

A RELATIONAL PERSPECTIVE ON THE DEVELOPMENT OF SELF AND EMOTION

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A chapter to appear in H. A. Bosma and E. S. Kunnen (Eds.), *Identity and Emotions: A self-Organizational Perspective*, Cambridge University Press.

This work was funded in part by a grant to the author from the United States National Institute of Mental Health (MH48680 and MH57669). I am grateful to the following individuals for their comments on this chapter: Kari Applegate, Trevor Burnsed, Jacqueline Fogel, J'lene George, Ilse de Koeijer, Tom Malloy, Andrea Pantoja, Cory Secrist, and Dankert Vedeler.

December 1, 1999

Begin with two premises.

First, psychological experience always implies a connection, a relationship: with another person, with cultural tools or language, or with the natural environment. Life is a network of relationships.

Second, psychological experience is always dynamic and changing. The simplest visual perception requires a change, either in a movement of the object or a movement of the eyes, head, or body. Thoughts and feelings fluctuate in a continuous pattern of change. These patterns of change themselves change as people develop. Life is a series of changes.

On the other hand, part of psychological experience is a sense of one's uniqueness (the self) and a sense of one's permanence through time (identity). How can this occur? How can people have a sense of themselves and their stability over time if psychological experience is fundamentally relational and dynamic?

The answer proposed in this chapter is that people experience the changes in their relationships according to different types of emotion and that emotions provide information about the self. Consistent with the two premises, emotions are conceptualized as dynamic experiences of harm or benefit, perceived as personally meaningful with respect to the individual's changing relationship with the environment (Barrett, 1995; Campos & Barrett, 1984; Fischer, Shaver, & Carnochan, 1990; Frijda, 1986; Lazarus, 1991). According to Frijda, emotional experience "is glued, as it were, to its object, coinciding entirely with apprehending that object's nature and significance . . . [negative] emotional experience is perception of horrible objects, insupportable people, oppressive events" (Frijda, 1986, p. 188). And de Rivera suggests that, "emotions may be conceived as existing **between** people, as various sorts of attractions and repulsions . . . which transform their bodies and perceptions" (de Rivera, 1992, p. 200). As we shall see, this perspective suggests that there are an unlimited variety of emotional experiences corresponding to the limitless variety of relationship dynamics.

From the perspective of this paper, emotion is one way of discovering the meaning of a relationship for the self and hence, the unique position of the self in the relationship. Over long

periods of time, the perception of consistency in one's emotional experience begins to yield a sense of permanence of the self through time. In this sense, perception and emotion are two aspects of the same process of discovering the way in which the self is related to the world (Dewey, 1934; Stern, 1985).

THE RELATIONAL PERSPECTIVE ON SELF AND EMOTION

Before developing this perspective, a few words may be said about why it is different from traditional models of self and emotion. If one begins with a different premise, that each person is a unique individual from the outset, then the existence of a sense of self does not need to be explained. The self-contained individual, existing as a totality independent of the surround, is one of the main features of Western culture inherited from Greek philosophy (Levinas, 1969). In contrast to the view presented here, of emotion as the perceived meaning of relationships, emotions in the individual perspective are conceived as basic «internal» states or motivations, generated from the neurophysiology in response to an «external» cause. In this perspective, individuals «have» an emotion that requires expression, via action, with respect to the environment. The individual perspective predicts that there are a limited number of discretely different emotions that are genetically programmed into the neural system and become available to define harms and benefits for the individual.

The relational perspective, by contrast, sees individuals as open and changing components in systems of relationships. Cooperative communication, for example, brings people together to create an outcome that no single person could achieve. Consider choral singing. Individual singers have different parts and vocal ranges that when mixed, form a coherent aural aesthetic. The concept of co-regulation describes this type of social process that is jointly created (Fogel, 1993). When co-regulating, individuals' behavior in the group is not theirs alone, but the manifestation of the group's dynamics in each of their bodies. In the same way, emotion is experienced as harms and benefits within individual bodies but it reflects the body's experience of a relational dynamic. According to Gergen (1991, p. 157), for example,

If it is not individual 'I's who create relationships, but relationships that create the sense of 'I,' then 'I' ceases to be the center of success or failure, the one who is evaluated well or poorly, and so on. Rather, 'I' am just an I by virtue of playing a particular part in a relationship.

The relational perspective does not deny that people often perceive their part in a communicative process as «their own» contribution or «their own» failure to make an effective contribution. On the contrary, these attributions are one of the undeniable manifestations of the self, the sense of one's own uniqueness. Each singer in the chorus manifests the group dynamics in a unique way, experiencing their own part in the larger musical creation. The relational perspective described in this chapter does, however, seek a principled explanation of the sense of self. How, in fact, does the self arise in spite of the obvious fact of ecology: that everyone and everything is merely an incomplete location in a network of relationships comprising the cultural and physical world?

There are different ways in which the sense of uniqueness can be experienced and they differ according to the time scale in which the individual is a participant in a relationship. At each time scale, a different aspect of self arises with respect to a different type of emotional process. In this chapter, three time scales are discussed. They are summarized in Table 1 and introduced briefly here, followed by a more detailed description in the remainder of the chapter.

Insert Table 1 Here

The first time scale is microseconds and seconds. Even during these very brief periods of time, individuals can have a sense of their orientation with respect others corresponding to emotions related to approach or avoidance. The second time scale is minutes, hours, or longer. This is the time it takes for orientations to form into a sequential pattern of communication. During this time scale, individuals can have a sense of their unique role in the authorship of the pattern. Authorship is a sense of one's agency and occurs with regard to emotions such as security vs. insecurity or togetherness vs. loneliness. The third time scale occurs over years. This

is the period of time it takes for individuals to have a sense of the uniquely enduring aspects of themselves, their identity. These experiences typically occur with respect to emotions such as harmony or conflict, satisfaction or dissatisfaction with oneself over time. At any given moment in time during the life course, the individual may experience the self and its related emotions at all three time scales. These ideas are developed in the remainder of this chapter.

ORIENTATION

This section discusses the emergence of the most basic form of self, the sense of a unique orientation with respect to a relationship. In order to co-regulate, people orient their actions toward the other within a period of microseconds and seconds. Orientation is not a fully formed action system with a pre-defined goal but orientation may become more goal-like during the process of co-regulation.

Orientation is similar to the concept of intention defined as «behavioral object directedness» (Merleau-Ponty, 1962; Vedeler, 1991). In this case, an object can be a physical object or a person. Intention implies an orientation movement of the body relative to someone or something rather than toward some fully formed goal. Because there is always an orientation, it means that there is always an intention. Trevarthen's (1993, p. 123) concept of «motive . . . a readiness for perceiving information needed for acting,» is similar. Orientation is also similar to the concept of «dialogical position» of actual or imagined selves (Hermans & Kempen, 1993), one's stance vis-a-vis another. Another related concept is «action readiness,» a propensity to move toward or away accompanied by an emotional experience of approach or avoidance toward a particular relationship (Frijda, 1986). Frijda's position is the only one that makes clear that orientations are connected to particular forms of emotional experience. Since there is always an orientation, there is always some kind of emotional experience.

Orientations can be relatively *open* or relatively *closed*. Postural orientations, for example, may differ with respect to whether stance, gaze direction, and limb position is open or closed vis-a-vis a partner. Mental orientations differ with respect to the willingness to embrace or reject the consideration of concepts or ideas. More open orientations allow a freedom in how

the process unfolds and permit creativity within the system. More closed orientations reflect degrees of control over how the process unfolds. The dimension of open-closed highlights the emotional aspect of orientation. Open orientations correspond to emotional attraction or a feeling of wanting to approach the other. Closed orientations correspond to feelings of repulsion or withdrawal.

The sense of uniqueness, the self, arises in part because orientations imply the location of the self with respect to the environment. Orientations may be *directed* from the individual toward the environment or they may be *receptive*, from the environment toward the individual (Vedeler, 1994). When orientations are more directed, individuals have the experience of acting on the environment with varying degrees of control. When orientations are more receptive, one has the experience of being influenced by the environment or of «abandoning ourselves to the world» (Vedeler, 1994, p. 346). There is typically an alternative between being directed or receptive.

Hardness and softness, roughness and smoothness, moonlight and sunlight, present themselves in our recollection not preeminently as sensory contexts but as certain kinds of symbioses, certain ways the outside world has of invading us and certain ways we have of meeting that invasion (Merleau-Ponty, 1968, p. 194).

Thus, although orientations are inherently relational – implying a relationship between self and other – individuals can perceive their position vis-a-vis others. Since the individual occupies a location in physical and psychological space, the body is perceived as fundamentally in an orientation because all movement is *from* one location and *toward* another, either directed away from the self or toward the self. All psychological processes, including thought and narration, have an orientation because of their fundamental embodiment (Hermans & Kempen, 1993; Lakoff & Johnson, 1999; Yasuo, 1987).

The self's uniqueness, then, is experienced from its particular perspective at one pole of a relational orientation (Gibson, 1966; 1979; Michaels & Carello, 1981; Reed, 1987). Recent

discoveries suggest that this type of self awareness can be directly perceived at an early age. Human infants, for example, can identify the movements of their own bodies with respect to the environment and other persons, the so-called «ecological self» that differs from the mirror recognition of self at 18 months (Butterworth, 1995; Fogel, 1995; Legerstee, Anderson, & Schaffer, 1998; Rochat, 1995; Rochat & Hespos, 1997; Stern, 1985).

The dynamics of co-regulation, and the continual shifts of orientation also play a role in establishing a particular emotional quality to the sense of a unique self. Because to co-regulate one must continually re-adjust one's actions based on the continuously changing actions of the partner, individuals can experience their relative degree of creativity as a participant in a relationship (Fogel, 1993; Ganguly, 1976; Pickering, 1999; Whitehead, 1978). Because the self is inherently creative, the experience of uniqueness is not an experience of *being* but an experience of *becoming*, a process of improvisation during communication (Bakhtin, 1981; Barclay, 1994; Boesch, 1991; Bosma, 1995; Hermans & Kempen, 1993; Jansz, 1995; Josephs, 1998; Shotter, 1981). It is thought that the earliest awareness of self in human infancy, called the emergent self, is just this experience of being a unique participant in the creative process (Stern, 1985).

A similar perspective is offered by philosophies of intersubjectivity (Buber, 1958; Jopling, 1993; Levinas, 1969; de Quincey, 1998) in which self and other arise as a result of communication and dialogue. During the give and take of ordinary discourse, each person's statements are countered by the other so that mutual reformulation (co-regulation) of meaning is required. As speakers make clearer their point of view to listeners, that point of view becomes clearer to the speakers themselves (Hermans & Kempen, 1993).

The sense of self that arises from these creative processes, however, is most likely to be experienced just following the creative act or creative moment. It is necessary for the experience to achieve a resolution. After have peak experiences of creative flow, as in mountain climbing or musical performance, adults report feeling a sense of uniqueness that did not occur during the experience itself (Csikszentmihalyi 1990, 1996). Dewey (1934) has pointed out that there is a

crucial difference between experiencing (being in the flow of activity) and having an experience. The latter implies a sense of both participation and completeness from which a characteristic emotion may be felt as well as a sense of self. This leads us to consider the issue of the completion of orientations into events.

Events

At particular times during the process of communication, the creative flow becomes punctuated. There is a change from experiencing as flow to having *an experience*. An experience is a sense that the flow has coalesced, a noticeable pattern has formed, a pattern that will be called an event. The sense of one's uniqueness comes into being as a concrete event that emerges from the orientational flow (Fogel & Branco, 1997; Kegan, 1982; Pedrosa, Carvalho, & Imperio-Hamburger, 1997; Sampson, 1989; Whitehead, 1978).

Events are the psychological experiences of real or actual entities such as objects, actions, feelings, or thoughts. When we experience something as real, we are participating in a process by which orientations have coalesced into an awareness of events, a process that may take only microseconds (Whitehead, 1978). The emergence of events is the perception of an island of stability against the background of the dynamic flux of change. From a dynamic systems theory perspective, events are self-organizing processes that owe their stability to the mutual interactions among the elements in the relationship and not to the existence of stored, fully formed representations inside the individual (Fogel & Thelen, 1987; Thelen & Smith, 1994).

As orientations coalesce into events, there is the simultaneous emergence of a stable emotional experience of value vis-a-vis the relationship between self and environment (Hermans & Kempen, 1993). All events are experienced as *inherently emotional* (Dewey, 1934). These orientational emotions yield the experience of values such as good or bad, approach or avoid, accept or reject, tasteful or distasteful, pleasure or pain. Value is the most basic form of awareness, occurring on a time scale of seconds and microseconds. Value is also the earliest form of awareness in human development. Newborn infants have sophisticated approach and

withdrawal reflexes by which they can evaluate a wide range of sensory experiences. Newborns suck sweet liquids and spit out bitter ones; they turn toward voices with particular pitch and intensity levels and not others; they follow the movements of high contrast visual objects and not others (Fogel, 1996). These experiences of value are centers of psychological consistency, called the emergent self (Stern, 1985) by which the self's unique relationship to the environment can be established.

To the extent that orientations are open, rather than closed, they are perceived with some sense of uncertainty. When engaged in an open conversation, for example, there are flow periods in which the outcomes are unknown and participants are willing to remain in an relatively uncertain co-creative process. Events, although they appear as uncertainty in orientations is reduced over time, always have some orientational aspect that leads them from present to future. Although it is theoretically useful to distinguish orientations from events, in practice there are neither pure orientations nor pure events: orientations coalesce into events but events-as-orientations set the stage for the next events (James, 1976; Merleau-Ponty, 1962; Whitehead, 1978). Events, therefore, can be more or less orientational, referring to the possibility for the event to become transformed in the process of co-regulation. In science, for example, the ideal situation is that concepts are working models. The scientist is supposed to maintain an orientational stance toward the data using those concepts but the concepts are always open to modification. The values that are perceived as part of an event are rarely finalized. They are always open to a process of re-valuation.

Becoming and being: Balancing orientation and event Orientations and events are two related aspects of awareness of self. The former is connected with the awareness of becoming and the latter with the awareness of being, the former with change and the latter with stability. Within individual experience, there are moments when being and becoming are present in a fruitful and self-sustaining balance. One remains open to change while at the same time has a sense of stability and uniqueness. In an open conversation, for example, the participants begin with a frame of mind, a loosely defined set of orientations that partake of their individuality. Via

co-regulation, each person opens to change but that change is integrated into their prior orientations, thus preserving their individuality and at the same time changing it. In this case, there is an intimate and directly perceived connection between self and other that has the special quality of being co-creative. One is aware of the self, one is aware that the other is a self, and one is aware that the emergence of those selves (as events) depends upon the co-creative process (as mutual orientations) and the self-events are always orientational. Co-being arises from and flows into co-becoming.

Buddhist thinking refers to the concept of *dependent co-arising*, which refers to the awareness of the creative process by which co-becoming is balanced with co-being. In this process, the individuals become aware that their attempts to ground themselves in the permanence of being is set against the background of the continuous living flow of becoming (Pickering, 1999; Varela, Thompson, & Rosch, 1991; Wilber, 1979). When individuals become fully open to each other during interpersonal encounters, the experience of orientation toward each other is both indeterministic and endless, the experience of «infinity» (Levinas, 1969). In these meetings, the other person becomes the self and vice-versa, there is no sense of being directed or receptive, only a feeling of selfhood dissolving into union. One sees the same humanity in the other and meets the other without reserve and in the fullness of other's vulnerability to be changed. These have been called «I-Thou» as opposed to «I-It» relationships (Buber, 1958).

Insert Figure 1 Here

This balance between being and becoming is only one part of the spectrum of self-awareness. One can shift the balance either more toward becoming or more toward being (see Figure 1).

One pole of self-awareness is that of pure becoming, *when experience is completely orientational*. One is oriented toward another person or thing without an end or resolution. There is a merger with that thing, the experience «of eternity, the complete absorption in being" (Loewald, 1980, p.141). Because the sense of self arises only as orientations coalesce into

events, purely orientational awareness cannot involve a sense of self. In Fridja's (1985) view, for example, emotional experience has this character. One you attack someone or something in rage, for example, there is a complete absorption in that thing or person (as when a person says, «I completely lost myself,» or «I didn't know what I was doing.» At the time of making such statements, one is reflecting on having had *an experience of anger*. During the experience, however, there is no sense of I or you. In relationships, partners fail to provide each other with closure and confirmation for their actions. When infant self-initiated acts are not facilitated by the family system to help the infant appreciate what acts lead to what consequences, for example, then the inner experience will not be felt as the infant's own (Sander, 1962).

The other pole of self awareness is pure being, when *events lose their orientational character*. There is no change because no matter the orientation, the result is the same event. These are "experiences of fragmentation" such that "each instant loses its relation to any other instant and stands by itself" (Loewald, 1980, p.143). One feels estrangement, depression, helplessness, depersonalization, and alienation when faced with unchanging circumstances, stubborn people, irreconcilable differences, chronic tensions or anxieties, or persistent negative emotions. In these cases, the self fills one's awareness with a kind of heaviness. Thoughts and emotions are self-focused and attempts to orient away from the self typically flounder in a sense of self-negation or self-inflation. Being lost or losing all of one's freedoms may lead to this experience of an absence of self.

Periods of being or becoming may last only seconds or minutes, as when the resolution of a communication process takes longer than expected, or much longer periods as in chronic depression. The orientational experience of self, therefore, is not a static, stored, or structural thing. It is an appearance and disappearance, a coming and going. In conversation, for example, one goes between a selfless merger with the other, an awareness of a co-created self experienced in the effort to dialogue, or a heightened focus on one's own needs at the expense of the other. In athletics and other movement activities one alternates from concentration to flow, from an

awareness of the self-other relationship and its implications for action and emotion, to selfless immersion in the moment, or to excessive shame or pride at winning or losing.

Ideally, then, a sense of a unique self occurs when dynamically unfolding orientations coalesce into stable events, each having a particular emotional quality and a particular connection between self and other. In the same way that orientations self-organize dynamically into events during microseconds and seconds, observation suggests that events are perceived to self-organize into sequential patterns of events over minutes, hours, or days. These sequential patterns of events in communication systems are called frames. The sequential coherence of events and its connection to the self is the topic of the next section of this paper.

AUTHORSHIP

The psychological coherence of patterns of event sequences is captured by the concept of frame. *Frames are sequences of events that have a coherent theme, that take place in a specific location, and that involve particular forms of mutual co-orientation between participants.*

Frames have a temporal organization -- a beginning, middle, and end -- in which the events in the frame cohere (Bateson, 1955; Fogel, 1993; Goffman, 1974; Jones, 1990; Kendon, 1985).

Examples of frames are greetings, topics of conversation, conflicts, or children's social games.

Frames are coherent patterns that result from self-organizing processes.

Because events are partly orientational, the events in a sequence can change in order to establish a psychological relationship with each other. In this way, all the events in the frame are co-constructed with all the others, an example of self-organization. In the same way that events coalesce and become stable from the dynamics of orientations, frames coalesce as coherent patterns out of the dynamics of event sequences. Because of these psychological stabilities in the flow of action over time, individuals have the opportunity to perceive a stable sense of self in relation to the frame.

Frames are similar to narratives, the latter referring primarily to coherent sequences of verbal communication. *Narratives* have a stable theme that emerges from the self-organization of the events, they have an orientational direction of flow over time that motivates the movements

of the actors and events (Ginsburg, 1985; Hermans & Kempen, 1993; Haviland & Kahlbaugh, 1993; Jones, 1990; Ricoeur, 1983). Single events are created in a period of microseconds and seconds, enough time for one to experience an approach or withdrawal orientation. Narratives, on the other hand, are assembled over longer periods of time, over minutes or hours or even longer periods. At this time scale the individual can perceive new stable aspects of the self, beyond simple orientation and emotional value.

As the individual becomes aware of the narrative/frame as a whole unit (e.g., a particular form of play or conflict in a dyad or group) the narrative is perceived as an event in itself. The same considerations that apply to the prior discussion of orientations and events can apply to narratives. The perception of the narrative as whole event can occur in microseconds or seconds, while at the same time the individual can also experience the actual unfolding of the narrative over minutes, hours or days. In this way, the entire history and future of frames that extend for long periods of time can come into existence as an event in the present (Fogel, 1993; Merleau-Ponty, 1962).

Some theorists (Stern, 1985; Tomkins, 1962) suggest that a new type of emotional experience, different from that of orientational emotions, arises over the time scale of narratives and that these *narrative emotions* partly account for the perceived coherence of narratives. In the creation of a narrative emotion, the specific values of orientational emotions from each event in the frame do not simply sum together. Rather, the emerging coherence of the events in the frame is partly accounted for by the emerging coherence of a narrative emotional process that is perceived to link events meaningfully together through time.

Observational research suggests that each narrative emotion forms into smoothly unfolding temporal contours, patterns of feeling experience (Tomkins, 1962) that have been called «protonarrative envelopes» (Stern, 1985; 1993). These contours create «feeling qualities best captured by such kinetic terms as ‘crescendo,’ ‘decrescendo,’ ‘fading,’ ‘exploding,’ ‘bursting,’ ‘elongated,’ ‘fleeting,’ ‘pulsing,’ ‘wavering,’ ‘effortful,’ ‘easy,’ and so on» (Stern,

1993, p. 206). The temporal contour of a crescendo, for example, is a relatively slow build-up of emotion, reaching a peak and then declining rapidly.

Each narrative emotion also has a meaning for the self, the personal harms or benefits of the relational connections in the frame (Frijda, 1986; Stern, 1993; Tomkins, 1962). These are experiences that connect events over time in some meaningful way for the self. Narrative emotions include, therefore, experiences that take some time to unfold and that establish a personal relational meaning such as love vs. hate, respect vs. disrespect, security vs. insecurity, togetherness vs. loneliness, safety vs. threat, pride vs. shame. Security can only be felt in reference to the consistency of interpersonal contact over the course of a frame. Security has a different temporal contour than other narrative emotions, a steadiness that accompanies feelings of enjoyment or comfort.

Narrative emotions self-organize over time through a process that magnifies or minifies the psychological meaning of particular events by focusing or diffusing the experience of initial relational orientations over a sequence of events (Demos, 1982; Fogel et al., 1997; Lewis, 1995; Lewis, this book; Sarbin, 1986; Tomkins, 1962; 1978). Consider the following example.

Walking down a lonely street at night one hears, or thinks one hears, a sound coming from behind. One's orientation (attention and posture) toward the direction of movement becomes changed to having more urgency and one's orientation toward what is behind comes into existence for the first time as wariness. What happens next depends upon the specific way in which emotion magnifies or minifies this orientation. Perhaps one turns around and notices a cat, which minifies the potential fear and magnifies the orientation to continue at the same pace, lowering the potential to perceive threat. Or perhaps one turns to see a person. The subsequent process depends upon whether that person is a man or woman, whether he or she is following or merely walking in the same direction, whether there are people ahead, or street lights.

The experience of participation in frames, therefore, inevitably highlights the self in a particular manner. Is there anything the person can do to protect themselves from harm? To calm themselves? To take charge of the situation? *The time scale of narratives allows the self to be*

aware of a sense of their own agency. I will follow Day and Tappan (1996) use of Bakhtin's (1981) concept of *authorship* to describe that sense of agency. Authorship refers specifically to the sense of self that can only be experienced as a co-agent in the construction of a social narrative, a story about the self meant to be communicated to another person. Authorship, however, can vary from being to becoming, as shown in Figure 1.

Other terms for agency are similar – self-efficacy, perceived control – but they fail to explicitly specify their links to the relational dynamics. The purpose of this chapter is to show how particular features of self experience can be linked to the emerging stabilities present in communication processes at different time scales.

Authorship can also be experienced in non-verbal frames in parent-infant communication (Fogel, 1993; Stern, 1985). Stern (1985) refers to the sense of self that involves an awareness of agency and narrative emotions as the *core self*, which begins around the third month of life. As an example, my colleagues and I made weekly videotapes of mother-infant communication for the first year of life as mother and infant played with toy objects. The examples below came from one weekly session of one of the dyads at three months. In this frame, the infant is lying on her back on the floor and her mother is sitting beside her holding a toy rattle. The infant is capable of putting her hand in her mouth yet does not have the ability to reach for objects. In the sequence described below, however, there is a transfer of the object from the mother's to the infant's hand. How does this occur?

The infant is looking at the rattle with her hand in her mouth, as mother moves the rattle in the infant's line of vision but out of the infant's reach. The infant's hand comes out of her mouth and moves toward the mother. At the same time, the mother begins to move the object toward the infant's hand. A period of ten seconds ensues in which the mother adjusts the orientation of the rattle while the infant opens her palm and watches. The mother then places the rattle in the infant's

hand. The infant grasps it and then brings the hand, containing the rattle, back to her mouth.

In this frame, the infant is oriented toward the self (hand-in-mouth) and at the same time toward the object held by the mother. The infant's acquisition of the object, with the mother's assistance, is then integrated into the same pattern of self-directed activity as the hand with the object is returned to the infant's mouth. The infant's sense of authorship in getting the object to her mouth arises as her orientations form into events and events form into a frame during a communication with the mother. It would be difficult to imagine any sense of authorship for the infant outside of a frame or narrative construction. One must have at least a minimal cause-effect sequence for the experience of self as agent. Another instance of the same frame occurs a few moments later, after the infant drops the rattle.

The mother moves the rattle in the infant's line of vision and out of reach as the infant looks at the rattle. This time, however, her hand is not in her mouth but is held out in front of her. The mother continues to move the rattle and the infant looks off to the side and puts her hand in her mouth. The mother calls her name and she turns to look at the mother as her hand comes out of her mouth. At this point, the mother tries to insert the rattle into the infant's palm but the infant looks away once again. The infant turns to look at the rattle and the mother tries again but the infant closes her palm, displays a distressed expression, and turns to the side, fussing.

By contrasting these two examples, we can see the variability in the emergence of authorship between instances of the frame. In the first example, the emotion -- attentive interest in the object-- is oriented simultaneously toward self and toward the object. The continuation of that emotion depends, first of all, upon the changing communicative events within the frame, specifically, upon the mother and infant's co-regulated mutual adjustment of their hands. The continuation of the emotion of attentive interest also appears to depend upon the connection of that co-regulated communication with the infant's orientation toward the self. The object transfer event depends, in other words, upon the incorporation of the object into the infant's self-orientation (moving the hand from the mouth, to get the object, and back to the mouth). Note also that the temporal contour of the emotion during the successful object transfer appears to be a steady focus of attention on the coordination of action. The infant is more likely to have a sense of self as author of the narrative when the communication is co-regulated, the orientations become events, and the events address the emotional concerns of the self over the course of the frame (see Figure 1).

In the second example, the infant does not appear to have a coherent sense of authorship. This lack of a sense of authorship/agency is connected to the distinction, made earlier, about whether orientations are directed or receptive, whether one perceives a sense of control by acting toward the environment or whether the environment is perceived as acting on the individual. When orientations are open, the result is a co-regulated balance between directed and receptive stances, a dialogue between self and other. When receptiveness occurs in this context, it can be perceived as a part of the sense of authorship. In the second example, however, the experience of receptiveness is not pleasant for the infant and most likely is accompanied by a loss of a sense of perceived control over the sequence of events. The unsuccessful transfer also has a different

temporal contour of emotional experience, beginning with fluctuation rather than steady attention (wavering) and ending with a rapid build-up (crescendo) of distress.

In the following example, also from my research, there is a balance of being directed and receptive and a corresponding sense of authorship. Once infants are able to reach and grasp objects (about five months), they are reluctant to release them. It takes another three or four months for infants to learn how to give as well as to receive objects. The following example comes from the same dataset of weekly videotape recordings. It reports on an observation of a different mother-infant dyad when the infant was nine months (see Fogel, 1993, for more details about this example). The example is the first weekly session in which we observed the infant voluntarily release the object into the mother's hand.

Mother and infant are seated across from each other at a child-sized table. The infant has a toy fork in his hand and holds it out toward his mother. As he moves the fork toward his mother, she begins to move her hand toward his hand. She opens her hand in a palm up gesture just underneath the infant's hand. The infant orients his hand as if to place the fork into the mother's but does not release the fork. He looks intently at his hand and at the fork and gradually begins to open his hand. The tines of the fork catch on the mother's open palm as she slowly begins to pull her hand back toward herself, but without closing her palm. At the same time and at the same rate, the infant's hand continues to open. At some point, the fork falls into the mother's open hand and she grasps it and brings it up to her chest, smiling. As she

does this, the infant watches the movement of the fork away from him while his hand remains extended outward and open. Finally, the infant gazes at his mother's face and begins to smile.

In this third example, like the first example, mother and infant communicative actions were co-regulated into a gently increasing temporal contour. The mother's movements of her hand toward her body, for example, were coordinated with the infant's opening of his palm. The infant's orientation toward concerns of the self was seen over the course of the frame in the intensity of the gaze at his own actions with the object and the care with which he released the object into the mother's hand. The infant's emotional experience of joy at the accomplishment of the object transfer, reflecting a sense of authorship within the frame, emerged from this intensity of interest in combination with the co-regulated communication with the mother.

This third example also shows the first instance of a new developmental achievement: the infant's voluntary transfer of an object to the mother. In everyday communication, orientations serve the participants by providing an initial stance from which communication becomes possible and a relative openness to emergent and creative processes that allow communication to be spontaneous and to address the concerns of the participating selves. We can see from this example that these same properties of orientation additionally allow for the emergence of a developmental change, the emergence of novel events and frames that have never before appeared in the communication system. In the weeks following the novel object transfer event in the last example, a new frame of give-and-take appeared, allowing the emergence of new orientations that did not previously exist in this dyad and new ways of experiencing the authorship of the self-in-relation (the self who can give and receive with another). These new forms of mutual activity also brought new emotional and self experiences with them.

Development is conceptualized as a change in the process by which a system's constituents change each other to create a newly emergent frame, a change in the process of change. As frames change developmentally, so do the corresponding experiences of self and emotion.

IDENTITY

It is possible for the individual to develop a sense of oneself over developmental time. Because any particular instance of framing involves an experience of self, and because framing involves the re-enactment of similar patterns that have occurred in the past, there is the possibility during frames for the individual to perceive the similarities between the present experience of self and the past experiences of self. *Identity is the experience that the self endures through time and that this self through time has preferential orientations that enter into particular forms of creativity, particular propensities for change and stability, and predispositions for particular patterns of framing* (Bosma, 1995; Erikson, 1968, Hermans & Kempen, 1993; Lewis, 1995).

Previous authors used the term identity to mean the particular manifestation of self through time that begins during adolescence and involves a growing commitment to career, gender role, or religion. Without negating that use of the term, one can see more general instances of between frame comparisons that begin as early as the end of the first year of life. During Piaget's third sub-stage of sensorimotor development, infants begin to compare and to integrate past and present schemes. During the fourth sensorimotor sub-stage, infants begin to use one frame as a means for another. It is at this age, for example, that infants begin to tease their parents, showing that they can take a past frame and transform it into a means to create something emotionally different in the present (Reddy, 1991). These developments indicate that infants develop a sense of their own agency and an understanding of the causal links between current actions and past actions. This is also the age at which secondary intersubjectivity

emerges, the ability to refer to a different frame outside the context of the current frame, as in pointing to an object in order to bring it into the discourse between mother and infant (Trevarthen & Hubley, 1978). According to Stern (1985), this is the period of emergence of the *shared self*

The coherence of the past and present in relation to the self as a whole, however, does not develop until the age of four years. After this age, children can consistently remember past experiences of themselves and weave them into a narrative account about themselves. «The child's representational system can begin to 'temporalize' what were previously successive and unrelated states of the self into an organized, coherent autobiographical self-concept» (Provinelli & Simon, 1998, p. 189). This has been called the «proper self» (Provinelli & Simon, 1998), the «extended self» (Neisser, 1991), the «narrative self» (Stern, 1985), and the «autobiographical self» (Nelson, 1989).

What is common across all these forms of self awareness is the sense of an identity between frames. It could be the current frame in relation to the past (e.g., I am the self who typically is shy in social situations). Alternatively, it may be the current frame in relation to cultural frames (e.g., I am the self who is similar to a shy character in my family or community, or in literature, TV, or film). Identity is also about one's relationship to cultural definitions of identity (I am the self who can more readily remain active in old age because there are more cultural models for successful aging).

Identity is experienced with respect to reference emotions involving the relative success of making these comparisons or of meeting the standards implied by the comparisons. These emotions include satisfaction vs. dissatisfaction, harmony vs. conflict, achievement vs. failure, frustration vs. elation, and approval vs. disapproval. One can accept one's self as shy in social situations, for example, or feel dissatisfied with one's self because of it. One can feel in harmony

with cultural standards or in conflict. The self-comparison emotions can be observed in infants beginning at the end of the first year and the comparisons with others or with cultural standards (e.g., gender roles) emerge by the third year, both inside and outside the family (Emde & Oppenheim, 1995; Kitayama et al., 1995; Reddy, 1991) .

Although the topic of identity as typically construed brings up the issue of a cognitive representation of the self through time, I am suggesting that identity is an emotional experience – not cognition or representation. Following along the theme of this paper, identity is the emotional perception of the coherence of a relationship over a developmental time scale. Identity, like orientation and authorship, arises in one's experience of being a participant in a communicative relationship.

Ideally, identity is created and re-created dynamically, always partly orientational, a balance between being and becoming. On the other hand, identity can become lost at the pole of becoming or centered on the self in the form of a personality disorder (cf., Figure 1 and Lewis, this book). On the side of becoming, identity can lose coherence, especially during periods of developmental change (Dunne, 1996). Individuals may experience periods during which they have lost their identity, as during transitions in career, marital status, or gender role (Erikson, 1968).

Ricoeur (1996), for example, defines «narrative identity» as the personal stories that endure against the background of life changes, a definition that could apply at any age. Identity emerges in the retelling of something about the self in the past. This is because, as shown earlier, the self is defined in the process of communication. In autobiographical writing, authors do not merely recount the past but are "deciding what to make of the past narratively at the moment of telling" (Bruner, 1990, p. 122). Identity also arises when one selects existing cultural narratives as frames in which to tell one's own story. An individual may frame their identity in terms of cultural

narratives for gender, speaking as females from the perspective of stories of communion or as males from the perspective of stories of independence (Gergen & Gergen, 1995; Miller, Mintz, Hoogstra, Fung, & Potts, 1992; Mistry, 1993).

The sense of identity can be perceived as an event in realtime, as one reflects upon oneself across developmental time. Identity then, as an event, is partially orientational over a developmental time scale, becoming stabilized into an event over a period of years. In these co-regulated dynamics, self perspectives become magnified and minified in relation to other's narratives about the self and the resulting emotions (see Bosma, 1995; Haviland & Kahlbaugh, 1993; and Lewis, 1995; for more detailed descriptions of identity/personality development).

One can move this discussion to the cultural level. The types of identity narrative in a culture also develop over historical time, presumably by the same types of change dynamics discussed earlier. During the 19th century in Western Europe and North America, gender identity was defined with respect to the differences between men and women. In the mid-20th century, androgyny became more salient as a theme in gender narratives. In the latter decades of the 20th century, gender narratives involve the self-construction of one's own gender identity and sexual orientation (Gergen & Gergen, 1995). One of the features of the end of the 20th century is rapid cultural change in identity narratives. *When cultural change is the backdrop for individual and relationship changes, the indeterminism of self development is increased and places increasing demands on individuals to maintain an open orientation to change at all levels in order to allow identity to develop freely* (Cole, 1996; Erikson, 1968; Gergen, 1991).

TIME AND THE SELF

The experience of self, then, can occur with respect to different time scales: events, frames, and development, shown in Table 1. One can expand the ideas in Table 1 by including longer time scales. The developmental time scale, mentioned above, refers to the changes that

occur every few years. The individual can become aware of cumulative changes, leading to increasingly complex senses of self and emotion. The particular form of identity that begins in adolescence seems to require a time scale of 15 years or more before the individual becomes aware of the frame comparisons related to the self's role commitments. This may be due in part because one needs the lengthy perspective on self and also in order to integrate the complex array of identity frames of the culture into a view of the self. According to Erikson's (1950) theory of psychosocial development, each stage of the life course brings with it a newly emergent sense of self, involving different types of self experiences and different kinds of emotions. Preschool children, for example, take on an identity in the eyes of others, feeling pride and shame (emotions related to their view of how others perceive them) for the first time. As young adults make choices about marriage or career, they acquire sociocultural identities and feel emotions of commitment or alienation. The older adult becomes aware of an identity of a person who dies, of the uniqueness of his or her life course, and experiences emotions such as wisdom and detachment. As people near endings, especially those at the end of life, emotional awareness becomes heightened as well as a corresponding appreciation for one's unique lifecourse (Carstendrn, Isaacowitz, & Charles, 1999).

In addition to the time scale of life course duration, as described in the last paragraph, change itself has an emotional meaning for the self, at all time scales (Fogel et al., 1997).

Personal histories are processes of change in time, and *the change itself is one of the things immediately experienced* (James, 1976, p. 25)

A critical dimension in defining and describing emotional experience, therefore, focuses on the concept of changing states (Stein, Trabasso, & Liwag, 1993, p. 281).

The emotions of change are certainty vs. uncertainty, stability vs. instability, determinism vs. indeterminism, order vs. chaos. Note that these emotions reflect the types of experience along the pole of being and becoming (see Figure 1). Order emerges on the being side while chaos may be felt on the becoming side. These emotions of change, as well as experiences that appear at different time scales of emergence, are summarized in Table 2.

Insert Table 2 Here

The emotions of change refer to the relative changeability of the other emotions. During transitions in romantic relationships, for example, the relational emotions may fluctuate rapidly, between security and insecurity or between joy and despair. These fluctuations create the change emotions of uncertainty and chaos. It is by these emotions of change during transitions in togetherness or intimacy that one recognizes the importance of the relationship for the self.

The maintenance of creativity and orientational flexibility in the face these uncertainties reflects a balance of being and becoming and is thought to facilitate optimal developmental change (Antonofsky & Sagy, 1990; Block & Block, 1980; Csikszentmihalyi 1990, 1996; Isen, 1990; Malatesta & Wilson, 1988). Change, therefore, can be experienced either as highly creative or as distressing and disorganizing, depending upon how individuals are supported in their important relationships while in the process of changing. *When most creatively balanced, individuals may seek change, magnifying their emotions of fear or success, uncertainty or certainty, in order to continue acting near the edge of chaos. At other times, people may find change more aversive, keeping their emotions within prescribed boundaries and maintaining the stability of previously "safe" frames for communication and emotion when faced with perturbations that are likely to lead to change* (Antonofsky & Sagy, 1990; Bütz, Duran, & Tong, 1995; Fogel & Lyra, 1997; Lewis, 1995; Rogers, 1961; Stern, 1985).

Both positive and negative emotions, then, may be important for navigating periods of change because all emotions provide information about the self's concerns in the relationship. The idea that emotions can be usefully magnified in the service of change runs counter to traditional emotion narratives from Western culture. In these narratives, emotions are irrational impulses, originating from the inside the individual, driving us to act in involuntary ways. Traditional Western narratives for mature identity, on the contrary, reflect themes of rationality, self-determination, and responsibility. «Emotions, with their alleged irrationality, would seem to seriously undermine this cultural ideal of personhood» (Fischer & Jansz, 1995, p. 61). In adopting these traditional narratives, we devalue the opportunities of change, times when events become more orientational and emotions more intense and unpredictable (Bütz et al., 1995).

There are a diverse variety of therapeutic methods -- ranging from psychotherapy, to body and movement awareness, to meditation and spiritual practices -- involving the enhancement of flexibility and creativity in the face of pain or changing, unpredictable circumstances (Antonovsky, 1993; Rogers, 1961; Wilber, 1979). The goal is finding a balance, which in the perspective of this paper, is optimal creativity and optimal stability, a balance between being and becoming, and a heightened awareness of being a co-participant in a relational process. These approaches can help individuals develop an alternative cultural identity with narratives for connection between persons in caring relationships with others and with the environment and for trusting the inherent value of emotional experience to guide one through the currents of chaos and change.

CONCLUSIONS

In this chapter, I have presented a view of communication, self, and emotion based on the *primacy of relationships and their change dynamics*. Each time scale allows the individual to perceive different aspects of the self. It is as if these different avenues of self awareness are the

natural consequence of the time it takes for events on different time scales to emerge in relationships and for the psyche to detect them. In addition, single events, authorship events, and identity events can all be perceived in the present and at the same time. Single events can change a frame more readily than they can change a culture or an identity but theoretically, every single event is in some way part of the events that change at all levels. One of the issues left unexplored in this chapter is a detailed accounting of the co-regulation that occurs across these different levels.

Also unexplored in this chapter is the relationship of the authorship/identity system to events that emerge over longer time scales. These include historical, phylogenetic, geological, and cosmological time scales. The way in which events are constituted from orientations depends in part upon the sensorimotor, emotional, and cognitive systems that evolved on this planet. The main narratives of culture depend as much on interpersonal relationships and their changes as on relationships with the earth and its changes.

Another unexplored topic is the historical pathways by which orientations and events enter into frames and by which frames enter into identities and by which events. Each specific single event or frame in a relationship has a history. In some cases, events and frames form and later disappear, with no perceptible effects on the system. In other cases, particular frames and events become amplified into seeds for developmental and historical change (Fogel & Lyra, 1997; Lyra & Winegar, 1997). These *relational-historical* dynamics are part of a more complete understanding of communication systems and the self.

More can be said about the role of the body in self awareness. The sense of self and identity emerges from relational dynamics because the body is specialized to create emotional experiences for the temporal contours and relational meanings of events within frames. And

reciprocally, the particular features of orientations, events, frames, and cultures owe their identity to the possibilities of emotion as experienced by the human body.

Research methods were not discussed in detail. In general, research that follows from the theoretical principles in this chapter must be focused on the process of change over time by which orientations coalesce into events. This requires a sequential analytic approach as illustrated in the narratives taken from my research. It is essential to track how a psychological process unfolds over time -- at all time scales -- in the context of co-regulated communication between the person and the environment. It is important to understand what kinds of sequences promote open compared to closed orientations and how developmental creativity can be facilitated in relationships.

Writing this chapter was an opportunity to author my own theoretical identity on the problem of how the self is created in the midst of relational changes, to become aware of my position in the scholarly community, and to realize where I am incomplete. I was comforted by the work of many others who have authored narratives of relationship and the indeterministic creativity of emotion and self. The individualistic narrative forms of the scientific culture are changing as they co-regulate with narratives of dynamic systems and relationships. In this fluid culture of change, the challenge is to create a relatively stable narrative identity granting autonomy within connection, accepting self loss against the background of self emergence, preserving individuality as a part of the human relational ecology.

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Table 1. Time scales and self experience. It takes only seconds to become aware of some aspects of the self and years to become aware of other aspects of the self.

Topic	Event	Frame	Development
Time Scale	Seconds	Minutes, Hours	Years
Sense of Self	Orientation	Authorship/Agency	Identity
Type of Experience	Orientalional emotions	Narrative Emotions	Reference Emotions

Table 2. Summary of different types of emotion according to type of change process.

Type of Change Process	Emotional Experience
Orientation to Event	<i>Orientational emotions:</i> approach vs. withdrawal, directed vs. receptive, open vs. closed
Event to Frame	<i>Narrative Emotions:</i> Love vs. hate, respect vs. disrespect, security vs. insecurity, togetherness vs. loneliness, safety vs. threat, pride vs. shame
Frame to Frame Comparison	<i>Reference Emotions :</i> Harmony vs. conflict, satisfaction vs. dissatisfaction, approval vs. disapproval, achievement vs. failure, elation vs. frustration
All Changes	<i>Change Emotions:</i> Certainty vs. uncertainty, stability vs. instability, determinism vs. indeterminism, order vs. chaos

Figure 1. The spectrum of self-awareness, from being to becoming.

