Transitory moments in infant/toddler play: Agentic imagination

Avis Ridgway
Monash University, Australia

Liang Li
Monash University, Australia

Gloria Quiñones
Monash University, Australia

Abstract

Studying relationships in infant/toddler play, using visual narrative methodology to identify transitory moments, supports our current research on babies and toddlers. We use Vygotsky's theorisation of play to understand children's affective and intellectual aspirations in play. The theoretical discussion, using cultural-historical concepts, argues for identification of transitory moments as turning points for learning. Through examining transitory moments in screen-capture snapshots from video, researchers illustrate the actual worlds of infant/toddler play where personal and collective meaning, and affect and resolution, are created and located. Our study of infant/toddler relationships in play reveals several transitory moments reflecting imaginative thought in action: agentic imagination. A case example from Long Day Care brings visual narrative together with a dialogue commentary to provide meaning of the playful circumstances in which babies' and toddlers' "affective incentives" (Vygotsky, this issue, p. 9) are realised and resolved in imaginary situations. This paper addresses a gap existing in pedagogical awareness of what transitory moments in play can mean for infant/toddler learning and development in early childhood education.

Keywords

Introduction

In the babies and toddlers pilot project, *Studying Babies and Toddlers: Cultural Worlds and Transitory Relationships* we use video to capture "transitory moments" in infant/toddler relationships in sustained play periods and bring a cultural-historical reading of transitory moments (moments of change and transformation) to this paper. We use Vygotsky's theorisation of play to understand children's affective and intellectual aspirations in play. We theorise a "transitory moment" as when "the child's needs, inclinations, incentives, and motives to act" (Vygotsky, this issue, p. 6) come together and undergo active change; a change that results from affective and imaginative thought by the infant/toddler. This is the process of "internal transformation" in play (Vygotsky, this issue, p. 17). This paper discusses (and illustrates) transitory moments of play and argues that pedagogical awareness of the role of transitory moments is highly significant for babies' and toddlers' learning and development. Transitory moments, often embedded in continuous movement, are worthy of closer examination in order to build pedagogical awareness in early childhood Long Day Care (LDC) settings and in other places experienced by babies and toddlers.

We gather data in two LDC sites (urban and city) over a 7-month period in Victoria, Australia. Participants in our pilot project research include six focus children under 2.6 years of age whom we video track on site for uninterrupted play periods of 6 to 8 hours. In addition, we record reflective interviews with eight educators and two LDC directors, and visit six families of the focus children to video home activity and interview parent/s.

We use visual narrative methodology for studying babies and toddlers in order to show the dynamic movement of "the whole system of interactions" (Fleer & Ridgway, 2014, p. 8) present in an infant or toddler's life. In doing so, we create opportunity for dialectical thinking. The toddler play we video record has a "playful narrative quality" (Singer, 2013, p. 178) that we show in the case example in the paper; a quality evident because of the enabling process of visual capture used to track the focus children.

In the babies and toddlers study (Li, Quiñones, & Ridgway, 2014), a fortuitous example of tracking outdoor peer play with a shared narrative constructed between three young toddlers is identified for discussion. Using this example, a visual narrative is created to enable shared review, reflection, and research comment. The outdoor peer play videoed is not subjected to adult involvement, any particular notice (apart from researcher's video), or interference. As a research team, we begin looking more closely at the relationships between the young toddlers and how their sustained situation of adventure unfolds in several transitory moments and culminates in one special moment of agentic imagination (Ridgway, Quiñones, & Li, 2015) discussed below. As these transitory moments, seen in uninterrupted dynamic outdoor play, are without adult presence or guidance, this suggests to us that the toddlers' own incentives and agentic imagination are fundamental to their relationships and continued activity. We theorise agentic imagination as "being evident when play is framed by shared intentions and when a child has actively connected their real life and imagined world" (Ridgway et al., 2015, p. 181). The value and potential of taking a closer look at the nature of small transitory moments observed in our pilot study is noted in Vygotsky's approach:

> Begin with the small insignificant facts and elevate the study of them to a high theoretical level, to attempt to discover how the great is revealed in the very small (Vygotsky, 1997b, p. 41).

Vygotsky's quote is encouraging because when observing hours of video tracking data from the babies and toddlers pilot project, we find multiple combinations of co-constructed complexities, changing relations, and changing environments, all of which demand focus (Fleer, 2008). We find a small transitory moment that affords the opportunity to analyse an active example of agentic imagination from a child's perspective. Through this opportunity, we aim to bring greater pedagogical awareness of how babies and toddlers learn from and with their peers and others in small transitory moments that may go unnoticed or appear insignificant. The play environment and space also promotes the peers' agentic decisions on how to play together, which provide rich pedagogical meaning. Firstly, we provide a discussion of theoretical and methodological considerations, followed by analysis of a contextualised transitory moment in infant/toddler play.

Cultural-historical approaches and methodology

"Play is the child's activity" according to Vygotsky (this issue, p. 9), and in the child's activity, relationships are changed. When play activities change social relationships, there are new possibilities for action (Hedegaard, 2008). In addition, elaborating on "the instrumental method in psychology", Vygotsky (1997a, pp. 85–89) suggests a two-fold situation comes into play in the relationship between external phenomenon encountered and subsequent action taken by the very young child.

Congruent with this situation, Emde, Birigen, Clyman & Oppenheim (1991) suggest, "the early self has dual origins in 1) a set of motives that are strongly biologically prepared and 2) everyday interactions with caregivers who are emotionally available" (p. 251).

In a situation involving the very young child (the early self), firstly, the stimulus of the external phenomenon will likely cause the seeking of a solution to a presenting problem, or alternatively, it may create the need for the very young child to call into action a means (or tool) to resolve the problem. In other words, the existence of an external problematic situation in play relations creates the need for an affective response and intellectual operation by the infant/toddler. Participation in an external social situation drives the very young child (interacting with the qualities of place and social circumstance) to find a solution directed towards meaningful resolution. The complexity of this response, Vygotsky (1997a) suggests, demands deeper psychological exploration of babies' and toddlers' activity in transitory relationships, as they internalise their new coordinations and actions in order to process them affectively for the practical purpose of resolution and also sustaining social relations. Here, according to Vygotsky (1998), we find that "an internal re-construction occurs along the axis of social relations" (p. 287). In addition, Stetsenko (2008) urges researchers take a cultural-historical perspective to examine young children's competencies, feelings and aspirations, which she suggests, can inform the sense of agency they bring to playful situations.

We draw on the power of visual narrative methodology to record and stabilise research data for analysis and discussion. This allows for careful examination of what is contributed by the babies and toddlers to transitory moments of playful interaction in terms of their personal and collective agency.

Visual narrative methodology for capturing infant/toddler activity in transitory moments
For the pilot research in *Studying Babies and Toddlers: Cultural Worlds and Transitory Relationships* a form of dialectical methodology occurs. Visual narrative methodology unifies visual data (e.g., video, screen capture snapshots, and still images) with storied commentary (dialogue) drawn from researchers' observations, participant's perspectives, and video transcripts, thus capturing, as wholly as possible, the playful interactions of babies and toddlers for shared analysis and theorisation (Ridgway et al., 2015). Through application of narrative methodology (Ridgway, 2010b), examples of agentic imagination of babies' and toddlers' experiences are caught on video for later discussion and review. This methodology can stabilise selected data in order to show how babies' and toddlers' learning is supported in transitory moments when a process of internal transformation occurs through the resolution of meaning and affect in interactive play with peers and/or adults.

Video tracking method
In our babies and toddlers pilot study, seeking to capture very young children (under 3 years) in sustained play periods, we use continuous video tracking to record transitory moments of relationships in play. The periods of play activity filmed in two LDC centre sites, extend over half and whole days. In this pilot study, we are involved in building nonintrusive yet trusting relationships with the focus children as well as within the LDC community where the babies and toddlers are being tracked (Hedegaard, 2008).

Discovering relationships in transitory activity and what these might mean for babies and toddlers, suggests that, as researchers taking a cultural-historical approach, we need to capture transformative moments of action, in context and over time. For this reason, continuous video tracking data is selected as an ideal method for gaining a broader picture of development, both of, and from, the infant/toddler's perspective. Transitory moments in relationships where "inclinations to interests" (Vygotsky, this issue, p. 6) are sustained over extended play periods of dynamic, coordinated infant/toddler activity are video recorded. Continuous video tracking brings the researcher much closer to the subject's perspective. There is a "lived momentum" (Ferholt, 2010, p. 78) to the continuous movement involved in the researcher video tracking infant/toddler activity over a whole or half day in a LDC site.

Triadic dialogue commentary
A unique research methodology called triadic dialogue commentary was initiated by the three researchers. Supported by using the video-tracking method, the three researchers make a more holistic interpretation of the video data through independently expressing their different cultural-historical perspectives and experiences. When the researchers juxtapose their independent perspectives, a new triadic conceptualisation occurs (Ridgway, Li, & Quiñones, 2016). In this process of dialogue commentary, the key elements for data analysis create a "lived momentum" (Ferholt, 2010, p. 78) that gives validity and authenticity to the research.

Site choice
LDC is part of a growing social milieu in Australia, and participating in LDC engages babies and toddlers in a process of enculturation (van Oers, 2010), the finer details of which deserve closer study. This is a time when studying babies and toddlers in relation to families and institutional life with peers and caregivers, has become increasingly relevant for early childhood educators whose experiences have largely been with children over 3 years of age, and the parents and

families whose babies and toddlers attend LDC (Goodfellow, 2014; Hedegaard, 2008; Johansson, 2011; Kudryavtsev, 2006; Li, 2014; Løkken, 2011).

The research team (Li et al., 2014) approached two LDC sites (one located in an urban setting and one in a city community cooperative) inviting their participation in the pilot project. Both sites offered LDC to families with babies or toddlers and accepted our invitation. Directors at each site agreed to meet with researchers for an orientation to the pilot project. Importantly, babies and toddlers in this project needed to be under 3 years of age; and families needed to give permission for their child's and their own involvement, as did staff involved in the LDC sites.
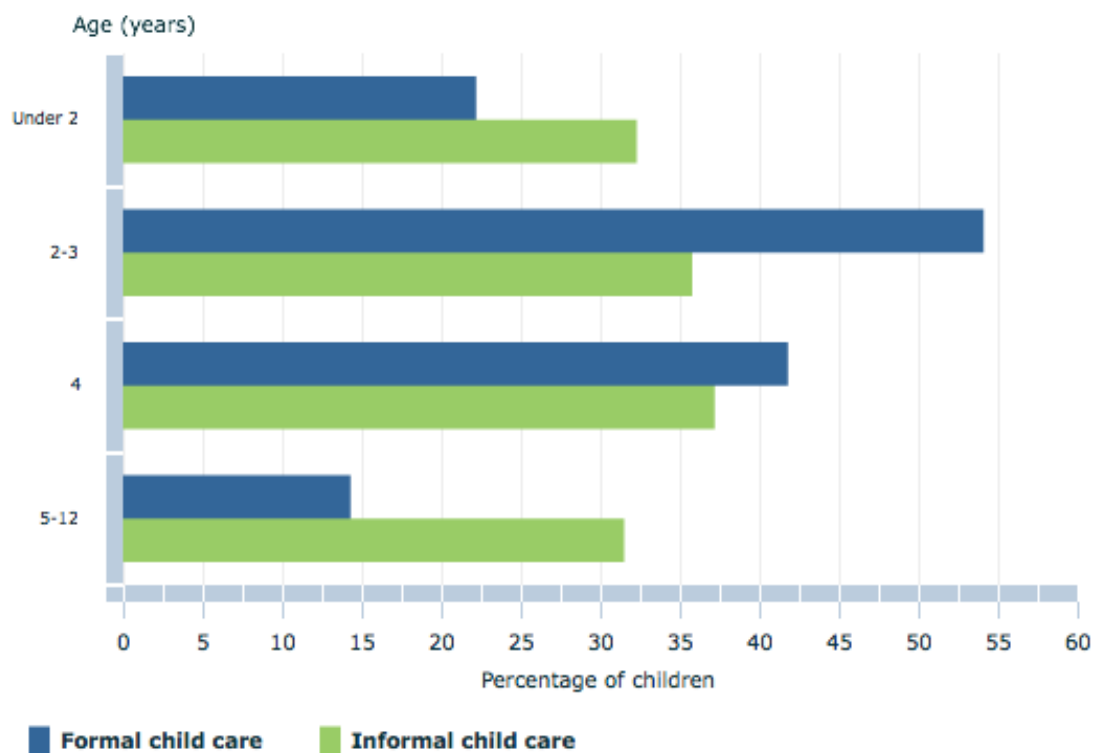

Figure 1. Children who usually attended childcare, by type of care and age. Reprinted with permission from "Childhood Education and Care, Australia, June 2014", by Australian Bureau of Statistics, 2015. Copyright 2016 by the Commonwealth of Australia.

According to the Australian Bureau of Statistics, babies and toddlers are now more frequently placed in LDC centres. Formal and informal care use can vary by age (see Figure 1). As seen in the graph, 22% of children under the age of 2 years usually attend formal childcare, while 32% usually attend informal childcare. The highest level of overall care attendance is among 2- and 3-year-olds, of which 71% usually attend care (see Figure 1).

In the light of new demands in Australian society, we find that more babies and toddlers than ever before are attending LDC. This is one good reason to bring greater pedagogical awareness of the importance of transitory moments in playful activity to those involved in the education and care of very young children in LDC sites in particular.

Dialectical thinking

Our research collaboration (Ridgway, 2010a) uses dialectical thinking to review video data. Juxtapositional movement of data content as a whole encourages dialectical thinking that provides opportunity for interpreting the small interactive transitory moments of babies' and toddlers' experiences captured on video (Fleer & Ridgway, 2014). Intentional playful and dynamic interactions strongly relate to how meaning is being made by babies and toddlers, where the smallest detail of a hand gesture, a directed gaze, a turned head, an exchange of body language, or a specific movement, all help to construct a new situation of togetherness that bring "infant social abilities" (Miall & Dissanayake, 2003, p. 339) to our notice.

In data for the babies and toddlers study, our aim was to visually capture any activity where the possibilities of qualitative change in the young child's momentary actions occurs, in order to expand our capacity to interpret participants' intersecting motives, inclinations, perspectives, feelings, and ideas.

Seeking moments where affective engagement, imagination, and initiative in active groups are evident, our collaborative data review involves the "instrumental method" where "activity toward oneself, and not toward the object" (Vygotsky, 1997a, p. 87) is used as a focus on the infant/toddler relationships captured in the research data. Thus, "the instrumental method studies the child not only as developing, but also as an educable being" (p. 88), and in doing so (in the infant/toddler period) for this project, we find there is considerable importance in being able to "read" visual data from different research perspectives including three researchers, parents and educators, and children in the LDC. The wholeness of research approaches has been processed which reflects dialectical analyses. We examine the gestures, movements, responses, gazes, relational positions, sustained activity, and wordless expressions of our infant/toddler subjects with deep feeling and interest.

Infant/toddler play and the experience it affords

There is a "general acceptance that infants express 'their perspectives' though their bodies" and this research seeks to video capture relational responses in transitory moments of play that show *"more detailed foci such as actions, reactions, vocalisation, gaze and specific facial gestures"* (Elwick, Bradley, & Sumsion, 2014, p. 200).

The practical activity of the babies and toddlers is therefore fundamental to this research, and in reviewing the tracking-style video undertaken in the pilot study, three focus children are selected. We identify one focus child (Elvin) consistently in an active relationship with two other toddlers (Caz and Al). Their sustained active relationship holds a situation where the shared interests of the toddler participants, their negotiations, emotions, and choices, offer us dialectical movement for analysis of the tracking video data that captures so many interactive transitory moments.

Johansson's (2011) research in ethical situations, points to the involvement of "interplay, which supported or opposed the child's own or the other's interest, wishes or well being" (p. 52). An ethical situation appears to unite the three young toddlers observed in the video. Their active playful relationship is dynamically aligned and united through play objects they have each chosen. A relationship is established over time, and grounded in a common interest of truck play, which is sustained throughout the particular day when video was taken. By using a visual narrative for the case example, we can take a more detailed look at the transitory moments in the relationships formed in infant/toddler truck play. The play observation in the case example

culminates in the identification of one particular moment of realisation: an example of agentic imagination. Vygotsky (1978) describes the process of internalisation as "the internal reconstruction of an external operation" where something that initially "represents an external activity is reconstructed and begins to occur internally". In this way "an interpersonal process is transformed into an intrapersonal one" (pp. 55–56). This suggests that agentic imagination is a personal process through which the child imaginatively and affectively connects with their real life. This relationship makes the dramatic pathway from interpersonal to intrapersonal. "Play partners contribute their agentic imagination to make a new collective meaning of the objects and actions together" (Ridgway et al., 2015, p. 178).

Through video data tracking infant/toddler peer interactions and communication continuously over a 5–6 hour period on one day, a particular transitory moment enacted within the social relations of three toddlers in a LDC site offers new pedagogical awareness of what may influence learning and imagination in babies' and toddlers' peer play.

Case example

Transitory moments in video data are frequent. In the play relationships recorded, there is an action by focus child Elvin (21 months old) that altered the trajectory of his activity in order to meet his current needs. Screen capture snapshot examples of focus child Elvin are drawn from a period of continuous video tracking. A triadic relationship amongst three toddlers (Elvin, 21 months old; Al, 25 months old; and Caz, 29 months old) unites around a shared interest and desire to move trucks together on multiple surfaces of an outdoor playground that has differentiated and varied surfaces. Elvin, the focus toddler, explores this rich environment moving in and out of play with his two peers, and most frequently moving in tandem with them on shared journeys that are both imagined and real.

Selected for closer reflection on infant/toddler thought-in-action in transitory moments, one part of the video attracts research interest. This is where one particular transitory moment in the triadic play relationship acts as a turning point for Elvin's learning. Videoing over a day, it appears to researchers that existing amongst the three boys is a dynamic alignment of imagination and agency. Each child has possibilities to experience, appreciate, and feel being part of an unfolding adventurous narrative. Agency, Jyrkama (2008) suggests, has different modalities (to want, to know, to be able, to feel, experience and appreciate, and to have the possibility). Naming these modalities provides us with an interpretative tool for discussion through our visual narrative. Whilst the agency of each infant/toddler is understood subjectively by each researcher, our individual and collective responses bring the possibility of theorising transitory moments in play.

Building a visual narrative around this transitory agentic moment may lead to new pedagogical awareness of an infant/toddler's learning and development in LDC.

Visual narrative of Elvin, Al and Caz

Transitory moments in truck play
At 11:31 a.m., the three toddlers drive trucks towards a step down to the playground. They participate in unison, one following the other and pushing each truck and making a "clackety" sound as they travel along the wooden verandah boards (Figure 2). It seems that they are all

feeling and experiencing this transitory moment wholeheartedly with a determined and united energy that moves them in tandem along a common path, the LDC verandah.

Figure 2 (left): Caz, Al, and Elvin drive trucks along wooden verandah.
Figure 3 (right): Caz, Al, and Elvin on truck journey.

By 11:32 a.m., Al and Elvin follow Caz down from verandah onto a pathway where Caz takes his truck to a "parking space" located under a small climbing frame (Figure 3). Over the observation time, Caz takes both imaginary and real leads in the truck play. At this point (Figure 3), it appears that Caz is imagining the climbing frame as something different (perhaps an enclosed parking space) and to that end he actively "drives" his truck along the pebblecrete pathway towards it. Whatever Caz has in mind, Al is attracted to follow him and he goes on this journey too, in turn encouraging Elvin who is willing to join him.

We find here that the individual agency of each child is nuanced (Stetsenko, 2008) in this social situation, and from a socio-cultural-historical view, agency may be thought of as the individual's subjective awareness of being an initiator or executor of actions in the world (de Vignemont & Fourneret, 2004). Caz is able to imagine the small climbing frame as a parking place for his truck.

He knows what he wants to do and does it. The other two boys appear to feel the possibility being offered and they aspire to follow Caz's lead and move together to park their trucks as well. Caz also waits for Al and Elvin to park their trucks under the small climbing frame. The collective shared agentic imagination has been formed towards their adventurous journey.

In Figure 4, we look carefully at the children's faces and gestures and see no laughter or outward enjoyment shown in this activity. There is, however, a transitory moment, of hesitation and mutual acceptance by the toddlers, of "parking" trucks together under the frame. This acceptance of an imagined thought to which Caz gives realisation is now endorsed and accepted by the other two boys who share this transitory moment by stopping, putting their trucks down, and also parking their trucks. The activity is coordinated and harmonious. It seems a serious moment for Elvin gazing intently at the parked truck as Caz looks outward, possibly considering where he'll take his truck to next (Figure 4).

Figure 4 (left): Caz, Al, and Elvin "park" their trucks under the frame (11:33 a.m.).
Figure 5 (right): Al brushes sand off Elvin's hand (11:44 a.m.).

From wider video data, we find Elvin is motivated to travel with trucks either singly, in pairs, or in triadic unison. The trucks act as both an object and a tool to use as "a means of influencing one's own mind or behaviour or another's" (Vygotsky, 1997a, p. 87). Both Al and Elvin are now part of the socially formed "affective sphere" (Vygotsky, this issue, p. 7) that accepts Caz' idea. This "affective sphere" is quite complex. As Caz is positioned in front, Al and Elvin followed. Caz is always tracking and looking towards Al and Elvin. This "affective sphere" consists of Caz' ability to affectively and imaginatively act by driving his truck, but Al and Elvin's notion of everyone's intentions of moving the truck and incentives to act comes from their own choices. Caz is now looking out towards the bridge (Figure 4) and appears ready to move on from this imaginary situation. An "affective incentive" (Vygotsky, this issue, p. 8) is now in place, and it is this incentive that is thought to be satisfying to babies and toddlers and drive new imaginary play. Meanwhile, Al has also picked up Elvin's truck from the "parking" space, passed it to Elvin, and encouraged him to move and follow Caz's truck. The "affective incentive" to act collectively has been fulfilled in their imaginary journey.

Another example of the existence of an "affective sphere" is seen in the care given by Al towards Elvin (Figure 5). When Elvin tips up his truck as he moves along driving it in the sand, it is hard going for him and his grip slips off the truck, and he lands on his hands in the sand. Al is quick to show care by stopping to help him and brushing sand off Elvin's hand. The look on Elvin's face and his arm gesture shows how he accepts this act of kindness by extending his arm and hand towards Al. Again, we find a transitory moment that builds the shared experience and appreciative presence of empathy that appears to sustain this ongoing play. Their journey together then continues.

Figure 6: Caz goes to the bridge; Elvin and Al follow.

At 12:00 p.m., the game resumes, with Caz leading with his truck and driving it up and over a wooden bridge (Figure 6). For the three toddlers, this involves carrying their trucks up two steps, then "driving" by pushing them over the planks of the wooden bridge. They must now each find a way to move the trucks from the bridge and down the steps on the other side. This shows how, as a collective relational triad, they are able to "combine a new reality, which conforms to his [their] own needs and desire" (Vygotsky, 2004, pp. 11–12). The play created and imagined by these children shows how purpose in this play is the children's affective attitude to the play. Through these transitory moments, children are able to develop a "conscious realization of its purpose" (Vygotsky, 1996, p. 16), playing with trucks and playing together in unity.

Building shared presence through prior experience
These first five figures (Figures 2–6) give some social context of the initial triadic play that occurs before the LDC routines intervene, after which further exploratory truck play continues. There develops, over the day, a shared presence of prior experiences as the boys continue to roam and range expansively each pushing ("driving") a toy truck around the playground, motivated in part by desire and imagination of being in this adventurous game together.

In this environment and at this time, the toddlers experience *perezhivanie* (intensely lived moments) with their senses fully alive, attuned to one another whilst responding to the challenge of the diversity of elements in their large outdoor play space. We notice in the whole video, that these trucks make a wonderful noise being driven over pebbly pathways and along wooden verandahs. The trucks are balanced on edges, pushed through sandy patches, driven up wire gates, run into soft grassy clumps, placed onto metal sink surfaces, pushed over wooden bridges, and carried up into the air.

We draw on the idea that the symbolic activity of the toddlers brings higher mental functions into being. "The history of higher mental functions is disclosed here as the history of converting means of social behaviour into means of individual-psychological organization" (Vygotsky, 1999, p. 41).

The toddler's cooperation, perceptions, memories, movements, and attention to the trucks, the playground, and one another, unite in function to form, for them, a cultural system of belonging.

The sustaining of dynamic affective social relations by playing with trucks over the observed time brings us to an event recorded during the morning. In their play, one transitory moment

attracts our particular research interest. Elvin needs to solve the problem of going "through" the bridge with his truck like Caz and Al do.

Transitory moments through the bridge: Problem and solution

Figure 7: Caz heads up the creek bed track that leads to going "through" the bridge.

During this day, Caz frequently expands the play by moving/driving his truck to many areas of the playground. At 11:20 a.m. (Figure 7), he tries a new pathway: an imitation creek bed that runs "under" the bridge. He proceeds along this pathway first and Elvin, looking around for Al, readies himself to join this new track that Caz is driving his truck on.

Figure 8: Caz goes through the bridge with Elvin observing and following.

At 11:20.37 a.m. Caz reaches the side of the bridge, lifts his truck, places it on the bridge, and then climbs through the gap between the rail and bridge (Figure 8). This is a practice that requires physical agility. Caz' individual agency in being able to do this is evident in the concrete action he takes by going through the bridge (Gillespie, 2012).

It is a different situation for Elvin—a dialectical one—where the varying levels of skill collide with his affective sphere formed through participation in the play (Quiñones & Fleer, 2011). There is a transitory moment where Elvin has a go and initiates an imitation of Caz's movement in the journey.

Figure 9 (left): Elvin's first try to go through the bridge after Caz.
Figure 10 (right): Elvin puts truck down and climbs up, whilst Caz continues journey over bridge.

Elvin lifts his truck as Caz did (Figure 9), and attempts to go through the bridge (11:21 a.m.). Caz looks back to see how Elvin is going and offers no particular physical help. At this time, Elvin appears to remain encouraged with the possibility the social situation offers.

Elvin climbs up on the bridge by holding onto the rail (Figure 10). To do this, he needs two hands and puts his truck down on the ground (11:21.26 a.m.). At this time, Caz continues without a backward glance and Elvin is left holding the rail unable to continue. Going through the bridge is an activity that Caz can do: an activity that causes for Elvin an "immediately unrealizable desire" (Vygotsky, this issue, p. 7) because it involves being able to move both his truck and himself through the bridge simultaneously.

Figure 11: Elvin picks up truck and moves back along the creek bed track and Caz looks at him.

Very quickly (11:21.48 a.m.), Elvin realises he wants to continue playing so he chooses to return the way he came, picks up his truck, and walks back along the creek bed track to join Caz, who is initiating the going-through-the-bridge play (Figure 11). This is the process of internal transformation of Elvin's own self from unknowing to being knowledgeable about continuing his journey without going through the bridge. This also further explains Kravtsova's (2014) argument that during play with other peers "children encounter a model for further learning activity" (p. 24).

Figure 12 (left). Back together again (11:23 a.m.).
Figure 13 (right). Caz leads journey back to the creek bed track (11:24 a.m.).

Elvin has moved back to the slope above the creek-bed path where Caz had moved and Al is now there too (Figure 12). It has been 2 minutes since Elvin was unable to follow Caz through the bridge. However, the journey starts up again through their collective proximity, and action is silently agreed upon by the three toddlers who each hold their trucks ready for further action looking to Caz as a leader (Quiñones, 2013).

This time the three boys move off in unison (Figure 13). Elvin knows Al as a "friend" and Al frequently beckons Elvin with a "come here" gaze and hand gesture, a symbolic action that brings to attention one way that these toddlers "speak" to one another. Al shows a desire to have Elvin join him and continue the triadic truck play.

Figure 14. Second try going through the bridge together.

Only minutes (11:25 a.m.) after Caz and Elvin went along the creek bed, the three toddlers now move into action together. This time, Caz leads, Al follows, and Elvin drives his truck in the rear (Figure 14). They all drive their trucks towards the side of the bridge that Caz is able to go through.

Figure 15 (left). Caz goes through the bridge, Al and Elvin follow together.
Figure 16 (right). Caz goes through and onto bridge.

Caz' truck (the yellow truck) is used as a "leading" truck all day (a subject for further discussion at another time). At 11:26 a.m., Caz moves himself and his truck through the bridge and, with their heads closely together (Figure 15), it seems that Al is communicating with Elvin who is moving along to follow him.

This time (11:26.09 a.m.), Caz is already through the gap and watches Al as he also comes through to join him on the bridge with this truck. Elvin is getting ready to do the same (Figure 16). He sees the possibility and aspires to follow the other two toddlers.

Figure 17 (left). Al gets through onto bridge with his truck.
Figure 18 (right). Elvin's second try.

The journey continues (11:26.32 a.m.). This time, Caz and Al have both taken their trucks onto the bridge (Figure 17). Elvin lifts his truck up onto the bridge in readiness to move through, too. This is different from the last time, when he put his truck down on the ground, and shows how he is observing his peers and has already learned to lift the truck up first.

Elvin places his truck on the bridge and watches Caz and Al continue the truck play. He takes the rail again to step up rather than climb through (Figure 18). His move does not lead to him getting through under the rail, however. Elvin has now tried this climbing up onto the bridge twice. Elvin does not yet know how to go under the bridge rail and climb through.

Figure 19 (left). Elvin climbs up then back down.
Figure 20 (right). Elvin, a transitory moment of agentic imagination (11:27 a.m.).

Already, Elvin can see Al is following Caz through to the other side of the bridge. Elvin starts to move down from the bridge (Figure 19).

Agentic imagination

This second time of trying to follow, Elvin finds the same problem as before. When his peers go through the bridge and he cannot, he stops his activity. When his play partners climb down from the bridge, we can clearly see that Elvin stops, gazes around, and because of what comes next, we understand that he becomes aware that going through the bridge is not easy for him (Figure 20). He quickly realises what he wants and can do. He imagines being back with the truck players. He walks back along the creek-bed track to the pathway, still holding his truck. He then joins the others, driving his truck strongly towards them to bring the collective truck play back together. In this transitory moment, the agentic imagination has been dramatically transformed. This is because of the affective incentives of playing trucks together. Although the challenges of crossing the bridge interrupts Elvin's journey with his play partners for a short moment, this doesn't affect their collective shared play, but reinforces their intrapersonal relationships.

Figure 21. Elvin solves the problem and rejoins the group (11:28.50 a.m.).

Elvin's transitory moment of agentic imagination supports the reuniting of the toddlers' play. We can see how Elvin rejoins Caz and Al with some very strong head-up confidence as he meets them with his truck in a face-to-face moment of reconnection (Figure 21). We look at the triadic

group for signs of triumph or welcome back, but cannot see any apart from Elvin's heads-up gesture with his truck facing the others rather than following. It seems that Elvin is quietly satisfied with his solution and the other boys acknowledge his presence.

Discussion and conclusion

"Internal and external action are inseparable: imagination, interpretation, and will are internal processes in external action" (Vygotsky, this issue, p. 16).

Elvin shows how his will and desire to be in, and with, the group brings him to thinking about solving a particular problem and he goes into action. As observers and interpreters of this visual narrative, we notice that over a long period of the day, Elvin shared active truck play and belonged in the affective sphere formed amongst Caz, Al, and himself. Elvin has shown an affective attitude and intellectual aspiration in play. He is able to develop, through these "transitory moments", a conscious awareness of what he can do and imagine in relation to the collective triadic relations formed with Caz and Al.

Finding a solution to overcoming the bridge as a barrier to maintaining the collective relationship developing in the truck play, Elvin resolves the problem for himself in a transitory moment by internalising the issue (through his agentic imagination), and under his own volition, moves out of the problematic space into a meeting point to be with his peers and their shared truck moving activity.

It is very clear that Elvin uses his own will and imagination to make this move independently because there are no educators in the playground to notice or help him, and both Caz and Al continue on playing together with their trucks. The importance of time for independent and unmediated play opportunities for problem solving becomes evident in the case example.

In this example, we find that Elvin reorganises his thinking at that point and demonstrates how his affective incentive to continue the truck play with the other two boys drives the moment of transformation. He is able to quickly work out for himself that he can take his truck, retrace his steps, and rejoin the group without having to go through the bridge under the rail. Elvin's affective attitude and problem solution is understood by his peers and they are able to form a harmonious collective play, which is not interrupted by Elvin's ability to solve the problem or not. This "transitory moment" could have been catastrophic or dramatic, however, Elvin clearly shows an appropriate way of expressing what could have been a frustrating situation but instead shows an affectionate way of expressing his emotion and wilfulness to be together with Al and Caz. Through this transitory moment, Elvin shows his high level of reflective consciousness as he internally transforms the knowledge of continually playing trucks with his peers without going through the bridge.

The social situation of focus child Elvin and his peers, shown in this visual narrative, becomes fertile ground for building awareness of the power of social relationships, affective awareness, and unified will. In the LDC setting where Elvin internalises a new coordinated action for maintaining meaningful relationships and the shared activity, we find Vygotsky's (1999) thinking mentioned earlier in this paper, now fully illustrated: "The history of higher mental functions (such as internalisation) is disclosed here as the history of converting means of social behaviour into means of individual-psychological organisation" (p. 41).

The "affective sphere" discussed earlier in this paper showed how children affectively relate to each other collectively through caring, gazing and looking at each other, and also through recognising the affective factors in learning. Through understanding Elvin, Caz, and Al's collective and affective purpose in play we can pay more attention as educators to those "transitory moments" in which children problem-solve and care for one another, with moments of gaze and understanding of each other. As Vygotsky (1987) explained, thought is not generated by thought but by our motivation, which are our desires or wishes and needs, our interests and emotions. We are beginning to see how collective (this triadic) play allows us to understand how play is affective and motivational when there is a shared and almost magical belonging. In this way through examining transitory moments, we begin to understand children's affective purposes in play and how agentic imagination has been collectively formed and shared by the toddlers. Furthermore, we also notice that the play space including the trucks, the bridges, and big yard creates the possibilities for three toddlers' dynamic interactions during the transitory moments which impels three toddlers' agentic decisions on what to play and how to play collectively. The close exploration of the visual narratives of the triadic truck play also gives insights into the importance of capturing the transitory moments to understand the collective and shared agentic imagination in children's play and therefore foreground the pedagogical awareness to educators in LDC.

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References

de Vignemont, F., & Fourneret, P. (2004). The sense of agency: A philosophical and empirical review of the "who" system. *Consciousness and Cognition, 13*(1), 1–19. doi:10.1016/S1053-8100(03)00022-9

Elwick, S., Bradley, B., & Sumsion, J. (2014). Infants as others: Uncertainties, difficulties and (im)possibilities in researching infants' lives. *International Journal of Qualitative Studies in Education, 27*(2), 196–213.

Emde, N., Biringen, Z., Clyman, R., & Oppenheim, D. (1991). The moral self of infancy: Affective core and procedural knowledge. *Developmental Review, 11,* 251–270.

Ferholt, B. (2010). A synthetic-analytic method for the study of perezhivanie: Vygotsky's literary analysis applied to playworlds. In M. C. Connery, V. John-Steiner, & A, Marjanovic-Shane (Eds.), *Vygotsky and creativity, A cultural-historical approach to play, meaning making and the arts* (pp. 163–179). New York, NY: Peter Lang.

Fleer, M. (2008). Using digital video observations and computer technologies in a cultural-historical approach. In M. Hedegaard & M. Fleer (with J. Bang & P. Hviid) (Eds.), *Studying children: A cultural-historical approach* (pp. 104–117). Maidenhead, United Kingdom: Open University Press.

Fleer, M., & Ridgway, A. (Eds.). (2014). Visual methodologies and digital tools for researching with young children: Transforming visuality. Dordrecht, Netherlands: Springer.

Gillespie, A. (2012). Position exchange: The social development of agency. *New ideas in psychology, 30* (1), 32–46. doi:10.1016/j.newideapsych.2010.03.004

Goodfellow, J. (2014). Infants initiating encounters with peers in group care environments. In L. J. Harrison & J. Sumsion (Eds.), *Lived spaces of infant-toddler education and care: Exploring diverse perspectives on theory, research and practice* (pp. 201–210). Dordrecht, Netherlands: Springer.

Hedegaard, M. (2007, August–September). *A wholeness approach to researching children's development: An argumentation for dialectic methodology to the study of children in their everyday life.* Paper presented at 17th EECERA Annual Conference, Prague, Czech Republic.

Hedegaard, M. (2008). Developing a dialectic approach to researching children's development. In M. Hedegaard & M. Fleer (with J. Bang & P. Hviid) (Eds.), *Studying children: A cultural-historical approach* (pp. 30–45). Maidenhead, United Kingdom: Open University Press.

Johansson, E. (2011). Investigating morality in toddler's life-worlds. In E. Johansson & E. J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 39–62). Dordrecht, Netherlands: Springer

Jyrkama, J. (2008). Agency, aging and everyday life: A sketch of a theoretical-methodological framework. *Gerentologia, 22*(4), 190–203.

Kravtsova, E. (2014). Play in the non-classical psychology of L. S. Vygotsky (A. Maximov, Trans.). In S. Edwards, M. Blaise, & L. Brooker (Eds.), *The SAGE handbook of play and learning in early childhood* (pp. 21–31). Los Angeles, CA: Sage.

Kudryavtsev,V.T. (2006). Feliks Mikhailov: The life-giving power of affective thought. *Journal of Russian and East European Psychology, 44*(1), 6–12.

Li, L. (2014). A visual dialectical methodology: Using a cultural-historical analysis to unearth the family strategies in children's bilingual heritage language development. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and digital tools for researching with young children: Transforming visuality* (pp. 35–53). Dordrecht, Netherlands: Springer.

Li, L., Quiñones, G., & Ridgway, A. (2014). *Studying Babies and Toddlers: Cultural Worlds and Transitory Relationships* [Pilot project] (CF14/2789 – 2014001543), Pilot project Monash University, Australia.

Løkken, G. (2011). Lived experience as an observer among toddlers. In E. Johansson & E. J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 161–183). Dordrecht, Netherlands: Springer

Miall, D. S., & Dissanayake, E. (2003). The poetics of babytalk. *Human Nature, 14*(4), 337–364.

Quiñones, G. (2012). Cultural-historical borderlands: Common grounds, limits and building bridges in an early childhood community. *NZ Research in Early Childhood Education Journal, 15,* 160–175.

Quiñones, G. (2013). Play performance and affect in a Mexican telenovela. In D. Winther-Linqvist & I. Schousboe (Eds.), *Children's play and development: Cultural-historical perspectives* (pp. 89–106). Dordrecht, Netherlands: Springer.

Quiñones, G. (2014). A visual and tactile path: Affective positioning of researcher using a cultural-historical visual methodology. In M. Fleer & A. Ridgway (Eds.), *Visual methodologies and tools for researching with young Children* (pp. 111–128). Dordrecht, Netherlands: Springer.

Quiñones, G., & Fleer, M. (2011). "Visual Vivencias": A cultural-historical tool for understanding the lived experiences of young children's everyday lives. In E. Johansson & E. J. White (Eds.), *Educational research with our youngest: Voices of infants and toddlers* (pp. 107–129). Dorchrect, Netherlands: Springer.

Ridgway, A. (2010a). How can cultural–historical theory be used as a methodological dialectic? *European Early Childhood Education Research Journal, 18*(3*), 309–326.

Ridgway, A. (2010b). *Using a cultural-historical framework to show influences on learning* (Unpublished doctoral dissertation). Monash University, Australia.

Ridgway, A., Li, L., & Quiñones, G. (2016). Visual narrative methodology in educational research with babies: Triadic play in babies' room. *Video Journal of Education and Pedagogy, 1*(1), 1–18.

Ridgway, A., Quiñones, G., & Li, L. (2015). Early childhood pedagogical play: A cultural-historical interpretation using visual methodology. Singapore: Springer.

Stetsenko, A. (2008, September). *Conceptions and research from cultural-historical approaches on motive and values in children's development, as well as how to confront the ethical aspect of this problem area in practice.* ISCAR pre-conference workshop on CHACDOC section meeting at University of San Diego, CA.

Singer, E. (2013). Play and playfulness: Basic features of early childhood education. *European Early Childhood Education Research Journal, 21*(2), 172–184.

van Oers, B. (2010). Children's enculturation through play. In L. Brooker & S. Edwards (Eds.), *Engaging play* (pp. 195–209). United Kingdom: McGraw-Hill.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1996). Consciousness as a problem for the psychology of behavior. In R. Rieber (Ed.), *The collected works of L.S. Vygotsky: Vol. 3. Problems of the theory and history of psychology* (pp. 63–80). New York, NY: Plenum. (Original work published 1925).

Vygotsky, L. S. (1997a). The instrumental method in psychology. In R. W. Rieber & J. E. Wollock (Eds.), *The collected works of L. S. Vygotsky: Vol. 3. Problems of the theory and history of psychology.* New York, NY: Plenum.

Vygotsky, L. S. (1997b). Research method (M. J. Hall, Trans.). In R. W. Rieber (Ed.), *The collected works of L.S. Vygotsky: Vol. 4. The history of the development of higher mental function* (pp. 27–63). New York, NY: Plenum.

Vygotsky, L. S. (1998). The crisis at age three (M. J. Hall, Trans.). In R. W. Rieber (Ed.), *The collected works of L.S. Vygotsky: Vol. 5. Child psychology* (pp. 283–288). New York, NY: Plenum.

Vygotsky, L. S. (1999). Sign operations and organization of mental processes. (M. J. Hall, Trans.). In R. W. Rieber (Ed.), *The collected works of L. S. Vygotsky: Vol. 6. Scientific legacy* (pp. 39–44). New York, NY: Plenum.

Vygotsky, L.S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology, 42*(1), 7–97.

Authors

Dr. Avis Ridgway, Adjunct Research Fellow, Faculty of Education Monash University, Australia and member of Child and Community Development Faculty Research Group. Current involvement in collaborative research, writing, coediting, and publishing books with Gloria Quiñones and Liang Li. Special interests: cultural-historical theory, visual narrative methodology, pedagogical play, expressive arts, infant-toddler relations and transitions, spaces that educate, innovative field research contextualisation. Editorial board service; local and international research collaborations.
Correspondence: avis.ridgway@monash.edu

Dr. Liang Li, is a lecturer in the Faculty of Education at Monash University, Australia, and an active member of Child and Community Development Research Group. Liang's research focuses on babies and toddlers' learning and development, visual methodology, play and pedagogy, teacher education and evaluation methods, and family studies.
Correspondence: liang.li@monash.edu

Dr. Gloria Quiñones is a lecturer in the Faculty of Education, Monash University, Australia, and member of the Child and Community Development Faculty Research Group. Gloria's research is conducted in both Mexico and Australia. Special interest in: play and pedagogy, space and place, emotions, visual methodologies, babies and toddlers' learning, friendship and pre-service teacher education. Gloria has recently coauthored a book on *Early Childhood Pedagogical Play* with Dr. Avis Ridgway and Dr. Liang Li.
Correspondence: gloria.quinones@monash.edu