Children's Improvised Vocalisations: learning, communication and technology of the self

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ABSTRACT The intention of this article is to explore, challenge and expand our understandings of children's improvised vocalisations, a fundamentally human form of expression. Based on selected examples from observation and recording in non-institutional settings, the article outlines how this phenomenon can be understood as learning and as communication. This is supplemented by suggesting a third possible approach which places these vocal forms within the frame of understanding implied by Foucault's term 'technology of the self'. This theoretical perspective entails recognising improvised vocalisations as tools used to 'act upon the self' in order to attain or reinforce a certain mental state or mood – happiness, satisfaction, anger or longing – in short, as a way in which children learn to know the self as a self. In line with a Foucauldian perspective is also a focus on the negotiation of power and how music serves as an empowering agent in children's everyday social interaction. Finally, informed by Vygotsky's approach to understanding the relationship between language and mental development, the author discusses the gradual disappearance of improvised vocalisations.

Introduction

Spontaneous improvised vocal expressions are something everyone who deals with small children has heard: playful musical doodling, endless repetitions of melodic phrases or creative new versions of known songs. They fascinate and amuse us, irritate and annoy us. They are regarded as noisy behaviour, charming play or beginning musicality. They are encouraged, restricted, laughed at or neglected. Many professionals as well as parents have noticed that improvised vocalisations comprise a major part of the ways in which children play, interact, communicate and entertain themselves. It is simply a dominating part of children's way of 'being in the world'.

This article explores, challenges and expands our understandings of this fundamentally human form of expression by bringing together perspectives from various fields: ethnomusicology, music education, music therapy and early childhood research. Following an introductory discussion of song as 'children's culture', I outline how improvised vocalisations can be understood as learning and as communication. A third possible approach places these vocal forms within Michel Foucault's 'technology of the self' (Foucault, 1986, 1988). This theoretical perspective is developed in the sociological study of music (DeNora, 1999, 2000). It is a recognition of improvised vocalisations as tools used to 'act upon the self' in order to attain or reinforce a certain mental state or mood. A Foucauldian framework focuses on the negotiation of power and agency, and how music may serve as an empowering agent in children's everyday social interaction. Finally, informed by Vygotsky's approach to understanding the relationship between language and mental development, I discuss the gradual disappearance of improvised vocalisations.

Background

A number of music educators, musicologists, music therapists and psychologists have been fascinated by the phenomenon of spontaneous improvised vocal expressions in young children, and tried to describe and analyse it in different ways. This fascination seems based on a kind of amazement, an interest in trying to explain how children apparently can sing in ways they have never learnt, at least not from adults. Ultimately, this touches upon challenging and complex issues relating to the universality of human expressions. Scholarly approaches point in various directions. Among various psychological approaches we find an interest in the semantic and communicative aspects of vocalisations in parent-child interaction (Trevarthen, 1993; Papoušek, 1996; Trevarthen et al, 1997) as well as a general focus on mental development and perceptual learning (Dowling, 1999). In music education research improvised vocalisations have traditionally been understood as early attempts at mastering a musical expression (e.g. Swanwick, 1988). Campbell's (1998) ethnography of children's song points toward a reconceptualisation of music education which recognises children's own musical expressions as valid and worthy of attention in the school curriculum. Several Scandinavian scholars (Sundin, 1978, 1998; Bjørkvold, 1985, 1990, 1992; Nielsen, 2001) argue against using traditional parameters of musicality (mastery of pitch, rhythm and vocal control) for interpreting the improvised vocalisations of early childhood. Bjørkvold emphasises social and relational functions, regarding 'spontaneous song' as a paralinguistic communication among children, highlighting creativity, improvisation and the particularity of a 'children's culture'. Similarly, perspectives in early childhood research (Young, 2004, 2006) stress the need for recognising the improvised vocalisations of children as comprising a valuable phenomenon in itself, without suppressing it by imposing on it the rules and structures of 'mature' music education.

Points for discussion in this article centre around four illustrations. The four video clips are selected from a body of research material recorded for a project based at Oslo University College. They show children – my own children and their playmates – in home settings beyond the direct influence of adults. The examples are selected to show a few of the different forms and social functions typical of improvised vocalisations.

Video 1

http://www.wwwords.co.uk/ciec/content/video/9/4/Knudsen_Video_1_CIEC_9_4.wmv

Two six-year-old boys in the garden are engaged in playful competition to see who can make the loudest, most penetrating vocal sound. They alternate making calls – or screams – at the very top of their voices. After a while the sounds fasten on a repeated rhythmical phrase, a marchlike **ri**-ri-ri-ri **ri**iiiiiiii. Still calling, they climb an old apple tree as if to see who can make the 'highest' sound.

Video 2

http://www.wwwords.co.uk/ciec/content/video/9/4/Knudsen_Video_2_CIEC_9_4.wmv

A three-year-old girl is in the kitchen eating her favourite cereal, humming contently by herself in continuous musical doodlings with no discernible rhythm: *mjam, mjam, mjam, mjaaaaammm, mjammjam*, shifting between rising and falling lines, between short and long melodic fragments. Occasionally some line from a children's song may be recognised, followed by new variations and unrecognisable improvisations.

Video 3

http://www.wwwords.co.uk/ciec/content/video/9/4/Knudsen_Video_3_CIEC_9_4.wmv

A four-year-old girl is playing in the living room while singing variations on the melodic phrase *so mi la so mi* (Figure 1), the supposed childhood *ur-song* (Campbell, 1998, p. 194) or *teasing formula* (Bjørkvold, 1992, p. 71). Her words are describing her own actions: 'I am pushing the chair so it

won't be so dark here', 'I am playing this' (xylophone). An adult answers her and engages in vocal dialogue using the same melodic formula.



Figure 1. Ur-song or teasing formula.

Video 4

http://www.wwwords.co.uk/ciec/content/video/9/4/Knudsen_Video_4_CIEC_9_4.wmv

A seven-year-old girl is dancing around in the kitchen, waving a drawing in the air while singing her version of a phrase from a Mozart symphony (Figure 2). 'I've made a drawing, made a drawing, take a look, I've made a drawing, made a drawing, take a look!' (In Norwegian: 'Jeg har tegnet, jeg har tegnet, bare se pål') As in Mozart's original, with each repetition the phrase begins on a higher note. She finishes with her own powerful coda, 'Look here now!', slamming the drawing on the table in front of her playmate, who apparently is overwhelmed by the performance and unable to make an adequate response.



Figure 2. Mozart, Symphony no. 29 in A major. Violin part, beginning of first movement.

As these examples indicate, improvised vocalisations come in many forms, often difficult to categorise unequivocally as either speech or song. We can hear musical doodling, repetitive chanting, melodious calling and rhythmic shouting. Children will engage in wordless utterances that correspond analogously to their movements while playing or dancing, or they use 'song-words' – small melodic formulas in which specific rhythmic patterns and musical intervals carry a particular semiotic significance unmistakably signifying teasing, mocking, calling or comforting. Melodic fragments may be borrowed from standard songs and supplied with improvised lyrics, thus taking on a new significance when adapted and applied by a child.

In the following discussion, the video examples are used as references and illustrations for different approaches to understanding improvised vocalisations – as an integral part of 'children's culture', as learning, as communication and as a technology of the self.

Children's Culture

In Jon-Roar Bjørkvold's (1990, 1992) pioneering work, 'spontaneous song' is intimately linked to the understanding that children relate to a *children's culture* with values, ideas, norms and modes of behaviour that are cultivated and transmitted primarily among children, independently of the adult cultural world. Improvised vocalisations are understood as a phenomenon emanating from an innate human need for vocal expression, shaped and developed in accordance with the particular rules of children's culture.

One of the few ethnomusicologists who has bothered to explore the vocal expressions of children, John Blacking (1967), viewed the world of children as a particular 'subculture'. During his famous fieldwork among the Venda of South Africa, Blacking acquired a growing interest in songs performed among children and was initially confused by their particular structure and musical composition. Blacking was 'puzzled by the apparent lack of relationship between the styles of children's song and other Venda music' (1967, p. 28). The 'logic of many Venda children's songs remained a mystery' (Blacking, 1967, p. 29). Eventually he reached the understanding that children

could very well be regarded as a particular social group, and that children's music ought to be understood on the conditions of child culture: 'There is no doubt that many Venda children could perform adult music, but they do not do so because each social group has its associated style of music, its audible badge of identity' (Loc. cit.).

Children, anywhere in the world, choose and select material from the sounds that surround them and elaborate vocally on them in their own ways. When the little girl eating her cereal (video 2) composes her own floating, arrhythmic accompaniment to her meal, what counts is not a question of what adults might call aesthetic qualities of song, but whether the soundscape she constructs is effective in creating and maintaining her own enjoyable experience. Similarly, when a child sings the teasing formula to a playmate, what matters above all is whether the utterance works in a social context – whether the wordless message comes through with the intended force and expressive quality. Evidently, many of the improvised vocal sounds of children are *humanly organized* (Blacking, 1973, pp. 3-31) in ways that are different from the ways in which adults organise sounds into music. This is not about being in time with a metronome or in tune with a tuning fork. It is about being in time with life and in tune with the moment.

Obviously, the social and musical world of children is not isolated from the world of adults. There is a close interaction between them. As all cultural groups appropriate material from the cultures with which they interact, children sample, borrow, discard and retain elements from adult music cultures within their reach. The girl showing off her drawing (video 4) has picked up a simple repetitive phrase from the repertoire of 'adult' classical music, and integrated it into her own expressive social context: a musical empowering of the verbal and physical presentation of her drawing.

Learning

This article is an attempt to further understand and interpret these vocal utterances. How can we best approach the improvised vocalisations of children in ways that adequately cover their varied individual and social functions? In the following section I outline three different perspectives which may contribute to our understanding of the phenomenon.

First, the improvised vocalisations of children can be seen as part of a musical learning process, similar to learning to talk or walk. Vocalisations can be interpreted as steps on the way to mastering the musical expressions of the adult world. With this view, we might expect that children would first engage in simple songs with small intervals or easy rhythms, and then little by little proceed to more difficult material. A major part of the scholarly interest in children's song has focused on their ability to develop singing as a skill, to recognise musical patterns, to discriminate pitch and to reproduce intervals and composed music (e.g. Swanwick, 1988, pp. 52ff.; Dowling, 1999). This focus is embedded in music education methodology for children in many parts of the world. A substantial amount of the teaching material made for small children is restricted to limited melodic scales, small intervals and simple rhythms, progressing gradually as the children grow older. The prevailing tendency is to simplify and 'scale down' material and methodology meant for adults and older children. Typical examples can be found in the globally influential methodologies founded by Zoltán Kodály (Choksy, 1974) and Carl Orff (1977), as well as in music education within the Rudolf Steiner schools.

It would, however, be limiting to understand improvised vocalisations only as an effort aimed at developing musicality understood as technical skills and capacities. If spontaneous vocalisations were regarded as musical learning in this narrowly defined sense, children would be expected to first elaborate on simple songs with small intervals and uncomplicated melodies, eventually proceeding to more difficult material. Research based on empirical observations of the vocal expressions that children actually engage in by themselves challenges this assumption. Blacking (1967), Sundin (1978, 1998), Bjørkvold (1992), Campbell (1998) and Young (2004) all point to astonishing rhythmic and melodic complexities, executed effortlessly by children with ease and nonchalance. The improvised vocalisations of children are not always easier than adult songs and children do not necessarily learn the simple music first. Thus, it does not represent a musical *gradus ad Parnassum* directed towards adult culture. It is not so much about becoming an adult, as it is about being a child.

Children's Improvised Vocalisations

When children engage in vocal play with sounds and melodies, when they disconnect, rework, repeat, and remix musical material, there is obviously an aspect of learning in it. It might, however, be appropriate to regard this learning from a wider, experiential and social perspective. Through vocalisations children are exploring their musical body and its capacities, they are learning about relationships between sounds and emotions, and – through the reactions their utterances are met with – they obtain knowledge and understanding of their surroundings and their self in community with others. In short, making improvised vocal music is a key way in which children learn to know the self as a self.

Communication

A second reading regards improvised vocalisations as a kind of communication – a precursor or parallel to verbal language. Trevarthen (1993, p. 129) describes vocal and physical interaction between infants and adults as the expression of an innate communicative musicality forming the basis of early 'protoconversations'. Papoušek (1996, pp. 90-95) points out that infants and their carepersons intuitively employ a 'prelinguistic alphabet' comprising meaningful vocalisations with a variety of melodic contours. Bjørkvold (1992, p. 80) describes the improvised vocalisations of children in preschool institutions as a system of sounds establishing a language of musical codes, a *mother tongue of childhood*.

Whether we consider infants or children in preschool institutions, it is evident that a command of this *paralanguage* is an essential part of a child's social and communicative competence. Even a wordless phrase can have a precise semiotic meaning. Most children, at least in the western world, are familiar with the 'teasing formula' (video 3) and understand that it often will entail some kind of mockery. In the example with the boys in the tree (video 1), however, the message conveyed by the musical formula they perform is of a more complex and open-ended kind. The repeated rhythmical phrase **ri**-ri-ri **ri**iiiiii is hardly a specific code recognised by both children, but it still serves as a musical message situated in this particular context. The wordless message transmitted between the boys – and possibly to other spectators who might hear it – can be understood as a communication of power, status, competition or sheer joy.

A musical phrase may also serve to empower any message uttered in words (Young, 2004, p. 65; 2006, p. 274). When words are supplied with melody and rhythm new layers of meaning arise, enhancing the communicative and expressive power of the child's language. In the busy and often noisy world of small children – as in a group of preschool children in free play – the timbre, the dynamics, and the melody all play a fundamental part in their vocal communication. When the girl is showing off her drawing (video 4), evidently, the force of the message is enormously enhanced by the totality of her expressive actions - by her dancing as well as by the melody she applies. In comparison, a spoken or shouted, 'I have made a drawing, look!' wouldn't have a fraction of the intensity, vitality and power. On the surface, the utterance, or speech act (Searle, 1991) involved here is assertive (I've made a drawing) and directive (Take a look!), requesting the other girl to look at the drawing. Still, the musical and physical performance in which it is embedded supplies the act with additional layers of meaning – dominance, a command of space, and, evidently, a bid for superiority. Similarly, the boys in the tree (video 1) use the power of their piercing wordless vocalisations to temporarily mark off a territory in the garden by taking command of the aural space surrounding them. In such everyday power negotiations between children as well as between children and adults, improvised vocalisations are integral parts of the social interaction taking place.

Children use their own idioms and practices to create and negotiate power. Power is not exclusively linked to social structures – to fixed binary oppositions or hierarchies – but is produced, exercised and manifested through everyday discursive actions (Foucault, 1984). Power is everywhere and comes from everywhere (Foucault, 1984, p. 93). It is exercised from innumerable points and is immanent in knowledge relationships (Foucault, 1984, p. 94). The ubiquitous presence and fluidity of power negotiations is obvious in the social lives of children. Growing up invariably means getting involved in countless power struggles. Children struggle to be seen, to gain control, to be recognised, taken care of, acknowledged and respected, and in order to reach

these ends they employ their musical knowledge and capacities to empower themselves as agentic subjects in social life.

Technology of the Self

At the same time, improvised vocalisations are not necessarily communicative. In many cases, we consider the individual practice of a child on her own, or at least not engaged in any type of communication with her surroundings. Susan Young (2004, p. 64) describes groups of one-and-a-half- to three-year-olds where the dominating part of their spontaneous vocalising is not part of any direct communication, either with other children or with adults. Such observations call for a third perspective, placing the improvised vocalisations of children within the framework of a 'technology of the self' – an influential notion in the sociology of music and current discussions on music and culture. Tia DeNora's inquiries into the everyday experience of music provide useful elaborations on the term (DeNora, 1999, 2000), and are drawn on here to suggest further possibilities for reading young children's spontaneous improvisations.

Contemporary use of the term 'technology of the self derives from the later writings of Michel Foucault, who describes it as a set of techniques and practices that can be deployed to modify, affect, put forward or even 'construct' the self (Foucault, 1988, p. 18). These techniques are historically situated within power relations; enabled or constrained by the available discourses. In accordance with the principles of Greek philosophy drawn upon by Foucault, this process contains obvious self-therapeutic overtones. Concern with, and care for, oneself is a device of practical reason which makes possible the social construction of personal identity. Technologies of the self:

permit individuals to effect by their own means or with the help of others a certain number of operations on their own bodies and souls, thoughts and conduct, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection or immortality. (Foucault, 1988, p. 18)

According to Foucault, common understandings of Greek philosophy have emphasised the Delphic principle 'know yourself' at the expense of the principle of actively taking care of oneself and reflectively engaging with your own thoughts (Foucault, 1988, pp. 24-25). Technologies of the self suggest an instrumental, utilitarian relation to cultural objects. The human being is understood as an active agent or *actor* using music – or any other cultural artefact – as a tool to reach certain aims. Consequently, the emotional and 'meaning-building' effect must be seen as the result of a particular mental strategy.

The improvised vocalisations of children might well be regarded as tools to 'act upon the self'. Children draw upon the available enabling discourses and engage in music with a specific aim – to generate or interact with an emotional experience. Improvised vocalisations are used as a resource in the process of developing and expressing emotions. They have transformative power with the potential of changing a state of mind. They are part of an individual, often egocentric, mental exercise – a way of initiating, maintaining, reinforcing, or altering certain moods (e.g. satisfaction, content, anger or longing). This might even be regarded as a 'self-therapeutic' activity. The vocal utterances of the little girl eating her cereal (video 2) are not intended for others – they are intimately linked to her activity and the state of mind she is in and desires to stay in. When she enjoys eating something good in a relaxed mood, she enters this special space where her vocal utterances are an integral component. She adds a soundtrack to her own actions, creating a satisfying multi-sensory experience.

Tia DeNora (2000) suggests that performing or listening to music in almost any circumstance of daily life can function as a personal resource for articulating and stabilising self-identity (DeNora, 2000, p. 68), making music an 'ally for world-making activities' (DeNora, 2000, p. 40). DeNora's discussion is primarily concerned with adults, who consciously control their auditive environment by listening to different kinds of mediated music in the home, in the car or on a portable music player. Through such listening activities, adults are able to alter, transform and decorate their surroundings, thereby changing or influencing their emotional state in some desired direction. Many of us employ various kinds of music listening as a technology of the self in our daily emotional self-regulation. We consciously use music listening for a variety of purposes – to get in a good mood before going to a party; to stimulate concentration; to provide pleasant accompaniment to monotonous tasks; to relax after an exhausting day at work; to ease feelings of loneliness; to rekindle a fond memory from our childhood.

Small children rarely have the same active relationship to recorded and mediated music that adults have, and obviously, their possibilities are more limited in this respect. For a child, the handiest tool for altering her auditive environment is using her own voice. Parallel to the ways in which adults employ recorded music, a child's own song can be regarded as a self-regulating mental strategy aimed at certain goals. It concerns the generation, stimulation, maintenance or enhancement of a mood or state of mind – concentration, melancholy, excitement or joy. By 'singing herself' into a certain mood the child is engaged in music in pursuit of a specific goal – the generation or cultivation of an emotional experience. The child performs a self-regulation of mental energy in relation to a desired state of mind. In this manner, improvised vocalisations are tools in the development and expression of emotions.

Consequently, a technology of the self that employs musical material has to do with an individual mental state or modality. This act is not so much a clear or conscious pattern of thought, but is rather the development of moods and sensations through a process referred to as 'intonation' (Paton, 2001). I argue that some of the more introvert – floating and improvisational – forms of children's vocalisations are concerned with the construction of an 'altered state of consciousness' (Bonny & Summer, 2002; Aldridge & Fachner, 2006). Thoughts and vocal expressions are organically linked together beyond conscious control in a 'liminal' psychological state (Ruud, 1995). This intrinsically motivated experience is a close parallel to the feeling of 'flow' that adult musicians and music listeners may refer to when their playing or listening experience transports them to a pleasurable self-contained mental 'space', void of logic and rational thought (Csíkszentmihályi, 1990). For small children, with less experience in manipulating their auditory environment by use of musical instruments or mediated music, access to this liminal state may be provided through their most accessible musical instrument – self-initiated vocal improvisation.

The Disappearance of Improvised Vocalisations

Many of the studies referred to in this article point out that these spontaneous vocal utterances gradually disappear as children grow older and approach the world of adults. On the one hand this might be explained as the 'natural' mental development of a child. The atrophy of improvised vocalisations is parallel to the diminishing 'egocentric' verbal monologues of children. According to Jean Piaget, these tend to disappear around the age of seven or eight. Piaget explained this as the transition between the pre-operational and the concrete-operational phase in the psychological development of the child (Piaget, 1959, pp. 256-257).

On the other hand, the reduction in improvised vocalisations might also be attributed to changing social contexts. As children enter the more structured life imposed on them by the school system and increasingly face the constraining discourses of adult culture, the rich and varied spontaneous song of childhood is restricted and subdued. Many of the most widespread methodologies of music education imply a serious limitation of a child's musical and emotional register. Children learn to restrain their vocal expressions and adapt in accordance with the conventions of formalised music education. Singing lessons generally pursue an ideal vocal timbre and precise reproduction of tonality and rhythm (Young, 2006, p. 272). The school curriculum enforces a compartmentalisation of music with its appropriate time – the music lesson – and space – the music room (Campbell, 1998, p. 35). As they grow older, when children make improvised music with their voices and bodies in settings other than music lessons – such as in the cafeteria or on the school bus – they are increasingly reproached and admonished.

There is, of course, great variation in this respect, depending on the child's environment and the character of the educational institution that the child attends. Outside the classroom, during breaks or in the playground, it is not uncommon to hear different forms of improvised vocal activity, even among older children. Many parents have surely witnessed ten- to twelve-year-olds using a hairbrush as a microphone and imitating popular bands, making up their own lyrics as they go. In adult culture there are also various traditions that cultivate spontaneous vocal expressions. We may find it in African-American religious communities in the United States and among the *griots* of West Africa. At Norwegian folk music gatherings you can hear *stevjing* – vocal

performances featuring spontaneously composed verses, often with a provocative or insulting content. Similarly, in the MC battles of rap music, participants compete through improvised musical duels, sometimes based on words or expressions provided by the audience.

Perhaps the improvised vocalisations of childhood are not completely extinguished. Lev Vygotsky (1962) challenges Piaget's theories and asserts that the egocentric speech of childhood does not disappear, but simply goes underground and turns into a part of inner mental monologue. Similarly, we might claim that as the child matures, improvised vocalisations are internalised and become part of our 'inner song'. Obviously, with the exception of emotionally heightened settings such as parties or football matches, in most societies, we rarely see adults spontaneously bursting into song, or creatively adapting familiar melodic phrases to the situation of the moment. Far more than children, adults are limited by social as well as personal constraints. Still, I am quite sure that most adults, whether they engage in music on a daily basis or not, are acquainted with some kind of inner music, melodies or melodic formulas, in their mental lives. It can be an inner humming, or fragments of a well-known melody repeated for self, in the car, in the shower or during a boring meeting.

Vygotsky considered the structures of the inner mental monologue that humans continuously carry out as reflecting the structures of language (Vygotsky, 1962, pp. 44-51, 149). This connection is not innate, but is established during the early years of childhood. Language, which primarily is an instrument of social relations, is transformed into an instrument of internal mental organisation, giving rise to inner monologues of verbal thought. Based on my own observations of children's song, I would argue that the inner monologues may also be of a musical kind, reflecting structures of the vocal musical practice a child engages in. For children, the boundary between their inner mental world and their outer, expressive world is more undefined and transparent than is the case for adults. Thus, when we hear the repetitions, improvisations and elaborations of children's song, they can be understood as indications of what children are musically thinking. They are reflections of how music is elaborated mentally, in continuous internal monologues of playful thought – the 'songs in their heads' (Campbell, 1998).

Conclusion

As demonstrated in this article, the improvised vocalisations of childhood comprise a rich and varied phenomenon, with implications relating to various fields of significance to early childhood – cognitive and linguistic development, music education and psychology. A comprehensive approach would recognise that improvised vocalisations concern processes of personal development and learning in the widest sense, that they have a social function as communication and manifestations of power, and that they may function as technologies of the self – enabling strategies involving both self-expression and the elaboration of mental states.

There are important implications for the education of preschool children and our everyday interaction with children. Parents as well as preschool educators could become more aware of the musical world of children, and listen intently to their spontaneous vocal utterances. The improvisations could be taken seriously as components of children's own culture. Above all, this article calls for the respect and recognition of these modes of expression as primarily belonging to the particular social world of children. At the same time, there is no reason why adults should not approach, encourage, and nurture this wonderfully varied vocal expression. This article calls for creative musical communication with small children, in kindergartens, in schools and in the home. Playful musical interaction with children can lead to a greater awareness of their creative potential and a deeper understanding of the musical nature of children.

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