

The role of play in music education for young children

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List of contents

Abstract.....	1
Introduction.....	1
§1. The young child, its general development and the role of play within.....	3
1.1. Physical development and forms of play.....	3
1.2. Cognitive development and forms of play.....	4
1.3. Social development and forms of play.....	5
1.4. The role of the teacher in play.....	7
1.5. Conclusion.....	8
§2. The young child's musical development.....	9
2.1. Moog.....	10
2.1. Swanwick & Tillman.....	12
2.3. Hargreaves & Galton.....	14
2.4. Conclusion.....	16
§3. The young child and its musical play	
3.1. Informal musical play.....	19
3.2. Free musical play.....	19
3.3. Description of some small scale observations on musical play	22
§4. Conclusion.....	24
Recommendations.....	26
References.....	26

'You can discover more about a person in an hour of play than in a year of conversation'

(Plato, 428- 348BC)

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Abstract:

This paper reports on a literature study and a small scale observation performed on musical play by children from 4 up to 6 years of age. It will look into the young childrens' general-, as well as their musical development, in order to explain certain types of (musical-) play. It will then move on to forms of musical play and the role of the teacher within. Finally, in order to interpret findings from literature, it reflects on video footage¹ of children playing musically, thus tying literature and practice together.

Keywords

Free musical play, teacher scaffolding, music education, musical development

Introduction

I love young children, and I my heart lies by teaching them. I have been teaching young children for over two decades and they still fascinate me in the way they experience the world, the questions they ask and the way they learn. Young children learn largely by play – the expression 'homo ludens' cannot be more applicable than it is to young children. Play however, is not only an enjoyable experience for young children, but also a crucial way to learn about language, to strengthen physical skills, develop intellectual skills and build social relationships (Brouwers, 2009). Because play enhances most aspects of child development, it is viewed as an essential ingredient in early childhood programmes. At the teacher training college where I teach, play is

¹ This video footage is not available on the Internet, due to confidentiality. For further information, please contact: christiane.nieuwmeijer@planet.nl

aligned a major role in the curriculum directed at the young child. I wish however, the same would apply for music education and play.

In general, in Dutch Primary Schools, music education is offered by general teachers, as the majority of schools do not employ specialized music teachers. These general teachers are expected to have acquired all skills necessary for this task, within their own vocational training. As a music teacher at a Teacher Training college, I have a reasonable clear image of how such music pedagogy is taught to upcoming teachers, and am abreast of curricula utilized to prepare them for this future task. From this experience, I think it can be stated that, due to a lack of time within the curriculum on the one hand, and students' own (relatively low-) level of musical development and self-esteem ('I'm not musical!') on the other, all these curricula are able to offer are the training of some musical skills such as singing, and some pedagogy on teaching children to sing, dance, or play on easy accessible musical instruments. In addition, groups are relatively large (around 30 students) and available time is limited. Consequently, the focus of these curricula lies on (mainly) teacher-led, whole group based musical activities – identical to the way students are taught themselves. Curricula offer no opportunity for other forms of music pedagogy, nor different views on music education. Research in this area seems to confirm that teachers offer mainly teacher-led musical activities (Andress, 1998; Morin, 2001), and that indeed music is often not integrated into a general education classroom (Bresler, 1993; Stake, Bresler, & Mabry, 1991). It also appears that abovementioned barriers such as teachers' lack of knowledge, lack of resources as well as overall pressure for teachers have been noted as deterrents to music integration (Bresler, 1993).

To my opinion, this practice does not do justice to children's musical development, as (especially-) young children learn largely by means of play. Teacher-led, group based activities are in itself efficient and suitable, but do not, however, meet every need of this age group. Recent research on children's musical play behaviour provides for a new understanding of the intuitive ways in which children make music, and how they learn from their musical play. This understanding could well form a basis for the design of

educational activities that indeed meet children's self-motivated learning styles, such as play. It is my belief that such forms of pedagogy deserve an equal place in a vocational training directed at young children.

Therefore, this paper aims to look into the issue of children's musical play in greater detail. It will concentrate on children between 4 and 7 years of age. In order for it to be of use in my practice as a vocational trainer, the role of the teacher within children's (musical-) play will be of specific interest.

Finally, this study may also serve as a 'prestudy' for my masters dissertation, which will be on the possible effects of a live musician on children's musical play.

The outline of this paper will be as follows. First, literature related to the child's general development, as well as on their development in play in general will be presented and discussed. Second, the focus will be on the child's musical development, and on how to define such a development. Subsequently, a closer look will be taken at literature on children's *musical* play. In order to comprehend and recognize this literature, this part will be accompanied with some findings as well as some footage from a small piece of (non-participant-)observation on musical play in a naturalistic setting. Finally, literature on the role of the teacher within musical play will be listed and discussed.

§ 1 The young child, its general development and the role of play within

- 1.1. Physical development and forms of play
- 1.2. Cognitive development and forms of play
- 1.3. Social development and forms of play
- 1.4. The role of the teacher in play
- 1.5. Conclusion

From birth until the age of six, a child experiences an enormous growth. Over only a period of five, six years, it grows from a helpless, dependent creature into a walking, thinking, increasingly independent child. This growth stretches out over different development areas, i.e. its physical development (such as motor control and the physical ability of speech), its cognitive

development (through which it learns to think and speak), as well as its emotional and social development (to develop a sense of self and begins to detach itself from its caretakers).

This development also has a direct effect on how children play. With every developmental stage and accordingly increased skills, the child enters another phase of play. If something is to be said on (the development of-) musical play, it is of value to have an overview of the child's general abilities concurrent to their age, as well as on how this development affects children's way of playing. Therefore this section will give some brief insights into this development. It will focus on the child's physical, social and cognitive development from birth up to 6, 7 years of age and of congruous forms of play.

1.1. Physical development and forms of play

A child's body, in the age between four and five, increases in length as well as in weight: as it used to have a round torso as a toddler, now it changes from round to muscular, and becomes (because of this muscular growth) heavier. Due to growth of the brain, resulting in the formation of new neurological connections, lateralisation and fine motor skills develop rapidly. Children become left- or right handed (Feldman, 1997). The child gains increased balance and is able to hop (Kohnstamm, 1993). In this stage, the child takes pleasure in practicing its motor skills by engaging in forms of physical play, such as running, jumping or pivoting (and with it, practicing its gross motor skills), or building blocks and playing with water and sand (practicing its fine motor skills).

1.2. Cognitive development and forms of play

Cognitive skills in this age span develop from initial sensorial perceptions as a baby, to the ability of speech, and (by that) the ability of thinking around the age of two. This development brings along an improvement of the

memory and an increase of the span of attention. The ability of thought enables symbolic representation, i.e. the cognitive skill by which some entity comes to represent something else (Feldman, 1997) (e.g. a stick becomes a broom).

Developmental psychologist Piaget devised a theory for a cognitive development. In his 'Developmental Stage Theory', Piaget distinguishes 4 stages in the cognitive development of the child, starting at birth with the sensorimotor stage (0-2 years old) (Piaget, 1969). In this stage the child experiences the world entirely through its senses and movement. Furthermore, children are extremely self-centered as they cannot perceive the world from other viewpoints than their own. In the preoperational stage (2- 7 years old) so-called 'magical thinking' dominates, which means that children believe their personal thoughts to have a direct effect on the rest of the world. Partly because of this magical thinking, children do not yet possess the ability to think logically, and cannot conserve. In this stage, children start egocentric, but this weakens when they grow older.

Despite the fact that it's beyond the scope of this paper, whilst being complete: between seven and eleven years of age, children reach the concrete operational stage, in which they commence to think logically, albeit still very concrete; e.g. they need visual aids to support their thinking. Finally, from twelve years and up, children reach the formal operational stage, in which they develop abstract thinking and are able to conserve and understand the concept of reversibility. (Piaget, 1969, in: Brouwers, 2009)

Concerning play, to Piaget the child's development in play is interdependent of its cognitive development. Subsequently, in continuation of this Developmental Stage Theory of cognitive development, Piaget developed a *taxonomy of play*, corresponding with the above-mentioned developmental stages. In this taxonomy of play, Piaget sketches the broad outlines of the evolution of children's play in the first seven years of their lives, by identifying three successive systems: practice play, symbolic play and 'games with rules' (Piaget, 1951, as cited in: Scales, Almy, Nicolopolou, Ervin-Tripp, 1991:130).

Within the sensorimotor stage, practice play is dominant, as it includes

sensory play (purposive combinations of actions) and manipulations (play involving moving objects to produce reactions). Eventually, this practice play transforms into constructions (Scales *et al.*, 1991:130). In the preoperational stage, with the onset of representation and language, symbolic play appears (symbolic representation). Here, the child engages in 'pretend play' in which it uses language for simple dialogues and substitute objects for play (e.g. a block stands for a car). This symbolic play eventually develops in sequential combinations of actions, such as the child constructing a whole scene in make-believe (Scales *et al.*, 1991:131). In this phase no rules are developed, the child can perceive and imagine. Finally, within the concrete operational stage, between the age of 4 and 7, the child reaches the third type of play, that of 'games with rules'. In this type of play, Piaget claims, play becomes collective and acquires rules. These rules are either handed down from above, or concern selfconstructed rules for play. The child engages in more problem-solving play. In this phase, play involves classification and rules. (Scales *et al.* 1991; Brouwers, 2009)

Foregoing makes it clear that Piaget considers of children's play as a means for a primarily cognitive development. This unlike others, who regard of play as a social phenomenon, as will be discussed in the next section.

1.3 Social development and forms of play

As a baby, the child has not yet any sense of self and regards himself as an extension of its mother. From around the age of twelve months, a self-image starts to develop, marking an emotional detachment from its mother (Brouwers, 2009). Simultaneously, gender- and racial identity come into being. Concerning the child's social emotional development, between the age of 0-6, the child's empathy is not yet fully developed. As the child is not yet able to put itself in another's place, it is self-centered. As empathetic abilities increase however, the child commences to see others as individuals with their own thoughts and feelings (Feldman, 1997). Flavell (2004) identifies this as 'theory of mind': the ability to attribute mental states- beliefs, intents, desires, knowledge- to oneself and others, and to

understand that others have beliefs, desires and intentions that are different from one's own (Flavell, 2004, as cited in Brouwers, 2009).

Abovementioned development of social emotional skills can also be recognized in the way children play, and in how their play evolves. Whereas in an early stage children play with any child available, around the age of four, friends are made on bases of trust and mutual interest. A classic study on the development of so-called social play was conducted by Parten (Parten, 1932, as cited in: Brouwers, 2009, Feldman, 1997). In her study, play of children between 2 en 6 years old was closely observed and categorised into six types, varying from playing alone (solitary play) to playing together (cooperative play). Initially, from around the age of two to three years old, the child is engaged in solitary play. In this type of play the child is completely engrossed in its play and takes no notice of others. Simultaneously, the child may be involved in so-called 'onlooker play' in which it takes an interest in other children's play, but does not enter: their main activity is to watch. A more interactive type of play concerns parallel play. Here, the child mimics other children's play, or uses the same material, but does not actively engage. Consequently, in its social development, the moment the child becomes less egocentric and is able to empathize with others, associative play comes into being. Here, for the first time, the child becomes more interested in the (playing-) person itself than in its toys. This category involves a first form of social interaction. Concurrent with their social emotional development (theory of mind), once the child involves and interacts actively with others, it engages in cooperative play. Here, playing is intentional, directed at others and the child adopts roles and acts in a group. (Feldman, 1997, Xu, 2010)

A prominent feature of Parten's study is that, even though children keep interchanging between different types of play as they grow older, Parten discovered that in aging, children generally tend to participate less in the first four types and more in the last two - those that involve greater social interaction. Therefore, Parten emphasises the idea that 'learning to play is learning how to relate to others', and thus regarding of play as a social phenomenon.

Another major influence on views on children's play can be attributed to Vygotsky, who also considered of play as a social phenomenon. In contrast to Parten, Vygotsky does not offer a systematic developmental theory on play, but merely a set of orientating concepts concerning children's play. These concerns childrens' free play of fantasy and pretense, and the more structured and rule-governed playing of games that becomes frequent in later childhood (Holzman, 2010). This type of play does not include activities such as movement activities, object manipulation or other forms of play behaviour as referred to by for instance Piaget or Parten, for 'real' play, according to Vygotsky, generally concerns pretend-play. Pretend-play is characterized by three major features: children create an imaginary situation, they take on and act out roles, and follow a set of rules determined by that specific role (Bodrova & Leong, 2003-b: 156)

Vygotsky considers of play to be one of the child's most significant sources of learning, as it includes language as a vital social tool – children learn within social interaction. (Vygotsky, 1933/1976). Play is thus regarded of as a social symbolic activity: it typically involves more than one child, and the themes, stories or roles that play episodes enact, express the children's understanding and appropriation of the socio-cultural materials of their society (Scales *et al*, 1991:134). In other words: by playing (together), children imitate the world as they know and perceive it, in order to make meaning of it and form their own opinions and understandings of that world. Moreover, since their play is self-initiated and pleasurable, children are highly motivated, which is an important condition for learning.

Another central notion in Vygotsky's larger psychological theory is that of the 'zone of proximal development', a term representing the difference between a child's actual developmental level and its level of potential development. To Vygotsky, play forms the actual source of development and creates the zone of proximal development. (Vygotsky, 1931, in: Brouwers, 2009).

1.4. Role of the teacher in play

Forementioned zone of proximal development means a major role is alligned to the teacher, as he is able to scaffold children's learning. Vygotsky, in his Social Development Theory, uses this term 'scaffolding' to describe the various forms of support that teachers can offer learners. From Vygotsky's point of view, the child's sociocultural environment is considered to be of major importance for its development, as children need this environment (i.e. other children, adults/teachers, the social context) to expand their action repertoire and thereby reach the zone of proximal development. The child's ability of self guidance is leading in its play, but as the teacher is to be considered to be part of this sociocultural environment, it is of major importance for him to stimulate this development. Such stimulation might include verbal assistance, questioning, suggestions and directions, all geared appropriately to the childs' level of potential development, thereby advancing his or her actual development (Scales *et al*, 1991:135).

Bodrova & Leong (2003-a) also give some pointers for the teacher's role in children's play. First, the teacher may provide for a balance between child-initiated and teacher-supported play. Teacher-supported play means hat children are left to play, but in case of stagnation of children's play, the teacher joins in, thus providing for new impulses. Secondly, the teacher creates imaginary situations, in which she uses 'multiple useful 'objects (cf. symbolic play), that can lead to imaginative play. Moreover, in order for children to expand their possibilities of play (and with it, their learning possibilities) the teacher offers themes that stimulate play. These themes relate to children's 'real world', and the roles, language and actions that go with it. By 're-playing' this world, children process these roles, language and actions. Bodrova finally suggests having the children, -prior to their play- , plan their play by the means of so called 'play scripts', or drawings (Bodrova & Leong, 2003-a). For a teacher, to offer these forementioned 'new impulses' and thereby bringing the child in its proximal zone of development this means that it is essential to have (some) knowledge of the child's development (i.e. their development in general, the development of their play and, as will be discussed further, their musical development).

1.5. Conclusion

Theories on play, such as by Parten or Vygotsky, proved to be of great value in forming an understanding of play as a phenomenon. As shown from literature, young children experience the world as a whole, and learn about this world by means of play- manifesting itself as (e.g.) role play, manipulative play, or parallel play.

To regard of play from different points of view (physical, cognitive, social), exposes the enormous richness of play, and thus provides for an indispensable foundation required for the support of the concept of musical play. From this literature study, one thing has become clear already. Namely, if we assume children to learn about their world through play, it is likely to expect that, when children learn about *music* in that world, they will proceed in the same way, namely by means of play. This could mean children might just as well demonstrate *musical* roleplay, *musical* manipulative play, or *musical* parallel play.

The next section will look into children's musical development and the role of play within, and aims to be of use in order to discover whether the supposed connection between theories on play and musical play is justified.

§ 2 The young child's musical development

- 2.1. Moog
- 2.2. Swanwick & Tillman
- 2.3 Hargreaves and Galton
- 2.4. Conclusion

Now that some of the main views on the relation between a general development of the child and its development in play are clarified, in order to understand the full impact of *musical* play later on, this section will look into the musical development of the child. It aims to answer questions such as: 'What is known and described about childrens' musical abilities at different age levels?' and later in this paper, 'What can be expected of children musically concerning their musical play?'

In this section, relevant literature on musical development will be discussed. As the ultimate goal of this paper is to clarify musical play development of young children, it focusses primarily on the musical development of children in the age of 4-7. Some of the discussed literature concerns studies executed on parts of musical development, as others supply for a theory for chronological stages of musical development.

As literature in §1 has shown, the determination of the child's general development by means of phases within a stage theory is common practice. The vast majority of research on musical development however, is generally not dominated by stage theories. Many studies executed in the last decades came down to attempts to give an global outline of parts of musical development, answering questions such as: 'at what age do different types of musical behavior become apparent?', or: 'when does a child start to react to sound, when does it begin to sing, at what age might it show or reproduce rhythms?'. Several studies have been conducted on the development of such musical abilities, each from a specific view on what defines (and indicates) musicality, as well on how it should be investigated. In doing so, some researchers explored the relationship between children's visual representations of music and their emerging musicality (Bamberger, 1982), as others looked into the development of singing and other spontaneous musical utterances of young children, and used findings to suggest a general theory of musical development (Davidson, McKernon & Gardner, 1981 as cited in Hargreaves, 1986:52).

2.1. Moog

One example of such research, directed at the young child, was executed by Moog. In the seventies of the 20st century, Moog carried out a large-scale investigation on 'the musical experience of the preschool child', in attempt to describe the musical development of this age group. With this research, he was one of the first to do a cross-sectional research with a large sample group, consisting of 500 children at each of ten different age levels between six months and five and a half years. For additional information on the

participants' musical environment, supplementary data were obtained from around 1000 parents. The basis of his research consisted of participants' vocal and behavioural responses to sound – sound varying from domestic sounds to singing, rhythms and music (Moog, 1968:8-10). Moog identified these responses by (unstructured) observations, which eventually form the foundation for his theory of musical development (Moog, 1968). In the introduction of his publication on this research, Moog argues that:

'Musicality (...) is not a special ability, but is the application of general abilities to music. The same abilities which enable a person to distinguish differences between noises (...), enable him also to distinguish differences in music. The ability to experience music is just as finely woven into the total fabric of potential human abilities as the potential for understanding speech, for reading, for motor skills, and so on. Therefore, the effects of musicality can only be considered as part of the total structure of human abilities' (Moog, 1968:28).

Outcomes of his study were (amongst others) that even from birth, babies respond actively to music by rhythmic movement and attention. In this first year Moog found vocalisation to music – vocal babbling, but not yet diatonic and rhythmically amorphous (Hargreaves, 1986:64). In the second year, Moog discovered a marked increase in the amount and variety of physical reactions to test pieces, but a decline of such physical responses to music during the later preschool period. Music and singing on the other hand, become incorporated into childrens' imaginative play. When reaching the age of 3,4 and 5 years children were increasingly likely to sit and listen to music. In general, at this age, children appear to internalise their responses to music and employ it in the broader context of activities such as imaginative play. (Hargreaves, 1986:65)

From his research, Moog believes that musicality itself is above all a collection of general musical abilities, and that, although all children are musical, progression of musical development is primarily dependent upon the (musical) environment provided from infancy on. To his opinion, the influence of this musical environment is not as important at some times in childhood as it is at other times. Moog claims that up until the age of about

three no significant differences could be observed in responses to music, determined by the environment, as between the ages of three and four, differences in home environment do begin to show their effect (Moog, 1968:28).

Studies described as above tend to focus on one single musical phenomenon, as in Moog's case, responses to sound. Such an approach however, might be subject for discussion, for to what extent can research, -executed on a single aspect of musicality-, lay the foundation for a general theory of musical development? Possibly one-dimensional studies such as Moog's, should best be regarded of as 'augmentation': multiple studies on a variety of musical behaviours together may form a foundation for a general (stage-)theory on musical development.

Swanwick (2001) states that the validity of any such theory is to be measured by the range of musical phenomena it attempts to explain: i.e. phenomena related to representation of music (perception), to vocal/instrumental reproduction of existing music (performance) or to the ability of composing ones own music (production) (Swanwick, 2001). Or, in other words: an overall theory of musical development should apply to the production, the performance as well as to the perception of music. Summarizing, Swanwick argues that a general theory of musical development should:

- have musical validity;
- have relevance across different musical activities
- take account of both maturation and cultural setting;
- identify qualitative, sequential and hierarchical changes
- have widespread cultural application;
- be supported by reliable data (Swanwick, 2001:229)

Over the years, several people indeed have tried to develop such a theory for chronological stages of musical development, comparable to psychological theories as described by Piaget or Vygotsky. Here, two main theories will be discussed, and compared to abovementioned criteria by Swanwick.

2.2. Swanwick & Tillman

A first example of a chronological stage theory is that proposed by Swanwick himself, based on research executed with Tillman (1986): 'The spiral of musical development' (Swanwick, 1986: 331). This developmental model emerged from a study evaluating children's musical compositions (see fig. 1). 48 children, ranging in age from 3 to 11 years old, were given the opportunity to make music with a variety of available instruments, including their voice. When finished, the children were asked to play their compositions twice, which gave the researchers an indication of children's musical memory as well as to what extent children were able to reproduce the same musical elements for a second time. In this study, 'observable differences between the musical compositions of these children, linked with age' were found (Swanwick, 1988), leading them to formalize their model of musical development. Swanwick and Tillman's spiral of musical development (fig.1) consists of eight developmental modes spread throughout

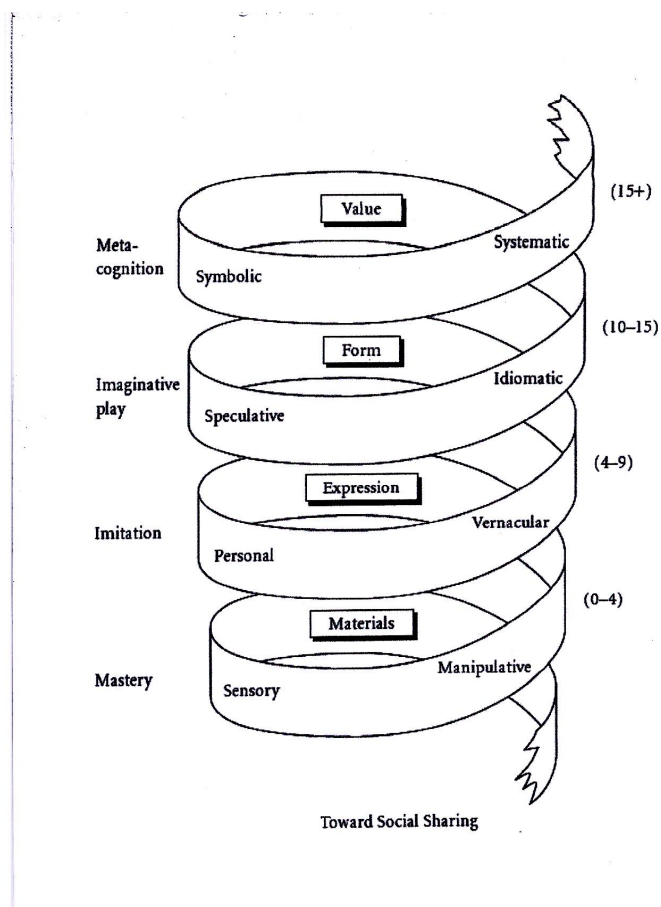


fig. 1: Spiral of musical development (Swanwick & Tillmann, 1986)

four levels of development. At the basic “mastery” level (0-4 years), children first experience the “sensory” mode. This is characterized by sound exploration, attraction to timbre and dynamic levels, as well as unpredictable music making. As time goes on, children enter the “manipulative” mode where they begin to demonstrate understanding of instrument techniques, a regular pulse, repetition, and increasing control of materials. The second developmental level is “imitation” (4-9 years), which begins with the “personal” mode. Here, personal expressiveness is central, with hints of basic phrases and generally spontaneous musical ideas. The transition to the “vernacular” mode is characterized by melodic and rhythmic patterns emerging in the form of shorter pieces, often exhibiting 2, 4, or 8-bar phrases. When growing up, children reach the “imaginative play” level (10-15 years), first entering the “speculative” mode, in which they explore contrasting ideas and musical surprises, passing on to the “idiomatic” mode, where children continue to develop their musical compositions (‘surprises’) into more identifiable musical styles. In this level, authenticity becomes very important as children aim to imitate “grown up” music making. “Meta-cognition” (15+ years) is the final level, initiating the “symbolic” mode. This final level however, is not based on Swanwick & Tillman’s research but is supported by literature (Bruner, 1966, amongst others). Furthermore, it no longer relates to composing, but more to the general way people above the age of 15 think about music and how it relates to their lives (Koopman, C. Unpublished article ‘De Muzikale ontwikkeling van het kind’).

2.3. Hargreaves & Galton

Hargreaves and Galton also suggest a stage model for musical development, established by psychological research findings. Their model describes the development of musical competences, focusing on singing, graphic representation, melodic perception and composition of music. An important notion of this model is that it adopts a social-cultural perspective on musical development, as Hargreaves and Galton state that each different cultural group relates to their own music. In other words: there is no such thing as a universal theory of musical development, for any musical development is

determined by culture. Therefore, when describing musical competence in terms of individual psychological developments, social and cultural contexts have to be identified first. Consequently, their stage model should be regarded of in a general sense.

The stage model recognizes five developmental phases, i.e. sensorimotor, figural, schematic, rule systems and professional (Hargreaves, 2003, 154-155) (see figure 2)

Phase	Age	Singing	Graphic representation	Melodic perception	Composition
Professional	15 +				Enactive and reflective strategies
Rule systems	8-15	Intervals, scales	Formal-metric	Analytic recognition of Intervals, stability key	'idiomatic' conventions
Schematic	5-8	First draft songs	Figural-metric: mutiple dimensions	Conservation of melodic properties	'Vernacular' conventions
Figural	2-5	'outline songs'	Figural:single dimension	Global features: pitch, contour	Assimilation of cultural music
Sensimotor	0-2	Babbling,rhythmic dancing	Scribbling,'action equivalents'	Recognition of melodic contours	Sensory, manipulative

Figure 2. Five stages of musical development. Hargreaves and Galton 1992 (NB: displayed in reverse order)

The *sensorimotor phase* takes place in the first two years of life when development concentrates on the acquirement of physical skills and coordination. As the child is incapable to understand abstract symbolism, this stage is largely presymbolic- a terminology adopted from Piaget, for being applicable and well known. In this phase, the child sings and performs, expressed as babbling and rhythmical dancing; a basis for future singing. It

recognizes melodic contours. Its forms of composition exist of experiencing and experimenting with sounds and rhythmical sequences.

In the *figural phase*, spontaneous singing emerges around the first 18 months and exists of vocal reproduction of melodic contours such as imitations of heard tunes, or improvised repetitions of syllables. Alongside the physical development of the child, and with it its vocal abilities, the child experiments with its voice. From around the age of three, the child's singing transforms into more conformed forms of song, and before the age of six, tonal melody and pulse become more regular and structured in singing. Singing of cultural songs requires skills such as accurate pitch control, understanding of the song's tonality and rhythmic pulse. Improvised singing in this phase is generally based on series of words and improvised lyrics and syllables.

By leaving the presymbolic stage, the child obtains the ability to use a sign, object or word to represent an abstract idea. (Piaget called this the 'symbolic' or 'semiotic' function). Hereby children are capable of graphic representation of sound and/or music. This figural phase lasts up until the age of five. As the child learns to speak, new content and spontaneous ideas are introduced to singing.

Around the age of 5, 6, children reach the *schematic phase*. In this phase the child starts to incorporate musical conventions used by adults in its own musical utterances. It can sing more complex melodies, as tonal skills and vocal control develop.

Consequently, during the *rule system phase*, artistic style conventions are definitely integrated in the child's musical expressions, and have their effects on musical taste. Finally, in the *professional phase*, the child obtains the ability of meta-cognitive thinking, and with it, the capacity of self-reflection. This meta-cognitive thinking may lead to the leaving of conventions and construction of conventions of their own.

2.4. Conclusion

Now that we have looked into some research/theories on musical development, here their applicability for the concept of musical play of young children will be discussed.

Moog describes children's vocal and motoric responses to sound over a period time, and outlines a development within these responses. Such an outline provides for useful information, as it creates an overview of the vocal and melodic development of the young child, which can be of help in clarifying vocal utterances of young children. However, since it concerns a rather one-dimensional piece of research, and shows no relation to other forms of musical behaviour, it is up to us to place his findings in a broader context.

Moog's research seems to have influenced Swanwick & Tillmans' spiral of musical development, as his findings and terminology such as 'sensory' and 'manipulative', can be recognized in the first two phases. (Swanwick, 1988).

Swanwick and Tillman's spiral model indicates a concentric course of development. Concentric means that by the reach of every new spiral phase, repetition of previous acquired knowledge and skills takes place, resulting in deepening and broadening of this knowledge. In this model, by the descriptions of these circular phases, children's musical behaviour from the age of 4 - 7 is well documented and seems representative for the age group, and might be helpful in explaining future observed behaviour.

Hargreaves & Galton's model seems to rely heavily on previous research, for instance, (concerning the young child) research by Moog ('singing', as well as the first two phases of their model), Bamberger ('graphic representation') and Moorehead & Pond ('composition'). Their model provides for a general overview of various musical behaviours, and ties formentioned 'one-dimensional' research together. At the same time however, the choice for explained behaviours seems relatively at random: certain skills are emphasized as others remain unclear, e.g. the development of aural skills, or musical performance skills. Furthermore, the correlation between the

development of musical behaviours is not really clarified, unlike in Swanwick and Tillman's model.

In conclusion, it can be said that research on musical development focussing on a single aspect has its advantages (depth) and disadvantages (isolated). In contrast, regarding of musical development in stages might be compelling, as it gives an orderly overview of development, and with it, the idea of clarity and transparency. The question is, however, if (any) development occurs in such a step-wise manner. A succession of stages admittedly creates a clear picture of development, but that lucidity might be too good to be true, for children usually do not tend to develop in an ever-rising line, nor do they collectively reach the same levels simultaneously. From that point of view a stage model for musical development certainly has its disadvantages, unless the concept of stages linked with age is not regarded of as rigid (ontogenetic). Accordingly, from their research, Davies (1992) and Marsh (1995) claim that children can be at different stages in their musical development simultaneously, which is something I recognize in my experiences as a (music-)teacher as well.

Nevertheless, as all these models are based on research, it does tell us something on children's (consecutive-) musical behaviours, giving insights of what (in general) can be expected musically at what age , and thus provide for useful guidelines for observation of musical behaviour, as will come up for discussion in section 3.3.

In summary, research enables the identification of patterns of musical development, which gives evidence for a broad developmental sequence during early childhood.

Play in musical (stage-) theories

In all discussed research, play – as a part of musical development -, seems to be of major importance. It can be recognized in the use of play categories within a developmental theory, like that of Swanwick & Tillman. Their spiral even appears to be based on the assumption that a musical development reflects the general developmental characteristics of play, as many of the

terms used by Swanwick and Tillman in order to clarify the stages of development derive directly from Piaget's work about children at play (e.g. 'mastery' and 'imitation', as in: Piaget, J. *Play, Dreams and Imitation in childhood*, New York, 1962). The importance of play can also be found in the descriptions of children's use of play within their musical composition or - imitation, e.g. 'imaginative play' and 'manipulative play'.

Concluding, it can be stated that in all discussed research (including that by Moog), researchers seem to agree on play being a motor for musical development, or at least assign a significant role to it, especially concerning the early years of musical development.

The next section will explore this role of play within a child's musical development into greater detail, and with it, the implications it may have for music education and/or the role of the teacher.

§ 3 The young child and its musical play

3.1. Informal Musical play

3.2. Free musical play

3.3. Description of some small scale observations on musical play and submission to literature

As my own experiences as a music teacher led me to look into musical play of young children more closely, study of relevant literature seems to support the assumption that child initiated forms of music pedagogy are not a 'hot topic' in current music education, nor in research on music education. Marsh & Young for instance, state that:

'In comparison with other fields of children's musical development, there is relatively little research into children's musical play..... focusing their attention on adult-initiated activity in formal educational settings rather than child-initiated activity. Research mainly concerned 'serious' formal skills such as learning to sing, to play an instrument or to develop aural skills. Play for which there is no obvious 'product' in the form of measurable learning is thus seen as trivial and unworthy of serious study' (Marsh & Young, 2006:291)

Study of recent research indeed seems to affirm the assumption that a focus on teacher-led musical activities, perhaps for them being easy to measure and verifiable, predominates. However, as previous chapters show, play appears to be of major importance to the children's overall development (including its musical development), which makes it worth while to look into the phenomenon of musical play of young children more closely.

This section will do so, and show a distinction between 'informal play' and 'free play'. Studies concerned with informal musical behaviour of (young) children (i.e. informal play) concentrate on spontaneous musical behaviours of children during everyday activities and events. Studies that concern free musical play however, include environments that have been prepared by the teacher in such a way as to stimulate the child to experiment with sound, albeit that the child still initiates its musical play (free musical play). The role of the teacher in free musical play varies from purely facilitating to higher levels of teacher intervention (Smith & Montgomery, 2005).

This section will give an overview on literature on research on musical play, the role of the teacher within this musical play and finally discuss its value and implications for music education.

3.1 Informal musical play

Informal musical play concerns spontaneous musical activities performed by children in unconditional, informal settings, without any educational objective. This kind of spontaneous musical activities (vocal, instrumental) is also termed as 'musicking' (Small, 1987). Taking the innate musical potential of children as a starting point, it is found to be of interest to explore what kind of informal musical activity can be observed in children, when they are able to play without the context of a formal educational setting. Trehub (2006) describes her studies on babies in this field. The listening skills of babies already involve an enormous degree of nuance; they can distinguish semitones, absolute tonal intervals and deviations from existing melodies. Campbell (1998) performed an experiment in which she observed children in the age range of 3 to 18 years old during their informal 'musicking'. Campbell describes a broad range of musical expression during the study.

One remarkable aspect is the relationship between the activities which children undertake and the music they make: for example, children think up suitable songs when they are playing with the sand in the sandpit. Forrester (2010) calls this 'pretend play singing' and agrees with Young (2006) that children combine play, telling stories and expressing these stories by singing. Music is directly related to the young child's perception of its environment, and as a child gets older, also to communication with others. Forrester's research recognises this increase in musical communication. Young (2006) warns us about the adult reaction in such a situation. The strong interpersonal aspect entails that adult intervention is more likely to interrupt the free music than to improve it. These studies reveal that children enrich their play with musicking; a musical accompaniment to their own play.

3.2 Free musical play

Free musical play however, takes place in an environment that has been prepared by the teacher, and which stimulates the child to experiment with and to explore the musical properties of sound. The initiative for playing is taken by the child itself. Literature offers various forms of approach concerning the role of the teacher and the design of the environment. In this literature, the degree of teacher involvement can be placed on a sliding scale, varying from pure facilitation at the one end, to intended teacher intervention at the other.

One of the first studies executed on childrens' free musical play, was that of Moorehead and Pond (1941/1978), also known as 'The Pillsbury Foundation Studies'. From 1937-1948, Moorehead & Pond conducted an in-depth study of the musicality and spontaneous music making of young children in a prepared situation, by collecting anecdotal records describing children's singing, dancing and playing on musical instruments, for over a longer period of time (varying from a few months to several years). Teacher intervention was restricted to a minimum of adult intervention (Moorehead & Pond, 1978:8). From their observations and analysis, Moorehead and Pond concluded that 'free use of varied instruments led to growth in understanding timbre, pitch, vibration, rhythm, tonal relationship and

melody' (Moorehead & Pond, as cited in Littleton, 1998). Concerning childrens' general musical behaviors, Moorehead & Pond observed that, amongst other things:

- songs that adults teach children are in all ways unlike the music they make themselves
- musical play behaviors with instruments, classified as sound exploration and rhythmic order, are characterized by rhythmic motifs
- dramatic play with instruments comes first by way of physical movement. (Moorehead & Pond, 1941/1978)

Gluschankov (2008) studied the free musical play of children between 4 and 5 years old. She reports on how the children in two different crèches react to freely available musical instruments. The level of involvement or 'intervention' on the part of the teacher is restricted to the choice of available instruments: a very limited form of intervention. The child initiates the musical activity. The children at both crèches reveal similar forms of musical play: musical- and extramusical play. Musical play involves the exploration by the children of sound characteristics. Gluschankov also mentions so-called 'extramusical play', where children play with instruments (solitary, parallel and cooperative) and use them in role-play, construction play and movement games as an auditory accompaniment to the game.

Niland (2009) is at the other end of the abovementioned sliding scale. She creates a musical situation that is compatible to the interests and experiences of children (in this case, cars). Her musical input is based on singing, as she says:

"...the voices of children are at the heart of a child centred curriculum". (Niland, 2009)

The song, chosen by the teacher, is the starting point for activities that are initiated by the children through play. They think up new words for the song, create musical accompaniment with instruments and invent movement

games to go with it. The teacher offers new impulses where necessary. Observing the childrens' musical- and play behaviour lends insights into their interests, perceptions and social interaction, and may help the teacher to introduce new elements into children's musical play. Niland's approach to the child-orientated curriculum initially involves a large degree of intervention by the teacher, but this is reduced once the children take more initiative in their play.

A final example of free musical play is that of action research executed by Page Smith (2011). Her research was conducted at two schools in New York, initiating musical play with groups of children of 3,5 to 4 years old and children of 4 and 5 years old. Here, point of departure is the play in which children are currently involved. Page Smith links in by both joining in their play and adding objects to their play on the basis of observation, such as Orff instruments, a shadow curtain and video equipment. These additions create new impulses within the learning environment, which allow the children to discover new elements in their play and reach deeper levels of musical play. In this research the teachers plays an exact opposite role to that as suggested by Niland: here children's play forms the basis, and the teacher's role is that of observer, initiator and facilitator.

These examples, while not attempting to be comprehensive, are nonetheless indicative of the sliding scale of teacher intervention. Gluschankov describes the musical activities that are initiated by the children when the teacher has merely prepared the environment, as in both Niland and Page Smith's approach, the teacher intervenes. Niland influences the context to a great extent whereas Page Smith considers the activities of the children to be leading.

3.3. Description of some small scale observations on musical play and teacher scaffolding

As the discussion of literature so far illustrates, for this paper, an extensive literature study on development of (musical-)play was carried out. During this study however, in order to understand findings from this literature, a

growing need to see described behaviour 'in real life' arose. Therefore a small scale observation was set up. Purpose of this observation was to answer the question: 'can musical play behaviour of young children as described in literature be recognized/identified in practice?', and thus interpret literature and create a clearer picture of (musical-) play behaviour of young children. Filming, observing and comparing observations to literature might tie literature together.

For this observation, the model of teacher intervention as proposed by Gluschkov was taken as point of departure. Two groups of 6-, respectively 4 children in the age of 4 to 6 years old, were asked consecutively to play in a prepared situation, consisting of several musical instruments on a small table. Children were asked to sit on the floor and play with the instruments anyway they liked. This musical play behaviour was filmed and analyzed frame-by-frame. The first group of 6 children (film 1 -4) was unfamiliar with the researcher, whereas the second group, acting in film 5, was acquainted with the researcher.

In the following section a selection of filmed and observed behaviour will be described. In order to distinct them in one way or another, play categories as proposed by Parten are taken as a basis, combined with other perceived play behaviours, when applicable.

Excerpt no. 1: Solitary play

The boy with the dark curly hair in the front, is completely engrossed in his own musical play with a drum. Here he demonstrates sensory- as well as manipulative play, as he experiments with all kinds of manipulations of the instrument, e.g. fast-slow, turning mallets as to experience the difference in sound (sensory mode/imitation level, Swanwick & Tillman; sensory play & manipulations, Piaget). This is combined with motoric play (Kohnstamm, Feldman) as he tries to play the drum while lying on his back with the drum between his knees. He is not really distracted by other children, not even when another girl plays a triangle on his forehead, which demonstrates him being obviously engaged in solitary play (Parten).

Excerpt no. 2: Parallel play

Here, the two girls in the front opposite to each other play their instruments (both drums). They have verbal- and eye contact, with a minimum on social interaction, but no musical interaction or playing together occurs. All children are engaged in their own musical play, experimenting with loud and fast sounds (sensory mode, Swanwick & Tillman; practice play, Piaget; parallel play, Parten)

Excerpt no. 3: Cooperative play

The same two girls opposite to each other, a bit later now, fight over a darbuka. The girl on the left holds the mallets, and tries to beat the darbuka held by the girl on the right. The latter, however, pushes her hands holding the mallets away and orders her to play with her hands. She demonstrates it, after which the other girl puts her mallets aside. Subsequently, together they initiate an imitation game, inviting each other to play in turn, resulting in playing a collective pulse (imitation level, Swanwick & Tillman, rhythmic motifs, Moorehead & Pond), while smiling and having fun (cooperative play, Parten). Their play attracts the attention of two other children, who watch, but continue playing their own 'thing' (parallel play, Parten).

Excerpt no. 4: Interactive role play

In this excerpt, role-play with two conductors and two orchestras occurs. Equal to Vygotsky's description of role-play, here children create an imaginary situation ('we are an orchestra!'), they adopt roles ('I am the conductor, you are an orchestra member') and make up rules for their play ('when I do this and lift my arm, you have to play loud. When I lower my arm, you have to play soft!') (self constructed rules for play, Piaget; pretend play: Vygotsky; imaginary play: Moog). All children conform to this imaginary situation and play along accordingly. This perceived role-play emerged after a request by the researcher, when she asked the children to make up a piece of music together. In this piece of music, both directors experiment with soft and loud and other musical properties (Swanwick & Tillman, Piaget), albeit in a group setting (Vygotsky).

Excerpt no. 5: Teacher scaffolding

In this excerpt, the general teacher joins a group of three children, after they sought for her help. One boy (A.) is totally absorbed in his own play on the drum, as the others want to play together. They have asked him to play along, or at least stop playing his drum because it disrupts their play, but he refuses. As they don't know how to persuade him, they ask for the teacher's help. When the teacher arrives, she asks each of the children to tell what (s)he thinks is going on. She then recapitulates, and asks the children to think of a solution that will make everyone happy. This, she also recapitulates, has the children discuss it, and finally asks them to use their own suggestions to come to a mutual agreement. Hestitant, A. agrees to play with the others, as long as he can stick to his drum. In turn, he won't play too loud en will adjust to the group. In return, the other children agree that, after their collective music making, A. is allowed to continue his improvisations again (teacher scaffolding, Vygotsky).

§ 4. Conclusion

This section will discuss findings from previous sections, and look into its implications for a general teachers' vocational musical training.

In order to create a clear picture of musical play in all its facets, this study looked into the child's general (play-)development, moving on to its musical development and finally described the appearances of musical play, and musical play in an educational setting.

Theories on play as proposed by Piaget, Parten and Vygotsky, proved to be useful for the way they elucidate various play behaviours of young children, and support a general understanding of the concept of play. Translating these general theories on play to musical development and musical play was a useful exercise, as it shed light on similarities (e.g. play categories) and differences/difficulties. Especially the investigation on the recognizability and applicability of theories in 'real play', by 'real children', appeared to be of varying success. Findings from studies by Moog (1968) and Swanwick &

Tillman (1986), such as 'imitation' or 'manipulative playing with musical instruments', could be acknowledged easily, mainly because these forms of behaviour are well described and therefore recognizable. With respect to Hargreaves & Galton's theory on musical development however, not all described musical behaviour was found. A reason for this might be that, in their theory, not all musical behaviour was discussed (leaving out, for instance, notation or singing). It also proved to be more difficult to recognize, as their descriptions were less concrete.

Another feature that appeared to be difficult to recognize was the correlation between age and (musical-)play behaviours. From observations, it became apparent that children indeed show various behaviours, but in any order they like - certainly not in accordance with the phase-like order as found in literature. This outcome might lead to the (cautious-) conclusion that a vertically and age-related view on musical development, and, with it, regarding of musical behaviours in isolation, is not congruent to the way children actually play with music. This appears to be much more mosaic, with children crossing borders of age and musical behaviours.

Nonetheless, the practice part of this study provided for a deeper understanding of literature on (musical-)play and musical development.

Study on musical play clarified the appearances of such play, as well as the role of the teacher in order to support it. First, the distinction drawn between 'informal' and 'free' musical play helps us to outline the situation in which musical play (from an educational point of view) takes place, namely in an environment prepared by the teacher.

Secondly, it proved to be that -even though free musical play appears to be child initiated-, the teacher has a vital role to play in supporting this type of play. Examples from research by Moorehead & Pond, Gluschankov, Page Smith and Niland, as well as suggestions by Vygotsky (Scales *et al*, 1991) and Bodrova & Leong (2003-a) give direction to the teacher's role in children's musical play. This role varies from a minimum of intervention, merely a form of 'play maintenance', through a simple form of intervention, to a more complex form of teacher intervention.

In order to stimulate childrens' musical play, one of the first actions a teacher can take, is to provide for a challenging musical environment, fitting to childrens' age and phase of musical development. In case of children between 4 and 7 years of age, this would mean providing for items such as musical instruments that give rise to manipulation and experimentation, for materials for drawing/writing up childrens' musical ideas, or for recording equipment which enables them to hear themselves and perhaps reflect upon their musical utterances.

A second, rather simple form of teacher intervention is to closely observe childrens' musical play, and intervene when asked and/or when childrens' play stagnates. In such a case, the teacher can help by questioning or giving suggestions and directions.

A more active role for the teacher is an intervention by participating in children's play and -whilst playing-, adding (musical-)language, objects or themes, thus broadening and deepening children's play (i.e. teacher supported play). In such a case, the teacher acts as an active 'co-constructor' in the music making of children, and is responsively alert to their musical actions and interacts with them.

If the teacher is to intervene in such a way however, it is of the utmost importance for him to have an understanding of the child's musical development, enabling him to recognize certain musical behaviour and act upon it by offering the right interventions at the right time.

This brings us to the last question, being the implications of these findings for a curriculum for musical teacher training.

Recommendations

With this study, I hope to have made clear that musical play is an utterly serious pursuit, one that deserves a place in a teacher training curriculum. Much of my work as a teacher to this date, has focussed on trying to get (future-) teachers to be more confident in teaching music. An important finding from this study seems to be that supporting musical play in the early years setting calls on many skills teachers already possess, such as observing and scaffolding. This means that the issue of 'the teacher being

musical or not', is less important, which may have a positive effect on teacher's musical self-esteem. Integrating forms of musical play into a curriculum for teachers, however, would imply theories on musical development should be part of such a curriculum. How to design a musical environment that fits childrens' age and level, and how to intervene, should be included as well. Finally, in such a curriculum, recordings of children playing musically, as were made for this study, could find a place for training observational skills.

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