Musical concepts as explanation for children's musical preference in primary school ageⁱ

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Background. Building on Behne's (1975) construct of musical concepts (beliefs, attitudes, information, etc. held by an individual concerning a musical object), the study explores the power of such concepts for explaining the development of musical preferences in primary school children. This ties in with the assumption that growing stylistic sensitivity is relevant to age-related changes in "open-earedness" (Hargreaves, 1982, p. 51; i.a. Gembris & Schellberg, 2003).

Aims. The following questions are investigated: Can musical concepts be found in primary school children? If so: How do these concepts develop during primary school? Are musical concepts important for the evaluation of music?

Methods. As part of the longitudinal study SIGrun (Busch et al., 2013), 31 children were interviewed in small groups about their musical preferences at two interview points (in second and fourth grade). A content analysis was conducted focusing on the development of musical concepts. The results are triangulated with earlier findings about the development of musical preference ratings (Busch et al, 2014) measured by a sound questionnaire as part of the SIGrun study. The analysis follows an exploratory design.

Results. The interview analysis discloses musical concepts used by children to describe their musical preferences. A change in relevance of genre-specific concepts and of the gender-specific concepts of *boys' music* and *girls' music* is observed between second and fourth grade. It will be argued that musical concepts have explanatory potential for age- and sex-dependent differences observed in the sound questionnaire.

A musical concept is understood as "the sum of beliefs, attitudes, information, prejudices, etc. held by an individual concerning a certain more or less defined musical object" (Behne, 1975, p. 36; own translation). Thus, such musical objects form the central reference point of musical concepts. Musical objects can be seen as music genres or epochs, musicians or composers, as well as music instruments and music listener groups (ibid). The latter two will not be focused in this article. According to Behne musical concepts around these objects can consist of cognitive, and affective evaluative, associative elements. In this way they exceed attitudes placing them into a broader associative network that is supposed to be also relevant to behavior (ibid.). Building on this definition of musical concepts and on the notion that such concepts are at the same time the result of old musical experiences as well as the basis for new ones (cf. Behne, 1987, p. 225), this study explores the potential of musical concepts to explain musical preferences in primary school age (six to ten years of age).

This ties in with the assumption of growing stylistic sensitivity being relevant to agerelated changes in so called "open-earedness" (Hargreaves, 1982, p. 51), the openness of young children towards "forms of music regarded by adults as unconventional", which is supposed to decreases with age (ibid.). Hargreaves (1982) sees this decrease in light of acculturational processes and growing sensitivity to stylistic categories. This view is supported by his finding of an age-dependent increase in the usage of stylistic labeling observed in children between 6 and 15 years of age when describing differences between two pieces of music (ibid.).

Investigating the notion of open-earedness and its decrease, several recent cross-sectional as well as longitudinal studies based on sound questionnaires have found significant age-related changes in primary school children's musical preferences with respect to broad stylistic categories, namely classic, pop and ethnic/avant-garde (Gembris & Schellberg, 2003; Kopiez & Lehmann, 2008; Louven, 2011; Busch, Schurig, Bunte, & Beutler-Prahm, 2014).

The latter of the above mentioned studies was conducted as part of the joint research project SIGrun – Studie zum Instrumental-unterricht an Grundschulen. Designed as a long-term study, qualitative and quantitative data were collected between 2009 and 2012. The sub-project on musical preferences forms the background for this paper in two ways. First, the analyses presented are based on the qualitative data of the SIGrun project. Second, the results of these will be used to explain further findings from the sub-project that for this reason will be briefly summarized in the next paragraph.

Combining eight existing musical examples used in former studies to represent the three above mentioned stylistic categories (Gembris & Schellberg, 2003) with eight specially examples, music composed children's preferences (n=735) were measured at four points of measurement (one in each of the first four school years; Busch et al., 2014). On the basis of children's preference ratings, music examples could be grouped as three latent factors (classic, pop and ethnic/avantthrough factor analysis in the measurements of first to third school year. This supports the view that already first have music specific stylistic categories in mind that are relevant to their preference ratings. Also significant differences in the factor classic could be observed detecting boys' mean preferences as substantially lower than those of girls. Boys' and girls' mean preference ratings for all three factors decrease during the first three school years, but only boys' mean ratings of the factor *classic* in third grade drop below the centre scale and thus can be interpreted as a negative evaluation. This factor structure dissolves in fourth graders' preference measurements being interpreted as an individualization of music preferences (ibid.).

Aims and questions

The aim of this study is to explore the potential of musical concepts to explain musical preferences in primary school age. Therefore Behne's (1975, 1987) notion of musical concepts was elected as a theoretical

framework. The following questions are investigated:

- 1. Can musical concepts be found in primary school children?
- 2. If so: How do these concepts develop during primary school?
- 3. Are musical concepts important for the evaluation of music?

Method

Research design

longitudinal study SIGrun (Busch, Schurig, & Bunte, 2013) provides qualitative and quantitative data. The development of children's (n=735)musical preferences measured by a sound questionnaire once in each of the four years of primary school has already been examined (Schurig, Busch, & Strauß, 2012; Busch et al., 2014). At two interview points (IP) a sub sample of children (n=31) were additionally interviewed in small groups of two to four children. First IP took place half term of second grade (IP 1) and second IP took place half term of fourth grade (IP 2). This paper presents the analysis of the interview-data and triangulates the results with those of the sound questionnaire. A summary of the results of the sound questionnaire analyses as important for this study is therefore given in the background section.

Interview participants

The sub sample of 31 interviewed children consisted of 15 girls and 16 boys. In IP 1 children were between seven and nine years (M=7.81:SD=0.48). Twenty-eight children from IP 1 were interviewed again at IP 2. Ages ranged between nine and eleven years (M=9.75; SD=0.43). The nine interview groups at each IP consist of children from five different schools that were selected from the SIGrun sample in order to represent large differences in their student structure according to socio-economic status and migration background. Furthermore, four of the five schools take part in a specialized music program called JeKi - Jedem Kind ein *Instrument*["], offering instrumental music

instruction. The fifth school specializes in sports. At IP 1 there have been two homogenic interview groups according to sex, one group with girls only and one with boys only. At IP 2 there was one group with girls only and two groups with boys only.

Data collection

The interviews were conducted following interview guidelines. These consisted of questions on children's preferred music, on two music examples taken from the sound questionnaire (one example composed to represent pop music and one example composed to represent classical music) and on music-specific gender stereotypes. The interviews took place in rooms of the children's schools. At IP 1 int erview length ranged from 18 to 30 minutes and from 33 to 40 minutes at IP 2 partially due to extended interview guidelines.

Interview analysis

Combining deductive and inductive approaches, structuring and summarizing techniques of content analysis (Mayring, 2010) were used in order to develop a category system. Some of the categories already detected in an initial analysis of IP 1 (Beutler-Prahm, 2012) were adopted and inductively extended within the framework of musical concepts and on the basis of the interview material from IP 2. Besides musical concepts, a second part of the category system captures preferences mentioned with or without a direct connection to concepts, such as preferences for volume, tempo, instruments, musical songs and bands. Evaluative statements about genres were grouped under the concept section.

The interview material of both IPs was coded according to the developed category system. coding the content dimension Besides captured in the category system, discursive character of the interview situation was minded by considering whether a child has brought up a certain statement or whether it has or might have followed statements already mentioned before. This is particularly important when looking differences between children in one interview

group, for example when comparing boys' and girls' statements.

Triangulation

According to a "complementary model of triangulation" (Erzberger & Kelle, 2003, p. 469) the results of the interview analysis on musical concepts are put in relation to the results of the analyses of the sound questionnaire from the SIGrun project already described in the introductory section of this paper. Assuming that the available qualitative and quantitative data shed light on different aspects the phenomenon of musical preferences, the analyzed musical concepts will be used to explain preference ratings observed in the sound questionnaire. Verbal preferences as the evaluative part of musical concepts are seen as the cutting point between musical concepts and preference ratings.

Interview analysis and triangulation follow an exploratory design, assessing the potential of musical concepts to explain children's musical preferences in primary school age.

Results

Concept Categories

The summarizing content analysis led to a categorization of musical concepts according to two levels of abstraction. On the lower level, categories represent single musical concepts. On the superordinate level, concepts were grouped under theoretical reasoning. All concepts or concept hints detected in the interview material of the first and second interview point (IP 1 and IP 2) are shown in Table 1.

Only few of these concepts were widely described in the interview material cognitive, incorporating evaluative and associative elements. Most of them are only hints towards the possible existence of a broader concept. If a child uses a particular word, such as "musical", "granny music" or "Turkish music" to describe a certain kind of music, this was seen as a hint towards a concept. Also if a child describes a certain kind of music - for example music of a musician or music heard in school - as if it had more or less the same attributes associated to it, this was accounted for as a concept or concept hint. Not only widely described concepts but also concept hints are of interest, because in many cases a concept or concept hint is not used in isolation, but forms an associative network in connection to others.

Superordinate	Musical concept
category	-
genre oriented	rock; classical music;
	pop; rap; musical;
	opera; hip hop; jazz;
	Schlager; rock'n'roll;
	hard rock; oldies; ballad
gender oriented	boys' music; girls' music
thematic oriented	ballet music; film
	music; love songs;
	computer music;
	Christmas songs;
	church songs
mood oriented	happy music; sad music
country or language	English; German;
oriented	French; Turkish; Polish;
	Russian; Spanish;
	Portuguese
musician oriented	Michael Jackson; Peter
	Fox; Pur; Black Eyed
	Peas; Justin Bieber
up-to-dateness and	charts music; old music
popularity oriented	
age oriented	granny or grandpa
	music; children's music
institution oriented	school music; JeKi
	music

Table 1. Musical concept categories as analysed in the interview material of interview point one and two.

The following comparison of the two interview points as based on Busch et al. (2014) focuses on four concepts most widely described in the interview material. These are the gender-oriented concepts of boys' music and girls' music that were also used independently of the explicit interview question, as well as the genre-oriented concept of rock music and an orientation towards charts music that were inductively detected. These concepts will be introduced on an inter-individual level and compared looking at differences between the interview

points as well as between girls' and boys' statements.

First interview point in second grade

At IP 1 most children differentiate between girls' music and boys' music with boys' descriptions of the concepts being more evident than those of girls. However children's statements add up to consistent characterizations of the concepts. *Girls' music* is supposed to be "nice and quiet" and "calm".iii characterized as Typically instruments like violin, cello and flute as well as female vocals are named. Boys' music is most often defined as incorporating electric guitar or "rock guitar" and drum set. It is also believed to be "rocking", "loud" and "cool". These most prominently characterizations of the concept of boys' music are practically identical to those of the genre-specific concept of rock music that was analysed independently.

In seven of the nine interviews children refer to rock music when depicting their personal preferences. Thus it is interpreted to play an important role for music evaluation of the second graders. Though gender stereotypical concepts were seldom used directly to talk about personal preferences, further analysis of verbal musical preferences reveal a tendency that boys are more oriented towards "their" concept. Whereas most boys in IP 1 show a distinct preference for loud and rhythmically accentuated music and instruments (drum set, drum, electric quitar), girls also state to like "medium loud" or "quiet music". Additionally girls name cello, flute and guitar most often as part of their favorite music.

Evaluating music (also the musical examples listened to during the interview) boys more often than girls refer to the concept of *rock music*. Analysing the structure of the interview conversations shows that boys predominantly express strong preferences for *rock music* at first, whereas girls – in the relatively few statements they made with respect to this concept – in most cases merely follow boys' statements in their liking for *rock music*. Noticeably only girls from the homogenic interview group (girls only) state that they don't like *rock music* very much.

Especially boys relate their positive evaluations of the pop music example listened during the interview to rhythmic instruments, rhythm or the concept of rock music: "I liked this one better, because it is more rocking" (student 2, interview 1), "I think the rhythm is cool" (student 2, interview 8). Phrases like these stated by girls are very rare and do only follow-up boys former likewise evaluations. Some boys evaluate the heard classical music example by distinguishing it from rock music: "I like this rock music better" (student 3, interview1).

Second interview point in fourth grade

Contrary to what is observed in second grade, almost all girls in fourth grade either reject the existence of boys' music and girls' music or they do not make any statements about these concepts at all. Merely in the girls only interview group girl's descriptions of the concepts still can be found, but introduced from a boys perspective: "My brother thinks girls' music is when a woman sings" (student 2, interview 9). Boys too only very rarely spontaneously agree that gender-specific musical concepts exist. Nevertheless among boys a couple of descriptions still can be found and they were stated without a change of perspective. Boys' music now is insularly described as "DJ-Mixes", "loud and cool" and as music with fast and inapprehensible vocals as well as with "other singing" than in "girls' music". Rarely described at all, the view mentioned characteristics of girls' music are congruent with those of IP 1. Comparing the IPs it is noticeable that neither girls nor boys use any typical instruments to describe gender-specific concepts anymore.

Talking about their own or other people's preferences only boys still relate to gender-specific concepts: "And there is typical boys' music. For example mixes. From DJs and such things, that girls [...] I don't know any girl other than you that listens to them" (student 2, interview 2). On a normative level all children agree that everyone can hear what he or she wants. But in homogeneous interview groups with boys only, it is noticeable how harshly the boys talk about girls' music: This music is "surely for us certainly shit" (student 2, interview 8).

A strong association between boys' music and rock music cannot be found anymore at IP 2. Rock music is still used to describe musical preferences as the most prominent genrespecific concept. Additional genre concepts such as opera or musical appear and genre concepts now are used to a greater extent than in IP 1 to describe musical preferences.

Furthermore, an orientation towards music that is analysed as the concept of charts music appears at IP 2. Primarily used by boys, charts music describes the now relevant dimensions of being up to date and popular. Children state their preferences referring to the "most current songs", the "top 20" or "top 100". The dimension of up-to-dateness is represented with two opposite poles in the interview data of IP 2. At one pole is the most current music and at the opposite pole children talk about "old songs" or music that is not "modern". It is also refer to under the "oldie music", "granny music" "grandpa music". Up-to-dateness and verbal musical preference are closely connected such as that new is good and old is bad. For instance, a boy criticizes that in music class they "always only [listen to] old things, never ever modern songs" (student 1, interview 6). His classmate adds that they sometimes only listen to "stupid songs" (student 3, interview 6) and a boy completes "such very old ones" (student 1, interview 6). Nevertheless this orientation towards charts music still only appears in four of the nine interview groups.

Triangulation

As has been introduced in Busch et al. (2014) musical concepts can be used to explain the two main findings from the sound questionnaire in the SIGrun-data: (A) boys' less positive evaluation of the factor *classic* in comparison to girls' up to grade three, and (B) the decline of gender differences and the dissolution of the stylistic factor structure found in the preference ratings in fourth grade.

(A) On the one hand in second grade boys, noticeably more than girls, pronounce a strong positive evaluative component as part of the concept of *rock music* predominantly defined through the instruments drum set and electric guitar. These instruments are not

present in the musical examples of the factor classic and thus a rejection seems likely. On the other hand especially boys distinctly articulate gender-specific concepts at IP 1 clearly associating boys' music with rock music. In contrast girls' music was defined other characteristics by among string instruments predominantly audible in the musical examples of the factor *classic*. Thus it can be assumed that this association between genre- and gender-specific concepts plays a role in the evaluation of music listened to already in first to third grade. Such as that boys' less positive evaluation of the factor classic could be seen as a tendency to distinguish own preferences from girls' music.

(B) The fixation of boys' music to rock music dissolved in IP 2 in favour of a more differentiated and individualized more concept. This differentiation also shows in boys' verbal preferences. Additionally the new normative awareness seems to hinder the verbal assignment of certain kinds of music as specific for boys or girls. Furthermore the dissolution of the factor structure found in the preferences ratings of the questionnaire coincides with the emergence of the orientation towards charts music. None of the examples of the factor pop comprises the typical currency and popularity of charts music.

Discussion

The interview analyses of the data from second and fourth grade indicate that primary school children already have certain musical concepts in mind that they use to verbalize their musical preferences. It is also shown that these concepts and the usage of them change from second to fourth grade. In line with the findings of Hargreaves (1982) the usage of genre concepts increases from second to fourth grade. At the same time an orientation towards charts music as the currently popular music arises as is previously argued (cf. Gembris, 2005, p. 294). This new orientation provides an explanation of why the factor structure found in the SIGrun data of grade one to three dissolves in grade four.

The analyses further provide evidence that the children in second grade have relatively narrow ideas about *girls' music* and *boys'*

music with boys showing more signs of concept conform preferences than girls. The gender-specific concepts especially show their relevance musical preferences to connection to the genre-specific concept of rock music that is strongly associated with boys' music by both boys and girls. In fourth grade only girls in the one homogenic interview group still reveal gender-specific concepts, but taking a boys perspective. Boys still provide information about the concepts, but fewer than before and with boys' music being more varied. This is in line with general findings on gender stereotypes that are found to be more accentuated in boys than in girls and become more varied and flexible during primary school (Maccoby, 2000; Ruble, Martin, Berenbaum 2006). Although in fourth grade a novel normative awareness in the evaluation of musical gender stereotypes can be detected, boys' statements from the boysonly interview groups disclose a vehement rejection of girls' music. This rejection supports the view that at least boys preferences functionalize musical expression of a developing sexual identity already in primary school (cf. Wilke, 2012). These aspects are discussed in more detail in Busch et al. (2014).

The triangulation of results from first to third grade supports that the association between gender-specific concepts and genre-specific concepts explains differences in evaluation of musical examples partially not heard before (at least in first class). Again an underlying process could be that musical preferences are used to express individual and social identity already in primary school. Schäfer and Sedlmeier (2009) found a close relation between the function of music preference to express one's identity and the strength of musical preference in adolecents and adults. Musical concepts might offer a helpful perspective in studying the link between preferences and functions.

The differences found in fourth grade between the heterogeneous and homogeneous interview groups with respect to sex also reveal that the group-situation during the interviews can have a major influence on the usage of certain concepts. Further statistical analysis of the SIGrun preference data that relate children's preferences to personality traits (Schurig, 2012) indicate that sexrelated differences in musical preferences can be interpreted as a peer-group effect specific to boys (Busch et al., 2014). The influence of group and especially peer-group situations on the usage and functioning of musical concepts needs to be further investigated as well as the question of how musical concept might function on an individual level. Triangulation of the interview analysis and questionnaire results support the view that the depicted concepts are relevant on an individual level of music evaluation as well.

Further generalization of the results of this study must take into account that most of the part in the interviewed children took specialized music program and might in this from other children. Although quantitative analysis of the influence of instrumental music instruction on musical preferences in the large SIGrun sample did not reveal a substantial influence on musical preferences measured by the questionnaire (Busch et al., 2014).

The complementary consideration of results the interviews and the questionnaire depicts in an exploratory attempt that musical concepts can be used to explain differences in the preference ratings between boys and girls as well as changes occurring during primary school. Thus future should further investigate relevance of musical concepts for the process of evaluating music. Also the direction of the supposed influencing connection between musical preferences and musical concepts is still unclear. Behne (1987) proposed a circular model of influence between musical experiences, musical concepts and music evaluation (cf. Behne, 1987, p. 225). If so, further analyses of musical concepts can shed light on connections between music socialization and cognition in the field of musical preference.

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¹ Parts of this paper are already published in Busch, Schurig, Bunte, & Beutler-Prahm (2014).

ⁱⁱ JeKi is an educational program that was initiated in Hamburg and North Rhine-Westphalia to offer children instrumental music instruction in primary school.

iii All citations of childrens' statements from the interview material, as presented in this paper, were translated from German to English by the author.