MERYC
Researching Different Approaches to Music Education Practice with Young Children
Conference 4-5 April 2005 at The university of Exeter, UK.

Musical Movement Responses in Early Childhood Music Education Practice in The Netherlands.

José Retra: University of Exeter 7 January 2005

Abstract
An investigation of movement responses in the Dutch Preschool Music Education environment, currently in progress, may reveal developmental aspects of movement responses to music of children aged 18 to 36 months. A preliminary framework for movement responses to music has been constructed, taking into consideration the usefulness of movement as a tool to understand, store and retrieve music from memory in an educational setting.

Introduction

In order to bring back singing into children's homes, Preschool Music Education - the Dutch name for early childhood music education - created special courses for children aged 4 months to 4 years. The Preschool Music Education (PME) courses have evolved from expert pedagogical practice over many years, but have not, so far, been subject to any kind of formal research. This paper describes research, presently in progress, investigating movement responses to music of children aged 18 to 36 months in the PME environment. Taylor (1989) remarked that "in music lessons with young children movement is often taken for granted ". Fortunately movement responses to music by preschool children are increasingly becoming the subject of research. However, in-depth understanding, of the movement responses of preschool children is still in need of specific knowledge.

Movement responses to music

Movement to music is used in PME to provide children with a useful tool to understand and sense the music through bodily movement. The songs presented in a lesson are virtually always accompanied by a motor action.

> "The movements make visual and real, in a time/space architecture, in patterns on the floor, and in interaction with others, what is otherwise difficult to capture and hold on to as the music flows past us" (Young,1992).

Movement responses to music can be regarded as a kinaesthetic representational way to internalise the music. According to Levinowitz:

> "We experience rhythm as the flow of our movement through space. From the developmental perspective, children must experience rhythm in their bodies before they can successfully audiate rhythm in their minds. Real musical

> instruments, like tools, can then become simply extensions or amplifications of the body's ability to be musically expressive" (Levinowitz,1998).

Movement activities become "aural counterparts"(Young,1996), in which all aspects of sound: tone quality, duration, intensity, sounds and silences and timbre, can be experienced through the tension of muscles and energy input of the gestures (Kemp,1990; Young,1996).
The experience of moving though space and time in itself can evoke implicit notions of close, far, up and down, high and low (Grunwald,1989), consequently as Bamberger suspects "organising incoming pitch-time phenomena" (Bamberger,1991), promoting the recall of musical aspects through movement (Kemp,1990). As a result, movement responses to music can be seen as an indicator of musical understanding in preschool children. According to Byrnes (1999), knowing a skill is the same as having created a representation of that skill:

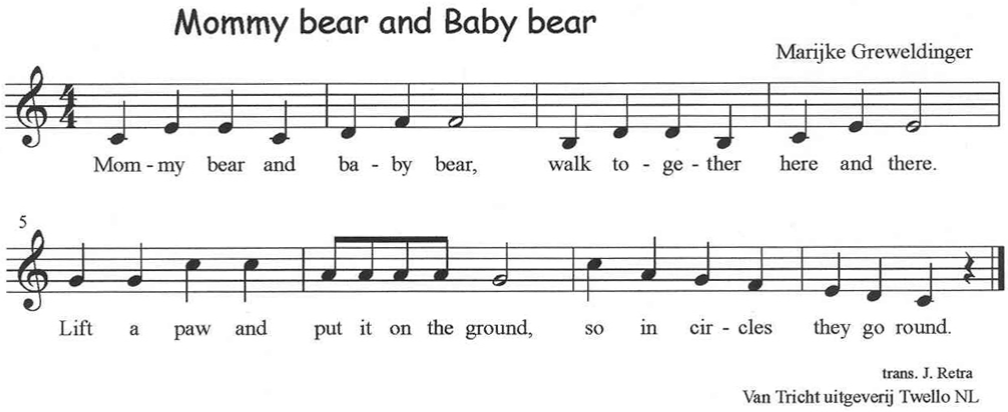
> "The primary evidence that the person has specific knowledge is that the individual can evoke the relevant representation when cued in some way" (Byrnes,1999).

Children can make movement responses to music because they posses a form of temporal representation. Representation of musical movement also implies the regulation of action in time, "synchronizing a motor action to an external rhythm" (Pouthas, 1996), which is a crucial aspect of musical timing.
Movement responses to music have been researched in the context of free musical play - unguided or un-stimulated movement reactions (Chen-Hafteck,2004; Gorali-Turel,1999; Young,1999). Results indicate that children make intuitively purposeful movement responses to music without encouragement.

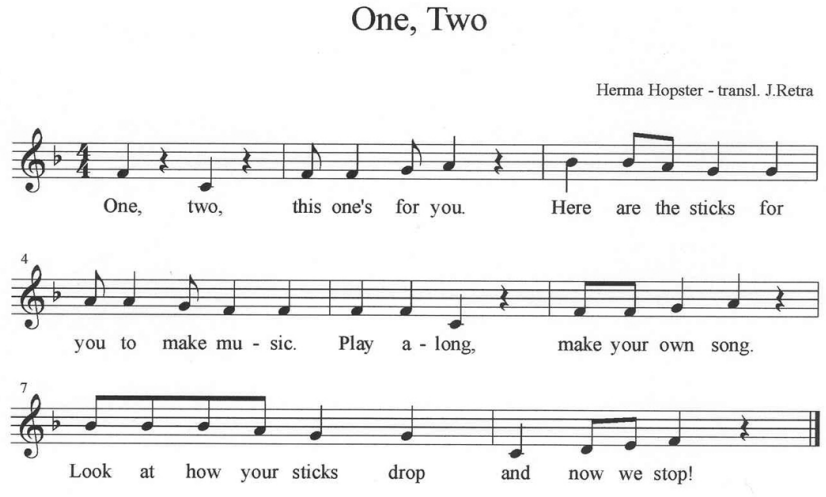
Preschool Music education

All PME activities are based on knowledge about the musical and general development of preschool children. Enjoyment in the offered activities is an important issue, because the children will therefore be motivated to join in. According to Dewey however "Enjoyment on its own is not enough to make an experience educational" (Garhart Mooney,2000). Although implicitly present, this is what distinguishes music courses from free musical play. An average PME course contains 10 lessons of 45 minutes every week with 8 to 10 participating children and their parents. During each lesson 10 to 12 activities will be offered. In each lesson only two new activities are presented because of the importance of repetition. Besides movements, often the songs involve the use of musical material or a toy. When looking at musical development we can see that PME has a range of musical developmental goals: sense of rhythm: timing, reaction moment; sense of dynamics: loud and soft; sense of form: music versus no music (silence), variations; sense of tempo: fast and slow; voice formation: articulation, resonance; listening skills: attention, directing attention to a sound source. These musical developmental goals are supported by the motor activities accompanying each song. The movements themselves also portray the lyrics of the songs.

An example is 'Mommy Bear and Baby Bear', a very steady paced activity.



The children can walk on the beat of the song to let them experience rhythm and after a few repetitions of the song, the tempo will be faster in order for the children to experience the difference between fast and slow. In the middle of the song the children can lift a leg - portraying the lyrics - which is a reaction moment: a musical timing moment. The children need to pay attention to lift a leg at the right moment. The important thing is that they have to anticipate this moment. Therefore songs are repeated at least 5 times to give the children time to learn the song, to step into the movement and to synchronise their movements to the beat of the song. This way the children can build their memory; at a certain point they know what will come. Songs for children aged 0 to 4 in PME are short - only one verse. The longer the song, the more difficult it becomes to store all in memory and to anticipate the right moment to clap, stamp, act. Hence imitation will take place. In this frame work it is important to distinguish timing - as in being on time - from imitation. In order to be on time you need to anticipate the moment. Imitation is responding to a stimulus but not anticipating that stimulus. Imitation therefore is always 'too late'. Stimulating movement responses is an important part of the musical developmental process: children are given the means and the time to synchronise their internal rhythm to an external input.



In an other example, 'One, Two', the children can experience, among others, through the use of musical material: wooden rhythm sticks, the sense of loud and soft and music versus no music. Here we will find the reaction moment at the end of the song: "and now we stop!". Guided experimentation time is often incorporated in this activity, making it possible for the children to express their own musical intentions. The PME teacher should observe closely and answer the children musically in the same manner as their performances. This way the children themselves can initiate the movements and will find a confirmed response in the teachers actions.

Naturalistic setting - the Preschool Music Education environment

Investigating the musical movement behaviour of young children asks for a 'real world' situation, in which they can act freely and spontaneously. A laboratory setting would take away the normal situation in which these children musically function. The use of qualitative research methods has the advantage that the natural occurrence of phenomena is not distorted (Cohen and all,2000). Although the music course - the educational setting - is to a certain extend a controlled situation, it can be compared to a real world situation in terms of being representative of the social lives of young children like swimming lessons. According to Gluschankof:

> "The study of children's *musicking* (*Small,1998*) from the perspective of their own level, should be done in its natural setting, and not by means of commissioned tasks in which children are asked to engage in those activities that the adults want to study rather than being allowed to act according to their natural inclination. Young argues that "the child's way of being musical is intimately connected to context and is not something which can be discretely isolated for study and captured in a series of sounds (1998/0,p.16)" (Gluschankof,2002).

Preschool Music Education's activities are a set of offered tasks , used in this study to investigate children's musical movement representations. However, Preschool Music education provides process driven, not product driven music education and is not engaged in adult criteria for preschool musical performance. The activities offered are tailored to the needs and capabilities of the children. The PME setting differs from free musical play in play groups and day care centres: there is a different goal for the children (and their parents) to be there.

The aim of the study is to investigate preschool children specifically in an educational setting. There they are presented with new musical information and can react to this information. This setting provides naturalistic research possibilities: meaning that in a child secure and child natural environment, their movement behaviour can be studied. In this case Preschool Music Education provides an ideal situation, because of its child-centred structure.

The study

In furthering musical development and understanding, PME has given movement a prominent place in its method. Children aged 18 to 36 months are already capable of performing a wide range of different movement responses to offered musical activities. Having established that movement responses to music can be seen as an indicator of musical understanding in preschool children and that it provides the children with a useful representational tool to understand and sense the music, the

question now is: how does the representation of movement to a musical stimulus develop? To answer this question qualitative and quantitative changes in movement responses are taken into consideration as well as the contextual effects on these changes. A movement reaction to a musical stimulus is a behaviour regulated by time and therefore a future event. Most likely a certain amount of exposure to the musical movement event is necessary to 'build', to develop the musical representation. PME also offers songs with more than one movement. These activities can be considered sequences of actions. The order in which the musical movements should be performed and the performance of a whole sequence might be subject to developmental aspects. Movements will not be performed the same by all the children and also not on the same moment, but should be seen as a musical response: direct or delayed. That is why processing time is important: the leg which is lifted after the 'right' musical moment should be seen as a delayed musical reaction. Musical movement processing time will most likely develop between the ages of 18 and 36 months.

Implications

For a large part, the nature of musical movement, can be derived from the writings of Kemp(1992) and Young (1996). Nevertheless a definition of musical movement responses should be approached with care. Young also writes the following:

> "So, for example, children reach high or low in order to assist their understanding of pitch variations, they take long and short step patterns to represent notational durations. Music is invisible and cross-modal imagery is often used metaphorically as an aid to grasping; in this respect movement has a function. But we need to be clear that the structuring of movement via conceptual ideas creates an arbitrary connection between movement and music, not based on existing intrinsic properties constant across both domains. In addition, the concepts are again usually music, theoretic, visual reductions of music to pitch and rhythm structures, not derived from the qualities of movement itself"(Young,1996).

For example, labelling in a direct way the lifting of the arms as the equivalent of going up in pitch is too bold, although PME teachers could benefit form these one to one connotations. Nevertheless, research into this matter should take a more distant viewpoint, in order to provide early childhood music educators with a solid underpinning of the musical how and why concerning the movements they offer in the activities.

According to Chen-Hafteck (2004):

> "The intuitive musical responses in children [...]need to be encouraged and developed. If not, they will be lost forever and it will be very difficult to regain them".

Research into developmental aspects of movement responses to music in an educational setting, can highlight factors which are necessary to develop already existing natural musical responses in preschool children.

References

Albers, M. & Rikhof, R. (1998). *Muziek tussen Schoot en School*. Haarlem: Uitgeverij De Toorts

Bamberger, J. (1991). *The Mind behind the Musical Ear.* Cambridge Massachusetts: Harvard University Press

Byrnes, J. P. (1999). 'The nature and Development of Representation: Forging a Synthesis of Competing Approaches', in Sigel, I. E., ed. *Development of mental representation. Theories and Applications*, London: Lawrence Erlbaum Associates, Publishers.

Chen-Hafteck, L. (2004) 'Music and Movement from Zero to three: a window to children's musicality', paper presented at the ECME conference The Musical Worlds of Children, Escola Superior de Musica de Catalunva, Barcelona, Spain, July 5 - 10, 2004

Cohen, L. & Manion, L. & Morrison, K. (2000). *Research Methods in Education*. 5th Edition. London: Routledge Falmer.

Garhart Mooney, C. (2000). *Theories of Childhood.* An introduction to Dewey, Montessori, Erikson, Piaget & Vygotsky.St. Paul Minnesota: Redleaf Press.

Gluschankof, C. (2002). 'The Local Style of Kindergarten Children: a description and analysis of its natural variables'. *Music Education Research*, Vol. 4, No.1

Gorali-Turel, T. (1999). 'Spontaneous Movement Responses of Young Children to Musical Stimulation as indicator of the hidden Cognitive Process', unpublished paper presented at the conference Cognitive processes of Children engaged in Musical Activity, School of Music, University of Illinois at Champaign-Urbana, IL, June 3-5, 1999

Grunwald, D. (1989). *De Muziek van de Speler*. Amsterdam: Uitgeverij De Toorts Kemp, A. (1990). 'Kinaesthesia in Music and its Implications for Development in Microtechnology'. *British Journal of Music education*, 7, 3, 223-229.

Levinowitz, L. M. (1998). 'The Importance of Music in Early Childhood'. Internet WWW page atURL: http://www.musictogether.com/HTML%20Pages/About%20Us/importance.html (accessed 28/03/02)

Pouthas, V. (1996). 'The development of the perception of time and temporal regulation of action in infants and children', in Deliège, I. and Sloboda, J., eds. *Musical Beginnings,* Oxford: Oxford University Press

Taylor, D. (1989). 'Physical Movement and Memory for Music'. *British journal of Music education*. 6, 3, 251-260.

Young, S. (1992) 'Physical Movement: Its place in Music education'. *British Journal of Music Education* 9, 187-194

Young, S. (1996). 'Contributions to an Understanding of the Music and Movement Connection'. *Early Child Development and care*, Vol. 155, pp. 1-6.

Young, S. (1999). 'Just making a noise? Reconceptualising the Music-making of Three- and Four-year- olds in a Nursery Context'. *Early Childhood Connections: Journal of Music and Movement-based Learning*, 5, (1), 14-22.