A sense of place: an investigation of sound with young children

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Abstract

Sound is integral to our experience of place, to our feeling of being here, being somewhere, although we may not know it. Young children responded enthusiastically within the project 'A sense of place: an investigation of sound', a project conceived to make the sounds of place explicit, to focus on experience of sound in the children's familiar kindergarten environments and in places nearby.

The Early Learning Centre in Abbotsford, Melbourne, is in an acoustically diverse environment - close to the Yarra River, near busy Studley Park Road and the bridge to Kew, and a short walk from the Collingwood Children's Farm, and the project aimed to explore this Centre's particular sonic situation. A group of five year old children, several staff and a 'sound practitioner' engaged in sound and soundscape inquiry in and around the Centre, they made listening and recording excursions to nearby sites, reflected on sound through words and images and created a soundmap as a final representation of their experience of sound and place. Simple methods, incorporating approaches of other educators/artists in the field of acoustic ecology, and a sequence of key questions were utilised to help focus children's listening during group activities. The intention was not to impose adult concepts of sound but to illuminate what the children might already know for children's informal understandings to emerge, then for adults and children together to work with sound in a co-constructive way.

1 An experiential project

Sound is implicit in young children's experience of place. Children playfully explore with and are tremendously affected by acoustic phenomena, though they may know more than they can tell.

A child walking under the large concrete archways of a busy traffic bridge may become more animated and feel compelled to shout, either anxiously or playfully in an exploration of reverberation/echo. A soft and contained indoor space may provide a retreat from the hurly-burly of a social context – a place for contemplation or reading, or a place for productive discussion and negotiation. A child may retreat socially and fail to thrive (and learn) in the vibrant acoustic of a noisy learning environment because of difficulty attending to a teacher's voice. A device with headphones may be needed to connect the child more directly with the one voice amongst many.

'A sense of place: an investigation of sound', was a project conceived to make the sounds of place explicit in young children's experience; to focus on listening in children's familiar kindergarten environments and in places nearby. My intention was to discover a little of how experience of sound/listening might contribute to a sense of place, to a feeling of 'being in' a place, to being in a particular place – the Early Learning Centre, of the University of Melbourne. I wondered would the children ever have explicitly listened, to the sound environment, to sounds of their own bodies? Would they have a sense of where their Centre was in relation to other places and what those other places might sound like?

2 The context

The Early Learning Centre in Abbotsford, Melbourne, is close to the Yarra River and bicycle path, near busy Studley Park Road crossing the river with a bridge to Kew, and a short walk from the Collingwood Children's Farm. The environment of the kindergarten generally is characterised by the

sounds of active children, the distinctive voice of bellbirds in gum trees in St Hellier's Street on one side and the hum of traffic from Studley Park Road on the other. At the beginning of the project sounds of playground reconstruction dominated outdoor and indoor spaces – earth movers, saws and workers' voices. As the weeks progressed the normal playground activities and ambience returned.

Over a period of 8 weeks early in 2002, the group of 20, five year old children from B room, several staff and I engaged in weekly listening activities and some sound making activities in and around the Centre, we made listening and audio recording excursions to chosen sites nearby, children reflected on their experience of listening with words and images, and created a soundmap as a final representation of their experience of the sounds of places.

3 Process of inquiry

We approached the weekly session as a process of inquiry, as "a sort of adventure and research" (p.108 Rinaldi, 1994). Though the project was adult instigated and aimed broadly to document local soundscapes, children were subjects in the process and the documentation, and their emergent ideas and responses central. Reflection on children's experience informed the planning of the process from week to week. This mini project and the environmental, communication and map themes being explored in other programmes with the children at the Centre had reciprocal influences.

Another aim of the project was to introduce the concept of documentation in sound to teachers in their daily/weekly practice. Sound as a documentation medium is beginning to be utilised in some centres in Australia whose practices have been influenced by those of Reggio Emilia. There is evidence that sound as an important environmental (and design) consideration and an experiential medium for children's experience is being incorporated in work more extensively in Italy (Ceppi, G. & Zini, M. 1999).

4 Experiences in sound

Our experiences in sound began with a focus on the ears and listening – ear cleaning (Schafer, 1977), no voices, no movement, just listening stimulated by the question "what do you hear?". Initially a composed soundwork on compact disc (Frayne, 1998) presented the children with familiar sounds, the sounds of the city, out of context, which engulfed us in the rather vibrant acoustic of their usual room. This intensity of acoustic experience, as an introduction to listening to their local sound environments and to

seeing and engaging with me each week, captured their attention.

We extended the size of our ears using hands and during all activities the microphone listened with us and to us. Listening to the sounds of our bodies while moving (Westerkamp, website reference) we gently made contact between finger and ear and followed the ear's contours creating an intense sound almost inside our heads. The early childhood professionals involved in the project seemed almost liberated by the notion that in a physical sense, sound is created by movement, that gesture and sound are inseparable (Wishart, 1996).

Extending outwards from ourselves we listened to the sounds of the room, then outside the room in the kindergarten (the Centre's) playground, then going further afield made soundwalks to nearby river and farm sites. As the weeks progressed we experienced cycles of listening, questioning, representing in words and pictures, recording, reflecting upon, discussing, listening again, and in the end constructing a soundmap, a formal representation with our audio, textual and visual documentation.

The following list outlines the weekly process and children's responses during the project will be discussed in the next section.

4.1 The weekly process:

1) Attentive listening within our immediate environment – the room, the playground:

Listening to the sounds inside the children's room

Listening outside kindergarten while the playground is under construction Making listening lists of the sounds heard

Making audio recordings of these sound environments

Audio recording children's group responses to "what do you hear?" Interviewing individual children while listening – recording responses Reflecting on the listening experience – drawing (black pencil on paper) representation

2) Extending out from ourselves – a soundwalk to another listening place:

Walking to the Yarra River Listening under a big palm tree, next to the walk/cycle path, and making listening lists Talking quietly in small groups about sound while listening at the river

Recording children's responses to the question – "what sounds do you hear?"

Beginning to categorise sounds heard – "what made those sounds?" (was it human, animal, plant or machine?)
Reflective drawing (black texta on paper) back at the Centre

3) Re-experiencing and representing the Yarra soundscape: listening again and drawing:

Listening to our recordings – kindergarten room, outdoors and river soundscapes

Focus on (categories of) significant sounds and features which emerged from week 2 drawings and listening lists: river, cars, birds, leaves, the path. Drawing in more detail (card and coloured ink)

Recording discussions while drawing Responding to the question – "how do those sounds happen?"

4) Investigating sounds of the Yarra soundscape:

Small groups of children setting up materials to experiment with the significant categories of sounds and features

Experimenting with the detail of how sounds are made: water over stones (river), wheels on a bridge (cars), leaves crunching – soggy and dry leaves, finding bird sounds to record – holding the microphone

Individual children reporting back to the whole group

5) Developing the concept of sound/no sound, voice/no voice, listening not talking, and revisiting the Yarra River:

Whole group vocal exploration, extending our ears when listening Revisiting the Yarra sound site – listening for the best place to record particular sounds, no voice Individual children holding microphone, recording again the sounds of the four emergent themes – water, birds, bridge, leaves

6) Exploring in greater depth children's images and sounds from previous weeks – developing the concept of soundmap:

Looking at enlarged drawings (on overhead projector) of the paths we had walked along

Collecting materials (fabric and blocks) and making a built representation of the map concept

Inquiring about the sense of place concept – identifying 3 familiar places by their sounds

7) Making a soundmap of the kindergarten and its environs, children choose recording places:

Drawing a map onto large canvas sheets which will become the soundmap

(children who had previously drawn the path)

Drawing /painting small stand-up figures on card (black and coloured ink) of soundscape elements for soundmap Recording sounds of kindergarten – individual children choose sound sites, now the new playground is constructed, it is less noisy

8) Soundwalk to Children's Farm, more detailed representation of soundmap elements:

Predicting what we will hear at the Children's Farm Soundwalk to the Children's Farm Listening to animals in several locations at the farm Drawing in small groups, discussing

Adding these new elements to the soundmap

9) Completing the soundmap, reflecting on the project:

Listening to, looking at the project booklet

5 Cycles of experiencing: children's responses

Listening was at the heart of our inquiry and within our evolving methodology there were cycles of reflection and representation, discussion and experimentation. The points above outline a fairly dense process, and the focus on significant sounds from the Yarra River (as evident in children's representations) points to our attempt, in a short space of time, to facilitate more in-depth study and meaningful experience. We hoped there would be reciprocal influences. Children's discussions about mapping and directions in other work at the kindergarten seemed to have an influence on the sound project which was encouraging and a communication theme about listening to others speak rather than speaking over them, we anticipated would be influenced by the sound project in return.

It is difficult to avoid a chronological view of week to week events, as children's responses were varied and fascinating. Within this discussion, and referring back to points in the weekly process, key issues emerge, some of which could stimulate further projects with young children.

5.1 Listening – kindergarten sounds

Rebecca the lead teacher was amazed at how quickly the children became used to the Monday morning 'sound project'. Although the overall process was not pre-planned we established group processes that would become familiar to the children - whole group and split group activities, warm ups, using a microphone and DAT to record all activities, listening, questions, spontaneous interviews with children, making lists and reflective drawing at the end of sessions.

Rebecca expressed surprise at how "unphased the children were about the technology being used – the microphone, the DAT and the new sound system installed in the gallery. The first time they had their voices recorded they talked into the recorder quite confidently and openly". The microphone helped focus and highlight the listening process, it symbolised the ear, a very big ear. The sound system allowed us to play back what we had recorded, to reexperience conversations, interviews and soundscapes and, to begin with, the kindergarten sound environment.

Inside B room in the first session children were attracted to the sounds of other children outside their room, and when asked the question "what do you hear?" responses were about children clapping, screaming, putting blocks down, and Cathy who was interviewed at length focused on people "playing quietly...leaves blowing gently...you had to listen carefully to hear quiet things...like those singing voices", and there was "I hear nothing" from Harry. Then ears quickly gravitated towards machinery and "tractors building a new sandpit" in the playground and while huddling outside, agitated, amongst the building works, children said "...I hear trucks making so much noise...trucks go brrr...I hear drilling". Whenever we listened again to these sounds, even if the volume was low, most children became agitated spontaneously and shouted that it was too noisy. Harry however said in a later session that "it's not noise to me"! When we produced a booklet with compact disc about the project containing children's own sounds, images, and words, Harry intently read it while listening through headphones.

"Draw a sound you remember from this morning" elicited a large majority of tractors and trucks, the most domineering sounds. In contrast there was "the wind...rumbles with owls caught in it, it means they're stuck...a tree blowing in the wind". In all the children's language about sound, firstly they identified and labelled the source of the sound, and often reproduced the sound with their voice to demonstrate, and at times made judgments about the quality of the sound they heard.

5.2 Listening at the Yarra River

During discussion about where else we could listen the children seemed to have an strong understanding of what places might be nearby and suggested the Yarra River and the Collingwood Children's Farm. The map and directions theme which had emerged in another programme with these children may have had an influence here. The first excursion was to the Yarra cycle/walking track, and to shelter under a big palm tree which was to feature later in drawings and on a soundmap. The microphone provided a focus as it was directed at our walking feet and towards any sound sources children noticed.

Listening lists made during the walk and drawings done later at the Centre highlighted four significant sounds in children's experience at the Yarra – birds "making a beeping sound", "leaves crunching" under foot, "cars passing over the bridge" nearby, and water in "the river going past". Children went into detail hypothesising about types of birds and modes of transport, describing the quality of the water sounds, and leaves falling from trees or being crunched. There was a discussion and disagreement between Jane and Andrew about the sound of a spider's web and four children drew the path which later gave the soundmap idea impetus.



Figure 1. One child's first depiction of the path, and the spider's web.

Several children put themselves into their reflective drawings at the end of the session.

5.3 Re-experiencing the Yarra River soundscape

Ear cleaning happened at the beginning of most sessions - making sounds with our bodies, with things we could touch, and with our breath - feeling the breath *moving* in our throat, through our mouths. In week 5 this expanded into a whole group vocal exploration contrasting sound and 'no sound', or at least voice and no voice in preparation for revisiting the Yarra sound site with a focus on listening, no talking as there had been the previous time. Vocal sounds we recorded which were the basis of a small composition that became part of the documentation contained in the project booklet. During reflective times at the listening station in their room children were particularly captivated by the sounds of their voices. Listening to recordings of children's voices and talking about voices generally Andrew had the idea that birds have a voice, and suggested that "they might have a horn in their throat that makes them go tweet tweet".

Children lay down on the carpet to listen to the sounds recorded from the Yarra soundwalk, covering their eyes spontaneously as if while hearing it is better to not see. They sat up anxiously whenever the sound was loud. Reflecting on pictures they had drawn and words they had spoken about their soundwalk experience, Jane suggested that "it could be a map!". The sounds of place and images of place became connected.

Small groups of children undertook more in-depth drawings focusing on the four significant sounds of the Yarra sound site, and began to think about "how do those sounds happen?"

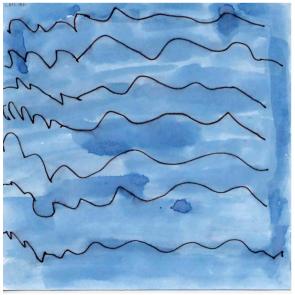


Figure 2. "Water rushing over stones".

They used descriptive words like "water swishing... spiky water... cars went bump bump... birds beeping... a bellbird... sun dried leaves, wind makes leaves squish".

5.4 Investigating four significant sounds

The question about "how" drove a sound investigation in week 4, with children dividing into small groups to focus again on representing the four significant elements, and then finding materials and building experiments which replicated the sounds of water in the river, leaves, traffic on the bridge and birds. Individual children reported back to the group about their findings – finding the language to discuss how sound happens. Lenny observed that there were the river that created stones in "sssss.....whoosh.....shhhh" sounds and there was vibrant action and discussion in his group investigating this concept with a tub of water and moving it sideways to make the sound. Children unanimously wanted to revisit the Yarra the following week.

5.5 Sound, no sound

Returning to a vocal warm up, listening and making a humming sound, West described the feeling in the throat as "it's vibrating". Children spontaneously followed hand signs indicating what to do with their voice, we investigated the voice and no voice concept, Harry once again saying "I hear nothing". A gesture creating a larger, extended ear signified listening, and a gesture cupping our mouths signified voice/sound. This was in preparation for revisiting the Yarra soundscape in small groups to identify the "best place for recording water running over stones...leaves crunching...cars on the bridge...bellbirds" the four significant sounds. Individual children held the microphone and Rebecca reported that children were more focused on their listening.

There were new descriptions for the water, "I can hear fast water... there's a stick in the water and it's making the water go pssst, pssst, pssst" The construct of the 'best place' for recording particular sounds was mine and after a vote the children decided that both places were equally good for listening to and recording water sounds!

5.6 Sounds and images, a soundmap

As children listened to CD recordings of sounds, an exercise in identifying the 3 different places we had recorded at so far, they automatically closed their

eyes and covered them with their hands again as if this would improve hearing. Jane called out "everyone knows it's the Yarra River" and many children were influenced by this, although it was the sounds from inside the Centre. Is that what they thought I expected or did the Yarra sound environment capture their attention more than the quieter sounds inside their own room?

The second CD recording was from their playground's construction and some children put their hands over their ears. Some children still persisted with the Yarra River idea. Cathy and Harry rationalised that "since truck sounds were in it, it must've been at kindergarten". These two children had seemed consistently receptive to sound throughout the project. Another child said it was from truckland, another child heard the "beep beep bird" and surmised it was at the river.

The sounds from children's Yarra River water recordings played on the third CD. "Is that rain?" many children inquired. Out of context it did sound very like rain. The adults were intrigued but it highlighted the idea that sound out of context can take on new meanings, and that sound and context are interdependent (Truax, 1984). Fay, one of the children, said "It was the Yarra because I heard the water going over stones", taking us back to the investigations in week 4.

We viewed children's path drawings on the overhead projector. It was the first time they had experienced this, and with the lights off! Three children recounted the story of their paths/maps; explaining the arrows showing directions for walking, the features of the places where we had focused our listening, the built environment predominantly – the bridge, the kindergarten, the church we walked past. There were some landmarks of the natural environment depicted – the palm tree and a hill. Several children subsequently built a representation of the path to the Yarra with fabric and blocks. Perhaps this was a development of the map theme which had been a feature in the children's room around that time.

5.7 Elements of the soundmap

Seven children who had drawn paths or who were interested in the map concept began the basis of the soundmap, drawing with ink onto canvas. The teacher guiding this inquiry reported that there was productive planning and discussion; they first plotted where the listening places would be, then drew the path to connect them. They added detail such as the short and long grass at the place a group went to in order to listen closely to the sounds of the river, listening for the 'best place'.



Figure 3. Part of the children's soundmap – paint on canvas

Other small groups alternated between drawing/painting and talking about stand up figures representing the sounds heard at the sound sites, and recording sounds in places of their choice around the Centre. Children who recorded had strong ideas about the sounds they wanted to capture and confidently held microphone at each place – "inside hearing the sounds of outside...the swing with someone swinging (in the new playground)...children's voices under the verandah".

Paintings in coloured ink illustrate one in-depth investigation of ears! With this Lenny hypothesised that different coloured ears can hear different things – green or brown can hear grass. Others painted figures are of the "beep beep birds and their sound... the birds mouth and the noise...me on the path...teachers talking...doggies going choo choo...the palm tree... a turtle". Mandy had an explanation for her drawing, about how we hear mother birds and baby birds. She demonstrated with a high tweeting sound and then low.

5.8 Sound/listening walk to Collingwood Children's Farm

Children anticipated the sounds they would hear at the farm and they offered animal type with it's related sound description such as "pigs oinking... goats going bleat". We focused on sounds of surfaces under our feet as we walked to the farm. Individual children held the microphone out to record animal sounds.



Figure 4. Listening to and recording chickens and geese.

Jane spoke to a goose saying "can you please make a sound for us?" A listening list was compiled as we walked and listened and included "the pigs talking to the pigs...springs on the gate...puff puff hay moving...water in a hose...a donkey eating" showing a greater variety of responses and perhaps development of more subtle listening skills. Some children anticipated hearing sounds that we subsequently did not hear at the farm, although they said they had heard them when we talked about it later in the session back at kindergarten. The process of remembering sound environments involves imagining, and creating ones own reality.



Figure 5. "Pigs made noise.. spudge, spudge". A stand-up card figure for the soundmap

Some of the documentation collected during the project contributed to the complete soundmap which we constructed and reflected upon in week 9 – the

large canvas, listening lists at each of the four identified listening places, stand-up figures (see Fig.5) and larger paintings representing the sounds, and soundscape recordings from each of the sites. Additional to this we amassed recordings of children's discussions and created a booklet with accompanying CD – containing moments of experiencing and small sound compositions.

Final comments

Throughout this project children and adults experienced the sounds of place, of four different places specifically, culminating in a sense of place expressed in the soundmap. The map making is a visual representation, or symbolisation (Forman, 1994) of their 'knowing about' the places and their sounds. It was as children reflected upon, and talked about sounds and listening, that we learnt a little about the nature of their experiencing. The sounds of place can be remembered and imagined or even fabricated! Sounds of communication between people can also be remembered or recorded in text. However it was specifically through audio recording that we were easily able to re-experience, to reflect upon and to analyse the detail of our experience - it facilitated a reflexive learning process. Documentation in sound in this context then becomes not just a final product but a vital aspect of the process – it makes experience and learning explicit.

It is the detail that is important about this project, and listening is all about detail – the detail in communication between people, and between people and environment. Listening is transactional. Teaching and learning, with a constructivist approach (Rinaldi), is transactional – adults and children both contribute ideas which guide and direct processes in a fluid but not un-planned way. Key aspects of this approach (emergent curriculum) are listening and picking up on the detail, for adults to co-construct in experiences with children. An implication of the project 'a sense of place' is that sound and listening provide valuable tools and materials, and essential experiential and documentation processes for educators in the field of early childhood.

Acknowledgments

Thanks to the staff and children at the Early Learning Centre for their participation and support, and to the University of Melbourne for funding the project.

Helen Dilkes (B.Mus. Performance, M.Ed.) is a musician, educator, and researcher. Helen's current interests are in educative/therapeutic work focusing on gesture and sound, improvisation and

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References

- Ceppi, G., and Zini, M., (Eds.), 1999. Children, Spaces and Relations: metaproject for an environment for young children. Modena, Italy: Grafiche, Rebecchi, Ceccarelli.
- Forman, G., 1994. "Multiple Symbolisation in the Long Jump Project". In Edwards, C., Gandini, L., and Forman, G. (Eds.), *The Hundred Languages of Children: The Reggio Emilia Approach to Early Childhood.* Norwood, New Jersey: Ablex Publishing Corporation.
- Rinaldi, C., 1994. "The emergent curriculum and social constructivism". In Edwards, C., Gandini, L., and Forman, G. (Eds.), *The Hundred Languages of Children: The Reggio Emilia Approach to Early*

- Childhood. Norwood, New Jersey: Ablex Publishing Corporation.
- Schafer, M., 1977. *The tuning of the world.* Toronto: McClelland and Stewart.
- Truax, B., 1984. *Acoustic communication*. Norwood, New Jersey: Ablex Publishing Corporation.
- Wishart, T., 1996. *On sonic art*. Amsterdam: Harvard Academic Publishers.

Web references

Queen Elizabeth Park Vancouver with Hildegard Westerkamp. http://132.205.57.9/facstaff/mo/mccartney/soundwalk/listening.html

Audio references

Frayne, N. (1998) Melbourne in 4 movements.