The Corporeality of Listening

Experiencing Soundscapes on Audio Guides

Holger Schulze

1. Introduction

In the early summer of 2012, I intended to visit a museum on the history of Berlin that would offer its visitors audio guides, one of the most significant practices of staging sound as cultural heritage today. I started with a quick search, contacted several relevant institutions and tried to gain more detailed information on whether and how they used audio footage in their audio guides. After actually having visited several of these museums, however, I felt somewhat disappointed. Neither the public, state-run museums such as the Märkisches Museum, Gedenkstätte Berliner Mauer and Museum Haus am Checkpoint Charlie, nor the private, commercial exhibitions such as The Story of Berlin or Historiale Berlin happened to stage the sounds of Berlin’s past in a detailed, contextualized manner. The audio guides provided fairly traditional narrations and explanations, while the more innovative museums offered so-called Hörbänke (listening benches) at which one can select sound files from a computer workstation, or 3D-/cinematographic arrangements. These 3D presentations seemingly aimed at overwhelming the visitors with symphonic soundtracks and a few very brief historical sound bites, touching them in a Hollywood-movie kind of way. The Berlin history museums and exhibitions thus offered either recordings of historical urban sound without much narration, or narration without much urban sound.

The field of producing and using audio guides is developing fast, however, both in technological and cultural terms. In recent years, many museums and exhibition venues have exchanged their previous communication equipment and systems for audio guides. Ever since we have smartphones in our pockets, small companies have started developing and selling applications or apps that can guide individual listeners through an exhibition. For the upcoming years we may even expect more radical changes in the hardware
and software for audio guides. The use of individual devices with internet access and audio players will challenge the production companies of audio guides to adjust their products to these new technologies and cultural practices: be it new generations of smartphones or tablet computers, be it a pair of glasses with tiny monitors and internet access (e.g. Google’s Project Glass) or devices we cannot yet imagine at this moment. Other novel technologies may open up options for transmitting exhibition sound files directly and without headphones or similar tools to the ears of the visitors.

This contribution, however, will not focus on the latest gadget or on the most recent attempts to capture and mediatize the sounds of the urban past, but aims to reflect on rather fundamental issues concerning the experience of audio guides. First of all, listening to sounds is – from the perspective of cultural anthropology – dependent on both the physical environment in which it takes place and the state and habitus of the person listening. This means that sound should not only be studied in terms of its physics, as has been the tradition of Hermann von Helmholtz and subsequent scientists, but also in terms of its corporealization: sound manifests itself via individual listening bodies and material entities. Sounding and listening are grounded in the corporeality of human beings.

This holds even more for an era in which media technologies are the predominant means of creating sound events: they are able to transform any physical space (for instance by THX-Sound, 5.1 or 7.1 Surround Sound or Waveform Synthesis) into a theatre optimized for specific forms of sound reproduction, sound transmission and culturally highly specific listening situations. Yet these technological advancements, as may be surprising to some, only highlight the importance of the individual body and sensory experience. This phenomenon touches upon an often recurring dialectic in the cultural history of technology and media: the more advanced the technological means are in transcending the body’s supposed limitations, the more the users of such novel technologies will become aware of the specific capacities and incapacities of their body and the subtlety of their corporeal sensibility.

This is also true for the field of sound reproduction. As the German musicologist, media studies scholar and jazz musician Rolf Großmann has argued in a seminal article on the notion of »performance practice« (»Aufführungspraxis«), musicology and sound studies urgently need to reflect on the material conditions of the listening experience in its widest sense. He proposes to use the term »auditory dispositive« (»auditives Dispositiv«) for this goal, critically drawing on work from film and media studies. The notion of

1 Schulze 2012. For a general introduction to the research strategies and questions of cultural and historical anthropology, see Wulff 2009.
2 Großmann 2008.
dispositive has quite a long history by now. In 1970, film studies scholar Jean-Louis Baudry published an article on the dispositive of cinema.⁢ This apparatus-theory analyzed the film reproduction and projection technology, the cinema setting and the viewing position of the film audience as key elements of a material and situated disposition, a dispositif (in French) for experiencing film. Subsequently, Michel Foucault⁴ unfolded the wider historical potential for analyzing material setups in various social and cultural environments; and Giorgio Agamben⁵ interpreted the dispositive as a highly important thought style for a material cultural history, one being close to the theory of affordances.⁶ Ever since Rolf Großmann’s article was published in 2008, there has been an ongoing discussion on how to apply the dispositive to musical and auditory phenomena.

In this short contribution I will explore the experiential side of contemporary auditory dispositives for listening to audio guides. Doing research in the field of a cultural anthropology of sound, I aim to shed more light on the individual experience of listening whilst using new audio technologies. I will try to evaluate what aspects of individual listening experiences are dominant and need to be taken into account while conceptualizing and designing audio guides with soundscapes – soundscapes of the past or on other topics. What happens with a listener when he or she listens to recordings in the specific techno-cultural circumstances of using audio guides in museums and exhibitions?

While Michel Chion’s notion of »point of audition« (»le point d’écoute«) presupposes a rather static position for those listening to sound productions, we really need to reflect on mobility when analyzing audio guides, as these were already mobile devices before the advent of digital technology, podcasts and online streaming services. To analyze this particular situation of listening, I distinguish three auditory dispositives that are relevant for listening to recorded and post-produced soundscapes in exhibition spaces:

(a) the spatial dispositive
(b) the temporal dispositive
(c) the narrative dispositive

In doing so I will draw on an earlier study by Hanna Buhl and me on conceptualizing, producing, implementing and using audio guides in art museums and art galleries,

---

3 Baudry 1970.
5 Agamben 2009.
7 Chion 1991, 91.
The Corporeality of Listening

for which we interviewed several producers, designers and marketing staff from audio guide companies such as Acoustiguide and Antenna Audio as well as curators and artists. In addition, my reflections on the audio guide listening situation are informed by participant observation and interviews with a small number of visitors in exhibition venues. Moreover, I critically observed myself, with a phenomenological twist, as an auditory-oriented visitor. How did I experience the use of audio guides?

2. The Spatial Dispositive. Listening in Architectural Bodies

As soon as we decide to put on the headphones of an audio guide device, we transform the auditory dispositive in which we will listen to what is offered to us for the next few minutes or longer. This decision is quite obvious. But it comes with another decision – one that is often ignored. We aim to leave the experience of the architectural space of the exhibition space behind and concentrate on the experience of a sonically constructed space.

It depends on the type of headphones connected with the audio guide whether or not it allows us to hear the environmental noises of the exhibition environment in addition to the recorded soundscapes. Often, however, we receive a pair of closed headphones that provide an intense and concentrated auditory experience. This approach expresses a certain negation or even rejection of architectural space: the original spatial dispositive seems to be subjected to the technologically constructed auditory dispositive. But is it really possible or even desirable to fully separate these two aspects of the listening experience? How might designers of audio guides take the combined experience into account? We might even add another layer to the complexity of the listening situation. We should not only reflect on the consequences of listening in architectural space when tuning into the sonically constructed space of the audio guide, but also flag the spatial dimensions of the sonic construction itself. When listening to an audio guide, we attune ourselves to a mixed media constellation of (a) materially fixed recorded objects, their reverberation time in recorded space and its specific reflections, and (b) of a technical apparatus with its specific means of sound transmission and reproduction. This two-fold spatial auditory dispositive is made out of software, hardware and buildware. This is embedded in the third layer of the auditory dispositive: the venue’s architectural space in which we

8 Buhl / Schulze 2012: a study executed in order to develop an instruction manual for museum and exhibition audio guides, commissioned by the German Stiftung Zuhören.
move around. Such proprioceptive aspects of listening are a key interest in the cultural anthropology of listening.

To understand the aural aspects of the spatial dispositive we have just outlined, Barry Blesser and Linda-Ruth Salter’s detailed exploration of the aurality of space is highly informative. In their volume *Spaces speak, Are you listening? Experiencing Aural Architecture* (2007), Blesser and Salter succeed in trying to find a specific terminology and adequate Denkfiguren to describe and to analyze what can be aurally experienced in architectural space. Rather than relating to the long research tradition of building or room acoustics, they undertake the daunting effort to combine highly diverse approaches to listening from anthropology, acoustics, psychoacoustics and sound art aesthetics with the aim to enlighten the experiential side of hearing in architectural spaces. Blesser and Salter have introduced key terms and concepts for our discourse on spatial listening. They for instance propose to differentiate between the *acoustic horizon* and the *aural arena* in which we hear in any given situation. While the first concept describes the horizon to which our ability of hearing stretches out, that is to the most distant point audible, the second notion refers to the ideal area in which we may enjoy a sound source to its full extent. These concepts help us to distinguish the desired situation of audibility in exhibition venues from the non-intended noises and sounds entering this aural arena from our acoustic horizon. When designing soundscapes for audio guides, knowing the acoustic horizon of the listener at the most important spots in the exhibition is thus highly important.

Next to the acoustic horizon and aural arena, Blesser and Salter also have an ear for how an architectural artefact is sonically illuminated by sounds in everyday listening situations: a building does not sound as such, but needs to be activated via sound. So in designing and furnishing an architectural space for a specific use, such as a museum or a gallery, it is important to take into account how the materials and constructions used will sound when sonically illuminated by the activities of visitors: their footsteps, talks and screams in the aural arena. Even if this seems self-evident, museum spaces have only rarely been designed for their auditory use – it is the spectacle most of them have been built for. Yet when their visitors enter the exhibition space with an audio guide, this past still speaks and should be considered when designing audio guides and redesigning museum spaces. It is such a historicity of listening that is another key interest of the cultural anthropology of listening.

As said, the situation gets even more complicated when we start thinking about how

---

9 Blesser/Salter 2006, 20-34 passim.
10 Blesser/Salter 2006, 12-19 passim.
we listen to a recorded audio file of a soundscape – of an urban past for instance – in the architectural space of the venue: this creates overlapping acoustic horizons as you hear the physically present soundscapes of the venue and the geographically and, perhaps, temporally remote post-produced soundscapes of another place. This layering forces the listener to find his own mode of listening in this auditory dispositive of technology and architecture. And as the architectural body of the venue is often muted and replaced by the sound recording’s space, through playing the recording at full volume, even non-hearing the venue may be an issue and affect people’s ability to orient themselves in a particular space. To our surprise, however, our interviews with experts showed that spatial layering effects in using audio guides are rarely reflected on by designers and curators, even though our participant observations clarified that the effects created irritating or even downright disturbing experiences for the visitors.11

We may understand slightly better now how this layering and refocusing of sound sources works. One layer is very present as it is almost directly projected onto our ear-drum through technology, while the other is acoustically rather distant but bodily very present through our acoustic horizon and orientation on spatial reflections. This intriguing layering of recorded and life sounds elicits a form of re-spacing via the auditory. The term spacing has been being introduced by the sociologist Martina Löw in her Raumsoziologie or sociology of space. In her work she explains how humans generate the physical experience of a space via a process she calls spacing, a process of assigning the location of objects, human beings and activities, and via something she calls Syntheseleistung or achievement of synthesis: forming a coherent impression of a situation in space.12 When listening to recorded soundscapes, mediated via the sound quality of the audio guide device, and within the soundscape of an exhibition venue, we experience spacing and re-spacing: the listening body keeps recalibrating itself.

2. The Temporal Dispositive. Listening whilst Moving and Our Experience of Time

As soon as we begin walking through in an exhibition space with an audio guide, we transform our auditory experience: we are not standing still or sitting quietly in a chair, but are constantly moving with our whole body, keeping our balance, finding our way

11 Buhl / Schulze 2012.
12 Löw 2001, 158f.
through the exhibit and keeping in touch with friends, colleagues or family members accompanying us to the venue. And while doing so, we do not only move in space, but also in time: we structure the temporal experience of the exhibition. In case the audio-guide does not impose a particular temporal order, for instance when we have downloaded a collection of audio files on a mobile device, we may even choose to listen prior or after visiting the actual exhibition. We may check the files and skip through them to get an overview of the audio guide. This is another aspect of the audio guide rarely reflected upon by designers and curators these days.13

In our exploration of a given space via our individually moving bodies, we create a characteristic, often very personal temporal structure – we may opt for a flanerie, we may wander through the exhibition, or cross it while in haste. Each visitor will find her or his own temporal order in response to previous experiences in exhibition venues, idiosyncratic ways of walking and moving through a space, and expectations about the current situation.14 But how can we unravel such temporal qualities of listening in the specific aural arena and the wider acoustic horizon of exhibition venues? Where can we find inspiration to do this?

Taking the epistemological value of artistic research15 seriously, we can learn from existing discourse about the auditory art of the soundwalk. Established by the composer Hildegard Westerkamp in the 1970s and recently revived by the highly immersive and site-specific Audio Walks and Video Walks of Janet Cardiff16, the soundwalk is still the most extensively explored and the most intensely discussed entrance into the phenomenon of listening and into the auditory exploration of a particular space while moving in time. In 1974, Westerkamp described how a soundwalk may start – by focusing on the sounding body:

Start by listening to the sounds of your body while moving. They are closest to you and establish the first dialogue between you and the environment. If you can hear even the quietest of these sounds you are moving through an environment which is scaled on human proportions. In other words, with your voice or your footsteps for instance, you are ›talking‹ to your environment which then in turn responds by giving your sounds a specific acoustic quality.17

13 Buhl / Schulze 2012.
14 Buhl / Schulze 2012.
16 Cardiff 1991.
17 Westerkamp 2007, 49.
This suggestive recipe for a soundwalk shows how the foundation of listening whilst moving can be found in the bodily, corporeal qualities of listening. In surprising accordance with today’s performative theories of the body, Westerkamp advises us to listen to what our body has to say. In the words of the philosopher Jean-Luc Nancy:

Being a body is being a certain tone, a certain tension. I’d also even say that a tension is also a tending.¹⁸

Listening whilst moving begins with listening to our body moving; and as we are moving our concentration wanders, digresses and re-focuses according to the speed, the rhythm, and the environment of our movement. We explore, or should explore, space by attuning our body to the continuity and discontinuity, the rhythm and pitch of environmental sound:

Go out and listen. Choose an acoustic environment which in your opinion sets a good base for your environmental compositions. In the same way in which architects acquaint themselves with the landscape into which they want to integrate the shape of a house, so we must get to know the main characteristics of the soundscape into which we want to immerse our own sounds. What kinds of rhythms does it contain, what kinds of pitches, how many continuous sounds, how many and what kinds of discrete sounds, etc.¹⁹

Human beings, and this is another insight coming from the cultural anthropology of sound, form a resonating continuum in relation to their environment, including its animals, objects and technologies – a continuum which can be explored, affirmed, neglected and ignored. In making audio guides, however, it may be more interesting to seek connections or dialogue with the rhythm of the body moving through the exhibition than to simply ignore it.

³. The Narrative Dispositive. Listening to Stories

The voice in our head, or better: the voice that gets transmitted into our earlobes and onto our eardrums via vibrating membranes, this voice tells us a story, documentary

¹⁸ Nancy 2008, 134.
¹⁹ Westerkamp 2007, 49.
or fictional, when we listen to an audio guide. He or she narrates a certain vocalized thread about each exhibit, be it an artwork, a document or something else: an auditory narrative.

But our concentration on oral narrations is not stable or linear; it shifts and rises, it gets weakened and strengthened by signals and signs in our environment and by our own proprioceptive dynamics during the day. We might digress, we may have associations with the work we need to do in the next hours or days, or we are reminded of friends, lovers, family or colleagues, or imagine or personal fictitious worlds. Somehow we have to integrate and synthesize the sounds of the venue, the voice on our audio guide, the story it tells and our shifting imaginations. Again, we may look for a source of inspiration in how sound artists deal with it by returning to composer Hildegard Westerkamp:

So far you have isolated sounds from each other in your listening and gotten to know them as individual entities. But each one of them is part of a bigger environmental composition. Therefore reassemble them all and listen to them as if to a piece of music played by many different instruments. Do you like what you hear? Pick out the sounds you like the most and create the ideal soundscape in the context of your present surroundings. What would be its main characteristics? Is it just an idealistic dream or could it be made a reality?20

After all, soundscape compositions also presents narrations or stories, even though these are quite different from traditional stories of the theatrical and plot-based radio play. It is fictitious in a way that also a large archive of experimental radio play in the tradition of German radio is, bearing the proud name of Hörspiel, literally »playing with listening«. The element of play, the ludic character of the experimental Hörspiel is so central to its auditory aesthetics that its fiction element cannot be reduced to a plot line. The most prominent examples of this tradition rather tend to be examples of sound poetry and audio art: from Ernst Jandl’s Das Röcheln der Mona Lisa (1970) to John Cage’s Roaratorio (1979), to Heiner Goebbels’ Wolokolamsker Chausee (1989), Andreas Ammer’s Radio Inferno (1993) and Michaela Melián’s Memory Loops (2010). Recorded sound has a strong and prolific agency in all of these sound pieces, and audio guide designers might use sounds as actors in similar ways.

The most advanced approach to such an aesthetic of auditory agency has been proposed by DJ and music critic Kodwo Eshun in his volume More Brilliant Than The Sun.21

---

20 Westerkamp 2007, 49.
In this inspiring and provocative work, Eshun tells about his auditory journeys into the realms of free jazz, of advanced electronic dance music, and of imaginary and real new technologies, drawing connections with the history of electronic warfare, the invention of new musical instruments, and even extraterrestrial creatures. Eshun presents no orderly, scholarly writing, but an unconventional and rhapsodic account of his individual, yet not arbitrary, listening experiences, in stream-of-consciousness style.

The auditory agency Kodwo Eshun wants to celebrate is probably best explained with the following quote about the character of overwhelming auditory experiences, and how traditional acoustic theory fails to capture what sound does to him when DJing:

There is no distance with volume, you’re swallowed up by sound. […] Not only is it the literary that’s useless, all traditional theory is pointless. All that works is the sonic plus the machine that you’re building. So you can bring back any of these particular theoretical tools if you like, but they better work. And the way you can test it out is to actually play the records.22

In its highly affective intensity, sound is to Eshun a truly corporeal and kinaesthetic agency that should be listened to but needs no superimposed narrative. Today’s music is itself already “more conceptual than at any point this century”, full of “thought probes waiting to be activated”.23 The soundscapes of artists are often of that kind, and museum curators might find inspiration in their sonic fiction.

4. Conclusion.
Designing Audio Guides with the Corporeality of Listening in Mind

We may actually design more interesting audio guides if we take the spatial dispositive, temporal dispositive and narrative dispositive of the listening experience in exhibition venues more seriously. It would not only have consequences for the audio guide recordings, but also for the venue space itself. It would be highly worthwhile to design both the exhibition and the audio guide recordings in such a way that acoustic horizon and aural arena interact in fruitful ways – that people are still able to orient themselves in the museum but also to focus on the audio guide. We should, in other

22 Eshun 1998a, 188f.
23 Eshun 1998a, -003.
words, sonically illuminate the museum in such a way that not only its spaces speak, but also its audio guides – and convincingly so. We may also learn from artists who create soundwalks. If they are used to tune into the sounds of their environment, they also invite us to connect the tempo and rhythm of our walking body to the tempo and rhythm of the environment. Sound artists, finally, may teach audio guide designers to listen to sounds as narratives without words, as fictions affecting our body without presenting an argument.
5. Sources

Foucault, Michel (1976): Histoire de la Sexualité 1. La Volonté de Savoir. Paris