Konrad Gutkowski and Dagmar Kift

On "Events Heard"—Researching and Re-using Industrial Soundscapes

The EU Project "Work with Sounds"

"Wherever we are," John Cage wrote in his book *Silence*, "we mostly hear noise. When we ignore it, it disturbs us. When we listen to it, we find it fascinating."[1] The noise or, to put it less judgementally, the *sound* of work was at the centre of the European Union project "Work with Sounds." For this project, six European museums joined forces in order to collect, document and save the sounds of work in one large database,[2] to find new usages for these sounds and to share their experiences in working with the sounds and soundscapes of Europe in the concluding conference on "Theory—Practices—Networks" at the LWL-Industriemuseum in Dortmund. The project partners of the LWL-Industriemuseum were the Museum of Work, Sweden (lead), the Finnish Labour Museum Werstas, the Technical Museum of Slovenia, the Museum of Municipal Engineering in Krakow, Poland und La Fonderie, Centre d'histoire Économique et Sociale de la Région Bruxelloise, Belgium. The project originated in WORKLAB, the International Association of Labour Museums.

John Cage is one of the composers who actually worked with sounds: after the Second World War he assembled his four-minute long electronic composition "Williams Mix" from a series of tape recordings of city, country, electronic, handmade, wind and other sounds.[3] A generation before him and on the other side of the globe, Soviet composer and People's Commissioner Arseni Avraamov included the sounds of work of the harbour in his "Symphony of Factory Sirens," performed in the port of Baku in 1922 on the occasion of the 5th anniversary of the October revolution. He used real foghorns, artillery canons and factory sirens, accompanying a 1,000 people strong choir intoning the "Internationale."[4] Today, all the sounds he used are probably gone, the ships and their foghorns dismantled, the factories closed.

1 Quoted in Alex Ross's bestseller "The Rest is Noise: Listening to the Twentieth Century", London 2008, Introduction, p. 12.
2 http://www.workwithsounds.eu and Europeana.
3 Alex Ross: The Rest is Noise: Listening to the Twentieth Century, New York 2007, p. 409.
4 Gerhard Paul/Ralph Schock (eds.): Sound des Jahrhunderts: Geräusche, Töne, Stimmen 1889 bis heute, Bonn 2013, p. 110.

The Project "Work with Sounds"

Preserving the sounds of work, which otherwise tend to disappear in the process of structural change (technical progress as well as de-industrialisation), provided the impulse to the project "Work with Sounds." Widening the field of industrial heritage was one of its aims, since industrial heritage, during the past 50 years, has focused mainly on objects and landscapes. Sounds, however, are also part of the industrial heritage and need to be preserved and developed for new uses. They contain the acoustic heritage of the industrial age and convey its acoustic signatures: factory sirens dominating the soundscape of the town besides or instead of church bells, the ringing of the tram and the honking of cars replacing the clopping of hooves, to name but a few. "Work with Sounds" recorded the acoustic objects, landscapes and heritages of their specific local, regional and national environment and contextualised each item with photos, occasionally, videos and a brief description: What is it? How did it develop? When was it in use? Where is it today? How loud was it originally? It is this type of thorough documentation which sets the database of "Work with Sounds" apart from many other sound collections. On the whole, the project contributed significantly to the acoustic industrial history of Europe, which is also why the European Union funded it as part of its culture programme.

Another objective and further unique feature of the project was the facilitation of new usages, firstly, by providing free access to its database and, secondly, through testing the potential of sounds in exhibitions and educational programmes—beyond the conventional audio installation. During the "International Museum Days" of 2014 and 2015, families visiting the LWL-Industriemuseum were drawn to a sound quiz. Young adults enjoyed the opportunity to write sound compositions under the guidance of a professional composer. Object presentations that included acoustic components made visitors linger in front of the showcases. A new app, developed in cooperation with an elementary school, now enables school classes to explore the site of the headquarters of the LWL-Industriemuseum, a former colliery, through its soundscapes. All this shows that visitors have a lot to gain from exhibits that include acoustic components.

Researching and Working with Sounds

Sounds have been on the agenda of many disciplines for a long time. At the end of the 19th century and shortly after the invention of the phonograph, ethnographers started to record sounds to document their research.[5] Almost simultaneously, the first sound archives

---

5   The historical role for bringing sound recording to ethnology is usually attributed to Jesse Walter Fewkes, a Harvard-trained zoologist who had turned his interest to the study of

like the Phonogramm-Archiv in Vienna and the Berlin Phonogramm-Archiv were founded in order to collect and to preserve the recordings.[6] While they concentrated on voices, stories and music, composers were also interested in sounds of work or industrial sounds. In his 1913 manifesto *L'arte dei rumori* (The Art of Noise) Luigi Russolo stated that the industrial revolution had given modern men a greater capacity to appreciate more complex sounds:

> Thus we are approaching noise-sound. This revolution of music is paralleled by the increasing proliferation of machinery sharing in human labor. [...], music has developed into a search for a more complex polyphony and a greater variety of instrumental tones and coloring. It has tried to obtain the most complex succession of dissonant chords, thus preparing the ground for Musical Noise.[7]

An interest in industrial sounds, however, did not necessarily translate into using them. Arseni Avraamov used "real" sounds in 1922, but Arthur Honegger in 1923 did not: In his famous "Pacific 231" Arthur Honegger described the ride of an express train, pulled by an engine of the "Pacific" type, but instead of employing the actual sounds of the machinery, he resorted to the traditional means of music. Only the French composer Pierre Schaeffer used recordings of real world sounds (including "industrial sounds") in his "concrete music" (*"musique concrete"*) at the end of the 1940s, for example in his piece "Études aux chemins de fer" (1948).[8] Were they composing today, Pierre Schaeffer and John Cage could have benefitted from the database of "Work with Sounds" or other sound databases.

Native Americans. In 1890 he recorded their music and speeches; see Jonathan Sterne: Preserving Sound in Modern America, in: Mark M. Smith (ed.): Hearing History. A Reader, Athens/Georgia 2004, pp. 295–318, p. 311; see also Burkhard Stangl: Ethnologie im Ohr: Die Wirkungsgeschichte des Phonographen, Vienna 2000, p. 67.

6   Christoph Hoffmann: Vor dem Apparat: Das Wiener Phonogramm-Archiv, in: Sven Spieker (ed.): Bürokratische Leidenschaften: Kultur- und Mediengeschichte im Archiv, Berlin 2004, pp. 281–294; Lars -Christian Koch et al.: The Berlin Phonogramm-Archiv: A Treasury of Sound Recordings, in: Acoustical Science and Technology 25:4 (2004), pp. 227–231; Sigmund Exner: Bericht über die Arbeiten der von der kaiserl. Akademie der Wissenschaften in Wien, No. 37, 1900, Beilage (1. Mitteilung der Phonogrammarchivs-Kommission), pp. 1–6; see also Carl Stumpf: Das Berliner Phonogrammarchiv, in: Internationale Wochenschrift für Wissenschaft, Kunst und Technik 2 (1908), pp. 225–246.

7   Luigi Russolo: The Art of Noise (futurist manifesto 1913), translated by Robert Filiou, New York 1967, pp. 5–6.

8   Miriama Young: Singing the Body Electric: The Human Voice and Sound Technology, Farnham 2015, pp. 44–56; Rolf Großmann: Gespielte Medien: Materialbezogene ästhetische Strategien von der Collage zum Sampling, in: Elke Bippus/Andrea Sick (eds.): Industrialisierung. Technologisierung von Kunst und Wissenschaft, Bielefeld 2005, pp. 2010–235, p. 217.

Large-scale recording, researching and preserving sounds was initiated by the "World Soundscape Project," founded by Canadian composer R. Murray Schafer at Simon Fraser University in the late 1960s. The driving impulse behind the project was the realisation that industrialisation and urbanisation had drastically changed the acoustic environment and led to noise pollution. The main goal of the project was to expound the problems of noise pollution as well as to recover and create an ideal ecologically balanced soundscape. The "World Soundscape Project" recorded, compared and catalogued international soundscapes with a focus on the preservation of soundmarks, "dying" sounds and sound environments.[9] "Soundscape" was the analytical term R. Murray Schafer created and worked with: "A Soundscape consists of events heard [...]"[10] and is an acoustic field of study that can include the entire acoustic environment of human beings—ranging from the sounds of nature and everyday sounds to music.[11] R. Murray Schafer treated the world as a "macrocosmic musical composition,"[12] where acoustic environments can be considered human products and where sound is a vehicle for meaning and part of communication media.

The concept of sounds as carriers of cultural meaning as well as products of cultural practices is behind the current boom of Sound Studies, and today an "acoustic turn" seems to follow the previous visual and spatial turns.[13] Media scholars focus on technology, practice, design and aesthetics of the acoustic in media—especially in radio, film and internet.[14] Musicologists look into the sociology and history of performances and examined forms of listening.[15] Anthropologists of the senses concern themselves with sounds and hearing.[16] Philosophers reflect on the phenomenology of sound and hearing, and literary studies direct their attention to sounds and listening in literature.[17] Historians are beginning to focus on the "sound of history" and its media because, just

---

9   Raymond Murray Schafer: The Soundscape: Our Sonic Environment and the Tuning of the World, Rochester 1977, pp. 3–12.

10   Ibid., p. 8.

11   Ibid., p. 7.

12   Ibid., p. 5.

13   Petra Maria Meyer (ed.): Acoustic Turn, Munich 2008, pp. 34–46.

14   Axel Volmar/Jens Schröter (eds.): Auditive Medienkulturen: Techniken des Hörens und Praktiken der Klanggestaltung, Bielefeld 2013; Andi Schoon/Axel Volmar (eds.): Das geschulte Ohr: Eine Kulturgeschichte der Sonifikation, Bielefeld 2012; Harro Segeberg/Frank Schätzlein (eds.): Sound: Zur Technologie und Ästhetik des Akustischen in den Medien, Schüren 2005.

15   Sabine Sanio: Aspekte einer Theorie der auditiven Kultur. Ästhetische Praxis zwischen Kunst und Wissenschaft, available online at: http://edoc.hu-berlin.de/kunsttexte/2010-4/sanio-sabine-2/PDF/sanio.pdf (accessed on 10 August 2016).

16   Regina Bendix (ed.): Über das (Zu-) Hören, Göttingen 2003; Burkhard Stangl: Ethnologie im Ohr, Vienna 2000.

17   Petra Maria Meyer: Minimalia zur philosophischen Bedeutung des Hörens und des Hörbaren, in: Petra Maria Meyer (ed.): Acoustic Turn, Munich 2008, pp 47–74.

like sounds, the media that transport them are signs of their time: acoustic signal devices, radios, gramophones, records, talkies, speakers, iPads, etc. Sounds structure time, they signify power, and they play an important role in politics and advertising. Memories are connected to texts and pictures as well as to sounds.[18] Museums and archives are beginning to understand sound as cultural property, which should be documented and preserved for future generations.[19]

At the same time, Sound Studies developed into a promising interdisciplinary field with its own networks and a growing number of conferences on sonic and auditory culture focusing on acoustic phenomena and the meaning of sounds and hearing.[20] And at colleges like the Berlin University of the Arts, Sound Studies is already established as an academic subject.[21]

The Conference "Work with Sounds. Theory—Practices—Networks"

Today, the spectrum of interest in and usage of sounds is widespread, and includes field recordings, theories of cognitive reflection regarding the perception of acoustics, as well as the entry of sounds into museum exhibitions, films and computer games, media and

18   Gerhard Paul/Ralph Schock (eds.): Sound des Jahrhunderts: Geräusche, Töne, Stimmen 1889 bis heute; the historical Journal "Geschichte in Wissenschaft und Unterricht 66" (2015) is dedicated to sound as well as "Historische Anthropologie. Kultur—Gesellschaft—Alltag 22:3" (2014). For the state of research see: Jan-Friedrich Missfelder: Period Ear: Perspektiven einer Klanggeschichte der Neuzeit, in: Geschichte und Gesellschaft 38 (2012), pp. 21–47; Daniel Morat: Zur Geschichte des Hörens: Ein Forschungsbericht, in: Archiv für Sozialgeschichte 51 (2011), pp. 695–716.

19   Digital archives like *Europeana* make great efforts to preserve sounds as cultural heritage: http://www.europeanasounds.eu (accessed on 10 August 2016); Uta C. Schmidt: Industriegeschichte hören: Ein Schallarchiv zur Klanglandschaft Ruhrgebiet, in: Zeithistorische Forschungen/Studies in Contemporary History 8 (2011), pp. 305–314; http://www.conservethesound.de (accessed on 10 August 2016) as well as museum-projects like "Work with Sounds:" www.workwithsounds.eu (accessed on 10 August 2016);

20   For instance: http://www.historikertag.de/Mainz2012/de/programm/wissenschaftliches-programm/sektionen/einzelansicht/article/sound-history.html (accessed on 10 August 2016); http://www.auditive-medienkulturen.de/tag/tagung (accessed on 10 August 2016); https://amerikanistik.uni-graz.at/de/conference-soundscapes-and-sonic-cultures-in-america (accessed on 10 August 2016); As to the networks see "Hör-Wissen im Wandel," http://hoer-wissen-im-wandel.de (accessed on 10 August 2016).

21   On Sound Studies as a discipline in its own right see Holger Schulze: Über Klänge sprechen, in: Holger Schulze (ed.): Sound Studies: Traditionen—Methoden—Desiderate: Eine Einführung, Bielefeld 2008, pp. 9–15.

the arts. Bringing together these various approaches to and practices with sounds, sound studies and sound usage was the aim of the concluding conference of the project "Work with Sounds."

Theoretical approaches to sounds were covered by papers on "Sounds and Resonances" (Prof. Dr. Petra Maria Meyer, Muthesius Academy of Fine Arts and Design, Kiel), "Interdisciplinary reflections on Sound" and sonic artefacts as sources in their own right (Monica Widzicka, Museum of Municipal Engineering, Krakow, and Konrad Gutkowski, LWL-Industriemuseum, Dortmund) as well as the interconnection between "Sounds, Power and Fear" (by Swedish journalist and author Anders Mildner). Prof. Jörg Lensing of the University of Applied Sciences and Arts in Dortmund and Prof. Sabine Sanio, Director of the Department of History of Auditory Culture at the Berlin University of the Arts provided insights into two Sounds Studies programmes, the latter also dealing with the issue of "Thinking with the Ears" which was complemented by a presentation on "Socializing Sounds" and the "School of Hearing" (Helga Kleinen).

Three panels dealt with projects in the field of "Urban Sound(scape)s" and memories (Des Coulam on Paris, Slawek Wieczorek on Wroclaw and Severine Janssen on Brussels), "Museum Sounds" and sound archives for museums (Richard Ortmann and Dr. Uta C. Schmidt from the Ruhr Sound Archive, Dr. Siegfried Saerberg on his project museum for the blind and Outi Penninkangas on a media museum project for people suffering from dementia), and "Working with Sounds" in music (with composer Gordon Kampe), television documentaries (with Beate Schlanstein from *Westdeutscher Rundfunk Köln*, West German Broadcasting Cologne) and computer games (with Steven Bigras from the Swedish video game developer EA Digital Illusions CE AB, Stockholm).

The final panel introduced present international and interdisciplinary research projects on sounds, with Helen Wagner (Free University Berlin) analysing Richard Ortmann's work on the "Noise of Structural Change" in the Ruhr area; Aleksander Kolkowski (Science Museum, London) presenting a research network project of the London Science Museum which explores the relationship between silence and music, noise and silence, and music and noise; Dr. Kathrine Sandys (Rose Bruford College of Theatre and Performance, Sidcup/Kent) on her art project on the "Hidden Sounds of the Thames Traffic", recorded under water and used for a performative animation of a former industrial site; and finally Dr. James Kennaway (Newcastle University/London Science Museum) on the relationship between music and medicine. The issue of digitalisation was addressed by Lisa Landes (German Digital Library, Frankfurt) in relation to the work of the German Digital Library on audio files as well as by Dr. Barbara Wiermann (Saxon State and University Library, Dresden), who talked about "Digitalising and Making Sound Recordings" accessible. They were followed by two presentations on sounds in museums with Aleksander Kalmykov (State Museum of Political History of Russia, St. Petersburg) on the function of "Sounds in Museum Expositions" and in the specific communication processes of the museum, and Sybille Greisinger (*Deutscher Museumsbund*—German Museum Association, Berlin) on the Museum Association's initiative to encourage museums to place a greater emphasis

on working with sounds while at the same time raising visitors' interest in sounds. The final presentation was by composer and media artist Florian Hartlieb, who spoke about working and composing with sounds. The variety of disciplines and projects presented at the conference enlarged the overall understanding of the complexities of "sounds" and drew attention to the other side of sounds, namely hearing. It consequently raised awareness of the sonic qualities of objects as well as of the many different uses of sounds.

Sounds come from objects and objects are what museums are dealing with; that is why "Work with Sounds" was a project for museums. At the same time, "Work with Sounds" was also an ideal platform for bringing together representatives not only of museums, but also archives, universities, media and the arts to discuss the nature, potential and usages of sounds. Ultimately, it also invited everyone to reflect on the material qualities of objects: "Voices make noise, so do things."[22]

Dr. Dagmar Kift is head of the research department of the LWL-Industriemuseum and the museum's deputy director. She studied History and German literature at the Free University in Berlin and at Oxford University (St. Anne's and Antony's College) and finished with a doctoral thesis on the British Music Hall, published by Cambridge University Press as *The Victorian Music Hall—Culture, Class and Conflict* in 1996. As a curator she was responsible for the concept of the permanent exhibition in the headquarters of the museum, the Zollern colliery in Dortmund (opened in 1999), the exhibition projects *Aufbau West/Rebuilding the West* (2005) and *Kumpel Anton, St. Barbara und die Beatles* (2010/2016), the EU-project "Work with Sounds" (2013–15) and the conferences *Industriekultur 2020* (2011) and *Welt unter Tage* (2014). Dagmar Kift is working and publishing on the social and cultural history of coal-mining, gender and migration. http://www.lwl.org/LWL/Kultur/wim/portal/profil/kontakt/wissenschaft/kift/

Konrad Gutkowski is a Research Associate at the LWL-Industriemuseum. He studied History and German literature at Ruhr-Universität Bochum and at the Jagiellonian University Kraków. As a curator he worked on EU-projects and exhibitions like *Work with Sounds* (2013–2015) and *Energiewenden – Wendezeiten* (2016).

---

22 Michel Serres: The Five Senses: A Philosophy of Mingled Bodies, translated by Margaret Sankey and Peter Crowley, London/New York 2008, p. 119.