

The Relational Mind in Couple Therapy: A Bateson-Inspired View of Human Life as an Embodied Stream

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Research on human intersubjectivity has found that humans participate in a dialogue throughout their life, and that this is manifested not only via language, but also nonverbally, with the entire body. Such an understanding of human life has brought into focus some basic systemic ideas concerning the human relational mind. For Gregory Bateson, the mind works as a system, formed from components that are in continuous interaction with each other. In our Relational Mind research project, we followed twelve couple therapy processes involving two therapists per session, looking at the ways in which the four participants attuned to each other with their bodies, including their autonomic nervous system activity. Using observations from the project, we here describe the ways through which the relational and embodied mind can be realized in a couple therapy setting.

Keywords: Couple Therapy; Autonomic Nervous System; Embodiment; Dialogism

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Our research group participated in a research program on the human mind, funded by the Finnish Academy of science. As family therapists, our interest was in looking at the human mind as relational. The basis of the program was the adoption of a multidisciplinary approach, including contemporary knowledge gained from neuroscience. A prime aim was to add the relational point of view to neuroscience research on the human mind, while at the same time contributing to family and couple therapy, adding the new knowledge of embodiment. In this paper, we seek to summarize our main observations, considering their clinical relevance. The research results have been published in several papers; hence, in this paper we shall give only a condensed description of the design, the methods of analysis, and the results (Karvonen, 2017; Seikkula, Karvonen, Kykyri, Kaartinen, & Penttonen, 2015).

When we started the research project, we had adopted some ideas that we thought formed an important addition to systemic descriptions. Of particular importance was research on intersubjectivity, which highlighted notions of the human mind as formed

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from relational and embodied processes. This has profoundly challenged people's understanding of human life, while at the same time verifying some basic systemic notions of the human mind. Inspired by the ideas of Gregory Bateson, our research team began study on the human mind as a relational entity. In practice, our team investigated the embodied attunement between two therapists and couple within couple therapy sessions.

Recent research on intersubjectivity has shown that the newborn baby is an active protagonist in the dialogical relationships from which the human mind is formed. For family therapists, the relational basis of the human mind makes perfect sense and is not in any way a new observation. However, for individual psychotherapists it may be more challenging, bearing in mind that, for instance, Sigmund Freud saw humans as psychologically empty at birth (Mahler, Pine, & Bergman, 1973), and not as actively participating in the creation of the mind. The psychoanalyst Daniel Stern saw the new results as a "revolution" (Stern, 2007, 36). Stern highlights the notion of the mind as an entity formed in relation to other minds, and—crucially—as formed through the sensory motor activity of the body. The latter element of this notion may be new for systemic therapists also, given that language has been seen as the most essential element of human communication and the human mind, with less emphasis placed on the embodied components of actions.

SYSTEMIC DESCRIPTIONS OF THE RELATIONAL MIND

For Bateson, the mind works as a system of different components in continuous interaction with each other (Bateson, 1972). Everything in life works within a system that operates on different levels, which relate to each other. Thus, within an individual, cells form a system consisting of internal organs, sense, muscles, and the central nervous system. The individual is a system that forms part of the family, and the family is a system that is part of broader society—which forms part of the ecological system, and so forth. No single component can be understood except in relation to other components and their interaction. All of this, together, forms the human mind.

In this paper, our interest is in looking at the component of the human mind that is manifested in the therapy setting, existing through the embodied presence of the participants acting in dialogue. The human mind is seen as a continuous *process*, a stream that includes relationships with others. The mind is also present at the bodily level. The body carries within it the memories of its relations to others. For Bateson (1972), the mind is, in the first place, a natural biological process, within which the psychological entity emerges. Nevertheless, Bateson did not introduce any precise description of how this connection operates within real-life interaction.

In the field of family therapy, there has long been an interest in looking at relational aspects of life, as manifested in problems and in therapy. A focus of this kind was present in the early work of Virginia Satir, and thereafter in the systemic family therapy of Minuchin (1974) and the Milan group (Selvini-Palazzoli, Boscolo, Cecchin, & Prata, 1980), continuing to the contemporary approaches of narrative therapy (Combs & Freeman, 2016; White & Epston, 1990). However, on the way to this point, some limitations emerged, running counter to the full adoption of systemic descriptions. When Bateson's cybernetic system theory was adopted into family therapy during the 1980s, the focus was mainly on the family as a system, with less attention given to different systems in interaction with each other. Generally speaking, the embodied element—the "biology" as Bateson named it—was not fully attended to. There were some exceptions to this. Tom Andersen included the body in his descriptions of reflective processes (Andersen, 2007), having a special interest in the breathing of the clients as a response to the comments of

the therapists. In narrative therapy, Michael White was, in the last part of his career, greatly interested in Lev Vygotsky's description of learning by bodily action (White, 2007).

THE RELATIONAL MIND AS AN ONGOING STREAM

In addition to systemic knowledge, some new contributions were needed if one were to construct a full description of human mind as relational process. For our research group, two of these were particularly important. First of all, it was necessary to look at the embodied part of feelings and emotions (Cromby, 2012). An interest in the human mind as an ongoing process—including both bodily sensation and bodily function—dates back more than a century. One important author was James (1890), who sought to understand human consciousness as a stream of bodily sensing:

Our experiences are feelings of tendency, often so vague that we are unable to name them at all. [...] Such feelings can function as signs of direction of which we have an acutely discriminative sense, though no definite sensorial image plays any part in it whatsoever. (James, 1890, pp. 253–254)

The value of James's contribution lay in emphasizing the idea of the human mind as an entity acting in the stream of an ongoing sensing of similarities or dissimilarities, apprehended as bodily functions. As Shotter (2016) has noted, for James this was not a matter of seeing repeated patterns "out in the world"; rather, it is our *inner* sensing of similarities that is the basis for making sense of what is happening to us in our lives. Shotter pointed out that in fact this way of looking at the human mind as an ongoing stream is somewhat different from Bateson's interest in finding patterns that form systems. As the quotation from James indicated, there is no need to give a name to what is sensed bodily and therefore, the aspect of language is not as important as has been thought in psychotherapy practice.

Second, there is a need to focus on the relationality that takes place in the sensing of our bodies (Fuchs & Koch, 2014), a topic that was not of interest to James. In more recent time, a valuable contribution to family therapy has come from studies on intersubjectivity, which have increased our understanding of the human mind as an active bodily actor in relation to others. Particularly important is the work done by Braten and Trevarthen (2007). As conceived in their research, from the very first inhaling in our lives, we are active partners in dialogical relationships, within which the human mind is created and recreated. In these dialogical exchanges, humans participate in rhythmic attunements with their entire bodies. Human life is based on a dialogical interchange with other human minds, and we as humans become human within a dialogical enactive and responsive relationship with each other. As Bakhtin (1984) noted, "In this dialogue a person participates wholly and throughout his whole life: with his eyes, lips, hands, soul, spirit, with his whole body and deeds." Thus, dialogue does not consist only of spoken words and responding in words. Dialogue is also an ongoing process of responding in the stream of sensing similarities or dissimilarities in our bodies. At the most rapid time scale, responses are created in milliseconds, and not primarily in actions that create meanings in words. Life is participation in an ongoing dance with whoever is present at the moment.

The Russian psychologist Lev Vygotsky was aware of the embodied interconnectedness of communication. As early as the 1930s he pointed out how "motor reaction inseparably participates in the affective process [in such a way] that it can serve as a reflecting mirror in which it is possible to literally read the hidden structure of the affective process that is hidden from direct observation" (Vygotsky, 1962, p. 31). As if in collaboration through a

reflective mirror, the affective processes of other participants become evident, even if they are hidden from direct observation.

Following on from the ideas of James—of taking emotions as the sensing of our bodies without naming them—and adding the notion of Vygotsky that within communication hidden affective processes become evident, we may consider that feelings in themselves serve as a form of regulating one's affective arousal through embodied actions. These actions become evident as one form of the communication through which humans become part of each other's affect regulation, thus creating the human mind—the relational mind—with the entire actions of the body, as well as with spoken words.

In perceiving that in dialogical relationships humans act with their whole bodies, we have possibilities of bridging the gap in the dualistic Cartesian view of humans—a view wherein the psyche consists of something *outside* embodied actions, while neurobiological structures form the basis of the rest of human behavior. Brain research does not in itself cross the Cartesian divide, especially if it seeks to reduce mental functions to brain functions. As Tschacher and Bergomi (2011) have pointed out, the relational embodiment view of the human mind goes beyond the neurobiological interpretation of cognition. Thus, every bodily action influences and is influenced by the mind, and, correspondingly, is a constituent of the mind. An important aspect of embodiment research is that it uses a whole range of methods to look at human behavior within its context. Thus, it includes rather than obviates neurobiological research, which has contributed enormously to endeavors of this kind in recent decades and has increased the overall understanding of the human mind.

THE RELATIONAL EMBODIED MIND

The relational mind was operationalized within couple therapy within the Relational Mind research project (Seikkula et al., 2015). To the best of our knowledge, this was the first attempt to describe and analyze the entire interactional system from the point of view of the embodied action of the couple undergoing couple therapy, and of the two therapists present. The aim of the design was to see (i) how participants in multiactor dialogues synchronize their behavior—and especially their body movements—with each other; (ii) whether change events in the session involve emotional arousal on the part of the clients and the therapists; (iii) what is happening, implicitly, in the important moments of the dialogue when things are not said aloud; (iv) how any change for the better is related to mutual attunement and synchronization of movements in all of the aspects mentioned above. The full design has been presented in other reports. In addition to precise facial and whole-body video recording of the couple therapy session, the researchers measured the ANS activity of both the couple and the therapists. ANS was chosen as representing the psychophysiological activity because (i) it responds quickly to social and environmental stimuli (as compared to, e.g., changes in cortisol level); (ii) it is active in several emotional reactions; and (iii) it was possible to record it in a four-person situation. The research team looked at how the therapists and the clients attuned to each other in their breathing, in their heart rate, in their bodily movements including facial expression, and in their speech. In addition, electrodermal activity (skin conductance) was measured from each of the four participants simultaneously, to see how the therapists and clients attuned to each other with their sympathetic nervous system (SNS). In an individual Stimulated Recall Interview (SRI) conducted within 1 day from the session, each participant was shown four brief meaningful video-recorded episodes from the session, selected by the researcher. They were asked to give information on their feelings, thoughts, and bodily sensations during those episodes (i.e., aspects that had not necessarily been said aloud during the session).

The study participants were clients who came to the Psychotherapy Training and Research Center of the University of Jyväskylä. The data eventually consisted of 12 couple therapy cases with 24 clients and 10 different therapists, who worked as cotherapists. The average age of the clients was 43 (range 28–61), and of the therapists 52 (range 32–63). The reasons for therapy were problems in the couple's relationship, problems with their family of origin or relatives, violence in previous relationships, and previous violence in the current relationship. The research procedure was approved by the University of Jyväskylä Ethical Committee, and informed consent was obtained from all the participants.

RHYTHMIC ATTUNEMENT AND EMBODIED SYNCHRONIZATION IN ACTION

Prosodial Changes and Silent Moments Enhance Communication within Emotional Topics

In psychotherapy, the embodied experiences of clients have been studied by some researchers (Lapides, 2011; Quillman, 2012), showing that clients respond more to the embodied elements than the content of what therapists say. In these studies, it has been found that clients in psychotherapy attend primarily to (i) prosody—pitch, and the rhythm and the timbre of the voice—and to; (ii) body posture; (iii) gesture; and (iv) facial expression, more than the content of what is said.

In the Relational Mind project, changes in the prosody of speech were found to have an important role in responding to the clients' emotional expressions and encouraging the processing of important experiences. Soft prosody—that is, the participants' use of pauses, lower volume, slower rhythms, and softer intonation—seems to be related in various ways to the processing of emotionally loaded issues and to changes in clients' personal meaning-making (Kykyri et al., 2017). In an individual psychotherapy case, soft prosody had a role in conveying affiliation and offering therapeutic formulations. It contributed both to the emotional attunement between the participants and to the therapeutic change that occurred during the interaction. When these experiences were formulated into words by the therapist, the stress of the client rapidly increased. However, the stress decreased at the moment when the client, who had been in tears, went on to formulate words of her own for her feelings concerning the emotionally loaded experience.

In another case study, silences and soft prosody had an important role in arriving at words for experiences that had not been spoken earlier. Silences promoted the rhythm of the conversation, and allowed the conversation to move forward, giving the participants a chance to react and to think (Itävuori et al., 2015). In the study of Kykyri et al. (2017) it was observed that in 19/22 couple therapy sessions, the moments of low sound energy (LSE) were clustered near to each other. In most of these episodes, the sensing of the emotions was expressed and responded to nonverbally, and/or addressed and processed verbally. The initial findings suggest that soft prosody may have an important role in talking about delicate issues, conveying affiliation, supporting the processing of emotions, regulating emotional interactions, offering challenging formulations and questions, and inviting clients' reflection on their own feelings and thoughts.

Sympathetic Nervous System Arousal Occurs in Synchronization

A number of therapists have included embodied actions as elements in couple therapy (Atkinson, 2013; Fishbane, 2011; Gottman, 2011; Solomon & Tatkin, 2011). Fishbane (2011) used neurobiological information to help couples regulate their inner emotional arousals while learning to be more empathetic to the spouse's emotional arousal.

Patterson and Vakili (2014) advised family therapists on how they could use the information gained from modern neuroscience. Gottman (2011) focused on affective arousal as part of marital and family interaction in marital conflict (Driver & Gottman, 2004), divorce (Gottman & Levenson, 2000), and partner violence (Jacobson, Gottman, Gortner, Berns, & Shortt, 1996). Levenson and Gottman (1983) noticed that the physiological synchrony between spouses was stronger when they discussed a marital problem. They also found that higher levels of arousal related to decreases in marital satisfaction over the following years.

In the RM project, many of the results surprised the research team. One less surprising result was that in the sessions as a whole, the participants' SNS activity became synchronized during therapy (Karvonen, Kykyri, Kaartinen, Penttonen, & Seikkula, 2016). This was observed by analyzing the concordance of the pairs' electrodermal activity during couple therapy sessions. In 86% of the 12 cases studied, a statistically significant concordance emerged in pair comparisons in the initial phase of the therapy.

Synchrony is not an accidental phenomenon related to the general flow of the therapy sessions; rather, it indicates how individuals regulate their affective arousal in attunement with each other. It can be said that in person-to-person situations we live in a state of similar affective arousal with each other, meaning that we do not merely have an empathetic understanding of the other's position regarding the matter under scrutiny, but also similar embodied responses. One surprising observation was that the therapist pairs showed high attunement with each other, whereas the couples had clearly lower synchrony with each other. One possible explanation could be that therapists, who come to the therapy session to conduct their work at a given moment, are highly attuned to each other. This may be due to the shared tasks in the session, requiring the cotherapists to follow each other closely, and to adapt their behavior to each other—a phenomenon realized via nonvoluntary communication through SNS arousal. The therapists' synchrony in SNS arousal was different from that of the couple, in the sense that the therapists' arousal was largely simultaneous, whereas the synchrony of the couple partners showed a time interval. The source of the therapists' arousal was outside them, i.e., in the clients. By contrast, the clients seemed to react more to each other; thus, their arousal followed that of the other, and did not occur simultaneously with the other. Spouses tended to synchronize with each other with a few seconds of lag, whereas the therapists often showed synchrony simultaneously, suggesting that therapists, in their role of therapists, are attuned to the same task.

Another surprising notion was the realization that the ANS synchrony seemed to be a complex, dyadic, or triadic phenomenon. This contrasted with the basic—rather naïve—expectation that the synchrony of ANS of all four participants would occur at—for instance—an important emotional topic of the dialogue in the session (Seikkula et al., 2015). In fact, there were very few instances of simultaneous ANS synchrony or body movement between all four participants.

This observation illustrates the fact that in a multirelational setting—as in couple therapy with four participants and six different pairs of relationships—the participants position themselves in a variety of ways. When two people are actively speaking to each other, the others can remain in the position of listeners, without being prompted toward high arousal. For the therapists, this means more options within the therapy team, insofar as observations conducted while one is emotionally aroused are different from those conducted in a state of physical calm. For instance, in one case, strong synchrony emerged between one therapist and one client in terms of their ANS arousal level throughout the therapy session, whereas the other therapist remained in the position of listeners, following the conversations without being as affectively aroused. It was also noted that high stress—estimated from a range of cardiac variables, including heart rate, high frequency,

and low frequency heart rate variability—occurred while the other participants (including the therapists in their reflective comments with each other) were discussing issues relating to the index person. This observation emphasizes the importance of a respectful quality in reflective comments by the therapists to avoid too much stress for the clients.

Overall, it seems that in evaluating the rhythmic attunement between therapists and clients, it is not enough to look at single domain of communication. In fact, there is a need for integrated information from several channels when one is seeking to make sense of the embodiment (Seikkula et al., 2015). In a case study (Kykyri et al., 2017), we observed matching synchrony (i.e., simultaneous similar responses or behaviors) and complementary synchrony (i.e., simultaneous changes pointing in opposing directions). This could mean that when the client becomes aroused and seemingly agitated, the therapist(s) could respond with calm behavior, thus calming the situation overall. We also assume that there can be a pattern of spiraling synchrony, i.e., a trend where two or more participants trigger each other to increasing levels of arousal. These different patterns of synchrony may have importance in emotional coregulation between people.

Therapeutic Changes in Relation to Embodied Synchrony

Some studies have examined the mutual embodied synchronization between therapist and client. Ramseyer and Tschacher (2011) noted a strong relationship between the synchronization of body movements and the client's experience of the therapeutic alliance. Fuchs and Koch (2014) described how body movements appear to be connected to emotions and to the relational situation and noted how this may become visible during psychotherapy. Bänninger-Huber examined repetitive affective relationship patterns in the context of specific emotions enacted during ongoing psychoanalytic therapy (Benecke, Peham, & Banninger-Huber, 2005). Raingruber (2001) observed that the therapist and the patient tend to synchronize their nonverbal behavior in important moments of therapy, attuning to each other in this way. Darwiche et al. (2008) found mutual smiling episodes during therapist-couple triadic interactions to be a key element within the affective exchanges that serve to regulate the therapeutic relationship. Benecke et al. (2005) noted a connection between simultaneous smiling in conflict situations and perceived relationship satisfaction. Empathetic experience has been found to include having the same feelings as another person, plus cognitive reasoning concerning the experience and regulation of one's own emotional arousal (Decety, Jackson, & Brunet, 2007).

In the RM project, the EDA concordance increased between the spouses during therapy (Karvonen, 2017). This may signal improvements in their relationship as part of the therapy process. One can speculate that as both spouses learned to share more of their lives, and that within dialogue, their embodied attunement with each other increased. This notion seems to contradict the results of Levenson and Gottman (1985) cited above. In fact, the current view seems to be that ANS synchrony between spouses is generally related to positive factors (except in the case of cortisol; see Timmons, Margolin, & Saxbe, 2015). It may be that there is a kind of a window for an appropriate embodied attunement in an optimal couple relationship. If this attunement is challenged in a marital crisis, there may be consequences in the weakening of the embodied attunement. Conversely, in a successful therapy process, attunement may increase in parallel with the spoken dialogue. Regarding the synchrony between the therapists, and the synchrony of the therapist–client pairs, Karvonen (2017) found no significant changes.

In the RM project, more precise information was gained concerning the changes in the dialogical process within couple therapy sessions. A focus on a single modality of communication is inadequate in the absence of efforts to integrate the analysis with the

information that takes place in the entire dialogue. In applying the *Dialogical Investigations of Happenings of Change* method (Seikkula et al., 2012) to include therapy dialogues, we found it most appropriate to take *topical episodes* as the basic unit of research. The session is divided into topical episodes according to the themes and issues focused on in a particular topical episode. Within each topical episode, the ANS arousal and the body movements can be examined, looking at the potential synchronization between the participants. A method for studying nonverbal embodied mirroring between participants has also been created (Nyman-Salonen et al., in press).

In these procedures, we differ from the focus mostly applied in psychotherapy research, including family and couple therapy. In recent years, within psychotherapy research, the focus has been strongly on linguistic communication, and consequently on looking at linguistic synchronization. However, information on the therapeutic relationship obtained in this way may turn out to have limited validity. In a similar manner, it can be misleading to focus only on other single modalities, including the autonomic nervous system, movement, or facial expressions.

Here, there was a contrast with one of our preliminary expectations, i.e., that we could use information about synchronization within each single modality. From our research, we came to realize that the information received from one modality should be integrated with the information from other modalities. The aim should be to include multiple modalities of communication within one description. In this way, the nervous system will not be seen as the reason or basis for a phenomenon, as "the real truth" of the matter. Rather, it is part of a comprehensive interactional system. An important point to note here is that when looking at the different modalities, SNS arousal and the emergence of a more fruitful dialogical exchange seldom happened at the same time. Most often, the SNS arousal emerged first in relation to some specific topic that was emotionally important for the couple. The construction of a new and more fruitful dialogical understanding—one in which the spouses started to listen to each other and be more accepting of each other—seemed to take place slightly after the emotion-arousal experience (Haapanen & Niemi, 2016).

DISCUSSION

In summing up the core of our findings in the research project, our aim has been to show the relational mind in a clinical setting and suggest how the new information can be taken into use in couple therapy. Within our overall research project, we have looked at how different modalities of communication are integrated with each other. This has been done by seeking to formulate a systemic description of the mind—meaning the mind as it is created in the relationships that occur between participants in therapy sessions, and in every person's inner dialogues conceived as their embodied experiences. The body is not seen as the basic entity to which mental functions are reduced; rather it is in a continuous interaction with all the other modalities, as in a stream.

Our interest has been in looking at the synchronization of four participants, while encompassing the multiplicity of domains of communication. Bateson's point of view, which involves looking at the human mind as a relational and biological entity, has guided us to focus on the full embodied essence of communication and existence. For family and couple therapists, this truly seems to introduce new knowledge on the human mind, applicable to therapy. As pointed out in the Introduction, within psychotherapy—including family therapy—several authors have emphasized the importance of bodily actions. However, what seems to be distinctive is the speaking about the body as part of the interaction, or the body as a speaking actor in communication. In our project, the body is an actively speaking actor within relational processes, and we are led to include embodiment as an essential element of therapeutic practice.

We have noted that humans create the reality of the active responsive interaction in every moment. Following the embodied and relational mind approach, this enlarges the perspective on communication. The body senses with all the senses, and acts in a rational way, according to the reasoning of the subject. In the autonomic nervous system, the body responds to its own affective arousal, including also the responses and initiatives of the other bodies—other humans—present. As we have seen, this communication in part takes place independently of the spoken dialogue; however, what we have also learned is that making sense of an interaction seems to presuppose *simultaneous consideration of several domains of communication*. Embodied responses in the ANS, and in gestures, movements, and facial expressions, make sense in relation to the topics of dialogues.

Embodiment enormously increases the information gained from the spoken dialogue, and this supports the inclusion of observations of the bodily responses that occur in dialogues. For instance, emotional arousal among men, which may well occur in the absence of any spoken narrative, can be taken into consideration by therapists in marital therapy. It is not always necessary to formulate one's emotional experiences into spoken narratives, since sometimes living through the emotions within the sessions can itself work as a healing process.

We also noted that within affective arousal, it seems best to live through the emotions, to encourage them to be experienced, and only after this moment to reflect on the importance of that specific emotional experience. Compared to traditional systemic approaches, as found for example in Milan systemic therapy (Selvini-Palazzoli et al., 1980), this truly seems to manifest a difference, in the sense of accepting affective arousal as part of the session. In the original Milan systemic practice, the emphasis was on the importance of using verbs instead of showing and encouraging emotions. Our practice is different in this respect. Living within emotions is, in itself, a powerful relational act.

Narrative family therapy practice has challenged the systemic point of view by emphasizing the importance of having all possible narratives instead of aiming at a single description of the function of the family system. Combs and Freeman (2016, 213) conclude their account of narrative practice as follows:

By relational, we mean that our stories of who we have been and who we can be would not exist outside of our relationships with other people; they are shaped by our experiences with others and our sense of how those others perceive us and respond to us. We are shaped by their responses and expectations. Our notions of how we can act in a given event are influenced by our memories of how people have responded in similar past events, by which particular people are present in the current episode, and by our understandings of what others expect us to do. We hear, remember, and learn the stories of who we have been and who we are expected to be as those stories are recounted in our relationships with others.

This view of humans is much nearer to the one presented in this paper. However, going beyond the narrative practice view, the dialogical view—which takes into account the relational and embodied mind—invites the inclusion of the embodied presence of everyone in the conversation. Whereas the narrative therapist participates in the session with many different types of question, seeking to invite the different voices of the participant, we encourage the inclusion of strong lived affects, plus responses to those affects through the affective arousal of the recipient. Whereas the narrative therapist may focus on these issues by asking what surprised the speaker, the embodied point of view encourages living within the affective arousal. Thus, one can ask directly, "How do you feel about this issue?" or one can point to the affective arousal of the therapist by saying, e.g., "while listening to your experiences I became sad."

In looking at the relational mind, we observed that the participants in the interactions were involved with the topics of the discussions with their entire bodies, and that at some specific points of time, their reactions were synchronized with each other. However, there

were also persons who stayed outside the synchronization within the session (Karvonen, 2017). In other words, one or more of the participants in the dialogue did not experience the same type of affective arousal as the others. This leads to interesting questions concerning the importance of having different positions in the dialogues and in the embodied responses of the participants in the relational mind. While some of the participants can be emotionally aroused and synchronized with certain others in the conversation—and in this way influence the interactional situation—other participants (one or more) may remain in the linguistic domain only, attaching linguistic meanings to what all the participants are living through. Constantly, within the relational creation of the human mind, everyone is affected by his/her body sensing, within a frame of having responses to that embodied sensing—both in a nonmediated, nonvoluntary way, and in spoken words. As observed in research on intersubjectivity, the Other is constantly part of the regulation of the affective arousal of the other. For therapists in couple therapy, this means being sensitive simultaneously to the embodied reactions of the clients and themselves, while being sensitive also to the spoken narratives.

The family therapy movement has developed through several turns. The systemic therapy phase moved into the linguistic turn. This emphasized linguistic constructions of reality, rather than "real" system problems. The linguistic turn has itself been challenged by the "corporeal turn" (Sheet-Johnstone, 2010), or the "affective turn" (Cromby, 2012). Both Sheet-Johnstone and Cromby emphasize the importance of shifting the focus from only looking at the linguistic discourse to including the affective, bodily processes involved in the (therapeutic) interaction. These turns are not categorical, in the sense that they would come one after the other, excluding elements from preceding approaches. Bateson (1972) is relevant here, in that he described the mind in terms of basically biological process, in which the psychological domain emerges via relational contexts. He thus includes all the different domains in his description. What we have been able to do in our research is look at the relational mind in action within different interactional modalities, simultaneously. The verbal element does indeed play an important role in human interactions. Nevertheless, other modalities of interaction convey valuable information on the ways through which we attune to each other in our bodies, and thus create the embodied relational mind.

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