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Bonde, Anders

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Searching for the Effectiveness of Sonic Logos

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Abstract

The paper concentrates on the development of a theoretical concept for the analysis and construction of sonic logos by combining together three highly different academic disciplines; that is (1) social semiotics, (2) marketing communications, and (3) musicology. I will partly draw on previous work by Theo van Leeuwen (1999), in which the concept of 'modality' (Kress & van Leeuwen 1996 [2006]) is extended to auditory expressions such as spoken language, music and sound effects; and partly on research on sonic branding (cf. Palghat 2009) as well as general theories of brand recognisability and brand identity (cf. Aaker 2002) by focusing on *distinctiveness*, *flexibility*, *memorability*, *consistency*, *continuity* and *fit* as typical branding guidelines. Admittedly, the idea of integrating sonic semiotics with sonic branding is well tried, although it appears novel to embed this cross-disciplinary field in musicological terms. As a matter of fact, I will argue that *pitch range* and *durational variation* (Van Leeuwen 1999, 172-173) make up together two essential parameters of sonic logos, providing *distinctiveness*), fulfilling or allowing for the fulfilment of the aforementioned six branding guidelines. Thus, developing the concept of RAF, meaning *Reduced Articulation Form* (Bang & Bonde 2013, *forthcoming*), might be useful; i.e. a sequence of tones of varying durations regardless of timbral or voice-quality features. Considering that a sonic logo can be recognised and recalled in this utmost reduced form of articulation, it will most likely also be the case in various articulation forms being tailored specifically for certain markets, cultures, consumer segments, campaigns, etc. Consequently, this might contribute to an explanation of why certain sonic logos are or aren't successfully integrated as part of a brand.

Introduction

A sonic logo is a certain kind of auditory brand identifier being analogue with a visual (or visual animated) logo. Sonic logos are sounding objects of a very short duration – typically between 2 and 6 seconds. They can be tiny melodies of a few tones, but they can also be sound effects or spoken voices. Examples of melodies would be the jingles of the American computer company Intel or the Swedish national telephone company Telia (cf. Ex 1-2).

Example 1. Intel: visual and sonic logo   Example 2. Telia: visual and sonic logo

Sonic logos are potentially distributed through a large number of so-called 'touch points', including every thinkable channel by which corporate brand communication can be transmitted. In the fields of marketing, business strategy and branding, theoreticians and practitioners usually emphasize a set of branding guidelines, which are also applicable on sonic logos. That would be guidelines such as

- *distinctiveness*; i.e. every sonic logo has to be easily distinguishable from other logos.
- *recognisability*; i.e. people must be able to identify the logo and the brand, and even recall the brand without hearing it beforehand.
- *flexibility*; i.e. a sonic logo must be operational regardless of musical context and style as well as the technical affordances offered by the specific audio touch points.
- *consistency*; both in a horizontal sense (i.e. in various touch points) and in a vertical sense (i.e. across different simultaneous campaigns).
- *continuity*; i.e. workable through shifting time periods.
- *fit*; i.e. suitable according to the attributes and values of the corporate brand.

The question is then: Are there any musical solutions, which make it possible to fulfil these guidelines once and for all? And if so, which ones?

Theoretical concepts

It seems to me that Theo van Leeuwen's (1999) theoretical work on the integration of speech, music and other kinds of sounds (i.e. sound effects) represents certain possibilities in that respect; especially his concept of 'sound modality cues', which he defines as manipulable articulatory parameters. He operates on eight parameters in total, each of which being described as a continuum:

- *Pitch range*: From the absence of pitch variation to a maximally wide pitch range
- *Durational variation*: From the absence of durational variation to a maximally varied amount of different durations
- *Dynamic range*: From a single degree of loudness to a maximally wide dynamic range
- *Perspectival depth*: From the "flat" sound without differentiation of foreground and background to maximum differentiation
- *Degrees of fluctuation*: From the completely steady sound to the maximally deep or rapid "vibrato"
- *Degrees of friction*: From 'smooth' to 'rough'.
- *Absorption range*: From the completely "dry" to the maximally spacious, reverberating and resonating sound.
- *Degree of directionality*: From the omnipresent to the source specific sound

Clearly, what we have her, is a systematization of the *articulatory complexity of sounds*, which can be higher or lower according to each of the eight parameters. Thus, a sound's modality configuration

depends on the actual combination of levels of the eight categorical parameters or variables. Now, the more a sound's articulatory complexity is reduced, the higher the level of abstraction at which the sound is encoded; i.e. the less natural or realistic the sound will appear. Here is an auditory analogy to visual shape and texture, where the modality configurations of, say, a high-resolution and depth-of-field photography and a newspaper cartoon respectively represent two opposites. Indeed, even the most primitive or simplistic kind of drawing or cartoon – or, for instance, a pictogram – might represent a rich semantic expression that very much conveys the essence of meaning behind the depicted subject, object or phenomenon (cf. Fig. 1-2).

Figure 1. The former Prime Minister Margaret Thatcher depicted by cartoonist Chris Madden (1981) as the "Iron Lady" and at the same time the "Mad Axewoman" because of her determined cut in the governmental welfare services.

Figure 2. The former Danish Prime Minister Anders Fogh Rasmussen depicted by cartoonist Roald Als (1993) as the "Caveman" because of his "minimal-state" approach, meaning that people would be better off when taking care of themselves without governmental intervention.

The point of making such analogy is as follows: If such combination of high abstraction and 'semantic richness' can be applied on sonic logos, the aforementioned branding guidelines of distinctiveness and flexibility are meat. There are of course some difficulties here since music does not convey meaning in the same ways as words and pictures do. As phrased by the English music-philosopher Peter Kivy (1990), "a piece of music can be mournful but not neurotically mournful over the death of a canary" (p. 174). However, in the matter of abstraction level, there are some prominent parallels between shaping a pictogrammic image of dots and lines and shaping a melody of sinus tones. Both expression forms are figurative, though highly abstract due to a minimized level of articulation complexity. Thus, leaving all the articulatory parameters on a minimum except for *pitch range* and *durational variation*, it should still be possible to create melodically distinctive sonic logos, which at the same time are flexible enough to be transmitted through virtually all kinds of audio touch points; and to be merged in any musical style or genre, depending on culture, market segment, the campaign etc. In the following, I shall designate this format as the 'reduced articulation form' (or RAF). Now, by fulfilling the criterion of *flexibility*, the matters of *consistency* and *continuity* are practicable too. Actually, the sonic logo of McDonald's represents a good example of flexibility, consistency and continuity ever since the

company licensed the Justin Timberlake single *I'm lovin' it* in 2003.[1] However, while being flexible for sure, a sonic logo as RAF is not necessarily fully recognizable; recognizing a sonic logo might depend to a greater extent on the level of *melodic distinctiveness* as well as *timbre*.

A mixed-method study: Design and results

To explore these matters, an experimental reception study was set up in two high schools in the northern part of Denmark where 137 subjects were drawn from seven classes. The aim of the study was to investigate in general the recognisability of sonic logos as RAF vis-à-vis sonic logos in their original form and a possible relation to melodic distinctiveness. An intermediate aim was to explore whether pitch range or durational variation of RAF represented the most important modality cue. For this reason, a mixed-method approach was used, which included both quantitative data from recognition tests and, again, quantitative data from content analysis focusing on melodic distinctiveness. Sonic logos of five corporations were chosen, which included Intel (cf. Ex. 1) as well as Nokia (Ex. 2), McDonald's (Ex. 3), JYSK (Ex. 4) and Elgiganten (Ex. 5).

Example 3.

Example 4.

Example 5.

Example 6.

The subjects were divided in two conditions labelled 'Test 1' and 'Test 2' (Table 1). In both test conditions, all five sonic logos were played in 4 different versions one after another where tempo and articulatory complexity were independent variables. Put in another way, the experiment was carried out as two separate musical commutation tests, focusing on pitch and rhythm respectively, and beginning

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Cf. Graakjær (2011) for a description of the genealogy of the McDonald's *I'm, lovin' it* logo.

with the most reduced and therefore most unrecognizable version, end ending with the original sonic logos. The subjects received a questionnaire and were told to mark with an 'X' under one of the 4 versions, after which they meant to recognize the sonic logo – and another 'X' when recognizing the brand. Finally, they were told to write down the name of the brand (Table 2).

Independent variables		Test 1: Pitch (n=66)	Test 2: Rhythm (n=71)
Tempo	I	Pitches only, slow tempo	Rhythm only, half tempo
	II	Pitches only, fast tempo	Rhythm only, original tempo
Articulatory complexity	III	Pitch and rhythm, original tempo (RAF)	
	IV	Original sonic logo	

Table 1. Test procedure.

	I	II	III	IV
I recognized the sonic logo	I ☐	II ☐	III ☐	IV ☐
I recognized the brand	I ☐	II ☐	III ☐	IV ☐
Brand name	_____			

Table 2. Questionnaire.

For the study, the following three questions were asked:

1) What significance has the concept of RAF as regards the recognition of the five logos and the corresponding brands?
2) To what extent is logo and brand recognition dependable on the pitch content or rhythmical design?
3) Do the responses suggest any correlations between recognition on the basis of RAF and melodic distinctiveness?

There are a few overall conclusions that one might come to. To begin with, it seems that pitch is more important than rhythm for recognizing sonic logos (Fig. 3a). The diagrams are based on all five logos, but the results from the individual logos are similar – even the McDonald's logo, in which the syncopated rhythm is a distinct feature; or the Nokia logo with its three rhythmic-identical chunks, which makes it distinctive too. The study does not reveal why it is so. One might wonder whether the results would be different if the test were extended to another socio-cultural milieu, but that remains pure speculation. Secondly, we may conclude that RAF does not cause recognition in a sufficient degree. If the RAF concept was to be considered sufficient *itself* for logo and brand recognition, the recognition ratio after playing RAF should be considerably closer to the recognition ratio after playing the *original logo* than after playing a more reduced version (Fig. 3b). Clearly, that is not the case, especially not with respect to Test 1 regarding pitch. Rather, it seems that timbre is very important for logo and brand recognition. Thirdly, there seems to be some correlation between logo and brand recognition on the basis of RAF and melodic distinctiveness. Indeed, the most recognized sound logos and brands are McDonald's, Nokia and JYSK, which are the ones with the largest intervals (*ambitus*) between the highest and lowest pitches (Ex. 8); and that would be one indicator of melodic distinctiveness. However, one has to be cautious here when making any conclusions, since the results on the basis of the individual logos might very well be due to factors not considered in the experiment. For instance, it appears that the three logos are derived from pre-composed or pre-existing music

material while the two remaining logos are specifically made for the brand, and that, of course, might have an important influence on the results.
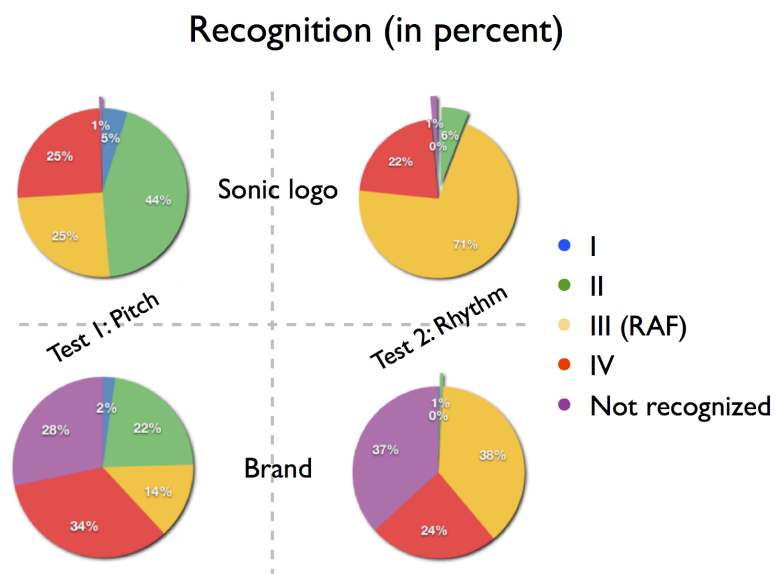
Recognition (in percent)

Figure 3.

a) Compare the green colours in the left and the right column and notice that the yellow colour equalizes the difference of the two test conditions.

b) Notice in both test conditions the substantial percentage increase of recognition after playing the original logo (red colour) and compare with the percentage increase of recognition after playing RAF (yellow colour).

Francisco Tárrega: "Grand Vals" (classical guitar composition, 1902)

15 half steps

Justin Timberlake: "I'm Lovin' It" (pop song, 2003)

9 half steps

H. C. Simonsen: "Man from Jutland" (Danish patriotic song, 1846)

12 half steps

Example 7. Ambitus and compositional source material regarding the sonic logos of Nokia, McDonald's and JYSK.

Conclusions

To conclude, RAF fulfils the criteria of musical and technical flexibility, providing the opportunity for consistency and continuity. RAF also allows for melodic and rhythmic distinctiveness as well as brand and product fit, though the experiment does not reveal whether that is the case regarding the five logos, as I stressed above. However, RAF does *not necessarily* lead to recognisability. And finally, pitch content represents a more important identification cue than durational variation (or rhythm).

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