

Children's Use of Objects in Their Storytelling

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Abstract

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Children's academic achievements are often measured by their levels of literacy and numeracy where a considerable amount of interest has been given to these specific learning domains. Narrative skills feature prominently in children's later literacy in American and New Zealand research (Griffin et al. 2004; Reese et al. 2010). For instance, Reese et al. (2010) demonstrated that the quality of children's oral narrative expression in the first 2 years of reading instruction uniquely predicted their later reading, over and above the role of their vocabulary knowledge and decoding skill. Stuart McNaughton's research in South Auckland (McNaughton 2002) has also emphasised the value of narrative competence for future literacy practice while illustrating the different styles of storytelling and reading across different cultural communities. When children narrate experiences and *story-tell*, they engage in cognitive, affective and social experiences and explorations that extend beyond simple conversation – opportunities to understand the social world – and one's place within it arises (Bruner 1991). Narratives are recognised as essential to both autobiographical memory and identity (Wertsch 2002; Bruner 2002; Szenberg et al. 2012). Classic studies remind us of the autonomy of children in developing their own cultural routines through mutual negotiations and storying (Sutton-Smith 1997 p.171) and the powerful combination of adding affect to cognition using story (Egan 1997; Vivian Gussin Paley 2004). In short, narrative competence is a valuable outcome in its own right.

Storytelling in the Early Years

Children's academic achievements are often measured by their levels of literacy and numeracy where a considerable amount of interest has been given to these specific learning domains. Narrative skills feature prominently in children's later literacy in American and New Zealand research (Griffin et al. 2004; Reese et al. 2010). For instance, Reese et al. (2010) demonstrated that the quality of children's oral narrative expression in the first 2 years of reading instruction uniquely predicted their later reading, over and above the role of their vocabulary knowledge and decoding skill. Stuart

McNaughton's research in South Auckland (McNaughton 2002) has also emphasised the value of narrative competence for future literacy practice while illustrating the different styles of storytelling and reading across different cultural communities. When children narrate experiences and *story-tell*, they engage in cognitive, affective and social experiences and explorations that extend beyond simple conversation – opportunities to understand the social world – and one's place within it arises (Bruner 1991). Narratives are recognised as essential to both autobiographical memory and identity (Wertsch 2002; Bruner 2002; Szenberg et al. 2012). Classic studies remind us of the autonomy of children in developing their own cultural routines through mutual negotiations and storying (Sutton-Smith 1997 p. 171) and the powerful combination of adding affect to cognition using story (Egan 1997; Vivian Gussin Paley 2004). In short, narrative competence is a valuable outcome in its own right.

Links to ECE Curriculum: Te Whāriki

The early childhood teachers in this project were guided by New Zealand's national early childhood curriculum, known as Te Whāriki (Ministry of Education [MOE] 1996). In the curriculum, there are five strands through which teachers are guided in the provision of curriculum in which children and families experience a sense of belonging and have their well-being supported, where children explore, contribute to and develop confidence to communicate about their experiences in the world. One of the goals of communication is 'children experience an environment where they experience the stories and symbols of their own and other cultures'. Learning outcomes for this goal include:

- Experience with creating stories and symbols
- An expectation that words and books can amuse, delight, comfort, illuminate, inform and excite

The curriculum adds that 'Adults should read and tell stories, provide books and story times to allow children to exchange and extend ideas ...' (p.73). Given the importance of early narrative experiences, the way in which narrative might be encouraged or planned for is of interest to teachers and researchers in ECE and is an aim of the current research reported here. This chapter describes research that has explored what these 'story times' for formal and informal, planned and spontaneous storying look like in current practice in two early childhood centres and how they might be extended and enriched by teachers' paying attention to the mediation of children's learning by and with people and things (objects).

The Role of Objects in the Early Years

Prior research investigating children's social interactions in 4-year-old children found that everyday objects were used to initiate and maintain social interactions with new peers in the playground when the children first began attending primary school (Bateman and Church 2016). This research offered insights into children's competent, purposeful and social use of objects that contrast to the prevalence of developmental research concerning children's object use which often suggests an immature progression with a focus on individual children (e.g. Lockman 2000; Fagard and Lockman 2005). There is considerable theoretical discussion about and research on the perception and deployment of affordances of objects in an educational environment. Sasha Barab and Wolff-Michael Roth, for instance, refer to James Gibson (1986) and colleagues' work on perception as a property of an ecosystem and add (p. 4): 'Our goal here is to extend this perspective, providing a language for educators, who, while interested in perception, have an additional focus on supporting cognition, participation and development, requiring the detection of, and participation in, extended possibilities for action (affordance networks) that are both materially and socially distributed'.

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A New Zealand example, researching the features of an affordance network for family engagement (Clarkin-Phillips and Carr 2012), included the affordances of assessment portfolios in a New Zealand kindergarten for increasing environmental demand: the resource or object is available, inviting and personalising. An ecological approach, in which opportunities for storying are materially and socially distributed, underpins all three analytical lenses in this chapter.

The Research

A mixed-method analysis is being used to analyse natural everyday storytelling in kindergartens and school settings as we follow our 12 case study children over 3 years. There are three layers of data analysis – conversation analysis, narrative analysis and materiality analysis (a focus on mediating resources) – that are used to answer the following research questions:

1. What storying opportunities exist in early year settings and what happens in them?
 - (a) What contributions do story partners make to these storying events? With what effects?
 - (b) How do mediating resources work to support children's storying?
2. How can these opportunities be strengthened?

Our research involves 12 participating children, six in the South Island site in Timaru and six in the North Island site in Auckland. The kindergartens were selected as the teachers shared an interest in children's storytelling and early literacy practices; the participating children were selected by birthdates where each child was transitioning from kindergarten to school between January and June 2015. The ethical process involved gaining approval for the research from each university researcher's institution, the kindergarten teachers, the children's parents and finally assent from the children. Once consent was achieved in 2014, the researchers collected video recordings of children's everyday free play (about an hour each child on three separate occasions) from which we identified storytelling events. Video recording was conducted at a time of day that most suited the early childhood teachers and children and so varied in each setting. Two additional sets of video data were collected in 2015, including the first set of video recordings of storytelling episodes in primary school for each child. A final video collection occurred in the first half of 2016 when our child participants had transitioned from kindergarten to school.

The selection of a 'storytelling episode' was central to this project. We initially drew from Bruner (2002) and the work of Labov and Waletzky (1967/1997) for both our working definition of story and analytical approach. Bruner (2002, p. 34) refers to Burke's story pentad: 'at a minimum, a story (fictional or actual) requires an Agent who performs an Action to achieve a Goal in a recognizable Setting by the use of a certain Means'. From the perspective of Labov and Waletzky (1967/1997), we took story to be as a minimum, two clauses, joined by a temporal structure where fully formed stories contain several elements: a summary or abstract, an orientation, an action, an evaluation, a resolution and, to return the perspective to the present, a coda. Not all elements are evident in all stories nor do they necessarily flow in a sequence. How we constituted storytelling and storytelling events evolved to include group storytelling. The works of Sacks (1992), Goodwin (2015) and Mandelbaum (2013) are also influential within our analytic process: from a conversation analysis (CA), perspective storytelling is perceived as a social activity involving people, places and things. Within a CA framework, the turn-by-turn conversational and gestural sequences that co-produce a storytelling are analysed to examine what the story participants choose to talk about at that place and at that time and

how the story unfolds. The transcription conventions used in CA transcription (see appendix for a list of conventions used in this chapter) help to represent as detailed as possible written representation of recorded interactions where specific features such as the length of pauses, prosody (pitch and tone of voice) and gesture are visible and so available for analysis. Within this chapter, CA transcription is used to offer a rich representation of the children's storytelling activities.

By taking a structural approach and evaluating children's storytelling in the context of people, places and things, we can observe how direct and indirect teaching affords opportunities for children's storying competence, as the 'curriculum is provided by the people, places, and things in the child's environment: the adults, the other children, the physical environment, and the resources' (MoE 1996, p.11). Our additional focus on children's uses of objects helps teachers to understand more fully how the setup of place and introduction of things may support children in their storytelling events. In taking this mixed-method and multilayered approach to the analysis of data, we expand the typical gaze of story analysts, interactions between people (tellers and audience), and consider the storytelling more holistically as we observe children telling stories with things, to teachers, peers and themselves. Within our video recordings, we have observed that opportunities for storytelling were made through provision of open-ended object resources such as puppets, play dough, book making resources and environmental spaces such as book corners, puppet theatres, etc. Selected observations are explored in more detail now using the three-layered analytic approach in order to provide a holistic understanding of storytelling through different perspectives.

Storytelling with Objects

Excerpt 4.1

Jacob and the ball



In the playground of an early childhood centre, three children are swinging on separate swings side by side. The closest of the three children to the camera is Jacob. He is wearing the microphone and sitting on a ball as he swings.

- 01 Adult: >you wanna turn with the < ↑microphone
 02 (1.8)
 03 Adult: okay when Jacob and h = when Jacob's had his turn
 04 (1.3)
 05 I'll let you have a ↑turn = how's that ball feeling
 06 Jacob
 07 Jacob: good
 08 (2.2)
 09 Adult: hhhh what made you put a ball in that swing
 10 Jacob: °y°es it does
 11 (2.1)
 12 Adult: would you swing with a ball in your swing Lucy
 13 Child: can I have a (1.0) can I have a ↑push
 14 Adult: I wouldn't ↑either
 15 Child: can ↑I have a ↑push
 16 Adult: I'll come round the back and push you
 17 Jacob: jus go in an ↑o::ut

- 18 (4.8) ((*swinging*))
- 19 Jacob: I'm really high
- 20 (2.2)
- 21 Adult: °learn° how to get yourself going kay
- 22 (6.9)
- 23 Jacob: I'm sitting on a ↑ba:ll
- 24 Adult: ↓wh::y
- 25 Jacob: ja get way hi:gher
- 26 Adult: ()
- 27 Jacob: >wee < (1.4) WEE:::::::::: (0.8) it FU:::N
- 28 Adult: °it feel° ↓comfortable
- 29 Jacob: >yah<
- 30 Adult: ()
- 31 Jacob: >yah<
- 32 Adult: I bet it ()
- 33 Jacob: it's make it = the ball's making my bum warm
- 34 REEE:: ↑ree↓e:: hhhhh I'm sitting ON A ↑BA::LL I'm
- 35 sitting on a ↑nothing hh ↓ba- (0.9) a:ll:: look (0.7)
- 36 at me (0.6) and ha::r:: (1.2) HI MASON (.) I'm
- 37 sitting on a ↑ba:ll:
- 38 (5.5)
- 39 Jacob: I'm getting off this (1.0).hhh my ball is fall ↓off
- 40 (10.6) ((*gets off swing and moves around the*
- 41 *playground*))
- 42 Jacob: okay baby
- 43 (1.1)
- 44 Jacob: ye:ah (0.8) ↓ye:ah run ba:by ↑ye:ah
- 45 (1.1)
- 46 Jacob: walk wa:::y
- 47 (14.6) ((*Jacob adjusts the microphone and picks up*
- 48 *the ball again*))
- 49 Jacob: ↑hm hm hm::: hm hm h- ((*humming*))
- 50 (20.7) ((*Jacob puts the ball into the swing and*
- 51 *pushes it backwards and forwards. The ball shoots*
- 52 *out of the swing*))
- 53 Jacob: >arharharha<
- 54 (21.1) ((*Jacob picks up the ball and carries it to*
- 55 *the slide. He sits the ball next to him*))
- 56 Jacob: >°we°<
- 57 (1.3) ((*Jacob and the ball go down the slide side*
- 58 *by side*))
- 59 Jacob: ball you're faster:: (0.6) you're fa:ster ball

60 (1.0) you're fa:ster ball
61 (17.7) ((Jacob retrieves the ball which has rolled
62 off the slide and into the playground. Returning
63 to the slide Jacob drops the ball onto the slide
64 and kicks it up a ramp. The ball rolls back down
65 to him. He kicks the ball again and this
66 time it does not roll back. Jacob steps off the
67 slide, looks in the direction of where the ball was
68 kicked, turns the other way and wanders off looking
69 back over his shoulder twice))

Jacob's first verbal interactions are responses to the adult's questions. These responses are brief, comprising only a few words (lines 07 and 10), and represent a minimal response to, and minimal interaction with, the adult. In his first response to the teacher, Jacob provides an assessment that the ball is 'good' (line 07); whether this is intended to relate to his haptic relationship with the ball through his touch or his perception of the ball's affective feelings, therefore giving the ball its own personality, is unclear at this point.

Although the affordance of a ball as accompanying (being sat on by) a person on the swing is questioned by the adult (line 09), Jacob does not explain his decision as to why he is sitting on the ball; rather, he announces his actions in a subsequent turn at talk (line 23) making it a noticeable activity that is talked into importance. Jacob then gives a second evaluation where he announces that 'it's fun' (line 27). The adult then returns to feelings of comfort, this time asking more specifically if the ball feels 'comfortable' (line 28) to which Jacob replies that it 'makes my bum warm' (line 33). Within these initial turns at talk, it is not clear yet (to the teacher, the researcher or, perhaps, to Jacob) that Jacob has a story design, but this attachment to a ball, plus the swing, invites the beginning of a narrative: the ball as a possible 'warm' companion. Indeed, Jacob's brief utterances in lines 19–25 could be indicative of a series of short story prefaces (Goodwin 2015; Mandelbaum 2013), possibly marking Jacob finding a place for his story. Jacob's possible brief story starts invite a response where a space is made available for the hearer to ask more about his story – which occurs with the question 'why' (line 24) – but does not support an expansion to the story beyond its present point (Jacob sitting on a ball, swinging).

The narrative analysis would interpret these early lines as 'orientation'; they tell us about the situation and participants. Jacob is swinging high (line 19); he is somewhat of an expert, instructing others in the skill, 'jus go in an out (line 17) to get to what looks to be the object of the narrative at that moment, to, 'ja, get way higher' (line 25). Jacob then complicates the action by declaring the effect of the ball on his body (line 33) and seeking to tell others in the vicinity by singing and chanting about the action (line 34–38).

Jacob engages in an extended multiunit telling (Sacks 1992; Goodwin 2015) including the ball as a character that plays a part in this commentary (lines 34–37). Jacob turns the story in a new direction by getting off the swing, which results in an unexpected complicating action (line 39) as the ball falls out of the swing and Jacob runs after it, addressing it as a character of the story, 'okay baby' (line 42), and himself in relation to it with his utterances, 'run baby' (line 44) and 'walk way' (line 46). His story is coupled with his physical actions as he runs and walks after the ball. The episode continues as Jacob places the ball back into the swing and swings the ball back and forth. Again, the ball responds unexpectedly as it shoots off into the playground; here, Jacob responds by developing the plot further. He heads to the slide and begins a sliding race, making an evaluative declaration to the ball

protagonist, ‘ball you’re faster, you’re faster ball, you’re faster ball’ (line 59–60).

The ball moves away from Jacob into the playground (line 61), another complicating action, and he retrieves it and kicks it up the ramp of the slide. The ball returns and Jacob kicks it again abruptly. On this occasion, the ball does not return to him; rather, it falls off the top of the slide and rolls away. Jacob’s story comes to an end (line 66), and he wanders off with a transition out of the story (coda) as he glances back over his shoulder in the direction of whence the ball was kicked. The story has resolved through the unexpected and unplanned actions of the ball’s movements and Jacob’s responses to them.

With regard to the interactions of the narrative with people and things in Jacob’s story, his early interactions with the adult are part of the story preface but were not integral to the story plot. It wasn’t until the direct engagement of Jacob with the ball as a ‘character’ that a story intention appears. The ball can be interpreted as a play partner in the ongoing story, as Jacob pushes the ball on the swing and, when it shoots out of the swing, he takes it to the slide and sits it next to him – both of them go down the slide together. The non-verbal interactions between Jacob and the ball add to the unfolding storyline where Jacob and the ball character are both the protagonists, highlighting the importance of tangible objects in the process of storytelling. Furthermore, the ball has become personified; it has moved from being an object involved in play (being sat on) to the primary object of play (pushed in the swing and taken side by side down the slide) and into being a playmate and a genuine character mediating the storyline directly and addressed with the assigned name of ‘ball’. A competition between Jacob sliding and ‘ball’ rolling down the slide appears to be both an exploration of rolling/sliding and a personalising of the ball’s intent and prowess. ‘Ball’ continues to shape the story with Jacob as he kicks the ball up the slide (line 64). On the first occasion, the narrative is sustained by the ball’s return to Jacob – the second kick results in the story’s abrupt end.

Story Shells: Co-producing a Story with Objects as Support

This next storytelling excerpt describes a game, often instigated by the teacher and always including the teacher, in which shells have had small pictures of people, places or things glued onto them, to be used for the purposes of storytelling: the activity is called ‘Story Shells’. Each seashell in the collection has a picture of a character stuck to it such as a pirate, dragon or princess, and they are randomly placed on a low table so that the children can select the shells characters that they will create their story around, in a sequence determined by the storyteller. The storytelling shells immediately set up an opportunity that is inviting and personalising, where the shell objects provide affordances for storytelling – the random or deliberate selection of shells has the effect of determining characters, locations and significant items for the story. The storyteller considers these and determines the sequence of the story to be told. In Excerpt 4.2, we see how Alexander is just beginning to tell stories from the shells; he has watched other more experienced players on a number of occasions and observed how an innovative and lively story, in which the relationship between the objects and the storyline loops back and forth, might be told.

Excerpt 4.2

Using Story Shells to maintain and extend a story



- 122 Kim: H↑ow you gonna start↓-↑you start↓
 123 (1.4)
- 124 Alex: One- (0.8) once upon a time there::: was ()
 125 a::nd
 126 (2.7)
- 127 Kim: \$keep going\$ ((looks at Alexander and nods her
 128 head))
 129 (1.8)
- 130 Alex: <Awww:::> ((looks at the dinosaur shell he selected in
 131 front of him)) and dinosaur comed and er::
 132 (1.5)
- 133 Kim: a dinosaur came↑ ((points to the dinosaur shell))
 134 Alex: ((nods his head))
- 135 Kim: So you're using this one t↑oo↓ ((still pointing to
 136 the dinosaur shell))
 137 Alex: ((nods his head))
- 138 Kim: <coo::l:::> see Alexander's telling with <all:> the
 139 shells so lets listen to what Alexander's got to say
 140 coz I think he's got some ↓awesome ideas↑ .hhh keep
 141 go:ing:↑
- 142 Alex: and there- and there was a (picture) of a pirate
 143 and the- an the pirates found the (0.5) the sword
 144 (0.6) and (0.8) and the pirate's gold and the ()
 145 ((holds the shells in his hands and moves them
 146 around, looking at them while he tells the story))
- 147 Kim: ((looks at Alexander with mouth open looking
 148 surprised))

This extract demonstrates the ease at which the children start their story shells storytelling with 'once

upon a time'; Alexander immediately begins with this opening (line 124); it establishes a linear trajectory to the story through which listeners can expect to develop a 'thematic pattern and a temporal and logical trajectory of events' (Ochs and Capps 2002, p. 61). Alexander's 'once upon a time a dinosaur comed' (lines 124 and 131) thus acts as both an abstract for the story and cue to its orientation. This is a past event story, of the fantasy type, whose character and plot will be shaped by the objects Alexander is holding at the table. However, once the opening is initiated and a possible (inaudible) character is introduced, there is a significant pause in Alexander's story that is responded to by the teacher Kim both verbally, with her prompt to 'keep going', and with gesture as she nods her head, smiles and looks at Alexander (line 127–128). Alexander responds by demonstrating the usefulness of the shell objects in assisting the storyline as he looks at the dinosaur shell that he has chosen in front of him (line 130) and continuing the story by describing the action of the character 'a dinosaur comed' (line 131). When bringing this character into the story with gaze and talk, Alexander also uses gesture as he marks the physical presence of the shell by pointing to it, drawing the attention of the audience to the item. Kim follows his gesture, acknowledging the physical presence of the shell by also pointing to it and confirming with Alexander that this is the shell and character that he is using to tell his story about (line 133), ensuring an intersubjective understanding has been met by all participants.

After a positive response from Alexander through his nodding gesture, Kim suspends the storyline to attend to the use of the shells, confirming that it is 'cool' to use all of the shells – the statement is a mark of acknowledgement to how important the shells are in supporting Alexander's storytelling. Kim further encourages Alexander to continue storying with her utterance, 'keep going' (lines 140 and 141). In this utterance, Kim simultaneously attends to the social organisation of the group, positioning her and the present children as 'listeners' inviting them into the collective activity of listening to Alexander's story, and reinforces Alexander's storyteller status, remarking that he has some 'awesome ideas' (line 140). Alexander's next turn then begins to look more like a multiunit telling where he includes pirate characters, objects of swords and gold and activities that tie these features of the story together (lines 142–146).

In relation to people, places and things here, the pictures on the shell objects are treated as a scaffold for the story plot and offer an opportunity to flesh out story details and characters. The activity has a purpose, telling a story, and the teacher prompts the teller with 'What next' and 'Keep going'. The linear narrative structure is scaffolded by the shells and Alexander's use of well-recognised story phrases 'once upon a time' and (not in this transcript) 'the end'. In between, the storyteller is in charge of the choice of characters and the action. Some of the pictures invite the children to introduce what Bruner (2002) termed *trouble* to the storyline: the pirate, for example (and perhaps the dinosaur). We do observe in this example that the dinosaur drops out of the storyline when Alexander sees/adds the pirate sword, and he then adds his own complexity and purpose to the story: the gold. This is a good example of how aspects of a story, scaffolded by objects (the characters and items pictured in the shells), suggest a storyline that can be personalised – as in this case, where the sword will be employed to protect the gold. It is important to note here that there was no 'gold' on a shell and so Alexander elaborates, beyond the invitations implicit in the pictures. We see here that the objects may support novel stories to develop but could also possibly constrain them if the array of pictures available on the shells encourages children to take up particularly dominant cultural tropes such as pirates and swords. In this centre, the shell pictures are frequently added to in response to children's current interests.

Technology Mediating Storytelling

In our final example of children storytelling with people and things, Isla is seated at a table and has an iPad mounted on a stand in front of her. The screen shows pictures of a scene, initially a house that she

changes to a dining room. There are also characters visible on screen that can be manipulated by pinching them to make them smaller and widening them to make them larger. The characters can also be moved around by dragging from one place on the screen to another.

Excerpt 4.3

Isla and the iPad



077 (5.8) ((moves characters including a large roast chicken around
 078 in the new scene window))
 079 ↑I'm > tall↑ and < sma::ll::↓ (1.2) ((character
 080 voices))
 081 ((Isla maximises the small scene window, and it
 082 fills the screen))
 083 [↓it's alright I: will save ↑you (0.7)
 084 [((a finger on one hand moves one character, while
 085 another finger on the other hand moves the chicken
 086 character))
 087 ↑o::h: but I where↓- = a ↑chi:cken a ↑chicke:n↓
 088 (1.8) and [let's put = it on ° > the < ° ta:ble
 089 [((sits the chicken on a table))
 090 chwar chwar chwar .hhh = .hhh
 091 ((moves the small character towards the chicken and
 092 makes breathing, panting sounds whilst moving the character
 093 backwards and forwards in motion with these sounds))
 094 a-h = h = h = h = h = h um = um = um = um = um (1.5) (.hh) (2.3)
 095 ((Isla once again minimises the scene window and selects a
 096 character who wears a pink dress from a wooden room scene.
 097 She drags the new character into the scene window that she was
 098 using before))
 099 I wanted to have a < chi↓:cken↑ > ((character voice))
 100 (1.2) ((drags a character down towards the bottom right of the
 101 reception room window))

102 aw::: I'm too:: li:ttle (1.2) I can't rea:ch
 103 (1.3) [cham]
 104 [((makes her character jump up towards the chicken on the
 105 table and take a bite))
 106 I:: want to re::ach
 107 (1.3) ((Selects another character, even smaller
 108 than the previous one, and again makes it jump up
 109 to try to reach the chicken))
 110 ~I want to reach ~ (0.6) ((crying sound)) (hh hh hh)
 111 [cham]
 112 [((makes her character jump up towards the chicken
 113 on the table and take a bite)) (0.4) ah:: (0.7)
 114 tha(t)'s better

Although we cannot make any assumptions about what Isla is thinking in regard to a storyline here as we do not have access to her cognitive state and there is no story partner here for her to map out the story with, we can build an understanding of events through her ongoing dialogue and her gestural interaction with the iPad and characters. The objects of interest in the storytelling are the characters, Isla's manipulation of them to make a story and also the iPad itself and the affordances it provides for this type of storytelling event.

Isla begins her story by setting up the story scene on the iPad. She chooses a scene and characters from those on offer by the application. Her initial utterances are a narration of the characters saying 'I'm tall and small' (lines 79) where she uses voice prosody to demonstrate that these voices belong to the characters. The character voices are concurrent with her manipulation of them on the iPad screen where she creates complicating actions in the story by manipulating the characters, changing them to be bigger or smaller as part of the story events unfolding on the iPad screen. She moves the characters into another screen, which is embedded in the larger iPad screen window, introducing another location to the plot (lines 81–82) simultaneously declaring one of the characters shall be saved (line 83). Isla is complicating action and moving the storyline on, illustrating Bruner's (2002) sense of *trouble* in a good story. One of the characters that she is orienting to here is a cooked chicken; she makes this character a significant protagonist as she moves it around (lines 85–86), talks it into significance (line 87) and puts it on the table (lines 88–89) where the other characters are made to feast on it (lines 90–93). The devouring of the chicken seems a pleasurable moment in the plot evaluation until Isla decides the eating is done.

Upon introducing a new character to the story, a further complicating action takes place. Isla's new characters are (possibly unexpectedly) too small in the scene to reach the cooked chicken atop the table. Recognising this, Isla quickly adapts the storyline to take account of the trouble that has ensued, turning it into a major story action. Isla, as the character, declares 'I wanted to have a chicken' (line 99). This new character is now made to jump towards the table (line 104–5) to take a bite. The enjoyment of this storyline is evident as a repetition of this action occurs with yet another character, even smaller, being introduced (line 107–109), who also has a problem with reaching the chicken. The story is then brought to a close with success for the characters, and an evaluation of the event (for the character) signals resolution with her utterance 'ah, that's better' (lines 113–114). The objects (moveable characters) available for the children in this iPad storytelling software clearly provide affordances for telling stories, as demonstrated by Isla. In this scenario, an iPad application invites the child to 'interact' with characters and provides different scenes that the children can choose, offering a

selection of ‘place’ in the people, places and things affordances. From then on, it is open ended, reflexive and available to support an embodied (of a limited nature) storytelling that can quickly be elaborated, recorded on the iPad for future storytelling or erased.

Many children in this centre draw pictures and staple or bind them together to make a story. The material affordances, in that case, are a table with paper, pens and stapler (also a book binder nearby which the children use competently), inviting the children to write a ‘book’. This is a common routine, and most children will do this at some point, and some of them every day. An object is created; the text is dictated to, and written by (usually), the teacher. The story is read to the children at ‘mat time’ and taken home to be read by the family.

Discussion

In this chapter, we have discussed the findings from the first year of our project where the 12 participating children were supported in their narrative and literacy learning kindergarten environment through:

1. People: the availability and levels of engagement from teachers and peers helped to co-produce storytelling and literacy practices in structured and informal ways.
2. Spaces: which provide and encourage opportunities for structured and informal narrative storytelling and literacy learning.
3. Objects: the availability of objects such as story shells, iPads, characters in iPad applications, swings and balls worked as physical props to support storytelling and narrative development in children’s stories.

All three factors (people, spaces and objects) were centrally engaged in the storytelling extracts analysed here, but the emphasis in this chapter has been on the contribution of the objects to the children’s storytelling.

In the first example, the ball was enlisted and personalised by Jacob as a companion; he and the ball became two characters in a ‘warm’ relationship who played together. The playground swing and the slide provided the context within which the relationship could flourish – the swing as an intimate semiprivate warm space and the slide as enabling the ball to take on some of the agency in the script. As the story moved from the swings to the slide, the child author/companion became an admiring onlooker of the ball – and a recipient of the ball’s movement. Jacob had to think quickly and flexibly to accommodate the ball’s unexpected action (you’re faster ball, you’re faster). However, Jacob was unable to, or perhaps not interested to, accommodate for what happened next, the ball not returning to him by rolling down the slide on Jacob’s second kick. The object in this instance held agency within the narrative, bringing Jacob’s story to an end.

In the second example, using the story shells, key elements of the structure of the story were constrained by the objects and the context rules – a range of characters for selection and (usually) a temporal story frame (provided by teacher prompts: ‘Keep going’) and the familiar story starter, ‘once upon a time’. Alexander’s story was delicately balanced between the objects, the cultural tropes attributed to the story shell activity in the kindergarten and Alexander’s own imaginative sense. The first character was a dinosaur (determined by the picture on the inside of the shell Alexander selected for the beginning of his story); he then introduced a pirate (a second shell), a sword (a third shell) and some gold (Alexander’s own imaginative addition). Alexander’s narrative (the pirate(s) found the sword and the gold) connects these three things; the role of the dinosaur is either abandoned or

retained as a (dangerous?) watcher without a central role in the evolving plot. The collecting together in the same place of ‘characters’ that are dangerous (dinosaur, pirate and sword) plus the addition of (desirable) gold provides ingredients of a possibly dramatic story of conflict and violence. The storyteller’s narrative was scaffolded by the objects, his teacher and his prior knowledge.

In the third example, the object available for storytelling was an iPad application in which the setting could be altered, characters could be moved around the screen and extra characters introduced. Isla changes the house scene into a dining room and plays out a story in which small characters are enabled (by her manipulation) to reach – and eat – the roast chicken on the table. She is not telling the story in the third person; she constructs the scene (including finding a roast chicken to put on the table) and manipulates the characters, adding voice and sound, much like a puppeteer. The theme appears to be about ‘being too little’ (to reach the food), and the objects are manipulated on screen towards a story resolution.

In each of these examples, the child is using an object or objects to tell a story in a different way, as a companion to the author and as an accumulation of disparate characters for an audience (three children and a teacher), and to construct a storyline and a resolution about a disability (in this context, being too small). At the same time, they are calling on their capacities for imagination. These stories are not recounted; they are constructed and imagined – and the objects do some of this work.

Our analysis has shown how the sequences of action that are essential to building and telling story are observable through the children’s use of objects where the participants orient to objects in such ways that each child has to respond to the prior talk or actions of their play partner, systematically building the storyline in order to co-produce a successful story episode. The story is never the child’s alone and children’s quick reading of the interactions between themselves, people and objects, in specific places combine to co-produce the story. Within these three excerpts of data, the chosen objects are sometimes uncontrollable and unexpected. As a consequence, we see evidence of children’s flexibility in their storytelling to accommodate the spontaneous actions of their story partners. However, sometimes, the objects are totally predictable (e.g. the pirate in the story shells), and such objects support children’s entry into storying as they take up cultural tropes which they may or may not bend to their own devices. The intelligent ways in which children use the objects in their immediate place have been observed in these storytelling events. The effect on narrative competence has been seen as we have observed children’s complex, rapid and fluid decision-making as they respond to the unexpected ways the objects interact with them in the world.

By understanding further the affordances of objects to young children’s storytelling in early childhood centres, we may appreciate how even so-thought inanimate objects may directly complicate and support children’s storytelling. The collaborative nature of storytelling discussed in this chapter demonstrates how storytelling activities align with the sociocultural perspectives of teaching and learning in New Zealand.

Appendix: CA Transcription Conventions

The conversation analysis symbols used to transcribe the data are adapted from Jefferson’s conventions described in Sacks et al. (1974).

[The beginning of an overlap.
]	The end of an overlap.
=	The equals sign at the end of one utterance and the beginning of the next utterance marks the latching of speech between the speakers. When used in-between words, it marks the latching of the words spoken in an utterance with no break.

(0.4)	The time of a pause in seconds.
::	Lengthening of the prior sound. More or less colons are used to represent the longer or shorter lengthening.
↑	A rising intonation in speech.
↓	A falling intonation in speech.
-	Abrupt break from speech.
Underscore	Marks an emphasis placed on the underscored sound.
Bold	Underscored words in bold indicate heavy emphasis or shouting.
°degree sign°	Either side of a word indicates that it is spoken in a quiet, soft tone.
(brackets)	Utterance could not be deciphered.
((brackets))	Double brackets with words in italics indicate unspoken actions.
\$dollar\$	Dollar signs indicate the talk was in a smile voice.
creaky	Asterisks indicate the talk was in creaky voice.
~wavy line~	Wavy lines indicates a wobbly voice (as in crying).
>arrows<	Utterance spoken quickly.
<arrows>	Utterance lengthened.

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