A Transdisciplinary Discussion on the use of Photography to Study Young Children's Multimodal Literacy Experiences

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New Literacy

Literacy has traditionally been defined as an individually based cognitive skill. This view sees literacy as a neutral, universal, and independent cognitive skill that can be taught with little consideration of an individual's background. However, this view overlooks that literacy development and practices are complex social experience that are contingent on family, social, and cultural factors. In contrast, over the past two decades literacy has been reconceptualized and expanded. What is now called "new literacy" departs from the tradition in two significant ways: First, it expands the scope of literacy beyond written language. It recognizes all communicative modalities, e.g. sound, gesture, images, objects, and digital media as legitimate literacy practices (see Bearne, 2009; Cope & Kalantzis, 2000; Street, 1996). Second, it sees literacy as social practices rather than an individual act. By social practices, it means that meaning-making is context-bounded and is intertwined with family histories and social identity such as race, class, sexuality, etc. (Barton, 2001; Knobel & Lankshear, 2005). Essentially, new literacy stresses that this is no one form of "correct literacy" but multiple forms of literacy practices that are locally recognized and are shaped by power and ideology.

New literacy provides important insights into young children's literacy practices: When literacy is narrowly defined as a reading and writing skill and is taught in a decontextualized way, it loses sight that literacy development emerges from children's early experiences with all sorts of symbolic activities, e.g. role-play, (see Neuman & Roskos, 1990); that it is rooted in family histories and local culture; and that it co-exists with children's developing understanding of the operations of social institutions (Barton, Hamilton, & Ivanic, 2000; Street, 1996).

From a research perspective the plural nature of literacy practices, i.e. multimodality and multiple literacy practices, invites researchers to look young children's literacy development and practices from a new perspective. It urges researchers, teachers, and parents to see that children's bodily performance *is* a form of literacy practice. Like written language, which is a symbolic system conveying specific meaning, young children bodily performance also exhibits signs of symbolic meaning conveying intent and identity. For example, when a child plays the role of a doctor, the body becomes a symbolic representation of a perceived image that carries specific social identity with matching performative script. The embodied literacy experience not only shows how children learn about the social world but also prepares them for further language development and literacy skills (Lillard et al, 2013).

Methodologically, new literacy calls for a new research method that can capture multiple forms of literacy expression and communication. This is especially important to the study of early literacy experience because it helps to visualize embedded traces of social learning experience in children. This approach is based on the premise that the

bodily performance is an image of self and society: Children at a young age are already internalizing sociocultural significances, such as family upbringings and cultural norms. They incorporate social images into their developing understanding of the society and their bodies performance reflects the perceived images. The externalized form of the social images can then be represented in photographs which allows detailed analysis of young children's meaning-makings.

Issues with the Current Visual Methodology

Recently photography has gained traction in the research of children's literacy experiences. Photography allows researchers to capture the fleeting moments of children's literacy activities (Mills, Comber, & Kelly, 2013; Rowe & Miller, 2015; Vasudevan, Schultz, & Bateman, 2010); it bridges the gap between school and home by connecting teachers, parents and children (Strickland, Keat, & Marinak, 2010); and it provides stakeholders a means of documenting and evaluating the effectiveness of literacy programs in the age of accountability (Kaufman, Kaufman, & Nelson, 2015; Pahl & Allan, 2011). In addition, cameras are also found in the hands of children who are increasingly being considered as research participants (e.g. Britsch, 2017). This child-centered trend is consistent with the evolution of law and international mandates concerning children's rights and status that prompt a paradigm shift from adult-centered research methods to the recognition of children as independent right holders who can witness their own lives (Alderson, 2008; Myers, 2011).

The current literature is replete with photographs of children's literacy works as well as analytical methods ranging from content analysis (a research method that codes the content of text or image data to identify themes and patterns within the current theoretical context, see Kress and van Leeuwen, 2001) to semiotic interpretation (the study of signs and symbols and their hidden meanings, see Rose, 2007). However, despite the popularity a critical issue has not adequately been discussed: The evidentiary value of photographs in research. There is a widely accepted belief that photographs tell the truth, because a camera can accurately represent the reality and a mechanical approach to data acquisition can minimize bias and interference. Hence statements like "audio and video recordings are precise record of naturally occurring interaction" (Flewitt, 2006, p. 30, citing Silverman 2000); "[video camera] provides a continuous and relatively comprehensive record of social interaction, a document that is to some extent phenomenologically neutral, that is, the video recorder does not think while it records" (Erickson, 2006, p. 177).

This view of photography holds several questionable assumptions: It assumes that truth is objective, obtainable, and provable; that photography provides an access to the truth; that the truth can be presented in the form of a print or a digital file as irrefutable evidence. Yet there are some questions researchers must ask: Can a photographic representation be equated to truth? If so, how much weight should it be given? If not, what does a photograph really tell? How should photographic evidence be understood in the post-Rodney King and post-modernist era where meaning is in constant flux, constructed and reconstructed by the interplay of individual subjectivities and social ideologies?

The Evidentiary Value of Photographs

Nowadays as smart phones have become ubiquitous, photography has become a tool for creating self-identity. More importantly, photographs have increasingly been used by individuals and social institutions as proof attesting to their version of truth. After all, looking at the photographs, it is obvious that the camera captures reality right in front of it and that reality has left indisputable traces of evidence. The evidentiary function of photography is well understood hence the widely accepted practice of using photographs in academic research. Outside academia, one of the most important areas photography serves is of course the criminal system, as exemplified in the prevalent use of mugshot, bodycam, and surveillance cameras. However, the idea that photographs represent truth is questionable.

Like many new technologies when they were first adopted, photographs as a form of evidence in the law was initially encountered with suspicion in judicial trials but has gained acceptance and now dominates modern courts (See "United States v. Hobbs," 1968). In the United States photographic evidence can be admitted and authenticated into court under two theories: First, *the pictorial testimony theory* ("United States v. Rembert," 1988, p. 1026), which requires a sponsoring witness with personal knowledge to testify whether the picture "fairly and accurately" represents the scene. The photograph then serves as an illustrative purpose for other testimony. Second, *the silent witness theory* under Federal Rule of Evidence § 901(b)(9), which accepts that the photograph carries its own independent evidentiary value and can speak for itself. Its admissibility is "based on the reliability of the process by which it is made" (Rembert, p. 1026). A common example of this type of photographic evidence is security camera footage ("United States v. Goslee," 1975).

There are some parallels between the ways courts and researchers use photographs. Photographs reproduced in literacy research articles act like *pictorial witnesses* – they are reproductions of children's literacy works and serve to supplement textual arguments (e.g. Pahl, 2002; Yamada-Rice, 2010). And the *silent witness theory* is similar to the common practice that a researcher places a camera in an unobtrusive position, documenting activities and hoping to minimize bias, subjectivity, and intervention.

Although it is widely accepted that photographs are reliable representation of reality and there is no denial that photographic representations entail rich, lively impressions and carry significant persuasive power, e.g. showing the degree of severity in a personal injury case ("Bannister v. Town of Noble," 1987), however, both literacy researchers and legal scholars must recognize that photographs cannot serve as a vehicle to truth. The belief that photographs represent truth can be criticized at two phases: the recording phase and the interpretation phase.

First, mechanical recordings cannot avoid subjective bias or human intervention. Nor can mechanical recordings be equated to a faithful and reliable representation of reality. Extensive subjective judgments are exercised, and bias is introduced during the recording phrase. For example, frame selection, camera positioning, choice of lenses with corresponding optical distortions, and even the presence of the researcher in the

particular place are all contributing factors determining the outcome of an image. Further, there exists reality that was left outside of the frame of representation and from subsequent interpretation. This selective nature of photography "may lead jurors to miss subtle nuances that ordinarily would change their evaluation" (Madison, 1984, p. 733). The limitation of data recording highlights the need to recognize the technical impossibility of capturing the truth as well as the extensive subjectivity a researcher invests. It may be fair to say that a photograph is the representation of what the researcher saw in his or her mind's eyes – an image of the photographer's own ideological position rather than a representation of the truth.

Second, truth cannot be fixed in the recording phase because photographs are symbolic representations that require interpretations. Even assuming a camera does capture reality with accuracy, plural meanings emerge during the viewing process. As Madison puts it, "the mind interprets stimuli according to past experiences and prejudices, both of which are unique to the individuals. Because of this subjective perception process, jurors can misinterpret the contents of an undistorted photograph" (1984, p. 722). Thus, jurors or researchers relying only on the intrinsic qualities of photographs without knowing the context can reach very different conclusions. Rodney King's case vividly reminds us the defense attorneys' transformation of police brutality to exonerating evidence:

> The defense attorneys broke the video down into "stills," freezing the frame, so that the gesture, the raised hand, is torn from its temporal place in the visual narrative. The video is not only violently decontextualized, but violently recontextualized; it is played without a simultaneous sound track which, had it existed, would have been littered with racial and sexual slurs against Rodney King (Butler, 1993, p. 20).

In a more recent case ("Scott v. Harris," 2007) the Supreme Court relied on short video clips and ruled that a police officer involved in a high-speed chase cannot be sued. Writing for the majority, late Justice Scalia concluded that the officer's force was not excessive. He said, "we are happy to allow the videotape to speak for itself" (p. 379, n. 5). Yet viewing the same videos Justice Stevens argued in his dissent that "the Court asks whether an officer may 'take actions that place a fleeing motorist at risk of serious injury or death in order to stop the motorist's flight from endangering the lives of innocent bystanders...' Depending on the circumstances, the answer may be an obvious 'yes,' an obvious 'no,' or sufficiently doubtful that the question of the reasonableness of the officer's actions should be decided by a jury, after a review of the degree of danger and the alternatives available to the officer" (*Id.* at 392). Referring to the need to recognize the specific driving conditions and the broader context, Justice Stevens explained "a high speed chase in a desert in Nevada is, after all, quite different from one that travels through the heart of Las Vegas" (*Id.*). Justice Stevens' dissent exemplifies how photographic evidence is inherently partial, incomplete, and subject to plural interpretations. Blindly trusting a photograph may have serious consequence in criminology, such as biased facial recognition and wrongful conviction, (see also Biber, 2006). Yet, the paradox of visual reality is well exploited by police, lawyers, politicians, and media agencies, and is carried on to academic research.

In sum, despite its compelling visual power, a photograph cannot not "speak" for itself. The belief of accurate representation of the truth itself is a myth. Even if a camera can accurately record the reality, truth is constructed by human experience. Mnookin (1998) says it well: "the meaning and epistemological status of the photograph were intensely contested, both inside and outside the courtroom... photographers, judges, and many others understood that photographs did not necessarily represent reality in a truthful or complete manner. Photographs could lie, making any presumption of accuracy unwarranted" (p. 4, 54). Like all symbolic systems, the perceptions and interpretations of photographs are framed in a regime of truth that conform to a particular social and historical paradigm. Indeed, if photography is objective and objective truth exists, it will render any fact-finder, jury or researchers, needless. The belief of a single version of truth, accurate representation of reality, and the possibility of moral neutrality hardly represents the current view of multiple literacies and justice movements that are always contested with power struggles.

A Visual Semiotic Approach

Phase I: Data Acquisition

Given that the current visual methodology can be criticized in the two phases – data acquisition and data analysis, the proposed visual semiotic approach has two corresponding components. This section discusses data acquisition by offering a new way to photo-taking. The next section addresses data analysis.

As new literacy expands literacy beyond text and recognizes equal meanings contributed by all semiotic modes (Kress, 2010; Labbo, 1996), it is believed that photography is particularly suitable as a new research method to the study of young children's embodied literacy experiences:

(1) While young children may not be able to read and write, their literacy experiences can be discerned by observing their engagement with multiple semiotic artifacts through bodily performance that exhibit signs of social significances.

(2) These signs then permit the analysis of whether children's activities can be considered as literacy experience; what informs these activities; and how do they take place in a particular social context.

As it is believed that unmediated data recording and objective representation are fictional, the proposed data acquisition approach urges the researcher to abandon the traditional practice of being a distant and disinterested data collector. It invites research photographers to appreciate children's complex and lively literacy experiences by getting more interactive with children as research participants, seeing from their eye level, getting involved, and zooming-in (both physically and figuratively) to their literacy space. The goal is to capture in depth specificity and insights into children's fleeting meaning-making experience. This approach exemplifies what Banks (2007) described: "visual methodologies relentlessly particularize, highlight the unique, go beyond the standardization of statistics and language" (p. 119). The resulting photographs thus exhibit rich symbolic meanings, to incite the plural reading of "rhetoric of the image"

(Barthes, 1978, 1981), and to "unlock[] as the semiotic processes within are deconstructed, resonating with the wider socio-cultural and political meanings of the society" (Spencer, 2011, p. 57).

In other words, this approach challenges the divide between the photographer and the photographed, or the researcher and the researched. It necessitates a close intersubjectivity among those involved. A successful photographer will capture the "decisive moment" of an action or conflict that "sums up a story" (Horton, 2001, p. 14). Not only will the photographs show the basic elements of a narrative such as who, what, where, when, why and how, they will also be graphically appealing, stirring strong emotions with shared concerns about a personal story (Kobré, 2008, p. 130). Researchers must refrain from relying on the automatic mode of a recording or a fixed position of a camera to collect data in a mechanical way. They must rethink the way a photograph is taken. Perhaps the question of how to take a photo is too simple to ask and most people think their photography skills are excellent (Canon U.S.A. Inc., 2016). Yet Becker (2004) lamented that photos in research are often no different from tourist snapshots. This visual semiotic approach urges researchers take a more thoughtful approach to photo-taking and "becoming more methodologically skilled within it [to] enhance the quality of our research" (Emmison & Smith, 2000, p. X).

Phase II: Data Analysis

As social semiotics approach to multimodal literacy highlights social meaning and cultural original of bodily performance, questions about what informed children's semiotic choices must be answered by tapping into children's past and linking it to broader social domains. The proposed semiotic analysis of photographs is not meant to find truth. Instead, it is used visualize the richness of multimodal literacy and to identify traces of embedded social significance. This involves multiple interpretations of the body (Bourdieu, 1977) and intentions (Lancaster, 2003). The vivid and detailed activities represented in photographs then allow nuanced and critical analysis of the semiotic meanings and their social origins. The results offer an explanation of how young children's literacy practices come into being; how they are informed by family histories; and how they manifest and interact with a specific symbolic resource or context.

The proposed semiotic analysis of photographs takes a combination of two analytical methods:

(1) Content analysis: identifying the immediate visible activity in the photograph (see Kress and van Leeuwen, 2001) and

(2) Semiotic analysis: interpreting the symbolic meaning behind the activity (see Rose, 2007).

It involves the following three steps to obtain a "thick" description of the qualitative results of the study (Lincoln and Guba, 1985):

(1) The unit of analysis is not the individual child or the photograph, but a specific activity that carry symbolic meaning of social significance. By social significance, it means the activity reveals a child's understanding of self, emotion, social values that meet Street's (1996) notion of literacy practice.

(2) As meaning making draws upon an individual's life, the next step involves identifying whether the symbolic signs of bodily performance reflect children's subjectivities and can be traced to family background.

(3) Finally, the examination of the embodied state. It analyzes how the internalized sociocultural image is externalized in the bodily performance within a specific semiotic setting. This step requires a close inspection of the socially constructed form of literacy practice; how it reflects self-image; and be interpreted within the frame of institutional structure and power.

Case Study

Photographs presented in this paper were originally taken at a children's museum in the Southwest in the United States.[1] Unlike a typical museum, a children's museum is filled with artifacts of rich symbolic meanings that are familiar to children, such as a pet clinic, train station, or grocery store. These symbolic resources offer hands-on opportunities for pretend play and multimodal literacy experience. The results are consistent with previous findings that children actively engage in a wide variety of social activities when they encounter symbolic artifacts (Björkvall & Engblom, 2010; Marsh, 2006; Roskos & Christie, 2001; Yamada-Rice, 2010). Yet looking through a visual semiotic lens opens a new landscape to visualize the embedded social nature of children's literacy practices.

Embodied Social Construction of Gender Identity

On many occasions when sisters Maggie and Katy noticed a camera was pointing to them, they would pose gracefully like dancers for the camera, as the following picture shows. Their bodily performance was not a random display but exhibited specific semiotic meanings as embedded in a patterned sequence and concerted actions. With their bodies signifying classical dance movements, Maggie and Katy transformed themselves into ballerinas. The performing body becomes a semiotic resource signifying a specific identity, embodying cultural aesthetic value, and serving as a vehicle for an elegant performance. Maggie (left) stood tall with spine elongated, straight right leg, pointed toe, and elevated left hand with fingers toward the ceiling, resembling *écarté*. With her right foot pointed outward and left foot flat on the ground Katy appeared to be performing *croise devant*. As Bourdieu argued "social identity is defined and asserted through difference" (1984, p. 172)m here, Maggie and Katy adopted specific symbolic gestures and movements so that they would be recognized as ballerinas rather than, say, painters. Not only did they exhibit individual performance, they also showed concerted postural coordination, engaging with each other in synchrony with a shared goal: That ballet performance requires harmony among dancers so that they look better together.

Maggie's and Katy's graceful ballerina pose and gesture also fit the idea of gaze (Barthes, 1981; Berger, 1972; Mulvey, 1975). This particular cultural practice, a multi-sensory interaction presenting oneself as an aesthetically pleasing object to be viewed by

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[1] All photographs in this paper are reprints from author's dissertation with permission (Cheng, 2010). Pseudonyms are used to protect the identities of research participants. IRB and parental consents were obtained.

a spectator, reflects their knowledge of dancing as performing art as they seek to connect dance, dancer, and audience (see Hanna, 1983). From their facial expressions, both girls assumed the confidence of ballerinas, yet in different ways. Maggie, looking straight at the lens, conveyed a strong sense of self and asserted her role as the prima ballerina. By doing so, she also invited "audience identification and involvement" (Jewitt & Oyama, 2001, p. 138) and "demanded" being looked at (Kress & van Leeuwen, 2006, p. 118). Katy, on the other hand, took a softer smile, looked away, and perhaps indulging herself in the fantasy of being the Swan Princess.

Just like ballerinas constantly watching themselves in the mirror examining alignment and imitating others (Dearborn & Ross, 2006), immediately after the photo was taken Maggie and Katy asked to view the images from the LCD screen on the back of the camera. This act supports their digital authoring skills: their knowledge about the immediacy of digital photography; their ability of using the screen as a mirror to check self-representation; and they have a perceived audience in mind. Maggie and Katy then asked to use the camera and started to take pictures of each other who took turns to be a ballerina. By doing so they played the triple roles that blurred the line of dancers, producers, and viewers as they engaged in their own multimodal media productions. To them, digital media was not a new, formidable technology – it was already part of young children's multimodal literacy repertoire (Bulter, 2009; Joy, 2012; Kaiser Family Foundation, 2006; Stout, 2010; Wohlwend, 2009).

A visual semiotic analysis can also reveal the connection among literacy practices, individual upbringing, and social ideology. The next photo on the left was a picture of Stephanie holding an image of herself with unibrow and beard she drew on a smartphone. Conversely, the photo on the right was a picture of me that Stephanie took

and that she embellished with eye shadow, lipstick, a necklace, hair bow, and long, colorful hair. When she completed it, she shouted "you are now a girl!"

Multiple layers of social embeddedness and connections are revealed in these two photographs. Literally speaking, the digital art – the literacy products – was an embodiment of Stephanie's fluency in media literacy and the socioeconomic capital from her family that contributed to the development of such a skill. Figuratively speaking, the finger drawing of the digital art – the literacy process – was an embodied externalization of her understanding of the constructive nature of social identity: Boy and girl are made distinguishable through indictive costuming and ornamenting. It can be argued that both photographs are images of Stephanie herself: An actual image of herself as a girl transformed into a man; and a perceived image of herself transformed from a man; all based on her skillful play on the notion that while social image must conform to a well-defined system of signification in order to be recognizable, social image can create perceived identity that overtakes actual identity.

Pretended Play with Semiotic Resources

The next picture was taken at a pet clinic, a small room filled with stuffed animals and medical toys. Young children may not be able to read the sign on the wall stating this room is a pet clinic but they intuitively know the setting and acted accordingly. Children were likely to pick up the cues of a vet clinic from the context, such as the light-blue walls of the room conveying a sense of healing or that prompted memory of visiting a clinic; plastic toys resembling medical tools lying on a desk that could be used as an

operation table; several pets laid down in the cages, they must be suffering animals in need of immediate care!

Social identity and difference were manifested through bodily performance and the semiotic meanings it carries. Here this photo shows Jimmy wore the ear tips of a stethoscope in his ears and placed the chest piece on a pet dog laying on top of the operation table. He then strategically placed fingers and tapped the belly and, with his head tilting one side, raised eyes and listened intensely to the heartbeats. From these symbolic activities, it can be reasonably inferred that Jimmy was able to discern the symbolic meanings of these artifacts and responded accordingly by playing out the role of a vet with proper medical script. Jimmy's roleplay of a vet re-affirms that children literacy practices are informed by their prior experience – a visit to a doctor – and helps to visualize how children externalize social image and re-enact prior experiences in a specific symbolic setting.

Children were free to pick any role they desire in the clinic, yet children over two years old automatically re-act a role that they deem as legitimate suggested by the specific semiotic setting – a vet. And when there are multiple roles available to choose from, they inevitably pick the dominant one – a vet again. It was never observed that a child played the role of a sick pet. Furthermore, although all children play the role of a vet, no one does it in the same way. For example, the medical device and the animal they pick may vary from each person and from each visit. There were always some sort of

improvisation as part of their idiosyncratic performance but children also acted in a way to ensure their bodily performances conformed to the social image and performative script.

Hence, the it become clear that the notions of dominance and legitimacy develop early in life. Even though children are autonomous agents free to do what they like in the museum, as capable cultural readers, children inevitably interpret and react to the specific semiotic site according to the museum's design purpose. Although they do enjoy playing the role of a vet, their cultural knowledge become a constraint, a self-imposed rule ensuring that their performance is legitimate according to the site. Thus, children do not have complete freedom. There exists a tension that the children actors must negotiate to balance their imagination and symbolic constraints. This tension can be visualized through a social semiotic analysis by identifying what was present and what was absent from the photograph: Here, what Jimmy did (following a prescribed social script dexterously examining the health of the animal with specific symbolic artifacts) and what he did not do (feeding the stethoscope to the dog or himself, for example) demarcate the imagery but social boundary of legitimacy Jimmy imposed for himself. Deviation from social constraint could cause strong resistance from the children as the next case will show.

Agent of Social Reproduction and Contest of Power

Even though a museum is an informal learning environment, as a social institution it is also a site of social reproduction. This is well demonstrated in the following two pictures: Many young children had learned early on the proper manner to interact with museum staff and teachers. They knew how to behave, such as raising hands to answer questions. (Picture on the left). And those who did not follow the teacher's instruction would get time out. (Picture on the right). Thus, those who had learned the "right" school discourse and behaved well readily met teachers' expectations and fit into the social institution. These children's dispositions were reinforced further as a result of positive responses from teachers. E.g. they get to pick toys first. Hence, a children's museum is not merely a playground but a place the prepare children for cultural competency and this is achieved by reproducing social hegemony.

The results further reveal that the site of literacy practice is not limited to textual or physical space. The following picture depicts an imaginary literacy space invented by the children, a jail, where the children would not follow the teacher as they resorted to the broader social institutional power to restore social order.

At one point a teacher and the author wanted to take some of the stuffed animals out of the pet clinic and "cook" them in the kitchen. Some children then immediately jump to the door of the clinic and stopped us from taking any stuffed animal. As the teacher insisted on taking the animals, several children summoned institutional disciplinary power and pulled the teacher to a place to restrain her. And a child proclaimed "you are bad, you need to stay in jail!"

This literacy space shows that young children's literacy practices can be extemporaneous as a response to new semiotic prompt, and can be persuasively expressed by their emotions and beliefs in the need to pursue a just world. The impromptu performance was rooted in their family histories and reflected their developing understanding of cultural norms and institutional power. The results highlight that children are not mere passive cultural readers of institutional instruments. Instead, they are active participants of the society, capable of restructuring their self-identity and creating a new context in accordance with the institutional codes they have internalized. Looking at the photograph here, the bodily performance showed that the play was fun and the challenge of the teacher was acceptable because all social agents – the adopted role of police officers and the imposed role of a bad guy – were understood to be bound by a commonly shared system of justice, policing power, and social institution. This finding is consistent with what Bourdieu (1977, 1993) called "symbolic violence" – self-reproducing symbolic practice to re-enforce social hegemony. By

reproducing social order, those children became active social agents contributing to the maintenance of the status quo.

Conclusion

It is hoped that the expanded notion of literacy and the questioning of evidentiary value of photographs will prompt researchers to reconsider the way photography is used in literacy research. It is believed a naturalistic and intersubjective approach to data acquisition is suitable for researchers to study young children's early literacy experience in out-of-school contexts. By foregrounding the bodily performance, early literacy experiences can be visualized; traces of social significance can be identified; and connections to self-identity, family histories, and social institutions can be made. These traces reveal and permit semiotic analysis of the self-image and the process of creating self-identity. All the insights into the richness and developing literacy experience would be lost if literacy is confined to written text and if mechanical recording is utilized.

A social semiotic analysis reveals that while young children's literacy practices exhibit a high degree of unpredictability and can manifest in various multimodal means and spaces, nonetheless they conform to self-imposed social images and scripts.

Furthermore, even though a sense of coherence can be discerned as children's making of semiotic resources match the contextual cues, underlying the apparent harmony is children's active adoption of preferred social ideologies that they seek to legitimatize and align with the broader social power structure.

Children's knowledge of social institution permitted a level of competency and comfort. This knowledge of intuitive conceptions of thinking and feeling, how things could go, and how to work with authority figures constitutes a form of hidden curriculum and is often unspoken, yet is critical to the success in formal school setting (see Bourdieu, 1990; Bourdieu & Passeron, 1977). This visual research paradigm offers researchers, teachers, and parents a critical lens to see that children at a young age are already developing self-images, absorbing cultural knowledge, and practicing dominant social discourses. I.e. young children are not tabula rasa waiting for formal education. Instead, they are active social agents, acquiring valuable cultural capitals that are class-based and that account for future educational success. This study points to the importance of early literacy experiences and informal learning. As educational settings are sites of reproduction of social hierarchies, those who come to school with capitals valued by the system are in a more favored position and will gain significant advantages.

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