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Electrified Voices

Medial, Socio-Historical and Cultural Aspects of Voice Transfer

With numerous figures

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Theoretical-methodical Approaches to Radio Aesthetics: Qualitative Characteristics of Channel-Identity

Abstract

Since its beginnings, radio program research has mostly been considered an issue of content: Studies explore informational topics, styles of journalistic presentation, music profiles, ratios of music and speech, etc. This contribution argues that aesthetic factors play a much larger role in radio production then scientific practice implies, proved a.o. by criteria of radio professionals aiming at the construction of an overall appeal of a radio station, the so-called *stationality* or *channel identity*. It is proposed that these aesthetic factors include differences in speaking styles, issues of timing, level and rhythm in the program mix, technical signal modifications (filtering, compression), and sound styles in packaging elements like station-IDs, teasers, etc.

The article then gives an overview over existing scientific approaches pointing in this direction, followed by a description of the theoretical and methodical implications of the research project *Radio Aesthetics—Radio Identities*, co-initiated by the author. Finally, the project's scope is exemplified by two studies realized under the author's supervision.

Introduction

After almost 100 years of worldwide establishment radio has developed into a locally and globally differentiated form of culture that is deeply rooted in the collective consciousness. Specific formal patterns, speech mannerisms and technical processing methods that can easily be distinguished from other auditory phenomena in everyday life as well as in the media (film, television, video games, telephone, etc.) have been established for radio. In a feature film, for example, one can clearly recognize an auditory element that supposedly is being played on a radio—even though we know that it was produced in a film studio especially for that purpose.

S. J. Schmidt's concept of culture helps summarize the content and the aes-

¹ Schmidt defines culture as the collective knowledge of values, norms and behaviors that is created and held valid by cognitive and communicative processes (Schmidt 1994: 12).

thetic composition of radio so it can be understood as a specifically radiophonic media culture. Therefore radio programs are the result of the collective knowledge regarding this medium. Producers, providers and listeners take different parts in an ongoing process of negotiation on what radio should contain and what it should sound like. Theoretically, one can assume that the direction and dynamics of this process are characterized among other things by technical conditions, national and cultural values and standards, everyday forms of use as well as by local language, music and other 'environmental' conditions such as the sound sphere of a certain broadcasting area.

As a result of an everyday listening practice, radio channels² can leave clearly distinguishable impressions in a fraction of a second. Surprisingly, it is not known exactly how this works. So far it has not been systematically examined on what features the channel identification by the listener is based upon, how those features are created by the editorial and production staff and in which way as well as to what proportions the technology on one side and the radio 'environment' on the other characterize its appearance. By means of a complex set of feature patterns, which can be called 'channel strategy' and is documented in a so-called 'stylebook,' radio practitioners have developed explicit concepts of how to create the effect of a coherent 'channel identity' or 'appeal'. But the concepts of different practitioners (in different formats or even countries) are only partially compatible with each other, which is already shown by the superordinate terminology. Since there does not seem to exist a common understanding of terms among radio practitioners, I propose the following definition (see fig. 1). The separation into a 'cognitive scheme' and an 'affective scheme' is in itself already a formulation of the initial thesis of this paper: previous studies have attached great importance to the cognitive scheme of structural and quantitative characteristics but blatantly ignored the qualitative dimension of affective appeal. Therefore this paper advocates the viewpoint that radiophonic media cultures (in short 'radio cultures'), apart from the content dimension, must be fundamentally understood as 'sound cultures' in order to fully grasp the composition and effectiveness of radio.

² The radio jargon term 'channel' refers to what commonly is called station: a specially structured program with its own frequency that is oriented towards a certain target group or content sector.

Channe	l strategy
Program structure (cognitively dominated scheme) - Style of language (information content, linguistic complexity, form of address, etc.) - Overall formal and content-related structure - Presentation pattern (journalistic form of contribution) - Music color (style, hourly clock)	Appeal (affectively dominated scheme) - Vocal delivery (speech mannerisms, agogics, tone quality) - Assembling and mixing - Technical processing ('tuning keys,' compression) - 'Packaging' design (layout, makeup)
Desired Broadcast flow	l results: Channel identit

Figure 1: Binomial model of radio characteristics

In the following I would first like to clarify that the research on radio has not addressed this question sufficiently and therefore propose a method that allows us to examine this hitherto little-explored area of study more closely. This method is currently being developed by an interdisciplinary collaboration between media, linguistic, and cultural studies. In this case the relations between spoken language and other program components, particularly music, play an essential role. It is being theorized that by using formalized indicators the development of analytical tools that are transferable to various radio formats will be possible.

2 The Problems of Classic Program Research

So far radio has almost exclusively been considered a structural issue. Regarding the conflicting demands between listener quota and the criteria of qualitative journalism, studies explore the program structure at the macro and meso level, the choice of topics and the journalistic presentation of the respective objects, the ratio of music and speech and the so-called 'music color'³. These investigative studies occur in many cases within the context of 'media research'⁴ or regular media analysis. That means it is their objective that the relation between what the media has to offer and the audience's expectations is as congruent as possible for as many people as possible. Such research is also partly carried out

³ The perception of a music color can be understood as a form of appeal, for it is assumed that a carefully controlled selection of music creates a coherent impression of what kind of music is to be expected from a certain channel.

⁴ Media research collects and interprets data on broadcast range and target audiences required for program planning and advertising (see Frey-Vor et al. 2008).

in context with historical topics of various sorts, be it politics, sociology, literature or musicology.

In most cases the overall cognitive goal consists of a measurement that determines to what extent a transmission process can be understood as a 'transfer of information' and is successful in two ways: a) in the sense of 'maintaining a channel of communication' (the listener listens and neither changes the channel nor turns off the radio) and b) in the sense of 'communicating successfully' (the listener receives the information and understands it in his own way). The communication model upon which this approach is based is the classic transmitter-channel-receiver-model by Shannon and Weaver (1963). This model is output-oriented, which means the measure for the evaluation of the 'broadcast success' is determined by the duration of the transmission portion that a) reaches the listener audibly and b) can be recounted by him when he is questioned about it. The audience's needs and the context are thereby largely ignored in the process.

The data gathered on the basis of this so-called listener, music or acceptance research is supposed to enable transmitters to specifically adapt their program so that it may develop: a) the largest possible area of effect (number of listeners = quota) and b) the most intense individual effect (high attention, cognitive participation and involvement of each individual listener). A powerful consequence arises from the obtained data: the amount of money that a program provider is able to earn or allocate from fees is determined by them directly or proportionally.

Thus a blind spot emerges in the comprehension of radio, which is the fundamental criticism of this paper. This blind spot is due to the theoretical problem that radio is dealt with as if its program contents went through a broadcasting channel that is directly connected to the listeners' cognitive apparatus. Such a simplified application of Shannon and Weaver's communication model, however, does not do justice to the complexity of real human communication, perception and cognition processes.

Therefore the concept of the 'human surrogate' was introduced by Fornatale and Mills (1980), by which radio can replace an emotional transcendence as in social interaction through a perceived intimacy to the speakers on the radio. The statement that listening to the radio dispels the feeling of being alone, which often can be found in the results of media research, is an obvious indication of the relevance of this concept. Exactly what factors cause such a perception is not known yet. Fornatale and Mills furthermore refer to McLuhan's concept of the 'tribal drum,' which postulates the implicit synchronization of dislocated listeners as the essential function of radio (Fornatale & Mills 1980: 12). People who listen to the radio by themselves therefore have a different approach to radio in general if they can assume that other people they know are listening to the same

program at that very moment and they can possibly talk about what was on the radio later on. Although in this case the program content probably plays a much bigger role than with the concept of the human surrogate, it is still likely that romantic longings, for example, can only be satisfied by a radio program's certain qualitative or aesthetic dispositions in form of implicit synchronization. Carin Åberg (2001) even considers this dimension of radio listening as the essential one and assumes along with Detlef Schröter (1995) that radio has developed in the way that an announcer is rather perceived as a pleasant voice than a serious journalist: "Investigations of, and theorizing on, radio could benefit starting from the point that it is the sounds we find meaningful that constitute the main point in radio listening" (Åberg 2001: 86).

The blind spot affects meanings that are primarily transmitted on the sensual level as well, such as can be described as the 'quality,' the 'aesthetic' or 'atmospheric nature' or even the 'appeal.' The detection of these qualities is very complicated because first they are encoded in a very complex way and often lie in the details, and second, their importance is seen very subjectively. Output-oriented reflections therefore should be complemented by input-oriented perspectives that take the recipient-sided capabilities of radio into consideration and thus understand the fact that, in addition to the content, the appeal also has an influence on the audience's choice of channel.

3 Alternative Perspectives

There already exist theoretical and methodical approaches addressing this problem. Thus, Christa Lindner-Braun (1998) developed criteria for the appeal and consequently for the success of announcers. She empirically identifies dimensions of effect that an announcer can evoke in an audience such as 'moral credibility,' 'competence,' 'authority,' and 'sympathy' (Lindner-Braun 1998: 54) and thus provides evidence of the key role that the para-social dimension, in other words, the listener's subjective impression that there was a communicative link between him and the announcer, for example, plays a vital role, in addition to the 'context' dimension.

A study on the concept of 'radio quality' by Gerhard Vowe and Jens Wolling (2004) constitutes another approach to the topic. They found out that program analyses are limited on the one hand to detecting the overall program structure (macro level) and focus on the other hand on the analyses of the informing program components (meso, and rarely micro level). Vowe and Wolling particularly criticize that detailed analyses occur on the basis of a journalistic and normative perspective of quality. Consequently, first the listener's criteria of quality are ignored and second the para-social induction of an impression of

closeness, which the authors consider very important, has no influence (Vowe & Wolling 2004: 312). This position is supported by empirical studies by which the impression of the speaker's naturalness and his appeal to the audience has a greater influence on the overall evaluation of a radio announcer than the impression of objectivity (Schubert & Sendlmeier 2005).

Finally, once more the approach of Carin Åberg (2001) needs to be emphasized. Åberg pursues the goal to identify the connections between service structures and listening attitudes in order to determine the value of the broadcast program not only in terms of content criteria but in the aforementioned sense. She distinguishes between two different modes of communication in radio: communicatio and communio (fig. 2). Radio stations and certain programming offers or individual forms of media usage can therefore be positioned at a certain point in this continuum between emotional and informational listening needs (see fig. 2).

'convey ideas' (communica	'be part of' (communio)	
'Intentional listening' – program or program of interest	Accompanying program	Background program

Figure 2: Continuum between the functions communicatio and communio by Åberg, applied to three paradigms of radio reception, which are often mentioned in practice.

On the audience's side the reasons for receiving a specific radio program assumedly consist of different shares of these modes of communication, which may also vary in time of day. Åberg identified patterns of different *demands of concentration* on the one hand and specific functions such as *creating tempo* and *calling for attention* on the other as a result of her sequence analysis.

4 The Approach of the Radio Practitioner

Obviously, radio practitioners have a different kind of approach to the medium. What scientists/researchers believe are the essentials and the real thing is only half the story for them. The structural feature patterns that are documented in a program structure plan in this case can be called, if I may overstate, their obligation. The free form, however, can be found in the 'style books.'

On the basis of the facts shown in figure 1 under 'Appeal,' the stylebooks describe that part of channel strategy that accounts for the affective components of a channel identity. Only an experienced practitioner knows how to precisely interpret the therein mentioned attributes, such as 'hot driven music' or an 'authentic style of presentation.' Neither the attributes 'hot' and 'authentic' nor the reasons for each specification in the context of the channel identity are

explicitly formulated in the stylebook. The free form's goal, to make the program as lively as possible every day, must therefore be converted subjectively and intuitively from a hitherto solely practical knowledge. When describing such qualities, certain requirements are mentioned, for example, "the personality of the spokesperson must [...] remain apparent at all times" or "Whoever is able to put his enthusiasm into an audible form will succeed in [...] creating real communication through radio" (Wunderlich & Schmidts 2005: 95). It is obvious that personality and enthusiasm cannot be detected by content-oriented methods. Therefore, new ways must be found.

5 The Theoretical Approach

In order to fill this gap, in 2009 the author together with two other scholars⁵ initiated an interdisciplinary research network now running under the title *Radio Aesthetics—Radio Identities*⁶. This network has since expanded personally to approximately 20 junior and senior researchers and further developed its theoretical and methodological approach. In the project's first step, the studies focus on the development and evaluation of instruments and methods for the analysis of the aesthetic dimension in radio production processes, in radio products and in radio listening. In the following parts I will report on two exemplary studies realized under my supervision, one looking at the meso level and the other at the micro level of radio products.

Anja Richter grasps 'radio aesthetics' as "the specific modification of a message or information that is induced by the radio medium and its creative elements" (Richter 2010: 9) and assigns to it the concept of sound aesthetics. Taken as such the term is still vague and must be differentiated, for example, by assuming that, in addition to sound aesthetics, radio aesthetics also consist of other elements such as rhythm, form or proportion. Sound aesthetics would thus rather momentarily relate to separate enclosed auditive shapes or musical compositions whereas radio aesthetics describe the larger picture of the relationships of heterogeneous and radio-technical linked broadcast elements. The synthesizing nature of radio would thereby be highlighted as the specific feature of this medium.

In order to determine the qualitative and audio-aesthetic dimension in question, in other words, the appeal or appearance component of 'channel

⁵ Ines Bose (Speech Science and Phonetics, University of Halle), Golo Föllmer (Media / Auditory Culture Studies, University of Halle) and Hans-Ulrich Wagner (Cultural Media History, University of Hamburg).

⁶ See http://radioaesthetics.org

identity,' the term 'sound concept' could be of use. According to Peter Wicke (2008), the audio (sub)cultures in a media-dominated society are based upon technology- and function-related 'concepts of sound'. By the means of storage and transmission technologies, the detachment of music from its physically present performance situation has been made possible and has led to the situation that "recordings [resp. the broadcast signal] [...] are neither a copy nor a simulation of the acoustic reality but rather a new form of sonic reality" in the course of the 20th century (Wicke 2008: np). In the field of music this sonic reality is characterized by an 'emancipated sound' that "[has been] completely separated from the paradigms of performance (and performability)," according to Wicke (2008). Elvis Presley's producers Mike Stoller and Jerry Lieber described this fact as follows: "We didn't write songs, we wrote records". And experimental pop musician and producer Brian Eno points out that successful pop songs are distinguished more by their sound than by melody and harmonics: "The sound is the thing that you recognize" (both quotes by Wicke 2008).

Peter Wicke traces the 'emancipation of sound' back to the dominance of media-technical principles in the production process. The logics of microphones (sources can be separated precisely; talking into a microphone from a close distance causes a bass boost; variations of distance enable changes of dynamics, etc.), of overdubbing (voices can be recorded successively; separate takes⁷ can be assembled patchwork-like, etc.) or of technical editing tools (devices for different effects can be applied to individual voices in various proportions) do not only determine the result cosmetically but also in its substance (Wicke 2008). Something similar can also be said for radio. But which medial logics are influential in this case is known only for very few broadcast elements.

The radio play is the only exception that has been more closely analyzed. According to Götz Schmedes (2002), microphone, editing tools (mainly reduced to effects for simulating space) and—as the radiophonic version of overdubbing—sound editing (montage/collage) have a substantial impact on radio plays as well. The scenic structure of most radio plays also adds the fade or transition technique with different implications on content (spatial fade, temporal fade, dimensional fade) as technical means for arranging scene transitions (Schmedes 2002: 88). These techniques that are matched to the requirements of fictionality, narrative and dramaturgy however cannot be directly applied to journalistic and entertainment programs with their serial succession of heterogeneous contents and recurring hourly schemes. Although the logics of microphones has an effect here as well, the montage of separately recorded sources already differs in these two fields by the mere fact that in radio it is not a sublime practice, as it is in music production, but literally and explicitly its 'program':

⁷ i.e., successively recorded versions of a piece or voice

While music in most cases is still supposed to give the impression that it was produced in one piece and in synchronous interplay of the instruments and voices, the radio program is based on the principle of lining up broadcast elements of explicitly heterogeneous origin—from presentation (broadcasting studio) to music (CD) to documentary (exterior recording), etc. The use of technical editing tools is limited mainly to filtering and compression, but the latter at length: a recorded announcer's voice can be made into a 'radio voice' by merely compressing the dynamics of the signal.

A special problem is that the entire channel identity of radio perennially disappears, it practically becomes 'invisible': in contrast to newspapers, film and television, whose appearance is continuously displayed by various visual elements, a radio channel is paradoxically just that less identifiable when the primary element of most programs today, namely music, is played. "Speak, so I may see you" Socrates was cited by the early radio drama theorists (Schwitzke 1960) seeing a complete statement realized only through spoken performance, and in a similar way a radio station can only be certain of its identifiability as long as the announcer resp. pre-produced programs or packaging elements are on the air. As soon as music is being played the station is in danger of making itself disappear, at least when other channels with a similar music color are on air in the same reception area.

6 Subject Matter and Methodical Approach

Style of announcement, packaging and other qualitative features presumably characterize the auditory experience of radio to a large extent. Samples of different radio formats for radio plays will quickly reveal the wide range of varied qualitative appearances, i. e., of different 'sound concepts.' This will emerge even more so when comparing recordings from different eras, cultures and continents.

The comparison of preferably heterogeneous examples is indeed the most promising way of gaining the best insight since we can assume that the potential rules of qualitative effect mechanisms are revealed most dominantly in the breadth of its qualitative expressions. However, it seems advisable to conduct the development of a methodical apparatus on the basis of examples whose cultural, technical and other context is as well known as possible. Therefore, familiar, present-time samples will be used for the first step in this Radio Aesthetics research project.

On the meso level it makes sense to use the method of sequence analysis, as did Carin Åberg (2001) and Götz Schmedes (2002) as well. Åberg performed a segmentation of broadcast elements and arranged them into a tri-partite classification system that differentiates speech and non-speech on the top level;

voice, music and packaging elements in the middle and on the bottom also simultaneity of music and voice as well as 'stylised music' as a separate category (Åberg 2001: 98). She evaluates the segment patterns in structural (comparison of different patterns) and quantitative terms (comparison of averages, minima/maxima, scattering, etc.). This approach was modified by Anja Richter (2010) for the presentation of complex interrelations in such a way that a more accurate chronological allocation could occur than in Åberg's method by means of a multichannel audio software program. By this means qualitative characteristics and interrelationships between individual broadcast elements could be visualized in much greater detail. The focus of Anja Richter's study was to evaluate the possibilities offered by the modified sequence analysis method for better understanding the subject of study.

Furthermore, the semiotic musical approach by Philip Tagg (1982) was used to address the analysis of packaging elements on the micro level, expanded with concepts from film-sound design, among other theories. Tagg proposes a representation that likewise proceeds sequentially and differentiates between voices/instruments and formal elements. The remarkable aspect of Tagg's approach is that it proposes a descriptive and analytical approach that is applicable for analysts without musical knowledge as well. For radio, the procedure was modified so that a distinction was made between montage or mixed layers and broadcast elements.

7 Hypotheses

Based on the transcription tools described above, a first aim of the *Radio Aesthetics—Radio Identities* research project is to demonstrate that qualitative resources are used consistently within individual radio channels and differ from the usage in other channels by a set of rules. For this purpose, the main qualitative features are to be identified. Then a practical apparatus to collect and measure them has to be developed and a coherent mode of description needs to be found. This methodical apparatus will later enable the comparative study of larger, more heterogeneous broadcasting corpora.

This first larger goal of identifying the qualitative characteristics is based on the following assumptions. Broadcast elements therefore generally contain 1) specific, standardized features of design that play a key role in the formation of channel identity or sound concept and thus in making radio 'visible'. These design features arise 2) in a regular and consistent way so they can enable identification at any given moment. They contain 3) speech patterns and other features of design for which indicators can be described. Sets of indicators comprise 4) 'identity markers'. These are 5) divided into a) sound patterns based

on speech and audio technology and into b) characteristically structured relations of elements at certain moments ('momentary relation' or 'key moment') and in temporally extended entities ('temporal relation' or 'key pattern').

In this study the *vocal delivery*, the audible result of the manner of address, is initially considered only as the relationship between announcer and other broadcast elements. According to a hypothesis of this study, the speech generic identity markers emerge especially concisely under these conditions such as the ratio of length and volume when presentation and music overlap (= example for a 'key moment').

8 Results to Date

So far two studies with a methodical-explorative orientation⁸ have been developed on the questions raised above. First, a microanalysis of packaging elements was carried out because they represent a qualitatively constant and acoustically outstanding factor in the course of the program (flow) and therefore it can be assumed with great certainty that they play a decisive role of identification for the radio stations (Rüdinger 2010). The author of this study, Tanja Rüdinger, assumes that on-air promotion is especially important for the construction of a channel identity in the radio medium because a large part of a radio program consists of external contents (particularly music). In addition, the frequent switching between broadcast elements hinders the formation of a consistent auditive aspect. Furthermore, radio presenters are less easily identifiable than their counterparts in audio-visual media or could even be easily replaced in comparison.

Packaging elements and trailers therefore would have to be acoustically striking and consistently of high quality in order to constitute the channel identity of a station effectively Station identification and reinforcement of the brand image on the macro level as well as the combination of all broadcast elements to create a 'broadcast flow' on the micro level are only detectable through qualitative analysis and must be looked for 'in the sound,' according to Rüdinger's initial thesis.

A choice of five stations (MDR Figaro, MDR Info, MDR 1, MDR Sputnik and Radio Brocken) was picked in the broadcasting area of Sachsen-Anhalt along with a consistent selection of approximately five particularly distinctive packaging elements for each station as object of the analyses in order to identify format-dependent characteristics of packaging elements in accordance with

⁸ Conducted at the Department of Medien- und Kommunikationswissenschaften at the Martin-Luther-University Halle-Wittenberg within the context of master theses.

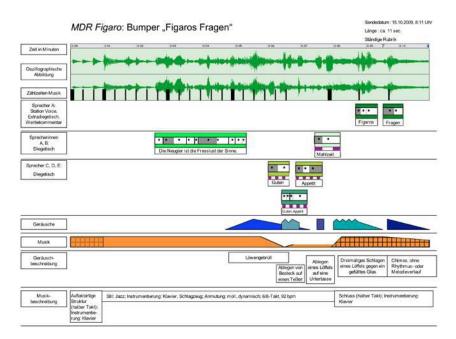


Figure 3: Microanalysis of a bumper on MDR Figaro (Rüdinger 2010)

Rüdinger's theory. A special graphic transcription system was developed for this analysis that allows the detection and representation of the production elements speech, music and 'sounds' that in packaging typically occur very densely and in rapid sequence, all the way into their micro structure (see fig. 3).

The study clearly shows that most packaging elements are constructed in accordance to the 'AIDA rule', by which they are initiated, for example, by an acoustic occurrence to which the listener reflexively tunes in. While qualitative characteristics of individual channels can be verified consistently, the results indicate that stereotypes such as the AIDA form show that the differences between the production methods are fewer and less significant than was stated by the responsible audio producers. In this manner 'hour openers' and 'station IDs' of different channels share great similarities although they try to address very different target audiences.

Furthermore, the analyses provide the information that various packaging types show element-specific forms and features in terms of argumentation and aesthetic appearance but seem undecided on their functions within the broadcast flow. An explanation for this could be a deficit in theory, which leads to

⁹ AIDA stands for the sequence scheme Attention, Interest, Desire & Action, which is supposed to be induced in the recipient through advertising messages.

concepts, implementations and evaluations on the side of the practitioner that are not sufficiently backed with criteria and models of effect. That means that for lack of precise language apparently neither a sufficiently effective thought process on the topic nor an effective product optimization in the development of packaging is possible. The editor and producer are left speechless.

The research deficit that was outlined in detail at the beginning of the article would therefore also be a practical deficit concerning our media reality, in other words: The methods and theory of radio aesthetics demanded here would probably also benefit the radio practice because if there were consensual terms, methods of analysis and evaluation criteria, then the production of broadcast elements could be coordinated and assessed more effectively among the various departments of a radio station.

Another study that was conducted in the context of our research project is an analysis at the meso level. Anja Richter (2010) compared two 2 1/2 hour recordings each for three channels of MDR (the culture channel MDR Figaro, the youth service channel MDR Jump and the youth culture channel MDR Sputnik) on the basis of sequence analyses. The segmentation was done using the audio editing software Pro Tools. This way it was possible to separate the segments and sequences with great accuracy and categorize them graphically (see fig. 4). Based on the editing list generated by the software, informative and quantitative evaluations could be performed, for example, on the quantitative ratios and on the durations of overlapping words and music, on averages or trajectories of the musical metrum (bpm), etc.

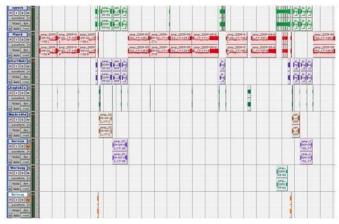


Figure 4: Section of a graphic sequence diagram from the analysis of MDR Jump. The categories in bold on the left: language, music, stylized (background) music, packaging elements, news, service, advertising, reports/pieces (see Richter 2010)

The study expands Åberg's predominantly structural-quantitative catalogue of characteristics by a number of qualitative features. Figures 5 and 6 differentiate the categories identified by Richter into 'structural' and 'qualitative' features. Structural features contain typical parameters of quantitative program analyses, such as those used by broadcasting stations as part of in-house program monitoring systems (see Spang & Leibrecht 2010). The features classified as qualitative were collected partly for the first time within this study.

The graphs show that the three examined channels clearly differ from one another in terms of both their structural features—such as duration of presentation or the number of broadcast elements per hour—as well as their qualitative characteristics—such as duration of synchronization of several broadcast elements (usually presentation over music), music volume during presentation or speech speed.

The four features in figure 6 on the far right do not differ in graded levels but in specific patterns, for example, in 'music and word pattern' the number 1 (here Figaro) indicates very long alternating with very short word units inbetween music, the number 2 (Jump) short to medium length word units and long music units, etc. Genuin speech-related characteristics are still very much underrepresented in this first, general overview.

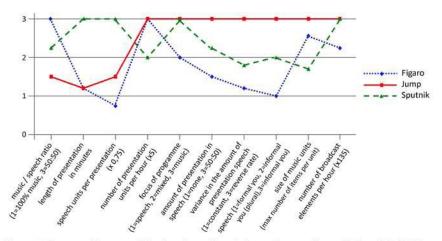


Figure 5: Structural features of the three investigated channels according to Richter (2010). They were each respectively normalized to the highest value for the purpose of graphical comparison.

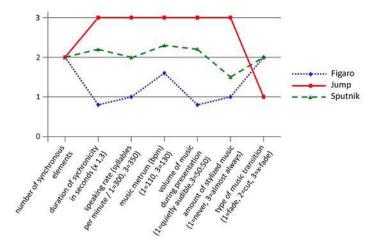


Figure 6: Qualitative features of the three investigated channels according to Richter (2010). Normalization as in Fig. 5.

9 Summary

The range of qualitative features that are to be ascertained in the course of the Radio Aesthetics research project is definitely not covered sufficiently with the instruments currently in use. The mentioned studies conducted at University of Halle had to limit themselves to easily collectible parameters due to the confinements of a graduation thesis. Potentially meaningful factors such as the various dimensions of voice quality (average pitch, tonal ambitus, etc.), the rhythmic relation between the broadcast elements, the dynamic quality or the gestural quality of the transition between songs, features, presentation and packaging require considerably more elaborate methods and will be investigated in future studies. The kind of data collection and its presentation in the form of profile images of individual channels, however, seems to have proven worthwhile and should be pursued further.

The long-term perspective of the project aims to reveal format-specific, historical and cultural idiosyncrasies of radiophonic sound concepts with a complex methodical apparatus and a larger number of qualitative program analyses in comparison of 1) different formats, 2) different eras, and 3) different cultures. It seems useful to determine indicators, after the features are identified, through which different formats, eras and cultures or certain dimensions of quality are also characterized consistently and reflect individual radiophonic media cultures in order to analyze a large body of temporally very wide-spread radio recordings. A certain figure or a list of figures of an indicator 'presentation

introduction' could be, for example, a characteristic of a certain youth format or even of a radiophonic quality dimension that could be referred to as 'drive' or 'tone'. Whether such general time-, format-, and culture-related dimensions of radio aesthetics can be determined is not certain. However, the results of this initial study are encouraging. Working on methods and tools that allow a differentiated description of 'radiophonic sound concepts' has brought forth practical procedures that promise new insights into a broader field of subjects.

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