A Narrative-Developmental Approach to Early Emotions

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Abstract: Over the past decades a great deal of attention has been dedicated to the broadening and diversification of the notion of narratives, which lead to a variety of models for narrative analysis and encouraged some to speak of a "narratological renaissance" (e.g., CURRIE, 1998; HERMAN, 1999). However, the application of these concepts to early development has faced a major challenge—the use of narratives (as both a theoretical framework and a methodological tool) to examine psychological processes prior to the acquisition of language. The present contribution offers a systematic approach to examine early emotional development grounded on narrative traditions. I begin by briefly presenting the relevant literature and linking it with the narrative-developmental approach proposed herein. This approach, I contend, implies that narratives and development are inextricably anchored to one another as narratives evolve over time through communication processes. I then describe within the narrative analysis the steps that I have developed to investigate emotions in the context of parent-toddler relationships. Thus, the narrative-developmental approach discussed aims to provide a conceptually grounded qualitative methodology to microscopically investigate the development of emotions and to demonstrate the inherently emergent nature of narratives.

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1. Introduction

Studies of emotion have often emphasized discrete aspects of the emotion phenomenon such as facial expressions and heart rate. Based on Darwin's early work, emotions have been conceptualized as biologically inherited programs that control autonomic, blood-flow, respiratory, vocal and facial muscles responses (e.g., DEMOS, 1988; IZARD, 1997; TOMKINS & McCARTER, 1995). Within this tradition, a core set of basic emotions exists with each of them presenting a
distinct cluster of responses. Thus, the existing literature tends to highlight three features of emotions to differentiate them from other psychological processes: (a) emotions fit discrete categories; (b) emotions tend to be brief and multi-faceted to include facial expressions, cognitive processes, and physiological changes; and (c) emotions are personally meaningful, and thus possess an object (for a recent review, see Fredrickson, 2001). Similar to current perspectives on emotions, I conceive of emotions as personally meaningful and constituted by a plurality of elements, including facial expressions and body movements. Conversely, emotions are also conceptualized as ongoing relational processes (and not brief, discrete categories) that vary along a continuum of pleasantness and activation (see also Fogel, Dickson, Hsu, Messinger, Nelson-Goens, & NWOKAH, 1997). [1]

The term emotion, however, appears to be deeply rooted in the tradition that emotions are states expressed outwards through the face and body, which are often regarded as discrete measures. I contend that although emotions include facial and bodily movements, these are continuously situated within relational scenarios that endow meaning to them. This paper illustrates how these relational and meaningful experiences (i.e., emotions) cohere into patterns of activity that hold a story-like organization. Within this framework, emotions are continuously embedded in (as well as constitute) the stories of which they are a part. I adopt this axiomatic assumption in order to avoid the inclination toward fragmenting emotions into discrete categories or putting emotions inside of individuals. Consequently, narratives serve as a coherent background upon which emotions emerge. [2]

2. Narratives, Emotions and Time

In addition to proposing that emotions are relational and storied processes (e.g., Sarbin, 1989, 1995), some narrative theorists (e.g., Polkinghorne, 1988; Rasmussen, 1996; Ricoeur, 1981) have focused their discussion on the dynamics between time and narratives. It is suggested that narratives have a developmental, always-changing quality inherent to them. Polkinghorne (1988), for instance, suggests that stories simultaneously contain two dimensions of time—chronological and non-chronological. The chronological dimension is characterized by the addition of events to a series, whereas the non-chronological dimension "lifts the events into a configuration so that, scattered though they may be, they form a significant whole." (p.131) Similarly, Ricoeur (1991) discusses the affiliation between narratives and time in terms of two dimensions.

"We could say that there are two sorts of time in every story told: on the one hand, a discrete succession that is open and theoretically indefinite, a series of incidents (for we can always pose the question: and then?). On the other hand, the story told presents another temporal aspect characterized by the integration, culmination and closure owing to which the story receives a particular configuration." (p.22) [3]

The essential link between these two time dimensions is the concept of emplotment. Emplotment is the process of synthesizing the multiplicity, and often...
times, chaos, found in series of life events (i.e., chronological time) into a complete and meaningful story (i.e., non-chronological time). Based on this idea, I maintain that emotions develop over time as the coherence (or emotional significance) of series of microscopic events arises through communication processes—and thus, the view of "emotions as narrative emplotments". [4]

Before I proceed with the explanation of the principles and steps of the narrative-developmental approach, I should clarify what the term "narrative" means to my investigation of parent-toddler transactions. [5]

3. Brief Comments on the Term "Narrative"

In psychology, the term "narrative" has been utilized in diverse ways. Various lines of research can be found and these reflect subtle distinctions in the role narrative plays in developmental investigations. For instance, HERMANS (1996, 1997) employs it as a theoretical window to examine self-development across the life course. Along with HERMANS’ framework, FOGEL (1993, 1996) examines self development as narrative processes that emerge through infants' actions on themselves. The approach I propose aims to use narratives simultaneously as a theoretical and methodological means to examine emotional development in the context of parent-toddler transactions. Consequently, narratives are not restricted to verbal recollections of series of life events. Rather, narratives include facial and bodily movements that cohere into patterned configurations in the context of early interpersonal relationships. Thus, the concept of narratives I am using encompasses an emergent, pre-linguistic, and embodied narrative. [6]

4. From Theory to Methods: Frames as Minimum Unit of Analysis

A number of emotion theorists have pointed to narratives rather than specific elicitors as providing the minimum unit of emotion analysis (e.g., FOGEL et al., 1997; FRIJDA & TCHERKASSOF, 1997; SARBIN, 1989, 1995). The contemplation of emotions as relational and storied processes also requires a shift in the unit of analysis. I utilize FOGEL's (1993) concept of frames as a heuristic tool to promote this shift. "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" (FOGEL et al., 1997, p.11). Frames that occur in intimate adult relationships may take the form of an argument that two individuals engage in around a particular topic, in which the argument itself contains a patterned and sometimes repetitive nature. Displays of love may also constitute a frame. For instance, intimate physical exchanges between two adults become organized into creative and mutually gratifying patterns of gestures and movements, which present their own inherent and dynamic organization. In the context of early interpersonal transactions, bedtime rituals and playful games parents engage in with their children are also illustrations of frames. [7]

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1 This narrative-developmental approach does not find it fruitful to distinguish narratives from narrating, as the former evolves through the act of narrating.
Frames may be composed of the intonations of the voice, gestures, vocalizations, smiles, particular body locations, forms of co-orientation, topics of communication, and so on. What is most crucial in the identification of a frame, however, is the coherence that emerges out of the mutual influence the various constituents have on one another over chronological time. Subsequently, the concept of frame implies a story-like organization with a beginning, middle, and end, which is often recognized by both interactive partners. And emotions are the meaningful relational positions the parent and the infant take in the process of frame co-creation. Thus, frames are the smallest unit of emotion analysis. [8]

5. Narrative Analysis of Frames

A crucial component of the narrative-developmental approach consists of the qualitative and detailed descriptions of the emergence of emotions, using frames as the basic unit of analysis. Qualitative analysis, however, is a broad term that includes a wide range of techniques utilized by social scientists, including anthropologists, sociologists, and developmental psychologists (for more details, see DENZIN & LINCOLN, 1994). Among the various forms of qualitative methods, I focus on POLKINGHORNE's (1995) discussion of narrative analysis because it has been most helpful in providing analytical tools to my developmental investigation of early parent-child relationships. [9]

According to POLKINGHORNE (1995), when conducting narrative analyses, investigators begin with data in the form of descriptions of incidents and occurrences. It is the task of the researcher to select a bounded assemblage for study and to search for characteristic features of that assemblage. This method allows for the preservation and understanding of the idiosyncrasy and intricacy in the data. POLKINGHORNE (1995) defines narrative analysis as:

"... the procedure through which the researcher organizes the data elements into a coherent developmental account [developmental in the sense of implicating an always-changing, dynamic organization]. The process of narrative analysis is actually a synthesizing of the data rather than a separation of it into its constituent parts."

(p.15) [10]

In my investigation, emotions within frames constitute this bounded assemblage; and the narrative analysis steps discussed herein allows for the observation of the microscopic changes within the frames that constitute the process of development of early emotions. In order to adapt POLKINGHORNE's narrative analysis to the examination of early development, I have created a series of analytic steps applied to a longitudinal videotaped data of mother-infant transactions. With the purpose of providing the reader with sufficient information to better appreciate the benefits and shortcomings of the narrative-developmental approach, the following paragraphs describe these narrative analytical steps in greater detail. [11]
5.1 Narrative analysis steps

As in most phenomena-sensitive approach, the first step of the present narrative analysis consists of watching and re-watching each of the videotaped records of the parent-child interaction. The emphasis is on conducting a systematic observation of the potential frames as dyadic actions (such as vocalizations, gestures, gaze, body movements, breathing activity, and facial actions) coalesce over chronological time. The goal is to develop initial impressions of what might be the unfolding process of the dyad's emotional development (i.e., non-chronological time) within the changing context of the parent-infant relationship. This is important because it provides the investigator with a preliminary view of both stable and changing components of the dyad's relationship account. With such preliminary understanding of each parent-infant dyad, the observer has the potential to develop a better appreciation for identifying microscopic changes within frames. [12]

As part of the second step, "chronological narratives"—or sequence narratives—are created for each parent-infant dyad. A chronological narrative is the detailed description of the observed phenomena in terms of sequences of events (RICOEUR, 1981; POLKINGHORNE, 1988). To create sequence narratives, the observer describes, in a written form, what s/he sees on the videotape, thereby transforming the observational data into text. Two examples of sequence narratives are provided below. These examples are extracted from an intensive longitudinal study of emotional development in the context of mother-infant communication during the first six months of life (PANTOJA, 2000). The infant is referred to as Nathan and the mother as Linda. [13]

Example 1: Nathan is 10 weeks old

While Linda finishes adjusting Nathan's posture into his usual supine position for facilitating eye contact, Nathan looks at Linda, sticking his tongue out. As Nathan begins looking at Linda, Linda holds his arms, slightly leaning over him, raising her lip corners and says "Boysenberries" [referring to the drawing on her shirt that Nathan was looking at seconds before]. Nathan continues looking at Linda, raising his lip corners, while Linda continues looking at Nathan, repeating "Boysenberries", moving his arms while raising the intonation of her voice. When Linda finishes saying "berries", both Nathan and Linda begin opening their mouth together while maintaining eye contact and their lip corners raised, thereby forming a bigger smile. While Nathan holds his big smile on his face, looking at Linda, Linda closes her mouth, maintaining her lip corners raised and moving Nathan's arms as she says again "Boysenberries" with the same melodic voice. Nathan produces a long and loud sound, opening his mouth even more and moving his tongue inside of it, while his lip corners remain raised. At this point, Linda watches Nathan, raising her eyebrows and protruding her lips as if cooing at him. [14]
Example 2: Nathan is 11 week old

As Nathan begins vocalizing again, raising his lip corners and looking at Linda, Linda raises her eyebrows and lip corners, slightly tilting her head to her right side, touching Nathan's hands and saying: "It is!" [15]

I recognize that while the investigator transforms the observational data into text, s/he may not describe every dyadic action occurring in chronological time. The process of writing sequence narratives implies an interpretation—which is guided and refined by the research problem in question. For example, in the longitudinal study of early emotional development mentioned above, numerous revisions of the sequence narratives were incorporated as the observer gained further insight into the microscopic changes associated with the emergence of new emotion patterns. Through these revisions, microscopic changes previously overlooked in the narratives were incorporated, and thus new interpretations were inevitably included. This was because the details previously unnoticed, when incorporated into the sequence narratives, potentially transformed existing emotion patterns. Therefore, writing sequence narratives implicates a continuous process of interpretation, at the same time that constitutes a written record of these ongoing interpretations of the data. [16]

The primary goals of composing sequence narratives are thus threefold: (1) to transform the observational data into text—a text composed of successive events that are relatively "open and theoretically indefinite" (RICOEUR, 1991, p.22); (2) to create a careful record of the microscopic changes in the dyad's emotional development; and (3) to maintain a record of the changes in the observer's interpretations of the data. [17]

In the third step, the sequence narratives become the primary data. One has now reached POLKINGHORNE's original form of narrative analysis—the data in the form of descriptions. At this level, the investigator begins to identify more systematically the frames that emerge from the textual data. In a single case study, each session in the longitudinal data informs the frames that emerged in previous sessions—this is an iterative process also known as constant comparative method (DENZIN & LINCOLN, 1994; STRAUSS & CORBIN, 1990). Similarly, when the study includes multiple cases, the investigators inductively derive the frames by session for each dyad, and the frames that emerge from one dyad inform the identification of frames in another dyad. By doing so, one allows the additional sessions or dyads to append new frames or characteristics of frames to the existing set. At this point, the observer is moving toward the identification of common themes (frames) in the data. [18]

The fourth step of the narrative analysis includes additional re-readings of the sequence narratives, bearing in mind the frames that originated from the previous step. The purpose is to create stories that synthesize the emotional coherence of frames across sessions. With these stories, one begins to configure patterns of microscopic change involved in early emotional development. The objective is to emplot both the stable and changing elements of frames into a narrative that
synthesizes the development of the dyad’s emotional account. At this level of
analysis, one creates a historical\textsuperscript{2} narrative for individual dyads. The process of
writing a historical narrative thus includes multiple readings of the sequence
narratives accompanied by the re-watching of the videotaped data. In this
process, the investigator continuous to gain an understanding of both the
idiosyncrasy and the intricacy of the parent-infant dyad, thereby gradually moving
from common frames to unique stories. An example of a historical narrative
follows based on the segments of sequence narratives used above:

During their third and fourth visits, Linda and Nathan engage in a playful social frame
co-created over time. This particular frame, however, continues to be transformed
throughout the following visits. The dynamic stability of this frame is becoming an
integral part of the process of emotional development of this dyad as mutual laughter
becomes more systematically incorporated into their social frames. The positive
connection co-created by Nathan and Linda appears to expand at this point. Nathan
begins initiating these frames more consistently and explicitly: he gazes at Linda,
protruding his tongue (see example 1); or he begins vocalizing, raising his lip corners
while looking at Linda (see example 2). By introducing mutually identifiable
constituents of a playful positive connection, Nathan not only appears to recognize
the meaningful patterns of co-activity he co-created with Linda, but he also explicitly
contributes to the re-occurrence of these relational frames. [19]

When the study includes more than one case, a final step is incorporated. The
goal is to capture conceptual regularities (if any) across dyads in the way they
develop and transform their relationship over time (for an example, see FOGEL,
HSU, PANTOJA, & WEST-STROMING, 2001; PANTOJA, 1997). At this level, the
investigator aims to create a story strongly “characterized by the integration”
(RICOEUR, 1991, p.22) of the multiple historical narratives. This is another level
of narrative analysis in which the observer moves towards a synthesis of the
multiplicity of stories derived from different cases into a comprehensive theor-
etical framework (which, I argue, constitutes another story to be told). [20]

5.2 Summary

By outlining and describing the levels of narrative analysis employed in the
investigation of early emotions, I have articulated the theoretical and
methodological grounds of the narrative-developmental approach. To better
illuminate the potential utility of this approach, I present some data from another
longitudinal study on emotional development in the context of mother-toddler
relationships. My venture is to provide a systematic procedure to investigate early
emotional development while using narratives as its foundation. [21]

\textsuperscript{2} Historical as it incorporates present events in relation to those that occurred in the past and
those that may occur in the near future (i.e., developmental possibilities).
6. Emotions and Narratives in Splashing Frames: A Case Study

For this longitudinal study, mother-toddler dyads were recruited when infants were approximately 16 ½ months of age. Once recruited, dyads visited a laboratory playroom three times per week for 12 consecutive weeks. Mothers and toddlers were videotaped as they played at a water table for 15 minutes. I present data from the first nine visits of one mother-toddler dyad. This intensive case study affords looking at the microscopic emergence of emotions in the context of frames. To reiterate, frames are recurring patterns of action or "games" that are constrained by the affordances of the interactive setting, in this case, the water table. I show that different emotions emerge in relation to specific features of the mother-toddler frames, thereby constituting the dyad's emotional life. While describing the process of early emotional development in the context of frame co-creation, I will refer to the toddler using the fictional name Megan. [22]

6.1 Splashing frames during parent-toddler transactions

During the first nine visits, Megan and her mother co-create a unique routine constituted of narratives surrounding episodes of splashing. Specifically, 16 splashing episodes were observed. Throughout these episodes, changes in the configuration of the splashing frames as well as in the emotional tone developed within these frames were noted through the microscopic examination of facial and bodily movements. I focused on the splashing frames because of their unique affiliation with the water. The segments described are taken directly from the sequence narrative step of the analysis. [23]

During their first visit to the laboratory, Megan and her mother engaged in splashing frames four times. In the first frame, Megan's lip corners slowly raise, forming a subtle smile, as splashing occurs. The splashing frame seems exploratory and new in the dyad's relationship as illustrated below.

Megan and her mom are sitting next to each other in front of the water table. Megan is holding a toy in both hands, and she is looking at mom. Megan then uses her left hand to splash the water with the toy as mom watches. Megan's gaze is on her own hand as she splashes and then she gazes at mom's face, raising her lip corners. Mom seems to be looking at Megan's hand as she walks her fingers across the water toward Megan. As mom begins to walk her fingers, Megan's gaze goes to mom's hand, and Megan begins to move her left hand in and out of the water making small splashes with her lip corners still raised. [24]

In the second frame of the first visit, the splashing occurrence does not seem to hold together for long. This frame again seems new and exploratory. There is no mutual smiling or mutual gazing, and the splashing event is brief. This is illustrated in the following segment:

Megan is holding the same toy in both hands as she stands facing mom. Mom is sitting with her body turned slightly toward Megan as she gazes at Megan. Megan gazes at the ground and extends her hand holding the toy. As mom takes the toy and
puts it on the edge of the water table, Megan turns toward the water. Mom asks "jump in?" gazing at Megan's face. Megan splashes her right hand in the water as mom tosses the toy in the water. Megan's splashes become bigger. Mom turns to toy crate and asks "Ducky in water?" Megan stops splashing. [25]

In the third frame, however, the splashing frame appears more coherent and less exploratory. Multiple facial and bodily movements emerge during this frame. Both Megan and her mother smile in different ways (e.g., with jaw drop, with cheek raise) and vocalize with distinct high-pitches. Megan jumps up and down as she looks at her mother. At this point, a plurality of elements (e.g., high-pitched vocalizations, smiles, and body movements) begins to coalesce into a positive, relational connection between Megan and her mother. It is as if the dyad is beginning to build upon the earlier splashing moments, and they appear to experience these moments in a positive manner, thereby sustaining the splashing frame for longer periods. This level of positive relational connection and mutual amplification can be illustrated in the segment that follows.

Megan holds a toy in each hand. Megan and her mom talk about bubbles as Megan splashes with both toys. As she splashes, Megan squeals and says "bubble". Megan's lip corners raise as she lets out a high-pitched vocalization and turns to face her mom. Mom's lip corners also raise as she looks at Megan. Then, Megan's cheeks raise and her jaw drops slightly, adding to her lip corner raise. As Megan watches herself put the duck in the water, splashing, she begins to vocalizes high-pitched "ha, ha" sounds, raising her cheeks and dropping her jaw even more. Megan gazes back at mom with her lip corners and cheeks raised and her jaw dropped. At the same time, Megan begins to jump up and down. Meanwhile, mom looks at Megan with slightly raised lip corners. Megan stops jumping and turns back toward the water as her jaw closes and her cheek raise fades. Mom quietly watches Megan's face. Megan gazes at the water and her lip corner raise fades. [26]

Similarly, the fourth splashing frame of the first visit seems a bit more stable and richer: varying types of smiles, vocalizations, and laughter are observed. Megan's mother verbally highlights the splashing frame multiple times by saying: "Can you say splashing?" as the dyad's big smiles, mutual gazing and Megan's laughter continue to coalesce to form splashing frames. Therefore, throughout this first visit, splashing frames and positive emotions develop as the frames gradually move from being exploratory to becoming richer, more stable, and with a positive emotional quality. I argue that these narrative segments illustrate the microscopic emergence of positive emotions within splashing frames. [27]

While no splashing is observed during the second visit, another splashing frame occurs in the third visit. This frame is short lived and gradually diminishes over time. Megan is the one who initiates the splashing frame, while the mother redirects Megan's focus of attention to another toy (i.e., mouse in a boat). Note in the segment below that Megan has her lip corners and cheeks raised, forming a smile, as she lightly splashes the water. This suggests Megan's recognition of the previous emotional story co-created with her mother in the context of splashing. Megan's mother, on the other hand, does not engage in the splashing frame.
initiated by Megan, and thus not allowing the splashing frame to become mutually amplified in this third visit.

Megan stands in front of her mom looking into the water table with her left hand in the water and the index finger of her right hand pointed and touching the water. Mom is sitting behind Megan, saying something about Megan's hair. Mom shifts and moves her head to see what Megan is doing. Megan moves her fingers back and forth in the water, lightly splashing it, and her lip corners and cheeks rise. Megan opens her mouth as she vocalizes something like “haatkee”, continuing splashing lightly. Mom moves back behind Megan as she says “Go get mommy mouse... in a boat.” Megan's gaze moves outward. [28]

It is late in the first week and early in the second week that the splashing frame becomes more clearly and consistently established. At this point in the life of this particular dyad, the splashing frame became longer in duration and more diversified in its emotional content. Indeed, during the second week (visits four, five, and six), amplification and slight transformations of the previously co-constructed emotional tone of splashing frames are noted. Both Megan and her mother are extremely engaged in the splashing routine; they smile, gaze at each other, laugh, and orient their bodies toward the water and each other. Specifically, four splashing frames were noted. In the first one, both Megan and her mother mutually contribute to the emergence, maintenance, and dissipation of the splashing frame. This first frame unfolds as follows:

Megan is gazing at mom's face and mom is gazing at Megan. Megan has both hands in the water and is splashing by moving her hands back and forth in the water. Megan’s lip corners rise and her gaze shifts to the water. Mom moves her right hand into the water and begins splashing water onto Megan's hands. [29]

In the second frame, the splashing frame is short and gradually transformed into another game between Megan and her mother. During the brief moment of splashing, Megan and her mother were not smiling, laughing, and/or producing high-pitched vocalizations. As Megan gradually starts splashing more vigorously, her mother just watches her, not mutually amplifying the splashes. The third splashing frame, however, is longer than any splashing episode observed before. Both Megan and her mother contribute to the gradual enrichment of the splashing frame: they smile, vocalize, talk, laugh, etc. Throughout this whole episode, Megan uses the toy to make splashes in the water, while her mother, smiling with her lip corners and cheeks raised, talks to Megan about her water-related activities (e.g., “Are you getting mommy wet?” “Are you splashing?”). Gradually, the splashing frame seems to become more and more vigorous: splashes get bigger, and Megan and her mother produce a larger variety of facial and bodily movements that seem indicative of a positive relational connection. Towards the middle of the frame, a pattern in which splashes and laughter co-occur is developed.

Megan starts moving the toy up and down in the water creating big splashes. Mom closes her eyes and scrunches her face as the water splashes. Megan's gaze shifts
to her mom's face and then to the toy crate and back to mom's face as mom says "Are you gonna get mommy wet?" Mom's lip corners and cheeks rise as Megan shrieks. Megan's cheeks and lip corners rise and her jaw drops. Mom laughs as Megan's gaze moves to the toy in her hand and her smile fades. Mom, still smiling, says in a high-pitched voice "you think it's funny?" while Megan splashes with toy some more. Megan looks toward the toy crate, and then she shifts her gaze toward mom. As Megan's gaze shifts, her cheeks and lip corners rise and she says "what?" Mom complements "what? Are you splashing?" Megan splashes the toy again, creating a big splash. With a closed-eyes, rised lip corners, and rised cheeks, mom puts her left hand up with fingers extended and says "no splashing" in a high-pitched voice. Megan looks at mom's face and her cheeks and lip corners rise and her jaw drops wide open. [30]

During the fifth visit, one splashing frame occurs. This frame is relatively similar to the previous ones in that the dyad appears to continue experiencing and amplifying a positive, relational connection as part of the splashing frame. Laughter, high-pitched vocalizations, different types of smiles, and mutual gazing are all observed. At almost all times, Megan laughs as she splashes. Again, even when the mother says: "no splashing", she does so in a melodic and laughing voice. [31]

In visit six, a change is noted: the only splashing frame observed emerges with a slightly different tone. That positive, relational connection does not seem to prevail during splashing. First, instead of having Megan and her mother smiling, vocalizing, or laughing, as Megan reaches for the toy, both Megan and her mother had neutral faces. Additionally, instead of having Megan laughing as she starts splashing vigorously, Megan forms a subtle smile on her face. These nuances in the splashing frame suggest a potential emotional divergence between Megan and her mother within those frames. From the beginning of this splashing episode, a mutual amplification of the emotional tone that constituted splashing is no longer observed. Instead, Megan slightly smiles while her mother presses her lips together, raising her eyebrows as if not approving Megan's attempt to initiate splashing. Smiles now appear to have a different meaning for the dyad—it is not necessarily embedded in the context of a joyful transaction. [32]

For example, as soon as the mother lowers her eyebrows, Megan starts splashing again. At this point, the mother and Megan look at each other, and the mother explicitly tells Megan that she does not want her to splash and that she will not even look at Megan today if she continues splashing. In the third week (visit 7, 8 and 9), it is apparent that another form of emotional connection is evolving within these splashing frames. The splashing frames become short-lived again and present a tone of apprehension. The mother does not engage with Megan in the splashing, and Megan does not smile or laugh while splashing or gazing at her mother. Similar to the previous session, the dyad no longer reaches peaks of mutual joy as part of splashing. The splashing frame begins to become relatively restrained. This is illustrated in the next segment.
Megan gazes at her own hand as she pulls the toy from toy crate. Mom watches Megan sternly. Megan puts bulb end of toy in the water and moves it up and down creating splashes. As Megan splashes, her jaw drops and her gaze goes to mom's face. Continuing to look at mom's face, Megan's eyebrows raise. Mom, still looking stern, raises her eyebrows. Megan's eyes close and open partially with her lip corners turned down. And, as Megan looks mischievous, she splashes some more. Mom's lip corners raise and she says "you're looking at me like you know, huh?" [33]

Similar to visit seven, the first splashing frame of visit eight is relatively short in duration and not mutually amplified by the dyad. Once again, splashing appears to be relatively restrained: this time, Megan creates small splashes using a toy with no smiles, laughter, and/or high-pitched vocalizations. While Megan splashes, she lowers her eyebrows. At the same time, the mother does not smile, laugh, and ignores any splashing-related activity. It is as if Megan and her mother are gradually "pushing" the splashing frame to the background of their relationship while a new form of emotional connection (i.e., apprehension) becomes a part of that frame. This change can be illustrated in the first frame of visit eight.

Mom points to toy out of her reach and asks: "Get mommy cookie monster? Get mommy cookie?" Megan is gazing at the cookie monster toy while holding the Bert toy under the water. Megan says "No!" Mom continues to point and gaze at the side of Megan's head and asks "Please." Megan moves her hand holding Bert toy up and down in the water, creating small splashes and gazing at the cookie monster toy with her eyebrows lower. [34]

The second splashing frame of visit eight is also short-lived. Megan simply moves her hands around, creating splashes, while her mother practically overlooks the splashes. Again, no mutual amplification of the splashing frame with all its previous constituents (e.g., smiles, laughter, vocalizations, and body movements) is observed. Splashes and the positive connection between Megan and her mother are gradually fading away and becoming background in the dyad's routines. [35]

Finally, no splashing is observed during visit nine. At this point, splashing frames were transformed from a moment where Megan and her mother participate in extreme joy and excitement to moments in which apprehension surrounds splashing. A variety of emotional tones within splashing frames were thus developed and these constituted microscopic changes in the frames themselves. These transformations in the emotional life of this dyad emerged as Megan and her mother added nuances to their splashing frames while at the same time integrating novelties to their previously established story. In other words, as Megan and her mother create and recreate narratives surrounding splashing, variability in their emotional connection emerges and becomes part of the dyad's relationship. [36]

Therefore, through the detailed analysis of the various segments of splashing frames, I illustrated how day-to-day transformations that emerge during dyadic
communication are an integral part of the development of early emotions. In this microscopic analysis, I highlighted the *dynamics of transformation* involved in the developmental process of the dyad's emotional life as a means to illustrate the contribution of narratives to further understand processes of change observed in infancy. [37]

### 7. Concluding Remarks

I have proposed and discussed a narrative-developmental approach to examine early emotional processes. Within this framework, narratives were viewed as inherently developmental as they incarnate multiple forms of time, reflect the always-changing nature of developmental processes, and create a developmental coherence across time. As illustrated in the narrative analysis conducted above, it is my contention that the secret for understanding developmental processes can be found through the close examination of the everyday details of mutual relationships. For this reason, I exhaustively discussed and provided narrative descriptions of the minute changes within the splashing frames co-created by Megan and her mother. [38]

Furthermore, the present contribution suggests that the development of emotions implicates the narratives that emerge in process of parent-child transactions, and not only feelings contained inside of individuals. Frames, viewed as the basic unit of emotion analysis, provided a coherent background in the form of narrative configurations while innovations were incorporated over time. [39]

Finally, the analytical steps of the narrative-developmental approach and its application were described herein with the goal to illustrate (and, perhaps, stimulate) the use of narratives, both as a theoretical and analytical tool, for the investigation of microscopic processes of change in infancy. It is my contention that for those developmental researchers concerned with how emotions emerge over time, the utilization of the narrative-developmental approach proposed is fruitful. This approach, with its strong commitment to describing in great detail the emergence of emotions within frames, reveals how changes take place in the life of parent-child dyads while at the same time interactive partners maintain a developmental coherence against which novelty is incorporated. [40]

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