DIALOGUE AND CO-REGULATION: USING DIALOGICAL SELF TERMINOLOGY IN THE RELATIONAL-HISTORICAL APPROACH. A COMMENTARY ON GARVEY & FOGEL'S "DIALOGICAL CHANGE PROCESSES, EMOTIONS, AND THE EARLY EMERGENCE OF SELF"

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ABSTRACT. The relational-historical approach to the study of mother-infant interaction is discussed in the light of the theories of Henri Wallon and Mikhail Bakhtin. The central question addresses the relevance of the concept of dialogue for this area of research. It is argued that an important common ground for Wallon and Bakhtin is the focus on the bodily origin of social interaction. The infant initiates emotional relationships through physical coregulation with persons and things. Differences in the infant's behaviour toward persons and things justify a conceptualization of social coregulation as dialogue. The time dimension is very important to understand the significance of accumulated earlier experiences for the emergence of a dialogical self, also, and in particular, in infants. That is the essence of the relational-historical approach. In order to study development over time, thus conceived, the "frame" concept is central. However, in order to be useful for observing development, the continuity of frames from one observation session to another is as important as changes and transitions.

Keywords: Mother-infant interaction, infant intentionality, coregulation, dialogue, dialectics, frames

The basic idea of the target paper is, that "emotions can be thought of as self-organizing patterns that emerge through dialogue with others, contributing to the development of self and the meaningful relationships that compose an individual's life" (Garvey & Fogel, 2007, this issue, p. 59). The authors convincingly argue that emotions are a crucial and integral component of self development. They also demonstrate that emotions are relational and that they develop in a context of relational histories. The target paper takes its point of departure in Alan Fogel's relational-historical view on the development of emotions and self (Fogel, 1993a, 2001), which I consider to be the most promising approach available. The target paper adds interesting new dimensions to this approach by introducing Henri Wallon's theory on the social significance of emotions and the concept of dialogue as presented and used by Mikhail Bakhtin and David Bohm. This provokes an interesting discussion which, no doubt, will

lead to a deepened understanding of the relational-historical approach, in particular as applied to the study of infant development.

The main question I want to address in this commentary is: What does the concept of *dialogue* add to the relational-historical approach? What does it mean to say that emotions and self emerge in a dialogical context, and that emotions are dialogical experiences? The present commentary will discuss these questions and will also include a consideration of the relational-historical method as presented in the target paper. In order to deal with these general questions I will focus on the following specific questions related particularly to the target paper.

1. What should we understand with *dialogue*?

2. What is the basis for the "otherness" implied in the Garvey and Fogel quote above?

3. Can Wallon, Bakhtin and Bohm help us to answer the above questions?[1]

4. What are the implications of the relational-historical approach for methodology, in particular for the use of the frame concept?

The discussion of these questions will be based on the idea, central to the target paper, of the bodily origin of self and emotion. A body, as a concrete, physical entity is always situated (Merleau-Ponty, 1962) and thus there is always a concrete context, that is, particular details of the situation, that sets the conditions for an interaction between two bodies (or several). The crucial point of Fogel's approach is to give the situation a time dimension. Thus, the *development* of emotion and self cannot be understood except in their situatedness in time. I would say that the experiences accumulated over time are the *sine qua non* of the emergence of self and emotion in a relational-historical context.

As to the meaning of the word *dialogue*, Garvey and Fogel write, with reference to Bakhtin: "It is important to note that Bakhtin's philosophy of dialogue is not to be simplified to analyses of interpersonal discourse. Dialogue represents a worldview in which one's existence, one's sense of selfhood, is not divorced from the experiences of being with others. It is our contention then that every self experience is a dialogical and emotional experience, whether the dialogue occurs in the context of an interpersonal or intrapersonal communication" (p. 55). This is an understanding of *dialogue* that is also embraced by the authors of the target paper. The concept of dialogue is thus to be understood in a very broad sense — beyond a common sense understanding of the word — and so not restricted to verbal exchanges. In this sense all social interaction, as well as cognition, imply dialogues.

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[1]   This question will not be treated separately, as reference to these authors will be made in the discussion of the two above questions.

From there on, the concept of dialogue is often extended to embrace a worldview, where every human activity is considered as imbedded in dialogical relationships: "Everything human is dialogues". In order to distinguish this worldview from dialogues as communicative exchanges, *dialogue* is sometimes contrasted to the concepts of *dialogism* and *dialogicality*, in order to delimit dialogue to cover only direct communicative interaction between people (Gonçalves & Guilfoyle, 2006; Linell, 1990; Salgado & Gonçalves, 2007). *Dialogism* would then be a better word to denote the worldview. Salgado and Gonçalves (2007) understand dialogism as a worldview where "every form of human life or every human process of knowing is basically relational" (p. 609). That is exactly the same stance as Fogel's relational perspective. Finally, *dialogicality* would refer to the dialogical nature of human interaction, that is, cases of human interaction are to be considered as dialogues (cf Linell, 2007).

Now we will have to ask, what is the relationship between the concepts of dialogism and dialogue? From the perspective of dialogism, one may say that every human individual is born into a dialogical environment, that is, a social environment filled with communicatively engendered meaning[2]. One way of dealing with this is to consider environment to be imbued with meaning, and individuals to be born into inescapable relationships to others. Every word uttered, according to Bakhtin (see Petrilli & Ponzio, 2005, p. 144ff), is *necessarily* related to the word of others, even in the case where there is no wish to respond to an utterance of another person. Therefore, dialogical acts are not acts of reason by a conscious self, wanting to exchange meaning with other selves. They are not cognitive, do not imply reciprocity or mutual understanding. Dialogues is the way human bodies interact, whether in friendship or hostility. Indifference is impossible.

Although Bakhtin mainly considered words and utterances, I see no problem in extending this view on meaning-related activity to other forms of human interaction with other humans under the label *dialogical acts*.

The target paper addresses an issue of emergence. Garvey and Fogel write: "… how does this unique self position emerge through dialogue?" (2007, this issue, p. 56). However, I suggest that the role of dialogue in the emergence of self should not be taken for granted. For the time being, I do not follow Bakhtin, as read by Garvey and Fogel, in saying that all cases of human interactions are to be considered as dialogues. There may be human interaction that is not meaning-related, that is, interaction where one or both parties are not acting purposefully relative to one another. An example of such interaction would not be a dialogue. Therefore, as long as we don't have arguments to the contrary, we should leave open whether dialogue, in the very broad sense, is something that emerges in human interaction (similar to the emergence of self

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[2] Very much more could be said about this, see Linell (2007) for a detailed discussion.

and emotion)[3]. This question will be particularly relevant for mother-infant interaction, where the question of the emergence of infant intentionality also has to be addressed. I will make this a crucial point later in this commentary.

It seems to be a common assumption for Wallon and Bakhtin that self and emotion emerge from the relationships and interactions between bodies, thus, that they have a corporeal basis and origin. The trick is to understand how we get from bodies to selves. Garvey and Fogel stress the role of emotions in this emergence of selves from bodies. The reference to Wallon seems particularly relevant in this context because of the way he links the expression of emotions to muscular tonus. However, the way in which the expression of emotions leads to a dialectical relationship is not fully explained. The example provided by Garvey and Fogel (2007, this issue, p. 56) reduces the interaction to a simple statement of the dependence of self on others and of emotions on self and others, and *vice versa*. The dynamics of the interaction is not accounted for.

Garvey and Fogel seem to make the words *dialogical* and *dialectical* synonymous (p. 54). However, it is often pointed out that Bakhtin's dialogism is not dialectical, at least not in the Hegelian (and Marxist) sense (Jung, 2007; Petrilli & Ponzio, 2005) where an equilibrium end state is strived for. Wallon made extensive use of Marxist theory, dialectical materialism, at the same time as he believed that Pavlov's classical conditioning could explain how emotions acquire their social significance (see van der Veer, 1996). That notwithstanding, perhaps because of his Marxist outlook, he did not conceive of classical conditioning in the usual atomistic way, like Watson, but stressed the wider context of culture and society. The child born into a society is at the outset dependent on social others for survival. Van der Veer (1996, p. 377) even suggests that these ideas inspired Vygotsky, who personally met Wallon in Moscow in 1931.

I will not dwell on the right understanding of Wallon's use of the concept of dialectical, just adding the remark that a useful understanding of the word in this context would rather be in the sense of Heraclitus, (the Greek, Pre-Socratic philosopher) focusing on the *open-ended* dynamic unity of opposites in the universe; that is, development is not heading toward an end state or equilibrium, and the point is to catch the dynamic relationship of entities in interaction, for example, the mother-infant relationship, rather than the outcome of the interaction. This might be a useful way of conceptualizing the relationship between *dialogical* and *dialectical*, to be elaborated further down. More attention should be given to the initial bodily aspects of emotions in the writings of Wallon. He very much stressed the basis of emotions in proprioceptive sensations of the different body parts — mainly through muscular tension — and

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[3]   I will come to another conclusion further down in this commentary, see p. 81.

interoceptive sensations from the internal organs. In particular, he considered muscle tonus as the most important factor for emotional behaviour, by which the social environment may know the infant's emotions. Infant emotions thus start as bodily reactions to internal stimuli, then more and more they become reactions to external stimuli, and they gradually acquire social significance, through classical conditioning, by the consequences they have in the infant's social environment (Tran-Thong, 1978; van der Veer, 1996; Wallon, 1949). Van der Veer (1996, p. 371) summarizes: "Emotions link the infant to the social world and thereby humanize him."

From Vygotsky one could be tempted to conclude that there is an innate, well developed, sociability in the infant that makes it prepared for communication. Wallon provides a more detailed picture, where the corporeality provides a material basis for the origins of sociability. However, while the physiological basis for the emotions of the newborn are well accounted for, their social dimension is in need of further elaboration. Wallon (1949) seems to make a simple coupling between the effects of the child's expression of emotions on caregivers and the effects of the caregiver's responses, according to a simple classical and operant conditioning scheme, although this takes place in a social setting. Van der Veer (*ibid.* p. 386) also expresses this in terms of an *"as if"* hypothesis (cf Vedeler, 1987), that is, the emotional behaviour of the infant is interpreted by the social other as an expression of a mental state, and, implicitly, thus eventually becomes one. One finds the same model of explanation in Vygotsky's analysis of the pointing gesture (Vygotsky, 1962). Thus, according to Wallon, the child develops from a state of symbiosis with the mother to eventually becoming an individual, separated from and at the same time in relation to the other. The mechanism of this transition is classical conditioning.

However, when reading Wallon, this explanation is not sufficient. His discussion of the emerging relationship between self and other is more sophisticated than could be expected from a Pavlovian point of view (Wallon, 1984). The starting point for the child is very clearly stated: "The unity of the situation or surroundings on the one hand and the subject on the other is initially all encompassing, and no distinction is discernible" (*ibid.* p. 4). Through anticipation, a provider of comfort eventually emerges in the environment of the child. From there on, the social dimension of the transition from symbiosis to relationship is featured. Reciprocity emerges, for example, through games of alternation, (e.g., the pounding game between mother and infant, studied by de Koeyer & Fogel (2003), and discussed later in this commentary) and it is only in relation to the social other that the child can grasp his or her Ego. However, in my reading of Wallon, *dialogue* is only possible when the child has a unified understanding of self at a mental level. Wallon thus does not embrace Bakhtin's extended understanding of dialogue, and the reference to the concept in the target paper might not be appropriate for the age group covered.

Since the early 1970's our understanding of the capacities of the newborn human infant has dramatically changed. What we know about young infants today has strong implications for our evaluation of, among others, the contribution of Wallon to our understanding of infant self development and, in particular, our understanding of the role of the other in this development. I think Wallon's explanation is insufficient, and propose a separate discussion on *otherness* in infant development[4].

How does otherness occur in a child's relationship to the environment, be it social or purely physical? The self is a relationship to this otherness, and it is in acting relative to this other that the self emerges. What is it then, that makes the self different from the other? In order to answer that question, I think it is necessary to analyze the relationship between an acting body and an object toward which the action is directed. This relationship is intentional (Vedeler, 1987, 1991, 1993). It is this intentional relationship that differentiates between self and other. Notice that so far I have made no distinction between a social and a purely physical other. Thus, I don't see the word *dialogue* as appropriate for describing this relationship. I will assume that dialogue presupposes some kind of reciprocity between two interacting persons. This runs counter to the Petrilli and Ponzio (2005) understanding of Bakhtin's concept of dialogue. However, I suggest that we use the distinction between dialogue and dialogism*,* to distinguish between the concrete and particular mutual exchange of meaning, or *semiosis* (Peirce, 1998, p. 411; see also Petrilli & Ponzio, 2005) that takes place at a particular time, in a particular situation, and with particular individuals involved, and, on the other hand, the general and inescapable dependence on the word of the other that Bakhtin has in mind.

The way I have described the intentional relationship, so far, it does not imply reciprocity. This changes somewhat when we consider that the intentional relationship is not static, that it is deployed in time. That is also where emotions will be part of the analysis. The deployment of the intentional relationship in time will accumulate experiences, which are first and foremost emotional experiences, and which successively will change the intentional relationship itself. Thus, the intentional relationship is dynamic, and changes according to the succession of actions and effects (reactions) of the object. This property of the intentional relationship is well captured by Fogel's (e.g., 1993a, 1993b) concept of *co-regulation*.

I remind the reader that still no distinction is made between a social and a purely physical object. In personal discussion with me, Alan Fogel has persistently argued that co-regulation is *not* an exclusively social phenomenon (although I was never guided to

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[4] I will not go into a discussion of Bakhtin's concept of *alterity* (see Petrilli & Ponzio, 2005)*,* related to *otherness.* It might be useful just to make the parallel to the relationship between *dialogue* and *dialogism*: Alterity could be seen as fundamental to dialogism in the same way that otherness is fundamental to dialogue.

any published work where this point has been elaborated on). In an "as-to-say" rephrasing one could say that you enter into dialogues with physical objects as well as with persons. That would mean that "dead" objects respond to your actions, and provide the conditions for your next actions in the same way as persons do. I take Fogel's word for it, and have eventually become accustomed to the idea.

Is this what Bakhtin, Bohm, Hermans (e.g., Hermans & Hermans-Jansen, 2003; Hermans & Kempen, 1993) and others mean with dialogue? I don't think so. They conceive of dialogues as necessarily social, whether inter- or intrapersonal. At least they have a social origin. The other referred to is a social other. So, in the context of mother-infant interaction, the question has to be asked, what is the difference between social and non-social co-regulation?

To start with, there are several observations of a difference in the behaviour of the infant toward things and toward persons (Brazelton, Koslowski, & Main, 1974; Trevarthen, 1974; Brazelton, Tronick, Adamson, Als, & Wise, 1975; Brazelton, 1983; Fogel & Hannan, 1985; Rönnqvist & Hofsten, 1994). I conjecture this to be an interesting point of departure for a discussion on the origin of communicative interaction, and also on the origin of dialogue in Bakhtin's extended sense, including the idea of a dialogical self. I suggest that Wallon's and Vygotsky's account on the emergence of social interaction between, for example, mother and child, based on an *as if* explanation (see above) is not enough. Rather, the newborn infant has a capacity specifically for social interaction, expressed through the difference in the infant's behaviour toward social others and toward physical objects. In this view, the basis for social interaction would be what Trevarthen has termed *primary intersubjectivity* (Trevarthen, 1977, 1979a).

Thus, through co-regulation, a child establishes emotional relationships both with persons and with physical objects, from birth on, if not even earlier. I see the self as emerging from the accumulated experiences of such emotional relationships. This contradicts Mahler's, Wallon's, and others' contention that the child first passes through a stage of symbiosis (or autism: Piaget!), before having an experience of self. It is compatible, however, with Winnicott's (1971) theory of object relations, and with Stern's (1985) theory of self development. What remains for the child, is to go from this bodily, situated sense of self, based on emotional relationships, toward a more cognitive and unified sense of self. But that is another story. Only, for the present discussion, it is worth pointing out that the social other will have an important role in the emergence of this unified sense of self.

My conclusion for the focus of the target paper, the bodily origin of self and emotion, is thus that otherness will have to be given a broader understanding than contended in this paper. Where does the concept of dialogue fit in to this extended concept of otherness?

Here above I have contrasted two fundamentally different positions on the origins of dialogue, on the one hand a "behaviourist", "blank slate" position — based on reinforcement — and adopted by Wallon and Vygotsky (the *as if* hypothesis referenced above); on the other hand, the "primary intersubjectivity" position where the baby already at birth differentiates between a social other and a physical object. I put my faith in the latter position. This position, however, is in need of theoretical concepts to account for the mechanisms of communication in a way that does justice to their dynamics. Bakhtin, not preoccupied by the origins of dialogue, describes the interactional dynamics of communication in terms of *polyphony* (Bakhtin, 1984) and *heteroglossia*, (Bakhtin, 1981) implying the multiplicity of languages, voices, interlocutors, and, notably, effacing the distinction between speaker and listener (cf. Morson & Emerson, 1990; Zappen, 2000). Zappen (*ibid.*) writes: "Such a dialogization of languages creates a complex unity of oneself with the other, for meaning in a language resides neither in my intention nor in what I speak or write but at a point between my intention and that of another. On the one hand, the word that I speak is already "half someone else's" (p. 293). It becomes my own only when I populate it with my own intention (p. 293-94). On the other hand, the word that I speak becomes populated in turn with the intention of another, for in the active life of the word my intention is always directed toward the active understanding of the other, which is itself populated with its own intentions (p. 282)." (Page references are to Morson & Emerson, 1990.)

I consider this quote to be a nice illustration of the dialectical dimension (in the sense of Heraclitus) of concrete dialogue. What I say depends on the intentions of the other, and *vice versa*. Thus we constitute a unity of opposites. And from a developmental point of view, this also points to the primacy of this unity over its constituents. In my view, this amounts to the same as Fogel's (e.g., 1993a) idea on the primacy of the relationship and the mother-infant dyad as the unit of analysis.

Zappen's quote above may also contribute to the understanding of Fogel's concept of co-regulation. Throughout the target paper, the concept of co-regulation is used as taken for granted and as having a common sense meaning. I consider it to be a highly theoretical concept, in need of an explicit description. I would have liked the authors of the target paper to expand on the role of emotions in co-regulation processes. What is their "view of dialogue as mutually co-regulated movements that emerge when two (or more) bodies encounter one another" (p. 56)? Fogel (1993a, p. 20) explains the emergence of self as "the infant becomes aware of self in relationship to another person, as a dialogue between self and other". To this explanation needs to be added the experiences accumulated over time. No doubt, these experiences are primarily emotional, associated to the concrete content of the interaction.

To summarize: The child is born as a social being, within dialogical relations. That is evidenced from the differential behaviour of the infant toward persons — as

compared to behaviour toward things — referenced above. Therefore, the interaction between a mother and her child is social from the very beginning. Also, from the very beginning, the interaction is co-regulated, that is, it does not consist of a simple turn-taking (e.g., mother speaks while the child is listening and then the roles are reversed, such that the child "speaks" and the mother listens, cf. Bateson, 1975), but features a continuous and simultaneous mutual adjustment of behaviour, notably of emotional expressions, covered by the concept of co-regulation. I consider it justified saying that this interaction is, from the beginning, dialogue in the sense of Bakhtin. Thus, dialogue, in this sense, is *not* an emergent property of social co-regulation, but a *constituent* property of it[5]. Thereby I suggest the concept of dialogue can help us to distinguish between co-regulation between persons and co-regulation between a person and a thing. Dialogues are the essence of *social* co-regulation.

To further advance the understanding of how, from social, dialogical co-regulation, a dialogical self emerges in the infant, we need to introduce the time dimension, and the experiences that accumulate in the mother-infant dyad over time. Fogel (e.g., 1993a) proposes a relational-historical perspective for understanding the development engendered by the social interaction over time, including the emergence of a dialogical self. I caution here to specify how the concept of *dialogical self* should be understood. I suggest it to mean the primary, most basic understanding of self as *interlocutor*. I conjecture this not to be a sudden insight, but a gradual build-up and organization, over time, of emotions in shared experiences in relationships. The infant will eventually develop emotions also in relation to things. However, primarily emotions will develop relative to social interaction in concrete contexts.

In order to deal with the role of the context, Fogel (1993a & b) proposes the concept of *frame,* with reference to Bateson (1956) and Goffman (1974). Garvey and Fogel (this issue) define frames thus: "In interpersonal contexts, frames are segments of co-action that have a coherent theme, that take place in a specific location, and that involve particular forms of mutual co-orientation between participants." (p. 59). This definition may be complemented by a quote from Fogel et al. (2006, p. 3): "The coherent themes involve shared meanings or goals, implicit or explicit, about the nature and course of the communication." Also elsewhere (e.g., Fogel, 1995) the concept of frame is elaborated on in a way that clearly underlines the content ("theme" or "topic") aspect of the concept.

In my understanding of Fogel's frame concept the historical dimension of frames stands central. Frames are recurring segments of co-action that are on the one hand stable, by repetition of patterns of co-action, in the same or similar contexts, and focused on the same theme. On the other hand they are changing, by co-regulated

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[5]   On the possible emergence of dialogues, see p. 79 above, with footnote 2.

innovations in these patterns. In most cases these changes will not change the theme of the frame, and thus not the frame as such, and it may therefore be considered the same while developing. The history of experiences shared by the partners, for example, mother and infant, will be crucial for the development of the frame. Sometimes the changes in a frame may be such that the theme has changed, and a new frame has emerged. Both the historical variability within a frame, and the emergence of new frames fit well into a Dynamic Systems view on developmental processes, with attractor states and phase shifts. Finally, sometimes the co-regulative dynamics of a frame may change to inertia, in which case the same co-actions will be repeated without variation. In such cases the frame is likely to vanish. Goffman's (1974) conception of "frame" seems not to have this historical dimension. Over the different definitions and descriptions of the concept, stability seems to be a central idea to the concept, recurrence of the same, as opposed to emergence of the different. Goffman's frames do not develop; neither do Bateson's (1956).

For the sake of this discussion I would like to distinguish between form aspects and content aspects of frames, with particular reference to the definition of the concept in the target paper. The particular forms of mutual co-orientation between the participants clearly are a form aspect of the frame. The rest, the coherent theme, the specific location, are content-related aspects of the frame, that is, they concern what the co-action is about, and what is the context of the co-actions.

The way the concept of frames is used in the target paper, as well as in Fogel et al. (2006), *does not*, in my view, correspond to the definition given in the target paper and in that same book. The frame concept certainly is hierarchical, that is, frames may be described at different levels of co-action. Within a "Salary negotiation frame" involving representatives from employers and employees, you may identify an "employee task discussion frame" within which, in turn, you may find a frame for each possible task included in the definition of the employee's work definition, etc. However, the above definition will be applicable at each and every level of specific frame description.

The frames described in the target paper, however, are not treated according to the above definition. I would prefer to describe them rather as "patterns of co-action", irrespective of theme, location, etc. They correspond only to the form aspect of the definition of the concept. Therefore the paper does not, in my view, feature frame analysis, but something more abstract, which may be termed "analysis of changing patterns of co-action". In principle, one and the same frame — with a coherent theme and in a recurring context — could be conceived as passing through several of these patterns throughout the development of the frame. In spite of a very careful reading of the narratives for the dyad in the study, I have not found any concrete theme or topic, which could have been followed over the different recordings. Instead the authors describe in general terms the transitions between different patterns of co-action.

The question now is whether this is enough to draw conclusions on development of self and emotion in a dyadic interaction context.

The narratives in the target paper cover a series of video recordings extending over 17 weeks. These are taken as evidence to account for development of self and emotion during that period. My main problem with the narratives is that they do not give me an idea of the change processes in the development of self and emotion during the period. I conjecture that this would have been easier if the frame analyses from each session identified frames over several sessions, with common themes, where the differences between the same frame from session to session were highlighted. With the abstract frames presented in this paper, that I prefer to call "patterns of co-action", and that might be different from session to session, it is hard to get at the core observations of the narratives, that is, the development of emotions and the child's notion of self over the recorded period. In comparison, de Koeyer and Fogel's (2003) analysis of the emergence of intersubjective self-awareness provides a much easier task in reading a narrative focused on a single, and well defined frame, namely *the pounding game*, that is, a well defined coherent theme in a recurring context. There it is possible to follow the development of the co-actions between mother and child from session to session, playing the same game.

Garvey and Fogel first use the frame concept in an ambiguous way, sometimes referring to content, sometimes not. Further down in the paper, it turns out that the conception of frames is about the same as in Fogel et al. (2006), although the denominations and descriptions of the proposed frames are different. It is difficult to point out what is the essence of this difference; a tentative distinction could be that the Fogel et al. (*ibid.*) frames are neutral to the emotional loadings of the interaction, while the frames in the target paper focus on emotional aspects. The patterns of co-action described in the target paper are more an account of general changes taking place over the sessions, rather than recurring coherent themes as defined by the concept of frame. The development of frames is not analysed. Under the frames that are described in this case study, as well as in the other cases reported in Fogel et al. (*ibid.*), development *within* a frame between sessions is not an issue. Instead these studies are focused on the *transitions* between frames. The historical dimension of the single frames is lost.

I am grateful to Garvey and Fogel for raising the issue of self development in the light of Wallon and Bakhtin, giving me the opportunity to take part in a discussion on the implications of these important theories for the emergence of emotion and self in the child. In the history of psychology, the contribution of Wallon has been obliterated by those of Piaget and Vygotsky, hiding the central aspect of the *bodily* origin of psychic functioning, which is more and more taken into account in the present debate, in particular with reference to Merleau-Ponty. I do not want, in any way, to diminish the contribution of Merleau-Ponty. However, it is important to know that Wallon was part

of the intellectual milieu in France in the 1930's and 40's, and that he inspired Merleau-Ponty.

Therefore, in spite of Wallon's theoretical background in Marxism and classical conditioning, his focus on bodily expression makes a crucial contribution to the analysis and understanding of relationship development. Bakhtin, as read by Garvey and Fogel, does not contribute in the same way to the understanding of the *emergence* of a dialogical self[6].

In this commentary I have tried to pin down the issue of the origin of dialogue, with reference to Bakhtin, concluding on the capacity of the human infant to relate in a specific social way to conspecifics as a basis for dialogue. In the perspective of the history of the social relationships with persons and the physical relationships with things, emotions and self emerge from the accumulated — and situated — experiences of the child in relationships with persons and things. These experiences are dialectical in the sense of Heraclitus, that is, they emerge in the ever-changing field of tension, deployed in time, between persons, or between a person and a thing. The emergence of such experiences is best captured by the concept of co-regulation. This concept constitutes a far more important contribution to the understanding of the *emergence* of a dialogical self than the contributions of Wallon, Bakhtin, and Bohm.

The accumulated and situated experiences of a mother-infant dyad are also central in the relational-historical development of frames, the continuity of which reveals the emergence of a dialogical self in the infant. I have argued that such experiences constitute the *content* (theme or topic) of the frame and that frames should be defined first and foremost in terms of their content in order to capture the development of a dialogical self. This is also necessary in order to capture the time dimension that is so important to the relational-historical approach. The emergence of a dialogical self may not be understood if not seen in the context of concrete co-regulated experiences situated in time and in space.

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[6] Cf. the Zappen (2000) quote above, for a different reading of Bakhtin.

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