### Aesthetic Play: The Meaning of Music Technologies for Children's Development

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#### Summary

The present article explores the role of music-related artefacts and technologies in children's lives. More specifically, it analyzes how four 10- to 11-year old girls use CDs and DVD games in their music-play activities and which developmental themes and potentials may accrue from such activities. Those artefacts are recent examples of the history of mass-production, mass-distribution, and mass-consumption of music. Since children do get into touch with the mass-phenomenon of popular music and artists, concerns may be articulated that this can have problematic effects on children's lives. By help of, among others, Marx Wartofsky's artefact theory, the article tries to get beyond "black-or-white" prejudices concerning technologies and their limited insight; this is done by suggesting to focus on the children's own perspectives and how music-play activities may be meaningful in relation to the children's complex life-worlds. Further, this leads to an analysis of music-play activities as play with an art-form (music), which includes aesthetic dimensions and gives the music-play activities its character of being aesthetic play. Following Lev Vygotsky's insight that art is a way of building life, it is argued that music-play similarly can be viewed as a way for the children to build their lives.

**Keywords:** development, play, children, art theory, aesthetic play, music, dance, music technology, artefact theory, mass-consumption, life-world

Children are no exception when it comes to appreciating music and music-related activities in everyday life. Children in the Western societies have access to a variety

of multifunction technologies which allows for the use of music. The musical lifeworld is, in Holzkamp's (2012) words, a media landscape, which means that children are faced with a colorful patchwork of various sorts of music that makes up the background to their everyday activities. Children use mobile phones or other electronic equipment to download and maybe share popular songs with each other, and so they negotiate what is "cool" and what is not; they find songs on Youtube and other available electronic sources and share their findings with other children; they collect CDs and bring them to each other's homes to listen to the music together; they listen to music on television or radios and they watch music contests where non-professionals compete by singing/performing cover versions of well-known popular music in front of professional musicians who judge their performance. Russel (1997) argues that a taste for popular music in general is found among young people and that teenage groups show a strong preference for current popular hits; furthermore, Russel writes that there seem to be some tendencies that tastes formed in youth persist into and across the adult years, especially in the case of popular music. This means that what children and young people get into contact with tends to be influential across a life-course. The market and the distribution of music, as well as the organized scenery of public music events, such as contests, resonate in the children's everyday life, and they pick up ideas of what engagement with music consumption and music performance might have to do with the culture in which they live. If not exactly a harmonious collection, *performing*, *competing*, *enjoying*, *judging*, *sharing*, *exploring*, and *conventionalizing* nevertheless all seem to be among the important keywords of such a culture - a culture children can learn about through the available technologies.

#### The issue of mass-consumption of music

The present article discusses the culture of music technologies and consumption from a developmental perspective. The focus of the article is not developmental processes in individual children; rather, developmental themes related to children's use of particular music technologies and music artefacts are explored. I shall use the term music "artefact" as a reference to specific objects used by the children, and the term music "technologies" as a reference to complexes of inter-related artefacts. For instance, this means that CDs and DVDs shall be termed artefacts, while the term "music technologies" shall refer to the complex of artefacts which constitute the necessary grounds for the display of music (CD and DVD player, speakers, wires, Playstation etc.).

My interest lurks around the question, whether children's consumption of mass-produced and massively distributed popular music based on highly controlled and standardized clichés may be a source for developmental issues. One concern might be that children get drawn into a competitive, individualistic performance "culture" and come to measure own and others' lives in relation to alienated standards disconnected from real life. These kinds of concerns are common among parents and others who care for children, and they tend to coincide with the inventions and mass-distribution of technologies produced for a market aimed at children and adolescents. Violent computer games cause the concern whether the children will themselves adopt a violent attitude; "too much" time spent at the computer screen, the PlayStation, the Nintendo, or whatever the children are absorbed in, causes the concern whether life with its challenges and pleasures will pass by while playing and leave the child behind as an immature adult. Those concerns are real and relevant, and the present article does not intend to offer any definite answers. However, the either-or and the black-or-white way of thinking about those issues strike me as clearly insufficient if not wrong. The "good versus evil" metaphor as a basis for evaluating children's use of mass-distributed technologies is problematic, both because non-dialectical thinking in general tends to lead to quite limited insights and also because the children themselves are wrongly regarded passive respondents to an either good or bad world. In other words, a theoretical basis of the analysis is needed which acknowledges both the dialectical nature of human-technology interaction and which views children as co-constructing agents (Valsiner 1997).

My focus in the article lies on the question of how children's music-play activities may vitalize their lives and contribute to their cultural and existential becoming. It is assumed that children – just like adults – do engage themselves in meaningful activities with importance for their lives. Of course, the question's scope is too broad and too open to be addressed in every detail. Therefore, I focus on a few selected examples of children's activities which shall assist in addressing some general developmental processes more concretely.

In order to address such overall processes, the article explores specific developmental themes related to 10- to 11-year old girls' use of CDs (popular music) and DVDs (music and dance games). My explorations are based on private observations of a group of four girls and their growing interests in music games and popular artists, an interest which, over time, has led them to create a shared room of reception and performance which includes both singing and dancing. The special thing about artefacts like CDs and DVDs is that they seem to *invite* children to perform music and dance through bodily play-like activities. CDs and DVDs are data storage devices which are complemented by their content, that is, either just music or music in combination with the playback and move devices - technological systems which mediate content that calls for action among the children. When watching how 10- to 11-year old girls approach music and music technologies and how they incorporate CDs and DVDs into shared activities, it seems quite relevant for me to suggest the concept of *aesthetic play* as a way to grasp the particular quality of certain music-based activities among preteen girls. I shall return to the analysis which has led me to the concept of aesthetic play; however, first I shall reflect a bit upon the "role" of music in children's lives, sketch the methodological background of the analysis, and approach the masscharacteristics of the music culture and children's meeting/playing with this culture. All this serves as a ground for the analysis of the aesthetic play qualities of children's activities.

#### The "role" of music in children's lives

Clearly, music and music technologies play a role in the observed children's (many children's) lives – they probably would not spend so much shared and focused time were the activities not experienced as important and meaningful. However, based on my observations of the music-related activities, I am reluctant to think of the "role" of music technologies solely in functional terms, that is, in terms of supporting goal-directed, *future*-oriented purposes (such as "wanting" to become a pop-star or a celebrated dancer or, less ambitious, to become popular among peers). Of course, music does have functional qualities relative to people's lives. Lamont and Webb (2010) find, for instance, that the ways that listeners use music depends on the context and on the purpose of listening; it might be used to increase arousal when exercising and to decrease arousal when relaxing.

In the case of children's activities, though, the term "role" must be used in a broader sense and pay respect to both the future-oriented purposes (to become like a pop-star, become a good singer/dancer, become popular, grow into admired adolescent culture etc.) and to the self-containing "purposes" of play. The music based activities are primarily *play* activities and, according to Leontyev (1981), the motives of the child's play activities lie not in the result (functional outcome of the play) but in the process of playing itself; the child plays because s/he wants to play. Since the play activities are self-containing (even with themes imported from the child's social world which resonate who the child is about to become through shared activities with others), the analytical focus needs to lie on the children and what motivates - from their own perspectives - initiation of activities and the process of playing with music and music artefacts. A one-sided approach to those activities might wrongly suggest that children's activities have merely functional relevance as a mainspring for development of skills or behavior and have no important significance in themselves. Even though music is used functionally in many contexts and for various aims by the individuals (Schäfer/Sedlmeier 2009), it seems quite important to acknowledge that the music activities are meaningful and valuable activities to the children who create them and share them. In other words, the present analysis builds on the theoretical and methodological idea of the children's perspectives, which is being explored and elaborated by a number of recent Nordic and other scholars (see for instance Hedegaard/Fleer/Bang/Hviid 2008; Hedegaard/Aronsson/Højholt/Skjær Ulvik 2012; Bang 2009). According to this theoretical and methodological view, it is the experienced meaningfulness of participating in various activities as well as how the participating children contribute to both shared and individual development that become primary research foci. In other words, it is the children's participation in shared social and cultural settings that is regarded a vehicle of developmental changes. This perspective opens up for the study of various themes and activities in children's lives, as those lives are imbedded into the specific cultural-historical dynamics of society and its available technologies.

#### Music technologies, mass-production, and mass consumption

As for the case of music technologies and their role in children's lives, we face societal dynamics as well, namely the dynamics of how new technologies allow for mass-production, mass-distribution, and mass-consumption of music. In fact, for more than a century, the history of music technologies has also been the history of mass-production, mass-distribution and mass-consumption of music. This means that children in recent Western societies grow with, and grow into, a culture where music is both an available commodity intended for consumption as well as a way (for the same reason) to grow into a societal being as an individual. The mass-production of sound recording was first made possible as early as the 1880s, when Emile Berliner invented the first microphone and the first disc record gramophone. This meant that it became possible for artists to record their music and have it distributed via gramophone companies. Consequently it became possible for an artist to become listened to and publicly valued, without needing to be present and to perform live music at particular cultural events (Morton Jr. 2004). When considering the present music market, we can see how the massproduction and mass-distribution of music has influenced the public access to various music "products", on the basis of which various individual and generational likings and tastes have come to light. In short, it occurs that the musicians, the producers, the companies, and the consumers of music to a large extent act according to the "mass" relevance of music. I mention this so as to avoid a nonhistorical or an individualistic approach to children's everyday lives and developmental themes. The dialectical relation between the individual and the societal meaning of music on the one side, and the invention of music technologies on the other side, has to a large extent channeled music into the production of artefacts and technologies distributed for sale on a market in which inventors, producers, and distributors must be sensitive to what the market "wants" – or even offer customers what they did not yet know they wanted. Artists are being introduced to the market and promoted so as to keep the customers interested in new releases and new artists. Also, the balancing of live concerts with the promotion of new releases seems important, in that live concerts both satisfy the need of intense social music experiences and support the meaningfulness of music in the individuals' lives. In between the live concerts are the music videos of live concerts, which mix the live character with the electronic character of music and allow for individuals to have an as-if-I-were-there experience while staying at home on the sofa. As an overall tendency it occurs that the invention and use of music technologies resonates important dimensions of individuals' lives. Availability of various sorts of technological music equipment supports the music-based mediation of people's everyday lives and developments. This is the case for children as well and the availability and mediation serve as a cultural background for specific music activities in their everyday lives. Children become consumers themselves, they integrate music artefacts and technologies into their own lives in ways which tend to promote further inventions directed at a specific market for children.

Furthermore, they use music artefacts and technologies as a way of *building life*. The term of "building life" is borrowed from Vygotsky's (1925/1971) art theory. In his analysis of the relationship between art and life Vygotsky suggests art to be *a method for building life*. Art, according to Vygotsky, is not merely an act of cognition; it is not the cognition of life, nor simply a mirror of life mediated by aesthetic elements. Inspired by the concept of catharsis, he views art as a method for addressing and destructing contradictions in human life; hence a method for the overcoming of emotions in generalized ways through aesthetic form. It should be seen as a method for creating possible future actions for people. In other words, Vygotsky does not see art as an object of perception as much as a method for humans to create their own life conditions and, by doing so, to create themselves. Building life and building (one)self are interrelated processes which, as I would suggest, can also be seen in children's music-play activities.

#### Mass-produced technologies for children

The history of the interconnectedness of music and music technology at a societal level is relevant for the specific studies of children's activities and developmental themes. This means that children in Western societies most often have access to many kinds of music technologies, some of which only mediate music and are being listened to (CDs, music videos), some of which afford interaction in different ways (sing- and dance-play games on DVD etc.). Furthermore, in their everyday lives and in their upbringing, children are always already part of the mass-culture. Even though some children learn how to play an instrument and even may become musicians themselves, most children do not. Most children relate to music as consumers who include music and music technologies into their own meaningful activities. I shall therefore focus next on some of those activities, and on what might be the developmental themes of children's engagements in such activities.

The technologies offer a palette of possibilities for the children to relate to music in their everyday lives. While I have already sketched how there is a dialectics between music use and music technology at a sociological/societal level (groups of consumers, tastes, variations of contextual use etc.), a dialectics between music use and music technology can also be found at an individual and subjective level of analysis.

Figure 1 illustrates the loop between mass-production, mass-distribution, and mass-consumption of music which creates a *sensitive field* among the users of music technologies and music artefacts. The technologies are not "neutral" mediators. Seitz (2005), for example, points to the fact that there are close connections between cultures and the composition of music. From an early age, composers of music, for instance, adopt the language of their culture and the popular music of the historical time, and those cultural processes are mirrored in their later compositions. Likewise, one might assume close connections between children's cultural and musical development, including the phenomenon that music is able to express emotions without any specific imaginary object. This implies that children may use music to resonate their culture and its values through emotions and imaginations, and by playing with the form language of music.

In short, the availability of music technologies as well as promoted artists and games all frame and standardize how music can be related to, which kind of activities are *afforded* (Gibson 1966), and which role music plays in people' lives. Therefore, to better understand the meaning of music and music technologies in children's lives and development, some specific analyses of available artefacts and afforded activities are needed.

# Children's artefact-mediated play with popular music – CDs and DVD games

The specific nature of different technologies may contribute in different ways to children's music activities, and so it becomes important to study examples of artefacts and technologies that children themselves use and how the activities may be meaningful and developmentally relevant to the children. Based on own observations of children's music activities, I shall focus on children's use of two artefacts – music CDs and music-related DVD games.



Figure 1: Music as a mass-phenomenon

CDs with popular music have long had a great appeal to children. Certain (changing) artists seem to be especially popular if they make great hits, have a cool style etc. But why is popular music so appealing? Ivaldi & O'Neill (2008) found that music is quite important when it comes to naming role-models among older children. Older children and adolescents tend to choose among their role-models those who are well-known media figures rather than people known from their own life. Ivaldi & O'Neill further found that among 11- to 14-year old children, girls especially, tend to seek out role-models among pop-stars because they look good, are popular, and have desired personal values such as caring for others and understanding others. Further, the voice, the way they dress, and their performance seem important.

In addition to the role of the CDs – and as a relatively new thing – recent inventions of DVD games based on interactive technology has offered children opportunities to "be" and act like their favorite pop-stars by entering a *receptionaction dynamic* available via the DVD game and its features. The interactive music technology allows for the children to follow their favorite pop-stars' performances by either singing-along or dancing-along with them.

Both the CDs and the DVD games mirror the fact that children are no passive consumers of music. On the contrary, they tend to link the reception of music to bodily actions, as we shall see in the following analysis (the receptionaction dynamic). In general, children are very active in sharing music; they share CDs and they share ideas and opinions about music, such as what to think about a new hit, a popular performer, his/her hair style, make-up, moral values, public actions etc. They listen to what others listen to and music is no less a part of their everyday life than it is to adults or to adolescents; nor do children and adolescents get stuck with a limited and stereotyped taste of music. In fact, Zillman and Gan (1997) suggest that adolescent music may be more varied than alternative forms of music; its rhythms range from slow and gentle to rapid and forceful; the melodic structures vary from sensitive and tender to disorganized and wild; the instrumentation may be simple or complex, even advance to sophisticated orchestration.

# Bridging adolescent culture and play culture – some examples of children's music activities

All this indicates that children should not be seen as mere passive consumers; they absorb the action possibilities of music into their personal lives and let those possibilities blend with whatever is experienced as important in their lives. Older children – such as the children in the present article – gradually grow into the adolescent music culture with idols, identification processes, and general appreciation of music while still being in a children's life-world of play activities. I would suggest this transition to be one of the important things going on among preteens. Those changes in children's lives are imbedded in societal processes, as suggested above. No child moves alone or as a single individual. On the contrary, there is a market for music technologies which allows for children to bridge those developmental domains of life and, at the same time, invite children to participate in such bridging activities. Music technologies and artefacts such as CDs and DVD games seem to provide such guidance for children in that they include both aspects of the adolescent culture and of the children's play culture.

But let us try to see what is going on at the level of the reception-action dynamics – how do children actually use music artefacts and for what? Developmental themes surface during this exploration of children's own activities. In other words, the following three examples illustrate how the mass-distributed culture of popular music finds its way to the children and how it enters the children's lives.

The examples build on occasional observations of four 10- to 11-year old girls - Nadia, Maria, Caroline and Monica - and their music activities at home after school or in the weekends. The four girls are friends, and Caroline and Monica are also sisters (twins). They all spend a lot of time together, in school as well as during leisure time. They sometimes plan to go to Caroline and Monica's house after school. Caroline and Monica have a music room with instruments (piano, violin, guitar, drums) and a CD-player. Also, they have a PlayStation 3 and a wide screen with a projector which can be used for music-play activities. I have a private acquaintance with the girls which means that I am privileged with a long first-hand access to studying their activities in natural settings, namely at home with the girls when they are most private. Over an extended period of time (a year or so), I have been able to watch their activities, which have been intense in some periods, like if they get a new game or CD or if they want to practice a dance performance for some reason. At other times, the activities fade out and there is only very limited number of music-related activities during long periods of time. In other words, playing with music is an activity that occurs for a variety of reasons, like when there is a new game that they find exciting, when they feel a bit bored and decide to play something, or when they want to practice for some event like the "melody song contest" at the after school activity center. They also do it just for fun and after some time has passed since they last played with music. The music and the artists also seem to catch their interest, and the girls do spend some time listening to the lyrics and talking about the meaning of it and whether they sympathize with the artist or not for one or the other reason. Everything about Michael Jackson, especially, seems to fascinate them.

In the first observation we shall see an example of how the CD plays a role in the girls' organization and practicing of a dance performance. The second observation illustrates how a Sing-Star DVD game is played with and how its competitive aspects are dealt with in a friendly manner. This is also the case in the third observation, where a Dance Move DVD game really challenges the girls and they have a hard time following the required moves. After that, I shall analyze the observed examples mainly as a whole, mirroring a variety of common developmental themes. Especially, I shall argue that the creative dimensions of the children's play activities are predominant and that these dimensions approach the aesthetic one usually associated with art.

### Observation 1: Creating and practicing a dance performance

At school, the four girls have planned to go home to Caroline and Monica to create and get involved in a dance performance. They are excited as they arrive at the house, and soon thereafter they go into the music room to start practicing. Nadia is the one who knows best about dancing, since each week she joins a team to learn show-dance. She knows how to create small compositions of dance movements and put them together so as to slowly create a performance. Quite naturally, she is accepted as the main choreographer and instructor of the dance to which the other three girls add with co-creations and suggestions. They put a CD with Lady Gaga songs into the CD-player and turn it on. They talk animatedly while listening to the music over and over again as they gradually suggest and negotiate the single new components of the dance and gradually create a full show. It takes a long time and they work intensely and in a focused manner. After a long while they seem satisfied. Their faces are reddened as they invite (insistently) everyone who is at home to come into the room, have a seat and watch their performance. The music is turned on and they start performing. Whenever there is a "you" or "me" in the song, the choreography includes pointing out to the listener or to themselves, and when there is something about "us" and "heart", it is choreographed as holding the arms around their own body and putting both hands on the left side of their own chest. They stand and move along a line but also, they change places, go up and down the floor and turn around - all done with good timing and coordinated relative to the music and each other's movements. It seems important that the timing is good and that the moves fit with the story-line of the lyrics and the emotional expressions of the music. They look very happy and smile intensely when the song is over and the "audience" applauds them for their performance.

#### **Observation 2: Playing a Sing-Star game with ABBA songs**

Nadia, Maria, Caroline and Monica want to play the ABBA Sing-Star game on the PlayStation 3. They all appreciate the ABBA songs even though recently the Sing-Star game with a Michael Jackson song has sown some doubts about which artists are the preferred ones. MJ obviously is a favorite among the girls, and (based on observations of the girls' music activities over a longer period of time) his popularity increases over time. A sign of this growing interest is the activities of buying books and reading about his life as well as watching movies which give insights into his work – he has grown to become an interesting person in the girls' eyes, and this interest prompts an interest in his work as an artist.

In the Sing-Star games two children at a time can sing along with the selected artist pretending to perform the well-known and popular songs, such as ABBA's Knowing Me Knowing You or Michael Jackson's Billie Jean along with the artist and the band. Each child will get a score after each line of the lyrics they sing along, and the score is followed by a comment saying, for instance, "great" or "gruesome". These competitive elements allow for the children to evaluate their own performance relative to the other child in order to see who is the better singer and who is most often off-key, but also it allows for them to work repeatedly to improve their own performance so as to better hit the high keys (an experience proved very relevant in the ABBA songs), and to modulate their voices in attempts to adjust to the artist's performance. Each child gets a microphone and the lyrics can be read line by line on the screen while singing them. In the end, each child will receive a final score which tells her who the winner is. The four girls take turns, two at a time, and they all intensely focus on the game. Those who sing stand next to each other in front of the wide screen, which is mounted on the wall, and that way they co-experience what it is like to join the artist performing live. Those who wait for their turn sit on the sofa, close to the performers, following and commenting their performances; sometimes they laugh if the "gruesome" comes up. The four girls are totally absorbed by the game. First, Nadia and Maria compete, and after that it is Caroline and Monica's turn. It goes on like that for almost an hour with shifting songs, and the girls once again realize that some of the ABBA songs are easier than others. They often negotiate which ones to sing, the easier ones or the more difficult ones, and most often they agree to sing those songs where some success is likely to be the result. It seems that Fernando is selected as a rather difficult song and so they tend to avoid that one. Because the song is difficult, they keep on focusing intensely, and after a while the concentrated focus seems to exhaust them; they decide to stop and for a while they do nothing but relax on the sofa.

#### Observation 3: Dance with Michael Jackson - the Move game

Even though the Sing-Star games are popular among the girls, they are excited to learn that there is also a release of Move games where they can compete on dance moves. The Michael Jackson PlayStation Move game draws much attention and they are eager to give it a try. They pick up the hand controller which registers their arms' movements and transforms them into scores and comments on the wide screen (such as "perfect", "good", "okay" etc.). As they dance, the hand controller allows for them to receive feedback on how well their own moves coincide with Michael Jackson's rather quick and sophisticated and definitely complex dance moves. The game generates some more simple moves, i.e. the complex dance moves are broken down into single standard moves (arms, legs, and body), so as to reduce the complexity of the demands for the child to have a fair chance of success. Those standard moves can be seen in the one corner of the screen and they run along with the digital representation of Michael Jackson and his co-dancers, who can all be chosen as figures to copy-dance. The child needs to follow the standard moves, and she may slowly and through much practice build up some competencies within Michael Jackson's dance universe. Those are competencies such as dancing typical sequences of quick and highly controlled hand-body-leg-head coordination, which are characteristic of Michael Jackson's dancing style. Like in the Sing-Star game, there is a competitive element, since the moves of the child will be scored along with the dancing, and a final score will sum up the individual dance performance. But the one camera only allows one child to perform at a time. The child, therefore, mostly competes with herself, which means that she tries to do her best to keep up with the quick and quickly changing moves on the screen. Nadia, Maria, Caroline and Monica find this game to be quite difficult. They take turns, and as each of them dances, the dancer intensely focuses on following the standard moves of the selected dancer. Each of them has a hard time doing this while the other three girls sit on the sofa and follow the performance. It almost seems beyond their physical limits to follow the moves, and it also seems quite difficult to improve their own moves over time because the dancers perform so fast that the child is often left behind with moving her body, legs, and arms randomly. Nevertheless, the four of them try over and over again. The atmosphere is not as excited as when they play the Sing-Star games. This is more like hard work with little success, and the move game is demanding for the girls.

#### Mass-produced music artefacts and reception-action dynamics

When looking across the three examples of how children use music technologies like CDs and DVDs to create a shared social activity, one can point out both similarities and differences. One can identify a difference between the first and the other two examples in that the first example includes only a CD which can be used for various purposes. Older teens might prefer to just listen to the music while relaxing at home, or go dancing to the music at some party. However, this is not the way life looks like to the four 10- to 11-year old girls. Their *social situation of development* (Vygotsky 1998) is different, and the music technologies therefore "speak" differently to the girls. They seem to find creative dance activities very enjoyable, also due to strong elements of "*wannabe*" (*like* Lady Gaga, *like* Michael Jackson etc.). The DVD games in observation 2 and 3 differ from the way they use the CDs for creating dance performances in observation 1, because the DVD games are produced with the specific purpose of singing along or dancing along. Those activities are already built into the games by the producers.

Among the similarities (on which I shall mostly focus in the following theoretical analysis) is the fact that the CDs and the DVDs are being used to start play activities which include circles of reception and action. Furthermore, the play activities are all, at least to some degree, being guided and inspired by pre-established available possibilities of pre-produced popular music and music games. The inventors and the producers reach the children both in the sense of offering pre-fabricated action possibilities, and in the sense of hitting the nerve of "what is it like to be a child" at a certain age in a Western culture. In other words, the reception-action dynamics are built up around another dynamic, more sociological in nature, of *offering the children what they want* and *suggesting to the children what they might want*. These dialectics between market and need are obviously present in all three examples.

#### The dual tool-toy character of music artefacts

Following the market-need dialectics, let us take a look at what might be the special artefact nature of the music artefacts like CDs and DVDs. What is it that

the children do in the three cases? They take a CD or a DVD and put it into some display technology (CD-player, PlayStation 3), then turn it on to begin singing or dancing. The special thing about the CD or the DVD as artefacts is that from the very beginning, they present a *duality* – a duality of being both a *tool* and a *toy*.

#### Tool $\rightarrow$ CD, DVD $\leftarrow$ Toy

The CD and the DVD are tools in the sense that the children can use them to have something done - to start up the dance and sing activities. They are toys in the sense that the activity is not only "done" by the help of the artefact, but that the content of the artefacts (the music, the perceived performances) are essential and meaningful requisites of the activities as well. In other words, music technologies can be viewed as artefacts that have tool-like qualities, but differ from tools used in production in that they are not – like a hammer, for instance – separated from the process of production; and, on the other hand, they have toy-like qualities, in that they are essential requisites in children's play activities, but differ from other toys in that they bear no resemblance - like a doll (baby), a toy-car (car), or a broom-stick (horse), for instance – with what they mediate or represent. The CDs and the DVDs open up a room of potential activities to the participating children while remaining anonymous requisites themselves. They are tools for reproduction that nevertheless offer possibility to be used productively in the context of shared activity; they are toys without figurative symbolism, yet they are played with.

This dual *tool-toy* character of the music artefacts mirrors how the artefacts have developed historically as mass-products aiming at a particular market for children. This implies, from the children's point of view, that no such play with music artefacts can be understood in isolation; all activities imbed the children in societal structures, markets, ownerships, ideologies, discourses etc. – all what Bronfenbrenner (2005) refers to as the "overarching pattern of ideology and organization of the social institutions common to a particular culture or subculture" (p. 81); in other words, the *macrosystem*. At a macrosystemic level, the music artefacts both express and add to the human praxis of raising children in a culture

with both availability and "pressure" (at a discursive level) of popular music and the role it is allowed to play in children's lives.

#### Extending play activities while growing into adolescence

An important point of the analysis is that the availability of music artefacts among older children seems to imply that play activities - which, in developmental psychology literature, often is regarded a core activity of the much younger preschool children - continue and are extended temporarily into the preteen and early teen years where the play finds its own specific forms relevant to the older children's life-worlds, while still keeping the original play qualities intact. Creating a dance to a Lady Gaga song or copy-dancing a Michael Jackson performance bear the qualities of as-if and what-is (Schousboe 2002) fantasy elements that are essential to role-play. In other words, the mass-production and mass-distribution of music technologies seems to impact how children become teenagers and how they relate to themes relevant to their age and their social situation of development. We cannot know for sure, but it seems plausible to conclude that the presence of such technologies and artefacts probably extends the play activities with its explicit role-play qualities temporally into the older children's lives, and that this extension would not have occurred among the preteens without the availability of music technologies for children. So, this may be viewed as an example of how the presence of technology in a culture impacts the life-worlds, the activities, and the values of humans.

#### Why we should not worry too much about the consumer culture

The suggestion to analyze children's activities concerning music and music technologies as *play* activities potentially (at least to some degree) dismantles worries among adults who might view the strong appeal of popular music as a way that naive preteens are getting drawn into superficial pop-culture "too early" and "too intensely". Certainly, those worries are relevant due to the recent strong influence of the market on human life, and with preteens and teens representing a most sensitive segment of customers, some protection seems necessary.

However, children are not just customers, nor are they passive consumers, as argued earlier. Children co-construct (Valsiner 1997) their own way of living, and activities they partake in somehow mirror and reflect the existential *what is* 

*it like to be me (us)* and the *who am I* questions that every individual faces in the Western culture. From this point of view it may be that children's music-play activities offer special ways of dealing with this general existential process of *becoming* in Western human life.

From my observations I conclude that the special thing about music-play is that the girls were playing with music as an *art-form* (and dance as derived from the access to music).

Music 
$$\rightarrow$$
 Music-play activity  $\leftarrow$  Play

The access to music CDs and music-play DVDs allows for the children to approach music as an art-form and to play with it, hence transforming it into activities both relevant for and appealing to a deeper meaningful level of their lives. The music-play activities are not disconnected from the children's lives and their everyday existential challenges as growing and developing individuals. The activities merge with the everyday life of the children and should be analyzed with regard to how the children experience the activities as meaningful.

#### The creativity of playing with an art-form

In other words, there seems to be quite a creative side to the music-play activity. The creativity lies in the connections that are being constructed during musicplay activities between the children's own *personal life* and the *music* as an artform. Both the CDs and the DVDs are being used in the ongoing process of living life and of mastering the challenges that preteens meet. Therefore, it shall be argued here that it is relevant to address *the meaningfulness of playing with art*. It is especially important to see how the particular nature of music as an art-form contributes to this process of creating one's own life. Theoretically, it seems necessary to create a connection between theories of artefacts (as already suggested above) with theories of play and of art. Therefore, to better approach the creative developmental themes related to playing with music, I shall next draw on Marx Wartofsky's theory on artefacts and Lev Vygotsky's theories on art and on play.

Wartofsky (1974) writes that an artefact is a *represented mode of action* or praxis. Following this idea, the music artefacts that children play with are represented action, which in turn indicates that when playing music-play, children

appropriate the culture of both music (including its characteristics as what I shall call an *art-form*) and what the music is about (its content), and of the culture of mass-distribution of music. This way, they at the same time appropriate *art* and different dimensions of *societal being*:

Music as art form  $\leftrightarrow$  music-play activities  $\leftrightarrow$  Music as represented (societal) action

In general terms, music technologies mediate the general existence of human life and values at a specific moment in the history of sociogenesis; and children, when playing with music, reproduce this societal and human existence; they co-construct themselves ontogenetically in sociogenetic historical time and add to the praxis of representing action through artefacts. Hence, playing music-play is an activity that reproduces both the form and the content of reproducing (and reproduced) action.

#### Applying Wartofsky's artefact theory

The present analysis of music artefacts and their role in music-play resonates well with Wartofsky's (1974) historical theory of artefacts and their role in the shaping and development of human societal life. According to Wartofsky, human praxis is being reproduced and changed during the course of human history in ways that ascribe a crucial role to artefacts and to technology. He considers artefacts an inseparable part of human existence and societal life. The analyses of music-play share similarities with Wartofsky's three general dimensions of artefacts: 1) artefacts as *tools* (primary artefact), 2) artefact as *symbols* (secondary artefacts), and 3) artefacts as *non-representational "possible worlds*" (tertiary artefacts). Let us first take a look at the first two dimensions before proceeding to the third dimension, which (as I shall explicate later) connects Wartofsky's artefact theory to Vygotsky's art-theory.

Since Wartofsky finds theoretical inspiration in Marxian philosophy and Marx' theory of human praxis, the human production of own life conditions is the primary axiom of Wartofsky's own theory. Therefore, to him, artefacts are basically connected to human productive activities, and the first two essential dimensions have to do with tying means to ends in human production and repro-

duction. This, he argues, is a function which creates a necessary connection between tools and symbols. In human production, thus, artefacts have a dual function in that they *both* are means to an end *and* also objectify an intention. In the first sense artefacts are tools or, as he says, primary artefacts. In the second sense they are *symbols*. As symbols, they represent themselves as a means, that is, they represent an intention to be used in a certain way for a certain end. The secondary dimension of artefacts enables the user and the community of users to go beyond the mere manipulative skills and the acquired behavior necessary to use the artefacts, and it embodies a process of production in a representational form where the artefact is viewed as prototype – something that transcends a particular use and comes to stand for a repetition of such uses in general; that is, artefacts represent praxis and enable individuals to both appropriate and to reflect praxis. Recently, Schraube (2009) has gone more into depth by examining such inner relationships between materiality and subjectivity by pointing to the fact that discrepancies, ambivalences, and contradictions are important parts of the relationship between human action and the action materialized in things.

When we think of music-play activities in the terms of primary and secondary artefacts, the CDs and the DVD games are primary artefacts in the sense that they can be used as a means to an end – to have something "done". In terms of secondary artefacts, the children meet and reproduce the societal praxis – i.e. norms, expressions of life, values, ideologies etc. – mediated through the music artefacts. They mirror, resonate, and transform at a personal level the societal processes relevant to them. In the music-play, the children both preserve and transform while they construct their own interpretations of pre-established conventional forms.

While creating dance like in observation 1, for instance, they *perform conventions* from both music and dance (by exploring/imitating elements from music videos), but also they *dramatize emotions* that are expressed in artistic form through the CDs and the DVDs. It is a play with both form elements and content elements and their possible interconnections. Often, those emotions are related to love themes and lie within the emotional spectrum of romantic relationships, but preferred themes can also deal with ethics of human life, what life is about, and how to take care of each other on the one planet that we have. Michael Jackson's songs, for instance, seem to have a strong appeal to contemporary girls because

of the ethical and moral contents, and because of some of the songs' references to decency and to human standards and artistic reflections of life. Thus, children's music-play activities refer to various important aspects of life as seen from children's current perspectives, and their experiences of becoming members of a human culture on a moral and ethical level. The songs and the music-play activities help them anticipate emotional and action-based responses to common challenges in life, such as being a cool singer/dancer, winning a contest, being seen and admired, improving skills, remaining socially attractive to others, overcoming injustice and poverty etc. It is a mix of themes that point to multiple (and to some extent contradictory) directions. It is such concrete findings that lead me to suggest an overall complex, rather than a "black versus white", interpretation of children's use of technologies. Many developmental themes are at work at the same time, and the potential contradictions among them may serve the children as fuel for further reflections on the who am I question as well as for reflections on what are/what should be the basic moral values in human life. The answers here are not unidirectional, of course, and neither are the developmental paths of the children.

#### Possible worlds and actual worlds

Let me now turn to a developmental theme that I find especially interesting as a way to deepen the general themes analyzed above, namely the potentials of playing with music as an art-form. The third dimension of Wartofsky's theory of artefacts is helpful for understanding how music artefacts like CDs and DVD games offer children a "bridge" to the world of art and aesthetics by connecting these to themes of human life. The music artefacts offer a set of possible worlds by imagining and reflecting upon human morals, decent actions, shared worlds etc., as well as themes of personal relationships, like close friendships and romantic relationships, and the potential emotional dramas that belong to those spheres. The symbolic (secondary) nature of artefacts implies that artefacts are not mere representations of human praxis, but that they are detached from actual use, opening them up for other potential and extended uses. Wartofsky (1974) argues that these hypothetical uses arise in explorations and extensions of the artefacts as objects, and new uses may be the result either of a modification of the form of use of the artefact, or of a modification of the artefact itself. In this open-ended process, the artefacts become non-representational and new innovations can take place. Wartofsky uses the term of *tertiary* artefacts to grasp the innovative and transcending *invitations* which allow for the creation of newness on the basis of explorations related to human life and life conditions. This world of tertiary artefacts is the one of "imaginary", "constructed" or "possible" worlds. An important idea of Wartofsky's is that he suggests an interconnection between praxis and subjective processes. Subjective processes (such as reflection) grow with and out of the constructive or productive activities. Humans do not only mirror what there is, they also create or produce the mirror itself via own activity. According to this view, as praxis changes, different mirrors are being produced (1974). This means that the changes in historical modes of praxis do not only include the history of the invention of artefacts – they also include the history of the emergence of imagination itself.

As tertiary artefacts, music artefacts offer children opportunities to play on the edge of possible worlds (the *as-if* and *what-if* mentioned earlier), while mirroring and reflecting actual worlds. The children unfold imaginary explorations and fantasies by using and playing with available music artefacts. This means that managing the tool-toy qualities of the music artefacts is important and in fact part of creative processes among the children, in which they draw on their culture to explore their own lives by means of a playful art-form. The artefacts become means to an initially unintended end. A sensitive market, supposedly, absorbs and mirrors important dimensions of children's lives, and so one may assume an indirect influence of children's activities and interests on the further invention processes. However, when children create own dance performances, they do in fact add to the symbolic (secondary) character of the CDs in that the actual use of the artefact is expanded through their activities. Just like in Milos Forman's film Amadeus, where the young Mozart, surrounded by well-established conservative musicians, starts playing a piece of Antonio Salieri - with all signs of amused sarcastic distance which seem to indicate that Salieri is a self-referential but not too gifted composer - and suddenly transforms the same piece into his own virtuous and energetically flowering version which completely transcends the original version. Despite the obvious differences between a great composer and children who play with music, in both cases something is being transformed. The children, in their own way, transform pieces of conventional dance movements into their own performance and expression. Such transformations of the material are apparently common human ground, and in both cases there is a play with possibilities that lies in the detail.

#### Playing with art

Children are not artists by virtue of nature, but their actions embody creative elements, and when singing and dancing they *play with art*. The intriguing thing about music-play is that it is not just play and it is not just performance, it is both; and it is both a play with aesthetic elements and a reference to life in general and to one's own life-world; it seems to include a work with emotions and social feelings and a way to develop skills. These many both-ands draw the analysis towards understanding children's music-play within the frame of art – of artistic expression and perception. To further elaborate on this, I shall include Vygotsky's art theory (1925/1971), because it aims at understanding art as a method for building life and aesthetics as the overcoming of content by form, as mentioned earlier. Those are two essential dimensions of art by which he acknowledges both the reference to life (without reducing art to a "function" in life) and the reference to aesthetic form (without reducing aesthetics to pure form and art perception to pure hedonic pleasure). I find those two dimensions quite relevant for the analysis of children's music-play activities, because those activities, as described earlier, incorporate references to life and play with aesthetic forms. To deepen this argument, it is necessary to briefly present some core ideas of Vygotsky's art theory and to further connect it to his play theory, since there are similarities to be found between those two dimensions of his theoretical work.

Vygotsky does not primarily view art as a way of cognizing life. Rather, it is a method for building life – a kind of concentration of life which proceeds from living with feelings to working with feelings. More recently, Hochschild (2003, 2008) has suggested that *emotion work* is an important part of how people manage emotions by trying to change the degree or quality of an emotion or feeling. She indicates that the effort to work with one's emotions is quite a common part of human conventional life. In Vygotsky's art theory, art builds on the idea of an antithesis of emotions (1925/1971). Greatly inspired by both Aristotle and Freud, he considers this emotional work a process of *catharsis*, where certain difficult feelings are being transformed into opposite ones, and thus the artists find some emotional relief in the overcoming of difficult feelings which may be reactions to, for example, hard life conditions. For instance, he describes music and poetry as having a common origin in heavy physical labor and the stress created through labor. Songs, he analyses, "express the thoughts of the workers about labour itself, its course, its gear, and so forth, as well as their joys or sorrows, their complaints about the hardness of the work and the inadequate pay; they address a plea to the owner, the supervisor, or simply to the spectator" (Vygotsky, 1925/1971, chapter 11, p. 6).

In these origins of lyrics and songs he sees the peculiarity that the songs as they express the feelings of pain and hardship which must be solved by art are an essential part of labor itself. However, lyrics and songs are being detached from labor – a thought similarly found in Wartofsky's idea of tertiary artefacts, which become objects of human action and reflection themselves - and begin to exist as independent objects of activity. Through this detachment, art incorporates the emotional elements of pain and hardship, which was initially generated by labor. It is a core idea of Vygotsky that art, even when it is completely separated from labor, has maintained the same essence of building life. Art still must organize social feelings and give relief to human emotional life. From the very outset and throughout the history of art, he finds that art is a powerful tool in the struggle for existence. Art is not just there to make us happy or experience wellbeing while perceiving it; it is there to offer opportunities of catharsis which help experience, overcome, and control feelings. Great art is art which is appreciated for years, or even centuries, for those qualities of enabling humans to overcome feelings, to resolve and conquer them.

By stressing the cathartic essence of art experiences, Vygotsky definitely *considers art reception a creative act*. Art is born in the work of trying to overcome feelings, and so art is a "dialogue" between the artist and the perceiver. Perception of art requires creativity. He writes:

"[I]t is not enough to experience sincerely the feeling, or feelings, of the author; it is not enough to understand the structure of the work of art; one must also creatively overcome one's own feelings, and find one's own catharsis; only then will the effect of art be complete" (1925/1971, chapter 11, p. 10). And further: "The melting of feelings outside us is performed by the

strength of social feeling, which is objectivized, materialized, and projected outside of us, then fixed in external objects of art which have become the tools of society [...]. Art is the social technique of emotion, a tool of society which brings the most intimate and personal aspects of our being into the circle of social life" (ibid., p. 11).

Art is essentially social; it is the social activity which individuals transform emotionally through aesthetic art experiences. Even though art does not directly generate a practical action, it does prepare the individuals for such action - it creates the opportunities of relating emotions to will. Vygotsky argues that art confronts us with more life phenomena than those we would actually experience in an everyday life with no access to art, and it offers us future action possibilities. Those possibilities find its sources in the two kinds of affect that art can generate - namely the *co-affect* (the *with*-feeling, e.g. with reference to a character or a performer) and the because-of-affect (our own affects which are caused by the character or the performer, but may be different from the affects expressed by the character or the performer). The co-affects and the because-of-affects allow for the individual to experience him/herself and his/her human value as reflected in someone/something else. The essence of Vygotsky's art theory, hence, is that through art, the individual feels and experiences, to a more intense degree, what it means to be a human being. This intimate connection between the individual's feelings and the object perceived finds its expression in imaginary activity which can be viewed as an *aesthetic response* created on the basis of art perception. With his idea that art experiences are based on emotional antitheses, aesthetic responses are composed out of contrasting elements which are joined into a unit of content and form. The aesthetic response lies within the field of delay between experience and action, and so art offers opportunities for the individual to explore contrasts, mixed feelings, and emotional responses without needing to directly act upon them. The artist, he says, always overcomes content with form. Rhythm, for instance, is a method of expressing feelings in terms of time. Rhythm itself is a formal element which is capable of generating the affects represented by it.

Vygotsky thinks that a work of art always contains an intimate *conflict between its content and its form*. The classical comedy may serve as an example, because the content – human weaknesses, such as failing attempts to live up to narrow social norms or to appropriate an attractive social position in society – is contrasted by the serious appearance and self-understanding of the characters. This content-form conflict usually makes people laugh (of themselves and of human conditions of life). The catharsis experience is achieved by means of the form, because it "destroys" the content. In the case of the comedy, laughter "destroys" the social anxiety and alienation that people may experience in life. The "destructive" element refers to the catharsis process, during which difficult feelings are overcome. Aesthetic form is not a simple but a rather demanding reproduction of reality. Lyrics, for instance, require attention and focus in order to understand the elements that are transformations of ordinary language use.

#### Aesthetic learning and aesthetic play

Now, my thought is that one might regard the children's music-play activities as a play with art, i.e. a play with aesthetic experiencing similar to Vygotsky's ideas of art reception understood as a creative process contributing to building life. The particular developmental opportunities of the music artefacts and music technologies apparently lie in the interweaving of play and art elements with the children's life-worlds as cultural and societal beings. Through these intense and shared music activities they do not simply practice specific skills such as singing and dancing (which they do also, of course). They first of all play with their own developmental processes of change and societal becoming and through this play they get into contact with various important aspects of cultural praxis and values and turn them into personally meaningful repertoires of regulation of action and feelings. As Huizinga (1950) remarks, the contrast between play and seriousness is inadequate. Children are building their own lives and do that, among other things, by the use of available music technologies and artefacts. Like the understanding of art is a kind of reproduction of reality, there is a reproductive or coproductive element in music-play. Furthermore, there is an element of *learning* about aesthetic experiences. The aesthetic experience works on the basis of a system of form elements, with which the individual deals, and so aesthetic learning can be viewed as developing aesthetic skills which emerge and grow as the individual meets the work of art (form elements) by emotional responses. Considering how serious and important Vygotsky believes art to be in human cultures, children's music-play activities should be regarded as quite important ways of *building life*.

Music-play activities can be understood as a way for children to work artistically with important life themes that may have reference to more complex issues, such as themes that refer to general moral and ethical standards, or themes that refer to the children's own social life-world and their social situation of development - perhaps their bridging between being a child and becoming an adolescent. Experiencing and acting out the dramas and the intensity of rhythmic popular music seems to be a play with emotions essential to the children's existential becoming, the dramas of their lives and the overcoming of difficult feelings in a playful way. Such a view resonates also the founding theoretical-methodological idea formulated initially in the article, that our analytical focus needs to lie on the children as societal agents, with own meaningful actions, and with own perspectives on available activities and on participation in available activities in their life. If this is the case – following the strong emphasis that Vygotsky puts on the role of art in society - the music-play activities may have utmost fruitful developmental potentials for the participating children. Its developmental resources move beyond the local and beyond the immediate character of the activities.

Playing with possible worlds synthesizes "what is" with "what might be(come)"; that is, possible worlds reflect everyday life in transformed ways by help of imagination and as-if/what if activities. Hence, playing with possible worlds may be a "step" into the future of the individual. According to Lindqvist (2002), children have a dramatic relationship to what surrounds them; they dramatize what is relevant to them in existential terms, and the aesthetic form of children's play grows out of emotions that are connected to the fantasies that make up the play.

Against this background of the seriousness of playful activities, music and songs seem to have a special form language, which become an important part of the playing with music; the lyrics use artistic elements to express the emotional themes of the artist. There are formal elements like keys, rhythm, pause, tension, relaxation etc., which mediate the content of the song and the music. Dancing the song is a way to meet the music's form elements and the content expressed by them through another medium (dance) with its own form elements. Viewed from the outside, building up a dance performance, for instance, may just look like a temporal construction of dance elements. However, in the case of the children's dance performance in observation 1, the formal dance elements have clear reference to the content of the song. The formal dance elements are a way for the children to *create a connection between two art-forms and a shared content*.

#### The interwoven emotional positions

While creating the dance performance, Nadia, Maria, Caroline, and Monica also seem to be dealing with the art-form of music and its form language. However, they do not play with pure music form elements, but with popular songs and lyrics. This means that the form elements of the music are not isolated; they are tied to the lyrics, and they consequently resonate the content of it. As mentioned earlier, they transform sequences of lyrics into form elements of dance, linking feelings to bodily movements in order to symbolize the meaning of the song. The content of the song undergoes artistic transformation. This double stimulus (form elements of music and the content of lyrics) may likely appeal to the girls, because it resonates the range of preteens life experiences and skills. Being 10 to 11 years old, they are still in an early phase of learning about form/content dialectics, and they may find it easier to relate to lyrics which refer to worldly events and relationships, whereas relating to pure musical elements without the supporting lyrics probably is a more abstract and therefore demanding process. As for the four girls, the artistic experience of their music-play, I would suggest, emerges out of this double stimulus - that of identifiable content and of the form elements. I do see this double character of stimulation as a very important developmental potential related to music-play, something which bears resemblance to Vygotsky's concept of aesthetics as an overcoming of content with form. This is why I think of the activities as examples of *aesthetic play*.

While the second (sing-along) and the third (dance-along) observation are mostly examples of how the children play with art forms through imitation of others, the first observation exemplifies how children themselves create a performance for an audience. The activity seems to balance between play as a self-contained activity and purposeful practice of a performance. In other words, in addition to playing with music, the children are also playing with performance, in some ways similar to an actor playing her/his part. Vygotsky (1925/1971) writes that when an actor plays her/his part, s/he works with a duality of emotions experienced and represented by the actor. Once the actor has finished playing his/her part, s/he does not retain any of the feelings s/he has represented. Those feelings are all transferred to the audience. When relating this insight to children's music-play activities, it occurs that such a duality of emotions may also be at work when the children perform. Following the analysis of the present article, the music-play activities are meaningful to the children also at a personal level, and therefore they must also refer to themselves in their actions – performing must also be self-referential. Therefore, it seems necessary to add a third element, namely the actor/performer as his/her own audience. Building up a role or a performance is dialectically interwoven with processes of self-feeling and self-reflection (a dialectical "I-character" relationship), which in turn implies that being one's own audience somehow is part of performing. This means that the children must both "be" themselves and identify with the song/the artist that they build a performance around; consequently, they themselves are both actors and audience and they both experience and mediate the performance. Ergo, the children perform by inhabiting *three different positions* at the same time – that of the *artist*, that of the *audience*, and that of the *I*.

The different positions adding to the emotional work should, of course, not be regarded as a static unit. Rather, the children play dynamically on the edge of all of them, while balancing what they want to express with how they express it. Even when they sing along like in observation 2, or dance along like in observation 3, they need to imitate meaningfully rather than mechanically.

#### Conclusions

In the article, I have explored how the history of mass-production and mass-distribution of music artefacts and technologies such as CDs and DVD games may have importance in children's lives. The analysis has tried to balance between the large-scale phenomenon (mass-consumption of distributed popular music) and the small-scale phenomenon (the children's perspectives and the question of how popular music and the artists' performances are being absorbed actively and meaningfully into the children's lives). It has been argued that there is a dialectical relationship between the mass-phenomenon, which refers to market interests, and the children's use of and contribution to music as a distributed and marketregulated mass-phenomenon. Furthermore, the analysis shows how children's music-play activities are interwoven with their life-world and reflect, as well as prompt, various developmental themes such as bridging between childhood and



Figure 2: The subjective triple position of the child

adolescence or reflecting upon moral and ethical standards of human co-existence. As an essential part of the analysis, it has been suggested that some special qualities of music and dance as art-forms are being offered to the children via the massdistribution of music artefacts and technologies; the analysis has attempted to focus on those themes and their possibly important developmental potentialities. In other words, it has been argued that the seriousness of children's playful activities *and* the overall building of life, which, according to Vygotsky, characterizes art in defining ways, are the *combined dimensions* which constitute the special developmental potentials of music-play activities. In the analysis, some of the complexities of such activities have been presented; however, the analysis is certainly not exhaustive. According to such an overall understanding of the complexities of human life, one should not expect any simple causality between particular activities and "who" the children may "become". The analysis definitely tries to reject such a simple causal approach, just as it deliberately tries to get beyond the simple and non-dialectical "black-or-white" view presented in the beginning; a view which, at the best, leads to only limited insights into the role of artefacts and technologies in children's lives. Such a limited approach might suggest particular limited skills (dancing, singing, collaborating, performing etc.) to be a positive outcome of the children's music-play activities. The analysis of the present article does include such a skill perspective (aesthetic learning may serve as one example); however, it keeps its focus on how skills are meaningfully imbedded into the lives of the children and into their cultural and societal becoming. Even the simplest bodily (or other) skills seem to be imbedded in human existence.

#### References

- Bang, Jytte (2009): Synthetic phenomena and dynamic methodologies. In: Valsiner, Jaan; Molenaar, Peter C. M.; Lyra, Maria C. D. P. & Chaudhary, Nandita (Eds.): Dynamic process methodology in the social and developmental sciences. New York (Springer), p. 567–594.
- Bronfenbrenner, Urie (2005): Making human beings human. Biological perspectives on human development. Thousand Oaks (Sage).
- Gibson, James J. (1966). The senses considered as perceptual systems. Boston (Houghton Mifflin).
- Hedegaard, Mariane; Fleer, Marilyn; Bang, Jytte & Hviid, Pernille (2008): Studying children. A cultural-historical approach. London (Open University Press).
- Hedegaard, Mariane; Aronsson, Karin; Højholt, Charlotte & Skjær Ulvik, Oddbjørg (Eds.) (2012, in press): Children, childhood and everyday Life. Children's perspectives. Charlotte (Information Age).
- Hochschild, Arlie R. (2003): The managed heart. Berkeley (University of California Press).
- Hochschild, Arlie R. (2008): Emotion work, feeling rules, and social structure. In: Greco, Monica & Stenner, Paul (Eds.): Emotions. A social science reader. London (Routledge), p. 121–126.
- Holzkamp, Klaus (2012, in press): Musical life practice and music learning at school. In: Schraube, Ernst & Osterkamp, Ute (Eds.): Psychology from the

standpoint of the subject. Writings of Klaus Holzkamp. London (Palgrave Macmillan).

- Huizinga, Johan (1950): Homo ludens. A study of the play element in culture. Boston (Beacon).
- Ivaldi, Antonia & O'Neill, Susan A. (2008): Adolescents' music role models: whom do they admire and why? Psychology of Music 36(4), 395–415.
- Lamont, Alexandra & Webb, Rebecca (2010): Short- and long-term musical preferences: what makes a favourite piece of music? Psychology of Music 38(2), 222–241.
- Leontyev, Aleksej N. (1981): Problems of the development of the mind. Moscow (Progress).
- Lindqvist, Gunilla (2002): Lekens Estetik [The aesthetics of play]. Psyke & Logos 2, 437–450.
- Morton Jr., David L. (2004): Sound Recording. The life story of a technology. Baltimore (John Hopkins University Press).
- Russel, Philip A. (1997): Music tastes and society. In: Hargreaves, David J. & North, Adrian C. (Eds.): The social psychology of music. Oxford (Oxford University Press), p. 141–158.
- Schäfer, Thomas & Sedlmeier, Peter (2009). From the functions of music to music preference. Psychology of Music 37(3), 279–300.
- Schousboe, Ivy (2002): Et livsforløbsperspektiv på leg [A life-course perspective on play]. Psyke & Logos 2, 395–411.
- Schraube, Ernst (2009): Technology as materialized action and its ambivalences. Theory & Psychology 19(2), 296–312.
- Seitz, Jay A. (2005): Dalcroze, the body, movement and musicality. Psychology of Music 33(4), 419–435.
- Valsiner, Jaan (1997): Culture and the development of children's actions. Hoboken (Wiley).
- Vygotsky, Lev (1925/1971): The psychology of art. Cambridge (MIT Press).
- Vygotsky, Lev (1933/2002): Play and its role in the mental development of the child. URL: http://www.marxists.org/archive/vygotsky/works/1933/play.htm (date of access: 07.02.2012).
- Vygotsky, Lev (1998): The collected works of L. S. Vygotsky. Vol. 1. New York (Plenum).

- Wartofsky, Marx W. (1974): Picturing, modeling and representing: Science and art as modes of cognitive praxis. Four lectures sketching the groundwork of a program in historical epistemology. Manuscript version.
- Zillman, Dolf & Gan, Su-lin (1997): Musical taste in adolescence. In: Hargreaves, David J. & North, Adrian C. (Eds.): The social psychology of music. Oxford (Oxford University Press), p. 161–187.

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Jytte Bang is Associate Professor at the Department of Psychology, University of Copenhagen. In her research she is concerned with developmental psychology and developmental science with a focus on ecological and cultural-historical theories. She combines her interests in developmental processes with discussions of foundational issues in psychology related to the subject-object dualism. Especially, she is occupied with studying the child's reciprocal and developing relationship with his/her environment (individual-environment reciprocity) and with the theoretical issues that it raises, such as what is meant by "environment" (beyond "that which surrounds"), how can emergence of "newness" be studied in microgenesis (micro-ontogenetic relationship), and how can the concept of "self" make sense within ecological developmental theory. In 2006-2007 she was a visiting scholar at Clark University, MA, USA. She is a member of the research center SUBSTANce, which studies the reciprocity of subjectivity and standards in human life. She is an editorial board member of Culture & Psychology, Integrative Psychological & Behavioral Science, Journal of Anthropological Psychology, and Psyke & Logos.

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