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**VERBAL, NONVERBAL AND DYADIC COMPONENTS OF REFLECTIVE  
FUNCTION**

by

**KIMBERLY M. KOTOV**

**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.**

**2002**

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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.**

Sept. 3, 2002  
Date

  
\_\_\_\_\_  
Diana Diamond, Ph.D.  
Chair of Examining Committee

Sept 7, 2002  
Date

  
\_\_\_\_\_  
Joseph Glick, Ph.D.  
Executive Officer

Steve Tuber, Ph.D.  
\_\_\_\_\_

Elliot Jurist, Ph.D.  
\_\_\_\_\_

Ilene Greene, Ph.D.  
\_\_\_\_\_

Kate Oram, Ph.D.  
\_\_\_\_\_

Supervisory Committee

**THE CITY UNIVERSITY OF NEW YORK**

**Abstract****VERBAL, NONVERBAL AND DYADIC COMPONENTS OF REFLECTIVE  
FUNCTION**

by

**KIMBERLY M. KOTOV****Advisor: Diana Diamond, Ph.D.**

**The ability to reflect accurately on one's own and others' actions is considered an advanced developmental, if not solely human achievement. The capacity to understand ourselves and others in a meaningful way, experience empathy and tolerance, all arise from this ability to anticipate and reflect on experience. Reflective function is broadly defined by the clinical researchers Fonagy and Target as the "predisposition to understand behavior in mental state terms" (1997, p.680). Although some unconscious component is recognized, RF is defined by psychoanalysts as the ability to hold in awareness one's own feelings and thoughts about one's own actions, and maintain these as separate from an understanding of another's feelings and actions. In essence, reflective function is the ability to reflect on one's own and others' actions in a psychologically-insightful way.**

**But what is this important reflective capacity really? What are its specific components? Can it be measured? Is it possible to assign a finite and unique quantitative score of reflection to an individual? What is the score based on, and how does it develop over time? Can we define one's ability to reflect independently of context?**

**These are just some of the questions that arise in regard to the construct of Reflective Function (RF) in psychodynamic literature. My research offers an argument for two elements which I think are inseparable from the RF construct, but which are not currently evaluated or captured in the current quantitative analyses or theoretical formulations of the construct: 1) the indisputable presence of nonverbal communication within the reflective capacity, and 2) the dynamic, dyadic nature of the construct. This dissertation will evaluate the current literature on the construct of RF, including the theoretical description and the operationalization of the construct in psychoanalytic, philosophical and empirical developmental research literature. Analysis of the philosophical roots of the concept adds to the case for its dynamic, dyadic nature, while developmental research and contemporary clinical literature provide insight into the way nonverbal domains of information sharing and storage impact awareness of self and other. Finally, I will suggest a fuller definition of RF, and offer numerous directions for research to investigate this construct further.**

## Preface

**This dissertation is about the most natural and yet complex experience of ourselves: broadly speaking, it is about meaning-making through human interaction. In an evaluation of certain contemporary constructs in the field of psychology, I seek to better understand why each person *cannot* be defined as a complete, separate and unique entity, but must always be understood within a context, and within a rather helical time line of past, present, and future. The dissertation addresses why the attempts to characterize and categorize individuals are helpful but not complete; why the whole picture involves not only the individual, but an "other," even several individuals, and events in time... a psychic context.**

**Though my dissertation argues, among other things, for de-emphasizing the singular significance of verbal communication in therapy, this opening statement attempts to capture facets of the dissertation development that are frequently left unsaid. As with many of my colleagues and classmates, I have found that some of the biggest struggles in this important sector of my graduate education have centered around task definition: how I want to define what I am evaluating and working toward, and why it is so important to me; and what I am willing to change or compromise in the process of growth.**

**The answer to these questions for me is rather simply stated, but quite complex. This dissertation is in part an attempt to integrate elements of my life experience into my new role and self-representation as a psychologist.**

**With Native American influences in my family and our farming community, I grew up with a strong appreciation for nonverbal communication. Among the Native American descendants in our small, mostly uneducated community, respect was granted to those who communicated clearly and powerfully with the least words. Elders were the wise, mature individuals who recognized their dependence upon the community for some part of their identity, and who communicated this with their actions. The rich events and interactions with which Cherokee descendants partook in the larger community were frequently conducted with little verbal explanation, and therefore, were regularly overlooked by those who focused primarily on verbal forms of communication. My elders' verbal communication about human beings was expressed through cliches and parables referencing our natural surroundings. It seemed that these communications, too, were regularly misunderstood as either mystical, primitive or childish - including by myself at times - because the contextual resonance of meaning was not understood.**

**Once in awhile, an individual with "the gift" of storytelling was called upon by the whole community to speak more, and weave stories**

which would have meaning that required time to ponder. My best friend's dad was a storyteller. He told us that the stories were like the corn which grew in our fields: each ear "spoke" meaning through being. Each had a kernel of daily truth (reality), each grew through the day, and each tasted differently on different tongues. I was frequently bewildered by these kinds of parables, but this one has stayed with me. Perhaps because I chose to savor it, this story has developed a lot of meaning for me. I believe that this story is about the wisdom of judgement and perception: about the inherent interconnectedness of human beings, who in their struggle to make meaning and clarify their world, can lose sight of their context and their impact on each other. Ultimately, their meaning and uniqueness is experienced through interaction with other(s). This story is about the psychological co-construction of meaning.

Entering graduate study in psychology, I was wary about how my life experience would fit, and be received by this new community. I frequently read about psychological health, and how various respected clinicians primarily categorized, defined and explained individual development. I was exposed to literature about how psychotherapy is "the talking cure," and how a psychologist must strive to be a blank slate (withhold from verbally communicating her own desires and intentions to the patient), and, in general, how individuals centering on nonverbal communication were perceived as more primitive. Yet, I also

read about and spoke with clinicians who explained the importance of the therapist's attunement to nonverbal communications of the patient and the therapeutic dyad, and who believed that they were communicating much to their patients, through tone and nonverbal means, even when speaking little. I initially feared that I might be perceived as primitive, because I carried a somewhat different value system regarding the communication "hierarchy," but I found instead that many in this new community were experiencing the same "something else" of unuttered communication that I had grown up with. I wondered if there wasn't something of worth to both "communities" (and, of course, myself) in comparing these modes of thought.

Early in graduate work I was introduced to the concept of Reflective Function (RF), a term that denotes an individual's ability to reflect accurately on his own and others' psychological worlds. I was excited about the idea of quantifying the concept of self understanding, but it seemed so elusive. An analyst and researcher had actually created a measure of what he believed was RF, and I started studying his construct and scoring manual. First, I was struck by the fact that an individual could receive a unique, finite, quantified score for this (after all, the corn changes through the day...), and was further intrigued that the score was based solely on written transcripts of interviews. No attempt was made to capture the dyadic paralinguistic

or nonverbal communication, which I believe is so important for sharing our knowledge of ourselves and others. Maybe this evaluation worked in a culture that specifically strove for symbolic-linguistic communication, but I felt that even healthy folks in my childhood community would not be well represented on this scale. However, I was pleased to find that, ultimately, after offering a painstaking elaboration of scores for different levels of insight, the RF scoring manual encouraged the scorer simply to utilize "clinical judgement" in assigning an individual's final score for RF. So, here was the scientific description of the ear of corn, the way it tastes different to us all. Here was a lovely term, clinical judgement, that signified the "something else" (my bet is that it is not about linguistic symbolization) that we all use to understand and reflect on experience. In other words, the scorer was instructed to rely on that intuition within herself of how reflective another's descriptions were, to utilize her own experience of the other to define the other: an apparently dyadic and nonverbalizable action. This "something else" is what I hope to better define in this dissertation.

## Acknowledgements

I cannot believe that I am sitting at last to write "thank-yous." Down South, I was taught that this is one of the most important facets of social etiquette - giving thanks to those who have helped you. This is for overt good deeds, as well as for the lessons of wisdom and personal growth we gather from each encounter along the way. So, first of all, I would like to say thanks to all of the graduate faculty from whom I learned at City College; I appreciate this education more than they know... certainly, more than I have verbalized to date. In particular, I would like to thank Steve Ellman for setting me the challenge to approach ideas in a scholarly and rigorous manner, but with a sense of humor, as well. I would also like to thank Steve Tuber, who was there in many ways of the spirit as I needed guidance; I certainly owe him a Cherokee "honor pack."

I would also like to thank every member of my committee for believing that I could do this, and having great expectations even when I just wanted to take the easy route (which I never found, oddly enough). Along the way there were typical (and atypical) setbacks. With each one, my chair, Diana Diamond, helped to find creative solutions and alternatives, and provide insightful guidance in the process. Other members provided guidance and help with challenges based on their specializations, as well.

I am very glad to have friends who were available for chatting, walks, dinners, and "please anything-but-dissertation-talk." And, of course, Vika and Anne-Britt, whose friendship has helped me to better understand myself and, consequently, my dissertation topic. I feel blessed with their friendship.

Finally, I thank my family, as they have been with me throughout this journey, in my thoughts... and in person. In a sense, they are the reason I have done this dissertation work, and why I will continue to pursue "truth." My eldest brother Scott, who understands best "from whence" inspiration flows; and my next-eldest brother John, who listened to me rant about whatever was on my mind many times. And my parents, who were always available to listen to silly ideas and provide what comfort I could tolerate when I was exasperated. But mostly, I express deep thanks to my husband Sergei. Though not in the field of psychology, he has been one of the most insightful discussants of my work, and is a joy to share with. I thank him for his love.

## Table of Contents

	<u>page</u>
<b>Abstract</b>	iv
<b>Preface</b>	vi
<b>Acknowledgements</b>	xi
<b>Chapter One: Introduction</b>	<b>1</b>
Background	1
Significance	5
<b>Chapter Two: Reflective Function and Attachment Research</b>	<b>8</b>
The Development of Reflective Function	8
Development of a Psychological Understanding of Self and Other: Comparing Mother-Infant to Therapist-Patient Dyads	8
Attachment Research	16
Caregiver-Infant Attachment Patterns	17
Adult Attachment	19
<b>Chapter Three: Reflective Function Background</b>	<b>26</b>
Introduction	26
Philosophical Basis of Reflective Function	27
Rene Descartes	28
Georg Wilhelm Friedrich Hegel	30
Daniel C. Dennett	36
Intersubjective Understanding of the Dialectic: Jessica Benjamin	39
Psychodynamic Understanding of Reflective Function	41
The Definition	41
Development of Reflective Function	47
Operationalization of Reflective Function	52
Neurobiological View of Reflective Function	57
<b>Chapter Four: Affective Regulation Research and Theory</b>	<b>60</b>
Elliot Jurist	61
Antonio Damasio	63
Ruth Stein	66
<b>Chapter Five: Research on Adult Nonverbal Communication</b>	<b>72</b>
<b>Chapter Six: Implications for Adult Psychotherapy</b>	<b>79</b>
What Brings About Change in Psychotherapy	79
Narrative Psychotherapy and Co-Constructionists	81
Reflective Function and the Analytic Third	83
Otto Kernberg	83

Thomas Ogden	84
The Clinical Thinking of Wilfred Bion	87
Implicit Knowledge and Theories of Change in Therapy	94
Daniel Stern and Karlen Lyons-Ruth	94
Beatrice Beebe et al.	98
<b>Chapter Seven: Conclusions</b>	<b>101</b>
Reflection	101
A Comprehensive Definition of Reflective Function	103
RF is Dynamic	103
RF is Dyadic	103
RF Includes a Linguistic Symbolizing Capacity	105
RF Includes an Implicit/Nonverbal Component	106
RF and Development	107
Reassessing "Clinical Judgement"	109
Full Definition of RF	110
Distinguishing RF from Other Psychological Constructs	111
Implications for Psychotherapeutic Change	112
Discussion	116
Suggestions for Future Research	120
<b>Bibliography</b>	<b>124</b>

**"All higher functions originate as actual relationships between human individuals" (Vygotsky, 1978, p. 57).**

## **Introduction**

### **Background**

**The ability to reflect accurately on one's own and others' actions is considered an advanced developmental, if not solely human achievement. The capacity to understand ourselves and others in a meaningful way, experience empathy and tolerance, all arise from this ability to anticipate and reflect on experience. But what is this important reflective capacity? What are its specific components? Can it be measured? Is it possible to assign a unique quantitative score of reflection to an individual? What is the score based on, and how does it develop over time? Can we define one's ability to reflect independent of context?**

**These are just some of the questions that arise in regard to the construct of Reflective function (RF) in psychodynamic literature. My research offers an argument for two elements which I think are inseparable from the RF construct, but which are not currently evaluated or captured in the quantitative analysis of the construct: 1) the indisputable presence of nonverbal information**

storage and communication included in reflection, and 2) the dynamic, dyadic nature of the construct. This dissertation will evaluate the current psychoanalytic construct of RF, including its theoretical description and operationalization. Analysis of the philosophical roots of the concept will add to the case for its dynamic, dyadic nature, while developmental research and contemporary clinical literature will provide insight into the way nonverbal domains of information sharing and storage impact awareness of self and other. Finally, I will suggest a fuller definition of RF, and offer numerous directions for research to investigate this construct further.

Reflective function is broadly defined by the clinical researchers Fonagy and Target as the "predisposition to understand behavior in mental state terms" (1997, p.680). Although some unconscious component is recognized, RF is defined by psychoanalysts as the ability to hold in awareness one's own feelings and thoughts about one's own actions, and maintain these as separate from an understanding of another's feelings and actions. In essence, reflective function is the ability to reflect on one's own and others' actions in a psychologically-insightful way.

But whereas Fonagy and his colleagues have focused research and theory on the linguistic, symbolizing aspect of RF, the

nature of RF entails a non-linguistically symbolized (nonverbal) component. Perhaps, as Fonagy writes, the nonverbally- organized components are implicit in the formal aspects of coherence and collaboration exhibited by narratives rated as representative of high RF. But, a combination of psychoanalytic, cognitive and neurobiological models elaborates on this elusive idea, creating a fuller, more multidimensional view of RF. According to the latest research results from these fields, it appears that RF cannot arise without nonverbal, presymbolic underpinnings; and RF continues to draw on spatial, non-linguistic communication and memory in order to produce symbolic representations of experience; in other words, RF involves both implicit and explicit memory. This understanding of RF is very important in crafting a model of change in an attachment relationship, as the essence of both verbal and nonverbal communication of each partner is captured in their narratives about the relationship.

Another factor which must be clarified is how a person becomes more reflective, and develops better insight into himself and others' psychological worlds. Research points to the necessarily dynamic, dyadic aspect of self development and on-going self understanding. Mother-infant literature has offered a great deal of insight into how the mother and her child

communicate and how the child begins to internalize a sense of self, a part of which is the RF ability. The latest research asserts that there is a dynamic entity at once including and separate from either partner, that of the dyadic relationship, wherein the RF of each partner is enhanced. Through management by the senior partner (Siegal, 1999), with input by the junior partner, the parent-child relationship is created and grows, bringing about change for both members of the dyad. It is in these writings that the model for this dissertation begins.

However, in order to ascertain specific information about how the on-going process of defining self and other within context occurs throughout life (such as entering into a new attachment relationship), I will focus on the development of RF in adult therapeutic dyads. Though the therapist-patient and parent-child relationships are quite different in many ways, it is useful to compare the relationship between caregiver and infant with the therapist-patient interaction, especially with regard to the nature of self growth within the relationship. Indeed, Freud (1940, in Owens et al.) viewed the mother-infant relationship as a prototype that influences the formation and course of later love relationships. Appelbaum (1994) has extended this idea to propose that the mother-infant relationship is homologous to the therapist-patient

**relationship. With this in mind, an evaluation of key writings of psychoanalysts and narrative co-constructionists adds to the mother-infant research to help formulate an appropriate model of the communication of RF and change within a close relationship.**

**Finally, after an evaluation of the philosophical and psychological roots of RF, a more nuanced model of RF will be proposed. This new model will incorporate the philosophical, clinical and research insights which speak to the dyadic, dynamic nature of RF, as well as the nonverbal component of RF.**

### **Significance**

**In various ways, we have long accepted the premise that each individual has a personality, a temperament with which he enters the world. Research in the past few decades has emphasized how the environment can interact with temperament and affect personality. Literature regarding the concept of Reflective function has dealt with some aspects of both temperament and environmental effects on personality, and has offered a stimulating way to assess an individual's level of psychological understanding of self and others.**

**This dissertation aims to evaluate the philosophical, clinical and other relevant literature that describe the phenomenon of RF, in order to offer a more exact operationalizable definition of RF, as well as a more comprehensive view of its development, and its place vis-à-vis other psychological processes. It is anticipated that this fuller definition will include some insights into the nonverbal and dyadic components of RF, which could have myriad implications for the further study of mental well-being, pathology, health and therapeutic interactions.**

**A deeper understanding of RF and its nature might be helpful to establish preventive mental health measures. Further, it is hoped that the ideas produced by this evaluation will stimulate more research on RF, especially into the nature of its dyadic development, and the role of each partner in the dyadic relationship - in therapy, for, instance, the interactive roles of the patient and therapist. A more careful evaluation of the "something else"<sup>1</sup> (the non-linguistic experience) in therapy, may offer a more grounded understanding of what is termed clinical judgement, and hopefully demystify some aspects of the transference/counter-transference experience.**

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<sup>1</sup> This is the term coined by the Process of Change Study Group in Boston to denote an important, to-date undefinable element which, above and beyond verbal interpretations, creates change in psychotherapy.

**Ultimately, perhaps, it is hoped that this fuller model of RF might lead to assessment measures of the likelihood of change with specific therapeutic pairings in certain contexts, and shed some light on the actual elements of therapeutic change that are so difficult to quantify.**

## **Reflective Function and Attachment Research**

### **The Development of Reflective Function**

As RF and its development are the focus of this dissertation, the best place to begin the work is by briefly tracing the current psychodynamic theory of RF along its own developmental trajectory. In order to do this, it is useful to begin with the developmental research from which attachment theory arose. Then, relevant attachment theory will be described, as it is within this arena that the current psychodynamic construct of RF arose. The theoretical and clinical underpinnings of our current understanding of RF will be presented, and finally, the construct itself will be described and critiqued.

### **Development of a Psychological Understanding of Self and Other:**

#### **Comparing Parent-Infant to Therapist-Patient Dyads**

According to Freud (1940), the parent-infant relationship can be seen as the prototype for all later relationships. Writing of the therapeutic relationship, Freud stated: "[the analysand] will of himself form such an attachment and link the doctor up with one of the imagos of the people by whom he was accustomed to be treated with affection" (1913/1958, p.140). Nunberg (1926, 1932, in Silverman, 1998) insisted that the therapeutic relationship has

many elements of the parent-child experience, including pleasing the parent, and needing the safety and security of the connection. Many infant and attachment researchers also see clear parallels between the parent-infant dyad and the patient-therapist dyad (e.g. Appelbaum, 1994; Beebe & Lachman, 2001, 2002; Main, 1991; Slade, 1999; Stern, 1998; & Tronick, 2001).

However, there are valid, common-sense arguments against equating a parent-child relationship with a therapeutic relationship. As Modell rightly explains (1998), there are limits to the analogical comparison of the two relationships: unlike the parent-infant relationship, the adult therapy dyad is not a biologically determined developmental process; while the adult dyad includes the extensive affective memories of two people, not just one. But perhaps most salient for therapy... and this dissertation... is the fact that adults have the capacity for verbal language that infants do not. While verbal language is not the only mode of communication in therapy, it is certainly encouraged as a significant format for the exchange of ideas. In psychotherapy with adults, a primary focus is the patient's working toward accurate verbalized communications of affective states and verbalized reflection upon actions and urges.

In this context, it is clear why verbalized language can become the focus of the treatment, as if this is the ultimate goal of therapy. In fact, however, the goal is the patient's improved well-being, which is facilitated by internal (perhaps nonverbal) and dyadic procedures that we do not understand, which may culminate in the patient's ability to verbalize more accurately. This dissertation attempts to deconstruct this therapeutic goal, working backward from the point of language to the connected and concomitant other events which are equally important but less noticeable. This research will bring the focus away from the traditional verbal focus of therapy, and toward the nonverbal and dyadic elements of communication and understanding, and the process of change in self-understanding that results from all of these elements together.

Thus, this research does not equate the parent-infant and therapist-patient relationships. However, it is important to evaluate parent-infant research, because the *process* of growth and development in the parent-infant dyad may offer insight into how the process of change occurs in any close relationship, especially the therapeutic one. The elucidation of the nature of development and transfer of RF within the parent-child dyad may shed light on

how the process of transfer happens in adult psychotherapy (probably not just through verbal language).

As described by Beebe, Lachmann and Jaffe (1997), presymbolic infants are capable of rudimentary representations, though the representations seem to be stored as sensorimotor schemata. Bucci (1985) has actually proposed two parallel systems of representation: verbal and nonverbal. Whereas the verbal representations are stored in linguistic, symbolic memory, nonverbal representations are stored in perceptual modes, such as image, sound, smell or touch. Studies with two-month-old babies show that they can discriminate perceptually between themselves and others: they know the difference between their own cry and that of others. Based on these differentiating schemata, the early infant learns to expect certain contingencies between his own behavior and the environment's response, a sort of rudimentary understanding of self-in-context.

But while the early infant is capable of preverbal representations, he cannot symbolize. To a large degree, the mother performs the function of symbolizing the infant's needs, responding to the infant and informing him of these needs as she ministers to him. Thus the relationship is to some extent symbiotic. Studies that map infants' EEG patterns show that the

infant is very affected by others' exhibited emotion: a smile produces EEG patterns in accordance with brain activity of positive emotion, while a frown or angry face is concordant with activity in the area of the infant's brain associated with negative emotion. Tronick's (1982, 1989) still-face experiments with mothers and infants provide further evidence that, at least on the level of emotions, the relationship is quite synergistic. That is, the infant's self-regulation and the dyadic interactive-regulation are highly correlated.

Interestingly, in normal dyads, the exact matching of facial expression between mother and infant occurs only 30% of the time, while the rest of the time the pairs are slightly mismatched. According to Tronick, this allows for "interactive repair," in which the mother and infant work together to correct the mismatch. Too much tracking (too "tight") or too loose tracking leads to insecure attachment. Tronick believes that this occurs because the failure of interactive repair forces the infant back on his under-developed self-regulatory mechanisms, without access to the support of mutual regulation.

Based on their observations, Beebe, Lachmann and Jaffe (1997) suggest a dual-model formula that seems to encompass the actual range of interactions between mother and infant. The first

model in the formula has been proposed by some as the manner in which structural formation is actually encouraged and effected in the infant – the model of natural disruptions and repairs. However, Beebe et al. speculate that this important model of the formula cannot occur successfully without the dyad's adherence to an on-going regulation process (as described by Tronick in the characteristic, predictable ways that mother and infant engage in matching and interactive repair), a constant effort at maintaining equilibrium. Clearly, these processes go hand-in-hand, as the infant learns to maintain connectedness even under the stress of disruptions.

But most salient for the purpose of the current research is Beebe, Lachmann and Jaffe's argument that, based on the empirical data to date, the best way to approach the infant's development is to focus on the dyad. At the presymbolic level, since the baby maintains knowledge of the dynamic interaction process, itself (a procedural memory), and since there is such a high correlation between infant self- and interactive-regulation, the focus should be with both partners of the almost symbiotic dyad. Beebe et al.'s model of the mother-infant dyad is a transformational one, as they believe that what is initially represented by the presymbolic infant is not what many theorists posit as an object

(which is a symbol), but an object relation (akin to a sensorimotor representation): that of self-in-relation-to-other. Presymbolic representations of self and other are simultaneously constructed in a sensorimotor schema, in relation to each other. Therefore, what is represented is “an emergent dyadic phenomenon that cannot be described on the basis of either partner alone” (Beebe, Lachman & Jaffe, 1977, p. 172). The dyadic systems model is perhaps best described by Sander (1977), who believes that the organization of behavior in infancy can be seen mainly as the property of the mother-infant dyad, not of either individual. Thus, the mother and infant work together to instill in the infant an understanding of self from which he will be able to begin his own understanding of space, time, place, as well as emotions and beliefs. Attachment researchers have developed this idea further, beyond early infancy into the early life of the child, and even into adulthood.

The Process of Change Study Group (PCG)<sup>2</sup> in Boston is a group of senior clinician-researchers who are currently generating theoretical papers based on the results of years of research and clinical experience with both mother-infant dyads and adult patient-therapist relationships. They believe that the actual process of change in therapy can be enlightened by the process of

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<sup>2</sup> This group includes Bruschiweiler-Stern, Harrison, Lyons-Ruth, Morgan, Nahum, Sander, Stern and Tronick.

interaction that occurs dyadically between a mother and infant. It appears that one of the primary goals of this group's work is a comprehensive understanding of the mechanisms that bring about change in therapy. They offer a Dyadic Expansion of Consciousness Hypothesis (Tronick, 1998) to explain the phenomenon of change, which is based on the Mutual Regulation Model (MRM) of infant-adult interaction, described by Sander above. The Dyadic Consciousness Model posits that each individual is "a self-organizing system that creates his or her own states of consciousness (states of brain organization) which can be expanded into more coherent and complex states in collaboration with another self-organizing system" (Tronick, 1998, p.290). A primary principle of this model is that successful mutual regulation of social interactions requires a mutual mapping of elements of each partner's state of consciousness into the other partner's brain. Each member of the dyad takes part in this interaction, which can be wholly nonverbal. Significant for the research being undertaken here, the PCG finds that there is definitely "something else with the therapist" besides the classic clarification, confrontation and interpretation, which the patient experiences, and which is significant to the ability of the patient to change. Although they utilize other words to describe this "something else," it appears to

include the dyadic sharing of affective regulation and Reflective function (for instance, Tronick, 1988, p.298; Lyons-Ruth, 1987; and Stern, Sandler, et al., 1998).

### **Attachment Research**

Also of importance within developmental research are the results of attachment researchers; after all, it is within this subfield that the current psychodynamic view of RF arose. Beginning with John Bowlby (1973), these researchers have hypothesized that there are a number of intersecting but distinct motivational systems which guide human behavior, including an attachment behavioral system. A behavioral system is defined within attachment theory as an independent, instinctually-based motivational system linked to discrete patterns of behavior which foster survival and adaptation. This approach has generated a great deal of research regarding infant-parent attachment, including an observation-based categorization of infants and caregivers into categories of attachment behavioral systems. Main (1990) extended the biological theory regarding the tendency toward attachment to an evaluation of the variations associated with quality of caregiving. These categories (defined below) separate individuals into general categories of secure and insecure

attachment behavior, with underlying internal working models (schemas) with regard to attachment.

### **Caregiver-Infant Attachment Patterns**

The attachment behavioral system of the child was first systematized in a group of seminal investigations of parent-infant interactions in the home and in the classic laboratory-based procedure to study parent-child separation and reunion: the Ainsworth Strange Situation. Based on observations of parents' and infants' separation and reunion behaviors in the Strange Situation, Ainsworth and colleagues (Ainsworth et al., 1978) identified three distinct patterns of attachment: 1) **Secure**, in which the infants showed signs of distress upon separation from the mother, but at reunion were observed to readily and actively seek proximity with the mother by whom they were easily comforted; 2) **Avoidant**, in which infants were observed to show little affect upon mother's leave-taking or return, to actively avoid the mother upon reunion and to focus on the inanimate environment; 3) **Insecure-resistant**, in which the infants showed prolonged distress upon separation from the mother, and an alternation between clinging furiously to the mother or angrily pushing her away upon reunion. These patterns of infant attachment behavior reflected organized

strategies for regulating proximity to the caretaker, and were found to be highly related to the caregiver's level of sensitive responsiveness in the home (Ainsworth et al., 1978). It was later discovered by Main and her colleagues (Main and Weston, 1981; Main and Hesse, 1990; Hesse and Main, 1999) that a preponderance of infants of maltreating or psychiatrically distressed parents showed a collapse of any consistent organized attachment strategy, and thus a fourth category, that of Disorganized/disoriented attachment was developed. This attachment pattern was characterized by chaotic and contradictory behaviors, such as approaching the mother and then hitting her, or freezing, stilling or expressing apprehension in the presence of the caretaker.

These dyadic, relational parent-child attachment patterns were thought by Bowlby to be consolidated into the child's internal working models (IWMs: emotion-laden perceptual and sensorimotor schemata) of attachment by the end of his/her first year of life. Attachment theorists posit that such internal working models are originally organized around parent-child transactions related to attachment, but come eventually to function as an internalized set of rules or expectations for processing or excluding information related to attachment. Internal working models thus tend to filter incoming interpersonal information and to forecast the fate of

current and future attachment relationships as well as to determine the nature of affective responses evoked and the nature of the memories that are encoded in those relationships (Bowlby, 1969, 1980; Fonagy and Target, 1998; Zeanah and Barton, 1989).

### Adult Attachment

In recent years, attachment theorists have turned their attention from a classification of parent-child attachment behaviors to an exploration of adults' internal working models or representational states that are associated with and perpetuate attachment behaviors. This "move to the level of representation" in attachment research has greatly expanded our understanding of the intrapsychic world of the adult.

The exploration of the adult's representational world was first spearheaded by the empirical investigations of Main and her colleagues (Main, Kaplan and Cassidy, 1985), who demonstrated a remarkable correspondence between the way in which individuals represented their own childhood attachment experiences on an Adult Attachment Interview (AAI), and the ways in which their child related to them in the Ainsworth Strange Situation at one year of age. Based on the Adult Attachment Interview, a one hour semi-structured interview designed to assess the individual's overall

state of mind with respect to attachment, Main and colleagues (Main and Goldwyn, 1985-1994) derived five major adult attachment classifications: Secure/autonomous, Dismissing, Preoccupied, Unresolved, and Cannot Classify. These classifications were based on subscale ratings of formal features such as coherence, metacognitive monitoring, level of preoccupied anger and derogation of attachment.<sup>3</sup>

AAI narratives that are classified as Secure/autonomous are coherent and collaborative, regardless of whether early and current attachment experiences are positive or negative. Secure narratives are internally consistent and are characterized by seemingly open and honest portrayals of early and current attachment relationships; they are typically well-organized, undefended discourse in which emotions are freely expressed. AAI narratives classified as Dismissing minimize discussion of attachment experiences and are internally inconsistent; responses are often truncated and frequently reflect a lack of specific memories to support general, often idealized early attachment experiences and memories. In AAI narratives classified as Preoccupied, there is often an inability to maintain focus or perspective, or to collaborate with the interviewer. These interviews are marked by

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<sup>3</sup> For a full description of the subscales and scoring categories see Main, Kaplan

grammatically entangled sentences, jargon and nonsense words, childlike speech, confusion regarding past and present relationships, and may involve anger towards the parents or inordinate vagueness about early attachment experiences and relationships.

AAI narratives that are categorized with the Unresolved for trauma and loss classification are characterized by lapses in the monitoring of reasoning or discourse around the discussion of past experiences of loss and/or trauma. While speech may be coherent overall, there may be highly implausible statements regarding the causes and consequences of early traumatic attachment-related experiences. The final and most recently established adult attachment classification, the Cannot Classify category, reflects a more global breakdown in discourse or an inconsistent use of attachment strategies so that the AAI shows characteristics of several different categories.

The first three categories, the Secure/autonomous, the Dismissing and the Preoccupied have been found to correspond to the three organized parent-child attachment categories originally identified by Ainsworth and colleagues in the Strange Situation. That is, a caregiver judged to have a Secure/autonomous state of

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and Cassidy, 1985, Hesse, 1999, Main and Goldwyn, 1985-1994.

mind with respect to attachment on the AAI tends to have a Secure baby, a caregiver with a Dismissing state of mind, an Avoidant baby, and a caregiver with a Preoccupied state of mind, a Resistant/ambivalent baby. The fourth category, Unresolved for trauma and loss, corresponds to the infant's pattern of Disorganized/disoriented attachment behavior.

This correlation of adult attachment status with infant/child attachment behavior has been replicated in numerous studies, and supports the view that relational information is transmitted or created in the parent-child dyad even before symbolized communication can occur.<sup>4</sup> However, while these attachment studies found a strong correlation between Secure caregivers and Secure infants, there have been surprising discrepancies in some investigations regarding other attachment categories. For instance, Fonagy, Steele and Steele's (1991) research with the largest group of mothers and infants to date failed to reach significance for Preoccupied mothers and Resistant infants. Neither did Zeanah et al. (1993) find a significant Preoccupied/Resistant concordance. The conceptualization of attachment representations is rendered

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<sup>4</sup> Retrospective studies in which the AAI was given to the parents in the postnatal period were conducted by Main and Goldwyn,(1984), Ainsworth and Eichberg (1991), and Pederson et al. (1998) and prospective studies in which the AAI was given to the parents before the child's birth by Fonagy, Steele and Steele (1991),

even more difficult by the findings from a number of studies that Insecure mothers could have Secure infants, and Secure mothers could have Insecure or Disorganized infants. These results suggest, among other things, that the overall attachment status of the parent is not always predictive of the child's. Some have proposed that a significant mediating factor is the caregiver's level of RF. According to attachment researchers, the organization of attachment relationships during infancy is associated with processes of emotion regulation, social relatedness, access to autobiographical memory, and the development of self-reflection and narrative (Main, 1995; Main et al., 1985; Fox et al., 1994; Oppenheim & Waters, 1995). According to Slade et al. (in press), clarity and coherence of the caregiver's representation of the child mediates between her attachment status and her behavior. In other words, the caregiver's ability to accurately reflect, on herself and the child, impacts the child's ability to develop a healthy attachment.

An additional piece of research which is relevant to this study is Dozier's work regarding the role of attachment organization in treatment (Dozier, 1990, 1993, 1994; Tyrell & Dozier, 1998).

Dozier and colleagues examined the relationship between clinicians'

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Benoit, Vidovic and Roman (1991), and Ward et al. (1991); while research on

attachment classifications and the interventions used with their patients, as well as patients' attachment classifications and patterns of response to therapy. Results indicate the importance of both the patient's and clinician's attachment status to the process of treatment, implying that there may be some merit to matching therapy pairs based on attachment. The more secure a patient was, the more compliant she was with treatment. Stronger avoidant tendencies were associated with greater rejection of treatment providers, less self-disclosure, and poorer use of treatment. Further, the data showed that secure clinicians intervened more with deactivating clients. Though Dozier emphasized the issue of complementarity in the dyad, this data seems to suggest an intersubjective model of therapy. Thus, from this series of studies it seems clear that states of mind with respect to attachment do impact the treatment; and that there is a dyadic experience in therapy, which is affected by some element of attachment representations.

These results of caregiver-infant and adult attachment research converge around several important themes: that formal aspects of a person's narrative of experiences reflect an implicit

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concurrent parent and child classifications was completed by Zeanah et al. (1993).

**model of self-in-relation-to-others; that this model is shared in verbal and nonverbal communication between two people in a close relationship; that the most salient and enduring formal feature of a life narrative that can be measured is the feature of coherence; and that the degree of a narrative's coherence is correlated with the degree of a person's secure and "healthy" connections with others. The next segment of my dissertation shows how these ideas have been integrated into a theory of mind which strives to explain the development of integration of affect, cognition and volition.**

## **Reflective Function Background**

### **Introduction**

The above-described attachment research is informative of modes of representing relationships: of necessity, all revolve in some way around the self-in-relation-to-other(s). As the research format focused on verbal narratives, the most enduring element of this body of findings is related to formal aspects of individuals' narratives of self and others: the structure of the sentences and story, and the believability of the story. Basically, this cohesion of the narrative has been shown to be correlated with a level of understanding of self and other in a meaningful, psychological way. In other words, the coherence of a story seems connected with how well a person integrates emotional memory into cognitive structures, and can utilize these emotive-cognitive constructs in a skilled way to understand the self and others in the past, present and future. Folk psychology calls this ability "reflection" (Mele, 1992).

Reflection is an important capacity for humans, and may be considered one clear ability that sets us apart from other beings; it helps us manage impulsivity, understand fantasy versus reality, and impacts our ability to relate to others. Recently, in an effort to better understand the phenomenon, there has been a movement to

expand and operationalize the construct of reflection (Fonagy, 2001, 1997; Fonagy & Target, 1997; Fonagy, Gergely, Jurist, & Target, 2001; Fonagy, Steele, Steele, & Target, 1997). In order to do so, researchers began by evaluating philosophers' evaluation of the phenomenon, known in philosophy as a "theory of mind."

The concept of theory of mind actually arose from philosophy. Hopkins (1992) and Wollheim (1995) have built upon the work of Dennett (1978, 1987) in order to emphasize the unconscious component of the mind's models of others' intentions. They add to the folk psychologists' basic view of "reflection:" a theory of mind must include not only conscious components of reflection, but also the unconscious desires, beliefs and wishes of the individual. Hegel (1807) and Wittgenstein (1935, 1949) have provided very detailed theories of the dialectical development of the self and reflective capabilities, which have been drawn upon by contemporary psychodynamic psychologists to create a new way to understand self development and growth.

### **Philosophical Basis of Reflective Function**

The basis of the human mind, consciousness, self-awareness and reality are at the heart of philosophical debate. There are many views regarding these concepts, but one of the most

important historical debates centers around the nature of self-consciousness (a precursor to the current concept of RF): in particular, the Cartesian versus Hegelian view of self-knowledge. Since the roots of RF stem more from an Hegelian view, more emphasis will be placed on this school and its development. However, as Hegel's ideas developed dialectically from Descartes' theory of knowledge, it is useful to reflect briefly upon the basic concepts of the earlier model.

### Rene Descartes

In the 1600s, Descartes developed a philosophy of "knowing," a philosophy of the mind and how it develops. His approach was rather revolutionary, particularly as it supplanted then extant views of emotion and self-agency. In fact, despite much polemics and debate, Descartes' views are still an important part of how Western culture views individuality. For instance, Descartes' *Traite de Passions* (1649) propounded the importance of the mastery of reason over emotion; he believed emotions were actually necessary for the individual, but must be submissive to reason, which was an advance from the Stoic view that emotion should be denied and obliterated. In addition, Descartes defined rationality as an internal property of subjective thinking, instead of the Platonic idea

that rationality is in the subjective vision of such. Perhaps most importantly for this dissertation was Descartes' position on the development of the mind occurring only through the individual's ability to "disengage" from the cosmos and from his own bodily nature. This may be inferred as a part of the reflective stance - separating from in order to evaluate.

Descartes' description of the human deemphasized the role of social interaction in the development and understanding of self. His version of the mind was individualistic, placing the development of knowledge and self-knowledge solely within the mind of the individual. In other words, the knowledge of the individual was purely subjective, and internally driven. From this, it is logical to posit the psychoanalytic idea that mental illness is an intrapsychic phenomenon, perhaps caused by an arrest at a certain "stage" in the phase of development. But while this model has some clear value in determining some occurrences of mental distress, clinical experience has shown that it is too simplistic to fully clarify elements of self-knowledge or other mental functions.

However, though modern psychology has moved somewhat away from the Cartesian view of the mind, there is still a powerful pull to believe Descartes' idea of a centered locus of the brain where consciousness occurs. Thus, the "Cartesian Theater" is still kept as

a possible model of consciousness, in which all thoughts and images are brought together in one locus, where they become/provide a narrative of consciousness through which individuals understand themselves and their environment. But philosophers such as Hegel and Dennett have striven to create different models of consciousness. A review of their theories is also relevant to understanding the current psychoanalytic concept of RF.

### Georg Wilhelm Friedrich Hegel

In contrast to the Cartesian model is Hegel's theory of knowledge, which provides a socially dynamic view of the mind. In the 1800s Hegel undertook a synthesis of all philosophical writings to date, and what arose from this was his own *Phenomenology of Spirit* (1807), a discourse on the development of the mind, consciousness, self-consciousness, and spirit. He replaced Descartes' separate individual with dialectics, the result of internal dynamism. In so doing, Hegel opened the door to a view of human development which included context as well as subjectivity. Thus, his theory added a facet of interaction with an "other" (roughly speaking, the environment, or a representation thereof) in determining self-knowledge. For the Hegelian, mental function and

dysfunction arise from a specific interaction of trauma with the individual's character and stage, within a context: the outcome is therefore unique, and could be positive or negative. This particular approach seems to better reflect the impossibility of predicting outcomes based on a specific formulaic approach to human nature, and parallels the complexities experienced by clinicians in treating individuals.

It is within the Hegelian model of the mind that Fonagy and his contemporaries locate the roots of the current RF construct (Fonagy, 1997). Indeed, a review of Hegel's philosophy is quite helpful in understanding the concept of RF, by highlighting the points that contemporary "Hegelians" have found pertinent, but also including the elements of Hegel's phenomenology that have not been emphasized or adopted, although they directly impact the theory of reflective function.

According to Hegel, the act of being is a dialectical experience. Self-consciousness arises of consciousness, in the same dialectical manner that consciousness arises in the mind. A description of this dialectical development sheds light on his assumptions of human development which are pertinent to this dissertation. He defines human knowledge in terms of a developmental trajectory, but warns that there is no set path,

because interaction among factors is dynamic and ever-changing. Consciousness simultaneously “distinguishes itself from something, and at the same time relates itself to it...” (1807, p. 52). Basically, we understand ourselves because of our understanding of the other, and its differences from us. Thus, we do not develop in isolation, nor is our internal development separate from our surroundings; on the contrary, it is directed toward the object, and from this desire to know the other we develop a knowledge of self.<sup>5</sup>

In general, the first experience in Hegel’s trajectory is a sense-certainty, in which the individual experiences sensual consciousness. Because of its concrete content, sense-certainty appears as the richest kind of knowledge, and appears to be the truest knowledge. It is as if the direct experience of the object occurs without yet omitting anything from the object. But a closer look at “pure being” (1807, p.92) belies a much more complicated process. In sense-certainty, “pure being at once splits up into what we have as the two ‘Thises,’ one ‘This’ as ‘I,’ and the other ‘This’ as object. When we reflect on this difference, we find that neither one nor the other is *immediately* present in sense-certainty, but each is at the same time *mediated*” (1807, p.92).

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<sup>5</sup> This is, in some ways, an early description of attachment, i.e., that there is an innate drive to attach.

It is through this unrest of pure self-movement that the mind is continually experiencing and reflecting on experience. When this sensual "consciousness" of other is acknowledged as mediated, the individual experiences self-consciousness. As Hegel strives to define it: "... it is in the inner world that it has first freely and clearly shown itself... but it is as '*explanation*' that it first freely stands forth; and in being finally an object for consciousness, as *that which it is*, consciousness is thus *self-consciousness*" (1807, p.163). Further, "...it is true that consciousness of an 'other,' of an object in general, is itself necessarily *self-consciousness*, a reflectedness-into-self, conscious of itself in its otherness" (1807, p.164).

Self-consciousness has interesting attributes arising from the dialectic with the other. Hegel describes a great fluidity of self and other development in self-consciousness, in which the self and other are continually being united and juxtaposed in the mind, and are eternally becoming and being as a result. Therefore, Hegel states that self-consciousness has a double object: one is the immediate object of sense-certainty and perception, and the other is itself, which is present only as opposed to the first object (the subjective and the objective selves).

In this manner Hegel develops the idea of the independence and dependence of self-consciousness-- what he calls the experience of lordship and bondage. Aptly, neither lord nor servant (neither of the "objects") can claim superiority over the other, as each is in need of the other for existence and growth. "The [truth] of the lord's independent consciousness is accordingly the servile consciousness of the bondsman" (1807, p.193).

It is perhaps in his description of the development of self-consciousness that Hegel's theory can add most to the current understanding of RF. He clearly focuses on the process of development as significant to the experience of reflection. That is, the dialectical interaction of self and object is what creates the reflective experience. "...action by one side only would be useless because what is to happen can only be brought about by both" (p.182). More provocatively, Hegel states "... each is for the other the middle term, through which each mediates itself with itself; and each is for itself and for the other, an immediate being on its own account, which at the same time is such only through this mediation. They *recognize* themselves as *mutually recognizing* each other" (p.184). In other words, each achieves recognition through another's consciousness! This movement, for Hegel, is the essence of self-consciousness.

A final but important point of Hegel's phenomenology is the actual place of self-consciousness in human development. Needless to say, it is quite important for understanding self and other, but for Hegel, this is not the pinnacle of development. It is a middle stage, beyond which the individual must move in order to develop Reason, Morality and a sense of Spirit.<sup>6</sup> While he does spend much time describing the repercussions of problems of self-consciousness (such as stoicism, scepticism, and unhappy consciousness), Hegel details desired achievements beyond self-consciousness. According to him, by the same dialectical method between self and other, the individual evolves through unhappy consciousness to a position of reason. Reason arises from consciousness, "...of the certainty that, in its particular individuality, it has being absolutely *in itself*, or is all reality" (p.230). Up until the advent of Reason, self-consciousness has been concerned solely with its independence and freedom, concerned to save and maintain itself at the expense of the world. With Reason, this struggle is no longer evident, as the individual recognizes himself as viable and does not need to struggle for definition. The final stage in Hegel's phenomenology is that of

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<sup>6</sup> Although it could be argued that the more developed states of Reason and Spirit are advanced stages of self-consciousness, it is clear that Hegel found them to be quite distinct from the function of self-reflection. He posited Reason as a new element arising from self-consciousness, and Spirit as an advancement from Reason.

**Spirit, in which the individual again embraces the world as all reality, and finds himself as a part of this larger whole.**

**Contemporary theorists have revisited these early philosophers' ideas regarding a sense of self and its development. By applying the latest research results in the fields of neuropsychology and psychoanalysis, these new theorists have added dimensions to the RF concept which are very important. Below are some points which are particularly germane to my evaluation of the RF construct.**

**Daniel C. Dennett**

**In his seminal work *Consciousness Explained* (1991), Dennett revisits Descartes' philosophy of consciousness (the Cartesian Theater) in order to refute it and establish his own version of how thought becomes conscious. Dennett's Multiple Drafts Model of Consciousness reflects his extensive scientific and philosophical research. In fact, Dennett believes that neither science nor philosophy alone have the scope to answer all questions, but should be integrated in order to better understand human phenomena. Therefore, he draws from philosophical definitions of**

**consciousness and creates a newer model by testing the theories with scientific knowledge of brain functioning.**

**The Multiple Drafts Model posits that information entering the nervous system is subject to revision or change at any point along its path. Further, all mental activity (including understanding of self) is accomplished by parallel, multi-track processes of interpretation and elaborate sensory inputs: multiple modes of input are occurring simultaneously, and various interpretation and editing is occurring constantly.**

**In contrast to what he calls the "intuitive model" that consciousness is some unified entity, taking place in some theater of the mind, Dennett believes that what we are conscious of at any particular time is a result of many things. The Multiple Drafts model posits that there is no single, final draft of consciousness that is canonical, but that there is an actual stream of consciousness. Instead of drawing a line between "in here" and "out there" at the same place (so to speak), or a rather constant line between what is presumed pre-conscious and conscious, he says that there are constantly self-revising streams of contents, impacted by other parallel and interacting streams and systems. "...at any point in time there are multiple 'drafts' of narrative fragments at various stages of editing in various places in the**

brain" (p.111). Therefore, consciousness is not the "end of the line," but a point at which one is probed and produces a narrative of self experience.

According to Dennett, consciousness is neither solely linguistic, nor necessarily symbolized in the traditional sense. "...thousands of memes, mostly borne by language, but also by wordless 'images' and other data structures, take up residence in an individual brain, shaping its tendencies and thereby turning it into a mind" (p. 263).<sup>7</sup>

Finally, it is important to include that conscious thought is partly defined by the probes used to precipitate a narrative about that time. In other words, consciousness does constantly change, and depends not only on the changes occurring due to multiple channels and editing, but also on what "question" is asked at a given time. This aspect of Dennett's Multiple Drafts Model is extremely relevant to a deeper understanding of reflection and self-reflection. It implies the importance of a dialectic, an impact of "other," a context which must always be taken into consideration when evaluating an individual's narrative of consciousness.

**Intersubjective Understanding of the Dialectic: Jessica Benjamin**

In her book *The Bonds of Love: Psychoanalysis, Feminism and the Problem of Domination* (1988), Benjamin addresses the presiding gender relations through the lens of Hegel's master-slave relationship. She provides a theoretical explanation of why and how a relationship of gender-based subjugation has occurred, and utilizes gender relations as a paradigm through which to discuss many aspects of Hegel's dialectic, as well as Bowlby's theory of attachment. Her monograph is particularly relevant to this dissertation, not only because of her evaluation of dialectical development, but because Benjamin concludes with an interesting solution for individual development.

She notes that Bowlby's work in the late 1950s coincided with British object relations ideas, which led to a new view in psychodynamic thought of the individual as a fundamentally social being. She reviews some of the key theorists, such as Mahler and Stern, as she sets the foundation for her theory of intersubjectivity. She describes Mahler's theory by stating that, for Mahler, the relationship is the background, and separation (the individual's movement toward individuation) is the figure. Benjamin states that

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<sup>7</sup> This biologically-supported approach which questions the singular position of linguistic symbolization in understanding consciousness; as such, it is key in critiquing the contemporary

it is more correct to view the parts such that the whole encompasses both directions: sort of like the optical illusion of a drawing of birds which can be seen flying in either direction. In other words, Benjamin believes intersubjectivity is about both partners - what is perceived as foreground is dependent upon point of view. But she views her theory as complementing Mahler's, because intersubjectivity focuses primarily on the affective content of mother-infant interactions. She sees the development toward more mutual and self-conscious recognition along a spectrum, wherein the conscious recognition of self and other difference is only a point.

Because she proposes a theory of dialectic, Benjamin naturally addresses Hegel's philosophy, with a particular focus on the importance of the tension of dynamic movement. She evaluates Hegel's theory of struggle between the "independence and dependence of self-consciousness" and states that it should not be seen as "culminat[ing] in the master-slave relationship" (p.31). Benjamin focuses on psychological growth in infant development in order to define this paradox and offer an interesting solution. She posits that both partners, mother and infant, strive for recognition, and it is the need for mutual recognition which many psychological

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view of RF, and will be discussed more fully later.

theories of the self have missed. Benjamin states: "From the beginning there are (at least) two subjects" (p.24). In the dyad, as both struggle to be recognized, it is the inability of the individuals to sustain the paradox of equality in a relationship that can convert the exchange of recognition to one of domination and submission. Benjamin's solution to the problem of dominance and submission is an enhancement of Hegel's: deemphasize complementarity in relationships, emphasize mutuality, and mostly, allow for the continued constant tension of the paradox. According to Benjamin, transcending the experience of duality, so that both partners are equal, requires the ability to share feelings and interactions without demanding control, to experience sameness without obliterating difference (p. 48).

### Psychodynamic Understanding of Reflective Function

#### The Definition

Based in large part on Hegel's and Dennett's philosophies, some other contemporary psychodynamic theorists (Main, 1991, Fonagy, 1989, 1991, Fonagy and Target, 1996) have developed a rather detailed description of RF, as well as a possible trajectory for its development.

In 1991, Mary Main began to define the construct of RF when she wrote that metacognition "refers to cognition as a target of thought, whether declarative and stateable (I know that false belief is possible) or in a more mysterious sense (I'm accessing multiple cognitions for contradictions and fallacies, which may lead to the significant if unstateable intuition that I am in error)" (pp. 133-134.) In this same article, she quoted Brown et al.'s (1983) definition of metacognitive knowledge as "relatively stable, stateable, often fallible, and late-developing information that human thinkers have regarding their own cognitive processes and those of others" (Main, 1991, p. 134).

But Fonagy, Target and their colleagues have further developed the current psychodynamic theory of RF and its evolution, creating a rather complex view of RF, and providing the first means for operationalizing and measuring it. They have drawn from philosophers' views of the mind and self-consciousness, as well as from developmental research to create their own dynamic view of RF, and Fonagy continues to refine the construct vis-à-vis its relationship to affect regulation and self development (Fonagy et al., in press). Perhaps Fonagy's earliest psychodynamic description of this construct appeared in Fonagy, Steele, Steele, Moran and Higgitt's 1991 article in the *Infant Mental Health Journal*: "...the

reflective self... [is] the dialectical component of the experiencing self. The reflective self knows that the self feels, perceives, reacts, and so on. The reflective self reflects upon mental experience, conscious or unconscious. It registers psychic life and constructs representations of feelings and thoughts, desires and beliefs. Most important, it is aware that its representations of its behavior and actions are shaped by the content of others' mentation. It constructs an image of the self as observed and of the other as observing and in both cases includes a capacity to reflect upon such observations. For example, the representation of oneself as feeling angry or unloved is distinct from simply feeling angry or unloved" (p. 202)<sup>8</sup>. These reflective capacities provide the individual with the ability to distinguish inner from outer reality, and intrapersonal mental and emotional processes from interpersonal communications. Without RF, an individual operates in a pre-reflective mode, incapable of understanding others' motives, one's own emotions, or having a sense of reality as separate from inner experience.

Clearly, Hegel's (1807) ideas of self-consciousness vs. consciousness, and Hegel's (1807) and Wittgenstein's (1935, 1949) dialectical basis of self development are evident in the above

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<sup>8</sup> In separating the reflective self from the experiencing self, the current theorists describe only one part of Hegel's equation, and lose the dynamism of the interaction between experiencing and

definition of RF. But, Hegel and Wittgenstein never posited a sharp distinction between the reflecting and the sensing/doing self; they described the different elements of self as if separate, but understood that it was the *dialectic* between them that was so pivotal to the understanding of self. In Fonagy et al.'s effort to focus solely on the reflecting self (RF) in this experience, they imply the superiority of reflection over experience.

Further, the psychodynamic theorists have seemed to try to specify how RF is a specific mechanism within the theory of mind/self development: it "underlies the capacities for affect regulation, impulse control, self-monitoring, and the experience of self-agency, the building blocks of the organization of the self," and is "intimately involved with many defining features of selfhood such as self-consciousness, autonomy, freedom, and responsibility" (Fonagy et al., 1991, p. 680).

As if to delimit and contrast it to all of these components of self-development, the RF construct has also been defined as "the mental function which organizes the experience of one's own and others' behavior in terms of mental state constructs. Reflective function concerns knowledge of the nature of experiences which give rise to certain beliefs and emotions, of likely behaviors given

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reflecting that is so basic to the experience of reflection.

knowledge of beliefs and desires, of the expectable transactional relations between beliefs and emotions, and of feelings and beliefs characteristic of particular developmental phases or relationships" (1997, p. 680). Unfortunately, this description is too imprecise to clarify the specific construct; it merely restates the original definition of RF in 1991. However, later in this same paper a more explicit definition was offered: "Introspection or self-reflection is quite different from reflective function as the latter is an automatic procedure, unconsciously involved in interpreting human interaction. We see it as an overlearned skill, which may be systematically misleading in ways much more difficult to detect and correct than mistakes in conscious attributions would be. Reflective function similarly lends a shape and coherence to self-organization which is outside awareness, in contrast to introspection, which has a clear impact on experience of oneself" (p. 681). IT is this definition which has been elaborated upon in Fonagy, Gergely, Jurist and Target's latest book *Affect Regulation, Mentalization and the Development of the Self* (in press). In this book, they provide the clearest description of RF yet, which harkens back to its philosophical roots: RF involves both a self-reflective and an interpersonal component, which at its best provides an individual with a capacity to distinguish inner from

outer reality, and interpersonal communications from intrapersonal emotional process. Indeed, while they see them as distinct operations, Fonagy et al. have linked RF with emotional regulation through RF's ability to lend "shape and coherence" to self-organization (p.29).

Through the interaction of affect and reflection on self/other the individual develops a sense of self which exists through time. Thus, while they retain that RF is the reflecting self, and without naming it directly, Fonagy et al. do describe an action of a dialectic between reflecting and experiencing self (Fonagy et al., in press).

Finally, Fonagy and Target turned to dynamic skills theory to provide further perspective of RF fits in with other aspects of the psyche: dynamic skills theory postulates that there are many skills developing along lines which may or may not intersect. Viewed from within this theory, RF is just one of many strands within the developmental web, which is "neither strongly connected with [other strands], nor coordinated or integrated" (p. 694). Though this explanation is aimed towards clarification, the nature of the construct is so complex that it is very difficult to accurately describe. However, it seems Fonagy and colleagues believe that it is a component, at least partially unconscious, which must interact with affect, and which underlies the concept of self-awareness.

Perhaps a closer look at their description of the development of RF will provide more dimensions to this understanding of RF.

### Development of Reflective Function

While they see the mature RF construct as a more intrapsychic phenomenon, Fonagy et al. clarify that the development of RF is not just an intrapsychic phenomenon, but is crucially embedded in the child's emotional relationship with his parents (Fonagy et al., in press). In so defining the development, they refer back to Hegel's statement of the dialectic and the social nature of self development. They state that : as the self exists only in the context of the other, the development of the self is tantamount to the aggregation of experiences of the self in relationships" (in press, p.44).

Further, the development of RF is seen as closely related to affect and its regulation (Fonagy et al., 1991, p. 206; in press). They theorize that reflective capability is part of a strand of development that begins with affective attunement in the first months of life, moves through empathic sensing and responding to another's mood, finally to an understanding of the other's intentions (which occurs around age four or five, at the Oedipal stage of development). While they state that there are varying

degrees of being able to reflect on the intentions and desires of the self and others, this seems to be what they see as the final stage of development of RF. According to them, RF is a biological given, which will spontaneously emerge unless something inhibits its development (Fonagy and Target, 1996, p. 83).

Since the development of RF is dependent upon intimate emotional interaction with another, it seems logical that anything that infringes upon the optimal attachment relationship would impair the development of RF. Accordingly, Fodor (1991) proposed that the dual disadvantage of the absence of a safe relationship and the experience of maltreatment in the context of an intimate relationship could inhibit the development of RF. Fonagy and Target later acknowledged that the failure of RF could be a result of parenting, innate problems within the child, or a combination of these two (1997, p. 696).

Main (1991) found that difficulties in childhood attachment were linked to the quality of the caregiver's metacognitive abilities. In 1996, Fonagy published results of a longitudinal study which suggested that the parents' abilities to observe the child's mind facilitated the child's general understanding of minds. "The child's [reflective function] develops in response to the psychic capacity of the caregiver" (1991, p. 207). Fonagy and his colleagues have

regularly stated that the caregiver plays a central role in the developing infant's reflective self. Thus, the caregiver needs to have the capacity to contain the infant's overwhelming affects, anticipate her psychological and physical needs, to adapt readily to the baby's perspective, and, at first, to manipulate the external world to fit it. An interesting addition to the dyadic RF relationship was added in 1997, when Fonagy and Target wrote "...unconsciously and pervasively, the caregiver ascribed a mental state to the child with her behavior... we assume that this, by and large, is a mundane process, happening routinely throughout early life, not reflected on, and so rarely modified" (p. 690). Thus, the caregiver's RF is to a large degree unconscious, and apparently is transmitted to the child at least to some degree unconsciously, both nonverbally and verbally.

Vis-à-vis other psychological theories of transmission of a stable sense of self, Fonagy has attempted to go further in his exploration of the topic of acquisition of RF. Whereas the traditional psychoanalytic view of self-development emphasizes the child's internalization of the containing object, Fonagy (1996, p. 83) postulated the child's internalization of his own thinking self, found within the containing object. Thus, the child perceives in the caregiver's behavior: a) the other's stance of reflectiveness, and b)

**an image of himself as mentalizing, desiring and believing. Again, this idea is a reflection of Hegel's complicated dialectic.**

**As RF is so important to a sense of self and the myriad components of self-awareness and control described above, it is interesting that studies have found a correlation between a poorly established capacity to reflect and serious psychological disorder, both in early life and in later years (Fonagy et al., 1991, p. 205). But Fonagy and Target have argued that abnormalities in RF cannot be seen as either a consequence of arrest or fixation at an early stage or a regression to that stage (1997, p. 695). As with all other aspects of RF, this would be far too simplistic, and indeed, does not reflect what is known to be true about individuals' RF capacities. In fact, Fonagy et al. (in press) counsel against an overly simplistic connection between developmental disorder and non-reflectiveness; they acknowledge that there are variations across situations and relationships. In their description of the development of RF, they state that RF is a property of the person and the situation together (p.67). It's development does not progress along a linear pathway, determined by maturation, but evolves through varied mechanisms, including emotions, social interactions, family and other environmental factors. Finally, they state that "RF as a skill may be more or less present in situations**

**as a function of contextual support and emotional states which push an individual up or down a developmental strand...**

**Unevenness across situations is likely to remain prevalent even in adults, especially when they are emotional" (in press, p.68). Thus, in their most developed definition of RF, the psychodynamic theorists see it as a changing, contextually-elicited dynamic, interpersonal experience, involving elements both conscious and unconscious.**

**In relation to the above-described contextual and unconscious elements of RF, attachment theorists have developed the intriguing concept of Internal Working Models (IWMs) -- sets of relational schemata which define various unconsciously-experienced models of being with another (Bowlby, 1969, 1973). This concept offers a construct within which to explore the role of verbal versus nonverbal representation and dyadic development of a sense of self and RF. According to the attachment researchers, including Fonagy and Target, the self is organized so that certain IWMs of self-in-relation-to-other include considerable reflective components, while other IWMs appear less reflective. The more reflective IWMs are supposedly more healthy. Different IWMs are engaged in different contexts. The researchers propose that the healthier a person is, the more healthy IWMs they have, and/or the**

more capable the person is of engaging IWMs which allow for clear reflection, even in emotionally stressful situations. However, it is not clear how the reflection occurs within these models, and whether an overall capacity for RF is linked to the IWMs. In fact, the phenomenology of dyads described by therapists who conceptualize within this framework does not emphasize the linguistic-symbolic component of RF as mutative, but a relational experience of IWMs maintained in procedural memory. For instance, Ammaniti (1999) posits that in order to establish a therapeutic relationship, the patient must have at least one latent IWM of secure self-other interaction, and apparently, this need not be verbalized.

Fonagy and Target utilize this concept of IWMs to suggest that even those who may have overall disturbances in reflective capacity can exhibit it in some contexts. For instance, there is clear evidence that delinquent adolescents or adults diagnosed with Borderline Personality Disorder exhibit an ability to reflect on others' mental states in certain situations (1997, p. 694).

### Operationalization of Reflective Function

In their theoretical models of attachment and RF, clinicians have written eloquently about the importance of developing RF

through nonverbal and verbal, dynamic, dyadic interaction. Fonagy et al. have actually found a means to operationalize RF (1997). But, in so doing, the intrinsic nonverbal and dynamic/dyadic components of RF, which Fonagy and colleagues have said are part of the construct, seem to have been greatly diminished. Necessarily, to quantify an individual's ability to reflect, the effort has been made to focus almost exclusively on the individual, and almost solely on the linguistic component of RF. But, the particular construct of RF is founded upon on-going interaction within a context: crudely speaking, of reflecting self with feeling self, and overall self with other.

Quantifying RF also raises the question of whether there might be a spectrum of RF capability in the population at large. Again, Fonagy and Target are at the forefront of this research: "Individuals differ in the extent to which they go beyond observable phenomena to explain their own or others' actions in terms of beliefs, desires, plans and so on" (Fonagy, & Target, 1997, p. 680). Indeed, they have created a quantitative scale of reflective function, ranging from levels -1 to 9 (Fonagy & Target, 1997b). But though they believe that RF is comprised in some way by unconscious material, Fonagy and colleagues have operationalized RF primarily as a conscious, linguistic capacity (Fonagy & Target, 1997).

Individuals fall along this spectrum according to an evaluation of formal aspects of their attachment narrative on the Adult Attachment Inventory. Basically, the more a person is capable of realistically evaluating/perceiving herself vis-à-vis another in an attachment relationship, the higher her RF ability.

In general, the RF measure evaluates certain questions of the Adult Attachment Interview which draw for general and specific descriptions of early attachment relationships. Questions are designed to address high-stress issues, such as memories of trauma, loss, and parental-child closeness and separation. Scores are based solely on a written transcript of the interview - there is no attempt to capture paralinguistic or other nonverbal cueing and communication. Scoring takes into consideration the subject's on-going ability to collaborate with the interviewer (as assessed by written transcripts), but does not clearly account for the impact of different levels of interviewer's RF throughout the interview. Subjects receive a score for each question. No question is more heavily weighted than another. The overall score is not a straight average of these scores, however, because the scorer is advised to utilize "clinical judgement" in assigning the overall score. In other words, the scorer is encouraged to sum up her overall experience of the subject, including that element of reflection which cannot be

quantified by the scores as they currently are defined. I believe that this is the experience of self-in-context which includes the scorer's own nonverbal and dynamic interaction, with self and with the text, which allows for a perhaps more-accurate-than-not "score" of RF for the subject. But, the components of this experience need to be better defined for a fairer assessment of each individual.

To get a sense of how each answer is scored, a more detailed description of the actual levels of RF is presented below.

**-1. Those individuals with negative RF (-1) exhibit hostility or active evasion of questions, or provide bizarre, unintegrated, or inappropriate answers to questions about memories of childhood experiences.**

**1. Individuals who lack RF (1) offer AAI narratives which are totally or almost absent of RF. The subtype 1A individuals may disavow or assert ignorance of topics, offer physicalistic, behavioral or global, generalized statements. Their narratives are barren. 1B individuals offer distorted, self-serving narratives, with grossly flawed reflection.**

**3. Those with questionable/low RF (3) exhibit some evidence of mentalization, but it is banal or superficial. References to mental states may not be explicit, and can fall into three subcategories: 3A narratives are naïve and simplistic, using excessive cliches, superficial explanations, and usually over-normalizing negative experiences; 3B**

narratives are over-analytical - they may appear reflective, but there is actually no depth or personal connection, with only shallow insights; and 3C narratives are comprised of miscellaneous low RF, a sort of compromise between higher (5 and above) and lower (1 and below) ratings.

5. The most common rating among the normative population is ordinary RF (5). These individuals clearly have some theory of mind of others as well as of themselves, even if it is simplistic. The 5A subgroup is characterized by a consistent but limited model of the mind, in which there is limited capacity to understand more complex aspects of interpersonal relations, such as ambivalence. 5B narratives exhibit an inconsistent level of understanding, in which there can be high insight during non-conflictual times, but lowered RF around specific conflicts, such as with parents.

7. Those exhibiting marked RF (7) offer numerous statements indicating full RF throughout the interview, and frequent passages of original reintegration. There is much detail about thoughts and feelings of all protagonists, implications of mental states are usually spelled out, and the person is usually able to maintain a developmental perspective.

9. Finally, those with exceptional RF (9) are rare: these narratives show exceptional sophistication, are commonly surprising, and quite complex.

### Neurobiological View of Reflective Function

As it has been described to date, much still needs to be elucidated regarding the RF construct. In light of the proposed deficits of the current operationalized model of RF, Dan Siegel (1999) offers a more biologically-grounded explanation of the unconscious elements of attachment styles and RF which bears consideration. To explain the multifaceted concept of RF, he defines various forms of representation, beginning with sensory representation.<sup>9</sup> *Sensory representations* enter the brain through the senses, and are integrated on the right side of the brain. A *perceptual representation* is more complexly processed, though it is still prelinguistic and organized in the right hemisphere of the brain. A *conceptual representation* is a categorical type of representation, symbolizing the mind's creation of ideas and the mind itself. This comprises the ability to "read between the lines," or understand the gist of an idea. Conceptual representations are nonverbal (right hemisphere), but they form the basic building blocks of thoughts, beliefs and intentions. *Linguistic representations* are those socially-shared symbolic units with which are communicated sensations, perceptions, concepts and categories: these can be used to link the mental representation

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<sup>9</sup> This is resonant of Hegel's phenomenology.

worlds of separate people. These neurological descriptions support the theoretical view that RF is more a capability of developing self-experiential awareness than of linguistic abilities alone (Perner & Ruffman, 1995).

With this in mind, a revisitation of the importance of coherence and cohesion of a self narrative allows previously obscure aspects of RF to emerge. Namely, the brain's right hemisphere is primarily responsible for theory of mind representations, including intentions, beliefs, attitudes, perceptions, and feelings. The brain's left hemisphere is associated with linguistic abilities to organize knowledge into digital packets of information which can be shared with others verbally. The utilization of RF is therefore dependent upon both right- and left-hemisphere activity. As Siegal states, it is the well-developed coordination of the right AND left hemispheres which is needed to integrate right hemisphere modules into a coherent reflective mode. Further, the coherent narratives of securely attached adults reveal, above all, the coordinated functioning of the mentalizing right hemisphere and the interpreting left hemisphere of the brain. In other words, there is a verbal and nonverbal component to any reflective experience. The individual senses, perceives and filters symbols through the implicit structures of perception, and should

**therefore "watch for shadows that such implicit 'recollections' cast on the stories [told], as well as on the nonverbal aspects of behavior and communication" (Siegel, 1999, p. 43).**

## **Affective Regulation Research and Theory**

**"The poet who 'thinks' is merely the poet who can express the emotional equivalent of thought... When we enter into the world of Homer... we incline to believe that we are apprehending something that can be expressed intellectually; for every precise emotion tends towards intellectual formulation." T.S. Eliot, 1932, pp. 115-117.**

**An evaluation of the experience of RF would not be complete without a discussion of affects and emotion.<sup>10</sup> After all, it is in the telling of accurate memorial stories regarding emotional experiences that RF is best evaluated. Furthermore, Fonagy et al. propose that affect regulation is a prelude to mentalization (Fonagy et al., in press). Further, as discussed in the previous section, Seigel pointed out that emotional memory is included in the set of right-brain representations that are relevant to RF.**

**In order to comprehend the concept of affect regulation, it is necessary to clarify the definition used herein. Of course, as with all concepts in psychology, there is a rich history of definition and development of the term "affect regulation". Some believe that the term may address the internal indicators of arousal, or the physiological processes of emotional arousal and management, the cognitive processes associated with interpreting emotions, or simply the expression of emotions in a socially acceptable way. However,**

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<sup>10</sup> For a review of philosophical and psychological theories of affect regulation, see Elliot Jurist's chapter "Historical and Interdisciplinary Perspectives on Affects and Affect Regulation" in Fonagy,

it is not within the scope of this paper to address and evaluate the development of various definitions of affect regulation.

**Elliot Jurist**

Instead, I will adhere to a most contemporary definition, one which is appropriate to a large degree because it arises within the realm of Fonagy's peers: the description of affect regulation posited by Elliot Jurist, philosopher and clinical psychologist (Fonagy et al., in press). In order to draw attention to a function of affect regulation which is predicated upon mentalization, Jurist consolidates earlier, incomplete views of affect regulation with his two-tiered definition. Basically, he clarifies two levels of regulation: the first is at a rather primitive level, at which regulation is equivalent to homeostasis. He posits that affect regulation at this level is mostly out of conscious awareness; this appears to be the level at which survival instincts are reflexive and little reflection is noted, though some choice may be part of this level of regulation at times.

According to Jurist, the second level of affect regulation occurs in relation to the "other." At this level, individuals are regulating the self as much as their affects, so the self and affects

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Gergely, Jurist and Target (in press), *Affect Regulation, Mentalization and the Development of the Self*.

are actually intertwined: "Self-regulation occurs when the object of regulation is the self; this can be, but is not necessarily, achieved through affects" (Fonagy et al., in press, p. 108). Interestingly, Jurist moves a step beyond the traditional philosophical and psychological views, which posit that affect acts upon cognition (or vice versa) by explaining that regulation involves the capacity to remain within an affective state while being cognitively aware of it. Jurist ultimately proposes that RF does not necessarily concern affects, but notes that affects will be processed in a more complex way with RF.<sup>11</sup> However, it is not clear whether he means that those who exhibit lower RF do so to some degree because they are splitting off and denying emotions, or that RF in its "most pure form" need not be considered as coupled with emotions. In any event, through his own RF and creative capacity, Jurist does introduce a new term for psychology, that of "mentalized affectivity" (Fonagy et al., in press, p.109). Mentalized affectivity marks an adult capacity for affect regulation in which an individual is conscious of his affects while remaining in the affective state. Ultimately, in putting forth this regulatory term in connection with RF, Jurist presents some of the unsung elements of RF: the nonverbal and even contextual/dialectic nature of RF, in which

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<sup>11</sup> It seems that here he is speaking of the significant function of distance-taking that the reflective stance can allow for emotional insight, and not RF as it is being defined in this dissertation.

cognition is in contact with developing and on-going nonverbal capacities such as emotions and affects.

### Antonio Damasio

The neuropsychologist Damasio has also recently added to the literature regarding the importance of affect regulation in regard to what he calls extended consciousness (Damasio, 1999). He draws on years of his own and other research in neuropsychology and neuroanatomy to show how emotions and consciousness are connected. First, like Jurist, he distinguishes at least two states of consciousness: a simple, foundational kind of self-knowing (core consciousness), which does not involve reflection; and a complex, extended kind of consciousness which involves working memory, understanding of time, and reason (p. 121). Damasio also posits that it seems reasonable to distinguish a spectrum of levels or grades within consciousness, but he does not develop this intriguing idea further.

Damasio goes on to define the place of emotions vis-à-vis consciousness. According to research he has amassed, other animals can have neural and mental patterns that are feelings, and even act on them, but may not have a conscious understanding of the feelings. He explains this by showing three stages of emotional

processing along a spectrum: the first is a state of emotion, which can be triggered and executed nonconsciously<sup>12</sup>; the second is a state of feeling, which can be represented nonconsciously; and the third is a state of feeling made conscious, which is known to the organism having both the feeling and the emotion.

Emotions are part of homeostasis. At this level, the brain and body states are managed at a generally nonconscious level. The substrate for the representation of emotions is a collection of neural dispositions in a number of brain regions, located largely in subcortical nuclei of the brain stem, hypothalamus, the basal forebrain and the amygdala. These representations are implicit, dormant, and not available to consciousness. Once activated, a pattern of activation represents, within the brain, a particular emotion as a neural “object”, and generates specific responses that modify both the state of the body and the brain regions (p. 79). Much of these events occur without any conscious reflection.

However, Damasio has proven empirically that emotions can be connected to consciousness (p. 37). His work with patients who have impaired levels of consciousness has shown that these patients also have impaired levels of emotional access. He further

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<sup>12</sup> After discussion with B. Beebe (2002), in which the nonconscious phenomena were discussed, I purposely use the term she has suggested, “nonconscious” as opposed to unconscious, in order to avoid confounding the term with what dynamic theorists refer to as the dynamic unconscious. Nonconscious refers only to implicit or other knowledge which is not consciously experienced.

extrapolates that when consciousness is suspended, so are emotions. But it seems that, though conscious access to emotion is impaired, there could still be emotion. Ruth Stein's (1999) evaluation of empirical and theoretical research on affect suggests that this is more likely the case.

Damasio defines the problem of consciousness “in terms of two key players, the *organism* and the *object*, and in terms of the *relationships* those players hold in the course of their natural interactions” (p. 19-20). The organism is that within which consciousness occurs, and the object is any object which gets to be known in the consciousness process (including, for instance, an emotion). Thus, for Damasio, understanding the biology of consciousness involves the mapping of the two players and the relationships they hold.

A final point of relevance for this dissertation is Damasio’s evaluation of neurological research which disproves the centrality of language to consciousness, while supporting the importance of nonverbal imagery<sup>5</sup>. According to him, language is a translation of something else, a conversion from nonlinguistic images<sup>13</sup> which stand for entities, events, relations and inferences (p. 107). He states that, while language can be important for higher stages of

extended consciousness, consciousness is actually built with the “nonverbal signs of body states” (p. 312).

### Ruth Stein

A comprehensive view of affect and its role in the psyche is provided by Ruth Stein in *Psychoanalytic Theories of Affect* (1999 edition). In it, she traces the history of psychoanalytic thought regarding affect from Freud to the present. By reviewing and discussing major theories of affect, she in effect reunites theory with the practice of psychoanalysis, and provides her own conceptual study of affect and its place in the psyche: particularly, Stein focuses on the role of affect in shaping self development and object relations. Resulting from her evaluation of research and literature, she offers some important conclusions to guide further research in the topic of emotions in psychotherapy. One of these highlights a basic assumption of psychoanalysis: that emotions exist from birth, and are seen as the building blocks of mental structures, of object relations, and of the self. She offers the following as a fundamental fact: “affects are indissolubly tied, in fact part of, self and object... affects are linked with the self and object relations” (p.174).

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<sup>13</sup> An image is not just visual, but “a mental pattern with a structure built with the tokens of each of the sensory modalities – visual, auditory, olfactory, gustatory, and somatosensory (Damasio, 1999,

In resolving the question of "which comes first," Stein shows that affects perform a dual role. That is, they are both part of memories and motives, as well as goals to work toward. Because of the multifaceted role that affects do play, they and their place in the psyche must be evaluated in relation to "how" we think of them. That is, cognition and affect are linked, as well, though affect can occur without being consciously registered in cognition. Stein incorporates contemporary research on cognition and affect to underscore a new conception of cognition, cognitive processing and perception which is also multisystemic and multistep. In this system of multiple feedback and feed-forward, Stein's view of complex of affective structures fits appropriately. In addition, by providing this broad solution, Stein points out a general difference in points of view between child and infant researchers (such as D. Stern) and adult theorists (such as Kernberg and Sandler): the child researchers generally believe that affect depends on the maturation of cognition and object relations, while the adult theorists see affects as key to building or linking self and object representations. Stein says both are accurate: affect has formative value as well as being dependent to some degree on cognitive achievement.

Stein concludes that affects are a kind of set point in a self-regulating system of dynamic equilibrium. Affects may be motivation and motivated. Self and affects develop in a dialectical manner. "an enhanced self and better-differentiated self and object representations enable the person to experience affects on a higher developmental level, with more discernment and nuancing, and, conversely, more articulated and developed affects strengthen and consolidate the self and enhance the differentiation between self and other" (p.182).

In regard to how these ideas impact actual therapeutic work, Stein notes that as a result of focusing on affects, and giving them motivational status of their own (independent of drives), the rules for interpretation have changed. Stein quotes Green (1973) as explaining that affects are among the continuous, unconscious chain of heterogeneous signifiers. According to Green, affects represent the body to itself, and at the same time have an inherently semantic quality as signifiers.

Stein acknowledges the difficulty in finding a level of discourse for the affects and their role in the psyche. I would like to quote one of her final statements as an introduction to the work evaluated and presented in this dissertation: "The evidence [herein] progressively articulates the evolving links of the affects with the

self, through the vital mediation of the caretaking object" (p.187).

This statement brings together the dialectic of self and other, as well as the importance of affect to RF.

Particularly useful for understanding affect and RF is Stein's exploration of the role of affect in the theory Wilfred Bion.

Stein provides a view of Bion's work regarding affects.<sup>14</sup> As Stein points out, Bion conceived of thinking as processing emotions. The basic psychic elements for thinking (alpha elements) are the transformed products of raw emotional experiences (beta elements). He called the transforming mechanism "alpha function," and vaguely defined it as a mechanism which operates on sense impressions and raw emotions to turn them into preconceptions for ideas. Thus, Bion believed that the mind thrives and develops on emotional experiences. Interestingly, Bion added to Melanie Klein's repertoire of basic emotions (love and hate) by positing that something called knowing (K) is an emotion, just like love (L) and hate (H). They are all called links, a term which describes the convergence of the emotional, relational and cognitive (Stein, p. 100). Bion's K is the process through which a person becomes aware of emotional experience and can abstract from it a formulation that will adequately represent this experience; it seems

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<sup>14</sup> Bion's theory will be discussed more fully later in this dissertation, but Stein's review of the role of emotion in his work will be outlined in this section on emotion.

to combine with alpha function to create what may be construed today as RF.

Credit must be given to Bion for his initial focus on the importance of developing mentalization, as well as the role of affect containment and regulation in mentalization. Indeed, in *Elements of Psychoanalysis* (1963) Bion wrote of the dynamic relationship of container and contained, and likened the therapeutic relationship to a relationship between at least two objects, in which one (usually the therapist) must help the other (usually the patient) develop a capacity to contain his own feeling-thoughts. In *Learning from Experience* (1963), he writes that projective identification is an early form of a capacity for thinking; it is initially managed by mother and infant (or therapist and patient), but becomes the ability of an individual to manage emotions in order to experience logical, emotional thought. Unfortunately, Bion does not comment on whether he believes that this dyadic function of emotional management and mentalization continues in some capacity even in "healthy" individuals in their relationships. Further, Bion sets the stage for better theorizing regarding the role of affect and dyadic regulation for mentalization with the following statement: "for the impact of the one upon the other is an emotional experience, subject, from the point of view of the development of the couple and

**the individuals composing it, to transformation by alpha function"**  
*(Learning from Experience, 1963, p. 36).*

### **Research on Adult Nonverbal Communication**

Much of the research presented herein regarding nonverbal information storage and processing has been from the field of parent-infant studies; this is where new and exciting information about nonverbal communication and related phenomena are arising at present. However, in order to support the inclusion of on-going nonverbal phenomena into the RF construct, it is helpful to present some research which focuses on the nature of adult nonverbal communication. In fact, even for adults, emotions are frequently, perhaps primarily communicated through nonverbal means. We often use sensory data to provide information about emotional states: for instance, we understand another's happiness or sadness from seeing their tears, embarrassment or anger from a red face, discomfort or joy from a smile, surprise from raised eyebrows; and we discern scorn or condescension in vocal tone, hear joy or fear in a scream. These are just some of the myriad meanings we understand from our own or another's nonverbal behavior. Nonverbal communication seems particularly important to impart information about emotion, and therefore about a state of mind - how inclined or disinclined a person is to an idea, for instance. In other words, nonverbal communication seems particularly relevant to reflecting on self and other.

**Body movement and placement, facial expression, and paralinguistic behavior (such as prosody, tonality, intonation, etc.) are all forms of nonverbal communication that we use to understand our own and others' inner worlds. But how do we utilize and understand this nonverbal data? How is it connected to linguistic information sharing and storage? A great deal of research has been conducted to better understand these nonverbal processes. While much of the research is relevant to the discussion of reflective function, only specific empirical research will be presented as support of the importance of nonverbal information sharing in understanding self and other.**

**To begin with, researchers have found that nonverbal communication and processing occurs so rapidly that it precludes conscious control. For instance, Newtonson (1990) found that social behavior was coordinated on a split-second basis, with such rapidity and density of information that it precluded cognitive control or explicit representation. Beebe and Lachmann (2002) quantified the rapidity of nonverbal communication: "A facial change of the partner can be processed within four milliseconds and registered in a change in the amygdala, out of awareness" (p.216). The explicit processing speed is slower than this, which means that partner coordination, if it occurs, happens on a mostly**

nonverbal level. Thus, according to this research, our understanding of self and other occurs primarily out of consciousness.

Jaffe, Beebe et al. (2001) have completed a study of adult and infant communication which has important implications for the role of nonverbal behavior in regulating and understanding self and other that goes beyond the preverbal infant. They videotaped mother-infant, stranger-infant, and mother-stranger dyads interacting both in the home environment and in the laboratory setting, to assess dyadic communication in a familiar and a novel environment. They specifically looked at interactions of four-month-old infants, in order to assess nonverbal communication. Their focus was the timing, pausing, and bidirectionality of vocal rhythms within the dyad. Their findings were quite interesting. First, both mothers' and infants' vocal state durations varied somewhat in temporal pattern from home to lab; further, infants employed different temporal patterns when interacting with mothers versus strangers. This set of findings supports the idea that both the dyad and the context are important when evaluating an individual's state of mind. Next, the bidirectional coordination of the dyad increased with novelty (new context, new partner): only approximately one-half of the mother-infant dyads at home showed

**bidirectionality, while 72% of the infant-stranger dyads were bidirectional. They summarize this research on nonverbal communication by stating their belief that it is of extreme importance in understanding self and other for adults as well as developing infants, as it provides a view of the nonverbal microengagement which is necessary to gather information about self and partner in a dyad- information which is not verbally symbolized, but is clearly utilized in order to understand self and other. This element of closer attunement in novel conditions may be relevant to the development of RF in adult psychotherapy, as it speaks to how attuned the members of the dyad could be in an attempt to engage attachment behaviors.**

**Marco et al. (2001) investigated the nonverbal behaviors of adults in different contexts. One of the most important outcomes of their study was the importance of the social setting in interpreting nonverbal communication. Certainly, it is important to know under what circumstances nonverbal cues are read. For instance, facial expressions may indicate many different emotions, and cannot be elucidated without an understanding of context. This information seems directly relevant for a construct designed to quantify a person's capacity for reflective function - under what**

circumstances, and with what partner, a person is capable of being most reflective, etc.

But what about the relationship between nonverbal and verbal communication? Even if much communication occurs via nonverbal and implicit channels, adult human communication is distinct in its linguistic, symbolic capability. How, if at all, does nonverbal behavior intersect with explicit knowledge? Krauss and colleagues (1991, 1998) have been studying this aspect of verbal/nonverbal communication for years, especially what they term speech-related gestures (arm and hand movements utilized when speaking). The latest study they undertook yielded interesting results regarding some purposes of gestures for the individual who is speaking and gesturing (as opposed to the communicative meaning to the partner in receipt of the communication). They compared the relationship of coverbal gesture to word for individuals who had 1) a primarily semantic impairment, 2) a primarily phonological impairment, reflected in both repetition and naming, and 3) a primarily conceptual impairment. They concluded that ideational gestures probably facilitate an individual's word retrieval by motor-conceptual priming. Aphasic subjects showed cases where gesture indicated the correct concept while speech did not, which supports the view

that verbal and nonverbal information storage are separate processes. Finally, though they found evidence in support of gestures facilitating lexical retrieval, they did not find this relationship with the processing of conceptual material. Taken together, these findings support the idea that nonverbal behavior is important not only as a direct communicator of implicit information, but can act as a prompt or other connection to facilitate retrieval of explicit information. This added complexity of the interrelationship of verbal and nonverbal modalities should also be considered when conceptualizing the impact of implicit knowledge on the symbolizing aspect of psychotherapy.

Whereas the tracking of verbal associations requires explicit, verbal modes of processing, the tracking of nonverbal shifts requires an implicit mode of processing. Beebe and Lachmann (2002) have presented data that supports the view that variations in face, voice and orientation provide an essential means of sensing the other and one's relationship to the other, but this information occurs out of awareness. They emphasize the importance of dyadic experience to understanding self and other, but also heighten the importance of the nonverbal element to parallel the verbal in this understanding of self and other. The next section in this dissertation will apply both of these concepts to the process of

**psychotherapy, in an effort to further elucidate the components of  
RF.**

## **Implications for Adult Psychotherapy**

### **What Brings About Change in Psychotherapy**

As stated earlier, I believe that improvement of the patient's quality of life is a primary goal of therapy. It seems likely that some improvement in the ability to understand psychological or emotional aspects of self and others would lead to more consistently satisfying life experiences. Does this entail some change in RF? Better knowledge of self and other is certainly about RF. Is this the change that occurs in therapy? If so, how does it happen? Indeed, although there are complex philosophies couched within many modalities regarding therapeutic interventions, the results of psychological outcome research converge on the actual patient-therapist relationship as highly important in the success of therapy.<sup>15</sup> In other words, it seems that, regardless of the therapeutic modality, patients continue to rank the relationship with the treater as primary in helping them to improve. According to Horvath and Symonds' (1991, in Crits-Cristoph, 1998) meta-analysis of psychotherapy outcome studies, the quality of the patient-therapist relationship has been ranked as a consistent predictor of therapy outcome across a wide range of therapies. These research results raise many questions about the nature of

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<sup>15</sup> See Seligman (1995); Horvath & Symonds, 1991; and Wampold, Bruce E.; Mondin, Gregory W.; Moody, Marcia; Stich, Frederick; Benson, Kurt; Ahn, Hyun-nie (1997).

**the relationship, and the mechanisms of change within the relationship.**

**Numerous studies offer inconclusive results about what makes a relationship work. The elusive element of what makes a relationship work seems connected to the ability of relationship partners to understand and empathize with each other; there is mutuality at the core of this concept. For this "mutuality" to occur, this dissertation posits that RF must occur within the relationship. Currently, researchers such as Diamond and colleagues (in press) are applying attachment measures and RF analyses to patient-therapist dyads over the course of a one-year psychodynamic treatment with very interesting results. One of the most promising results shows that, indeed, the therapist's attachment style and RF as related to the dyad are impacted by and impact the patient's attachment and RF.**

**Historically, psychologists such as Harry Stack Sullivan also have described the importance of the bidirectional approach to understanding the work of therapy. Several analytical theorists are currently describing aspects of the mutual therapeutic relationship in exciting ways, particularly in the school self-defined as co-constructionist. An exploration of this literature offers opportunity for synthesis of these ideas as further support of the RF**

phenomenon, much in the same way the analytic and biological views of Reflective function have been herein synthesized.

According to Siegal (1999), psychotherapy is a form of "co-constructed story-telling around the memory talk between individuals" (p. 62). For full emotional communication, each person must allow his state of mind to be influenced by that of the other (Trevarthen, 1993). This communication is manifested both verbally and nonverbally: at its most basic, secure attachments are established by sharing the nonverbal flow of emotional states, as well as a verbal focus on the information-processing aspect of mental life (Siegal, 1999). So what can we learn from the experiences of analysts and therapists who write about the bi-directional nature of the therapeutic relationship?

### Narrative Psychotherapy and Co-Constructionists

Those most prolific on this topic are proponents of narrative psychotherapy, and co-constructionists. Holmes (1999) writes about narrative, attachment and therapy. He believes that both the patient and therapist contribute to the therapeutic relationship (thus the idea of co-construction)<sup>16</sup>, creating a unique narrative.

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<sup>16</sup> This does not imply equality in the relationship; it merely acknowledges that each partner contributes to the relationship.

He relates RF to narrative competence, and includes an experience of "something else", describing therapy as:

"an experience in which the patient learns to put feelings into words; these are 'reflected back' by the therapist; the patient then rechecks the reflection for congruence/contingency/verisimilitude - whether it 'feels right'; finally, a representation, or story, is formed" (p.155).

According to Holmes, shaping a story is the narrative version of the modulation and responsiveness of the security-transmitting caregiver.

Knoblauch (1996) describes therapy as a stream of interactive moments which are co-constructed by the therapist and patient. These moments weave together to configure an intersubjective field of interaction, much like Bowlby's conception of the caregiver-infant relationship. Based on the infant research of Fogel, Lyons-Ruth, and Beebe, Knoblauch draws on the co-construction theme to posit his "continuous emergence model" of therapy: there are different experiential perspectives of the patient and the therapist, as well as a unit of shared experience unable to be further reduced. As these three units emerge in the therapy, Knoblauch focuses on the sequential interactive context of the relationship as mutative; he falls short of explaining how co-construction occurs, instead concentrating on how interventions

have impact depending upon the sequential interactive context in which they are embedded, as well as how the intersubjective precipitate impacts on the subjective organization of patient and therapist.

### Reflective Function and the Analytic Third

#### Otto Kernberg

Perhaps, moving beyond the dyad, it is within a third unit of the co-constructed relationship that the sharing and molding of self and RF occurs. Maybe this is the place where the patient and therapist meet<sup>17</sup>. Interestingly, both Kernberg (1997) and Ogden (1994, 1998) have located the arena for therapeutic change within what they label the third position, or the analytic third, respectively. Though he has not yet written extensively on the topic, Kernberg's version of the third position involves the therapist's assessment of his own feeling experiences with the patient,, judging the patient's position through this kind of self reflection, and gauging interventions accordingly. Thus, Kernberg's third position appears to be boundaried by the therapist's reflective function, which is consistent with the statements put forth herein

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<sup>17</sup> This is similar to Winnicott's concept of transitional space.

regarding the importance of the therapist's RF as well as the patient's RF in the dyad.

**Thomas Ogden**

"In writing these sentences, I choose each word and phrase, and speak to myself through the voice of the reader whom I created in my own mind" (Ogden, 1994, p.4).

Ogden's concept of the analytic third provides a framework of ideas which resonate with Hegelian theory of the dynamic, dialectic self; these ideas are key to understanding RF as evaluated in this dissertation. Over the past decade, Ogden has written and refined his theory of the analytic third. In 1994, in an attempt to better define and evaluate the specific nature of the relationship between subject and object within the framework of analysis, Ogden defined the concept of the analytic third. In recollecting his central emphasis on the dialectical nature of analytic intersubjectivity (Ogden, 1979, 82, 85, 85, 88, 89, 94), Ogden stated that the analytic third is "a product of a unique dialectic generated by/between the separate subjectivities of analyst and analysand within the analytic setting" (1994, p. 64). He further stated that the analytic third was "a creation of the analyst and analysand, and at the same time the analyst and analysand (qua analyst and

analysand) are created by the analytic third" (1994, p. 93), because it is the dialectic and dynamic experience which brings all parties into being. Finally, Ogden clarified that, although the analytic third is jointly created, it is experienced by analyst and analysand within the context of their own personality and history, so it is not identical for each. This concept of similar yet different experiences of the analytic third is very important for this dissertation, as it speaks to the richness (or poverty) of an individual's RF, versus the dyad's RF as conceived within the analytic third.

Not only does he advocate for a dynamic and bi-directional understanding of selfness and otherness, Ogden also attempts to clarify some important nonverbal communications within the natural fabric of the analytic experience (1994). His concept of "interpretive action" is a set of specific nonverbal communications (communicated without means of verbal symbolization) by the analyst which serve as transference interpretations. Within this category, Ogden includes interpretations disconnected from words, such as silence, and facial expressions in the absence of words; verbal communications without words, such as laughter; and acts that take the form of verbalizations, such as fee setting, and various ways of announcing the end of the hour. In so doing, he also points out that the meaning of such acts is frequently not clear

during the action, but can be "reflected upon" at a later time for attribution of meaning.

Since this is a very important idea regarding change in therapy and nonverbal aspects of communication, it may be helpful to provide a specific example of this form of interpretation-in-action. Ogden describes a moment with a patient who utilized words as a defense against closeness:

"...after I ended the session, [the] patient stood at the door of my office and continued to talk... I repeated somewhat more firmly... 'our time is up.' [This] represented an interpretation that was condensed in my verbal action... [which] conveyed the following ideas: 'You may have felt that you could seduce your mother into a blurring of generational boundaries through your engaging facility with words, but... you are also terrified that I will get drawn into it with you and that you will find no way finally to free yourself of this sexualized/infantile form of attachment to your mother and to me'" (1994, p.189).

Part of the implicit message that Ogden omitted in the retelling was his conveyance that he was a safer authority figure than the fantasied mother, because he would maintain the boundary for the dyad.

By bringing attention to these "more advanced" nonverbal behaviors, Ogden moves the study of nonverbal communication

beyond the evaluation of infants and disturbed pre-verbal individuals, and past Balint's (1968) and Winnicott's (1965) respective descriptions of the therapist as an environment or container for the patient. Ogden's concept of interpretive action supports the view of this dissertation that the nonverbal communication of any individual can be a highly sophisticated, non-primitive mode of communication, and should be considered in an evaluation of the person's level of RF.

### The Clinical Thinking of Wilfred Bion

Although Bion's theoretical approach to affect was outlined earlier, further evaluation of Bion's approach to the mind and the actual mutative effect of therapy is informative in attempting a new definition of RF. Indeed, Bion thought that new definitions were warranted for many aspects of the psyche, because of how incapable the existing terms were for capturing the nature of change in treatment (e.g, Bion: 1962, 1967). He began with Freudian and Kleinian concepts and built upon or added to them to create his own, very elaborate version of the psyche and mental growth. This dissertation will not attempt to elucidate his theory, but will focus on specific key elements therein which relate to the task of understanding RF.

Bion's understanding of analysis was that it was the diagnosis of the truth. He disagreed with Freud's position that the function of thought was for the reduction of tension, and posited instead that thought was for the management of tension (Symington & Symington, 1996)<sup>18</sup>. Bion wanted to do away with the structural model of the mind, because he did not like utilizing static and inanimate descriptors for the animate and dynamic experience of the human mind. Thus, he moved away from the Freudian concept of conscious-unconscious, which he felt was too structural (as if they resided in certain places in the mind), and replaced it with the terms finite and infinite, respectively. The unconscious, Bion's infinite, is that which we struggle to define in order to understand ourselves and the world, but it has no shape or form, no categories, etc. Freud's consciousness was grouped into Bion's category of finite. Further, as opposed to analysis being for the purpose of clarifying the unconscious, Bion stated that the struggle in analysis is to prevent the finite smothering the infinite. Bion also repudiated the primary/secondary process distinction, preferring to refer to various levels of thinking.

In keeping with his new descriptors of the mind and therapy, Bion's creative vision of human interaction sheds light on dyadic

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<sup>18</sup> This is reminiscent of Hegel and Benjamin's resolution of the dialectic - not the conquering of, but the management of on-going tension.

and nonverbal experience in regard to RF. To begin with, Bion saw the experience of emotion as basically dyadic: "An emotional experience cannot be conceived of in isolation from a relationship" (Bion, 1962, p.42). He reduced all experience to fit into three categories of emotional linking which were predicated on Klein's emotions of love and hate: his categories of Love, Hate, and Knowing. The Knowing link was present when one was in the process of getting to know the other in an emotional sense. According to Bion, having a piece of knowledge about oneself is not the same as getting to know oneself through experiencing those aspects of the self in relation to the other (Knowing). He stated that without links there were no emotions, and without emotions there could not be development of thought.

Bion explained the analytic endeavor as the analyst and patient meeting in a situation of chaos, in which attempts are made to understand the inner world of the patient through the Love, Hate and Knowing linkages. Bion believed that both the patient's and analyst's states of mind should be utilized to understand the patient's position and state of mind. In his description of this experience, he predated Winnicott in declaring that the relationship entails a container and a contained, and that usually the analyst is the container. In fact, Bion saw all as dialectic: certainly, the

personality is constituted of dual elements:  $\infty$ . The mother-infant relationship is an archetype for the  $\infty$ , a relationship which is neither static nor one in which the infant is passively held by the mother. Bion firmly believed that the relationship was dynamic, and saw the  $\infty$  as a prototype for the therapeutic relationship.

Not only is the personality composed of  $\infty$ , but thoughts are, as well. According to Bion, pure thought is non-material (infinite), and the agency that moves the infinite to the finite is  $\Phi$  looking for  $\sigma$ . He describes the linguistic function as being significant in the way that it binds ideas together to prevent dispersal (containing), and simultaneously provides a thing from which to grow. So, for Bion, meaning develops through the *action* of the container meeting the contained, an on-going and evolving process.

However, preceding current neuroscientific advances that ratify the nonverbal experience as valid and on-going without the need to verbalize all, Bion believed that emotions and experiences had to be processed (experienced verbally) before they could be used by the personality (Symington & Symington, 1996). Alpha function was designated as the psychic vehicle which performed the function of transforming the beta elements (elements without meaning) into alpha elements, the building blocks of meaning. It is

alpha function that endowed the mind with a sense of subjectivity - basically, Bion's RF. Alpha function transforms the basic emotional experience into thought, which may be imagistic or other sensory-stored meaning, but ultimately linguistic. It is conceived of as an action, one that enables the distilling out of the essential aspect of the emotional experience which is necessary for emotional development. For Bion, as for other analysts of his time, the pinnacle of thought was linguistic. And, like contemporary proponents of RF, Bion was not very successful in describing the actual construct, so it remains poorly understood. However, his descriptions of the occurrence of alpha function and K have been quite informative, as well as his myriad of clinical examples used to describe the development of meaning.

Through evaluating his own vignettes, Bion realized some key elements of the dyadic interaction in therapy which promoted change. While it had been previously thought that the analyst's interpretation of a patient's unnamed experience was the pivotal catalyst of change, development and healing, Bion's careful analysis of his own work led him to other conclusions. It was not the insightful interpretation which created change, but something else. It was the conjunction of what Bion called the finite and infinite which occurred in a moment of emotional insight that led to

change. In the therapeutic dyad, alpha function created alpha elements, which were pre-conceptions, and these preconceptions were transformed further into conceptions within the dyad by the dyad's ability to tolerate emotional tension, and conceptions became the pre-conceptions of other conceptions, ad infinitum (Symington & Symington, 1996).

Symington & Symington present several excerpts of analysis to explain Bion's concepts in their book *The Clinical Thinking of Wilfred Bion* (1996). One such vignette is described as follows:

"At a moment in a session the analyst understands that behind an array of pompous bullying his patient is suffering intense shame. Now the question is 'How does the understanding arise in the analyst?' There is a directness of experience which was not there before. Shame, as an emotional reality, is now within the analyst's emotional orbit. It is no longer confined within the boundaries of the patient's psyche. The analyst does not know it as he might know the day of the week... The shame confronts his emotional being... The seeing of the shame comes about as a result of a transformation... shame... is *intuited*" (pp.166-167).

It is this kind of working description of the clinical process which is invaluable in understanding RF. Regardless of what Bion defines as linguistic or ultimate, the work being done involves something he terms intuition. He describes attunement to nonverbal processes of patient and himself as crucial to this endeavor. Finally, moments of insight which move the treatment along, and enhance mutual understanding, are predicated upon an

inner creative act of thought (Symington & Symington, 1996). "The analytic experience, the coming together of two personalities, cannot be known in its essence but only in its manifestations in the two people involved - analyst and patient. Each of them experiences it in his own unique way, represents it to himself, this being the first transformation, and then transforms it in and for communicating to the other just as does the artist or poet. It is then possible for the two versions... to be compared with each other. The patient's transformation is expressed in his behavior both verbally and nonverbally; the analyst attempts to restrict his transformation to words, the interpretation" (Symington & Symington, 1996,106-107).

In summary, Bion has provided a wealth of ideas key to understanding RF and change in therapy. For him, thought is of necessity dialogic, and emotion and other nonconscious and sensory experiences<sup>19</sup> must be involved in order to experience an understanding of self. This kind of understanding of self or other - Knowing - can only occur in a dyad, much as thought develops dialogically. The productive linker, alpha function, occurs between any container and contained: mother and infant, self and other, parts of the self, or pre-conception and conception. However, while

Bion's descriptive clinical vignettes have provided an amazing opportunity to reflect on change in therapy, some more current clinician-theorists have the benefit of years of research to help better define the RF experience.

### Implicit Knowledge and Theories of Change in Therapy

#### Daniel Stern and Karlen Lyons-Ruth

As a member of the Process of Change Study Group (PCG), Daniel Stern has also written extensively on how change occurs in treatment (Stern, 1998). According to him, the vast majority of therapeutic change occurs in the realm of implicit relational knowledge, outside of the domain of explicit knowledge (the verbal sphere). This process of change requires no interpretation, and does not even have to be made verbally explicit. He refers to Tronick and Cohn's description of how change occurs between mother and infant (1989): "coming to implicitly know how to repair and redirect the improvisational process is one of the main hidden agendas of the parent-infant interaction" (Stern, 1998, p.303).

Stern and the PCG focus at a micro-level of change in the therapeutic relationship, and have discovered at the implicit level what Stern terms "present moments" in the direction refocus of the

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<sup>19</sup> Bion wondered if there was a communication of thought or pre-thought in the body before it registered at conscious levels, and tried to learn more about this through investigating prenatal life

co-created "narrative" (p.303). A present moment is a qualitatively different and unpredicted moment from what had occurred before (like in Bion's vignette presented above). It is affectively charged, and laden with potential importance for the future. It is a moment that challenges or threatens the stability of the ongoing state. In so doing, the present moment offers a new intersubjective context, representing a nonlinear jump in the moving along of the therapy. This may be a look, a movement, a laugh, a verbal non sequitur, or something else unpredicted; importantly, it need not be verbalized at all.

A present moment that is therapeutically seized and mutually recognized can become a "moment of meeting" in the therapy. This moment of meeting requires that each partner contribute something individual and authentic to the moment. It frequently happens nonverbally, such as when both patient and therapist laugh, or when the therapist leans forward to communicate attentive engagement. It may also be resolved at times with a verbal intervention.

Finally, Stern puts the verbal and nonverbal aspects of the dyadic communication into perspective by explaining what he believes is their moment of integration. With this explanation, he

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(Symington & Symington, 1996).

also speaks to why, for years, we have thought of the verbal communication, particularly the interpretation, as the changing force in therapy. According to him (1998), well-timed interventions include moments of meeting which concern the emotional effect of the interpretation. This includes altering the patient's explicit and implicit relational knowledge (what Bion had tried to describe earlier). Stern reports that the two mechanisms of implicit and explicit change can occur together or separately, but the implicit change mechanism is the sphere of most change in treatment.

Karlen Lyons-Ruth is another member of the PCG who has written extensively about the implicit communication of the mother-infant dyad and compared it to change in therapy (1999, 2000). One of the most important contributions she provides in this regard is a restatement of Sander's data about how new levels of organization emerge in dyadic systems without verbal communication. She cites the experiment in which the 8-day-old infant instigates an interaction of emotive reciprocity with her father in split second intervals, intervals which occur too quickly for verbal thought to become engaged (e.g. Beebe & Lachmann, 1994). Lyons-Ruth further posits that this kind of implicit communication of ways of being with another continue through life, and are the basis of adult relations, as well; "Knowing in the

**procedural or enactive sense is clearly available from earliest infancy and is active continuously throughout adult life, operating in constant interplay with symbolic forms of knowing and meaning" (2000, p.90).**

**Lyons-Ruth proposes that this information goes far to explain the psychotherapeutic process by providing a model of therapeutic change which parallels but is different from interpretation. It is the microencounters with a myriad of nonverbal components which are the units out of which ways of being with others are constructed. These relational processes are apprehended directly (without verbal mediation) and are translated into the realm of "reflective verbal description" (2000, p.94) with great effort. According to Lyons-Ruth, "Even the most penetrating verbal description of how two people negotiate an affectively charged issue together rarely captures all the subtle elements of how they really go about doing it because the essential medium of the exchange is not primarily verbal..." (2000, p.90). Although language is increasingly incorporated into these encounters, the structure of the encounter itself may never be represented in words. Thus, for Lyons-Ruth, the goal of psychotherapy is the collaboration of therapist and patient toward increasing the flexibility, range and effectiveness of the patient's adaptive capacities, along with decreasing the**

experience of maladaptive behavior and dysphoric states. The recognition process which makes this happen is dyadic, dynamic, and requires the intersubjective coordination of complex psychological states, rather than just coordinating verbal and physical acts. She invites us to conceive of procedures for relational growth that do not rely solely or primarily on translating procedural knowing into symbolic form (1999).

Beatrice Beebe et al.

Finally, Beebe et al. have been publishing exciting findings this year which they relate to change in the adult psychotherapeutic dyad (and therefore can be related to RF). For instance, in a recent presentation at the New York State Psychiatric Institute (5/7/02), Beebe stated: "Human behavior is better conceptualized as process than as states. It's *all* process." Beebe and Lachmann (1998) have proposed that internal and relational processes are simultaneously organized in relation to each other at all levels of development. They propose that the capacity for inner experience exists from birth, and consolidates around the experience of recurring processes, which the infant [and adult] comes to recognize. In adult treatment, nonverbal patterns of communication can be picked up on, even outside of

consciousness, by the therapist and can inform her verbal and nonverbal interventions. Beebe and Lachmann (1998) evaluate the videotape of an adult psychotherapy dyad and conclude that an important component is the movement patterns which are not likely to be experienced consciously by either partner, but will be perceived out-of-consciousness by both; they say this is much as the split-second interactions of mother and infant, which happen too quickly to be processed symbolically in the moment. Further, these nonverbalized communications are an essential basis of the therapist's clinical intuition, and they are critical to the therapeutic process. So, in their systems view, self and interactive regulation are simultaneous, complementary, and optimally in dynamic balance. "Thus, the individual can be fully described only in relation to the dyad" (1998, p.509).

So, according to Donnel Stern (2002, p.243): "Each of our thoughts gains its meaning as much from the silent, invisible, and affectively toned background within which it is set as it does from the words of the thought itself." Or, even more well-stated (Stern, 2002, p.243): "What we say, then, is only a portion of what we would have to say if we were to account fully for what we mean." The point is that, as contemporary analysts and researchers

continue to grapple with and better elucidate the analytic experience, more attention is paid to the holistic experience of the individual-within-the-dyad. A model of dynamic, dyadic, nonverbal and verbal communication is developing which enlightens the concepts of RF and therapeutic change. This is where the model of this dissertation begins. The basic goals of this dissertation have been to find a way to reintegrate nonverbal and dynamic/dyadic components into the current psychodynamic operationalized construct of RF.

## **Conclusions**

### **Reflection**

For a moment, let us suspend the discussion of philosophical and empirical findings regarding the brain and reflective function. Let us simply "look" at what the physical phenomenon of reflection is. It is best explained within the realm of physics, as a phenomenon of light and matter. But we do not need to know how physics works to "know" a reflection. We look in a mirror and see our reflection; even young infants can recognize themselves. We know it is a reflection, and not our actual selves; we recognize the likeness of self, however.

Reflection is not only a noun, but a verb. It is the action of reflecting. Thus, there is a physical "movement" to the experience of reflecting, which, again, we cannot detect, but we understand that it is happening in order for us to see ourselves in the mirror. Without the physical phenomenon of imperceptible light waves moving through air, striking us and the mirror, there would be no reflection. And without our sensory perception of the image, we would have no registry of the reflection.

Why are the physics of reflection important to our psychological view of how we understand ourselves? Because it has been utilized as a metaphor to approximate the experience of

**reflective function: the experience of finding oneself through another is may seem static but it is dynamic. RF is also about a dyad, and cannot occur in a vacuum. The activity requires sensory perception and implicit understanding, but may not necessarily include explicit knowledge.**

**Human self understanding and reflection: Reflective function is, after all, more complex than the physical phenomenon of reflection. RF is a human capacity, how each of us knows ourselves and others. After all of the arguments presented in this dissertation for including the dynamic and dyadic factors of self-and-other knowledge, research results provide a caveat that, indeed, under optimal developmental conditions, there *are* enduring qualities of self that we experience, regardless of context. It is important to acknowledge that individuals do tend to have some unique and rather unchanging personality traits. This is how we can "recognize ourselves" in others.**

**But what I have tried to focus on is reincorporating the idea that RF and self-other understanding is also an animate experience. As such, it entails emotional understanding, a sense of attunement as well as separation from context, and in a micro-sense it is never static. Although there are some enduring traits of self that we can recognize as "me" throughout time, this sense of**

**self is actually changing constantly in small ways; whether "other" is represented by a part of self or an actual other, our sense of self depends on venue, mode of inquiry and mood state, to name just a few contextual parameters. So, below is a definition of the RF phenomenon arising from the weaving together of different schools of research regarding RF.**

### **A Comprehensive Definition of Reflective Function**

#### **RF is Dynamic**

**Incorporating contemporary developmental research insights into Hegelian phenomenology, I propose an encompassing definition of RF, which emphasizes the experiencing self as much as the reflecting self, and anchors RF in this dialectical experience. In so doing, the focus is placed upon RF as a dynamic construct. It is what we know of ourselves and how we know it at the same time. RF is not only the static and distancing ability to reflect on oneself or another, combined with the experiencing self; it is just as importantly the result of the fluid interaction of the two.**

#### **RF is Dyadic**

**RF is the animate, moving and changing experience of self and other, always impacting and impacted by the environment.**

Thus, the dyadic input of actual others with the self, and the "self-otherness" of the experiencing and reflecting self, are captured in the process of RF. Although we all have personality traits, and strive to feel that we understand ourselves through time, we cannot do this without comparison, without maintaining the tension of inner/outer, me/you, or experiencing me/observing me. Once one is separated from the other, we have a breakdown of experience, and skewed results of this phenomenon of RF.

It appears that we are intersubjective from birth, if not earlier (Bion tried to research prenatal experience; Cherokee certainly believe that babies in utero are "knowingly" interacting with their mothers). This idea seems in keeping with the emerging results of empirical research regarding infant awareness. Among other researchers discussed in this dissertation, Beebe, Lachmann and Jaffe in New York, and the Process of Change Study Group in Boston have developed creative ways to study the mother-infant relatedness from birth, and their findings support the idea of intersubjectivity even before the infant's ability to verbalize. For instance, Beebe et al.'s (2000) evaluation of mother and infant vocal rhythm coordination and attachment has provided a view of the way mother and child both impact, organize and react to each other in the process of self understanding and definition.

**This idea of intersubjectivity has been further developed by clinician-researchers such as Knoblauch (1996), who has applied lessons learned from infant research to adult relationships and adult development. He and other co-constructionists propose that adult interaction, as well as mother-infant interaction, is composed of micromoments of co-constructed meaning, and it is through this ongoing co-construction that an individual knows himself.**

### **RF Includes a Linguistic Symbolizing Capacity**

**Lest we forget that this is the medium that adults consciously use to communicate with each other, I want to return to the linguistic skill of representation and description. After all, others' verbal representations and descriptions have allowed this evaluation of research and philosophy of the self and its development. The verbal, symbolizing function is certainly a key element in RF. Many of the researchers presented in this dissertation (Fonagy, Jurist, Damasio, and Bion, for instance) propose that the best interactive situation is when the individual can freely and continuously integrate implicit and explicit modes in order to have an on-going dynamic insight of self-in-context.**

**Verbal symbolizing is significant. Ultimately, it is a necessary component of RF. Clinicians such as Lyons-Ruth,**

Beebe, Slade, and Tronick, and who work with both children and adults, attest that the free interaction between word symbolizing capacity and nonverbal experience provides a most fertile space for the development of emotive understanding of self and other. This being clearly stated, however, I have tried to open the door to other, perhaps equally necessary abilities that have been overshadowed by our attention to the acquisition of verbal fluency.

#### RF Includes an Implicit/Nonverbal Component

Advances in understanding how the mind stores and utilizes information have made clear that a primary, on-going mode of information gathering and storage is implicit (nonverbal). The implicit sphere encompasses whatever is processed out of consciousness, although this information can sometimes be made conscious. As such, it includes emotive memory, IWMs, and sensory-motor processing. All of these nonverbal elements should be included in our construct of RF, as they are the bedrock of how we know ourselves. The implicit emotion-laden understanding of self-in-relation-to-other is so important for our functioning in the world. Such implicit information seems regularly to be processed out of awareness, and therefore does not necessarily require verbalization.

Further, implicit knowledge seems to have an on-going trajectory through life, perhaps even paralleling the development of explicit knowing. This new vision of implicit knowing releases it from early views which implied a solely primitive function for preverbal knowledge, as if it must fall away once the verbal capacity begins to develop. Instead, it appears to evolve into a sophisticated mode of communication which transfers and processes complicated information outside of consciousness. This begs the question of how, and if, implicit knowledge does have a developmental component.

Implicit "reflecting" is not through an explicitly symbolized medium; it seems to be a symbolizing experience, however, which we do not yet have the ability to untangle, since we have primarily approached meaning through the linguistic procedure. It seems that it would be very beneficial to understanding the self and the brain to continue to seek ways of better understanding implicit communication.

### RF and Development

There are two important points regarding RF and development which arose from this evaluation of literature and research. The first deals with the difficulty of studying and

mapping such a thing as an RF developmental trajectory. As Ruth Stein (1991) explained when she integrated the views from both sides of the development argument, it is not clear which "comes first", affective experience or object relations. In so doing, she broadened our understanding of self development and RF to encompass a dynamic feed-forward and feedback system of emotion, cognition, and object relations. Seen this way, RF both evolves from and underlies object relations and emotive self development. While it can be useful to evaluate the developmental trajectories of these abilities separately, the developmental picture of each is inseparable from other aspects of the psyche.

This caveat stated, the next point to address is the nature of a possible developmental trajectory of RF. As Hegel set forth, there is a dialectical development of the understanding of self and other, and in this process of "movement" lie the changes which help us to better understand our own and others' motives. But most of the research to date has arisen from developmental psychology and child studies, and therefore focuses on childhood development of RF, a development of RF which occurs by age 6 (Fonagy & Target, 1996a, 1996b, 1997). While there are some researchers who acknowledge the further development and consolidation of self and RF into the teen years (Krystal, 1988); and some researchers have

looked at how RF can be inconsistent for individuals across contexts even in adulthood (Fischer & Ayoub, 1994); RF is generally not viewed or studied as a life-long or on-going developmental process. However, based on the argument herein regarding the natural intersubjective and dynamic nature of RF, it would be interesting to look at how RF (both healthy and pathological trajectories) becomes amplified and developed beyond childhood.

### Reassessing "Clinical Judgement"

This brings me to a final point regarding RF. Because RF as I have defined it includes nonverbal components, and because it is dyadic, this particular, almost elusive vertex is important to name (to verbalize?). I am speaking of what most clinicians would consider their ability to "intuit" others' feelings and inner predicaments. This is what is aptly named "clinical judgement", exactly that "something else" which Tronick and others have been seeking to define. *This* is what makes art communicative, therapists skilled, and individuals flexible: the vertex of adept interconnectedness without the need for full or even partial verbalization - the ability to know oneself and another through the tension of relatedness. This vertex, where implicit knowledge is being processed smoothly, incorporating an emotional

understanding of self and other through time, is that ability to feel understood and to understand other. It is at this vertex that we feel both autonomous and whole, and woven into the human community. How would therapeutic interventions change if this mysterious force were studied as the free and comfortable management of implicit knowing?

### Full Definition of RF

In summary, RF is the dynamic interaction of reflecting and experiencing self, and the dyadic interaction of self-in-relation-to-other. It is stored in the mind and shared with others both symbolically and implicitly (roughly speaking, through verbal and nonverbal means). It is an on-going incorporation of affect and intellect through the proficient interplay of both cerebral hemispheres.

There may be somewhat parallel developmental trajectories between the implicit and explicit components of RF, but this is not yet clear. It does seem clear that, in addition to the development of verbal and symbolizing capabilities, there is a development of sophistication in the sphere of implicit knowledge, as well. I propose that RF is developed through dyadic interaction with others (each enriches the other), which is also internalized as a

dialectic interaction among parts of the self. Thus, the oscillation between verbal and nonverbal serves to further RF and self-other understanding. While nonverbal interaction is not yet understood in terms of the importance of its contribution to RF development and consolidation, the impact of symbolizing meaning into words and narratives is clearly beneficial in the amplification and development of RF.

The developmental assessment of RF leads to questioning whether there is a spectrum of RF capability. It does seem likely, as Fonagy et al. have defined, that there is such a spectrum. However, it would be useful to expand the scale to include measures of verbal, nonverbal and dyadic components in order to assess RF the most accurately across populations.

#### Distinguishing RF from Other Psychological Constructs

So many terms have been introduced in this study of the mind and its development, but it is still difficult to clarify where RF fits in. In the school of attachment research, RF is considered a subset of the attachment repertoire, which seems accurate even after providing a fuller definition of RF. Further, RF incorporates IWMs, affect and all verbal/symbolizing capacities; therefore, it includes both conscious and nonconscious components.

### **Implications for Psychotherapeutic Change**

**After defining RF and clarifying that it indeed must include a symbolizing, reflecting capacity as well as an implicit capacity, how important is this RF construct to psychotherapy? How much do we need to understand explicitly in order to function well? After all of the research I have evaluated, I cannot believe that every emotion or nonverbal experience tends toward verbal formulation. Just as we screen from consciousness (linguistic symbolization) much external stimulation because we could never process it all, I believe that we have a myriad of nonverbal knowledge which exists, develops, organizes and impacts us without our ever needing to elaborate it linguistically. Of course, verbalizing helps, particularly if the emotive climate is in tandem with the verbal insight. That is, the oscillation of verbal and nonverbal naturally tends toward insight and mastery of the self.**

**If future research were to disprove the herein proposal that implicit knowledge is important for psychological growth, what would change? Based on current mainstream understanding of what is mutative in therapy, not much. After all, the talking cure is what is prescribed by most clinicians, and verbal symbolization is**

the goal. So, testing the new ideas regarding implicit knowledge would only support current verbalizing treatment interventions.

What are the implications of finding that implicit knowledge and communication is equally as important as verbal symbolization for psychological change? This provides another picture, one in which clinicians may realize that they are already practicing the nonverbal support of verbal interventions, but since this occurs in implicit communication and information storage, has not been an active focus.

But what if Stern and other cutting-edge theorists are right, and implicit modes of ways of being are the most important modality of change in treatment? This is a radical departure from what we have assumed to date to be the focus of adult treatment. This would surely require a new way of conducting treatment, as therapeutic change may occur faster by focusing on implicit knowledge.

Finally, what are the implications of the medium of change being within the therapeutic dyad, as opposed to focusing primarily or solely on the intrapsychic world of the patient? Research has been rather consistent in supporting the importance of the dyad in change. Is there such a thing as a good dyadic match? Again, researchers have shown that neither too much nor too little

attunement is good: mid-range implicit interaction is appropriate. This brings into question the implicit storage and communication of the therapist as well as the patient. The therapist has to have the ability to oscillate between the verbal and the nonverbal.

In fact, some researchers have found that there is a relationship between the patient's ability to reflect and the therapist's capacity. Diamond et al. (1999, & in press) have been evaluating, among many variables, patients' change of self and other representations after a one-year psychotherapy. While their primary focus has not been RF, the group has published information which does address the dyadic nature of RF in the patient-therapist relationship. For instance, in comparing the same therapist's narrative of one patient versus another, they have discovered that there appears to be a correlation between the patient's level of RF and the therapist's. In Diamond et al.'s 1999 publication of preliminary findings, they note that, at one year, the same high-RF therapist exhibited higher RF when describing the improved-RF patient Adam than when describing the low-RF patient Beth (p.857 & p.862). Thus, the inability of the patient to reflect meant that the therapist, regardless of her RF capacity, could not reflect as meaningfully about her relationship to this patient. Other rich examples of this phenomenon are presented in

**Diamond et al.'s publication in press. Vignettes are presented of four patient-therapist pairs. Again, there is evidence of a dyadic relationship between patient and therapist RF. Perhaps one of the most vivid examples is with Patient C, who was so protectively preoccupied with her autoinduced fantasy of being saved from the brink of death that she could not collaborate with the therapist to develop a multidimensional understanding of self or other. The therapist, while exhibiting a secure state of mind and high RF, acknowledged frustration and anger with the strength of Patient C's fantasy (p.22). More interestingly, the therapist's narrative of the relationship with the patient, though secure, was notable for moments of angry preoccupation or dismissiveness which tended to match and/or complement Patient C's pathological state of mind. After evaluating four such patient-therapist pairs, the researchers conclude that "the patient's state of mind with respect to attachment, and the therapist's response to it may constitute a "third term" or "analytic third" [as Ogden has described, 1994], that reflects the unique dialectic generated by (between) the separate subjectivities of patient and therapist" (p.41).**

**I had the opportunity to work with this research group, which initiated my interest in the construct of RF. In interviewing therapists regarding their relationships with patients treated within**

the research protocol, they exhibited a range of RF. As a psychologist-in-training, the vacillation of my own RF ability per patient has seemed natural to me, but I had idealistically hoped that it would diminish as I improved my therapeutic technique. But through these interviews I realized that it is natural for even a seasoned therapist to have vacillations in RF depending on context and relationship to the other. The same therapist could be capable of describing one patient in a well-rounded way, while exhibiting some difficulties in describing another patient. For instance, at times during interviews, therapists would resort to textbook descriptions of patients' psychological problems to describe patients with such low RF that they could not find common ground.

With this experience in mind, it would be helpful to develop more research which could better target and elucidate the dyadic and dialectic experience of RF and its development within the therapeutic dyad.

### Discussion

Did this dissertation accomplish what it set out to do? My goal was to utilize multidisciplinary theory to assess a current construct in psychoanalytic literature. Particularly, in light of life

experiences, I had questions regarding the ability of the currently operationalized and scoreable construct of RF to accurately capture an individual's RF. I wanted to review philosophical and psychological theory as they set forth a model of the development of our capacity to accurately reflect on the mental states of self and other. An evaluation of these spheres led me to question the role of spoken and unspoken information storage and communication in RF and its development; and my understanding of an individual's need to communicate led me to question the possibly dyadic structure of RF, and the frustratingly elusive nature of mentalization.

The current RF construct, as operationalized by Fonagy et al., utilizes means at our disposal to capture RF (semi-structured interviews of emotion-laden memories) to assess the level of sophistication of an individual's ability to reflect on mental states. Without question, RF includes an individual's inherent and rather consistent ability to verbally reflect on mental states and to accurately attribute such states to others.

But this is not all there is to RF. This is why Fonagy et al.'s straight-forward scoring guidelines allow leeway for interpretation. Why? This is the slice of RF in which I believe the integration of nonverbal and dyadic/dynamic elements are best captured. An

individual's RF on this scale is not just a direct average of his scores; the scorer's "clinical judgement" is required to analyze the score, adjusting it up or down. This fact made me wonder what pieces the direct linguistic communication is missing. What must I use within myself, which cannot be stated, but must be tapped in order to score another's RF?

Deconstructing the construct led me to question the natural nonverbal storage and communication elements inherent in this esoteric function. I have had the opportunity to perform the PT-AAI and AAI interview which are scored for RF, and indeed discovered a nonverbal component: although I was trained to provide minimal extraneous communication,<sup>20</sup> interviewees frequently looked at my facial expression and responded to my tone to cue them for speaking more, or to guess whether they were "going down the right path" in their descriptions. For instance, one subject would pause at certain points in her narrative and seemed to assess my face for encouragement/ discouragement. In retrospect, I realize that I was engaged with each subject in nonverbal communication about the parameters of question responses and time limits, with the tone, pace and timing of any of my statements. In this subtle way, we worked together to move the interview along. Finally, since the

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<sup>20</sup> Researchers have found a strong interviewer impact on subject response. See Blanchet, 1988 for an extensive discussion.

nonverbal communication was happening in tandem with linguistic symbolization, I naturally wondered whether the nonverbal memory ought not to be included somehow in the overall RF. Certainly, further research should include a comparison of nonverbal data with written RF transcripts, in order to test this nonverbal communicative element which may be important in helping individuals to score higher on the Fonagy et al. RF scale. Perhaps something along the lines of what innovative infant researchers have developed to assess paralinguistic or physical attunement could work; although different tools may have to be utilized with adults, the idea of evaluating nonverbal interaction, communication and processing is the same.

As a reader of RF-scoreable transcripts, it was not the nonverbal communication of the interviewees which I used to assess the interviewee's ability of accurate reflection. It was something else, what the Cherokee symbolize in the story of the ear of corn, what psychologists call "clinical judgement," and artists may call "artistic creation." I had to use my own RF, my inner world, and thus my own implicit knowledge in order to judge these transcripts. There was, therefore, an actual dynamic interaction even in the process of my scoring, and it was this interaction which finalized my understanding of the interviewee's RF score. In other

words, there had to be a certain resonance, a "roundness" to the descriptions of self and other, a multidimensionality which rang true, but which I could only judge, after all, based on my own ability to reflect and understand.

This point also has been an important goal of my dissertation: to highlight the interconnected nature of human beings. After all, though we all have some elements which can be evaluated as our inherent abilities, we are always evaluating ourselves in a context. To a large degree, context can enable our abilities or inhibit them. Context includes, primarily, an other, which is naturally human and judging, and whose evaluations are based on yet another context. Thus, while a particular construct such as RF may have value in quantitative terms (like IQ?), it is also a rich concept for qualitative research on the elements of communication and self- definition.

### Suggestions for Future Research

Therefore, some spheres of suggested research include continued evaluation of the current RF construct and measure. Particularly, a comparison of nonverbal data (perhaps through videotape or audiotape of paralinguistic communication) with the results of the transcript scores would be interesting to parse out

what is communicated implicitly versus explicitly, and when the modes converge. Designing research to capture the nonverbal or paralinguistic aspects of communication a la infant research would be important for adult interaction as well; although the methods of research would need to be modified, the assessment might be similar to that of infant research. Or, we might find distinct differences between adult and infant verbal-nonverbal integration, which would provide useful knowledge about the specific interconnectedness of verbal and nonverbal information storage and utilization in the adult mind. Among other things, this also might help with defining aspects of communication which we attend to in order to assign verity to another's communication. Finally, it would help to better understand why the formal elements of verbal communication (coherence, cohesion) seem meaningful in the absence of nonverbal data.

A collaboration with artists and others who communicate meaning in nonverbal ways would be an interesting endeavor to learn more about the implicit ways of knowing and communicating. After all, art critics have expended much energy to define that ability of the artist to capture and communicate the nature of being so clearly through multiple mediums, not just verbally. For instance, the Russian Formalists of the 20<sup>th</sup> Century have written

**extensively on the importance of all aspects of a piece of art as communicative, which strike the audience both explicitly and implicitly.**

**An evaluation of nonverbal data in adult psychotherapy would be invaluable in assessing the degree to which nonverbalized interaction is mutative. After all, one of the primary goals of understanding how self is represented is to be able to help those with emotional difficulties with relationships and self-other representations. More information regarding the change in implicit relational knowledge is key in understanding therapeutic change. In addition, specific attention to the importance of integrating verbal and nonverbal knowledge in order to manage the tension of self-development and the interaction with environment should also provide helpful data. Comparing verbal versus nonverbal interventions would be one avenue to study these therapeutic moves.**

**Finally, continued research regarding the dynamic and dyadic definition of self is also important. This has implications on many levels, many of which are already the focus of on-going research. For instance, what is the impact of thinking about implicit and explicit knowledge (shared dyadically) on the interplay of cultural and familial influences and inborn personality traits?**

**Perhaps cross-fertilization of neuropsychological studies with social psychology would provide helpful information regarding humans in social context.**

**Bringing together the dynamic, nonverbal and verbal communication within dyads may require us to rethink psychological constructs previously perceived of as verbal/symbolized. We must broaden our understanding of knowledge to include all of the elements described in this dissertation. As we move away from the individuated view of mental health toward a clearer picture of how individuals exist in contexts, we should be able to better understand how treatment can help to encourage growth of RF. It may be time to move beyond the current fractionated schools of theory to work together, to enter the transitional space where we can learn about ourselves and our context by tolerating, managing and even exploring what Hegel might have called the ongoing tension of difference and similarity.**

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