to T.

10:20 Returns to housekeeping corner. Goes to a toy chest, pulls out green bag and says "I got the green bag." Runs across the room and gives it to Kim. Returns and puts on a pink dress over her clothes. Asks me to zip it up. I do and she walks around the area. Kneels down and takes clock out of the closet.

Picks up broom. Puts both in small carriage. Then lifts the clock and winds it. Puts it on table. Goes to cabinet. Lifts the toast out of toaster. Laura grabs at it. Flo says no and holds onto it. T. intervenes, seems to think Laura is in wrong and gets Laura away from the area. Laura is looking for food for her trip to Monsterland (it takes 20 days to get there). Flo overhears L's conversation with T. and says "There's no food in the fridge. No food in the hospital except toast." Goes to cabinet, is sorting out the contents -- pots, vegetables, etc. Puts some of the items into an adjacent cabinet. Things fall out. She retrieves them and puts them into cabinet. Then takes things out of the larger cabinet. 10:25

Moves to the stove cabinet. Takes out pots. "Getting out some food, can't you guess." -- said to no one in particular. T. plays piano and says 5 minutes to cleanup. Flo continues rearranging pitchers and pans. T. sounds cleanup.

10:30 Picking up vases, etc. from floor. Placing them on top of the cabinets. Kim says something to Flo about the watering cans. Flo seems to be saying no to something. Then finally she says "before we get into trouble". The two of them go off to the water fountain carrying a watering can and bowl. Flo seems to be hiding the can behind her as she skips across the room. T. says that the housekeeping corner needs to be cleaned up. She then calls Pam and Flo by name. She returns to the area carrying the watering can. It seems to still be empty. She closes the cabinets. T. asks who else had been playing there. Flo is putting away cups and moving things around on the shelves. I get the impression she is moving things around more than actually cleaning up. Puts pan back into cabinet. Picks things up from the floor. Places them on top of cabinets. T. tells her to take off the dress and unzips it from her. Helps her take it off and tells her to put it away. Flo does so and T. then calls her to come get her milk. Flo walks across the room, picks up carton of milk and sits down at the long table with rest of class. Then gets up and gets a straw. Sits and unwraps the straw. Is sitting and sucking on the straw, her milk unopened. 10:35

Opens the milk container slowly. Sits with straw in mouth, head resting on her elbow. Doesn't seem to be drinking. Someone passes out cookies. She fingers them. Is quiet. Nibbles on one cookie. Holds the other in other hand. There is conversation around her, and suddenly she interjects "Who cares" echoing something that has been said. Seems to be a bit out of it. As T. walks by, Flo tells her that the cookies don't have much taste. T. asks what kinds of cookies she prefers. Says she likes the kind that is chocolate with vanilla on the inside. T. says those are Oreos. Has stood to talk to T. Now sits. Makes exaggerated chewing motions.

10:40 There is some conversation at the table, all I hear is that "all the girls except Flo". Someone says they don't like Flo. This goes on for about 1-2 minutes. Flo seems uninvolved, as though she doesn't hear the conversation around her. Pam then says "I like Flo." The conversation continues, but I can't hear it. I think it may have centered on the fact that Flo is always last to finish milk -- is very slow. Then someone seems to be passing a message around the table and Flo says "Pass it on" to person sitting next to her.

Is sitting with head resting against her hand, elbow on table. Straw is in her mouth, again doesn't seem to be drinking. Most Others have already finished and are walking around room, taking out mats for resting . Flo walks across the room carrying her milk. Stands near carton in which the containers were delivered. Is walking around, then Laura calls her. Flo goes over to L., who invites Flo to her house to see her new _____. Flo replies that she already saw it -- saw it at L's birthday party. Then says something about L's house being hard to find. Drinks her milk and walks across the room. 10:45

Hero is crying. The T. walks over to him and so does Flo. She then follows both T. and Hero halfway to sink. Standing apart from the group, drinking milk. Follows T. Still drinking. Laura tells her to drink faster. Walking around room and drinking. All others are on floor, resting. (T. walks by me and says it takes Flo forever to drink her milk, just can't drink it). Flo walks around the now-empty long table, drinking. Laura follows her and says something about the milk. Flo asks T. if she can put it away (i.e., throw out rest of it). T. says yes. She does so and then skips around the room, out of sight. Returns about 1 minute later. Walking around room. Everyone else is lying down and the lights are out. She skips back to the closet and returns with her mat -- a towel, with a smaller towel stitched onto it as a pillow.

10:50 Unfolds mat and spreads it out on floor. Lies down. T. is singing as they rest. Lies quietly for a moment, then sits on hands and knees with rear end pointed up, patting it. Sitting quietly. T. then begins to call names for people to put their mats away. 10:55

When she is called, jumps up, straightens hair (not in pretend way as before) and folds mat. Walks across the room to put it away. Returns to the circle where people are now sitting. T. tells her to get her chair and join the group. Flo does so and sits down. Tapping her feet up and down as she sits. Christopher has brought in popcorn which T. asks him to distribute. T. fixes shoelaces of person sitting next to Flo who comments on how long they are.

11:00 T. sits to read a story. Flo is fixing her hair, rubbing her eyes. Looking forward at T. Rubbing her feet back and forth across the floor. T. talks about ceramic animals, collections of them, that they're breakable, etc. Flo shouts out that she has ceramic horses. T. asks her to bring them in. T. says to wrap them in tissue and put them in a shoebox, won't break. Flo says no, as they might break. Listens to T. and banging her feet together. 11:05

Watches T. as she reads story. Flo shouts out answer to question if she knows it. Story is about different kinds of houses -- treehouse, houseboat, townhouse, etc. As T. shows illustrations, Flo stands to see them, walking up to the book. Plays with sole of her shoe after she sits again. Looks at T., rubs eyes, yawns. Plays with hair, twirling it around her finger. Looks tired. Stands again as T. shows illustration. Sits, swinging her legs. Holds her knees and listens.

11:10 Stretches arms behind her. Leans forward as T. shows picture. Shouts out asking why the little pig in the story was too young to make gingerbread. T. says maybe the little pig was too small to reach the counter and wasn't there a time when Flo was too small? Flo says she stood on a stool, jumping up and down as she says so. T. ends story and goes to piano to play songs. Tells Chris to give out remaining popcorn. Plays "This old man". Class sings along. Flo also does accompanying hand motions -- one of few who does. Then plays patty-cake in rhythm of song with Kim who is sitting next to her. As they sing, T. stops and asks what number is next. Flo jumps up and excitedly says "9". Sits again and plays patty-cake. 11:15

Laura asks class to guess her favorite number. They are all guessing. Flo leaps out of her chair and guesses "6". She is jumping up and down in front of L. and keeps guessing until she gets it. Is very excited. T. tells about her favorite number. Flo continues jumping and tells hers are 5 and 45. (T. had said that hers is 5). Chris gives her 2nd portion of popcorn. She eats it. Is sitting again. Then leaps up, walks across the circle to the T. and says she can count to one million and twenty-two. Jumps back to her seat. Sits. Puffs up cheeks and holds fists against them. Jumps up. Twirls around, then sits with her legs over the back of her chair. T. tells them to put chairs away. Flo does so and then jumps and skips around room. Fixes her socks and continues to jump around. 11:20

11:20 Is on line with others to play River Rat. Jumping around. Steps on mat quickly. Once she is out, she jumps around as she watches others play. Jumps up and down. A girl wins and F. joins all the other girls in jumping up and down around her, congratulating her. They then go for their coats and line up to go home.

Overall Impressions

Flo is a very thin, even skinny child with short blonde hair. She wore a striped sweater, skirt and knee socks. She was the only girl in the class to wear a skirt. She is very exuberant and energetic. She seems to find it difficult to sit for any length of time. The teacher seemed manic to me and the class pace frenzied, but I think Flo would have been as hyper in a calmer setting.

She involves herself in almost every conversation and interaction, often intrusively, and often talking about herself and some irrelevant topic.

It was striking that when one child told of being hurt, Flo immediately thought of an incident in which she was hurt -- it certainly was minor and seemed that it was told in identification with a victim or a hurt individual, as a way to gain attention and perhaps sympathy. I wondered if she equates being sick or hurt with gaining attention. During the time in the housekeeping corner she was concerned with damaged things and repairing them. I wonder if hurt and damage are important issue for her, and the repair a way of undoing the damage.

She seemed to be very popular, judging by the invitations extended to her. She seemed reluctant to accept those invitations. She also seemed to devalue some of the invitations as they were offered. I wonder if she is generally that popular, if there was a 'bandwagon' effect in operation once the first invitation had been issued, and why she was singled out. This display of popularity was in contrast to the incident later on during snack time, when she was singled out and ostracized for drinking so slowly.

She is continuously seeking T.'s attention and calling attention to herself. In addition to this was her "identifying" herself with the teacher by saying that she had the same kind of pearls. As mentioned she continuously approached the T., intruded into conversations, etc.; yet did not engage in much prolonged interaction with any of her peers. Mostly she seemed to say something about herself and then not listen to other people talking.

She seemed to become increasingly manic during the day, except during snack which was certainly a low period for her. It will be important to find out if she has general difficulty with food, and what her trouble is with the snack period. Today's behavior was evidently typical for her.

She called attention to herself during the gym period through her clowning, caricatured poses. They were dramatic and overdone and seemed contrived. She did seem to enjoy the gym activity.

Her imaginative play involved others only peripherally. Others initiated interactions with her, but not vice versa. She essentially initiated interactions with the T.

She seemed to be competitive in her bids for attention and in her statement that she already knew how to tie shoe laces, did not learn that in school.

Kim was able to convince Flo to do something they knew they should not be doing. Flo knew it was wrong and tried to hide it. In the long run I think they did not carry through as T. told them to clean up.

She was adamant about holding onto what she was playing with when Laura tried to take the toast. She seemed to want to play by herself and was not about to be sidetracked or to give up what she had.

Following the low period of snack time, she became increasingly manic as T. read a story. Indeed she jumped up to look at each illustration.

The most striking feature was the overall time that she spent in interaction with the T. and not with peers. There was a great deal of interaction initiated by the T. (which may have been motivated by my presence), but it seemed to be their pattern.

As the class was leaving to go home, and I was putting on my coat, Flo walked by me and said, "You hardly even told me your name." It seemed entirely inappropriate for a 5 year old to use that kind of expression, and I also wondered if she had wanted some direct attention from me. As far as I know she did not know that I was there to observe her.

Appendix F

The following is Ainsworth's (1976) description of the maternal sensitivity variable that will be used in training raters for their task.

"Sensitivity Versus Insensitivity To The Baby's Communication"

This variable deals with the mother's ability to perceive and to interpret the signals and communications implicit in her infant's behavior and given this understanding, to respond to them appropriately and promptly. Thus the mother's sensitivity has four essential components: (a) her awareness of the signals; (b) an accurate interpretation of them; (c) an appropriate response to them; and (d) a prompt response to them. Let us consider each of these in turn.

The mother's awareness of her baby's signals and communications has two aspects. The first is the same as the issue covered in the scale "accessibility versus ignoring and neglecting." In other words, the mother must be reasonably accessible to the baby's communications before she can be sensitive to them. Accessibility is a necessary condition for sensitive awareness. It is not a sufficient condition, however, for a mother can maintain the "baby" in her field of awareness without fulfilling the other condition for sensitive awareness. The second aspect of awareness may be described in terms of "thresholds." The most sensitive mother-the one with the lowest threshold-is alert to the baby's most subtle, minimal, understated cues. Mothers with higher thresholds seem to perceive only the most blatant and obvious communications. Mothers with the highest thresholds seem often oblivious, and are, in effect, highly inaccessible. This second aspect is very closely related to

the question of interpretation of the baby's signals, for usually the mother who is alert to minimal cues also interprets them correctly. This is not invariably the case, however. For example, some mothers are alert to the slightest mouth movements, and sometimes incorrectly interpret them as hunger--or they notice minimal tensions or restlessness and incorrectly interpret them as fatigue.

The mother's ability to interpret accurately her baby's communications has three main components (a) her awareness, as previously discussed; (b) her freedom from distortion, and (c) her empathy. An inattentive, "ignoring" mother is, of course, often unable to interpret correctly the baby's signals when they break through her obliviousness, for she has been unaware of the prodromal signs and of the temporal context of the behavior. But even a mother who is highly aware and accessible may misinterpret signals because her perception is distorted by projection, denial, or other marked defensive operations. Mothers who have distorted perceptions tend to bias their "reading" of their babies according to their own wishes, moods, and fantasies. For example, a mother not wishing to attend to her baby might interpret his fussy bids for attention as fatigue and therefore, put him to bed; she being in a hurry, might perceive any slowing down in the rate of feeding as a sign of satiation; or a mother who is somewhat rejecting of her infant might perceive him as rejecting and aggressive towards herself. Mothers who least distort their perceptions of their babies have some insight as to their own wishes and moods, and thus can more realistically judge the baby's behavior. Furthermore, they are usually aware of how their own behavior and moods effect their infant's behavior.

The mother must be able to empathize with her baby's feelings and wishes before she can respond with sensitivity. That is, a mother might be quite aware-of-and-understand accurately the baby's behavior and the circumstances leading to her baby's distress or demands, but because she is unable to empathize with him--unable to see things from the baby's point of view--she may tease him back into

good humor, mock him, laugh at him, or just ignore him. The mother's ego centrality and lack of empathy may also lead to detached, intellectual responses to the baby rather than to warm, sensitive interactions with the baby.

A high threshold of awareness and inaccurate perceptions certainly lead to insensitive responses. Nevertheless, the mother may be highly aware and accurate in her interpretation and still be insensitive. Therefore, in the last analysis, the appropriateness and promptness of the mother's response to communications are the hallmarks of sensitivity.

The quality of the mother's interaction with her infant is probably the most important index of her sensitivity. It is essential that the mother's responses be appropriate to the situation and to the baby's communications. Often enough, at least in the first year of life, the sensitive mother gives the baby what his communications suggest he wants. She responds socially to his attempts to initiate social interaction, playfully to his attempts to initiate play. She picks him up when he seems to wish it, and puts him down when he wants to explore. When he is distressed, she knows what kind and degree of soothing he requires to comfort him--and she knows that sometimes a few words or a distraction will be all that is needed. When he is hungry she sees that he soon gets something to eat, perhaps giving him a snack if she does not want to give him his regular meal right away. On the other hand, the mother who responds inappropriately tries to socialize with the baby when he is hungry, play with him when he is tired, or feed him when he is trying to initiate social interaction.

In play and social interaction, the mother who responds appropriately to her child does not overstimulate him by interacting in too intense, too vigorous, too prolonged, or too exciting a manner. She can perceive and accurately interpret the signs of over-excitement, undue tension, or incipient distress and shifts the tempo or intensity before things have gone too far. Similarly, she is unlikely to underestimate the child, because she picks up and responds to the signals he gives when he is bored or when he wants more interaction

than has heretofore been forthcoming.

In the second year of life, and sometimes also toward the end of the first year, it is maximally appropriate for the mother to respond to the baby's signals not so much in accordance with what he ostensibly wants as in terms of a compromise between this and what will make him feel most secure, competent, comfortable, etc. in the long run. This is a tricky judgment to make, for so much that is done "for the baby's own good" is done both contrary to his wishes and according to the mother's convenience, whim, or preconceived standards. Nevertheless, there are situations in which limit-setting, even in the first year, clears the air even though it is initially contrary to the baby's wishes. Similarly there are situations in which the baby's signals might lead the mother to increase the tempo of interaction to the point of discomfort for him, and in which it is appropriate gradually to diminish intensity. Furthermore, there is a fine point of balance at which the mother can begin to show the baby that she is not an instrument of his will, but a cooperative partner whose participation must be elicited appropriately. In such instances the mother will slightly frustrate the baby's imperious demands but warmly encourage (and reward) behaviors which are inviting or requesting rather than demanding. Nevertheless, in such interactions the sensitive mother acknowledges the baby's wishes even though she does not unconditionally accede to them. The chief point is that a sensitive, appropriate response does not invariably imply complete compliance to the baby's wish--although very frequently compliance may be the most appropriate response.

The final feature of appropriate interaction is that it is well-resolved, or well-rounded and completed. For example, when the baby seeks contact the sensitive mother holds him long enough to satisfy him, so that when he is put down he does not immediately seek to be picked up again. When he needs soothing, she soothes him thoroughly, so he is quite recovered and cheerful. When he seeks social interaction she enters into a more or less

prolonged exchange with him, after which, often enough, he is content to entertain himself. In contrast, some mothers with low sensitivity seem to be fragmented and incomplete, these mothers may try a series of interventions as though searching for the best method or solution. Highly sensitive mothers have completed, easily and well resolved interactions.

Finally, there is the issue of the promptness of the mother's response to the baby's communication. A response, however appropriate, which is so delayed that it cannot be perceived by the baby as contingent upon his communication cannot be linked by him to his own signal. On the assumption that it is a good thing for a baby to gain some feeling of efficacy--and eventually to feel cumulatively a "sense of competence" in controlling his social environment--it seems a part of sensitivity to acknowledge the baby's signals in some effective way and to indicate that one is at least preparing to accede to them. During the first quarter of the first year, a mother's sensitivity is most easily judged by her latency in response to the baby's distress signals such as hunger. However during the last quarter, the mother's prompt response to the baby's social communication and signals is probably a more critical measure. A mother is inevitably insensitive when she fails to respond to the baby's outstretched arms, to his excited greeting, or simply to his smile or gentle touch.

An issue which cuts across the various components of sensitivity concerns the timing of routine activities and play. In general, arbitrary or very rigid timing of major interactions cannot but be insensitive to the infant's signals, moods, and rhythms. The mother who arranges and organizes day by day activities with her infant in order to most convenience herself, or the mother who thinks by the clock, has little or no consideration of the infant's tempo and current state.

In summary, highly sensitive mothers are usually accessible to their infants and are aware of even their more subtle communications, signals, wishes, and moods; in addition, these

mother's accurately interpret their perceptions and show empathy with their infants. The sensitive mother, armed with this understanding and empathy, can time her interactions well and deal with her baby so that her interactions seem appropriate--appropriate in kind as well as in quality--and prompt. In contrast, mothers with low sensitivity are not aware of much of their infant's behavior either because they ignore the baby or they fail to perceive in his activity the more subtle and hard-to-detect communications. Furthermore, insensitive mothers often do not understand those aspects of their infant's behavior of which they are aware or else they distort it. A mother may have somewhat accurate perceptions of her infant's activity and moods but may be unable to empathize with him. Through either lack of understanding or empathy, mothers with low sensitivity improperly time their responses, either in terms of scheduling or in terms of promptness to the baby's communications. Further, mothers with low sensitivity often have inappropriate responses in kind as well as quantity, i.e. interactions which are fragmented and poorly resolved. (Ainsworth, 1976)

Appendix G

"Maternal Sensitive Responsivity vs. Insensitive Responsivity to her Toddler's Communications."

This 5 point scale is an adaptation of the Ainsworth (1976) scale of "Maternal Sensitivity vs. Insensitivity to Baby's Communication." The changes made were in the wording and were not substantial.

5. Highly Sensitive. The mother is exquisitely attuned to her toddler's signals, and responds to them promptly and appropriately. She is able to see things from her toddler's point of view, her perceptions of her toddler's signals are not distorted by her own needs and defenses. She "reads" her toddler's signals and communications skillfully, and knows what the meaning is of even her subtle, minimal, and understated cues. She nearly always gives her toddler what she indicates she wants, although perhaps not invariably so. When she feels that it is best not to comply with her demands--for example, when she is too excited, over-imperious, or wants something she should not have--she is tactful in acknowledging her communication and in offering an acceptable alternative. She has "well-rounded" interactions with her toddler so that the transaction is smoothly completed and both she and her toddler feel satisfied. Finally, she makes her responses temporarily contingent upon signals and communications.
4. Sensitive. In the sensitive interaction the mother interprets her toddler's communications accurately, and responds to them promptly and appropriately--but with less sensitivity than mothers with higher ratings. She may be less attuned to her toddler's more subtle behavior during the interaction than the highly sensitive mother. Or, perhaps because she is less skillful in dividing her attention between her toddler and competing demands, she may sometimes "miss her cues." Her toddler's clear and definite signals are, however,

neither missed, nor misinterpreted. This mother empathizes with her toddler and sees things from his point of view; her perceptions of his behavior are not distorted. Perhaps because her perception is less sensitive than that of mothers with higher ratings, her responses during interactions are not as consistently prompt or as finely appropriate--but although there may be occasionally little "mismatches" during an interaction. M's interventions and interactions are never seriously out of tune with her toddler's tempo, state and communication.

3. Inconsistently sensitive. In the inconsistently sensitive mother there are some moments in which the mother is insensitive to communications. M's inconsistent sensitivity may occur for any one of several reasons, but the outcome is that she seems to have lacunae in regard to her sensitive dealings with her toddler--being sensitive at some moments or in respect to some aspects of his experience, but not in others. Her awareness of her toddler during the interaction may be intermittent--often fairly keen, but sometimes impervious. Or her perception of her toddler's behavior may be distorted in regard to one or two aspects although it is accurate in other important aspects. She may be prompt and appropriate in response to his communications at some moments and in most respects, but either inappropriate or slow at other moments and in other respects. On the whole, however, she is more frequently sensitive than insensitive during the interaction. What is striking is that a mother who can be as sensitive as she is during some exchanges can be insensitive to her toddler at other moments.
2. Insensitive. In the insensitive interaction the mother fails to respond to her toddler's communications appropriately and/or promptly. Her insensitivity seems linked to inability to see things from her toddler's point of view during the interaction. She may be too frequently preoccupied with other things and therefore inaccessible to her signals and communications, or she may misperceive her signals and interpret them inaccurately because of her own wishes or defenses, or she may know well enough what her toddler is communicating but be disinclined to give her what she wants--because it is incon-

venient or she is not in the mood for it, or because she is determined not to "spoil" her. She may delay an otherwise appropriate response to such an extent that it is no longer contingent upon her toddler's signal, and indeed perhaps is no longer appropriate to her toddler's state, mood, or activity. Or she may respond with seeming appropriateness to her toddler's communications but break off the transactions before her toddler is satisfied, so that their interactions seem fragmented and incomplete or her responses perfunctory, half-hearted, or impatient.

1. Highly Insensitive. During the highly insensitive interaction the mother seems geared almost exclusively to her own wishes, moods and activity. That is, M's interventions and initiations of exchange are prompted or shaped largely by signals within herself; if they mesh with her toddler's signals for a moment this is often no more than coincidence. This is not to say that M never responds to her toddler's signals; for sometimes she does if the signals are intense enough, prolonged enough or often enough repeated. The delay in response is in itself insensitive. There is usually a disparity between M's own wishes and activity and her toddler's signals during the interaction. M who is geared largely to her own signals routinely ignores or distorts the meaning of her toddler's behavior. Thus, when M responds to her toddler's signals her response is characteristically inappropriate in kind or fragmented and incomplete.

APPENDIX H

Duration Scale

Each identified interaction cycle can be assessed for the duration of the interaction. Duration is defined as the temporal length and/or the amount of observable interactive exchanges.

1. Short Interaction: 1 to 2 communicative exchanges between mother and toddler occurring in less than 30 seconds.
2. Medium Interaction: 3 to 4 communicative exchanges between mother and toddler occurring in less than 60 seconds.
3. Long Interaction: 5 or more communicative exchanges occurring for a period longer than one minute.

APPENDIX I

Ego Defense Analyses based on Psychological Testing

1. Helen

Helen appears to be operating at an oedipal level of organization characterized by phallic hysterical conflicts. She manages these conflicts quite successfully, displaying a good deal of resourcefulness, resiliency, and initiative. She impresses me as a child who has been heavily socialized, perhaps as a result of being an active, "willful", toddler. This is reflected via several fixation points which are anal in nature. When stressed, she relies on anal level defenses. These maneuvers effectively prevent further regression.

The central conflict is around phallic initiative versus dependency. Helen gives direct expression to ambivalent and competitive feelings towards her mother. These feelings likely reflect themselves in an object relation that is characterized by control struggles. In reaction to this issue, she manifests some separation anxiety. The developmental thrust, however, is clearly in the direction of maternal identification and adequate superego organization (Note CAT #6 "I want to grow up"). Because of her well integrated ego functioning and her age (5.11), she is on the resolution side of the Oedipal configuration, with evidence of introjection, sex role identification, superego anxiety, imitation, identification, and consolidation of self.

The overall balance of pathology-adaptation is well orches-

trated and effective in managing conflicts. She has well developed social skills and coping mechanisms which enable her to manage her impulses and anxiety efficiently.

The most significant aspect of Helen's behavior is her successful use of active-passive reversal (i.e., identification with the aggressor), initiative, and reaction formation. These defenses permit her freedom from debilitating anxiety and allow for channeling of energies into mastery and competence. Her reliance on action is well sublimated and socialized, as reflected in her precocious motor abilities.

The overall sense of a girl who has effectively integrated anal defenses into the current developmental task of oedipal resolution, albeit with a degree of compulsivity.

Degree of Anxiety

Overall anxiety level is mild to moderate. Helen's use of action as a coping style dissipates anxiety quite effectively. Castration anxiety is handled by denial with equal success since she is spared bodily concerns and/or inhibition. The highest level of anxiety is seen around maternal separation which is likely the result of oedipal aggressive wish/fear maternal themes.

Kind of Anxiety

Oedipal level. Phallic hysteric anxiety (castration). Super-ego anxiety is beginning to crystallize.

Preferred Defenses

High level denial, reaction formation (Note Rorschach IV, V, X), inversion of passivity to action via identification with the aggressor, intellectualization, imitation. Note on Rorschach Card II how "being burned" (castration fears) are managed by the construction of the image of a "Dreydly". This transformation relies on action (i.e., a Dreydl is spun like a top), intellectualization (it needs to be decoded by reading letters), and magical thinking (winning, losing). These anal maneuvers are also seen in her compulsivity (neatness), and efforts to do for the examiner. Secondary defenses include repression, avoidance and to a lesser degree, isolation of affect.

Effectiveness of Defenses

Overall, very effective. Helen manages fears and anxieties reasonably well, perhaps with the exception of separation. This is likely a transient situation. Her compulsivity and need for control are, by and large, not pathognomonic. She is able to maintain a remarkable degree of poise and intrapsychic balance under stress.

Developmental Level of Defenses

Mixed Phallic Oedipal/Anal

Rank Order of Defense Organization Functioning

#1 (highest)

Report on test data prepared by
 Steven Berk, Ph.D.
 Assistant Psychologist in
 Department of Psychiatry
 Harvard Medical School

2. Flo

Flo appears to be operating at an oedipal level of organization characterized by conflicts of a predominantly hysterical nature. There appears to be some regression to a more anal level of functioning, particularly in connection with her efforts to manage more basic oral-dependent issues. Her defensive organization reflects this state of affairs as there appears to be an effective admixture of high level hysterical cognitive and defensive activity along with more typically anal defenses.

The central conflict is around phallic assertive issues with concomitant anxiety over body integrity versus a more dependent (and in some cases, oral dependent) stance with anxiety around devouring impulses. There is some degree of ambivalence toward the maternal object and awe of the paternal object. She is actively in the midst of the dilemma of power versus dependent identifications. There appears to be some displacement of phallic concerns upwards (into the visual system of "looking" Note K-F-D father with "camera" and TAT Card 1 "window"), as well as adaptive denial of castration issues (Note mother's "magic finger.").

The balance of pathology-adaptation appears to be well modulated and effective. She is well endowed with cognitive capacities, reveals a developmentally advanced capacity to construct and represent inner states with the use of imagery,

and gives organized expression to a wide range of affects. Nearly all of her defensive maneuvers are effective in maintaining relatedness to the examiner and tasks.

The most significant aspect of her behavior is an intense need to demonstrate competence. One has the sense that this girl may have been prematurely thrust into a position of adult identification, and that she still hungers for nurturance (but feels some guilt as well as anger about this). She uses language that is somewhat intellectualized (e.g., "heart attack") for her age, even when considering her exceptional verbal IQ.

Several aspects of her functioning warrant further comment: She shows some vulnerability to somatizing when her defensive efforts to inhibit aggression fail. Second, there are some signs of encroachment of inhibition onto conflict-free areas of ego functioning. Note her significantly low PIQ score in relation to her VIQ. Particularly noteworthy here is the very low relative score on the Mazes subtest which may reflect her struggles with independence and autonomy.

Last, there appears to be an underlying depressive tone. Not severe, but there nonetheless. This is managed by denial and to a lesser extent, reaction formation. It is not clear whether this is intrapsychically related to frustrated dependency needs, or if it is more closely connected to object relations.

The overall sense is of a very bright and affectively integrated young girl who is in the midst of negotiating oedipal issues. Her affectivity appears intact and her ego

integrative capacities are solid. One would expect, at worst, selective compromising of functioning (i.e., difficulty in a specific academic area, performance anxiety, mild phobic fears). Her self-demanding, self-critical nature could pose problems.

Degree of Anxiety

Overall anxiety is well channeled and inhibited such that its expression is mild. Most significant anxiety is seen transiently in relation to phallic-oedipal issues. Here it is moderate.

Kind of Anxiety

Oedipal level. Phallic-hysterical anxiety around body integrity. Some anxiety around oral impulses.

Preferred Defenses

High level defenses including intellectualizing, isolation of affect, reversal of passive-active via identification with the aggressor. Secondary defenses include projection, high level denial, displacement. Present to a lesser degree: repression and avoidance.

Effectiveness of Defenses

Overall, extremely effective. Flo is able to manage impulses and affects without severely restricting her range of affectivity, cognitive processing, and self-expression. She does show slippage in the face of phallic impulses. Her resiliency is quite remarkable. In one instance, (Rorschach

Card VIII), she regressed from phallic to oral level and re-constituted with anal defensive maneuvers.

Developmental Level of Defenses

Mixed Phallic Oedipal/Anal

Rank Order of Defense Organization Functioning

#2

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3. Diana

Diana appears to be functioning at a level consistent with a more primitive (diffuse) hysterical level. There are indications that her regressions are directly related to unresolved phallic/oedipal issues. Specifically, at the phallic level, she appears to be organized so as to project and avoid impulses in a phobic manner. With regression, a more pronounced oral dependent posture becomes evident. Her orality appears to be directly related to her intense phallic anxiety, that is, she adopts a passive dependent position as a way to manage her fears of phallic aggression. There are wishes for protection, safety and security (pouches, mouseholes, shells). This posture seems to afford her some degree of insulation from projected aggressive impulses, however, she does reveal a vulnerability to feelings of sadness and emptiness.

While her profile is quite similar to that of Zena, she appears to have several differential strengths by comparison. Conflicts are more clearly articulated, defenses are less rigid, regression to the oral level does not bring with it the same extent of self-diffusion and intense anxiety. Her psychic economy is more efficiently maintained by containment of impulses within a phobic posture. There are also some indications of partially successful anal maneuvers such as reaction formation, undoing, and isolation. By way of contrast, she re-

tains a capacity to represent and symbolize her inner world which serves to discharge affects and impulses to some degree. The persistence of imaginary friends may reflect an ego adaptive mechanism which enables her to displace issues of aggression (and perhaps depressive loneliness), such that a sense of self is adequately maintained.

The overall sense is of a child who is actively struggling with her aggressive impulses and with her dependency (hunger). The ego has not surrendered integrative functioning and still maintains a degree of autonomy from primitive impulses and affects. Speculatively, the presence of anatomical imagery of a depressive nature (skull, skeleton), the need for stimulus barrier (shell, rhinoceros), and the need for protective structures (pouch, mousehole), raises questions concerning what Diana may have witnessed or experienced during her pre-oedipal years.

Degree of Anxiety

Overall level of anxiety is marked and, at times, severe. Cognitive ego functioning is selectively compromised.

Kind of Anxiety

Phobic anxiety present (i.e., around phallic aggressive impulses). There is also anxiety around nurturance and protection (i.e., oral dependent/oral aggressive impulses).

Preferred Defenses

Primarily projection along with avoidance, displacement

and denial. Some subtle indications of a potential for more anal maneuvers such as reversal, undoing, reaction formation and perhaps isolation (Note number of Rorschach responses, sequencing of content, TAT Card 1). These latter defensive maneuvers are partially available and partially effective. Rather than stemming off regression, they are used primarily as reconstitutive efforts.

Effectiveness of Defenses

Defensive maneuvers are situationally effective. At times, they do not maintain efficient regulation of impulses and ego autonomy resulting in physiological stress and need states such as hunger and elimination. At other times, they partially redirect aggressive anxieties and dependent issues such that the self is not seriously threatened and distancing capacity is maintained. The most effective defense is projection, followed by displacement.

Developmental Level of Defenses

Mixed lower level oedipal (hysterical) defenses along with oral maneuvers. Cognition is well maintained, particularly in the verbal sphere allowing for maximum reliance on available defenses. One has the sense that Diana is using her available defenses to the fullest extent to manage anxiety.

Rank Order of Defense Organization Functioning

#3

Report on test data prepared by
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4. Zena

Zena appears to be struggling with a variety of issues at different developmental levels, such that she is beset by anxiety and conflict. Her cognition is unable to effectively balance and regulate affects resulting in rapid and extensive regression to a bodily level of tension expression and need regulation (i.e., hunger, elimination). There are several levels of intrapsychic compromise evident in her record. She is pervasively conflicted around issues of autonomy, mastery, and initiative. Situations which generate these themes are handled by massive inhibition, avoidance, denial, and repression. These primitive defenses do not afford her sufficient distance from dysphoric affect. Consequently, she is left with feelings of emptiness, hunger, and depression.

Zena appears to have little trust in her own resources, expecting failure and frustration. Further, she views the world as ungiving, unpredictable, and dangerous. Her imagery conveys this in terms of self-injury, things "popping" and "breaking" and things being taken away. In addition to intense affect and object hunger, she also struggles with intense annihilatory anxiety. There is an attempt to insulate herself from her inner world, however, fears of intimacy and of her own impulses (aggression) are not sufficiently attenuated.

The overall sense is of a very troubled child who has yet

to crystallize a dominant mode of object relation, or a consolidated sense of self. The self is defined by virtue of orality and hunger. She is vulnerable to impulsivity and to hostile dependent behavior. She may develop a passive dependent stance characterized by depressive mood and somatizing or an impulsive stance whereby potential threat to the self is handled by oral aggressive impulsivity, identification with the aggressor or primitive projection and denial.

Degree of Anxiety

Overall anxiety level is pervasive and intense. Cognitive ego functioning is permeated by anxiety and impulsive interference.

Kind of Anxiety

While there are some indications of phallic level concerns regarding assertion, competence, and initiative, these issues are secondary to more basic anxiety around oral dependent/oral aggressive impulses, annihilatory fears, and body ego issues.

Preferred Defenses

The most prevalent defenses are avoidance, denial and repression. Zena's reliance on avoidance is so pervasive that she is not readily able to use imaginal resources for problem solving (Note WPPSI VIQ = 110 vs. PEQ 119)

Effectiveness of Defenses

Overall, ominously ineffective, Zena's defensive network is largely ineffective in stemming off impulses, regulating anxiety, and modulating affects. She has restricted her access to her inner world, thus depriving herself of the use of fantasy as a way to rehearse action. She experiences shifts in affect that are intense (lability), and she experiences needs in a directly physiological manner (ego regression).

Developmental Level of Defenses

While there are some indications of neurotic-like defense deployment (i.e., guilt around "cutting open" around "secrets" and around masturbatory themes), the generally diffuse anxiety level, orality, impulsivity, and regressive shifts in ego functioning suggest a preoedipal level predominates. Defenses are deployed in a rigid and indiscriminatory manner, and they are not effective in preventing regression along libidinal lines.

Rank Order of Defense Organization Functioning

#4 (lowest)

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APPENDIX J

Ego Defense Analyses based on Kindergarten Observations

1. Helen

In the classroom Helen is very sensitive socially and highly competent in her academic and play activities. There is a smoothness to her overall functioning despite many transitions between quieter versus more vigorous activities or between individual or group work. She is also well coordinated physically and her overall competence makes her stand out as one of the more mature children in the classroom. The teacher relied on her maturity and competence frequently to help others clean up and even to remember who in the class visited the nurse the previous week! There were no signs of defense mechanisms, either oedipal or preoedipal, that substantially interfered with an enriched and satisfying integration of Helen with her peers, teachers, play activities and her academics. Nonetheless, there are defense mechanisms characteristic of the oedipal phase present that do subtly interfere with optimal adaptation. In terms of psychopathology Helen could be classified in the mildly neurotic range. The high level defense mechanisms she employs do not effect her attention span which is long and flexibly employed. Except on one occasion of regression to avoidance mechanisms, Helen's higher level defenses were effective in controlling anxiety and maintaining optimal adaptation.

Helen's relationships with her peer were numerous, comfortable and mutually satisfying. She got into subtle and not so subtle conflicts with her peers by her occasional excessive "good girl" behavior brought on by an identification with her teacher. In group play Helen was remarkably flexible making transitions easily from leader to follower or from one activity to another. She has a strong sense of self that is not easily threatened by even rapid changes in her social milieu. Helen also was skilled at making transitions from individual to partner or group play and vica versa. That is, she easily incorporated others in her activities or just as easily asserted her wish to play independently. Notable in all these transitional interactions was a sensitivity and respect for other children's feelings. She had a highly developed skill for her age of taking the other's perspective into account in her behavior. A close look at her social sensitivity does show, however, that defensive elements are present in that she has a tremendous need to avoid conflict or any experience of anger with others. This is not to say she was not assertive in the observation, she was. However, she was not observed to be angry or even irritated at any time even when she was assertive in a conflictual situation. Overall, Helen's social development is quite healthy as she is able to take genuine pleasure in shared activities as well as in her individual work and achievements.

In essence, the classroom observations show Helen to be a very "good girl" who is exceptionally competent both socially

and academically. It is this excessive "good girl" aspect of her personality that shows evidence of the tetrad of defense mechanisms characteristic of the obsessive compulsive (i.e., regression, reaction formation, isolation, undoing). Helen rarely uses more primitive defenses (avoidance, projection, denial) and when she does they appear more situationally determined and not part of her basic character or coping style. In essence, the primitive defenses occur so unfrequently as to have a negligible effect on her overall high level of personality functioning and integration.

A typical technique of Helen's to avoid the experience of negative affect is a momentary regression to a passive, submissive role whenever she is in a group of children threatened by a conflictual disruption. In the following interaction, Helen turns off her usually acute social sensitivity as a way of avoiding conflict between Jodie and herself and Caroline who wants to play with them.

Helen sits on the floor near Jodie and Michelle. Asks Jodie something. Jodie says no at first then says 'you can play'. They are making patterns from blocks. Jodie dumps all the blocks onto the floor. Helen sits. Jodie insists on taking all the reds. Then Helen works with Jodie on Jodie's red/blue pattern. Her stitchery is sitting on the floor in front of her. They build a long chain following a red/blue and yellow/orange pattern.

Jodie asks teacher if she likes the pattern. Teacher offers them a 2nd box of cubes. C runs off to get them, returns saying, 'here you go guys'. Jodie seems to be running the activity -- they follow her pattern, do as she wants. Helen watches. Now Jodie and Helen make a curved configuration. C asks if she can join them. Jodie says no, they might get

the colors mixed up, C tries to get Jodie and Helen to join her. Jodie says no. Helen doesn't seem to notice any of this.

Helen says 'I don't want to do this anymore'. She and Jodie begin to put blocks back into box. Teacher says 5 minutes left to free play. Helen picks up stitchery. There is disagreement about blocks. Jodie and C disagree about which blocks go into which box. Helen says, 'that's all, this box is finished' showing that box she and Jodie had been filling is now full. C says, 'Helen I know you're not my friend.' Helen replies, 'I am your friend.' C says, 'then why not help?' Helen replies, 'You brought it out.' Jodie says 'Helen will be my friend. Right?' Helen shakes head 'yes'. Jodie takes Helen by the hand and they walk to other side of room.

Helen uses another defense than regression to passivity when she couldn't avoid C's assertion of "you're not my friend." Helen's response shows the use of isolation in her absolute assertion that she is C's friend and in her becoming excessively logical and legalistic both ways of eliminating the possibility of negative affective experience. She returns to regression to passivity as a defensive technique in the last part of the sequence when she is caught between conflicting demands of Jodie and C. That is, she passively says, "yes" to Jodie's hostile, jealous assertion that "Helen will be my friend." Here Helen succeeds at mollifying Jodie and indirectly snubbing C, again successfully avoiding open conflict and negative affect.

A more debilitating use of regression occurred the week before classroom observations began but this kind of primitive reaction is highly unusual for Helen. The previous week Helen had an incident of extremely painful constipation while in school. Her mother could not be located and school authorities

could do nothing to help her without her parents permission. Following that incident, Helen was quite frightened about a recurrence and became phobic about returning to school despite mother making it clear each day where she could be reached. During the first two days that Helen returned to school, her mother stayed with her. Helen's typical use of regression, however, is not so pervasive or rigid, rather it is quite minor and momentary. That is, a moment of being passively oblivious to her classmates or her environment can be sandwiched between active and assertive behavior so that the regression to passivity has little overall effect on the adaptiveness of her behavior. For example:

Helen returns to class. In room, stands next to Debbie who is unwrapping a pack of peanuts. Gets some. Teacher hands out cards for game, Sounds of School. It is a record and each child has to match the picture he has with the sound on the record. As she distributes cards, teacher asks who did not have a turn last time. Helen raises her hand and teacher gives her a card. Sits and rest are distributed.

Sitting on floor -- look far away for a moment. Touching her mouth with her finger. Then looks at the card she is holding. The record tells part of a story then just some sounds, teacher asks what was happening. Helen said 'Washing it off" (i.e., boy washing his hand after falling). She was correct. She listened to each story and responded correctly to each.

Reaction formation is the preferred and predominant defense mechanism used by Helen. She uses reaction formation to effectively sustain an adaptive stance in the face of her own hostility or helplessness or other negative affective

states which are unacceptable to her.

An example showing the strength and pervasiveness of reaction formations in her character occurred the first day of the classroom observation. As indicated, the previous week had been the most stressful of the year with Helen unable to get her parents help during an incident of extremely painful constipation. The first day of classroom observations was also the first day Helen had been in school without her mother since the incident a week earlier. In the example of reaction formation that follows, the observer for this study had been asked by other children why she was there. One would have expected Helen to be somewhat in touch with the fear, anxiety and anger she had experienced in the previous days, but her response to the observer as she looks up from her school work on numerals shows her defenses are back in full swing.

Helen is matching numerals to the number of items in sets. Someone asks me why I'm here. I said something about learning what kindergarten is like. Helen says, 'I know what it's like.' I ask her what that is and Helen says, 'Fun, nice.' I ask her what she likes best. 'Music'. Helen then tells the teacher that she told me.

Helen makes a point of telling the teacher what she told the observer, another factor showing the defensive aspect of her attitude since in reaction formation the aim to please and mollify superego figures both internal and external is a central part of its structure as a defense.

The next example of reaction formation in Helen's personality functioning shows the quality of constant vigi-

lence against the unacceptable impulses that is characteristic of this defense.

Elaine then passes cookies around. Teacher says they'll have cookies, then sing another song, can't sing while eating. As Elaine passes cookies, Helen says, 'Can't eat yet.' Teacher agrees, saying must wait until everyone served. Waits for cookies.

When Elaine gets to her, Helen pulls the packet down to eye level with both hands, looks at the cookies and chooses one. Takes a small bite without waiting for everyone to have. Continues taking small bites. Teacher begins to play another song. Helen sings, smiling and eating. Teacher wonders out loud who she will pick, Helen raises her hand, waving it around. Teacher sings. Helen sits, eating cookie and smiling. Teacher then begins another song and tells only those who have finished eating to sing along. Helen sings along anyway. Rodrigo is not paying attention, is jumping around. Teacher calls him to sit next to her. Helen who was sitting next to Rodrigo says, 'I'm not doing it.' Teacher says she knows Helen wouldn't. Continues eating.

It is the latter part of this sequence where Helen pipes up, "I'm not doing it" which shows how on guard she is against disruptive impulses. Despite knowing the rules which she verbalizes, about not eating before all the children get their cookies, Helen starts eating anyway. She then starts singing while eating despite the teacher's admonitions to not do this. Given these inconsistencies in her attitudes and behavior and the strong disavowal of Rodrigo's open disruptive behavior, we can surmise that Helen's reaction formations against uncontrolled disruptive impulses are more rigid and uncompromising than those reaction formations against her passive, oral strivings.

It has become a truism in psychoanalytic developmental

psychology that the obsessive compulsive personality tends to regress from the genital to the anal stage as a defense against unacceptable oedipal libidinal and aggressive drives. In the following example Helen reacts with the predictable disgust and distress to the experience of handling gobs of glue in the art class.

Goes to Mrs. V. asks 'Mrs. Volpai, I don't have any string and I'm ready for it.' Mrs. V. tells her to wait. Helen returns to seat saying 'okay, I'll put on glue.' Uses finger to get some glue (as directed), feels it and says 'oooh gooey, gooey' in distressed way. Then I think she said, 'so cool.' Puts glue on -- but seems to me that it was not in length as supposed to do.

Teacher comes over and says the glue should go on the long way first. Helen turns paper. Referring to Eric, says, 'He didn't cut off his corners.' Teacher tells her to be concerned with her own work, and yes Eric did cut his corners. Helen takes glue again, saying, 'ooh.' She spread glue halfway across the paper and teacher tells class that they should put the scissors in the middle of the table to give them more room to work. Helen uses the hand without glue, stops glueing midway and puts her scissors in center of table. Resumes glueing.

Glueing, says with disgust, 'isn't it gooey with this stuff?' Then, 'gooey, it's gooey. But it's gooey, gooey.' Continues to glue, says 'I finished Mrs. Volpati.' Picks up kite and carries it very carefully. Says, 'Mrs. Camerano' and hands it to Mrs. Camerano (teacher's aide).

Helen's occasional tendency to rely on projection when reaction formation fails is evident as well in the above example. Immediately after the teacher corrects her mistake, Helen tries to shift the attention off herself and onto Eric and in the process distorts reality in asserting 'he didn't

cut his corners off." The example shows that Helen's higher level defenses quickly recompensate as she follows the teacher's direction about the scissors while she is at the same time attending to her task of glueing.

It is characteristic that the aggression controlled by reaction formations against hostility is displaced or repressed and Helen is no exception.

The underlying resentment that Helen feels by constantly submitting to superego demands to be a "good girl" bursts forth in the following example and is displaced onto a peer who was trying to be helpful.

Helen walks around, picks up a sweater, asks whose it is. Throws it to Rodrigo. Picks up another sweater, asks whose it is and throws it to Keith. Walks around, picks up a chair. Jodie stops her -- says got to put crayons away first. Helen picks up the markers says, 'teacher, I'm putting them here.' Marilyn picks up chairs and begins to stack them, Helen says, 'Marilyn, sit down. Marilyn's out of group.' Teacher says Marilyn is just helping them and thank her. Helen stands and watches. Jodie tells her to get paper. Helen picks up a paper, takes it to teacher and says, 'no name.' Teacher says, it does have a name, Helen leaves it on the table. Jodie puts crayons away.

Standing, teacher picks Michelle to pass crackers (triangles for Purim, teacher asks if Helen and Jodie thanked Marilyn. Helen shakes head yes (I don't think she actually thanked her).

Although failures of her higher level defenses are rare in the next example Helen and her friend Jodie act out the failure of obsessive compulsive defenses particularly reaction formation. The failure of the reaction formation

defenses is evident in the classic ruminating and obsessing over the books in a manner that undoes any productive work and passively expresses their angry rebellious impulses towards the teacher's demand that they clean up. Again, these kinds of failures are brief and infrequent in Helen's overall personality functioning.

The Teacher's Aide staples her fan. She holds the hat and gloves. Teacher tells Helen and Jodie to finish cleanup. Teacher turns on record player. Helen puts on her hat and gloves, carries fan, fans self, walks back to group.

C walks over and says must give the fan to teacher -- can't take it home yet. Helen fans herself. C continues to tell her to give it to teacher. Helen goes to table with markers. Draws a few lines in folds of fan. Caroline again tells her to give it to teacher. She does and then walks around for a moment. Helen touches Jodie's arm. Says, 'clean up, we've got to clean up.' They take all the books off the shelf and begin to sort the 2 different sets of books. Helen is still wearing the hat and gloves. Helen is sorting very slowly, reading the name on each book.

Jodie pulls the books that Helen has sorted off the shelf. Helen begins again and Jodie pulls them off again. Then Jodie pulls all of her own pile off the shelf. She is looking for Helen's book. They agree that their books will be on the tops of the piles. They continue to sort. Teacher tells them to hurry. Helen tells Jodie to finish, she'll do something else to clean up. Jodie says no. They continue to sort. Teacher comes over and points to all else that needs to be done. Teacher says, 'Look around Helen', Helen does and goes to pick up the stamp pages. Teacher says that she will get the stamp pads so that Helen doesn't get her gloves dirty. Helen returns to help Jodie. They finish sorting books.

The instability of reaction formation is evident in the opening portion of the sequence where Helen swings ambiva-

lently between passively ignoring the demand to clean up and then excitedly identifying with them ("clean up, we've got to clean up").

Even following this admonition the reaction formation fails again and Helen and Jodie ruminate and obsess unproductively over the books.

Undoing also figures prominently in Helen's defensive repertoire. Classically undoing is doing something positive which actually or magically is the opposite of something done before. What we see in Helen may be an early stage of undoing in that her automatic (defensive) positive behavior seems to be an attempt to undo the acting out of a forbidden impulse by a peer. Helen consistently attends to and verbalizes to the teacher other children's misdeeds. This defensive pattern appears to be an attempt to: differentiate herself from the wrongdoers; undo any guilt she has for unconsciously identifying with them, and finally to augment her own reaction formations against such disorderly, disruptive impulses. Some examples follow:

The class returns to the room from gym. Helen goes to the teacher and says, 'I just wanted to tell you, Rodrigo went to the bathroom.' Returns to seat.

Teacher is reading a story to the class and stops because of noise. Helen quickly points and says, 'He's talking to her.'

Sitting at a table with others working in workbooks. Teacher asks if they all have their names on their papers. Helen says, 'Joshua can't have a cookie' then runs to teacher and says, 'Joshua can't have a cookie because his name isn't on his paper.' Teacher says this was just a check. Helen returns to seat.

Still coloring. Teacher begins to play piano (signal that they should be cleaning up). Helen sings along to 'Yankee Doodle.' Knows the words and recognized it on about the second note. One of first to start singing. Still coloring. Teacher begins new song. Helen doesn't sing. Continues to color. Jodie and Caroline walk away from table. Rodrigo comes over to begin to color. Helen says, 'No, it's clean up time. No, it's too late.' He begins anyway. She continues to color. Caroline says, 'Helen we can't color anymore.' Helen colors for a few more seconds. Then she picks up her picture and walks toward the group.

Ryan is no longer in her chair, and Helen sits. Teacher says to look for scraps on the floor. Helen bends over and looks but misses a scrap next to her chair. Sits and waits, teacher tells Pedro's table to stand and line up. Some boys from another table sneak into line. Helen calls out, 'Keith's table is standing up. Keith's table is standing up. Keith's table is standing up.' Teacher then calls Helen's table and Helen says, 'I'm the leader' and walks to front of line. They return to class.

It is clear from the examples that the teacher's expectations of Helen also increase the pressure on her to use reaction formations somewhat rigidly.

In summary, Helen is a remarkably capable young girl who copes effectively and creatively in her current milieu. She uses higher level obsessive-compulsive defenses regularly. Reaction formations, particularly against hostility, are used somewhat rigidly. However, these defenses are mildly neurotic and do not substantially interfere with an overall successful adaptation.

2. Diana

The classroom observations show Diana is a bright, competent child who is eager to learn and enjoys school activities. She functions predominantly at high levels in her social relations, academics and her play. Interwoven with her considerable competencies are more regressed techniques of coping with challenges in her emotional and social life.

In terms of her strengths, Diana's capacity for sublimation is excellent. She plays and works in academics with great enjoyment. Her ability to read surpasses all of her class mates. She uses this skill to augment her sometimes weak self-esteem. Due to allergies she has had to restrict her food intake and does so with apparent ease. During lunch time she accepts full responsibility for what she eats and does not complain, despite, for example, always having to drink water while the rest of the class gets juice. Diana's social relations are typically warm and sensitive. She has the capacity to share during play activities and can ask to be a part of other children's play when she was not initially included.

Despite her high social and academic capacities, Diana is subject to chronic diffuse anxiety. The most striking indication of her anxiety is her almost continuous tactile self stimulation. Presumably she is attempting to sooth herself during this self stimulation. Specifically, she sucked her thumb, fingered her

navel or rubbed her stomach even when engaged in academics or game playing. Diana's anxiety was also manifest during transitions between activities. The classroom observer noted:

Anxiety and ends of activities go together.
She wanders around, touching objects, watching others, often seeking contact with teacher.
Often sucks thumb or plays with navel.

Diana's seeking out the teacher's comfort is another manifestation of her constant low level anxiety. Whenever the teacher called the class together as a group, for example, for a story, Diana invariably sits at the teacher's feet, practically touching her. The observations show that when Diana is not engaged in a structural activity she tends to begin orbiting around the teacher, quickly losing interest in any peer interaction or activity she encounters. She gives the impression of gravitating towards the teacher in spite of herself, as if the yearning for passive nurturance and comfort are so overwhelming that they can't be resisted. At these times of a regressive tug towards the teacher, Diana's libidinal ties to her peers are rigidly repressed.

Diana clearly had special friends in the class and at times showed exceptional sensitivity to the needs of her classmates. Diana can see her classmates as whole people with needs similar to her own. These high level social relations were regularly displaced by social behavior that was bossy, provocative and short tempered. Furthermore, this petulant style gives way to the infantile yearnings towards the teacher. There is,

thus, a great contrast in Diana's presentation and it seems that for her there is no middle ground between the highly competent, happy, socially sensitive child and the petulant, preoccupied, mildly depressed distractible and self soothing child. The key variable to these shifts seems to be whether an external agent has given direct permission for whole hearted engagement in a structured activity. If opportunities to utilize her competencies are immediately at hand, the powerful passive yearnings break through and she behaves in a more repressed manner.

Diana's ego defense organization reflects these shifts between high level and more regressed functioning. Diana's high level defenses are most evident in her excellent capacity for delay. She is able to wait for the teacher's attention, for materials or for an activity to be set up without undue frustration. Her regular interactions with peers as well as those occasions of exceptional attunement to others shows the flexible operation of repression. Her self control is augmented by mature forms of identification with the aggressor, that conform to adult ideals and are not suffused with punitive aggression.

The key variable in Diana's shifts to preoedipal or rigid defense mechanisms is the presence or absence of an authority figure. That is, Diana's higher level defenses are subject to regression due to her heavy reliance on an early form of identification. As soon as she moves out of the social field of an authority she is likely to begin using more primitive, less adaptive defenses. In effect, Diana's ego defense organization

is not solidly established as self-generated and internalized, one of the indications of the successful resolution of the oedipal phase. Rather, her ego defenses easily slip to pre-oedipal techniques or the rigid employment of the oedipal level defenses. Her less effective, more primitive defense constellation has a distinctly hysterical structure. She resorts to denial in fantasy and word. She displaces considerable aggression through primitive forms of identification with the aggressor. She shows definite somatizing tendencies when anxious. Finally, at times, she uses a rigid form of regression that excludes a libidinal investment in her peers, especially boys.

Diana could be classified as a moderately neurotic child who oscillates between being an oedipal level hysteric with conflicts predominantly from that era and a preoedipal, oral hysteric with tremendous conflicts around autonomy and nurturance.

As noted, Diana's higher level defenses weaken at times of transition when she is not structured by an external situation or agent. In the following example, high level defenses (flexible repression in waiting for person in front of her to climb up and in waiting for her friend at the bottom and the flexible use of reversal with Sloan) sandwich a regression to passivity and somatization.

Runs to slide, stands on bottom step for a few seconds (waiting for person in front of her to climb up). She climbs up, stands at top, waits, and smiles. Child in front of her shouts 'I'm

gonna be a hot dog.' Diana replies, 'I'm gonna be (inaudible).' She then slides down, and waits at bottom for friend to slide down. Runs back to monkey bars and stands there for a moment (30"?). She clutches her stomach. Walks across the lawn, clutching her stomach, stooping down. Walks in direction of Mrs. M. Then runs and joins Mrs. M. and others standing near a tree. (Then out of my sight).

Running across lawn, letting Sloan catch her. As soon as Sloan 'tags' her, she says, 'OK, my turn now.' and turns and tags Sloan. Sloan says she was not yet ready, and they repeat the sequence.

Given that her symptom disappears in mid-stride towards the teacher, it is clear Diana was regressing to a comfort seeking behavior. It is as if for the 30 seconds she stood alone by the monkey bars she was caught in a conflict between her healthy phallic narcissism and autonomy demonstrated in her exuberant play and her primitive oral dependency.

There are numerous occasions in the classroom observations that show a conflict in Diana between the full enjoyment and ownership of her libidinal impulses and unconscious guilt over such satisfaction. She resolves these conflicts typically by regression to passivity and somatization. The following brief example showing a process of self-enjoyment and expression following by regression to oral passivity and somatization occurred innumerable times in the kindergarten observations.

While running, Diana falls, gets right up. The leaves are falling from the trees and she puts her hands up as if to catch them. She runs and jumps in a small pile of leaves. Stares up at them, extends hands, trying to catch one. Runs and jumps in leaves. Then stands off on side of tree sucking her thumb, holding her stomach under her shirt.

It appears that conflicts regarding libidinal self enjoyment and conflicts over autonomy versus passivity have coalesced in Diana at this time. The following long example demonstrates well the shift between higher and lower level defenses in the context of an autonomy struggle with the teacher.

Mrs. M. has already called the group to assemble, which Diana has ignored. Mrs. M. now calls her specifically, and she runs over to group. Sits down on low wall, with others. Listens to Mrs. M. give directions for their walk.

Walking with Joy Toy, holding hands. Holds leaf in other hand. (Purpose of walk is for collecting leaves). Bends and picks up another leaf from street, then waits as JT does the same. They've fallen behind the group and Diana says, 'Oh, we got to move on.' They run up to others. College student asks Diana if she wants to put her leaves into the communal shopping bag. Diana does so, without speaking. She picks up another leaf, and another, then calls, 'Here, Here,' to the college student. Mrs. M. points out red leaves and Diana shouts 'Yeaaa', laughing. She runs over to pile of red leaves and calls, 'JoyToy, come here.' She bends and picks up leaves. Mrs. M. calls, Diana runs a few more feet and then picks up another. Runs back, gets JT and holds her hand. Listens to Mrs. M. tell everyone to calm down. All begin to walk again. Diana takes a couple of steps forward, still holding JT's hand, and yanks JT forward. Continue walking. Diana swings JT's hand back and forth three times. It looks like she is yanking JT's hand rather hard. JT says nothing.

They continue walking, Diana still pulling JT by hand. JT says, 'Hey, Diana'. Diana is walking with thumb in mouth. JT says something about home. Diana who didn't seem to be listening asks, 'What?'. JT then says something about having a friend go home with her, and Diana replies, 'Oh,' Continue walking, Diana lets JT walk a bit ahead of her and suddenly pulls her arm back hard. Does it again. College student tells Diana to stop. Diana looks at her (hard to read facial expression, perhaps angry). Says nothing. They continue walking, Diana still has thumb in mouth.

The above sequence begins with a denial of Mrs. M's call

to assemble, signifying the end of the free play. Diana moves up the developmental ladder in her next reactions showing oedipal level identification ('Oh, we've got to move on') and the flexible use of repression (waiting for JT). After the admonition from Mrs. M. telling the group to 'calm down' Diana resorts to a primitive form of identification with the aggressor, treating JT in a cruel, narcissistic manner. When JT finally protests Diana continues using lower level defenses of denial in fantasy and regression to passivity.

The powerful aggression and anger evident in Diana's action probably represents part of her reaction to the teacher ending the free play period and then admonishing the group to calm down. Diana's tremendous resentment belies her internal conflicts over the experience and expression of her phallic/libidinal impulses and imagined prohibitions. Upon reaching school, Diana's mood shifted dramatically as did her level of functioning as she became enthusiastic about the activities available and more socially appropriate. Perhaps being back in school stimulated the return of the "good mother" introject.

Diana, however, cannot sustain herself on this "good mother" introject but alternative forms of satisfaction are precluded due to the rigid use of repression. That is, whenever a situation stimulates the oedipal complex Diana resorts to a rigid, unhappy solution. She, at these times, is unhappy with what she has and acts as if she is forbidden enjoyable experiences with others, particularly with her peers and especially

with boys. The following example is one of numerous spontaneous provocations with the boys in the class. Some of her actions are less aggressive than the following and actually appear to be weak and hesitant efforts to make contact.

Diana walks over to Mrs. M. Mrs. M. is pulling children on truck, three children are already sitting or standing on it. She (Diana) sits on the truck and gets a ride over to the 'parking lot'. Smiling and looking behind her to see in the direction in which Mrs. M. is pushing. After the ride, she climbs off. Is standing with others, and 'bumps' into a boy standing near her. The bump was deliberate with hip thrown out. Skips across the room back to 'The Enterprise'. Taps her throat, saying, 'Oh, ah, ah, ah.' Goes back to block corner and pushes toy truck along the floor.

The above example Diana acts out aggressively towards a boy immediately following a happy interaction with her teacher (mother figure). In this sequence her oedipal yearnings and conflicts are resolved by rigid repression and reversal. The following long example further demonstrates how oedipal issues untrack Diana and lead her to a more primitive form of ego defenses:

Begins to draw, using right hand. Draws a shape somewhat between triangle and square and begins to color it in. Diana says, 'give me _____' (inaudible). She picks up scissors, and in doing so knocks over the container of markers. Ignores that. Wendell moves the markers. Diana says, 'Don't' in a very annoyed voice. Looks over her own drawing. LL elongated person. Uses colored pencil. Not talking to others at table. Sticks tongue out in concentration. Continues to draw. Looks at K's picture of robot. Stands, picks up another marker and continues to draw.

Still drawing. Self involved. Drawing face. S.O. asks if she has forgotten the belly button. Diana's response is inaudible. Continues her drawing, not

involved in conversation. K then says st and Diana laughs and looks up. Looks back to her drawing. Looks around at people at table. Back to drawing. Rubs her finger across the drawing. As if to smudge it. Continues drawing. There are now many people standing near the table. Diana: 'you're a little bit too noisy' in tone imitative of teacher. Turns the page in her pad, placing used page on top of paper being used by Wendell. He complains and Diana says 'I can't help it.' She continues her new drawing, leaving the first one where it was. She begins to cut out the design she's drawn on the 2nd page. She opens purple marker and smells tip. Opens another purple marker and smells tip.

Diana quickly calls forth a primitive form of identification with the aggressor in reacting to Wendell's attempt to move the markers. Towards the end of the sequence she resorts to blatant denial and regression to passivity all in the service of denying and disowning her hostility.

The following example shows more directly how the shift from higher to lower level defenses is stimulated by a context evoking oedipal issues.

Breaks her pretzel into 3 pieces, and begins to eat 1 piece. Watching the college student talking to children at her table. Then has that 'faraway' look again. Sips her water. Micheal is pouring more juice for himself. Diana says, 'Ugh.' to him, and then, 'Yukkie.'

Marlo has said something about her mother having a baby, and Diana responds, 'So, my mother's having a baby too. Coming home tonight with a baby girl.' Mrs. M. has heard Diana's comment and shakes her head 'no' to the college student. She then turns to Diana and asks where Len is. Diana responds, 'Home.' Mrs. M. asks who's taking care of him, and Diana says, 'Mom.' Marlo asks something and Diana in imitation of Steve Martin says, 'Excuuuuuse me!'

The oedipal issue of possessing or not possessing something

or someone of value is here played out in identification with mother. Diana's denial in fantasy includes, significantly, changing her baby brother into a baby sister. When challenged gently by the teacher Diana does not rigidly hold onto the denial, a good sign that her ego has not settled on a more primitive form of defense organization.

In summary, Diana's ego defense organization shifts between oedipal and preoedipal techniques of defense. In particular mature repression and identification with the aggressor alternate with rigid repression, denial and primitive identification with the aggressor. Her defenses are not effective in controlling or eliminating her anxiety. Nor does her current defense organization successfully modulate her tremendous passive urges, resulting in mild depression, transient isolation from peers and a loss of autonomy. Nonetheless, the more primitive forms of defense are not held to rigidly and Diana can quickly recompensate to her higher level defenses if given adequate environmental support.

3. Flo

The classroom observations show Flo to be intellectually precocious and far in advance of her peers on academic issues. Socially, however, she is isolated and emotionally she is highly anxious. These problems and assets set her apart as distinctly different in the classroom. Her current ego defense organization is unstable and only partially effective. That is, her defenses usually allow her to maintain her academic achievements despite her anxiety and isolation but these same defenses interfere substantially with the establishment of healthy narcissism and satisfactory relationships. In the realm of the personal and social Flo's higher level defenses are failing her. Thus, intellectualization, isolation, undoing, reaction formation and repression either break down completely and Flo's ego functioning is overwhelmed by anxiety or she uses them so rigidly as to compromise her optimal potential adaptation.

Flo's constant anxiety in the classroom is evident in her poor impulse control, regular self stimulation by touching various parts of her body and by her self-referential, ego-centric manner of relating to others. Except when engaged in an impersonal, intellectual task, Flo's higher level defenses are ineffective in the classroom and she must turn to more primitive means to maintain her stability. The lower level defenses used

by Flo that are typically more prominent in the preoedipal era are denial (in fantasy, in action, in word), projection and avoidance and they are used either singly or in combination. In terms of psychopathology, Flo could be classified in the severely neurotic range.

Intellectual striving is Flo's favorite manner of coping. Her language skills, particularly in reading are quite superior. She does have a long attention span, but it is still regularly disrupted by her anxiety. Her self esteem is based entirely on her competing successfully at academic and physical challenges. She had no moments of quiet self-acceptance either alone or when with others. Rather, all her activities are constantly intruded upon by intense competitive aggressiveness that at various times appears derived from her current developmental position (phallic/oedipal) while at others is derived from earlier, more primitive levels of development (oral, anal).

The most persistent example of the failure of intellectualization and the concomitant reliance on denial (denial in action in this example) is Flo's uncontrolled demandingness of the teacher's attention. She continually interrupts others to gain her teacher's attention and even moves closer to her physically at inappropriate times. She not only interrupts others constantly but expresses a cascade of personal associations to whatever is being discussed, effectively taking over the interaction and eliminating, momentarily, all competition for attention. The denial in action is evident by her constant, impulsive interrupting and the failing intellectualization in her inability

to offer something that smoothly fits in the context of the discussion. For example, while a classmate was talking about skiing Flo blurts out,

Tomorrow . . . maybe my sister is going to go skiing today and where Hemlock Park is I went ice skating in the park before 2:30 yesterday, me and my mother were the only people, but she didn't have ice skates and had to watch til I got the hang of it . . . I took a piece of ice that was loose and . . . (talking too fast to record) . . . and put it in freezer.

It is difficult to assess whether Flo's defenses are regressing due to her being overwhelmed by the strivings and anxiety of the oedipal phase or whether there is an earlier, preoedipal kind of anxiety with which she is struggling and which calls for more primitive defenses. An example of the failure of intellectualization and isolation to control the anxiety of the oedipal phase and the emergence of magical thinking and denial in word to manage what had become unmanageable is the following:

Flo became terribly upset and anxious at school while watching a movie about safety around powertools. She started crying during the movie and the teacher called Flo's mother saying Flo would be coming home upset. Flo refused or was unable to discuss with the teacher what in particular was upsetting her. Subsequently, it was revealed that Flo's father had impressed upon her that in their new home he had a work room in which she wasn't allowed and had never been in. Upon arrival home she insisted that she be able to call her father at the office to ask him one question. She refused to tell her mother what she wanted to ask him or what she was concerned about. Her mother was able to calm her enough so she could wait for her father to return from work. When he came home, Flo, in private, asked her father if he had a power saw. He said

he didn't and her upset was calmed. The mother found out what Flo's concern was from the father since Flo still refused to tell her about it. As a matter of fact, Flo wanted the whole incident kept secret and the mother informed the interviewer she'd be very upset if she knew they were discussing it.

In this example, Flo's considerable capacities for intellectualization and isolation failed in that they couldn't keep separate issues in external, objective reality and the tremendous unconscious anxieties Flo had related to the oedipal drama she was in the midst of.

Any classroom discussion acted as a stimulus for Flo to make attempts to control her anxiety. She constantly blurted out both appropriate and idiosyncratic responses to her teacher or classmates. For example, her classmate, Kim, says she was stung by a jellyfish and a bee. Flo blurts out anxiously "at the same time." Here, Flo's defenses fail to contain what seems to be her own fears of harm coming to her and this results in thinking that distorts and exaggerates reality.

The failure of intellectualization and isolation is also evident when her thinking becomes blocked. For example,

The teacher begins a lesson. Flo interrupts saying 'I know the book, that, that, that . . . I know that book that, that, that' and she follows the teacher accross the room.

Or another example;

Teacher asks what a period at the end of a sentence means. Flo shouts out 'It means that it's the end because . . . it means that it's the end because . . . you don't need any more of the sentence.'

The rigidity of Flo's use of intellectualization is another sign of its current ineffectiveness in some situations. It was clear throughout the observations that her intellectual skills and knowledge are her primary tools for expressing her aggressiveness and maintaining her fragile self esteem. For example:

There is a discussion about signals and Flo calls out 'I know all the signals . . . want to see them?' She demonstrates bicycle signals. Chris shows a different way and she says, 'No, you're wrong, I know it.' Teacher says they really are the same.

Flo's intense competitiveness is very much related to her feelings towards her older, very competent sibling, Joanna. In the following example Flo is writing a valentine to her sister and it appears that the underlying aggression toward her sister is displaced onto her peers with the mechanism of identification with the aggressor.

Flo asks how to spell Joanna. J, o, a,
Teacher spells the rest and Flo writes it.
Stands and reads, 'I love you Joanna.' Colors in small hearts to teacher's suggestion. Talking to girl next to her, Flo says, 'maybe I learned my lower case before you. Maybe I do my lower case better than you.'

Needless to say this form of identification with the intellectual aggressor has not enriched Flo's social world. The aggressivization of her intellectual capacities is another sign of its ineffectiveness.

A poignant example of the social isolation that is the result of Flo's rigid and ineffectual defenses occurred during

snack time. Flo is sitting quietly and is subdued, avoiding social interaction which is her usual coping style during snacks. There is conversation all around her and suddenly she blurts out a nonsequitur of "who cares." Clearly distressed by her isolation, Flo pushes others further away through her use of denial, this time in words and perhaps in fantasy. As indicated, Flo resorts to more primitive defenses of denial, projection and avoidance as her higher level defenses prove unable to control her anxiety. When Flo is not interrupting others and implicitly denying their presence in her actions, she is self absorbed, unable to attend to conversations around her and is thus denying others presence in fantasy. She becomes inwardly turned at these times and constantly engages in diffuse, self-stimulatory activities (pick her nose, suck her hand or thumb, finger her skirt or crotch; repeatedly adjust her underwear).

Flo also uses projection when her higher defenses fail her. In particular, rigid reaction formations against passivity, helplessness and ignorance result in a reliance on projection to handle these discarded aspects of herself. For example:

Teacher turns on a record. Flo had not known what it was and had just asked the teacher was it Swan Lake or the Nutcracker. The teacher told Flo it was Peter and the Wolf. Later Lelia asked what it was. Flo says in a condescending way that it's Peter and the Wolf, as though everyone knew that.

A more dramatic example of projection embedded in an exaggerated, histrionic reaction is the following:

Flo accidentally touches the point of the scissors. She says 'Take the scissors away, the sharp part of it.' Realizes the teacher is not listening. When the teacher approaches Flo says, 'Take the scissors away, the sharp point of it touched my hand.'

The combination of projection and denial (of the projection) is also common when Flo is distressed. For example, Flo had been pleased with the valentine cards she made. When there is not quite enough wrapping paper for them she says, "Oh no, the book, it can't, oh look." Note the combination of the externalization of responsibility and the denial of the distressing reality in the construction "It can't."

Flo also regularly uses a combination of lower level pre-oedipal defenses and higher level oedipal defenses when dealing with her distress. Her use of denial in action and word; projection, and isolation are evident in her dealing with social rejection in the following long example:

Flo puts valentine away, runs to teacher. Teacher says it is almost time for milk, go have fun, we'll have milk later. She runs to housekeeping corner where Pam and Jenine are laughing hysterically about "Dial a Story". Flo stands near them, smiles, looks like she wants to be included. Asks 'What's so funny?' They don't answer. She picks up a 3rd phone (they are each holding a phone, listening and intermittently, laughing). Pam says 'It doesn't work on that phone.' Then says, 'You don't know the phone number.' Flo dials, saying, 'I know.' They chorus, 'no'. They laugh and Flo imitates. Then she laughs of her own initiative. They laugh at her. Pam says, 'Flo that phone doesn't work, it doesn't even have a string.' (it is missing the cord that connects the receiver to the base). Flo continues to listen. Pam grabs the base of Flo's phone and teases Flo holding it out of her reach. Flo gets it back. Pam and Jenine

continue to listen and laugh manically. Flo imitates their laughter. Flo says into the phone, 'Of course I know.' Pam says 'You can't talk to it, it only talks to you.' Flo laughs, listens to the phone, carries it around the area. All three laugh. Pam and Jenine shout, 'yeech.' Flo sits. She is listening and imitating their reactions. Then she imitates 'yech.' Says into phone, 'Of course I'm not a killer.' Pam says 'You can't talk back to it.' Pam grabs it from Flo saying 'Can't talk back to it.'

Flo has kept the phone and is listening. Says 'I got to call another number.' Dials many numbers. 'Hello, are you gonna tell . . .'. Teacher plays chords on the piano and says 5 minutes to cleanup. Flo says, 'I've got a great story because I dialed the _____ number.' She listens. Pam says something about 3,4. She and Kim dial a number and laugh. Flo sits behind them, listening to her phone. She then sits at the table near them. They immediately pick up their phones and walk away. Flo says, 'I know the number for a scary story.' Pam and Kim are sitting, say 'ooh'. Flo is off to a side, dials a number, says 'Hello Jackie.' Stands, listens, laughs. Says 'There's something funny on this phone.' 'Ah hah hah' Listens, 'ah hah hah'. Holds phone to her chest and laughs. Listens, laughs. Holds phone to ear, wrong end, reverses it.

Besides her constant interrupting and anxiety, Flo's lack of mutually satisfying, warm, affectionate peer relations is the most striking aspect of her classroom behavior. During classroom time there is little, if any, joint planning, cooperative play or ongoing conversation. Flo maintains this status quo by a seemingly generalized rigid repression against warm, affectionate or even exciting relations with her peers. She augments this rigid repression with a more primitive defense, avoidance. Avoidance in the form of passive-aggressive intellectualizations and rationalizations can be observed in a

sequence between Flo and Laura during group time.

Laura says it has been a long time since Flo invited her to visit, please invite her, we had a good time didn't we. Flo responds that last time Laura fussed about Flo not coming over to Laura's house.

A little later, another girl invites Flo to sleep at her house that night and Flo responds half-heartedly, "maybe sometime." Still later, Laura invites Flo to her house. Flo says she saw it at Laura's birthday party and Laura's house is hard to find. In general, Flo is unreceptive when girls invite her to their houses, never seeming to be pleased or excited.

In summary, Flo is a very anxious, egocentric and lonely young girl who employs both higher level defenses appropriate to the oedipal era like intellectualization, isolation, repression as well as lower level defenses characteristic of the preoedipal era like denial, projection and avoidance. Her higher level defenses are either ineffective or so rigidly employed as to be quite costly in terms of her healthy social and narcissistic development. When her higher level defenses fail, the lower level mechanisms are effective at stabilizing her but, again, at a high emotional and social cost to Flo.

4. Zena

Zena was consistently observed to be an active, exuberant child in the classroom observations. She was oriented to other children but her relationships consistently had a strong narcissistic element such that she appeared to not understand that other children had feelings and ideas of their own. She disregarded other children's feelings to a striking degree, again, not so much out of anger but as a result of her own entitlement to have what she wanted when she wanted it. In terms of defenses, Zena uses predominantly low level preoedipal defenses, mainly projection, denial, avoidance and primitive forms of turning passive into active. The high level defense she uses most is reaction formation against passivity and hostility and when these are unsuccessful she relies, as indicated, on an immature fantasy laden form of identification with the aggressor. Her combination of predominantly preoedipal and some oedipal techniques of defense controls her anxiety but at the price of a prominent narcissistic component in her personality. In terms of psychopathology Zena could be classified in the severely neurotic range.

When not faced with conflict or distress Zena was articulate and direct in her speech and goal oriented in her behavior. She enjoyed a variety of activities engaging easily

in quiet autonomous activities like reading, drawing or listening to music as well as more active social ones like group fantasy play. She was very independent and asked for assistance from adults only after repeated attempts to accomplish something on her own. She regresses from this active independent stance at times and becomes a detached, passive onlooker, interested in watching others work and shadowing the teacher. Despite her regressions to passivity where she wanders unengaged about the classroom, Zena rarely asks for help when she is stymied in an activity. When she does ask for help she is brusque and pushes the helper away as if to deny her occasional need for assistance. Predominantly, Zena is a take charge person who is very persistent at having things done her way. She usually manages to get the other children to accommodate to her, rarely does she accommodate to them. Given her aggressiveness and egocentricity it is somewhat surprising that she is friendly with many children in the classroom and clearly has some special friends in Amy and Nils. Thus, she oscillates between these comfortable, mutually satisfying relationships and more narcissistic functioning where her own needs and desires take precedence over all else. In like manner, these oscillations in her social relations represent the functioning of higher level oedipal defenses, particularly reaction formations against passivity and hostility, on the one hand and predominance of preoedipal, narcissistic defenses on the other.

Much of the time Zena functions effectively and adaptively in the classroom and presumably this is the result of some stability in her higher level defenses. However, Zena's automatic turning to primitive means of defense is as consistent and predictable as her higher level, adaptive behavior. The most prominent preoedipal defense utilized by Zena is a primitive form of identification with the aggressor. It is primitive because the aggressive introject identified with by Zena is clearly punitive, retaliatory, narcissistic and omnipotent. A more advanced form of identification with the aggressor would be a more idealized introject that demanded, for example, fairness and was not primarily punitive and aggressive.

The following example gives some sense of Zena's reliance on this primitive form of identification with the aggressor and how this compromises the quality of her social adaptation. Zena's drivenness to be the "no sayer" interferes with a more adaptive response to the girl calling her and her friend Amy.

A group began a game of "Cat and Rat" which Zena and Amy joined. Zena was immediately chosen to be the cat. She "chased" the rat for about a minute and the game broke up. Zena and Amy were standing apart from the group and one of the girls called Zena. Zena responded "We're not playing." This sequence was repeated 3 times. Finally the girl who was calling Zena said "You never know what someone is going to ask you." Teacher said, "She might want to ask if you want a cookie." At that, Zena and Amy each said, "I want a cookie." and Amy said, "I'll go get them." They ran over to the others, and without registering any disappointment about the lack of cookies, Amy pretended to hand a cookie to Zena and they each pretended to eat cookies.

An adaptive use of denial in fantasy can be noted in the last part of this sequence. Anna Freud (1936) referred to denial in fantasy (and word and act) as precursors of higher level ego mechanisms of defense so its use by Zena is consistent with her reliance on a primitive form of identification with the aggressor.

A more dramatic example of Zena's use of a primitive form of identification with the aggressor and its basically impulsive, egocentric quality is the following:

She continues copying the letters then flips through pages of book, and is talking to those near her. Then says, 'I'm up to her. I'm up to her.' referring to where her friend is in the book. Working in book. Grabs a pencil from girl next to her, tries to get it out of her hand. She holds onto it and they struggle. The other girl unclasps Zena's hand from the pencil. Zena says, 'I need it.' The other girl uses the pencil, writes something, then puts it down for Zena to use. Zena uses the eraser and returns the pencil. Uses her own pencil to continue copying letters. Turns the page, says 'Oooh, this is the tuffie.' Repeats that. (the page has numbers rather than letters). Bites her pencil, leans forward. Writes 1, 2, 3, 4. Bell looks over Zena's shoulder, Zena pushes her back, pushing on her neck. Bell says 'Zena, (rest inaudible). Then twice grabs at the pencil of the girl near her (same one as before). Misses, says, 'I need that eraser.' The other girl gives it to her and Zena erases the numbers she's written. Holds book up to wipe away erasures.

Despite classroom observations showing that Zena has many positive interactions with her peers and has many friends, they also show Zena to regularly resort to teasing and taunting in her interactions. Again, this is a primitive form of identification with the aggressor and suggests a powerful attempt

by Zena to overcome and reverse her own sense of being a needy and deprived individual. The following long example comes right after a transition in the classroom from academic work to arts and crafts. Zena copes with the uncertainty and momentary passivity of starting a new activity by taunting the other children.

Walks to arts and crafts table. Picks up 2 scissors, shakes them rhythmically. Says 'I got scissors, nanananana' in taunting way. Someone tells her not to touch them and she replies, 'I could touch them, yes I could.' Someone else says something to her and she says 'Wrong' sticking out her hip and making a face. Plays with magic markers and paper on the table. The group at the table is a very social one, with much discussion. Zena wants to get paper from the roll. Says 'Gimme that scissors.' Someone at the table tells her that she doesn't need it. (They usually use a ruler as a straightedge against which to tear the paper). Zena replies, 'Yes, I do.' Is told to use the ruler. Takes the scissors and cuts the paper. As she cuts, Lee comes over and says, 'Zena, I told on you.' Zena looks at her for a few seconds. Hard to read her expression -- not much response. Then asks, 'What did she . . . what did the teacher say?' Lee: 'Not to do it again.' They return to the table.

Clearly, at times Zena's reliance on primitive identification with the aggressor makes her petulant and difficult to get along with. Instead of the above becoming an opportunity for cooperation and mutual enjoyment Zena's primitive defenses turn it into an aggressive struggle. Further, Zena's concrete concern over what the teacher said in response to her misbehavior rather than even a hint of remorse indicates that her reliance on primitive identification with the aggressor

thwarts optimal superego development.

Zena's tendency to turn her passive tendencies into active stances through identification with the aggressor is such a powerful characterological defense that she allows herself to regularly be distracted from autonomous ego activities when an opportunity to identify with the authority presents itself. In the following example Zena is coloring with crayons when she is almost magnetically drawn to such an opportunity.

Behind her Zena evidently overheard a conversation in which the teacher told Heather that Lee had invited the whole class to her birthday party. Heather was disagreeing with teacher. Zena says, 'Yea' and walks over to the teacher and Heather. Zena continues, saying 'Whole class, it's the whole class.' Heather walks away and Zena says to her back 'Really is.' Zena follows Heather across the room saying, 'Yes, it is.' Zena then walks back to the teacher who is talking to someone else. She then walks back to the table and begins to color again.

The transformation by Zena of an authority's reasonable correction of Heather's perception into a chance to hound and dominate another is indicative of the difference between higher and lower level identification with the aggressor and her reliance on the latter. Zena's strong need and capacity to be independent and self-reliant is representative of higher level identification with the aggressor, probably augmented by reaction formations against both passivity and hostility.

Projection was the other predominant lower level defense employed by Zena in classroom situations that stimulated intrapsychic conflict. Since the projection many times involved the

attempt to shift the focus off her own actual wrongdoing, it was used conjointly with denial, another primitive form of defense. As was her pattern when confronted with her wrongdoing, in the following example, Zena immediately accuses someone else of having stomped in the puddle and attempts vigorously to evade the focus of her teacher's disapproval, even if it means aggressively accusing her friend Amy.

Zena is walking around holding her paper. Goes to area near the teacher. Stands there holding her paper. Teacher is told Zena splashed in the puddle and she tells Zena not to do so. Zena says that Amy also splashed. Teacher says that she is not talking to Amy now, but to Zena. Amy and Zena are standing near the teacher. Amy denies stepping in the puddle. Zena says she saw her. Ilene says she saw Amy also. Zena pushes her face right up against Amy's and says, 'You did, what you think?' Amy responds, 'When you come to my house I'll take off my shoes and show you.' They walk away together, walk around kind of aimlessly.

Zena's reliance on projection sometimes takes the form of projective identification. The tendency toward projective identification can be seen in the following example where when Zena's aggressive wishes are thwarted by Amy they emerge in a projected form as concerns about another child's aggressive impulses.

Zena and Amy are sitting at the table, each reading a book. Zena says, 'I have this book, but it's bigger, not this book.' Flips through pages, doesn't seem to be reading the story. Amy asks, 'Want to change books, do you?' 'Let's see that book.' Zena is holding the book open with the cover toward her, the pictures facing out. Says, 'Amy, she was taking your book.' referring to a very little girl who is the only other child in the library.

An example of the use of projective identification showing the confusion of ego boundaries characteristic of this defense is the following. Confusion in Zena's verbalization as to who did what, when, who's who, and who's to be punished show that Zena both projected her aggressive inclinations into the little boy and identified with them at the same time.

Teacher tells Melvin to sit and not play for a few minutes as punishment for stepping in the puddle. Zena says, 'I can't play because I stepped in the water.' Teacher tells her that she can play because she told the class not to step in the puddle after Zena had done so.

Zena also uses projection in combination with lower level forms of denial and primitive forms of identification with the aggressor when threatened with the loss of approval of her teacher. The following example shows the extreme pathological degree to which Zena will go to avoid such loss of approval.

Watching Sleeping Beauty film. No words. Look at the pictures. Teacher comes over and says it was good that Zena was able to change the film but next time should call the teacher. The film is very fragile.

Trying to shut viewer. Turns switch. Doesn't shut. Tries several times. Finally turns off. Melvin wants the Cinderella film. Zena unrolls Sleeping Beauty, looks at it, puts it down. Takes Cinderella. Threads film. Melvin tells her not to do it again (i.e., ask teacher). Zena says to him, 'I'm telling on you.' Melvin asks why. 'Because.' Melvin: 'Why?' No answer. Melvin: 'Tell me.' Zena: 'It's a secret.' Melvin: 'Tell me.' Zena: 'Secret.' Melvin: 'Why?' Zena: 'Because it's a secret.' Melvin: 'Really gonna tell on me?' Zena: 'Yes.' Melvin: 'No. It's a trick. Won't.' Zena: 'No, not a trick.' They then start discussing Snoopy characters.

The blatant distortion of reality, the aggressive and con-

fusing turning of the table on her peer and her relentlessly holding to her projection despite the opportunity for reconciliation are such strong and primitive defenses that it suggests the stimulation of powerful preoedipal anxieties regarding the loss of her primary object's love and that object's retaliation for misdeeds. Given that Zena immediately ignored the teachers admonition to not thread the film without help it is clear that her superego is not functioning effectively at this time. It seems likely that Zena using the preoedipal form of defense of primitive identification with the aggressor momentarily insulates her from reality and then when that primitive introjected aggressor is re-projected she must rely on denial of reality and projection to ward off her overwhelming anxiety. This oscillation between introjection (of omnipotent, punitive introject in identification with the aggressor) and projection has apparently interfered with the superego development expected in the late oedipal period. In addition, her reliance on these primitive defenses may be the factor that sustains the prominent narcissistic component in an otherwise healthy personality. The primitive projection and denial in the above example enables her to avoid the negative affective experience of guilt. If the affective experience of guilt were integrated into her self representation rather than projected and denied Zena would begin to overcome the superego lacunae and pathological narcissistic component in her personality. The inflexibility of the primitive defenses employed would indicate

that such an integration would be unlikely at this point. This inflexibility is especially evident in the last part of the interaction where Melvin, accurately perceiving that he was being "tricked" by Zena, says just that which would have given Zena an out. Zena, however, rigidly maintained the projection, denial and reversal at the cost of undermining the quality of her peer object relations as well as her contact with reality.

In summary, Zena's defenses oscillate between high level oedipal defense like reaction formation and lower level defenses like denial, projection and avoidance. Both higher and lower level defenses have been incorporated in her character structure. These defenses are effective in controlling anxiety but they interfere with optimal interpersonal relations, lending these relations a prominent pathologically narcissistic component. In addition, the use of primitive defense mechanisms precludes the development of a mature superego. The lack of a mature integrated superego means Zena's capacity for guilt and appropriate idealizations are significantly compromised at this time.

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