Chapter 28
Sounds of Web Advertising

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ABSTRACT

Sound seems to be a neglected issue in the study of web ads. Web advertising is predominantly regarded as visual phenomena–commercial messages, as for instance banner ads that we watch, read, and eventually click on–but only rarely as something that we listen to. The present chapter presents an overview of the auditory dimensions in web advertising: Which kinds of sounds do we hear in web ads? What are the conditions and functions of sound in web ads? Moreover, the chapter proposes a theoretical framework in order to analyse the communicative functions of sound in web advertising. The main argument is that an understanding of the auditory dimensions in web advertising must include a reflection on the hypertextual settings of the web ad as well as a perspective on how users engage with web content.

INTRODUCTION

The shouting of the medieval public crier (Dyer 1982, 15) and similar historical instances of commercial announcements (e.g. Bridge 1921) illustrate a long auditory tradition of advertising. In advertising as we know it today, sound seems flourishing and–from a communicative point of view–indispensable in commercial messages in mass communication media such as radio and television (Graakjær & Jantzen 2009a). However,

when it comes to web advertising, one is often met with 'sounds of silence' as we will demonstrate empirically below. In a way, research on sounds in web advertising corresponds to this state of affairs, and only a few contributions have dealt considerably with the subject matter (e.g. Jackson & Fulberg 2003, Tsang 2007).

'Silent sounds' have been considered in studies of language in printed advertising (e.g. Myers 1994, Cook 2001) in terms of prosody, rhythm, and rhyme. Likewise, language in web advertising is interestingly demonstrated to have a pronounced spoken characteristic–and thereby

implies sound. As pointed out by Janoschka (2004), written language in web ads typically plays on face-to-face communication as a means to involve the user: "The use of linguistic features that are typically found in spoken conversations (…) is particularly striking in online advertising interaction. This conceptual orality (…) reflects the affinity between language use and the conception of web ads found in the new communication medium. Characterized by the Web's technical interactivity, the way in which language is utilized in online advertising can create the impression of interpersonal communication and communicative immediacy" (Janoschka 2004, 130). Following Janoschka, the conceptual oral character of the web ad serves as a schema or mental model of how the user is supposed to interact. For instance, a directly addressed question needs an answer; a request must be followed by an act, etc. In this way, the use of language is seen in correspondence to the possibility to interact and thereby 'to answer'.

Thus, sound in web ads is verbally put into play in various ways. First of all, sound appears as implied and invited in the constructed communicative interaction. But sound is also seen as a reference in the communicated address, e.g. imperatives implying sound ('*Turn up the volume*', '*Listen*') and icons indicating sound, e.g. notes, loudspeakers, and play-buttons.

Also visually, web ads sometimes *look* like having sound (see Mass 2002 for a comparable observation regarding printed ads) and 'silent sounds' appear affiliated to visual expressions in various ways. Sound can be implied as a synaesthetic[1] accompaniment–or a kind of 'muted' sound–to the visually highlighted expression of the text (cf. typography and graphics like capitals, bold, italics, underlining, coloured text, etc.), and because such visual means of expressions can be experienced as 'noisy', 'invoking', or 'calling', they are affiliated with auditory conditions. In relation to animated graphics, sound can be experienced in text or visual objects that are looping in sequences. Visiting a website that hosts many animated ads, as for instance an online newspaper, may very well entail a 'noisy' experience, partly due to the abundance of advertising messages featured next to the editorial content, and partly because of the different rhythms of the animated ads which, in an overall view of the website, will probably seem to swing unsystematically. The expression of the specific ad is not necessarily 'noisy', though, and it can appear rather 'rhythmical' and 'musical'. Furthermore, sound associations can arise as 'muted' sound from animated objects that are normally associated with sound as for instance animated cars and moving pictures of people seen talking.

In this regard, web advertising is accompanied by many 'silent sounds'. But what about the real and heard sounds of web advertising? In the following, we will concentrate on the sounds of web ads that we actually hear. These sounds can be grouped in the following four broad categories: speech, music, incidental sounds, and sound effects. The empirical point of departure is a comprehensive material registered in a Danish context in two periods: 2004-2005 and 2008-2009. The material is analysed with the intent to specify the frequency, forms and functions of sound in web ads. In contrast to more limited scopes of previous studies (e.g. Tsang 2007), we will include different types of web ads, and we will not restrict the discussion to specific corporate brands. This allows us to give an empirically substantiated indication of 'normality' when it comes to the (non) presence of sounds in web ads, even though the empirical material can only hardly be considered representative of 'web ads in general' (more to this reservation below). As already hinted at, our findings suggest that sound is not particularly widespread. However, the registered material allows us to make a close examination of the web ads that actually *do* include sound, and the examples lead us to the proposal of an analytical framework. It is the intention that the proposed framework can provide both analysts and designers with useful insights into the (possible) appearances

and communicative functions of sound in web ads. In addition, the framework helps to identify relevant future research initiatives.

The chapter is organised in the following manner: Firstly, the chapter provides relevant insights to the conditions of sounds in web ads. Addressing issues of media use and specific characteristics of medium and genre in an intertextual perspective, the first sections will provide a theoretical background for the understanding of sounds in web ads. Secondly, the chapter presents and discusses the empirical material, hereby providing an indication of the frequency and functions of sound in different types of web ads. Thirdly, by way of conclusion, the chapter will present an analytical framework in which to examine the functions of sound in web advertising.

COMMERCIAL SOUNDS AND MEDIA USE

As an introduction to the study of specific sounds in web ads, we will present an overview of some of the differences between sounds in web ads and other instances of commercial sounds from a user's perspective. This introduction will provide the backdrop for the following more specific and detailed presentation of the textual characteristics of web ads that are important to understand sound.

From an overall view, the existence of sound in web ads is accompanied by some ambivalence. Many Internet users seem to experience sound as an intrusive and negative element (Tsang 2007), particularly in relation to web ads surrounded by editorial content as for instance web banners. Accordingly, automatically activated sound is presented on Nielsen's list of *The Most Hated Advertising Techniques*,[2] and, in the creative guidelines from the international association Interactive Advertising Bureau (IAB), it is recommended that audio should be "user initiated, on click",[3] i.e. sound should not turn up as an unwelcome surprise to the users.

Probably, this attitude towards sound in web ads can be explained by the Internet representing a *pull*-media (contrary to *push*-media such as analogue broadcast television), where the user usually expects and experiences a high level of control (cf. one *search* information on the Internet). According to the media typology proposed by Jensen (1999, 163), the web is predominantly a consultative medium. This means that the sudden appearance of sound that the user did not deliberately search for can be experienced as a very intrusive element in the private sphere of the user. Compared to radio and television, sounds of commercials in these media are also often considered uninvited and disturbing (e.g. Schafer 1977, 268ff). However, there are mitigating circumstances: The sound of radio and television plays an important role in establishing both *continuity* (the unbroken and overlapping sequence of events) and *breaks* (the abrupt highlighting of present or upcoming events), useful–if not directly attractive–features of modern radio and television programming matching absent minded listening and viewing. The appearance of sounds on the Internet might perform the same functions for users (one can for instance listen to the radio on the Internet while writing an e-mail), but whereas sounds of radio and television presents (part of) a pre-determined expression which cannot be modified (only avoided), sounds of the Internet are generally to be considered more dependent on the user in the sense that sounds appear as a result of additional choice.

While radio and television arguably present sound *relatively independent* of user activity (cf. the sound on television is mutable, but it usually emerges when the television is switched on), the sound on the Internet is more likely to be *dependent on* (a result of) user activity in various ways. Television is an audio-visual medium presupposing speakers and sound (cf. television sets have always been produced with integrated speakers), whereas the Internet has been conceptualized and used to a greater extent as a visual medium

with less focus on sound technology from both producers and users. For instance, it is no rare occurrence for the sound never to appear when opening a computer, in that opening a computer does not necessarily entail switching on speakers. Likewise, when specific web ads come into sight it is not wholly expected for them to carry sound, indicated by the widespread use of imperatives in the ads such as 'turn up the sound' or 'switch me on'.

Specific variants of sounds on web ads warrant a comparison to the commercial sounds (typically in the form of music) in stores. On web banners' linked target ads (e.g. microsites) sounds will sometimes welcome its listeners independently of further user activity than the initial *getting there*. Because the media use and the role of sound do not seem to be quite habituated (as discussed above), it might be argued that for some users these sounds will be met with discomfort and perhaps irritation. An indication of this is the possibility to switch off the music–much unlike a stay in shops, where music is inescapable (only to be avoided through privatised 'cover-music' in for example iPods).

Of course, there are differences between a 'stay-on-a-website' and a 'stay-in-a-store': In stores, the stay is normally sequenced in a relatively well-defined manner (cf. a script for shopping), whereas a stay on a website is usually characterised by a shorter-lasting, not pre-determined explora-tion or visit, and the stay can be ended any time without important consequence. In other words, the user is *on* the website, whereas the customer is *in* the store, in which the physical setting and spatial experience is co-constructed and modified by music.

In Table 1, the preceding discussion is summed up. In rough outline, the figure indicates essential dissimilarities of sounds in web ads when compared to commercial sounds of stores, radio commercials and television commercials, profiled from a user's perspective.

In the following sections we will focus more specifically on the conditions of sounds in web ads.

THE CONDITIONS OF SOUND IN DIFFERENT TYPES OF WEB ADS

In the present chapter, we use the term 'web ad' as a general term for ad formats on the World Wide Web. In relevant literature, the attempts to specify the different types of ads on the web are numerous (e.g. Rodgers & Thorson 2000, Faber et al. 2004, McMillan 2007). Web ads include a number of graphic formats and technologies, they often integrate multiple modes of expressions, and they can be static, dynamic as well as interactive. Contrary to for instance printed ads and television commercials, which both have

Table 1. Overview of commercial sounds in different media from a user's perspective

	Store	**Radio**	**TV**	**Internet**
Typical degree of receiver attention to commercial sound	Low to medium	Low to high	Low to high	High
Appearance of commercial sound	Ambient	Separate, in ads between editorial content	Separate, in ads between editorial content	Next to editorial content and separate on web pages
Typical degree of user control	Low The listener is exposed to a pre-determined 'auditory architecture'	Medium The listener is exposed to a pre-determined auditory flow	Medium The listener is exposed to a pre-determined audio-visual flow	High The listener is engaged in a user-dependent flow
Musical format and duration	Long, whole pieces of music	Short	Short	Varied

well-defined formats, a web ad is more difficult to define clearly. Obviously, the web ad shares this problem of delimitation with other texts on the Internet, and the challenge is to decide how many links further are related to the context of the ad. When is the ad no longer an ad? Furthermore, it can be difficult to distinguish web advertising from other marketing functions (cf. Faber et al. 2004).

However, in an empirical study of web advertising as the one we refer to here, an operational definition of web advertising is necessary. Unlike a general definition of web advertising that includes all possible types of advertising on the web and that complies with a general definition of advertising (e.g. Dyer 1982, 2), an operational definition is more specific in pointing out what particular kinds of ads that should be included in the study. From an overall perspective, empirical studies on the effectiveness of web ads *either* seem to focus on banner ads (and similar formats),[4] where the advertising message is competing with the surrounding content, *or* employ a broader conception of web advertising *as* commercial websites (see e.g. Hwang & McMillan 2004). It is also a general conception that web ads should be regarded as a hyperlinked connection between an *embedded web ad* on a host website (e.g. a banner ad in an online newspaper) and its *linked target* (for instance a web page about the product, a company website, or a microsite hosting a specific campaign) (e.g. Dahlén 2001, Janoschka 2004). In the present chapter, we stick to the conception of web advertising as a hyperlinked structure starting from the embedded web ad. Thus, we focus on sound in relation to the embedded web ad and its linked target respectively, even if the latter might appear not to comply with a general definition of advertising simply because it does not 'look like advertising' and/or happens to serve other marketing functions.

Therefore, what we claim here about sounds of web advertising must be regarded with the particular operational definition of web ads in mind. However, the proposed analytical framework is intended for a more general use and is believed to be applicable to other types of web ads as well (e.g. commercial websites). It is also necessary to be aware of the different conditions of sound in the embedded web ad and in the linked target ad, respectively. As mentioned, sounds in web ads that are located among other content are in principle *regulated* (cf. the IAB guidelines), whereas structurally independent forms of advertising as for instance the linked targets ads are *less regulated* as regards the use of sound. We will now take a closer look at the media related conditions of sound in web advertising.

THE TEXTUAL CHARACTERISTICS OF THE WEB AD

The web ad is a digital text. This means that it is based on the representational capacities of the computer in which all other media can be simulated by means of the binary alphabet (Finnemann 2001, 23f). In relation to sound, this implies that the use of audio in older media can be simulated and integrated as a component in the digital text, e.g. in the form of a television commercial.

According to Bolter & Grusin (1999), the representation of older media in the digital medium reflects a general logic of *remediation* that appears at the level of the interface in various ways.[5] The remediation of other media can also be considered in a perspective of stages. In his *Media Interaction Cycle,* Leckenby (2005) identifies three phases in the development of a medium: 1) the transference of characteristics from one medium to another ("transference"), 2) the focus on the capabilities specific to the medium ("exclusivity"), and 3) the influence of the new media on older media ("recurrence"). To illustrate the phases Leckenby refers to web ads: "Today's ubiquitous online banner ads are simply a product of taking known methods and ideas and transferring them to the new media from the traditional media, a common occurrence with the advent of a new

medium" (Leckenby 2005, 18).[6] Thus, it should be clear that we must understand the web ad text as a result of a complex interplay between existing media forms. We find examples of remediation of 'older' forms of advertising (e.g. billboard ads similar to printed ads, web ads displaying television commercials) as well as examples of new forms of advertising that make use of the unique potentials of the Internet medium (e.g. interactive games, hypertext menus, forms).

However, the web ad's 'borrowing' is not restricted to the level of media, but exists as a common characteristic of advertising as a genre as well. As described by Cook: "Ads draw upon, and thus share features with, many other genres, including political propaganda, conversation, song, film, myth, poetry, fairy tales, soap operas, sitcoms, novels, graffiti, jokes and cartoons (Cook 2001, 12). In an overall perspective it is then appropriate to be aware of the web ad text as a composite form that potentially refers to and borrows from many other modes of expression.

Thus, when analysing sound in web ads, there are a number of other instances of sound in other forms of communications on which it might be necessary to reflect. Figure 1 presents an outline of the related sounds of web advertising. The figure should not be regarded as a complete check list, but as areas that are relevant to consult when dealing with sound in web ads:

To sum up, the figure illustrates that the use of sound in web ads (as well as in other modes of expression) is inspired by different media and genres, and therefore it appears of relevance to consider the occurrence of sound in other advertising media, e.g. sound in radio and television commercials, as well as the use of sound in other genres, e.g. in computer games. However, it is crucial to pay attention to the specific characteristics of the medium in which the sound occurs, including technology as well as media use (cf. Table 1).

Another important characteristic of the web ad text to be mentioned here is its basis in a network of nodes and links (the Internet). From a perspective of communication, Janoschka describes the hyperlinked structure of the web ad as a succession of advertising messages: The web ad consists of an "initial advertising message" (e.g. a banner ad), which links to a "linked advertising message" (the destination of the banner ad, e.g. a web page about the product), and finally an "extended advertising

Figure 1. The related sounds of web advertising
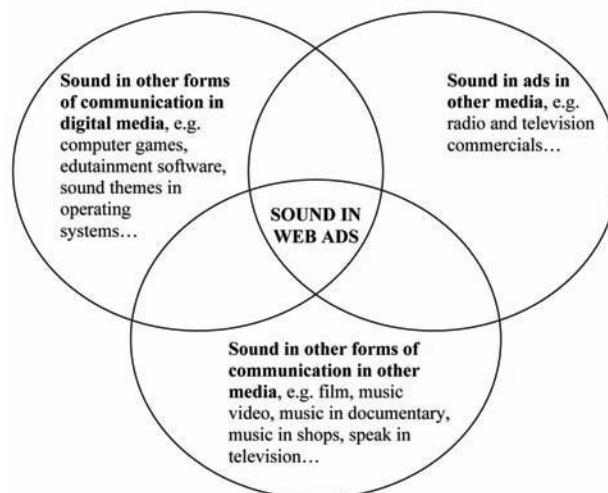
message", which follows from the links on the destination of the banner ad (Janoschka 2004, 49f). In other words, depending on how the limits of the advertising message is decided, the web ad must be regarded as a hypertext or (at least) as a part of a hypertext structure. In this respect, we find it useful to adopt a definition of hypertext as a navigational mechanism in addition to (not opposed to) text: "What hypertext adds to text is primarily that it provides a set of navigational mechanisms which can be used in a variety of ways in our navigation between elements within and between texts" (Finnemann 2001, 42). In our view, the hypertextual feature of the web ad raises an interesting question in relation to sound: What is the function of sound in relation to the hyper-textuality of the web ad? We will elaborate on this central question in the remainder of the chapter.

HOW DO WE READ WEB ADS?

The well-known phenomenon of banner blind-ness (Benway & Lane 1998) indicates that we do not pay much attention to web ads, yet, eyetrack studies have shown that we are not totally blind to commercial messages on the web.[7] Different kinds of empirical studies of what users actually see–and hear–while using the Internet are of course relevant. However, we would like to introduce a general theory of reading hypertexts in order to analyse the specific instances of sound in web ads. The aim is to investigate the functions of sound in relation to the user's potential engagement with the content of the web ad. We regard sound as carrying important communicative functions that shape the user's experience of the web ad, and the challenge is how to analyse sound in relation to the specific medium of the Internet. As mentioned, the purpose is *not* to examine actual users' conceptions of the various auditory phenomena in web ads but from an analytical perspective to be able to describe the functions of sounds in relation to the different types of activities that the user might bring into

play when engaging with the ad. Therefore, the first step is to know in which ways the user can orient himself in the web content.

According to Finnemann, digital texts are characterised by *modal shifts* between different modes of reading, representing "a discontinuous process, included as part of the reading process" (Finnemann 2001, 44). Addressing digital texts in general, Finnemann distinguishes between three modes of 'reading': 1) the reading mode, i.e. "reading "as usual" (including skimming etc.)", 2) the link mode, i.e. "navigating and browsing", and 3) the editing mode, i.e. "interactive behav-iour changing the future behaviour/content of the system" (Finnemann 2001, 43). In order to under-stand the role of sound in web ads in relation to how we engage with web content in general, we find it useful to adopt Finnemann's conception of hypertext as facilitating modal switches.

Thus, in the following, we distinguish between three kinds of user activities that can describe the ways in which users read or engage with web ads, namely reading, navigating, editing. In the *mode of reading,* the user for instance listens to and watches a commercial video or simply reads a written text in a banner ad. Unlike the 'simple' reading of the content, the *mode of navigating* obviously involves a more active and tactile contribution by the user, usually by moving or clicking the mouse as a means to browse between parts of the ad's content by the provided links and menus. Finally, in the *mode of editing*, the user contributes with input that has some kind of effect on the content or appearance of the ad. Examples of editing could be the marking of radio buttons and checkboxes as ways of choosing preferences (e.g. the colour of a car, the settings of a game) or the submission of information to the system by filling out forms with numbers and words (e.g. sending orders and contact data).

In the following, we will examine the functions of sound in a comprehensive material of registered web ads in relation to the different modes of user activities. The assumption is that an analytical

framework based on the above presented modes of user activity–reading, navigating and editing modes–can be applied on both embedded web ads and linked target ads (as well as other kinds of web ads not discussed in the study), although, obviously, the embedded web ad has more limited conditions as regards sound because of its size and placement. First, the empirical material referred to is presented.

THE EMPIRICAL MATERIAL

The web ads that constitute the empirical material are registered on a Danish sample of websites in 2004-2005 and in 2008-2009.[8] The material from the first period of registration includes 1025 embedded web ads and 613 linked target ads, and the material from the second period of registration includes 221 embedded web ads and 185 linked target ads.[9]

In fact, the absolute majority of the embedded web ads in the material appears without sound, only 1,9% of the registrations from 2004-2005 and 5% of the registrations from 2008-2009 include sound (see Table 2), and when sound actually occurs, it is usually as part of a video, a television commercial or a film trailer, integrated into a banner or a billboard. As regards the linked target ads, sound is neither exactly widespread, even if sound occurs more frequently compared to the embedded web ads: 6,2% of the registered target ads from 2004-2005 and 6,8% of the registered target ads from 2008-2009 include sound (see Table 2).

Even if the share of web ads with sound in the material is rather low, it is notable that the instances of web ads with sound seem to be increasing. However, it should be emphasized that what we report here on sound in web ads must be seen in relation to the specific empirical material,

Table 2. Occurrences of sound in the registered web ads with sound

		Embedded Web Ads		Linked Target Ads	
		2004/2005	**2008/2009**	**2004/2005**	**2008/2009**
Total number of registered web ads		1025	221	613	185
Share of web ads with sound		1,9% (n=19)	5% (n=11)	6,2% (n=38)	8,6% (n=16)
Automatically initiated sound		-	-	**78,9**	**81,3**
	Speech	-	-	15,8	43,8
	Music	-	-	60,5	75,0
	Incidental sounds	-	-	21,1	18,8
	Sound effects	-	-	18,4	-
User-initiated sound		**100**	**100**	**55,3**	**37,5**
	Sound from embedded videos	84,2	45,5	34,2	25,0
	Speech	68,4	36,4	18,4	25,0
	Music	47,4	45,5	21,1	25,0
	Incidental sounds	47,4	18,2	21,1	6,3
	Sound effects	-	-	-	-
	Other instances of sound	15,8	54,5	28,9	12,5
	Speech	10,5	9,1	7,9	-
	Music	-	45,5	5,3	-
	Incidental sounds	5,3	-	2,6	-
	Sound effects	5,3	45,5	21,1	12,5

in particular the applied operational definition and the selection of websites in the sample. It is likely that a focus on other types of websites would have resulted in more ads with sound. Also the Danish context in which the web ads are registered must be acknowledged. The frequency of web ads with sound might vary from country to country, but analysis of cross-cultural differences lies outside the scope of this chapter.

Overall, four categories of sound can be identified in the material:[10]

1) Music, i.e. musicalized sound (typically performed on musical instruments).
2) Speech, i.e. spoken presentations (with direct address in the form of a presenter, a testimonial, or a voice-over, and with indirect address in the form of dialogue).
3) Incidental sounds, i.e. non-spoken and non-musicalized diegetic sounds (supposedly originating from a presented or implied dramatic universe).
4) Sound effects, i.e. non-spoken, non-musicalized, and non-diegetic sounds (typically representing an unrealistic auditory addition to objects showed or implied).

Table 2 presents an overview of the registered sounds in the embedded web ads and in the linked target ads in the empirical material. The figure distinguishes between automatically initiated sound (sounds that 'just turn up') and sound that is initiated by the user.

In all the examples of embedded web ads, sounds are initiated by the user's mouse, i.e. by mouse-over–a more or less deliberate activity–or by clicking on the ad. Such instances are typically formatted as embedded videos of various lengths, and often they bear resemblance to television commercials (thus presenting a case of 'unchanged' representation of the television commercial in another medium, cf. Bolter and Grusin 1999). However, the importance of user activity shows in that the playing of the videos can be modified

by the user (which presents a dimension of 'improvement', cf. Bolter and Grusin 1999): If the mouse does not stay on the ad, the video will be interrupted, only to start again when the mouse revisits the ad; a design that makes particular user activities possible (probably not intended by senders), such as *scratching*–the reactivation of a video with very short intervals.

Because it is the user's activity that causes the sound and not the reverse, this 'silent', only potentially auditory ad at first sight presents a peculiar audio-visual advertisement phenomenon. Thus, to *attract attention* is not the primary function of the sound–contrary to the almost archetypal function of sounds in advertising more generally. Rather, the sound emphasizes and sustains attention, so as to prompt the user to leave the mouse where it is (in cases of videos) or to click. It seems that embedded web ads are predominantly visual expressions (pictures, texts–and sometimes animated), attracting attention by various sorts of eye catchers (e.g. colours and movements) or by verbal imperatives. Only in cases when the mouse unintentionally slides across the ad, it makes good sense to consider the sound as attention grabbing; most obvious in cases of highlighted sound in the beginning of the video.

When it comes to the linked target ads, sounds occur more often and more varied compared to sounds in embedded web ads. As mentioned, entering a linked target ad is caused by user activity (click and expectation)–it is an ad that the user deliberately goes for. The advertising message is no longer occurring synchronously with non-commercial, editorial content (contrary to the case of embedded web ads), and the ad text is ready for exploration either right away–following the initial click–or succeeding an introduction in which sounds appear as part of a fixed expression that has to be followed (or skipped).[11]

If we take an overall look at the auditory phenomena that occur in the linked target ads, we can identify automatically initiated sounds in introductions (sometimes including the automatic

playing of videos) as well as sound in the 'background' of a web page. We can also identify user initiated sounds comparable to the ones already mentioned in relation to embedded web ads. For instance, sound effects can be heard as a result of mouse-over where the sounds become indexes of the objects seen. Sounds also appear as part of audio-visual expressions such as the 'unchanged' (or perhaps slightly improved) remediation of television commercials or as videos embedded into the design of a microsite, for example as part of a collage, thus presenting a rather sophisticated refashion of television commercials. However, mouse-over initiated videos on linked target ads seem to have somewhat different conditions compared to their status as embedded web ads: Auditory phenomena are not necessarily *up front* (loud and right from the start)–as in many mouse-over initiated embedded ads–because the users' attention can be presupposed, and therefore the need for attention grabbing sounds is less. Furthermore, sounds in linked target ads can be heard in connection with a range of features accessible on the web page, for instance in quizzes, games, immersive scenarios and the like.

We will now take a closer look at the web ads with sound in the registered material in relation to the different modes of user activities, i.e. sound in the mode of reading, in the mode of navigating, and in the mode of editing.

THE FUNCTIONS OF SOUND IN THE MODE OF READING

To a great extent the embedded web ads with sound are videos to be watched and listened to 'as usual', i.e. they are intended to be received in the mode of reading. In the material, the videos in the embedded web ads are most often television commercials or film trailers, but there are also examples of videos related to political campaigns and charity. The use of sound in the videos is evidently very similar to what we hear

in audio-visual media in general (cf. Figure 1): We can identify different kinds of speech; the direct address to the user from a presenter, testimonial or voice-over, and the indirect address to the user by means of dialogues between people in a displayed story, and we hear different kinds of music and incidental sounds.

Likewise, in the linked target ads, we find examples of videos 'simply' to be watched and listened to, e.g. presentation videos about the product, television commercials, and film trailers, and often they appear with longer duration compared to the videos of embedded web ads. But, in the linked target ads, we also find instances of sound that appear as part of the web page as such. The sound is automatically initiated when the user enters the web page, and it typically presents itself as part of a short introduction sequence (often in flash design), and/or as sound in the 'background' of the web page as a whole. In the material, we hear different kinds of music, both original and pre-existing, as well as incidental sounds, e.g. sounds from particular settings (for instance a city, a museum, a ski slope, a beach).

Music comes in two forms: Either as predominantly short-lasting, repeated (perhaps slightly varied) musical expressions characterized by groove and sound at the expense of melodic curvature and harmonic progression[12] or as wholly rounded tunes. The latter is comparable to music in stores, where longer-lasting culminating progressions constituted by tuneful, pre-existing pieces of music will typically be heard.[13] However, contrary to the occurrence of pre-existing music in stores–and in radio and television commercials for that matter–the music on a web page can often be identified instantaneously via for instance an icon texted: "You are now hearing…". Pre-existing, often relatively unknown music (to the ordinary user) is sometimes part of the attraction of a linked target ad; the music co-establishes atmosphere and moods (to the possible commercial benefit of the linked target ad and its product), while the pre-existing music is exposed in a rather unobtrusive

way. Considered as a kind of co-branding of music and the advertised product, this phenomenon has been prevalent in television commercials for quite some time. However, the linked target ad seems to add new dimensions by providing information on the music (product) instantaneously and simultaneously in an unobtrusive–compared to television commercials–commercial environment.

Considering other types of sounds, speech is occasionally heard as an accompaniment to linked target ads, especially in the short introduction sequences. In videos, speech typically performs the function of more or less explicit commercial presentation (e.g. by way of voice-over, presenter, testimonial, and dialogue). Incidental sounds and sound effects appear during the user's navigation and in different types of games–sometimes supplemented by music–offered on the linked target ad. Occasionally, music from the front page will accompany the sounds of the user's navigation and implies the possibility of overlap between sounds corresponding to different modes of reading; for instance: Music corresponding to the reading mode can perform an auditory background to incidental sounds and sound effects of the modes of navigation and editing mode, respectively (more on this below).

To sum up, three functions of sound can be identified in the reading mode, namely *supportive*, *mood enhancing* and *presenting* functions. Whereas the presenting function of speech (in the form of a presenter, a testimonial, a voice-over, or dialogue) tend to be less dominant, the supportive and mood enhancing functions of sound effects, incidental sounds and music seem to be more widespread. We use the term 'supportive' to refer to a predominantly structuring and underlining function of sound in audio-visual expressions (generally assuming that sound will be subordinate to the visual part to an even greater extent on the Internet compared to television, cf. the discussed media related conditions of sound). We use the term 'mood enhancing' to refer to the usual function of music and incidental sounds in visually

uneventful periods, and here sound functions as a rather unspecific moderator of the experience of the web ad (somewhat similar to the experience of being in a store with music). Whereas sounds with a supportive function arguably point *into* the audio-visual expression for instance by emphasizing movements and bridging scenes, sounds of an uneventful visual context are more likely to point *out from* the media text, identifying and positioning the user as for example somebody in need of making a move (see more on this last issue below).

THE FUNCTIONS OF SOUND IN THE MODE OF NAVIGATING

The mode of navigating is constituted by the user's linking or navigating between elements in the ad. In the mode of navigating, sound accentuates or draws attention to the navigational conditions of the web ad text in various ways. In the registered material, we find examples of embedded web ads in which sound is indicating the possibility to link. For instance, the initiation of the sound of a rifle fire by the user's mouse-over in an ad that invites the user to go 'job hunting' (visually illustrated by a savanna with people representing different job positions) can be regarded as a sound that makes the user aware of the existence of a link. At the same time, the thematized sound of the rifle serves as an auditory promise of what the user might expect and thereby motivates the linking.

In the linked target ads, we find similar instances of sound that draw attention to the possibility to link, e.g. in connection with menus (sound effects as well as speech initiated by mouse-over). We find also examples of sounds that stress the navigational movements in relation to a particular object, e.g. sound effects that highlight the zooming in and zooming out of a product. Moreover, in the material, we can identify navigational sounds that, in some respects, overlap with the functions of sound in the reading mode, but that are consti-

tuted by the *transition* between different sounds in different parts of the ad. An example is an ad for a car in which the front page displays a new car model on the roof of a skyscraper. The front page is accompanied by incidental sound from the noisy city (with many cars) below, and when the user 'enters' the car for further inspection of its interior details, the user is met with classical music. Obviously, the contrast between the city noise and the classical music is loaded with meaning, but what we would like to point at here is that the contrasting sounds serve as an indicator of where the user is positioned in the structure of the ad. However, transitions between sounds that indicate the position of the user are not necessarily made by contrasts. Other examples in the material show that it is the *difference* (also minor differences) between sounds that positions the user.

Another instance of navigational sound is the use of circular (looped) musical expressions or repeated incidental sounds that alongside the mood enhancing function in the reading mode also seem to function as an incentive to navigate or link. As a result of user expectations of 'pull-ability' (cf. the previous discussion on the Internet as a pull-medium), users might search for a 'link out' (or rather a link 'further into' the universe of the linked target ad) as soon as the sounds stand out as circular, monotonous and stagnant. For example, the repeated playing of 'city noise' on the main navigation page of the above mentioned car ad somehow forces the user to take action, i.e. select which part of the car to be further explored, in order to escape (auditory) boredom.

To sum up, in the mode of navigating, we can point at two dominating functions of sound. Firstly, sounds that function as an *indication of the user's position* for instance by the use of different music in the different levels of the ad's composition. In these cases, the sound emphasizes the location of the user by connecting e.g. specific music or incidental sounds with specific 'spaces' or levels in the ad's structure, and thereby the sound underlines *where* the user is or should be. Secondly,

sounds that function as a *marker of link-option*, both directly in the form of sound effects or exclamations and indirectly in the form of circular, repeated sound that urges the user to navigate.

THE FUNCTIONS OF SOUND IN THE MODE OF EDITING

In the mode of editing, the user is actively contributing to the ad. In the registered material, sound in the mode of editing is mainly heard in relation to the user's participation in different kinds of games either in an embedded web ad or in a linked target ad. For instance, the sound of darts hitting a dartboard, the sound of a vase that the user is supposed to smash, or the sound of the user's playing on a piano in a karaoke-like play contest. We also find an example of speak humoristically commenting on the user's performance in a game (e.g. "*What are you doing!*") and a musical fanfare celebrating the user's triumph.

Thus, in the mode of editing, sound functions primarily as a confirmation of the user's input. In contradiction to the mode of navigating where sounds will normally function as motivating activity, the sounds in the mode of editing are rather *confirmatory* in that they function as 'auditory receipts' that are highlighting the *result* of an activity.[14] Most often the sounds are thematized so that they correspond to and emphasize the act that the user is supposed to do (cf. the simulation of a game of darts).

THE COMMUNICATIVE FUNCTIONS OF SOUND IN WEB ADS: AN ANALYTICAL FRAMEWORK

So far, we have examined the sounds of web ads in relation to how we read web texts in general, i.e. as involving modal switches between a reading mode, a navigation mode, and an editing mode. In order to analyse sound, we argue that it is rel-

evant to reflect on the communicative functions of sound in each mode as well as in relation to the switching between modes. Referring to an empirical material, we have outlined what we hear as the typical functions or roles of sound. It is our impression that the presented functions are rather general; however, the findings may not be exhaustive. Figure 2 presents an overview of the functions of sounds in embedded web ads as well as in the linked target ads in relation to the modes of user activities (reading, navigating, editing).

Even though the embedded web ad, because of its limited size, seems less complicated as regards composition and use of sound compared to the linked target ads, the functions of sound presented in Figure 2 both describe the embedded web ad and the linked target ad. In many instances, though, the figure would seem 'too big' since the embedded web ad does not (yet) provide users with the range of options presented in the linked target ads with regard to navigation and use of sound. Moreover, the embedded web ad will not allow the same amount of shifts between different user activities, although they can occur on a reduced scale.

It should be emphasized that the modes of user activities are overlapping and thereby not mutually exclusive. This is why the figure is illustrated as an embedded structure. For instance, music with a predominantly mood enhancing function can form the auditory background of sounds marking options to link or of sounds confirming the user's input. In the registered material, an example of the latter is seen in the game "*Kick out your boy friend*" (addressed at younger women) on a microsite advertising mineral water. During the game, the playing of *Tu m'as promis* by In-Grid serves as the background for the seemingly 'aggrieved' and 'sweet aggressive' female user's smashing of the boy friend's things.[15] Shifts between levels are also typically marked by different kinds of music or incidental sounds (cf. the contrast between the noise of a city and the playing of classical music inside a car), and depending on shifts in modes of user activity the functions of sound will change and possibly overlap.

As regards the different categories of sound (music, speech, incidental sounds, and sound effects), the presenting function in the reading mode is reserved to speech, the mood enhancing and supportive functions are primarily reserved to music and incidental sounds. All other functions listed in the figure can be constituted by either speech, music, incidental sounds or sound effects, or they can appear as an interplay between all of these. The difference between the categories of sound

Figure 2. Function of sounds in relation to mode of user activity
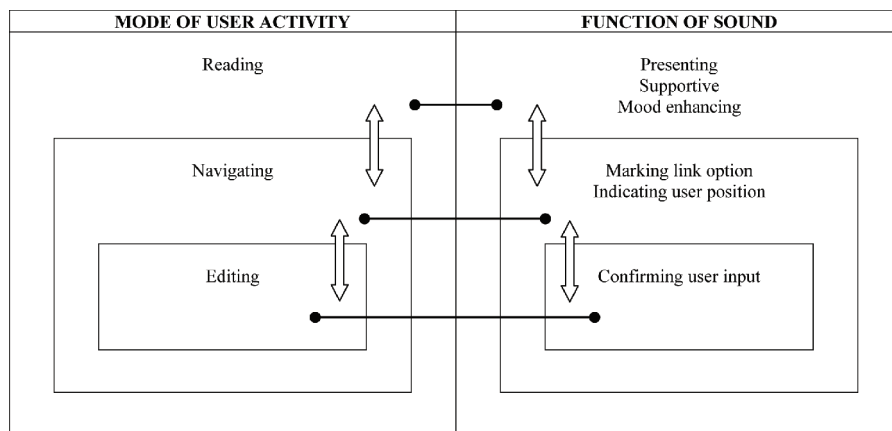
is primarily qualitative, and this is why we find it relevant to distinguish between them as basic variables in the auditory composition of the ad.

Principally, the figure establishes a theoretical framework in which to describe and analyse the communicative functions of sound in web ads. However, the framework might also be useful in a production perspective as a tool to reflect on the different roles of sound and how sound is related to the way we read web texts. As sound in the mode of reading seems quite habituated (cf. the web ads' inspiration from ads in other media illustrated in Figure 1), it thus seems most necessary to concentrate on how sound can accompany the navigating and the editing mode as well as mode switching.

CONCLUSION

The chapter has analysed the appearances, conditions and functions of sounds in web ads. Generally, sounds in web ads can be considered to be a rather rare phenomenon, and this seems in particular to connect to the conditions of sound on the Internet. Thus, technology, design, and media use do not (yet) seem to imply sound in the same (and arguably more consolidated and habituated) way that characterizes the technology, design, and use of e.g. television. However, obviously impressed and optimistic commentators within the advertising business predict that the status of sound will change in the (near) future. For instance animated pictures with sound is considered to represent an effective and impressive means of communication (cf. Gluck & Bruner 2005), and sound is argued to have a great overall potential (Jackson & Fulberg 2003, 7; Tsang 2007). More specifically, the predictions might turn out to hold true, especially of the linked target ads where sounds do not collide with the surrounding context.

However, this study has oriented itself towards present practices and actual instances of sounds. When sound in web ads in fact occurs,

a wide variety of functions is involved, and, on a general level, sounds appear user initiated and user dependent compared to commercials in other media. Following this observation, we have argued that sound is a phenomenon to be more or less deliberately 'pulled' from the ads by the users. Actual 'pulling' ranges from the unintended activation of sound in embedded web ads to the intentional exploration of sound on a linked target ad (e.g. pieces of music and games). By combining modes of user activities and functions of sounds, we present Figure 2 as a tool for analysing and designing sounds of web ads. The figure proposes a way to take into account the specific conditions of the digital medium when analysing and designing sound.

Future research could profitably study the responses of actual users to sounds in web ads. It seems that both qualitative media ethnographic approaches and quantitative experimental approaches could be helpful in providing more precise insights into the user's way of handling, understanding and being affected by web ads. Also, further research on the actual prevalence of web ads with sounds needs to be conducted. Obviously, the fact that the empirical material is registered in a Danish context has an influence on the findings. Precisely *what kind of* influence is very hard to pinpoint as there is no available studies to compare with. Future initiatives, in line with the present empirical registrations, would allow for both cross-cultural (synchronic) analysis and mono-cultural (perhaps also cross-cultural) diachronic analysis. Discussions on the functions of sound might also be nuanced or expanded if future research implies 'web ads with sound' as a sample criterion. No doubt that a sample of web ads *all with sounds* would bring further validity to the study of the functions of sound. We hope to have inspired and to have provided the fertile ground for such endeavours.

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ENDNOTES

[1]   In this context synaesthesia refers to the 'weak', socially reproduced form ('quasi-synaesthesia' in Cook's terminology, cf. Cook 1998, 24ff), which finds expression in our everyday experience and vocabulary (e.g. a voice can be clear). It refers to a stimulus in one sense *associating* a stimulus in another sense. In the 'strong' form ('synaesthesia proper' in Cook's terminology), synaesthesia refers to a stimulus of one sense (an E-major chord) *eliciting* a *synchronous experience* in another sense (the colour yellow).

[2]   Cf. Jakob Nielsen's Alertbox (2004): http://www.useit.com/alertbox/20041206.html

[3]   Cf. the Rich Media Creative Guidelines from IAB: http://www.iab.net/iab_products_and_industry_services/508676/508767/Rich_Media

[4]   The term 'banner ad' is often used as a general term for web ad formats located among editorial content. However, these types of ads include many graphic formats and have many names: e.g. banners, rich media banners, skyscrapers, leaderboards, billboards, rectangles, buttons, interstitials, hockey stick, wallpaper, etc.

[5]   Bolter & Grusin specify "a spectrum of different ways in which digital media remediate their predecessors" and they position digital media products on a scale consisting of 'unchanged' remediation, improvement, refashion and absorption (cf. Bolter & Grusin 1999, 45f).

[6]   According to Leckenby, the first phase of web advertising is inspired by the outdoor billboard ad in that the static banner ad must also communicate its message in competition with other messages in a very limited space and therefore needs to economise on the amount of information. The second phase is the use of the unique features of the medium, e.g. the dynamic and interactive potential of digital media: "An ad becomes a mini-video game and requires media planners to make connections to new issues in their field such as online order fulfilment operations" (Leckenby 2005, 22). And finally, in the third phase, Leckenby identifies examples of television commercials copying features from the web ad. Leckenby emphasizes that the phases do not necessarily occur in a linear way, but can be present at the same time in the development of a medium. The phases

in the *Media Interaction Cycle* are therefore illustrated as three overlapping circles (cf. Leckenby 2005, 21).

[7] Cf. the report from the Poynter Institute: *Eyetrack III. Online Consumer Behavior in the Age of Multimedia* (2004): http://www.poynterextra.org/EYETRACK2004/ (see 'Advertising Results')

[8] The sample includes portals, information resources and news media, all selected because of the appeal to a broad target group, a large number of services, many visitors and a broad field of topics. The registrations are made from predefined navigation paths on each website, and the navigation paths cover a wide range of subjects as well, e.g. news, health, sports, culture, business, computer, life style, and communication. For a presentation of the methodological framework of this study, see Jessen (2010).

[9] The number of embedded web ads and linked target ads are not identical, mainly because different versions of an embedded web ad within the same campaign can link to the same target ad. Another reason can be that the target ad did not exist.

[10] It is important to stress that this categorization is based on a reception perspective (and not for instance on a production perspective).

[11] The sounds of the introductions (e.g. to a microsite) typically appear in a pre-arranged flow, not dissimilar to some types of television flow, cf. the gradual absorption of viewers to television programmes such as series and news in which music plays an important role as preparation and characterization (e.g. Tagg and Clarida 2003).

[12] In a syntagmatic perspective, and with a geometrical metaphor, the music might be considered to be circular and elliptical rather than linear (inspired by Björnberg 2000).

[13] Cf. *stimuli progressions*, a phenomena offered by Muzak for employees (e.g retail managers). Today, the use of original music made by companies like Muzak have decreased in favour of the use of pre-existing music, offered in specific segmented compilations by Muzak and other companies (Graakjær & Jantzen 2009b).

[14] An exception is the above mentioned example of the piano game in which the user is supposed to hit the tones of a played melody. Here, interestingly, sound is *both* a result of the user's activity and an input in itself.

[15] The aggressive tone of the game is counterbalanced in another more 'loving' game on the same microsite where the user is supposed 'to kiss' (loudly, of course) as many bottles of mineral water as possible.