Two decades have passed since the New London Group (NLG) (1996) radically expanded the definition of literacy in the landmark article, *A Pedagogy of Multiliteracies*, which introduced the notion that literacies are multiple, modally and culturally. This reconceptualization extended text to include animation, video, music, websites, drama, and live-action play, among other multimodal forms for making meaning. Since that time, digital technologies and global networks have stretched multiliteracies even further. When information is conveyed not through print but primarily through image, video, and apps, more expansive methodologies and pedagogies are needed to uncover and respond to the complexity and movement of multi-bodied and multi-spatial interactions. This is particularly true in play, where players collaborate, compete, or otherwise coordinate activity to create and maintain a shared pretend scenario or game. This chapter examines the NLG’s foundational concepts of multimodal design and multiliteracies, as well as its recent critiques, to understand where these concepts fit well with play, where play slips past definition, and how these slippages might inform contemporary pedagogies.

**Multiliteracies and Play**

The NLG’s recognition that literacies are multiple and diverse, situated in everyday practices founded a major strand of multiliteracies research that critically engages culture as more than an universalized monolith. Literacies involve both practices and things: embodied ways of using materials to make meanings as well as sets of physical tools and the artifacts they produce. Literacies, like all cultural tools, are tinged with power relations, which means reading, writing, playing, and designing are ideological practices to wield rather than autonomous skill sets to master (Street, 1995). Over time, particular ways with literacies and their meaning-products come to be expected and tacitly valued within cultural groups. The situated nature of literacy in *A Pedagogy of Multiliteracies* drew upon NLG author James Paul Gee’s theorization of (1996) Discourse, in which certain combinations of reading, writing, playing, or making are accompanied by ways of talking, sitting, walking, eating, and so on, and their co-occurrence comes to be expected as the normal way of “being and doing” among a group of people. Although not an NLG participant, linguistic anthropologist Ron Scollon shared many of the same commitments to the study of language and literacy in cultural contexts: literacy practices are imbricated and entangled with language practices and other social practices. For example, Scollon’s *nexus of practice* explains how webs of social practices make up naturalized ways of participating and mediating cultures. Particular combinations of practices act as markers of membership and identity (e.g., insider/outsider; novice/expert) that uphold unspoken patterns of inclusion and exclusion, justified by widely-circulating discourses (Scollon, 2001; Gee,
1996, 1999). Literacies are powerful ways of making meaning and belonging, situated in a culture’s mesh of engrained social practices and dispositions, materialized in automatic routines that members expect of one another.

Mediated discourse theory provides a thread to connect multiliteracies to cultural production in play. In mediated discourse theory (Vygotsky, 1978; Wertsch, 1991), meanings are mediated, or co-constructed and made accessible, through social practices with cultural tools. When children come together in play, they mediate conventional meanings of physical actions and material props through negotiation, until they agree upon who is playing whom and what their characters will do and say. These agreed-upon meanings are improvised in the moment with materials that are available in the immediate environment and permitted for children’s use according to family, school, or other institutional rules. A data example illustrates this: a group of kindergarten boys rolling and taping paper tubes instantly recognized the tubes as props for Star Wars light sabers, in response to one child’s fencing move that initiated a silent multiplayer duel sequence. Just as quickly when the teacher approached, they improvised, flipping their paper tubes sideways to turn prohibited pretend weapons into electric eels and an undersea pretense that would be tolerated at school.

It is through play that children foreground particular potential meanings of artifacts while backgrounding others by adding physical play actions, talk, and sound effects, that make one meaning more relevant. We tend to look for some print on a page when we consider children’s literacy products and to discount and overlook the action texts that children play. When the boys enacted eels, they quietly held the tubes horizontally and maneuvered individually, walking side-by-side, sometimes tumbling the tubes in slow circling motions or undulating waves. When they enacted light sabers, they turned toward each other, tilted the tubes diagonally or vertically, and voiced the shoom, shoom, shoom, of humming light sabers as they engaged each other in momentary fencing moves. (Wohlwend, 2013, p. 112)

In this way, a toy (e.g., neon-glowing plastic light saber or child-made rolled paper tube facsimile) is an aggregate of meanings and materials situated in a cultural context, entangled with the power relations and prevailing discourses in global flows that circulate in the classroom (e.g., teacher/student power relations in educational discourses such as developmentally appropriate practice) and outside
school (e.g., popular media fan identities and discourses). Discourses justify particular ways of "using language, other symbolic expressions, and 'artifacts,' of thinking, feeling, believing, valuing, and acting that can be used to identify oneself as a member" (Gee, 1996, p. 131). Educational discourses make some materials, modes, and meanings unavailable in classrooms (e.g., children should be reading and writing and not playing, pretend weapons are not allowed in school). A still-prevalent singular print-intensive autonomous model (Street, 1995) keeps school literacy securely insulated, boxed in on all sides by a grade level by discipline matrix of tightly-framed standards.

**Multimodality and Play**

Another NLG legacy redefined Design, recognizing critical agency in designers’ active appropriation that strategically makes or redesigns texts to fit their social purposes using available resources. This concept drew on NLG author Gunther Kress’ (1997) research on early writing that theorized young children as agentic designers who craft drawings, block constructions, or writings intentionally. Kress closely followed the drawing and writing of young children, finding a designer’s agency in the complex wielding of color, line, and shape in paper car constructions. Careful observation revealed the inventive and thoughtful decisions children were coordinating while deciding where to cross a T or how to color a paper car to make it appear shiny and when to cut it out from its paper frame to turn a representation into an object for play. Kress’ analysis (1997) of a child’s action cutting out a car brings a drawing or representation into the world of action is fundamental to understanding children’s action texts. Children are not limited to representing their thinking on a paper; they craft with actions, making worlds, and things with enough substance to support interactions in three dimensions. "The relation between form and meaning is a motivated one, and this motivation arises out of the young maker’s interest" (Kress, 1997, p. 142). Meanings are motivated by the physical properties of materials, which influence their sensory affordances and their sociocultural uses. The interplay of semiotics, materiality, and culture constitutes a mode--a sensory aspect of the environment in a system of culturally-produced meanings developed over histories of use (Kress, 1997, 2003; Pahl & Rowsell, 2010). Table 1 displays a non-exhaustive range of modes that can provide resources for meaning-making with bodies, places, and things.
Table 1. A Sampling of Action Modes

<table>
<thead>
<tr>
<th></th>
<th>Embodied</th>
<th>Environmental</th>
<th>Designed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visual</strong></td>
<td>Gaze</td>
<td>Color</td>
<td>Image, Print</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td>Speech</td>
<td>Sound</td>
<td>Sound Effect, Music</td>
</tr>
<tr>
<td><strong>Spatial</strong></td>
<td>Movement</td>
<td>Layout</td>
<td>Animation, Landscape</td>
</tr>
<tr>
<td><strong>Gestural</strong></td>
<td>Posture, Gesture</td>
<td>Proxemics</td>
<td>Affect</td>
</tr>
<tr>
<td><strong>Tactile</strong></td>
<td>Haptic</td>
<td>Texture, Temperature</td>
<td>Shape, Depth</td>
</tr>
</tbody>
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Kress (1997) showed that children at play produce enacted signs that they craft with bodies and modes in their environments, not to compensate for their emergent language but because they intend to convey the richest meanings possible in their designs. In *A Pedagogy of Multiliteracies*, the agentic relationships among Design, Redesign, and Available Designs have implications for early literacy research and teaching, shifting the focus from young children’s emerging competencies with literacy skills to their purposeful, playful engagements in multimodal composition and cultural production. This repositions children as knowledgeable cultural participants. Even very young children are experienced media consumers who interact daily with video, apps, games, and other multimedia. Through these media histories, children develop expectations for multimodal interactions (e.g., visual effects, music, speech, scene layout, sound effects, etc.) according to film, television, and video game conventions. In other words, young literacy learners *think in film*, knowing that action-based performances on screens mean differently than page-based formats. In videos or animations, meanings are created in an enacted narrative but also through fleeting multimodal interactions in the composition of scenes, unfolding action sequences of shots within scenes, and juxtaposed relationships among subjects and objects within a shot.

However, play is an unruly literacy, flexible and ambiguous (Sutton-Smith, 1997), whimsical and capricious, enabling both doings and undoings. Its fluidity of meaning creates a productive tension with pedagogical aims such as the need for cohesion in storytelling. This was a challenge that early childhood teachers in Literacy Playshop studies faced when trying to hold on to children’s free-flowing and meandering play
narratives, “like nailing Jello to a wall” (Wohlwend, Buchholz, Wessel Powell, Coggin, & Husbye, 2013, p. 45). Tensions among play and storytelling are further complicated when collaborative production with digital technologies intersects with children’s participation that unfolds according to their purposes, social relationships, play histories, and friendships in classroom and popular cultures (Wohlwend, 2011b).

**Modal Bubbling**

The study of play has prompted researchers and theorists to search for new approaches that can account for its emergent, contentious, joyful, and multiply messy character and this leads to new understandings of literacies, in general. In children’s pretend play, player actions and interactions with other players and materials ARE the meanings; thus the foregrounded modes convey meanings that move across space and time. Play scenarios are crafted with bodies, modes, and objects in moments of experience that are emergent, spontaneous, and often temporary. Play exists in the moment, challenging the future-focused planful Design articulated in *A Pedagogy of Multiliteracies*. This is a main premise of a landmark critique of NLG’s privileging of linguistic text and representation. Through a Deleuzian analysis of a boy’s joyful and intense manga play, Leander and Boldt (2013) analyzed his activity as an emergent, emotion-packed, and embodied literacy performance in a mobile, meaningful, lived, and felt experience, that should not be analytically pinned down and flattened into a strategic, orderly, and intentional text.

In play, collaborative meanings are imagined with immediate materials in the moment, improvisations that are transitory and always provisional. An imagined scenario is a collective representation of an agreed-upon context that suspends (one) reality and replaces its conventional meanings of things in an immediate place with pretend ones. In the next section, I explore a more mobile and less planful model of multimodality that accounts for the quicksilver shifts in moments of experience as modes bubble up, grow, shrink, and burst to be replaced by another.

**Analyzing Play Actions, Modes, and Meanings**

Jewitt (2009) makes a distinction among approaches to multimodal analysis, including two that were represented in *A Pedagogy of Multiliteracies*: a social semiotic approach focused on textual analysis of meanings and multimodality (e.g., NLG’s Fairclough and Kress) and a linguistic anthropology approach focused on interactional analysis of discourse and cultural contexts (e.g., NLG’s Gee and Cazden; also Scollon).
In the anthropological strand, Norris (2004) developed an multimodal interactional analytic tool—*modal density*—that provides a way to examine literacy interactions for *modal complexity*, or the number of modes that are in active use, and *modal intensity*, or the relative attention each mode attracts or requires. In this way, the relative modal density of a particular event can be represented in a modal map where a large number of circles indicate high modal complexity and larger circles to indicate higher intensity of more frequently used or foregrounded modes. Interestingly, in social semiotic framing, modes also can be compared for their functional load, that is, to see which mode is doing more work in carrying a design’s meaning (Kress & Jewitt, 2003). Both approaches are relevant in analyzing play activity.

The construct of modal density captures the juxtaposition of modes in a moment of experience and allows an unhinging or mapping of young children’s play and media production as emergent collaborative flows of embodied actions, modes, and meanings, rather than individual and fixed processes, products, or effects of discourse. Specifically, how does action-oriented analysis of young children’s digital storytelling reveal their negotiation of the complexity of an emergent and fluid text? In this view, play is a literacy, a set of social and semiotic practices that produces action texts, animated or live-action pretense collaboratively enacted with other players in an imaginary context, whether a dollhouse, a puppet show, an animation app, or a video game. I have described this kind of interactive spatial production as an action text, focusing on its co-enacted pretense. This perspective recognizes play not only as a literacy but also as a tactic, a way of remaking power relations by making alternative spaces through pretend as-if worlds (Wohlwend, 2011b). To examine literacy practices and material artifacts as sites of engagement and to understand play cultures in early childhood settings, I draw on nexus of practice to analyze how children wield literacies when they play together, tracking nexus in their collaborative production and negotiation of shared meanings to see how play affects patterns of belonging in school and peer cultures.

The following vignette is excerpted from a study of multimodality and meaning-making action texts in children’s play, films, and media production in ongoing ethnographic Literacy Playshop research (Wohlwend, et al., 2013) in early childhood classrooms (10 teachers, over 120 3-8 year-old children). This episode of classroom play and filmmaking was recorded in a K-1 classroom where two teachers who co-taught 50 5- to 7-year-old children during a 1 month thematic unit on storytelling, imagination, and making. Video analysis program synchronized video data of children’s play and filmmaking activities with video of children’s handling of video cameras, puppets, and props while creating films. Mediated discourse analysis identified video
clips for close multimodal mapping (Wohlwend, 2011a) of modal complexity (Norris, 2004) to locate changes in film meanings and classroom participation.

**An Action Text: Coloring Arms and Quacking Hands**

Three children are seated on the carpet of the K-1 classroom, liberally covering their forearms and hands with patches of green, yellow, orange, and blue with water-color markers. One child picks up the digital camera, and with it the roles of camera operator and director. Aiming the camera at one of two girls, he signals “Go!” She immediately arches her mallard-colored arm and makes quacking gestures by holding her hand horizontally and touching her thumb to her fingers. Animating her hand as a duck’s bill, she quacks to the tune “Twinkle, Twinkle, Little Star: Mwack, mwack, mwack, mwack, and so on.” As she sings, the second girl joins in, reaching two quacking hands toward the camera which creates a blur effect. Cautioning “too close!”, the camera operator quickly pulls the camera back to zoom out. At the end of the song, he turns the camera on the other player but she is again decorating her arms. Instead, he turns the camera on his own forearms, playing with movements as he brings his green fingers close to the lens and moves them away again. He accompanies his hand movements with the quacking song, dragging out each syllable slowly, then improvises a burst of sounds and word play, “Beesha bosha basha pa pa pa way…”, punctuated with a few Donald Duck vocalizations.

When passing child asks, “Why are you coloring on your arms?”, the director replies, “It’s ok, it’s part of our story” and dropping the pitch of his voice, he switches into his duck character, “Now don’t ever ask us again.” After reassuring the bystander that they have teacher permission to draw on their bodies, the three players resume filming, alternating turns in front of the camera to continue quacking their variations on the tune. As the film moves from duck to duck, the action and quacking slows to a crawl at times, distorting the syllables and morphing a few notes to a minor key.

Multimodal analysis of this instance of young children’s filmmaking reveals emergent and improvised meanings in their manipulations of modes (e.g., proximity, music, color, tempo) in the child-made video. They moved their hands in and out of the camera frame, filling the screen with blurry images of colorful fingers, slowing down the song and their actions in places, playing with speech sounds to create rhythmic word play. Each action, mode, or meaning is further thickened by modal intra-actions within the multiple actions among cameraperson and actors in a collaborating film crew, within the multiple semiotic systems in costume production and performance in a live-
action music video, and within the multiple improvised characterizations by multiple actors.

1. Multiple actions overlap in film crew collaboration as children coordinated filmmaking roles in a single film. For example, the cameraperson needed to move the camera away from the actor’s hands when she moved too close to the lens while he tried to hold the camera steady. Players also coordinated the timing of their performances, taking individual turns and singing together.

2. Multiple modes combined in multimodal interaction through music, sound effects, color, and movement that enlivened children’s storytelling. The multimodal interaction repeated the meaning “duck” through an exaggerated nasal voice quality, Disney’s Donald Duck sound effects, quacking hand gestures, and patches of coloring that match the solid green head of a mallard drake’s head and dots of brown on forearms that simulated the brown speckling of a feathered body.

3. Multiple meanings pooled in multiplayer improvisation and emerging story ideas in shared pretense. Such storylines vary according to genre. In this music video, rather than proceeding in a beginning to end flow of narrative, the children looped the melody over and over, adding variations to create new stanzas.

Semiotic and social effects were created as well by interactions among actions, modes, and meanings. Semiotic effects are visible in the ways modes combine with meaning and mediated actions with cultural tools and materials. For example, children designed with the mode gaze by attending to subjects in the camera framing or changing the camera angle, panning to capture more action, or zooming in to create a cut-in closeup of quacking hands. These actions held social effects in peer culture when children were included or excluded in shots or activities that conveyed insider status. Children wielded the creative space opened by costume-making to safely transgress school culture. They justified deliberately coloring on their bodies with markers, clearly enjoying the ability to engage in a practice that was against the rules, (i.e., “Color on paper, not people”) as it would be in many early childhood classrooms. They also forestalled a peer’s threat to tattle by referencing their teachers’ approval, “Mrs. B said we could, if it’s for our story. And it is.”
This moment of “coloring arms” while another child quacks with hand motions to an improvisation on a nursery rhyme tune while a third child films the action shows the difficulty of applying Norris’ modal density heuristic for examining a foregrounded practice to parse out how social actors’ attention is divided among modes. In this early childhood example, modes seemed to bubble up as a story element emerged, bubble over as actions/modes/meanings clumped into assemblages, and then burst and disappeared into the background. Rather than a modal density measure of user attention or modal load to measure the relative semiotic strength of a text, I suggest this metaphor of modal bubbling to capture the emergent, productive, and temporary nature of children’s play texts (see fig. 1).

Figure 1. Modal Bubbling: Coloring Arms in Duck Song Film

- **Bubbling Up**: Children’s play texts here are emergent and fluid (Leander & Boldt, 2013). The action texts are co-constructed in collaboratively imagined context, a fragile and fluid pretense sustained by players’ shared agreements to
pretend this means that, which at the same time opens up the played contexts and its underlying pretexts for negotiation, remaking, and improvisation that allows new directions to pop up.

- **Bubbling Over**: The data show productive assemblages of actions, modes, and meanings built through repetitions and modes in motion. The children’s film featured cyclical repetitions of the *Twinkle, Twinkle* melody, repetitions that were also remakings as different children improvised on the melody. The humor of quacking gestures and comical facial expressions were amplified by gaze and proximity in camera work, as zooming in and out was achieved by physically changing the camera’s proximity and moving closer to actors’ bodies while actors also changed their own proximity by leaning toward and leaning away from the camera.

- **Bursting**: Play can be temporary, partial, and fast-paced. The transitory meanings and quick transformations in children’s play are emblematic of its inventiveness and its fragility, where meanings change on a whim.

This analysis of a moment of play reveals the complexity of children’s designs created moment-to-moment in collaboration with peers. In the case of classroom filmmaking, additional factors add to the tensions among emergence, production, and transience in their storytelling. The framing camera lens of a digital camera requires shared onscreen/offscreen awareness by both players and camera operators, as ducks move in and out of frame. These collaborations show children’s abilities to imagine what the camera “sees” as they move bodies and cameras to manage multiplayer actions with multiple modes of proximity and image in zoom in/zoom out relationships.

Literacy practices are not static. Instead they are composed of a confluence of actions, modes, and meanings in the trajectories that flow into and emanate from a moment or site of engagement. Mediated discourse analysis takes an action orientation to literacy, materiality, and culture and shines an analytic focus on mediated action, the ways we wield things and rework their meanings to belong. Mediated actions are engrained into bodies through histories of use (Bourdieu, 1977) or ways with things. And at a fundamental level, literacy is how we make meaning with stuff, how we use bodies with tools and materials to fashion artifacts and resemiotize the meanings of the things around us. The products of this meaning-making leave traces, that may or may not be tangible and durable objects. I argue that children’s pretend play, transitory in the moment, produces a vibrant text full of meanings for its participants. The action texts of play can be transformative whether or not they leave a permanent record through a photo, film, or a saved game.
Conclusion

The fluid transformations that occur in children’s action texts suggest the potential of play and media production as key sites for understanding new practices of meaning-making and cultural participation for children and youth. Recognizing the semiotic potential of play is key to re-establishing play spaces in early childhood classrooms, spaces that are disappearing as play is squeezed out to prepare children for high-stakes testing (Christakis, 2016). It is just as important to recognize the educational significance of play for older youth and to integrate play into all classrooms. Through play, children can collaboratively engage converging imaginaries that matter to them (Medina & Wohlwend, 2014). In this way, play aligns with NLG’s Design and Redesign with potential for transformative effects on texts and equitable participation in school and peer cultures. Play is a literacy for making and remaking taken-for-granted identities and texts that circulate widely through imaginaries, but it is also a literacy for unmaking, its bubbling and bursting uniquely suited to respond to fast-paced flows of imaginaries and technologies. Literacy research on play-based pedagogy is urgently needed to understand how play functions as a key meaning-making practice in the context of imaginaries and powerful digital tools that easily record and amplify action texts. Children who already “think in film” need teachers who understand and teach video production. But filmmaking is just a comfortable first step—with familiar elements: a linear text, story arc, and so on. Meanwhile children’s lived literacies move on. More responsive and nimble pedagogies are needed now to quickly catch up and follow children across shifting landscapes along the path opened by A Pedagogy of Multiliteracies.

References


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