



**THE ART OF SUCCESSFULLY
DESIGNING A QUALITY EARLY
CHILDHOOD LEARNING
ENVIRONMENT**

Lisa Terreni

ABSTRACT

An early childhood environment can act like another teacher and has a specific 'language' that speaks to children, giving them important messages and cues about how to act, play and engage in learning spaces. It can influence the social and emotional climate of an early childhood education (ECE) centre and have a significant impact on children's learning as well as their well-being. An important part of developing an effective early childhood learning environment involves making many aesthetic decisions in relation to the design of the environment as well as the presentation of learning and teaching resources. Examples from ECE centres in Vietnam, China, Australia and New Zealand are discussed in relation to their unique cultural contexts and how these different learning environments reflect this. This article explores some of the literature and current research about the ways in which quality physical environments provide an important dimension of children's learning.

INTRODUCTION

In an article by Pairman & Terreni (2001), *If the environment is the third teacher what language does she speak?* the authors unpacked some ideas that have been developed by the Reggio Emilia education project about carefully considered early childhood environments (Malaguzzi, 1998). It gave teachers some guidance in relation to organisational and aesthetic considerations that could be made when establishing or re-developing an ECE centre. Twenty years on, this article discusses Terreni's recent research (Terreni, 2019) about aesthetic experiences that can be offered in ECE environments. These take into consideration many of the cultural, social and contextual factors involved in creating effective environments.

The concept of the environment as a third teacher was first articulated by Malaguzzi, the founder of the Reggio Emilia education project. He noted that "the environment should act as a kind of aquarium which reflects the ideas, ethics, attitudes and life-style of the people who live in it" (Reggio Children, 1996, p.40), and he considered the three most significant teachers of children to be: adults, other children, and their physical environment (Gandini, 1998). The conceptualisation of the environment as a third teacher is a useful one. It helps to personalise a

sometimes-overlooked aspect of ECE programmes because the physical environment can then be afforded equal status and value as the adults and children involved in the shared learning spaces i.e. those who live there. This idea is echoed in the guiding criteria for Reggio Emilia preschools and infant toddler centres which states, “the interior and exterior spaces of the infant-toddlers centres and pre-schools are designed and organized in interconnected forms that foster interaction, autonomy, explorations, curiosity, and communication, and are offered as places for the children and for the adults to research and live together” (Istituzione of the Municipality of Reggio Emilia, 2010, p. 13).

Nonetheless, like many other early childhood curricula around the world, the New Zealand framework *Te Whāriki* also acknowledges the importance of the learning environment, stating that it should offer “a variety of possibilities for exploring, planning, reasoning and learning [and that] ... the whole of the environment [should be] used as a learning resource” (Ministry of Education, 2017, p. 50). This statement supports Gandini’s (2001) hypothesis that a physical space “fosters encounters, communication and relationships ... encourages choices, problem solving and discoveries in the process of learning” (p.17). This important idea requires ongoing consideration by teachers (Pairman, 2018) as they plan their programmes and consider ways that they can provide rich and meaningful learning environments that best suit the needs of those who live in them.

RESEARCH METHODOLOGIES

The research discussed in this article has relevance to an ongoing discussion about the environment as the third teacher and the art of successfully designing early childhood learning environments. Terreni (2019) examined how the different cultural, social and environmental contexts in ECE centres in the Asia Pacific region (New Zealand, Australia, Vietnam and China) mediate and transform the implementation of Reggio Emilia inspired pedagogy and practices¹. The various environments encountered in the research showcase the important role of aesthetics in the design of environments and programme provision which create quality experiences for both children and teachers. Conditions for “quality practices, rich lived experiences, and teachers’ and children’s agency” (Pairman, 2018, p. iii) were also dependent on environmental factors such as space and organisation.

The data gathering methods used in her research project involved case studies of ECE centres, focus group interviews with managers, lead teachers and teachers, observations, and the use of photographs as a data source. In this research there was an examination of teacher’s project documentation as well as observations of the learning environment. Terreni analysed her findings in relation to socio-cultural and constructivist ideas about learning and the role of aesthetics, drawing strongly from the work of Veia Vecchi (2010). This approach informs the discussion in this article.

¹ Victoria University of Wellington Human Ethics application number 0000027373, 12/09/2019.

THE LANGUAGE OF THE ENVIRONMENT

In keeping with the metaphor of the environment as the third teacher (and the language(s) that she speaks), the following sections of this article look specifically at aspects of the 'language' of the environment that connect to the ideas discussed in Pairman & Terreni's article (2001). In the following section these ideas are taken further through a discussion about the language of aesthetics and by considering some of the relevant literature. Examples of aesthetic practice from the ECE centres Terreni visited as part of her Asia Pacific research are highlighted.

The language of aesthetics

Gonzalez-Mena and Eyer (1994) argue that children are more likely to grow up with an eye for beauty if the teachers and adults around them demonstrate that they value good aesthetics. As Pairman & Terreni have remarked early childhood professionals in New Zealand sometimes overlook or give little attention to aesthetics in the ECE centre environments (Pairman & Terreni, 2001). Good aesthetic considerations can make ECE centres more welcoming and homelike for children, families and teachers. This can actively foster learning by helping to facilitate children's social engagement with others (Mills, 2007) by making the centre experience pleasurable and familiar. Vecchi (2010), a leading atelierista with considerable involvement in the Reggio Emilia education project (Dahlberg & Moss, 2010), also notes that many schools (and ECE centres) consider aesthetics as "pleasing but neither necessary nor indispensable" (p. 9). However, she argues that "beauty and aesthetics are generative resources for women and men and that to propose them as inalienable and fundamental rights would benefit all humanity" (Vecchi, 2010, p. 10), particularly young children. Nonetheless, Vecchi suggests that it can be difficult to pin down what an aesthetics dimension involves. Consequently, an examination of a range definitions is included here.

The term aesthetic can be used "to designate, among other things, a kind of object, a kind of judgment, a kind of attitude, a kind of experience, and a kind of value" (Shelly, 2017, para. 1). However, it can also be applied to the critical evaluation of a piece of art or a design (which includes the visual and dramatic arts as well as dance and music). Commonly, criteria are used to make an aesthetic judgment and involve factors that can be important to a specific culture and help to explain "what the aesthetic experience consists of" (Dissanayake, 1992, p.24). These criteria can include: the use of form, line and colour, the themes of the work, the combination of mediums, or use of symbolism. Inherent in this definition is an appreciation and recognition of the skill and craft of the artist who has executed the work.

Another definition of aesthetics encompasses the appreciation of pleasant and special sensory experiences (usually visual, aural, or tactile) which often arouse pleasing emotional responses (Marković, 2012). As well as being agreeable to the senses, aesthetic objects (or situations) often involve other features that are cognitively pleasing. These may include things such as: repetition, pattern, continuity, contrast, balance, and proportion. For example, a display of natural materials in an ECE centre can be aesthetically pleasing because of the inherent natural beauty of the materials themselves and their sensory value and also because of the way the objects have been arranged by teachers (items are balanced, contrasted, well-spaced), and

where they are situated (in a well-lighted space where children have good access to them -see figure 1). Inherent in this notion of aesthetics is the premise that aesthetic experiences are pleasurable and involve a positive emotional and cognitive response from the spectator, in this case, the young learner.



Figure 1 - Children's brush and ink paintings displayed above the well-lighted painting table at Gembryo kindergarten (Tongzhou campus), Beijing, China

Vecchi (2010) describes empathy as the key to considerations of aesthetics and understanding how the individual relates to objects as well as how objects can relate to each other. She believes that it involves a special attitude, one "of care and attention for the things we do, a desire for meaning; it is curiosity and wonder; it is the opposite of indifference and carelessness, of conformity, of absence of participation and feeling" (p. 5). Vecchi notes that visitors to the ECE centres of Reggio Emilia are always struck by the aesthetic considerations given to their learning environments. However, the international influence of the Reggio Emilia education project has meant the attention to aesthetics in ECE environments has inspired many other educators from around the world. Attention to aesthetic detail and beauty was evident in all the centres (who identified as Reggio Emilia inspired) that the author visited in her research in the Asia Pacific region – none more so than the Aurora International Preschool of the Arts, in Ho Chi Minh City in Vietnam.

AESTHETICS ARE MEDIATED BY CULTURAL CONTEXT

On a busy street in Thao Dien (Hồ Chí Minh City District 2) tucked in behind an ivy-covered wall, Aurora International Preschool (and primary school) of the Arts offers the visitor a smorgasbord of sensory and aesthetic experiences on entering its gates (see figure 2). What is immediately apparent at this preschool is the “care of furniture, the objects, and the activity spaces by the children and adults [which] is an education act that generates psychological well-being, a sense of familiarity and belonging, aesthetics and the pleasure of inhabiting a space” (Istituzione of the Municipality of Reggio Emilia, 2010. p. 13). Mrs Nguyen, the owner and founder of the centre, has been to Italy to study the Reggio Emilia education project several times and is very familiar with the European aesthetic evident in the preschools there. Yet her preschool has a very distinct and deliberate Vietnamese aesthetic.



Figure 2 - Entrance to Aurora International Preschool of the Arts



Figure 3 - The outside atelier

Assisted by an architect in the initial stages of converting three neighbouring houses into the preschool (and now a school as well), the emphasis on the elements of design, colour, lighting, furnishings and materials is rooted in Vietnamese culture, traditions and values. Aurora is testimony to how good consultation with professionals such as architects can help create an environment that reflects the unique culture of the early childhood community (Curtis & Carter, 2003). Mrs Nguyen says the choice to refurbish the older houses was deliberate because she wanted “to bring in the home spirit and the relaxing spirit” (T. Nguyen, personal communication, November 2, 2019).

The architect involved in this project suggested the frequent use of bamboo throughout the preschool in order to create and highlight focal points in the buildings (see figures 3 and 4). This feature combined with traditional style lights (see figure 5), objects and old recycled wood speak loudly of the ways that the Vietnamese cultural context at Aurora mediates ideas common to the Reggio Emilia education project in relation to the environment (Hennig & Kirova, 2012).



Figure 4 - Bamboo is used decoratively and symbolically in the dining hall



Figure 5 - Bamboo is threaded through stair case railings and traditional lights are suspended from the ceiling in the stairwell of the preschool villa.

A key feature of the Aurora environment design is the incorporation of two powerful Vietnamese fairytales that continue to inform important aspects of Vietnamese life today. Mrs Nguyen talks about incorporation of the legend of Âu Cơ (the Vietnamese mother figure who started the creation of the country) into the attic of one of the villas as a mural and sculptural element. It is there so the children can learn and appreciate the story. The story about a man named Cuội who hung on to a magical banyan tree as it floated up to the moon is also incorporated into the classrooms. The banyan tree is an important part of this story and has been recreated out of recycled materials. Mrs Nguyen notes that Vietnam “is a very, very old cultural country and in every village all the people of the village always sit around the tree to talk about our lives”. Therefore, the tree has symbolic and cultural value as well as aesthetic value. Giamminuiti (2009) suggests that the beauty evident in Reggio Emilia preschools “is not merely about “how we want things to look” but rather “about the values we want to live by”” (p. 215), and cultural values determine the aesthetic features of Aurora International Preschool of the Arts.

A quality environment must respond to the multiple languages of children according to Malaguzzi (1993) in his poem *The hundred languages of children*. As the poem suggests, the ECE environment needs to say to children, “Yes! an early childhood centre is a place for singing and understanding, a place to discover, to invent and to dream, and that it is a place for listening and marveling” (Terreni & Pairman, 2001, p. 2). Consequently, an ECE environment needs to be

safe, stimulating, and beautiful (Rinaldi, 2001), and have a range of rich sensory and aesthetic learning experiences on offer for children (Terreni, 2005).



Figures 6 and 7 - Recurring symbolic sculptural tree forms throughout the preschool

Gandini (2002) remarks that the Reggio Emilia EC centres are characterised by environments which are beautiful and also reflect the children using them, where “paintings, drawings, paper sculptures, wire constructions ... work and reflections of the children, their photographs, and the documentation of the [learning] experiences” (p. 17) are well displayed. An EC environment that honours children’s work in this way contributes to enhancing children’s sense of belonging (Ministry of Education, 2017). Children’s thinking and learning is also made visible to others (Project Zero and Reggio Children, 2001). Work display like this can provide a window for adults into children’s thought processes and understandings that are generated through their learning experiences and interactions within their EC environment. This emphasis on the carefully considered display of children’s work was particularly evident at Gembryo kindergartens at the Tongzhou and Changying (Choayang) campuses in Beijing, China.

LOOKING FOR THE BEAUTIFUL IN THE EVERYDAY

At the Tongzhou (Tongzhou district, Beijing) and Changying (Chaoyang district, Beijing) campuses, both kindergartens carefully considered displays of children’s artwork are a priority. On entering the buildings at Gembryo Tongzhou the visitor is greeted by a variety of artwork that shows children’s engagement in a wide range of media and evidence of inquiry projects where engaging with materials is an important component of the learning process. Drawings, paintings (see figure 1), work in wire and tin foil, clay and constructions give glimpses into the

Gembryo children's understandings of their world (figure 8), and their working theories about it and themselves (Hedges & Jones, 2012; Ministry of Education, 2017). The children have opportunities to create art in their classrooms as well as in well equipped, purpose-built art studios which the children can use at any time, supported by an atelierista.



Figure 8 - The Kingdom of Chinese Phonetic Symbols constructed by children at Gembryo Tongzhou using wire, wooden sticks, cardboard and plastic.

At the Changying campus the teachers sometimes use things children say about their investigations and create short poems which capture the children's voices. The poems become unique art works through the careful framing and hanging of the works, as well as effective forms of documentation. For the international visitor it is also clear that Chinese calligraphy is an art form in its own right. The poems function as a significant form of environmental print (Giles & Tunks, 2010), as they are often read out loud to the children as they travel up and down the stairs (figure 9).



Figure 9 - Poetry as art displayed in a stairwell at Changying (Chaoyang) campus

There is considerable evidence to show that beauty is an important aspect of the environment in both campuses, in keeping with Vecchi's belief that, like the Reggio Emilia preschools, Gembryo "considers beauty and processes promoted by poetic languages to be important for learning" (p.17). Nonetheless, Eunice, an experienced lead teacher at Tongzhou, articulated to me her belief that beauty must stay connected to children's life experiences (expressed thus through the translator),

in her [Eunice's] eyes presenting beautiful things is important, but she thinks it is more important connecting with the everyday life because different people have a different understanding of what is beautiful. For her ordinary stuff from everyday life can be beautiful, [for example] a piece of material...and someone [else] may think a flower arrangement is beautiful but for her its connecting to everyday life's beauty that is important.

Eunice raises two important points in this discussion. It is important to acknowledge that everyone has their own individual (as well as cultural) ideas, tastes and preferences about what constitutes beauty and/or beautiful things. How these differences are navigated in a team can be an important consideration for teachers. However, recognising that there is beauty in everyday life and in ordinary things can help both teachers and children to pay special attention to their environment (see figure 10).



Figure 10 - Everyday utensils are made extraordinary in a wall display in the Tongzhou dining room

Making sure materials and resources are presented in a considered way can result in children paying greater attention to objects, offering an "intense, absorbing experience" (Gandini, 2001,

p. 92). This, in turn, can assist children to also be more thoughtful and respectful in their own use of materials. Objects that arouse children's curiosity can be both natural and human-made (Topal, Weisman and Gandini, 1999). Having a variety of artwork or objects displayed in the centre in different styles, from different cultures, and in different mediums (for instance, sculpture, pottery, weaving, cloth, art from different cultures) can also add considerable interest to the environment. As Gandini and Edwards (2001) suggest "every object brings out different play behaviours and different forms of thinking" (p.92), so it is important to think about what and how objects are presented in an ECE centre. The Point Preschool in Sydney, Australia is a wonderful example of the teachers' thoughtful consideration of quality art materials, artists and artifacts and how these can be used to complement the unique cultural context of the preschool.

WALKING ON COUNTRY

The Point Preschool (in Oyster Bay, NSW, Australia) emanates energy and purpose in a very calm and gentle way inviting engagement, curiosity and inquiry on the part of the visitor. There are layers of history evident in the environment.



Figure 11 - The mosaic at the front door was designed by one of the preschool children. The work was co-constructed by an artist, a Dharawal elder, staff and children.



Figure 12 - A display of children's artwork displayed on the branch of a tree decorated in the style of Tjanpi Desert weavers in Australia.

For instance, the history of Dharawal country, the history of the generations children and families who have used (and still use) the centre, history of the original establishment committee (Norma, aged 93, an original founder lives next door and is still actively involved and included in preschool life), and the Director has worked at the preschool for seventeen years.

The philosophy of the preschool embraces the inclusion of all families and their children. Integral to the programme is a commitment to connecting with local Aboriginal (indigenous and first people of Australia) knowledge holders and artists to deepen their connection to Aboriginal culture and 'country'. Catherine Lee, the director and a teacher at the centre, has stated that her personal vision for all children living in Australia is "for them to have a strong connection to 'country' and to our Aboriginal people ... which will strengthen our sense of belonging to our shared culture so we can truly understand who we are as Australians" (Bursill, Jacobs, Lee & Morgan, 2013). The environment of the preschool speaks to its commitment to reflecting indigenous cultures in its inside (see figure 12) and outside spaces (figures 13 and 14).

The mosaic at the front door of the preschool (see figure 11) acknowledges local Aboriginal cultural history. It represents the large Morton Bay Fig at Como where historically, the Dharawal people met before their final walk to the coast. Drawn by one of the children after an investigation of this story and then co-constructed with artists from the local community as a mosaic, the work was guided by a Dharawal elder and "stands as a testament to our philosophy of relationships and reconciliation" (Catherine Lee, personal communication, 26 July, 2019). A Yarning Circle (a traditional gathering place used by indigenous Australians) is another example of this commitment to cultural healing is found in the playground. The circle is used regularly by the children and teachers for collaborative learning experiences (Mills, Sunderland & Davis, 2013). Embedded in the concrete are depictions of Australian animals important in Aboriginal mythology – the kangaroo and the snake.



Figures 13 and 14 - Children use the Yarning Circle for important collaborative learning experiences.

The Yarning Circle is a special place, and Vicky, one of the very new teachers at the preschool, feels that "it's lovely to start our day as we come together and connect and share our ideas and thoughts. It's a time for listening and communicating. Each and every one [of us] is valued

and respected. It is wonderful for each of the children to feel comfortable and confident in our place” (personal communication, 26 July, 2019).

The resources and materials provided for the Point Preschool children’s own art making are of high quality because the teachers and children at Point Preschool regularly work with and alongside artists. Vecchi (2010) is emphatic about the use of quality art materials in the ECE programme, stating that teachers need to pay attention to the types of materials children have to create their art with (and on) as it will impact on their understanding of how to use these materials most effectively. For instance, she believes that “the size, shape, colour, grain and surface quality of paper are not neutral, nor are the nature and quality of tools used to produce drawing: we should not be indifferent to any of these” (p. 111). Quality art materials contribute to the children’s ability to represent their ideas competently and confidently, helping them to see themselves as artists (Terreni, 2005, 2016). Good materials also make a difference to the quality of an artwork. often more expensive quality paints use better pigments giving children more opportunities to experience varied and intense colours.



Figure 15 - Michael from The Point Preschool, aged 4 years, use quality watercolour paints on canvas to depict a deciduous tree he has regularly observed during Yan-Ma Nurra experiences.

The children at The Point Preschool have weekly excursions into the bush and the open green spaces in their neighbourhood (known as Yan-Ma Nurra – walking on country) where they have direct experiences with rain, water, mud, plants, animals and insects. These excursions often inspire their artmaking (see figure 15) as they document their observations through drawings and paintings, and the excursions heighten their appreciation of the beauty and aesthetic natural objects in their local natural environment. In New Zealand, excursions into nature are also increasingly popular for developing in children “a deep sense of responsibility for the living earth and an understanding of kaitiakitanga [guardianship]” (Meade, 2014, p. 4). Like the Point

Preschool in Australia, Sophia Pre-school in New Zealand has a special focus on experiencing nature outside of their gates, and just as importantly, inside of them as well.

THE AESTHETIC LESSONS OF THE GARDEN

There can perhaps be a no more dramatic a setting for an early childhood centre than under a mountain. From the front door at Sophia Preschool (in Ōakura, New Zealand), seeing Taranaki Maunga (Mount Taranaki) invokes the spirits of Papatūānuku (the earth mother) and Ranginui (the sky father). On a good day you can even hear the waves breaking on Ōakura beach. Being tucked in between the mountain and the sea makes it logical that the teachers at Sophia Preschool actively foster a connection to nature and practice environmental sustainability as a cornerstone for the pedagogy and practices of the preschool.



Figure 16 - Taranaki Maunga can be seen from the front door of the preschool

Connections to the ngahere (New Zealand bush/forest) in the local community are facilitated by the centre's helpful location next door to Matakai park, a public reserve. Here the Sophia children deepen their connections to their local community, and the park has become a familiar part of their lived experiences at the preschool. In the bush children learn about sustainable behaviours such as picking up rubbish and looking after Papatūānuku, the earth mother (Kelly & White, 2013). Adrienne Wilkins, the founder and owner of Sophia Preschool, says, "all the children have a strong connection with Papatūānuku and they know Papatūānuku and they know what hurts Papatūānuku". Excursions into the bush and down to the sea regularly inspire the children's art making (see figure 17). In 2019 the children and teachers collaborated with a local art gallery to hold an exhibition of the children's nature-inspired work (see figures 17,18 and 19). *The child as an artist: A child's view and sense of place* exhibition held at the Hall of

Design gallery in Ōakura, documented the things in the community that were important to the children through their art works (see <https://www.stuff.co.nz/taranaki-daily-news/news/117607021/taranaki-childrens-artwork-gets-its-own-gallery-show>).

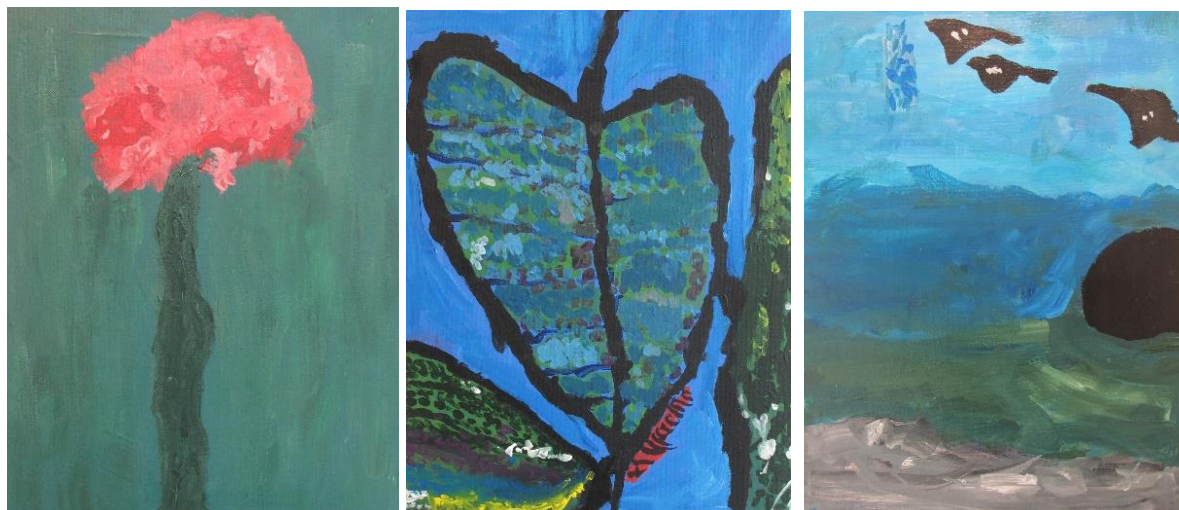


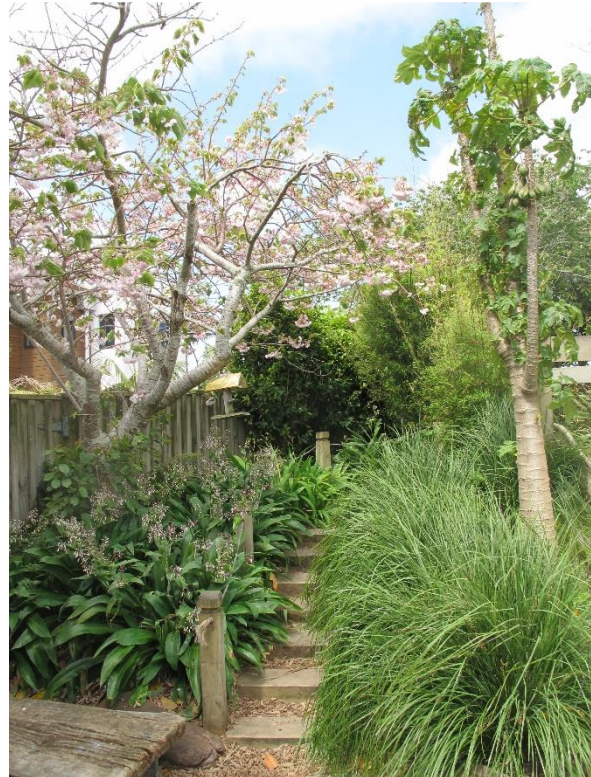
Figure 17, 18 and 19 - Artwork inspired by the local environment by 4-year-old children from Sophia Preschool, acrylic on canvas.

The children are as inspired by the gardens at the preschool as they are by the bush nearby. Adrienne has a keen interest in gardening and identifies herself as a gardenista. Consequently, the gardens at the preschool have many nooks and crannies -places of interest for the children to play in amongst a wide variety of plant species. Importantly, the garden provides fresh produce for the centre's vegetarian menu.

The language and aesthetics of food are as important at Sophia Preschool as the visual aesthetics of the environment and enhance the feeling of a truly home-like environment. Adrienne's vision for the preschool includes "a nature playspace for young children where gardening, harvesting food, food preparation and shared meals took place...". She strongly believes that "just as we provide food that is prepared the slow food way (cooking from scratch, rather than opting for the convenience of processed readymade food) we also believe that children grow best in an unhurried, nurturing environment. It is not only the children's bodies that need feeding; their minds and spirits require nourishing foods free of pesticides and other chemicals ..." (Wilkins, 2014, p. 5 and 6). These ideas resonate with Cavallini & Tedeschi's observations that "the kitchen is a place where it is possible to reflect on cultural habits and models with attention and respect, contributing to the affirmation of new humanism connoted by ecological sensibility and the ability to listen to the environment and to all the individuals in relationship" (2008, p.17).

Sophia Preschool is an example of how gardens are used as a teaching tool "across all strands of the New Zealand early childhood curriculum: Mana Atua (wellbeing), Mana Whenua (belonging), Mana Tangata (contribution), Mana Reo (communication) and Mana Aoturoa

(exploration)". Garden activities "support the special character and values of individual ECES settings, such as environmental sustainability, links with home and community and healthy eating" (Dawson, Collins, Reeder, Gray, 2013, p. 217). They are also a powerful link to the learning possibilities of the outside environment and how, when carefully planned, these add an important aesthetic dimension to an ECE programme.



Figures 20 and 21 - The nooks and crannies, secret paths and old utensils for play make the outside environment at Sophia Preschool a magical space for children, teachers and parents.

CONCLUSION

As the ECE centres discussed in this article have illustrated, an awareness of what constitutes relevant aesthetic principles that reflect the social and cultural aspects of their individual educational contexts generate an overall sense of attractiveness and beauty within these early childhood centre environments. But significantly, the language of these environments speaks loudly of the key values held by the people who live there. They show that ideas about the environment that have been inspired by Reggio Emilia have not been simplistically imported (Johnson, 1999). Rather, they have been carefully considered and they are examples of how local culture can mediate (or even transform) ideas from other educational and cultural contexts. Rather than being examples of "a blueprint that is portable and a ready-to assemble kit" they amply demonstrate an awareness of their "connection between education and the culture, politics and history of place" (McArdel, 2013, p. 206).

All the centres described here had an emphasis on making their environments home like, welcoming and comfortable. De-institutionalising early childhood environments through well-considered design and aesthetic considerations is important because hundreds of thousands of New Zealand children (and many other children around the world) spend a considerable part of their early years attending one type of ECE service or other (Ministry of Education, 2018; Pairman, 2018; Terreni & Ryder, 2019). The development of warm, trusting relationships, a sense of community, and feelings of ownership and belonging are goals that the New Zealand ECE curriculum *Te Whāriki* encourages teachers to work towards (Ministry of Education, 2017). A well-planned environment can play a significant role in realising these goals, as well as give pleasure to those who work, play and visit there.

Considering this research, teachers may want to reconceptualise their planning to include the language of the environment to ensure it acts as an effective third teacher. If educators acknowledge that successful learning takes place in relation to people, places and things (Ministry of Education, 2017) and where interactions with all these things help children construct knowledge and understanding about the communities they live in, then each of these dimensions needs to be given equal weight and attention. It is hoped that the aesthetic considerations and examples discussed in this article can assist with the development of quality EC environments which support the “possibility of learning in which wonder, ethics, beauty, pleasure and rigour are [seen as] the basis of knowledge” (Vecchi, 2010, p. 25).

REFERENCES

- Bursill, L., Jacobs, M. Lee, C. & Morgan, P. (2013). *Authentic inclusions of aboriginal cultures*. Dharawal Publications.
- Cavallini, I. & Tadechi, M. (2008). *The languages of food - recipes, experiences, thoughts*. Children.
- Curtis, D. & Carter, M. (2003). *Designs for living and learning: Transforming early childhood environments*. Redleaf Press.
- Curtis, D. & Carter, M. (2014). *Designs for living and learning, second edition: Transforming early childhood environments*. Redleaf Press.
- Dawson, A., Richards, R., Collins, C., Reeder, A.I. & Gray, A. (2013). Edible gardens in early childhood education settings in Aotearoa, New Zealand. *Health Promotion Journal of Australia*, 24(3), 214-218.
- Dahlberg, G. and Moss, P. (2010). Series editors' introduction: Invitation to the dance. In V. Vecchi. *Art and creativity in Reggio Emilia*. Routledge.
- Dissanayake, E. (1992). *Homo aestheticus: Where art comes from and why*. The Free Press.
- Gandini, L. (1993). Fundamentals of the Reggio Emilia approach to early childhood education. *Young Children*, 49(1), 4-8.
- Gandini, L. (2002). The story and foundations of the Reggio Emilia approach. In V. Fu, A. Stremmel & L. Hiil (Eds.), *Teaching and learning: Collaborative explorations of the Reggio Emilia approach* (pp. 13 – 21). Merrill Prentice Hall.

- Gandini, L. & Edwards, C. (2001). *Bambini: The Italian approach to infant/toddler care*. Teachers College Colombia University.
- Giamminuti, S. (2009). *Pedagogical documentation in the Reggio Emilia education project: Values, qualities and community in early childhood settings*.
file:///C:/Users/lisat/Downloads/Giamminuti_Stefania_2009.pdf
- Giamminuti, S. (2013). *Dancing with Reggio Emilia: Metaphors for quality*. Pademelon Press.
- Giles, R.M. & Tunks, K. W. (2010). Children write their world: Environmental print as a teaching tool. *Dimensions of Early Childhood*, 38(3), 23-30.
- Gonzales-Mena, J. & Eyer, D.W. (1994). *Infants, toddlers and caregivers* (4th ed.). Mayfield.
- Hedges, H. & Jones, S. (2012). Children's working theories: The neglected sibling of Te Whāriki's learning outcomes. *Early Education Folio*, 16 (1), 34-39.
- Hennig, K. & Kirova, A. (2012). The role of cultural artefacts in play as tools to mediate learning in an intercultural preschool programme. *Contemporary Issues in Early Childhood*, 13(3), 226-241.
- Istituzione of the Municipality of Reggio Emilia (2010). *Indications of preschools and infant-toddler centres of the municipality of Reggio Emilia*. Author.
- Johnson, R. (1999). Colonialism and cargo cults in early childhood education: Does Reggio Emilia really exist? *Contemporary Issues in Early Childhood*, 1(1), 61-78.
- Kelly, J. (2013). Artfully caring for the environment. In B. Clark, A. Grey, & L. Terreni (Eds.), *Kia tipu te wairua toi - Fostering the creative spirit: Arts in early childhood education* (pp.66-77). Pearson.
- Kelly, J. & White, J. (2013). *The Ngahere Project: Teaching and learning possibilities in nature settings*. https://www.waikato.ac.nz/data/assets/pdf_file/0007/146176/Ngahere-project_3-2013-03-14.pdf
- McArdle, F. (2013). There's more to art than meets the eye. In F. McArdle & G. Boldt (Eds.), *Young Children, Pedagogy and the Arts: Ways of Seeing* (pp. 187-209). Routledge.
- Malaguzzi, L. (1993). No way. The hundred is there. In C. Edwards, L. Gandini, & G. Forman (Eds.), *The hundred languages of children: The Reggio Emilia approach to early childhood education* (p. vi). Ablex Publishing.
- Malaguzzi, L. (1998). History, ideas and basic philosophy: An interview with Lella Gandini. In C. Edwards, L. Gandini, G. Forman (Eds.), *The Hundred Languages of Children: The Reggio Emilia Approach--advanced Reflections* (second edition) (pp. 167-178). Ablex.
- Marković, S. (2012). Components of aesthetic experience: aesthetic fascination, aesthetic appraisal, and aesthetic emotion. *Iperception* 3(1), 1-17.
- Meade, A. (2014). *Nature explore: A case study*.
<https://static1.squarespace.com/static/56a6a6addc5cb4e8ec6d6d86/t/574e294f45bf21410cb1d718/1464740199511/nature-explore-a-case-study.pdf>
- Mills, J. (2007). Constructivism in early childhood education. *Perspectives in Learning*, 8 (2).
<http://csuepress.columbusstate.edu/pil/vol8/iss2/8>
- Mills, K., Sunderland, N. & Davis, J. (2013) Yarning circles in the literacy classroom. *Reading Teacher*, 67(4), 285-289. <http://eprints.qut.edu.au/61361/7/61361.pdf>
- Ministry of Education. (2017). *Te Whāriki: He whāriki mātauranga mō ngā mokopuna o Aotearoa: Early childhood curriculum*. Ministry of Education.

- Ministry of Education. (2018). *Participation*.
<https://www.educationcounts.govt.nz/statistics/early-childhood-education/participation>
- Pairman, A. (2018a). Little boxes, rambling houses, and children's agency. *Early Childhood Folio*, 22 (1), 27-32.
- Pairman, A. (2018b). *Living in this space: Case studies of children's lived experiences in four spatially diverse early childhood centres*. Victoria University of Wellington, Faculty of Education, Wellington.
https://researcharchive.vuw.ac.nz/xmlui/bitstream/handle/10063/7675/thesis_access.pdf?sequence=1
- Pairman, A. & Terreni, L. (2001). *If the environment is the third teacher what language does she speak*. <http://olivepress.co.nz/TheThirdTeacher.html>
- Project Zero and Reggio Children (2001). *Making learning visible: Children as individual and group learners*. Reggio Children.
- Reggio Children (1996). *The hundred languages of children; Narratives of the possible. New extended exhibit catalogue*. Author.
- Rinaldi, C. (2001). Reggio Emilia: The image of the child and the child's environment as a fundamental principle. In L. Gandini and C. Edwards (Eds.) *Bambini: The Italian approach to infant/toddler care* (pp. 49-55). Teachers College Colombia University.
- Shelley, J. (2017). *The Concept of the Aesthetic*. *The Stanford Encyclopedia of Philosophy*.
<https://plato.stanford.edu/archives/win2017/entries/aesthetic-concept>.
- Terreni, L. (2005). Adding a bit more colour: Possibilities for art and aesthetics education in New Zealand. *Early Education*, 38, 27-26.
- Terreni, L. (2016). Visual arts education for young children in Aotearoa New Zealand. *Journal of Childhood Studies*, 41 (4), 50-59.
- Terreni, L. (2019). *Exploring the influence of the Reggio Emilia educational project and its pedagogical practices in early childhood contexts in the Asia Pacific region*. Research proposal, Victoria University of Wellington.
- Terreni, L. & Ruder, D. (2019). The brave and the foolhardy: Excursions in early childhood contexts in Aotearoa New Zealand. *Early Childhood Folio*, 23(1), 16-21.
- Topal, C. & Gandini, L. (1999). *Beautiful stuff: Learning with found materials*. Davis Publications.
- Wilkins, A. (2014). *More recipes from the pirates' kitchen*. Sophia Preschool
- Vecchi, V. (2010). *Art and creativity in Reggio Emilia*. Routledge.

BIOGRAPHY

Lisa Terreni is a Senior lecturer at the Faculty of Education, Victoria University of Wellington. She is also an artist. E-mail: lisa.terreni@vuw.ac.nz