

Bortoluzzi, Maria , and Elisabetta Zurru , ed. Ecological Communication and Ecoliteracy: Discourses of Awareness and Action for the Lifescape. London: Bloomsbury Academic, 2024. Bloomsbury Advances in Ecolinguistics. Bloomsbury Advances in Ecolinguistics. Bloomsbury Collections. Web. 16 May 2024. <<http://dx.doi.org/10.5040/9781350335851>>.

Accessed from: www.bloomsburycollections.com

Accessed on: Thu May 16 2024 17:10:18 CEST

Copyright © Elisa Bertoldi. Maria Bortoluzzi, Elisabetta Zurru and Contributors 2024. This chapter is published open access subject to a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International licence (CC BY-NC-ND 4.0, <https://creativecommons.org/licenses/by-nc-nd/4.0/>). You may re-use, distribute, and reproduce this work in any medium for non-commercial purposes, provided you give attribution to the copyright holder and the publisher and provide a link to the Creative Commons licence.

Picturebook Mediation for Children's Ecoliteracy in English L2

Elisa Bertoldi

Introduction: Read-aloud sessions about nature in English L2 in informal contexts

Reading aloud picturebooks in a foreign/second language with children is an activity that can be used to cross the boundaries between formal contexts (language lessons at school or after-school) and informal contexts (out-of-class activities such as events in libraries, museums, parks and playgrounds) offering children the opportunity to reflect on environmental issues from new points of view. Read-aloud sessions in English L2¹ offered in natural science museums, natural reserve parks, science centres and libraries increase children's exposure to environmental education through a language different from the native language and offer opportunities to experience positive communication about the environment, create connections with other people and with nature and provide new experiences in and with nature. They also offer children the opportunity to engage in a wide range of immersive, bodily experienced, multisensory and hands-on activities that can complement formal learning opportunities such as lessons at school. Museums, natural reserve parks, science centres and libraries contribute to bringing ecoliteracy to a broadly inclusive range of people in order to create communities that think, act and communicate for a sustainable present and future in an ecologically healthy world (Capra 2007: 9). Crossing the boundaries of formal and informal contexts through read-aloud sessions in English L2 gives the opportunities to children to reflect on natural aspects and environmental issues from local and global perspectives.

The chapter focuses on the initiative Telling And Listening to Eco-Sustainable Stories (*TALES*). *TALES* is a series of picturebook read-aloud sessions in English

L2 for children that takes place in museums and libraries of the Udine area (north-east Italy). Students of the Primary Education degree course (University of Udine) participate as volunteer storytellers and picturebook mediators: they select picturebooks and give read-alouds in English L2 for children's language and environmental education. The picturebook mediation process is aimed at offering children and adult participants tools to communicate, reflect on and interpret natural and environmental issues while catalysing positive communication and action about the environment.

The aims of the initiative *TALES* are:

1. Establish partnership and close collaboration between different educational institutions (university, museums, libraries).
2. Promote children's positive relation with the environment through picturebook read-aloud sessions in English L2.
3. Promote student teachers' reflection on reading aloud as a multimodal communicative practice for environmental education.

Taking a multimodal perspective on picturebook mediation, the aims of the present study focus on identifying which multimodal features in picturebooks about nature were considered salient by student teachers for read-aloud sessions in English L2 and to analyse multimodal ensembles of semiotic resources used by storytellers to give salience to key elements about nature during read-aloud performances. Section 9.1 of the chapter presents the theoretical framework. Section 9.2 describes the initiative *TALES* and the methodological approach for data gathering and analysis. Data from semi-structured interviews and multimodal annotation of video recordings are discussed in Section 9.3. Implications for teacher education for picturebooks in children's language and environmental education close the chapter.

9.1 Picturebooks as sources of stories about nature

At a time when one of the most urgent challenges is to find eco-sustainable ways of living on and with our planet, picturebook authors address citizenship education for children by giving salience to natural elements and devoting special attention to environmental issues (Colombo 2012). Children are fascinated by the stories about nature and by the many characters that belong to it, and in environmental education it has been suggested (Schenetti, Salvaterra and Rossini 2015) that the use of stories may help children acquire knowledge about nature

and feel connected with it. As Nanson underlines, stories can be used to provide a framework for educational programmes that involve inquisitive and creative interaction with the natural environment (Nanson 2021: 24). Picturebooks about plants, animals and natural elements can empower young readers/listeners, help them become sensitive and respectful towards nature, and active and positive agents of change in relation to the environment and their own future life (Eisler 2000; Bruno 2020).

In picturebooks the story is told through the interplay between written text, illustrations and design features (Nodelman 1988; Nikolajeva and Scott 2001; Mourão 2015; Mourão 2016); they are conceived and designed as a unit in which all parts are integrated to produce meaning: peritextual features (cover, spine, dust jacket, endpapers, typographical elements, etc.) work together with the written words and illustrations to produce a unified item of manufacture (Nodelman 1988; Nikolajeva and Scott 2001; Sipe 2008). Among different types of picturebooks for children, informational picturebooks are aimed at disseminating knowledge (Goga, Iversen and Teigland 2021: 1). According to Heeks, '[i]nformation books serve as the tools which can help readers to knowledge' (1996: 428). They structure, organize, interpret facts and data and turn them into information presented in a way that it can be perceived as meaningful by the target readers/listeners. Mallett underlines that the main intention of informational picturebooks 'is to impact knowledge and ideas' (Mallett 2010: 622). They are 'an art form, designed to give pleasure, and enlightenment, to arouse wonder, and to reveal our capacity for self-awareness and understanding' (Kiefer and Wilson 2011: 291). Pictures are essential in informational picturebooks: they are aimed at triggering an intellectual, emotional, affective and aesthetic reaction in children. Non-fiction informational picturebooks are tools that allow children to access a wide range of information combining scientific knowledge with the assumptions of artistic experience. Informational picturebooks aim to entertain, inspire and amuse (Von Merveldt 2018). As Grilli states, '[w]hile often spectacular in a visual and material sense, the new generation non-fiction picturebooks perform their task of providing information about the world in a "humble" way' (2020: 14). Informational picturebooks about nature are aimed at encouraging children to reflect on environmental issues, to focus their attention on natural elements, to wander through the illustrations and the written text, to slow down and take time to observe the details and to linger on pages (Terrusi 2014). They give space to questioning and speculating infusing a sense of mystery, discovery and wonder, and most of all they allow children to experience awe (Grilli 2020: 25). Awe is a complex emotion that has beneficial effects on humans' physical and

mental well-being. Experiencing awe makes humans less self-oriented and more collaborative, humble, sharing and altruistic (Allen 2018). Offering children the opportunity to experience awe through informational picturebooks about nature fosters openness towards other creatures and stimulates curiosity about the environment we belong to and sustains us.

9.1.1 The mediation of picturebooks

Even though picturebooks are addressed to children, they are also meant to be read aloud to children by parents, caregivers, teachers and storytellers. Read-aloud sessions are an effective tool to help children familiarize with a new language as they contribute to the development of verbal and non-verbal communicative competences, stimulate the interpretation of situations and events, facilitate comprehension and raise awareness on the complexity and variety of communicative contexts (see, among others, Ellis and Brewster 2014; Masoni 2019; Ellis and Mourão, 2021). As Ellis and Mourão mention, during read-aloud sessions in English L2 the picturebook is mediated by the storyteller. The mediation is ‘the support or assistance, often referred to as “scaffolding”, given by the storyteller ‘when sharing a picturebook with a group of children’ (2021: 23). As Ellis and Mourão write (2021) the picturebook mediation process includes three stages: ‘mediation begins with the picturebook selection, continues during the read-aloud itself and extends into the follow-up activities’ (2021: 23). The first stage in the mediation process is the selection of the picturebook and the planning of the read-aloud session. In this stage, the storyteller evaluates the affordances of the picturebook written and visual texts and peritextual features in relation to the context and the purpose(s) of the read-aloud session. Picturebook selection is an explorative process through which the storyteller identifies salient aspects in the written and visual texts. For what concerns visual elements in picturebooks, the concept of salience refers to Kress and van Leeuwen’s definition (2021). It is the degree to which an element draws attention due to its size, its place in the foreground or its overlapping of other elements, its colour, its tonal values, its sharpness of definition; it ‘results from a complex interaction, a complex trading-off relationship between a number of factors’ (2021: 210) and can create a hierarchy of importance among elements, selecting some as more worthy of attention than others. For what concerns the written text, Stibbe (2021: 160) mentions that ‘patterns of linguistic features can come together to form salience patterns which represent particular participants prominently in a text’.

The read-aloud performance is the second stage in the picturebook mediation process; it depends upon the systematic interaction between the storyteller, the children and the picturebook (Hägström 2020: 119), which influence each other, and it includes two main sets of actions: the read-aloud and the read-aloud talk. During the read-aloud performance, the storyteller shares the written and visual text of a picturebook with children telling the story out aloud and combining different semiotic resources in order to allow the audience to enjoy the story, make meaning and participate in the interaction (Masoni 2019). During the read-aloud performance the storyteller decodes and performs the verbal text of the picturebook: s/he uses the punctuation as a guide to know when to pause, give emphasis or change voice intonation; s/he uses graphic devices (such as font and font size) as a guide to modulate voice pitch and voice speed and s/he differentiates between characters' speech and narrative varying the tone of voice and voice pitch. In addition, the storyteller combines semiotic resources such as gestures, gaze, facial expressions, body movements and use of props which are orchestrated to help children make meaning and orient their attention to key elements in the picturebook. During the read-aloud performance the storyteller integrates reading aloud with read-aloud talk. The read-aloud talk enables meaningful interaction among participants through questions, comments, inferences and predictions that are not in the written text of the picturebook. Read-aloud talk is aimed at contemplating, exploring and explicating the picturebook and establishing rapport with the children (Ellis and Mourão 2021). Read-aloud talk orients children's attention to the images, to the props or to key elements in the story, facilitates comprehension of the story and stimulates children's responses. The third stage of picturebook mediation includes the follow-up activities which can stimulate the children to think and reflect upon the story, the characters and the events and to give personal responses to the picturebook (Ellis and Mourão 2021).

During read-aloud sessions in English L2 about nature, the process of picturebook mediation is aimed not only at helping children make meaning of the language but also at scaffolding communication about the environment influencing children's interpretation of events, situations and people raising their sense of belonging to nature. By giving salience to key concepts in the story and orienting children's attention to natural elements, storytellers can help children capture some fundamental ecological principles such as appreciating the interdependence between species and ecosystems; feeling concern, empathy and respect for all living things; and experiencing wonder and awe towards nature (Muthukrishnan 2019).

9.1.2 A multimodal perspective on picturebook mediation

Picturebook mediation is a multimodal, interactive process aimed at making meaning, facilitating children's comprehension of situations and events, orienting children's attention to key elements in the story and stimulating children's responses (Masoni 2019; Ellis and Mourão 2021). Different types of semiotic resources are combined in multimodal ensembles by storytellers in order to make meaning and interact with children. To understand how storytellers and children interact with and through different semiotic resources during read-aloud sessions about nature in English L2, this chapter analyses the picturebook mediation process from a multimodal perspective that considers 'a full range of communicational forms people use – image, gesture, gaze, posture and so on – and the relationships between these' (Jewitt 2017: 15).

Multimodality analyses meaning as it is developed, negotiated and established through organized sets of socially and culturally shaped semiotic resources. Meaning is made through the co-deployment of semiotic resources separately, and at the same time, all semiotic resources contribute jointly to meaning-making as it emerges from a process of interaction, contrast and conjunction of modes (Kress et al. 2014: 1–2): social actors design meaning by selecting and using available semiotic resources at each specific moment in specific contexts (Kress and van Leeuwen 2001: 20). Meaning is constructed both in and in between different semiotic modes, and meaning-making involves the design and production of multimodal wholes in which modes and semiotic resources are interwoven and influence each other (Bezemer and Kress 2016: 28; Jewitt, Bezemer and O'Halloran 2016: 2). The intertwining of modes and semiotic resources used simultaneously by social actors can be defined as a multimodal ensemble. A multimodal ensemble is a 'coherent, integrated, communicational unit' (Bezemer and Kress 2016: 25). Semiotic resources operate in ensembles to serve 'complementary functions' (Bezemer and Kress 2016: 30). Resources are combined by social actors through the process of 'multimodal orchestration' (Lim 2021: 108; Jewitt 2017: 27) which results in the harmonization of corresponding, complementary and dissonant resources in multimodal ensembles (Jewitt 2017: 465). A multimodal perspective on picturebook mediation process allows the researcher to analyse the co-occurrence and interplay of different semiotic resources in multimodal ensembles (Bezemer and Cowan 2021: 20). It also allows the researcher to identify possibilities and constraints offered by semiotic resources in the multimodal orchestration during read-aloud sessions about nature in English L2.

In educational contexts, such as the context of the present study, language is generally considered the most significant mode of communication (Jewitt 2017: 15). It has often been argued that language serves the widest range of communicative functions or that it enables the highest, most complex forms of thinking and is therefore the most important. Multimodality scholars have pointed out that there are differences between modes in terms of possibilities they offer for making meaning but it is not the case that one resource has more or less potential than others (Jewitt, Bezemer and O'Halloran 2016: 3). Multimodal approaches consider semiotic resources as equally important and having meaning potential in multimodal ensembles; such perspective allows the researcher to understand the role of language (speech and writing) within multimodal ensembles and how language is used in combination with other semiotic resources to make meaning. Multimodal approaches offer a new look at the functions of language: as Kress et al. underline, '[w]e feel that in order to newly and properly understand language we need to step outside it and take a satellite view of it' (2014: 10). A 'satellite view' taken by adopting a multimodal approach offers a wider perspective on language in general and on language education in the specific context of the present research study. As Norris points out, '[l]anguage, while being the most researched and well-understood mode, here becomes a (very important) part within the multimodal constellation when people act and interact, illuminating language from a new perspective, allowing us to gain new insights into linguistics' (Norris 2020: 5) and in language education. This might lead to a greater acknowledgement of how learning and using a language must be understood as embedded within broader processes of communication and action (Nelson and Kern 2012: 62). Understanding the implications of embodied communication and interaction in informal contexts provides additional insights and new perspectives on children's language education. In addition, an exploration of the role of semiotic resources used by participants during read-aloud performances can contribute to reflecting on understanding children and storytellers' meaning-making processes to identify key aspects in communication about the environment.

Taking a multimodal perspective on picturebook mediation in read-aloud sessions about nature in English L2, the research questions addressed in this study are: what elements in picturebooks were identified by storytellers as salient aspects for read-aloud sessions about nature and what semiotic resources they used in the read-aloud performances to give salience to key elements about nature?

9.2 The organization of *TALES* initiative

The data discussed in the present study were gathered during four events of the initiative *TALES*² organized in July 2021 at the Natural History Museum of Friuli (Museo Friulano di Storia Naturale) in Udine (Italy). The Natural History Museum of Friuli owns important collections of exhibits belonging to different branches of natural sciences, and it aims to promote the awareness of the local and global biodiversity, with a special focus on the environment and the rich natural heritage of the region Friuli Venezia Giulia (Italy) and its surrounding areas across national borders (Austria and Slovenia). The museum staff organizes activities and workshops addressed to a wide audience of visitors including schools and contributes to enriching the educational offer and to promoting a hands-on approach to natural sciences. The events analysed in this chapter were addressed to children from six to nine years old.

In accordance with the museum staff, the first step in the organization of *TALES* was creating a list of picturebooks for read-aloud sessions in English at the museum. I selected sixteen informative picturebooks³ in English that can help children familiarize with natural aspects and promote a sense of care and belonging towards the environment. The list of selected picturebooks was submitted to the museum experts who checked them for coherence, scientific accuracy of the events presented and terminology used in the story.

Four student teachers (S. P., E. P., I. G. and E. S.) participated in the initiative *TALES* as volunteer storytellers. Each one of them selected a picturebook from the list and gave a read-aloud during the four events at the museum. Due to Covid-19 restrictions, the maximum number of participants who could attend each event was fifteen children. All in all, forty children attended the events of the initiative *TALES*.

The events took place in the outdoors area of the museum. The decision to host the events outdoors allowed children and storytellers to interact keeping social distance but without wearing face masks (in accordance with Covid-19 measures since the events took place during the pandemic). This had a significant impact on the range of semiotic resources that participants could use to make meaning during the events.

9.2.1 Data gathering and methodology for the analysis

The approach of the present study combines ethnographic observations and multimodal analysis of video recordings. The analysis focuses on two steps of the

picturebook mediation process: the storyteller's picturebook selection and the read-aloud performance at the museum. The data for the analysis of picturebook selection were gathered through semi-structured interviews with volunteer storytellers conducted before the events at the museum. Each volunteer storyteller of the initiative *TALES* was interviewed. The language used during the interviews was English (an L2 for all participants). The four semi-structured interviews were conducted online via Microsoft Teams, and they were video recorded and transcribed. A first set of questions focused on general information about the picturebook and the elements of the story (settings, characters, plot and theme) that captured the storyteller's attention. Three sets of questions investigated the storyteller's interpretation of the structure and meaning of the verbal text and the illustrations in the picturebook both as separate units and related to each other. A last set of questions focused on the storytellers' planning their performance and the expectations related to the storytelling event. The aim of the interviews was investigating what elements in picturebooks about nature were salient for storytellers and how they meant to give relevance to key elements in the story during their read-aloud performances. The concepts of visual and linguistic salience (Kress and van Leeuwen 2021; Stibbe 2021) are used for the analysis of the storytellers' answers in semi-structured interviews in order to identify what they consider salient aspects in visual (illustrations and peritextual features) and linguistic (written text) elements in the picturebooks; these aspects were fundamental for planning their read-aloud performance.

The second step of the analysis focuses on picturebook read-aloud performances at the museum. The data for the analysis of read-aloud performances were gathered through multimodal annotation of video recordings. I was present during each event at the museum in order to conduct video recordings, observation and take field notes about participants (parents, children, museum staff), setting, camera positioning and contextual factors. The multimodal annotation of video recordings and the analysis of time-aligned annotations allowed me to identify what ensembles of semiotic resources were used by storytellers to give salience to key elements in picturebooks during the read-aloud performance. To annotate the videos I used ELAN (2022), an open access software for video annotation developed by the Max Planck Institute for Psycholinguistics (Nijmegen, the Netherlands). During read-aloud sessions, salient aspects identified by storytellers in the picturebooks were embodied in the performances. Through ELAN I annotated visual, spatial, oral and aural semiotic resources that allowed storytellers to embody the story: verbal language, voice features (such as tone, volume and pitch), gestures, facial expressions, movements in space and use of

images and props were time-aligned annotated in multiple tiers. To elaborate ELAN raw data, I used the software TMA (2021) (developed as part of my PhD thesis in collaboration with a computer developer). TMA generates graphs and tables in order to identify and visualize ensembles, correlations and patterns in the data within specific time spans. I used the transcription table generator in TMA (Figure 9.1, Section 9.3.1) that groups together annotations of semiotic resources that co-occur in the same time span. The tool allows us to visualize the ensembles of semiotic resources used by storytellers during the performance and to analyse how storytellers gave salience to key elements about nature in stories through multimodal configurations of semiotic resources.

In this study, my point of view is informed by the direct involvement in the organization of the *TALES* events, the discussion and reflection with storytellers, the observation of the events and the analysis of the data. The research design of the study was in compliance with the ethical guidelines of the University of Udine and the museum privacy requirements for all participants who were present during the events (storytellers, children and parents/caregivers), as I obtained all the necessary informed consents.




Time	Image	Transcriptions
00:02:25.110 00:02:25.908		[Spoken language]: Language of picturebook [Transcription]: Was bright [Voice Intonation]: Statement [Voice Tone]: Surprised [Voice Volume]: Lowers her/his voice [Gaze]: Looks at the children [Gesture]: Iconic [Hands Movement]: Hands movement
00:02:27.000 00:02:30.636		[Gaze]: Looks at the images of the book [Turns the Page]
00:02:30.636 00:02:33.805		[Spoken language]: Language of picturebook [Transcription]: And the stone was loud [Voice Intonation]: Statement [Voice Volume]: Raises her/his voice [Gaze]: Looks at the children [Proxemics: book]: Moves the book closer to children
00:02:33.666 00:02:35.954		[Gaze]: Looks at the children

Figure 9.1 TMA output: transcription of multimodal ensembles in E. S.'s read-aloud performance. Copyright: the author.

9.3 Discussion

In the first stage of the picturebook mediation process (see Section 9.1.1) the storytellers of the initiative *TALES* chose the picturebook for their sessions from the preselected list (see Section 9.2). During the read-aloud sessions, the selected picturebooks became the ‘play script’ for the storytellers’ performances: although the picturebooks did not offer explicit directions for the storytellers to follow, the interplay between the multimodal elements in the picturebook (written text, illustrations, peritextual features and graphic devices) identified by the storytellers influenced the way in which the story was told, the responses of children and the interactions between participants during the performance. The present section analyses and discusses the data gathered through the semi-structured interviews with the volunteer storytellers before the storytelling events and the data gathered through the multimodal annotation of videos of *TALES* read-aloud performances. In the first part I will briefly present the four picturebooks selected by the storytellers, then I will discuss the storytellers’ answers. In the second part I will discuss the configurations of semiotic resources used by storytellers during the read-aloud performances.

9.3.1 Student teachers selecting picturebooks about nature

S. P. was the volunteer storyteller of the first event at the museum; she chose to give the read-aloud of the picturebook *The Beeman* by Laurie Krebs and illustrated by Valeria Cis (Krebs and Cis 2008). In the picturebook, a beekeeper and his grandson take care of a beehive and through the written text and the detailed illustrations the reader/listener can appreciate the slow process of beekeeping and honey production. The aim of the session was stimulating children’s curiosity about bees and presenting beekeeping as a caring practice. The second event was conducted by E. P. and it was based on the picturebook *A Forest* by Mark Martin (Martin 2012) that underlines the importance of trees for life and the impact of deforestation on our planet. The sparse text and the illustrations in the picturebook present the sequence of events that gradually lead humans to replace trees with buildings and factories. Deforestation causes storms and flooding that wash away factories and buildings, letting trees repopulate the earth again. *We Love Dinosaurs* by Lucy Volpin (Volpin 2016) was read aloud by I. G. during the third session at the museum. The aim of the session was allowing children to experience the sense of wonder through the observation of unknown creatures. In the picturebook, facts about dinosaurs are presented through bright

and colourful illustrations depicted on each double-spread page and through the brief text written in rhymes. In the last session, the storyteller E. S. gave the read-aloud of the picturebook *A Stone Sat Still* by Brendan Wenzel (Wenzel 2019). In this picturebook events are presented through the complementary interplay between the sparse written text and illustrations. The steadiness of a stone, depicted on each page, emphasizes the dynamic interactions taking place with and around it and recalls the multisensory nature of human experience in the environment.

Despite being very different in terms of topic, design features, content of the written text, type of illustrations and narrative structure, the four informational picturebooks have aspects in common which influenced the storytellers' selection. First of all, the structure of the narrative influenced storytellers in the selection of the picturebook. According to the storytellers, the presence of a clear sequence of logically connected events in a linear or circular structure allows children both to follow the unfolding of the narrative and to understand the connections in the lifescape presented in the story.

For instance, the picturebook *A Forest* has a circular structure. As E. P. stated, 'it starts with a graphical representation of a forest' that covers almost the entire double-spread. Then, the number of trees depicted on the page gradually diminishes, page after page, and 'in the central pages of the picturebook the images of trees are completely replaced by the images of buildings'. The central pages of the picturebooks depict a storm that washes away all the buildings and factories leaving space to the illustration of 'one little tree which soon gives rise to a new forest' that covers the entire last double-spread page. E. P. pointed out that the circular structure of the narrative allows children to understand the importance of respecting the balance in human relation with the environment. The presence of repetitions of words and expressions in the written texts of the picturebooks was noticed and taken into consideration by storytellers as an aspect that can give salience to natural elements and orient children's attention to key elements, characters and characters' actions in the story, thus facilitating the comprehension of expressions and events. In the specific context of the initiative *TALES*, the presence of repetitions in the written text of the picturebooks is a feature that not only does it scaffold children's comprehension of expressions and chunks of language, but it also emphasizes and gives salience to the natural elements at the core of the story. Key elements such as tree(s) or the stone are mentioned in the written text on (almost) every double-spread page. As S. P. pointed out during the interview, on every page of the picturebook *The Beeman*, the written text starts with the expression 'Here is/Here are'

followed by the names of tools used by the Beeman (the gloves, the smoker, the extractor, etc.) or the name of members of the bee colony (queen bee, drone bees, workers). According to S. P., the repeated expressions 'Here is/Here are' potentially orient children's attention to key elements in the double-spread page. During the interview, she reported that in her performance planning she was considering using various props (as she did) to show children in more detail the characteristics of beekeeping tools mentioned in the written text in order to involve children, stimulate their curiosity and 'make the story more realistic'. S. P. identified another repetition in the written text: each section in a double-spread ends with the noun phrase referring to the protagonist, 'the Beeman', reconnecting the reader/listener with the title and the theme of the picturebook. According to S. P. a repetition at the beginning and at the end of each sequence can 'give a rhythm to the performance' and can help children 'understand the sequence of events and actions in the story' which put bees and humans into close relation.

Design features in the written text of the picturebooks were taken into consideration by storytellers in their selection. S. P. noticed that keywords in the written text of the picturebook *The Beeman* are written in bold and in a large font size. According to her, this can help the reader/listener focus the attention on main elements of the story. The font used for the title on the cover of the picturebook and for the words written in bold in the text is peculiar and captured her attention: swirl lines surround each letter in the keywords (e.g. bee, queen bee, drone bees, gloves, beehive) and recall 'the buzzing of bees around flowers'. Similarly, in *We Love Dinosaurs*, I. G. noticed that different font sizes combine with the meaning of words and illustrations in order to emphasize the dinosaur's actions and characteristics: 'tall' is written in a big font and 'small' is written in a small font concretely depicting the meaning of the adjectives.

Illustrations in the picturebook influenced the storytellers' selection. All the four storytellers in the interviews stated that illustrations are clear and detailed and allow the listeners/readers to observe specific features and characteristics. Referring to the picturebook *A Forest*, E. P. noticed that the illustrations of trees are 'one different from the other' and presenting various features (sizes, colours, shapes) which might be used to invite children to observe, identify and recognize different characteristics in trees (and there were real trees in the courtyard of the museum where the storytelling events took place).

S. P. noticed that in all the pages of *The Beeman* there are references to beekeeping as a practice of care that bonds humans and bees in different ways throughout the seasons of the year. This is made visible through the characters'

actions and facial expressions which express positive emotions. As far as the illustrations are concerned, S. P. noticed that the role of the queen bee in the beehive is made salient in the picturebook as an entire double-spread represents her in the honeycomb surrounded by some other bees. In that specific page, the Beeman and his grandson do not appear visually but the written text printed on the page is the Beeman's direct speech that, as a voice-over, states, 'She's the heart of the hive.' S. P. appreciated the authors' choice: according to her, the double-spread entirely focused on the queen bee can help children understand her importance in the colony and the fact that humans should not 'interfere too much with the delicate balance in the beehive.' The illustrations in the picturebook *A Stone Sat Still* had a significant role in E. S.'s selection. She reported that in the book, the landscape changes page after page and different creatures appear but 'the stone is always present': covered in mud, hidden by long wavy grass and immersed in water, the stone is an element of the environment through which life develops and thrives. E. S. stated that this can contribute to focusing children's attention on the key element (the stone) inviting them to spot it in every page and at the same time to observe differences and similarities from one illustration to the other identifying changes in the environment that surrounds the stone. The stone becomes part of the 'lifescape'.

9.3.2 Student teachers giving read-alouds at the museum

The storytellers' use of voice was extremely important during the read-aloud sessions at the museum: stressing words, changing delivery speed and tone of voice gave emphasis to words and expressions and contribute to making meaning clearer. During the performances, the storytellers used both low-volume voice to convey a sense of wonder, magic and mystery and loud voice to capture children's attention and orienting it to specific expressions and elements. The small number of participants for each event and the fact that all children were sitting around the storytellers allowed storytellers to use mainly a quiet voice which contributed to making more evident variations in voice features. For instance, while S. P. was reading aloud the central pages of *The Beeman*, when the Beeman and his grandson are visiting the beehives, she lowered her voice whispering the words in the written text. In this way she gave children the idea that human actions should not disturb the colony of bees and should not interfere with their activities.

Variations in the tone and in the volume of storyteller's voice were frequently used by E. S. while she was reading aloud the picturebook *A Stone Sat Still*.

She combined the use of different voice features (volume and tone) with the language of the picturebook in order to convey the meaning of expressions related to the stone. As can be seen in Figure 9.1 she lowered her voice whispering, 'was bright' referring to the stone lit by the moon. At the same time, she made an iconic gesture moving slowly her hand from right to left in order to convey a sense of magic and wonder. She shifted her gaze from the children to the illustration in the picturebook pausing and staring at the image of the bright stone. Then, she turned the page and she rose significantly the volume of her voice while reading aloud 'And the stone was loud'; she also moved the picturebook closer to the children to show them the image of a pebble hitting the stone.

Similarly, in *We Love Dinosaurs* I. G. used voice features in relation to the different font sizes in the written text: she raised and lowered her voice in relation to the size of words written on the page and the meaning to be conveyed. She combined verbal language, voice features and gestures in order to help children imagine the appearance and the behaviour of dinosaurs creating a feeling of connection with them. During the performance some children mimed I. G.'s actions: they roared and moved their arms pretending to be dinosaurs.

Variations in voice volume, pitch and tone helped storytellers to reproduce effectively onomatopoeic words (e.g. splash-splash, bang, crash, etc.). As mentioned in the previous section, in the picturebook *The Beeman* swirl lines surround the letters in the title of the picturebook. The storyteller associated the font and the design features used by the illustrator to a combination of voice sound and hand/finger movement: she reproduced the sound of a buzzing bee with her voice and with hand and finger movement she reproduced the flight of a bee in the air every time she mentioned 'the Beeman' at the end of a sequence of the story. Repetitive patterns of semiotic resources such as voice features and gestures were used by storytellers to emphasize repetitive expressions in the written text, capture the children's attention and orient it to key elements in the story.

The storytellers also used proxemics to orient children's attention towards the illustrations in the picturebook. After reading aloud the written text on the page, the four storytellers leaned forward and moved the picturebook closer to the children giving them time to observe, generally in silence, the illustrations. After letting the children observe carefully the illustrations, the storytellers, generally without speaking, pointed to the images in order to orient children's attention to some of the image details; for instance, in the case of *A Forest*, E. P. pointed to the different trees depicted on the page.

The storytellers included the use of props in their performances; this expanded and enhanced the story beyond the pages of the picturebook. They let children observe the props (beekeeping tools, the stone, dinosaur toys) during the performance, moving the objects closer to each child and letting children touch them. In the case of the read-aloud session of the picturebook *A Forest*, trees that surrounded the storytelling corner in the museum courtyard became 'props' for E. P.'s performance. He gazed and pointed at trees in the grounds of the museum thus orienting the children's attention to the main elements of the picturebook before starting to read the story. Children interacted with the storyteller by turning their heads and bodies to look at the trees around them. In the read-aloud performance of *The Beeman*, S. P. placed a small beehive, a smoker, gloves, a beekeeping jacket and hood and a piece of honeycomb all around her; in this way she could easily pick them up and show them to the children during the read-aloud session. The use of props was combined with gestures and gaze. S. P. used gaze to orient children's attention to specific elements: they shifted gaze from the picturebook, to the props and to children, and children's gaze followed the storytellers' gaze. Gaze created a connection between storytellers, the audience and the natural elements presented in the story of the picturebook.

Storytellers used repetitive patterns of semiotic resources in their performances: in the first session S. P. read aloud the written text on each double-spread of the picturebook *The Beeman* starting with 'Here is/here are', then she pointed to key elements illustrated on the page and finally she put down the picturebook, took the real object and showed it moving it closer to the children. She repeated the same sequence of actions for each double-spread. The expression 'Here is/Here are' combined with hands gesture and gaze was used by the storyteller to create expectation and orient the children's attention first towards the illustrations in the picturebook and then towards the real objects. A repetitive pattern was used by E. S. during read-aloud talk (see Section 9.1.1) about the picturebook *A Stone Sat Still*. After reading aloud the sequence in every double-spread page, she asked children 'where is the stone?' leaning forward and moving the book closer to the children to focus the children's attention to the main element in the story. The same ensemble was repeatedly used by the storyteller, creating a familiar pattern that children could rely on. The children replied pointing at the image of the stone in the page but in the last pages of the picturebook where the image of the stone is half-hidden in the environment, children pointed at the illustration and exclaimed 'the stone!' before the storyteller asked the question: children had become part of the performance.

9.4 Concluding remarks

The picturebooks selected for this study are econarratives that offer children an insight of how we humans represent the ecosystem we inhabit and belong to and how humans position themselves in the ecosystem and what role we create for ourselves. The availability of a multiplicity of semiotic resources for the realization of meaning and interaction requires the selection of resources suitable for this specific aim (Kress et al. 2014: 41). Information gathered through semi-structured interviews demonstrates that in the selection of the picturebook the storytellers took into account the structure of the narrative, the presence of repetitions of words and expressions in the written text, the illustrations and design features in relation to the context and audience of the read-aloud session about nature.

Salient aspects identified by storytellers during the interviews were embodied in the read-aloud performances of the initiative *TALES*. Key elements in stories about nature were highlighted through various modes such as verbal language, voice features, gestures, gaze and the use of props combined in multimodal ensembles. The multimodal orchestration resulted in a configuration of modes utilized by storytellers to form salient ensembles and focus children's attention to key elements about nature, thus connecting children to the environment. When storytellers give a read-aloud of picturebooks about nature, they select certain aspects of reality and make them salient through the use of semiotic resources: storytellers orient children's attention by pointing to, gazing at and lingering on specific illustrations in the picturebook, to the props or to natural elements in the environment that surrounds the storytelling corner. Read-aloud sessions are an example of positive action for citizenship education through ecological multimodal communication. The mediation of picturebooks about nature integrates multisensory, multimodal and ecological communication in order to strengthen and extend children's connections with nature. Multimodal communicative practices such as informal read-aloud sessions can contribute to creating memories in children which are linked to nature; such memories promote respect for nature we all belong to and eco-sustainable ways of living.

Read-aloud sessions offer student teachers the opportunity to extend their own ecoliteracy through the exploration of environmental narratives in picturebooks. Read-aloud performances with children can raise student teachers' awareness on strategies to give salience to nature through positive multimodal communication about the environment.

Notes

- 1 The read-aloud sessions were held in English by and for non-native speakers. To acknowledge the 'plural' identity of English in children's and storyteller's linguistic repertoires and to account for very different levels of participants' personal commitment to and experiences with English language, in the present research study the target language used by storytellers and children during read-aloud sessions will be referred to as 'English L2'.
- 2 <https://yell.uniud.it/en/storytelling/tales>.
- 3 <https://padlet.com/elisabrtl83/t6jnb3ylfn1ono4r>.

References

- Allen, S. (2018), 'The Science of Awe', The University of California Berkeley. Available online: https://ggsc.berkeley.edu/images/uploads/GGSC-JTF_White_Paper-Awe_FINAL.pdf (accessed 11 February 2022).
- Bezemer, J. and K. Cowan (2021), 'Exploring Reading in Social Semiotics: Theory and Methods', *Education 3-13*, 49 (1): 107–18.
- Bezemer, J. and G. Kress (2016), *Multimodality, Learning and Communication*, London: Routledge.
- Bruno, R. T. (2020), *Educare al Pensiero Ecologico. Letture, Scritture e Passeggiate per un Mondo Sostenibile*, Milano: Topipittori.
- Capra, F. (2007), 'Sustainable Living, Ecological Literacy, and the Breath of Life', *Canadian Journal of Environmental Education*, 12 (1): 9–19.
- Colombo, R. (2012), 'Sulla Natura', in Hamelin (ed), *Ad Occhi Aperti. Leggere l'Albo Illustrato*, 227–38, Roma: Donzelli editore.
- Eisler, R. (2000), *Tomorrow's Children: A Blueprint for Partnership Education in the 21st Century*, New York: Basic Books.
- ELAN (Version 6.3) [Computer Software] (2022), Nijmegen: Max Planck Institute for Psycholinguistics, The Language Archive. Available online: <https://archive.mpi.nl/tla/elan>.
- Ellis, G. and J. Brewster (2014), *Tell it Again: The Storytelling Handbook for Primary English Language Teachers*, British Council. Available online: https://www.teachingenglish.org.uk/sites/teacheng/files/pub_D467_Storytelling_handbook_FINAL_web.pdf (accessed 21 August 2021).
- Ellis, G. and S. Mourão (2021), 'Demystifying the Read-Aloud', *English Teaching Professional*, 36: 22–25.
- Goga, N., S. Iversen, and A. Teigland (2021), 'Introduction', in N. Goga, S. Iversen, and A. Teigland (eds), *Verbal and Visual Strategies in Nonfiction Picturebooks: Theoretical and Analytical Approaches*, 1–5, Oslo: Scandinavian University Press.

- Grilli, G. (2020), 'Introduction', in G. Grilli (ed), *Non-Fiction Picturebooks: Sharing Knowledge as an Aesthetic Experience*, 11–16, Edizioni ETS.
- Hägström, M. (2020), 'The Art of Read-Aloud, Body Language and Identity Construction: A Multimodal Interactional Analysis of Interaction Between Parent, Child and Picture Book', *International Journal of Language Studies*, 14 (1): 117–40.
- Heeks, P. (1996), 'Information Books', in P. Hunt and S. Ray (eds), *International Companion Encyclopedia of Children's Literature*, 428–37, London: Routledge.
- Jewitt, C. (2017), 'An Introduction to Multimodality', in C. Jewitt (ed), *The Routledge Handbook of Multimodal Analysis*, 2nd edn, 15–30, London: Routledge.
- Jewitt, C., J. Bezemer, and K. O'Halloran (2016), *Introducing Multimodality*, London: Routledge.
- Kiefer, B. and M. Wilson (2011), 'Nonfiction Literature for Children: Old Assumptions and New Directions', in S. Wolf (ed), *Handbook of Research on Children's and Young Adult Literature*, 290–98, London: Routledge.
- Krebs, L. and V. Cis (2008), *The Beeman*, London: Barefoot Books.
- Kress, G. and T. van Leeuwen (2001), *Multimodal Discourse: The Modes and Media of Contemporary Communication*, London: Arnold.
- Kress, G. and T. van Leeuwen (2021), *Reading Images. The Grammar of Visual Design*, 3rd edn, London: Routledge.
- Kress, G., C. Jewitt, J. Ogborn, and C. Tsatsarelis (2014), *Multimodal Teaching and Learning: The Rhetorics of the Science Classroom*, London: Bloomsbury Academic.
- Lim, V. F. (2021), *Designing Learning with Embodied Teaching: Perspectives from Multimodality*, London: Routledge.
- Mallett, M. (2010), *Choosing and Using Fiction and Non-Fiction 3–11: A Comprehensive Guide for Teachers and Student Teachers*, London: Routledge.
- Martin, M. (2012), *A Forest*, London: Templar Books.
- Masoni, L. (2019), *Tale, Performance, and Culture in EFL Storytelling with Young Learners. Stories Meant to Be Told*, Newcastle upon Tyne: Cambridge Scholars Publishing.
- Mourão, S. (2015), 'The Potential of Picturebooks with Young Learners', in J. Bland (ed), *Teaching English to Young Learners: Critical Issues in Language Teaching with 3–12 Year Olds*, 199–218, London: Bloomsbury Academic.
- Mourão, S. (2016), 'Picturebooks in the Primary EFL Classroom: Authentic Literature for Authentic Responses: Children's Literature in English Language Education', *CLELE Journal: Children's Literature in English Language Education*, 4 (1): 25–43. Available online: <https://clelejournal.org/sh-html/> (accessed 30 January 2022).
- Muthukrishnan, R. (2019), 'Using Picture Books to Enhance Ecoliteracy of First-Grade Students', *The International Journal of Early Childhood Environmental Education*, 6 (2): 19.
- Nanson, A. (2021), *Storytelling and Ecology: Empathy, Enchantment and Emergence in the Use of Oral Narratives*, London, New York: Bloomsbury.
- Nelson, M. and R. Kern (2012), 'Language Teaching and Learning in the Postlinguistic Condition?', in L. Alsagoff, S. McKay, G. Hu, and W. Renandya (eds), *Principles*

- and Practices for Teaching English as an International Language*, 47–66, London: Routledge.
- Nikolajeva, M. and C. Scott (2001), *How Picturebooks Work*, New York: Routledge.
- Nodelman, P. (1988), *Words About Pictures: The Narrative Art of Children's Picture Books*, Athens: University of Georgia Press.
- Norris, S. (2020), *Multimodal Theory and Methodology for the Analysis of (Inter)action and Identity*, London: Routledge.
- Schenetti, M., I. Salvaterra, and B. Rossini (2015), *La Scuola nel Bosco. Pedagogia, Didattica e Natura*, Trento: Erikson.
- Sipe, L. (2008), *Storytelling: Young Children's Literary Understanding in the Classroom*, New York: Teachers College Press.
- Stibbe, A. (2021), *Ecolinguistics: Language, Ecology and the Stories We Live By*, 2nd edn, London: Routledge.
- Terrusi, M. (2014), 'Letteratura per l'Infanzia e Narrazioni Naturali', in R. Fernè and F. Agostini (eds), *Outdoor Education*, 69–74, Roma: Spaggiari.
- TMA [Software] (2021), <https://yell.uniud.it/risorse/multimodal-communication>.
- Volpin, L. (2016), *We Love Dinosaurs*, London: Nosy Crow.
- Von Merveldt, N. (2018), 'Informational Picturebooks', in B. Kümmerling-Meibauer (ed), *The Routledge Companion to Picturebooks*, 231–45, London: Routledge.
- Wenzel, B. (2019), *A Stone Sat Still*, San Francisco: Chronicle Books.