

# MOVING INTO THE FIELD OF POPULAR MUSIC – A SHIFT IN SCIENTIFIC CONCEPTS, VALUES, QUESTIONS, AND METHODS WITH EDUCATIONAL IMPLICATIONS

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## ABSTRACT

**Background.** About 150 years since Helmholtz' pioneer work about musical acoustics ("On the sensations of tone") so called Systematic musicology was developed in the "natural" context of classical music. But by a critical review it has been revealed that the classical canon of European art music has a historic starting point as well as it has found an end at least in its absolute recognition. So today popular music changes music psychology, the horizon of questioning, the spectrum of methods, the results, and consequences. The BACKDOOR-project carried out at Bremen University has drawn consequences from the changed music life worlds of today.

**Aims.** Moving from the classical style into the area of popular music causes a shift of our scientific focus. The concepts and methods of research have to be adapted to the new area. The older subjects are seen under new perspectives and scientific paradigms, with implications on music education.

**Main Contribution.** This may be explained with reference to an intercultural experiment about sound experiences with different musical styles. A piece from the US-rock band *Nirvana* has been investigated by German and Asian listeners. Qualitative data analysis may answer questions how meanings and significance in music grow out of verbally reflected perceptions.

**Implications.** The example may illustrate that the shift concerns topics of high relevance for music psychology, like perception, talent, creativity, hierarchy of tone parameters in music reception, experience of body and rhythm, self taught learning versus formal education, emotion and meaning, evaluation. Especially the frames of reference, and the methods of scientific research are enriched by the pop music research in the cultural studies.

The consequences in music education are remarkable and concern the centre of musical learning in schools, i.e. aims, the methods of teaching and learning, the relation to new media, the evaluation of music lessons by students, teacher colleagues, parents, school image, the improvement of general living conditions in schools, the inclusion of outside activities etc. Results of will be discussed under these perspectives. The implications concern music education in schools but also musical learning by individual initiatives and activities in instrument learning and playing in groups or bands.

## 1. SOUND AS THE ESSENTIAL SOURCE OF MUSIC UNDERSTANDING AND INTERPRETATION

Musical sound appears in different discourses of musicology and of cultural theory. Beside of some difficulties connecting with German and English language the relevance of tone color, timbre or sound in the hierarchy of musical elements and means of expression is estimated in a complete different way.

Hermann von Helmholtz represents a traditional position: tone color („Klangfarbe“) results from the supposition of a certain number of harmonics. In his classical work *On the sensations of tone* first published in 1863 he explicitly restricts his focus on the periodical movements as „musical“ sounds. Irregular processes in the beginning and endings of sound are neglected. His explanation comes from the physics and physiology of listening. Sounds are explained by the relation of basic oscillations to different harmonics. In the 20<sup>th</sup> century our knowledge of the musical sound could be extended by new investigation techniques and also by broadening the perspectives to different cultures of the world. Especially the relation from pitch and tone color has been analyzed critically. So Horst-Peter Hesse (1972) proves our pitch dominated way of looking at music as only one historical perspective. His consequence: pitch is not necessarily the fundamental musical quality given by nature, but it might be the result of a cultural development and as such a historic perspective of meaning. Much more detailed descriptions of sounds are possible and open ways of culturally differentiated reflections (Schneider, 1997). But looking at special investigations of acoustics the music itself disappears, and they fail to answer any of the questions we are confronted with by music in modern life worlds.

While musicology neglects relevant questions of emotion and meaning in music, cultural studies are making progress in matching music into its psychological and social frames. It is a question of which music styles are in the focus of interest. If we switch from the classical to the popular area the sound shifts into the core of scientific interest. Shepard and Wicke (1997) take sound in music just to figure out fixity and negotiation of meaning. They set into contrast musicology and cultural studies: „...musicology would typically make much of the role of the motor rhythm of Beethoven's Fifth or Seventh Symphonies in generating immanent meaning, while sociology and communication would typically pay scant attention to the possibility of the prominent bass guitar riff in the Rolling Stones' 'Satisfaction' (another example of motor rhythm) playing a significant role in the generation of the social and cultural meanings customarily associated with this song... Musicology has

... tended to conceive music's meaning as phenomena extrinsic to social and cultural forces ... capable only of 'influencing' a central aesthetic, musical core. Here, there is a tendency to reduce music's meaning to the condition of music's sounds. Sociology, communication and cultural studies, on the other hand, have tended to conceive music's sounds as phenomena extrinsic to social and cultural forces and the affects and meaning they generate. Both approaches tend to keep separate music's sounds from the social and cultural processes that are of consequences for them" (p. 18 f.). The design of the following experiment follows a conception that musical meanings are generated in the process of using the musics or may be derived from the social context in which the musics are experienced.

## 2. PSYCHOLOGICAL ANALYSIS OF A ROCK PIECE FROM *NIRVANA*

Out of a larger intercultural experiment which was carried out in 2002 (with 30 German and 30 Asian students) I will show only a small excerpt. The subjects had to listen to musical examples from different cultural backgrounds. They gave verbal descriptions of their inner experiences concerning the sound, musical time, expressed meanings and the expectation how members of a particularly different culture (Asian resp. German) would answer the same questions. The verbal reports were examined by a qualitative data analysis (cp. Kuckartz, 2001). The piece with which we will deal here is *Smells like teen spirit* from the rock group Nirvana. It may represent main stream rock music of the beginning nineties (cp. Jacke, 1998).

The first question about the **sound** would implicate no physical or physiological answers, but a psychological definition given by the subjects. The answers show how complex the term sound is used. It has to do with the sound of the (English) language, with musical instruments, electronic tools, volume, and also with rhythm (!).

While the expectations concerning the particularly strange group of students are ambivalent (14 times *the same*/14 times *different*/16 times *don't know*) the answers to sound, time, and interpretation show clearly a different cultural background.

Asian students characterise the sound as: strong, noisy, exciting, loud, with a strong beat, shrill, rhythmic, splendid and marvellous, unpleasant for the ears, a loud crying voice, refreshing, clumsy, energetic and strong, untidy, with electronic components, myserious, explosive, the singer roars just to express his dissatisfaction with society or to overcome his individual lovesickness.

And German students characterise the sound as: rock - indy sound, wild, heavy, high volume, much energy, aggressiv, dirty, trivial, violent, unmelodic, tough, somehow awkward, emotional, strong rhythm, provocative, crying, in a otherwise more provocative context gives it a sort of silence and thoughtfulness, dark, chaotic, hard and melancholic, is hammering, distortet, and a summarizing interpretation: 1st rock-punk with suicid character, also ache, suffering and redemption; 2nd break, ache, and suffering; 3rd noise, brokenness, fight, criticism of the established, openness.

The second question concerned experience of musical **time**. Time in the ears of Asian students means (1) tempo like quick or moderato. But (2) it also has to do with order. Because of the diversity of rhythm the music is out of order. The tempo seems to stop, it does not go ahead. The mood is held up. The music first sounds interesting, but later on it becomes boring. Apparently a melody is repeated very often and the rhythm of the drums dHes not sound lively. The metre is strong and constant. The strong metre nad the rhythm of the electric base guitar touch my heart. With the speed it is amusing. The tempo is a little bit quick, bbut alos heavy and strong. – And the German students: time goesover quickly; the rhythm is stressed, it sounds hard. It is entertaining, there seems to be no end, rocky, pulsing, hectic, this music culture is expression of our time. The metre and structure are clear, the tempi are changing. The music is breathless, insistent.

The content analysis shows that students give many different **interpretations** about what music says. Asian students give interpretations in the form of the following allocations of musical meanings. Very complicated inner worlds. Enjoyable, not understandable, tempestuous, but the sound stays in a good harmony with the human voice. Dynamic and marvellous. I do not know what going on in the music. Crazy (a little bit), but ... cool. The music remembers me to an untidy room. The music is amusing and remembers me to the youth. It reflects the climate ofmodern life in a big city. It's just a shout, young people want to romp about. The music expresses dissatisfaction with society.

And German students make very similar allocations of meanings, but they have much more meanings at their disposition: Human beings full of problems. Search for solutions. Cry for help, aggression, revolt, changing moods. Indifference till rage. Rebellion of human robots, provocation, party. Aggression, aggressive rock music full of frustrations; destructive, pessimistic, lost generation, tired of living, reflects the atmosphere of the American western civilisation or mass society. *Here we are now, entertain me!* Aggressive animation for entertainment, critical of society. Noise, brokenness, battle, criticism of the existence, openness. Big city, urban life of young people who love each other. Anger, contrariness, opposition, full of conflicts.

In all theses cases musical structure is of low relevance for the interpretation (cp. earlier investigations like Kleinen, 1998). Nobody needs the text for explaining the meaning (but several subjects ask for it), and musical structure or form is used very seldom as indicator for meaning and significance. Instead the sound is the primary source of understanding and interpretation. The second source is rhythm or time experience. A third explanation comes from the social surroundings.

The effects for Asian students are reduction of stress, refreshing, touching the heart, problems or conflicts are driven out of the head. For German students the meanings are quite the same, but with additional interpretations: the music also makes nervous, it relaxes me because I connect many positive experiences with the music. It makes pulsing my heart quicker.

One general remark: As we've seen, the psychological world is constructed spontaneously and more or less it does not need

any rational argumentation. The psychological reality is built by sound, rhythm, suspected effects, bodily experiences, and social use.

There also is an intercultural dimension. From the answers of the both groups the culture elements are enlightened. Several statements give an argumentation which reasons might be effective. For German students most often music experience in which way however is estimated as the basis for a culture related interpretation: No relation to the music because it is unknown; question of taste; strangeness make the music banal; they are irritated because they are fixed on art music; Asians of the younger generation may be grown up with this music, so it is not strange; expression of feeling; all people feel positive who surround themselves with this music; familiarity causes positive judgements; fans evaluate positively; the character sometimes may be experienced as too aggressive and typical Western.

Asian students have some expectations about the evaluations by Germans, but without any reflection about the basis. Only in one case a general rule is mentioned that every person may have his own taste.

### 3. IMPLICATIONS

Empirical evidence taken from the reported experiment but also from several empirical studies about talent and creativity in popular music (BACKDOOR) may proof that the classical model of musicological research should be replaced by a new thinking about musical meaning and evaluation.

For a reflection of the consequences caused by essential shifts in musical life worlds of today two models may be compared: The **old model** was created by the psychophysics of the 19th century. It contains a one-dimensional chain, beginning with the physical structure which causes the sound and the musical structure - the sensations of sound were declared „as physiological basis of the theory of music“ (von Helmholtz). So sound and sounding moved forms create meaning and understanding of the music (Hanslick). The relations are as follows:

- physical sounds & physiological processes create sensations of sound
- musical structure (melodic, harmonic elements, tempo and rhythm create musical expression
- information content determines aesthetic judgments or preferences.

- A **new model** as developed from the qualitative data analysis of the verbal data in the experiment has its originating point in the subject. It is multi-dimensional. The constructing activity of the subject uses three factors for creating musical meanings and significance: first sound and time, secondly the listening situation and thirdly individual and social experiences. Meaning and significance are the result of biographic and social experiences; they are constructed in the course of a spontaneous construction process.

Another consequence is: musicology has to make explicit which musical genre is the basis for a investigation. (As examples

musical time or rhythm, talent, creativity, development, learning etc. could be mentioned.) The classical hemisphere has lost its matter of course!

Music pedagogy (cp. Green, 2002) has

- to adapt the modes of learning to the particular genre (look at the self taught learning)
- to open itself for alternative musical interests and to break up the well known circle (music teachers teach in schools with the aims to qualify the students to become music teachers who teach in schools and so on)
- to reflect the institutional points given (the systematic curricula may be replaced by organization forms with more and more workshop elements)
- to open the place of learning from schools to music in all its social and cultural contexts (cp. f.e. the large space for community music in Colwell & Richardson, 2002, part V; activities in rock groups happen outside from regular music lessons at schools).

Finally there are conclusions to be drawn for programs in musicology and music research at universities (for a criticism of the German situation see Hemming & Marx, 2002). Not only with music historians but also in systematic musicology widespread views and research practices are to be characterized or moreover criticized as hermetic. Already the name systematic musicology suggests general rules or laws which may function without any connection to individuals and social or historic situations. Many studies, although executed on a highly scrutinized methodological level, have a very limited horizon of questions and already from the start they exclude essential factors for the allocation of meanings and significance.

Research in pop music gets more and more importance and has gained primary interests in respect to youth people and to daily life experiences. Musicology may not leave it to cultural studies. The financial support of a research project about DJs may be at least as severe as for such composers like Graun and Hasse (from the times of Frederic the great).

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