The Affordances and Constraints of Visual Methods in Early Childhood Education Research: Talking Points from the Field

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Visual methods are increasingly being developed and used in early childhood research. The literature strongly suggests the affordances of visual methods; still, such methods are not unproblematic. Through a critical reading of literature pertinent to visual methods in early childhood research (i.e., involving children from birth to age 8), including multimodal literacy literature, this paper offers six discussion points to promote critical conversations among educational researchers about visual methods. The points pertain to the definition of visual methods, their potentialities in early childhood research, children's rights and participation in research, authenticity and children's voices, methods for interpretations of visual texts elicited from children, and ethics and assent. Aggregated, the points suggest the need for the enactment of critical, dialogic relationships between methods and methodologies, adults and children, and researchers and research participants.

Keywords: visual methods, early childhood education, multimodality, voice

Particularly within the last ten years, visual methods have become "a distinctive feature" (Lundy, McEvoy, & Byrne, 2011, p. 716) of early childhood research, that is, research concerning children from birth up to and including age 8. The literature suggests that this trend stems from a plethora of arguable benefits, such as the opportunity for children to document their own lives (Clark, 2010, 2011; Dalli & Te One, 2012; Dockett, Einarsdottir, & Perry, 2012; Harcourt & Hagglund, 2013; Pascal & Bertram, 2009) and use modes and media that reflect the semiotic complexity of contemporary times (Kendrick, 2015), hence offering researchers unique and timely insights into children's lived experiences (e.g., Brostrom, 2012; Clark, 2005b, 2010; McTavish, Streelasky, & Coles, 2012). A variety of visual methods have been devised and implemented to work toward the goal of "recognis[ing] young children's competencies" (Clark & Moss, 2011, p. 2) and enabling children to become co-researchers and knowledge builders (Clark, 2010; Pascal & Bertram, 2009). Yet, while the importance of visual methods is emerging in sectors of the early childhood research literature (e.g., Bradbury-Jones & Taylor, 2015; Dalli & Te One, 2012), and interest in them is expanding, as evidenced, for instance, in research groups devoted entirely to visual research (e.g., see Visual Research Group, 2015), the nascent as well as diverse, fragmented, and fast-moving nature of visual methods demands pause, consideration, and conversation among researchers.

We are three early childhood researchers (Rachel Heydon and Lori McKee study early childhood curricula and literacy and Lynda Phillips early childhood development) who use visual methods of various kinds in our scholarship. Our goal with this paper is to contribute to the needed groundwork for better understanding the visual turn in research with a focus on its implications for those who study early childhood. Herein we explore the nature of visual methods as well as responses to the following question: *What are the problematics and potentialities when using visual methods in early childhood research?* Our goal in posing this question was not to answer it absolutely or to conduct an exhaustive literature review, but rather, given the intricacies and newness of the topic, to highlight relevant literature and raise *talking points*, which we define as ideas pertinent to the topic at hand requiring further elaboration and scrutiny by researchers. The talking points are the result of a synthesis of applicable literature read through a critical theoretical lens (Lewison, Flint, & Van Sluys, 2002) as well as reflexively as early childhood researchers.

To devise the talking points, we first compiled articles, book chapters, and books on visual methods in early childhood, searching four databases (Google Scholar, ProQuest Education, PsycINFO, and Summon) using variations of the search terms "visual method*" and "child*". To investigate the topic through a child's rights lens, we additionally conducted a search where we added "UNCRC, and "child* right*" and searched specific modes of data collection, such as "photograph*". We considered primary, secondary, conceptual/ theoretical, and anecdotal/opinion sources and used the references in literature we found to lead us to additional sources of import. Noticing the reoccurrence of issues relative to multimodality in our readings, we also wove into our readings and talking points pertinent literature from the field of multimodal literacy. The critical readings of this literature involved asking within and across sources, as well as our own interpretations of what was taken for granted, where views converged and/or diverged, and implications for equity and social justice relative to child research participants.

The synthesis of these critical readings produced the following set of talking points, which we elaborate on in this paper:

- the definition of visual methods

- the potentialities of visual methods in early childhood research

- children's rights and participation in research

- authenticity and children's voices

- methods for interpretation of visual texts elicited from children

- ethics and assent

We share each point in turn and conclude the paper with implications of these points for research in early childhood.

The Definition of Visual Methods

To begin to generate the talking points, we had to first deal with defining visual methods. We identified quickly that this is a term that is used in the literature in varied ways. By employing media and data collection efforts, such as "cameras, drawing, tours, map making, and ranking exercises" (Lundy, McEvoy, & Byrne, 2011, p. 716), in their simplest sense, visual methods can be defined as using "visual materials of some kind as part of the process of generating evidence in order to explore research questions" (Rose, 2014, p. 25). Admittedly these methods come in varied form in terms of what kind of data are collected, worked with, and interpreted (Rose, 2014), hence there is a breadth of latitude in what could be called a study that employs visual methods.

Researchers like Wood (2015) call for methods to be distinguished from more complex visual *methodologies*. Methods refers to "a 'catch-all' label to define established approaches" to data collection or forms of data exemplified by "video and still images, drawings, sculptures and models that are used across a range of disciplines" (Wood, 2015, p. 130). Methods are akin to the "what?" or "how to?" of a study. Methodologies, however, are the overarching approach to the study as a whole which "make[s] the visual the mode of enquiry" (p. 130). As such, the visual is pertinent throughout the study from data source, form, "analysis," interpretation, and "the means of data (re)presentation" (p. 130). Furthermore, the nature of the visual can be construed in more intricate terms, relating, for example, to the "sensory, symbolic, metaphoric and[/or] existential" (p. 130). We noted in the literature that the term *visual methods* is often used as a shorthand for visual methodologies, and Wood's distinction, which is ontologically and epistemologically important and hence a talking point, is not explicit in most of the literature. This distinction is nonetheless something we raise within other talking points.

The Potentialities of Visual Methods in Early Childhood Research

Our review of the literature relative to the affordances of visual methods strongly suggests that they make many things possible for children and researchers. Most generally, we found that these affordances coalesce around enabling children to express their views and lived experiences so that they might be documented by both children and researchers. Specifically, visual methods have been found to create numerous authentic opportunities for children, researchers, and educators.

First, visual methods allow children to actively participate in documenting and interpreting their own lives (Clark, 2005a, 2005b, 2010) and reflect on those their experiences (Clark, 2005a, 2005b; Singal & Swann, 2011). Visual methods also afford children's participation in research in ways that capitalize on their production of and engagement with visual texts (Clark, 2005a, 2005b; Elden, 2012). The making and viewing of images, for example, have been found to be familiar practices that can be "experienced" by children as "fun" and "relaxing" (Elden, 2012, p. 68). Visual methods indeed can permit children to express themselves through the modes of communication that are most salient to them in their daily lives (Kendrick et al., 2010). This enjoyment of the quotidian might help research by "triggering remembering" in the children as well as "helping the abstract become concrete" (Elden, 2012, p. 68). Having these memories be accessible to children could help flatten the "power relationship between the adult researcher and the child" (Elden, 2012, p. 68). Other affordances of visual methods involve their ability to allow children to discuss their lives through image and language, thus representing what words alone cannot convey (Rose, 2007). In expressing themselves through the conjunction of modes and media, new meanings can be opened up as the relationship between modes can itself communicate something of significance which might be otherwise lost in more restrictive communication situations (Rose, 2007). The use of visual designs has similarly been shown to convey children's tacit understandings (Rowsell & Decoste, 2012) and provide children with a feeling of relief, because they have been invited to use diverse communication channels instead of being forced to use only language-based modes to generate knowledge (Kendrick et al., 2010).

These affordances create new possibilities for researchers, including for them to gain "detailed information about how participants see their world" (Rose 2007, p. 242), to understand different perspectives (Rowsell & Decoste, 2012), to see children's experiences across domains and garner information about the children's funds of knowledge (Moll, Amanti, Neff, & Gonzales, 1992; Singal & Swann, 2011), to perceive the multidimensionality of children's voices (Elden, 2012), to collect information about children's "experiences and perspectives while at the same time democratically involving children as 'producers of knowledge'" (Elden, 2012, p. 68), and to recognize children's identities (Singal & Swann, 2011). This recognition happens as researchers learn through children's diverse meaning-making practices that expose parts of their identity that might otherwise be invisible in other communication modes (Albers, Frederick, & Cowan, 2009). Researchers can also account for semiosis and the materiality of children's texts and the embodiment of their experiences through visual methods (Kendrick et al., 2010). Moreover, the literature has highlighted ways that visual methods can provide opportunities for the perspectives of young children to "become the focus for an exchange of meanings between children, practitioners and researchers" (Clark, 2005b, p. 29).

Most of the above affordances suggest that the potentialities of visual methods reside in capitalizing on children's meaning-making practices and positioning children in research as capable communicators. Visual methods use "tools which play to the strengths of young children, methods which are active and accessible and not reliant on the written or spoken word" (Clark & Moss, 2011, p. 15). This is essential because young children in particular have "not yet settled into the fairly narrow range of methods of communication used by the adults around them" (Fraser & Gestwicki, 2002, p. 249). Thus, leveraging the affordances of non- or extra-linguistic multimodal literacies may be particularly apt for research in early childhood. We use the term multimodal literacies to refer to meaning-making practices that draw on a variety of communication channels (e.g., Walsh, 2011), most notably the visual. Further, given that the visual is increasingly salient in contemporary communication (e.g., Kress, 1997), visual methods may allow for different, even expanded, ways of understanding children's lived experiences in ways that honour children's multimodal meaning making (Anning & Ring, 2004). For instance, when writing about their "mosaic approach" for listening to young children by, in part, leveraging multiple modes and media, Clark and Moss (2011) express that this visual method positions even the youngest of children as "experts in their own lives," "skilful communicators," "rights holders," and "meaning makers" (p. 5, as cited in Clark, 2011, p. 328).

This positioning is in sync with the concept of early childhood literacy, which refutes children's meaning making as a lesser form of adult literacy. In a comprehensive review of the literature related to young children's literacy, Gillen and Hall (2013) offer that the very term *early childhood literacy*

is a concept that allows early childhood to be seen as a state in which people use literacy as it is appropriate, meaningful and useful to them, rather than a stage on a path to some future literate state. It is not about emergence or becoming literate; it is about being literate and allows the literacy practices and products of early childhood to be acknowledged as valid in their own right, rather than perceived

as inadequate manifestations of adult literacy. (p. 14)

For instance, Kress (1997), in his foundational study of how children learn to write and writing's relationship to a host of other literacy practices that draw on multiple modes and media (e.g., model making, drawing, cutting), argues that children are not just *users* of signs, but *producers* of signs. Relatedly, children's expressions are understood by early childhood literacy to be purposeful and motivated. Gillen and Hall (2013) highlight that Kress's findings argue that "children's use of signs, symbols and modalities is not arbitrary but is structured and reflects strategic choices by them to represent things that are important to them" (p. 12). Visual methods that simply create opportunities for the use of multiple modes and media do not guarantee the benefits previously described. Although the use of the visual may be evocative of an honouring of children's personhood, our critical reading suggests that it needs to be seen in its totality within a research *methodology*. Bloome, May-Woods, Wilson, Katz, and Hong (2013), for example, argue that early childhood research methodologies are always undergirded by "assumptions about the personhood of children" (p. 606). The mosaic approach (Clark & Moss, 2011), for instance, insists not just on multimodality but also on methods that foster listening through participation, reflexivity, adaptability, a focus on children's lived experience, and an intertwining of research and practice. This is a totalizing approach to research involving young children rather than mere method.

Children's Rights and Participation in Research

Further to the affordances already relayed concerning visual methods, the literature also suggests the promise of the methods for mobilizing children's rights in research (e.g., Clark, 2010; Dalli & Te One, 2012; Dockett et al., 2012; Harcourt & Hagglund, 2013; Pascal & Bertram, 2009). The United Nations Convention on the Rights of the Child (1990) establishes children's rights to be heard (Article 12) and to have freedom of expression (Article 13) as imperatives that researchers must heed. The UNCRC "clearly positions all children, including young children as rights holders and places a corresponding duty on ratifying states to respect, protect and fulfill the extensive obligations contained therein" (Lundy et al., 2011, p. 715). Most relevant for our discussion, the UNCRC's concern for freedom of expression entails children's right to express themselves "orally, in writing or in print, in the form of art, or through any other media of the children's choice" (Article 13). These rights reify the notion that "young childhood is an intrinsically multimodal state of being" (Young & Gillen, 2010, p. 60) and call for the protection of multimodal expression. The urgency of keeping open children's literacy options (e.g., Heydon, 2013), that is, in children having access to and facility with a range of modes so as to select the most apt, is particularly salient given that every sign is *motivated* (Kress, 2009). Otherwise put, signs are created and/or mobilized through children's interests and *funds of knowledge* (Moll et al., 1992; e.g., their epistemic and semiotic resources) and are connected to children's identities (e.g., Rowsell & Pahl, 2007). There are thus increasing calls in the early childhood research literature for children to help illuminate the circumstances of their lives, with researchers learning *from* and *with* them rather than *about* them (Bradbury-Jones & Taylor, 2015; Clark, 2005b, 2010; Todd, 2003). Though early childhood "is a critical period for the realization of these rights" (United Nations, 2005, p. 1), children's rights in early childhood are understood as "frequently overlooked" (p. 6). Research is a place where there have been attempts to mobilize rights and increasingly, "it is accepted" that children's "involvement in the design and delivery of research projects is essential if children's rights and best interests are to be duly respected" (Lundy et al., 2011, p. 716).

Children's rights are thus not surprisingly a salient theme in the visual methods literature; however, holding and exercising rights within research has been identified as neither neutral nor necessarily straightforward (Dalli & Te One, 2012; Dockett et al., 2012; Pascal & Bertram, 2009). Certainly there is no one-to-one correspondence between visual methods and children's rights, and even the notion of rights is a complicated and difficult one. All of the problematics of rights and research cannot be dealt within this paper; however, we do offer, within the context of the talking points, some of the literature that signals to the scope of the issues. Gadda (2008), for example, accepts that the UNCRC has received endorsements from national governments and child rights advocates for its work in helping to "establish an internationally accepted framework for the treatment of all children" (p. 3). She posits that the UNCRC has "encouraged a positive and optimistic image of children as active holders of rights, and stimulated a greater commitment to safeguarding these rights" (p. 2). At the same time, however, she also forwards that the discourse that underlies these rights is "limited" (p. 3) for a variety of reasons, not least of which is that it normalizes a Western ideal of childhood. This ideal views children through a lens of vulnerability and in need of care and protection. The implications of this view are tied up with a colonial power structure where "nations which are unable or unwilling to adopt [this Western ideal] are judged to be immoral and in need of salvation" (p. 7). Another implication of the view that colonizes childhood and again positions the West as morally superior is the idea that "universal children's rights gives children the right to be remade in the image of adults and non-Western childhood the right to be remade in Western forms" (p. 7). In her critique of the rights discourse, Rogers (2004) highlights that all rights discourses, no matter how well-meaning, are undergirded by the notion of "doing things for children simply because they are 'good for them'" (p. 134). Rogers highlights the discourse's constraints by forwarding this example:

If we accept that children cannot thrive and flourish unless they have warm and caring relationships—this is not all that intimate relationships mean to a child. Adults don't regard being loved and cared about as just about having their "needs" met. Neither do children. For a child, being loved is profoundly meaningful and valuable in itself. (p. 134)

The above would suggest that complex, socioculturally situated, and diverse images of children should inform their involvement in making decisions about their lives, including, we might infer, their participation in research.

Further, an ontological and epistemological question is raised when considering the dual notions of childhood and children's participation in research. The literature on visual methods suggests that such methods tend to view children "not as passive objects in the research process or in society in general but as social actors who are 'beings *not* becomings'" (Qvortrup et al., 1994, as cited in Clark, 2005b, p. 30, emphasis in original). Watson, Emery, and Bayliss (2012) identify a debate in the literature that has emerged over the last thirty years where children are seen as either "social actors in their own right"—that is, *being*—or "as adults in the making, who are judged as incompetent against adult standards" (p. 30)—that is, *becoming*. They explain that the notion of being is marked by theories that conceptualize childhood as "a state of being in its own right" (p. 29) and becoming as a notion marked by theories that conceptualize childhood as "a natural, biological state and transition on the way to adulthood" (p. 29). Visual methods have been seen to "accentuat[e] children's rights and promot[e] social justice" (Agbenyega, 2014, p. 160) by positioning children as active meaning makers (Clark, 2005a, 2010; Singal & Swann, 2011) who are capable of commenting on their own lives (Clark, 2005b, 2005b, 2010) through various modes as text designers (Rowsell & Decoste, 2012). Lundy et al. (2011) found that to engage children as co-researchers, they needed to allow children to express their views within the research process. This meant that children informed "how the research [was] conducted and what methods [were] used" (Lundy et al., 2011, p. 718). Further in their research, children had the choice to participate and were not obligated to do so.

Watson et al. (2012) suggest a more nuanced view of children, which raises questions about how adults might conceptualize them as *both* being and becoming and audit the demands that are placed on children as rights holders and the allies they might need (as well as other supports) to exercise rights. The literature on visual methods identifies research strategies that may be supportive of children's participation as they are becoming. For instance, Lundy et al. (2011) offer a heuristic for conceptualizing children's participation in ways that are consistent with their rights (p. 717), and they recommend particular operationalized methods, such as conducting research in a safe, familiar place for the child and, when conducting research in classrooms, to clarify the difference between schoolwork and the research project. The questions around being and becoming are perhaps most salient in the case of young children who may require the most support to meet the demands of being rights holders (e.g., Watson et al., 2012).

From our reading of the literature, it appears that there needs to be a broader and more intricate conversation regarding how research conceptualizes children as holding and exercising rights. Such a conversation would be more in line with Watson et al.'s (2012) concern for children as being and becoming, where researchers might develop methods that more fully honour the complexity and situated nature of children and childhood. It is also suggestive of the UNCRC Article 5, where children are described as having "evolving capacities" and where adults are encouraged to offer support and guidance to children in ways that reflect the child's gradual acquisition of "knowledge, competencies and understanding" and enable the child to exercise their rights (United Nations, 2005, p. 8). Offering this support might require the promotion of reflexivity in researchers who "seek to challenge the taken-for-granted in the production of knowledge about children and childhood" and ask critically oriented questions about "what gets researched, when, how and why" (Spyrou, 2011, p. 161). This (re)positioning of the researcher explicitly locates the researcher "within the inquiry" and opens the door for "complexities, messiness, vulnerability and competence as well as unexpected relations and practices … to emerge" (Elden, 2012, p. 71). Our talking point here is not even the tip of the iceberg of these issues. The being and becoming discussion is inexorably tied to the discussion of rights, with the pursuit of both being crucial for conceptualizing what visual methods can and cannot accomplish, the responsibilities of researchers, apt methods for operationalizing these responsibilities, and the implications for all concerned.

Authenticity and Children's Voices

Visual methods, like other contemporary movements in research concerning children (e.g., the new social studies of childhood (Spyrou, 2011), are built on the concept of children's voices and the necessity of the participation of those voices in decision making, including concerning research. Collaboration and dialogue in research raises questions about multivocality (Gillen et al., 2007). How do researchers listen to the voices of children above others within a multivocal account? The literature is awash with the importance of children's voices, but to appreciate the ethical and epistemological promises of voices, researchers like Spyrou (2011) argue that we must wrestle with their conceptualization and use. In this section we proffer a talking point concerning the potentialities and problematics of voice in

early childhood research.

Spyrou (2011) recognizes several interrelated problematics concerning voice, such as the representation of children's voices where researchers may unquestioningly represent them as authentic (e.g., James, 2007), individual (Komulainen, 2007), and the product of a unitary subject (Mazzei & Jackson, 2009). There may also be the tendency to "essentialize" (Elden, 2012, p. 67) children's voices. Instead, Spyrou (2011) posits that voices are socially and culturally constructed and mediated or shaped through a variety of factors, such as researchers' "assumptions about children … particular use of language, the institutional contexts in which [they] operate and the overall ideological and discursive climates which prevail" (p. 152). Children's voices can, for instance, also be the result of governmentality (e.g., Heydon, 2015), constrained and constraining, requiring that researchers attend, not so much to devising better methods to capture their "essence," as in Lundy et al. (2011), but rather to discern the ways "power relations in data generation" influence knowledge production (Spyrou, 2011, p. 152). We would also argue for a contemplation of ontological questions about the nature of voice. What is a voice and how might it be relocated from the personal so that the politics of the personal might be viewed and a critical reading enabled (Kamler, 2001)? Again, this seems like a call for critical reflexivity.

Further, our consideration of the literature on children's voices returns us to the problem of being and becoming in children expressing their voices. Watson et al. (2012) urge researchers to consider the demands that are placed on children as rights holders. All people require particular abilities and dispositions to hold and exercise rights, like the rights to voice and freedom of expression. In terms of the multimodal nature of expression, people require knowledge and facility of modes and media to make meaning. What are the conditions that can support this acquisition? Further, young children may require extra support within meaning-making processes (Bradbury-Jones & Taylor, 2015; Brostrom, 2012; Pascal & Bertram, 2009). Children, for instance, are viewed in the early childhood literacy literature as competent text designers (e.g., Walsh, 2007), but they are also understood as not always being aware of their design choices (e.g., Stein, 2008), and such choices are not always successful in conveying intended meanings (e.g., Rowsell & Decoste, 2012). Moreover, Spyrou (2011) identifies the difficulties associated with "actualizing children's voices: to get children to freely and openly express themselves in such a way that the goal of understanding is served" (p. 153). Lundy et al. (2011) argue that "the younger the child, the more complex [it is to] involve them in the research process" (p. 731) and the less the child is able to communicate through speech, the more "salient" these issues become (Spyrou, 2011, p. 152). However, we are reminded that according to the UNCRC it is not necessary for children to prove that they are capable of participating in research, it is for us, as researchers, to use methodologies that can assure that they can (Bradbury-Jones & Taylor, 2015). Ultimately, "young children are neither incompetent nor fully competent in many situations, including research studies and they will benefit from (and in fact are *entitled* to) adult guidance (Lundy et al., 2011, p. 732). Guidance may take the form of modelling representational choices (e.g., what modes and media may be available for expression; Zhang & Heydon, 2014).

Methods for Interpretation of Visual Texts Elicited from Children

Given the complexities of voice just described, as well as what is known about multimodal communication, the notion of how to interpret visual texts becomes critical when using visual methods in early childhood research. The literature is unequivocal in relaying the range of complex considerations and negotiations that are part of visual and multimodal texts, as well as the processes involved in creating them. The semiotics of the research must be considered. For instance, in interpreting data, one must be aware that they are interpreting signs and texts. Classic literacy literature expresses that there is at least an interpolation between text-maker, text-reader, and the situated nature of expressive and receptive textual practices (Rosenblatt, 1978). The meaning of text is never singular, nor is it produced in a vacuum. Rose (2007) describes three sites of making meaning from text—the site of text production, the site of the text itself, and the site of viewing/reading—and states that researchers must give attention to each of these sites when trying to interpret text or understand its interpretation. Considerations for making meaning of visual texts and text making include the ways in which the "visual becomes a tool for understanding how children … momentarily *visualize* and *embody* their knowledge and experience of their everyday worlds (Kendrick et al., 2010, p. 406, emphasis in original), as well how text production is affected by the text-making materials that are available to children and the cultural affordances of how these resources can/should be used (Hackett & Yamada-Rice, 2015). These considerations are akin to Agbenyega's (2014) suggestion that researchers must be aware of capital when conducting visual research. Cultural and social capital certainly influence research design and also text design. Further, to read the visual and to understand visual texts, Pahl and Rowsell (2006) assert that researchers "need not only to account for the materiality of the texts, that is, the way they look, sound, and feel, but also have an understanding of who made the text, why, where, and when" (p. 2). Additional considerations we identified in the literature for when contemplating the issue of interpretation include the following:

- Meaning communicated through any text is contingent and interpretations must be contextualized (e.g., Elden, 2012).

- "Each person interprets media texts and their messages differently" (Rowsell & Decoste, 2012, p. 250).

- "Textual meanings are local and global, socially situated and discursively produced" (Kendrick et al., 2010, p. 405).

- Meaning is created through a "friction" between text and context (Albers et al., 2009).

- At the site of audiencing or viewing, the effects that texts produce "are always embedded in social practices … and may well be negotiated by the image's audiences" (Rose, 2007, p. 35).

- "Reading [an] image as a whole text requires understanding how the various sign systems (e.g., visual and linguistic) work in relation to each other, that is, as fused, rather than as separate systems" (Kendrick et al., 2010, p. 399).

Interpreting the texts of children, particularly young children, by adults who have become entrenched in language (e.g. reference withheld) may require a special attention to the issues raised by the authors above.

We located in the literature on visual methodologies a variety of approaches that have been used to analyze and interpret data which are fitting for use with the texts of early childhood. We reckoned that given the multimodal nature of such data and the notion that analyzing and interpreting such data are forms of reading or sense making, multimodal analyses pulled from literacy studies with an emphasis on early literacy could be useful. The literature in this area clearly shows how such analyses are adept at attending to the complexities, materialities, and situated nature of voice, as per our previous discussion points. Witness Kendrick et al.'s (2010) description of how they handle visual data. Kendrick has long explored how to interpret visual data, in particular children's drawings in relation to other modalities like print literacy (e.g., Kendrick & McKay, 2004). As a literacy researcher who takes a sociocultural approach to the study of literacy, including child-generated texts, Kendrick, with her team, adopts an analytic approach to visual data that accounts for the social semiotics of text generation and interpretation. Kendrick describes how she and her team begin their analysis of visual text with an "*initial description* of the image" asking, "What visual and textual material is contained" in the text, and "Who and what is represented?" (Kendrick et al., 2010, p. 397, emphasis in original). This is an attention to the literal elements of the text and an identification of the modes used therein. Here there is no judgment, just description. Then, "focusing on *immediate connotation*," the team inquires, "What does the image/text signify in this context?" They next move on to the "*systemic connotation*" associated with the text, which sees them ask, "What is the place and status of the [image] with respect to the communication system or systems it is part of?" This is where the researchers think about visual image in relation to other visual images or about language in relation to language more generally. Last, the team establishes the "*narrative threads*," posing the questions, "For what/whom was the [image] intended? What is the relationship between the [image] and local/global discourses?" (p. 397, emphasis in original).

Other researchers involved in visual methodologies signal even more forcefully the importance of considering the materiality of textual data in relation to the social. Pahl and Rowsell's (2011) "artifactual critical literacy approach," for example, "combines a focus on objects," asking questions about what these material data are, what they are made of, and the "stories" or situated cultural, historical, and social information that surround them. More specifically, Pahl and Rowsell forward that the artifacts that children create or hold in their daily lives tell stories about those lives. By inviting children to share their artifacts with researchers and then analyzing them in terms of their material and situated natures, researchers, especially those interested in children and families who have been minoritized, can "understand how children experience home literacy practices in a way that accounts for material culture (the things that lie around us in everyday life) and lived experience" (p. 130). In short, the sharing and analysis of daily artifacts that are of import to children have much to teach about the children, their practices, and situations, and, more broadly, can link up with larger sociocultural trends and happenings.

Regardless of the specific visual method used, the literature exhorts researchers to collect multiple modes of data and focus on the potential relationships among these modes, for example, connecting the visual with opportunities for children's oral explanation to allow for textual interpretation (e.g., Albers et al., 2009; Clark, 2005b, 2011; Rose, 2007). The literature also suggests that, again, it is important to operationalize "reflexive research processes" (Elden, 2012, p. 67) that "[accept] the messiness, ambiguity, polyvocality, non-factuality and multi-layered nature of meaning in" visual and other data (Spyrou, 2011, p. 162). We read this to suggest that to include the voices of children in research, researchers must listen with eyes and ears to begin to understand the messages inscribed in both linguistic and (other) multimodal terms (Albers et al., 2009).

Ethics and Assent

Ethics are at the heart of research with children and foremost in all of the talking points we have forwarded thus far, and their consideration is itself productive given that Todd (2003) posits that ethics "potentially offers" us as researchers "a discourse for rethinking our relations to other people" (p. 1). The notion of who we are for the other, or what could be called *the ethical relation*, is a strong vein in pertinent ethics literature (Cornell, 1992). The literature we read on visual methods outlines different ethical concerns that run from the philosophical to the more operational. This section highlights some of the major ethical deliberations that may be required when undertaking or evaluating visual methods with children, which are always more complicated the younger the children are as communication can become increasingly challenging.

To enact an ethical relationship with children within research, the literature on visual methods says first that researchers must be knowledgeable about children (Pascal & Bertram, 2009; Spyrou, 2011). This knowledge can then help researchers to determine how much the child can participate and select methods that will maximize the child's right to be heard (Lundy et al., 2011). For instance, Lundy et al. (2011) point to how "presenting data to children in analysis requires thought in how data is represented to children" (p. 726). We might ask, are we using a mode that is familiar and understandable to the child? Knowing children also better permits "children to express their own views rather than just reflecting adult views" (p. 726), understanding children's voices as variable (Spyrou, 2011), and leading adults, who may be firmly entrenched in language to the detriment of other modes (e.g., Heydon, 2013) to "relearn other languages" (Clark, 2005b, p. 47). Reconceptualist approaches to early childhood (e.g., Iannacci & Whitty, 2009) do caution that knowledge about children needs to be context specific as in knowledge about *these specific children*, rather than relying on static developmental norms. Thus we would argue that the search for responses to the questions about what children are likely to understand and the best modes for communicating with them should be directed toward the particular children who are involved in a particular research instance.

The literature also calls for ethical researchers to be knowledgeable about research methods so as to recognize that different visual methodologies elicit different data (Spyrou, 2011, p. 153; also see Elden, 2012) and to appreciate that different methodologies position children in different ways (e.g., Lundy et al., 2011). This tenet might also entail researchers recognizing that traditional power relationships between researcher and researched undergo a change—which itself must be critically examined (Clark, 2010; Dalli & Te One, 2012; Pascal & Bertram, 2009). Consider that engaging a child as co-researcher can disrupt power differences between adult and child, but not fully (Lundy et al., 2011). Even when the adult takes care to reposition her/himself, it is difficult to disrupt the power of adults in the research process (Spyrou, 2011). Changes in power structures have been seen as potentially destabilizing for families if the researcher is not aware of the capital the participants and researcher bring to the research field (Agbenyega, 2014). This consideration returns to the question of being and becoming. Phillips and Coppock (2014) relate that much established research with children has taken what we interpret as a *becoming* approach to children and their capacity to participate in research. They explain that according to the UNCRC, children's rights have been organized into three categories—provision, protection, and participation—and they highlight that organizations (such as ethical review boards) have embraced the provision and protection categories because they fit with adult Western ideologies that children are in need of care and protection. At the same time, research that operates from what we might term as a *being* approach positions children as citizens of today and therefore capable participants in research (e.g., Clark, 2005a, 2011; Coppock & Phillips, 2013; Hall & Rudkin, 2011; Phillips & Coppock, 2014). There is no easy resolution to the being and becoming dilemma, especially given that there is no doubt a power differential between children and adults, especially given the observation that traditional ways of conducting research tend to play to adult strengths, such as communication through verbal and written modes rather than children's preferred modes (Coppock & Phillips, 2013). Consequently, there is a need to explore, not only new ways of thinking about children as potentially active, contributing participants in society, but also their capacity to knowingly participate in research, again a point that is more complicated the younger the child.

Much of the dialogue around the process of gaining consent/assent for/with children involves discussing how one ensures that children understand what they are assenting to (Brostrom, 2012; Dockett et al., 2012; Harcourt & Hagglund, 2013; Mortari & Harcourt, 2012). A variety of methods for this process have been documented in the literature. For example, in the "day in the life" research approach (e.g., Gillen & Cameron, 2010), which is premised on visual methods, researchers seek to ensure insofar as possible that the child understands what it means to participate in a study. To reinforce the child's capacity to control what information is recorded, a researcher invites the child participant to create a signal to use if/when the child wishes the filming to stop, and practices using the sign prior to filming. However, even when children give assent for the day of filming, they may not fully understand the implications of assent, and in particular that the data collected will be studied for years to come (Gillen & Cameron, 2010). How can researchers respond to issues of ethics and assent?

The literature calls once more for critical reflexivity to deal with these problematics of inquiry (Elden, 2012; Spyrou, 2011), with Agbenyega (2014) saying that, without it, "visual research becomes depersonalising, objectifying and compartmentalising and treats research participants in mechanical terms, neglecting visual research as lived experience" (p. 155). And we might add that despite the complications of ethics and assent with young children in particular, the benefits may be worth the risks, given that without visual methodologies, children's lived experiences could go unheard, unexamined, and unknown (e.g., Lomax, 2015).

Conclusion

Early childhood research studies involving visual methods are seeking new ways to learn about children and the circumstances of their lives. Much of this research is also concerned with larger methodological issues and implications, including learning *with* children and not just enriching findings through data that are semiotically heterogeneous. Reaching these goals seems to require opportunities for children to express a diversity of voices in research processes and products. Our review of visual methods finds that research employs myriad methods to generate and capture children's multimodal expressions. To engage children successfully in research, methods must play to children's strengths (Clark, 2005b, 2010, 2011). Visual methods that involve digital videotaping, photographic techniques, interviews, field notes, contextual mapping, and the like have been identified, among other potentialities, to mitigate the communication challenges children experience when involved in research (Clark 2005b, 2011). These methods "do not in themselves provide a fail-safe shortcut to children's experiences" (Lomax, 2012, p. 114), however, and raise numerous important considerations. In this paper we asked, "What are the problematics and potentialities when using visual methods in early childhood research?" In our response we identified numerous affordances of visual methods and six discussion points: the definition of visual methods, the potentialities of visual methods, children's rights and participation in research, authenticity and children's voices, methods for interpretation of visual texts elicited from children, and ethics and assent.

None of the discussion points is complete in and of itself, nor are they exhaustive. Our goal in raising the points is to provide a sense of the scope of complexity and issues inherent in visual methods and, more broadly, in research work involving young children. Within our explication of these discussion points, we have noted some commonalities. First, issues of the image of the child and children's capacities, especially in relation to the adult as norm, come repeatedly into play. We see this issue in tension with attempts by some parts of the literature to mitigate colonizing, adult conceptualizations of children, research, communication, and rights. Questions raised in relation to these issues include how researchers might talk about children and childhood in ways that defy universals, fixed trajectories, and problematic power relations, but at the same time have a sense of how to practically proceed in needed research. Given the sociomaterial nature of the visual, approaches to visual methods that build from the literacy literature are an apt place to begin. We have included a taste of such literature that can provide a full accounting of the semiotic demands of expression and voice and the social and material qualities of all data, and can aid in data collection and interpretation. We have also signalled to what kinds of supports and conditions could provide opportunities for child participants to make use of available modes and media. Critical reflexivity is also a strong current we identified in the talking points. We understand this reflexivity as the need for a situated research practice that seeks to understand and work with the children and circumstances at hand rather than making gross generalizations and assumptions.

Much work remains, but the affordances of visual methods listed in this paper are a beginning to grasping their potentialities. The literature is so firm in its regard for these potentialities that one might read visual methods as an imperative of early childhood research in contemporary times. Our talking points suggest that such methods are no panacea. There are undoubtedly epistemological, ontological, and ethical challenges in this work. In discerning a way forward, our reading of the issues of visual methods suggests that needed are critical, dialogic relationships between methods and methodologies, adults and children, researchers and participants, and always a striving to listen to the other. We offer our discussion points as a contribution toward crystallizing the issues associated with such emergent methods so that researchers can further dialogue about them.

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