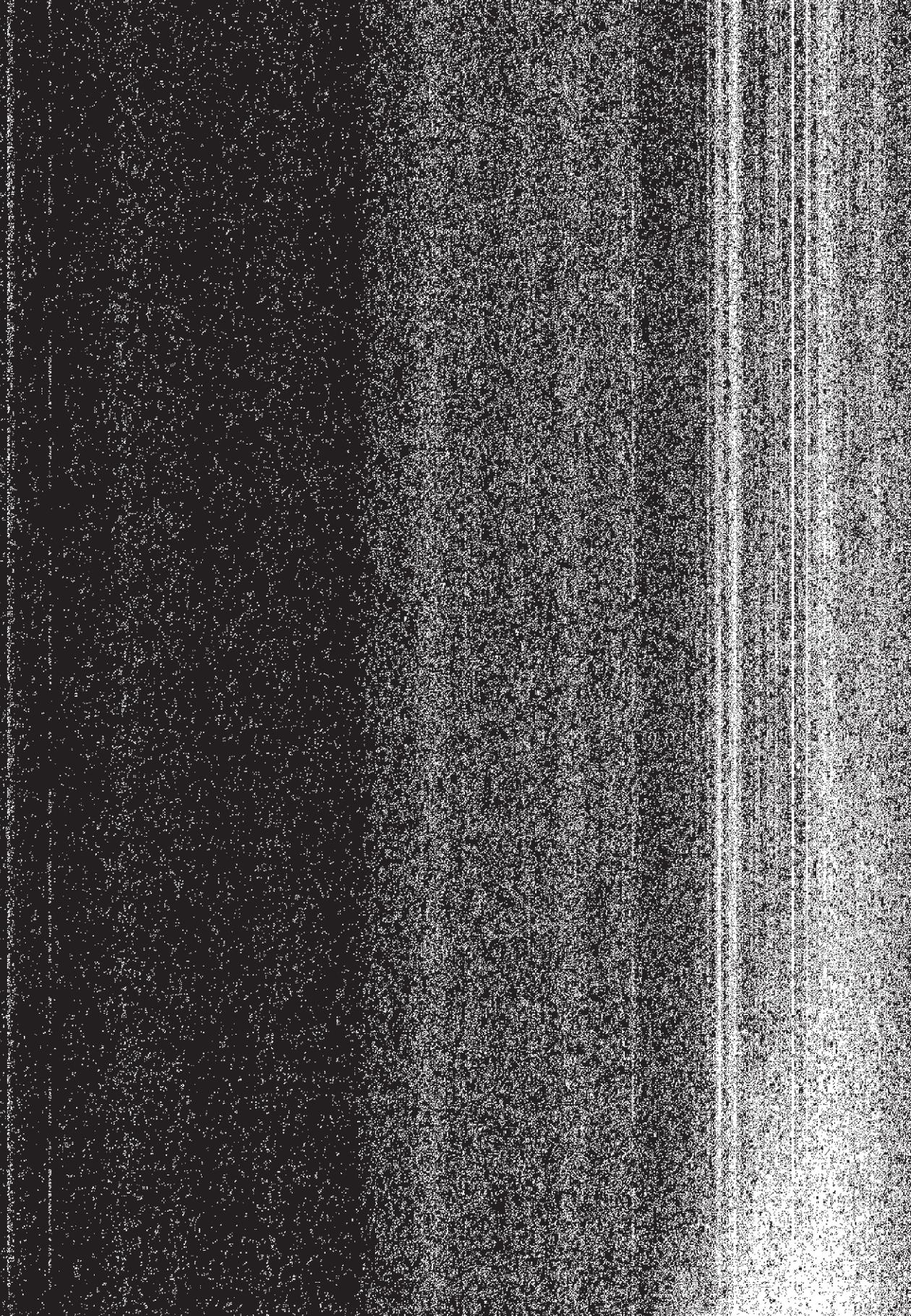


radio
revolution
ten

30 days
of radio art



RADIO REVOLTEN:
30 DAYS OF RADIO ART

Edited by
Knut Aufermann
Helen Hahmann
Sarah Washington
Ralf Wendt

Corax e.V.

Spector Books

1 GENESIS Helen Hahmann, Ralf Wendt 41

2 LET IT BE RADIO Knut Aufermann 47

3 TIME AND FORMAT Udo Israel 57

4 MUSIC—NO MUSIC Knut Aufermann 67

5 VOICE Ralf Wendt 79

6 UNDER THE SKIN Sarah Washington 89

7 RADIO DRAMA Tina Klatte 105

8 CABARET Sarah Washington 119

9 PARTICIPATION Helen Hahmann 139

10 WALKING Tina Klatte 153

179 Ralf Wendt UP IN THE AIR 11

195 Knut Aufermann AREALITY 12

209 Knut Aufermann TECHNIQUE 13

219 Ralf Wendt BIOLOGICAL RADIO 14

231 Sarah Washington RITUALS 15

255 Ralf Wendt GHOSTS 16

263 Martin Hartung, Florian Wüst TRANS-POSITIONEN 17
Xentos Fray Bentos, Hartmut Geerken, Lucinda Guy

273 Lukas Holfeld, Sophea Lenner, Michael Nicolai META-LEVEL 18

289 Helen Hahmann NETWORKS 19

305 Knut Aufermann, Helen Hahmann TEAM 20

ARTISTS 338

VENUES 350

AUTHORS 352

Let us imagine and then create
a radio art that fearlessly descends
into the darkness, inside and out

Let us imagine and then create
a radio art that seeks out dead
nerves and fires them back into life

Let us imagine and then create
a radio art that invites the listener to
feel at home with entropy and decay

Let us imagine and then create

Let us imagine and then create

a radio art that embraces an ethos of
free association and honest ambiguity

Let us imagine and then create

a radio art that instantly incinerates
the rotting corpses thrown into our space

Let us imagine and then create

a radio art that rejects the tight and
tidy formats of the corporate logos

Let us imagine and then create

a radio art that turns a deaf ear

to all branded Empires of the Self

Let us imagine and then create

a radio art that restores vital imagination
to the dumb-numb social brain

Let us imagine and then create

a radio art that hums and howls against
the perpetrators of ecocide and torture

Let us imagine and then create

a radio art that infiltrates and pacifies
the weapons of lethal vibration

Let us imagine and then create

Let us imagine a woman create
a radio art that finds the lover
in revolt and gives her wings

Gregory Whitehead

Radio art presents an opportunity
for nonlinear communication,
audio metaphor and the audio
manipulation of pure sensation.
Audio forms that have no other
home or forum are in their
natural element on the radio,

which can be understood in part
as a laboratory in which new
associative and affective forms
may be evolved. Radio art is its
primary investigator.

Chris Cutler

Towards a free radio: unmediated
immediate media: contesting the
material contest: making the noises
which challenge and undermine the
smug complacency of our toxic

snugg complicity of our toxic societies: promoting creative interventions towards the possibility of a different living, beyond the tyranny of acquisition and drudgery: a life-enhancing medium, celebrating non-coopted, non-commodified energy: some bloody wonderful musics which no-one else will air: some radical thinking which will inspire more.

Ivor Kallin

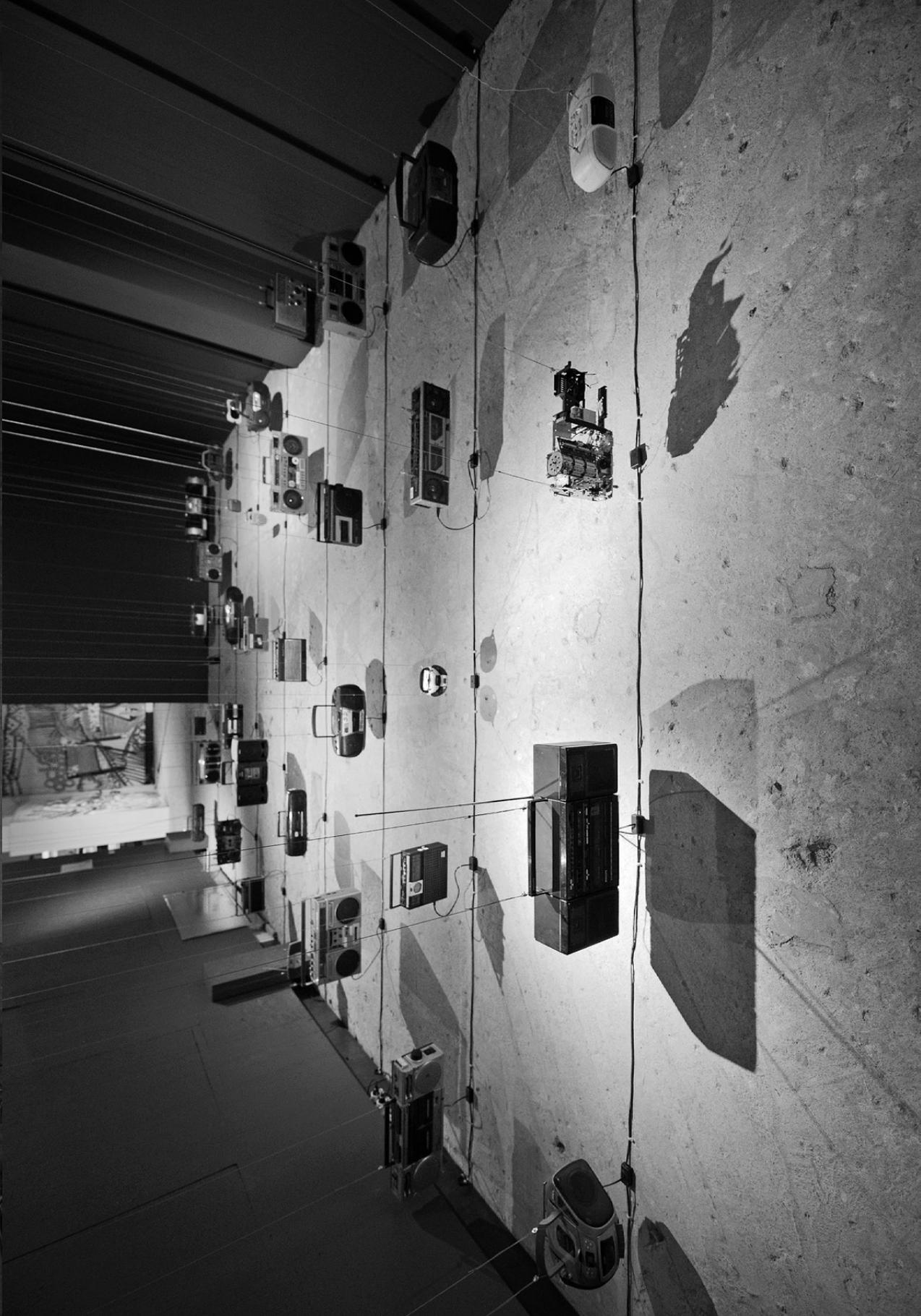
For me radio is about intimacy and distance at the same time. It breaks down the essential difference between these two. For me radio is about not having to sound like anything.

Alessandro Bosetti

It's freedom.

The possibility to use neutral radio technology such as microphones, recording and transmission devices









The title *30 Days of Radio Art* conveys the attempt to hold onto an elusive moment in radio history. The radiophonic Fata Morgana we called Radio Revolten came, according to some participants, very close to being a genuine space of freedom for radio production. A space that allowed for a clear consciousness to roam free despite the unsettling times we live in. How can we represent the 720 intense hours of the festival programme, produced at locations and on frequencies that were temporary in nature? How can we describe a month long international radio art festival, its wishes, outcomes and impacts? In an attempt to convey as much detail as possible, this book seeks to awaken, stimulate, encourage, and to extend faith in the provision of collective artistic radio spaces. In a continuance of the spirit from our original endeavour, it has been written collectively by the festival's curators, organisers, artists, and observers.

A fine example that might give a hint to the singular artistic practices that Radio Revolten originated from, is the opening ceremony for our main venue Radio Revolten Zentrale, on a rainy evening at the beginning of October in 2016. The festival's physical heart was planted in two abandoned houses at Rathausstraße 3 and 4 in the city centre of Halle. At the precise moment when the opening of the festival's radio art exhibition *Das Große Rauschen* was announced, visitors were gathering in front of the two houses waiting expectantly to be let in. It had been more than 15 years since these buildings were last open to the public. But instead of a door opening, six windows opened up across the facade. Each window was inhabited by one of the festival's artists,¹ holding battery driven mini-speakers in their hands. The speakers released different interval signals (short tunes, formerly used by radio stations to allow for station identification and signal tuning), creating a jingling soundscape, which

¹ Myke Dodge Weiskopf, Maia Urstad, Peter Courtemanche, Rodrigo Ríos Zunino, Emmanuel Madan, Steve Bates.

was interwoven with the whispering voices of the audience and noises from the street. After a short while this symphony of signals emerged from the buildings to join the audience outside, whom the artists then led in a procession into the Radio Revolten Klub whereupon the speakers each fell silent, one by one.²

The inauguration of Radio Revolten Zentrale was the culmination of a day long opening tour through the city of Halle. The festival's exhibitions were spread all over the town centre: in the greenhouses of the Botanical Garden, the vaults of the 15th century Moritzburg castle, the top of the tower of the former Department of Physics and the cellars and attic of the former Department of Zoology, in an old printing press building that is now part of the Stadtmuseum, the modern foyer of the German Federal Cultural Foundation, and in the impressive Roter Turm (Red Tower) on Halle's market square. It took nine hours to open all of the exhibition's sites.

The possibility of gaining access to so many different public spaces in the city of Halle was due to the openness and enthusiasm of many institutions and organisations working in the city, including the municipality itself, represented by the mayor who became our patron. The confidence in our ideas by the German Federal Cultural Foundation was the prerequisite for the entire festival, as they agreed to support Radio Revolten on the premise of us staging the largest celebration of radio art worldwide. With the Media Authority of Saxony-Anhalt (Medienanstalt Sachsen-Anhalt) as a third major partner, we were then able to plan and execute the temporary festival broadcast frequencies.

With these preconditions in place, Radio Revolten was able to stretch all practical restrictions, and indeed the medium of radio itself, to

2. _____ The shortwave signals were taken from recordings made by Myke Dodge Weiskopf and arranged for the opening ceremony by Emmanuel Madan, on the basis of an idea from the Radio Revolten team, in celebration of these two houses in the city centre of Halle entirely dedicated to one month of excessive radio making.

the limit. We simply said yes to the many propositions which arrived on our desktops, in addition to the existing plans which had already reached the scale of a full-blown biennale. Here are some of the numbers: we utilised 17 different venues in the city of Halle, including the two adjacent old buildings which we completely restored to create a performance venue (with bar, café and garden) and 400 m² of exhibition space; one FM and one AM frequency; 84 commissioned artists from 21 countries and more than 100 additional artistic collaborators; the participation of over 200 local and visiting radio activists and media scholars; more than ten thousand festival visitors; more than 40 radio stations from 17 countries who syndicated broadcasts; more than a hundred thousand listeners; 69 partners and sponsors; and a team of around 100 people who coordinated, organised and volunteered.

Radio Revolten arose from two central impulses: the curatorial team—Knut Aufermann, Anna Friz, Sarah Washington, Ralf Wendt, Elisabeth Zimmermann—gathered radio artists from around the world in Germany to measure radio art on all possible scales; Radio Corax—as the festival host and seasoned community radio station—was excited to explore and to present contemporary radiophonic culture.

The festival invited many of the significant artists currently engaged in thinking about and creating artistic radio practices. Radio Revolten was devised both as an event to stake a claim for the genre of radio art, and as a showcase demonstrating how far the art form has developed to date. This book covers the myriad of radio activities which occurred during the festival, and will also examine radio art from different perspectives, approaches and angles. Structurally, Radio Revolten was composed of five main sections: stage performances, the collectively-made Radio Revolten Radio on 99.3 FM and 1575 AM, exhibitions featuring

radio art installations and radical local radio history, radio art and activist conferences, and artist-led workshops.

Radio Corax, the aforementioned host for Radio Revolten, is a free, independent, non-commercial, local radio station. From the beginning of its existence Radio Corax has been constantly searching out new impulses and methods for radio making. The station has been broadcasting around the clock since July 2000 on 95.9 FM in Halle (Saale) and the surrounding area. Radio Corax is supported by 350 members, more than 200 of whom are active radiomakers. With about 100 regular programmes, it is the biggest non-profit radio broadcaster in Eastern Germany. The station cooperates with national and international partners and is an active contributor to national and international community media networks with the objective to strengthen the local infrastructure of community radios and their global networks. This approach has shaped the ambitions of the station and the self-image of its radiomakers in wanting to create a unique, constantly animated radio programme made within a self-organised community.

This book documents the proceedings of Radio Revolten and embeds them into a discourse about the opportunity of art to alter radio, and of radio to influence art. The individual chapters offer a kaleidoscope of viewpoints based around themes that arose before, during, and after the festival.

The scene is set by a short history of creative radio production at Radio Corax and an outline of the festival's first incarnation in 2006,^[chap. 1] before the varied chapters begin to query the accepted truths of the trade which on a closer, artistic inspection become nothing more than a springboard to new worlds,^[chaps. 2, 3] where music disintegrates into sound,^[chap. 4] and language becomes synonymous with voice.^[chap. 5]

The synchronicity of live performance and live broadcast throughout Radio Revolten is the starting point of chapters discussing the body,^[chap. 6] radio drama^[chap. 7] and cabaret^[chap. 8] in a radiophonic setting, whilst essays on participatory practices^[chap. 9] and outdoor broadcasts^[chap. 10] explore uncharted forms of public interaction with radio production, be it by the deliberate inclusion of passers-by or by bringing the broadcast to strange localities.

Three chapters sound out various aspects of the continuum between artists and radio experts in a crescendo of nerdiness that cumulates in a fondness for seeking out high places^[chap. 11] in order to populate them with antennas.^[chaps. 12, 13] By now it should be clear that this book is a collection of a multitude of viewpoints and voices, and can therefore be read in a non-linear fashion. Many of the productions mentioned and portrayed in the texts can be listened to at radiorevolten.net. The entire archive is hosted by Radio Corax in Halle. It covers audio from the radio transmissions, videos by Thies Streifinger and more than 2,000 photos by festival photographer Marcus-Andreas Mohr, whose pictures embellish this book.

Another trio of chapters which contain observations of the daily events of the festival further enable this publication to carry out its dual function as a festival catalogue. Including the contribution by Radio Revolten's festival partner, the Halle-based Werkleitz Gesellschaft e.V., the chapters span from biology^[chap. 14] to metaphysics,^[chaps. 15, 16] and from radio to film.^[chap. 17]

The book's final chapters contain interviews following up the festival's international radio art conference *Radio Space is the Place*, and touch upon the gathering of the radio art network Radia, the board meeting of AMARC Europe and the conference *Zukunftswerkstatt Community Media* of the Federal Association of Free Radios in Germany (BFR-Bundesverband

Freier Radios).^[chap.19] This is where you will also find personal stories ranging from critical observations of the festival's outcomes to artists' impressions,^[chap.18] and where we also take the chance to celebrate each of the individuals in the festival's team of heroes who made the whole glorious endeavour possible.^[chap.20]

As Radio Revolten continued to grow in size and stature in its three-year-long planning phase, and even while it was running in October 2016, it dragged along a net like that of a deep sea trawler landing catches big and small. This was due to the extraordinary opportunity to draw the radio art tribe, which has been steadily growing over the past 30 years, into a single orbit, and the magnetic effect such a potent gathering had on people. Holidays were hastily taken, return visits booked, travel arrangements rearranged to enable longer stays. In combination with the curatorial decision to enable artists to stay for as long as possible in Halle, this allowed for additional events to pop up, new collaborations to develop, and deep bonds to form between members of the festival community, be they participants or keen spectators. It often felt as if a remarkable serendipity was assisting the festival to produce a substantial body of work, one which will hopefully continue to resonate for many years to come. It is still amazing to consider that we were able to pull off such a feat, the success of which was down to a unique synergy between the core team of organisers and curators—and especially the four editors of this book, who constituted the project's ferocious driving force. Due to the near-impossibility of creating the conditions to realise a festival of such scale in a relatively unknown art form, and the vertiginous workload it entailed, perhaps none of us would want to attempt it again in similar circumstances. However, in 2016 we certainly managed to carry off our ambitions in style. A chorus of voices still echoes in our ears: "Roll on the next Revolten!"





EVERYONE A LISTENER

In the history of radio, the popular narrative privileges originary signals, such as wireless Morse code that is transmitted across a laboratory and then across land, then a single voice broadcast across the sea. But there were many kinds of early listeners who built their own precarious crystal receivers and makeshift antennas in order to coast the airwaves, and who eventually sought to share what they heard with others. Tinkerers at home, who appropriated and recycled common materials for electronic and mechanical parts to create wireless transmission and reception equipment, were largely responsible for the radio boom that occurred while corporate interest in wireless technology temporarily stagnated in the early 1900s. Unlike Guglielmo Marconi's fledgling radio system, which was designed to improve on existing telegraph technology by making it wireless, amateurs put new dispersed networks of radio activity into play:

[T]he amateurs were captivated by the idea of harnessing electrical technology to communicate with others, and they were not deterred by a lack of secrecy or by interference from other operators. In fact, these features, considered a major disadvantage by institutional customers, increased the individual amateur's pool of potential contacts and the variety of information he could both send and receive.¹

In North America, these improvisers experimented with many aspects of radio communication in a free-for-all unlicensed wireless environment, dabbling in long distance conversation and signal strength competitions, eavesdropping on naval activity, running interference on official communications as well as each other, and eventually forming one of the earliest broadcast radio stations.² Spark-gap transmitters were fashioned from Model T ignition coils and aerials were constructed from the ribs of umbrellas, while headsets were stolen from phone booths to use with the home wireless system.³ The host of radio amateurs and home tinkerers in the early 1900s dreamt up the idea of the radio show from listening on their receivers and homemade assemblages, eventually playing records for one another, thus "lead[ing] us to the summarizing thesis that the listeners invented the radio".⁴ Even after the United States government began to regulate the amateurs with the Radio Act of 1912,⁵ many amateurs simply ignored the law requiring all radio users to be licensed, and continued their activities in the wireless world as the first radio pirates;⁶ while those who were licensed to use the spectrum at 200 metres or less quickly realised they could move a little further up the dial without being caught. Thus the first broadcasters in North America were amateurs, pirates, and radio clubs run by teenagers until for-profit corporate radio took over the spectrum after World War I. These eclectic activities undertaken by young craftsmen who eagerly engaged with wireless-ness

remain a potent North American mythology (both about technological experimentation and about the construction of masculinity in the early twentieth century), and prefigure the tinkering of the ham enthusiasts, and the eventually far more diverse population who made their voices heard on the competitive and chaotic Citizens Band' radio, the renewed rebellion of pirate radio in the 1990s, and the contemporary do-it-yourself (DIY) transmission arts scene. The radio voices followed the radio ears.

As a cultural form and as a technological configuration, the disposition of radio is manifold and ultimately escapes the demands of historical formats, even though human stories about radio history tend towards ossifying the medium, or towards locating the definition of radio in the past. But radio, ever ephemeral and time-based, is always once again here, now, becoming all of these and more: information, entertainment, comfort, familiarity, emotionality, tedium, background, ambiguity, compromise, urgency, danger, resistance, ritual, experimentation, celebration, surrealism, mystery, geography, space. The scope of radio may be delimited by habit, licensing, and regulation, but is never permanently frozen by any historical or social practices nor technological form, as the great variety of artistic (mis)uses of radio demonstrate.

Let us imagine that there are only listeners. No consumers, target audiences, or clients; only listeners, listening out of curiosity, desire, persistence, generosity, and fellow-

ship. Imagine that listeners attend on every frequency to every squelch, every click, all the encrypted conversation, all the two-way cross talk, all the moving traffic, all the air to ground to air loops, all the late night automated playlists, all the lonely FM radio hosts, all the last truckers with a handle, all the repeater towers, all the radio telephones, all the satellites, all the stars. Listeners create and share all these worlds and more, wirelessly, in radio space.

When free radio meets radio art, this loop of listening to radio which is by listeners and about listening may continue to spiral out in all dimensions. Under the circumstances of an independent and community organised radio ready to blow open the medium, radio abandons the logic of radiality or of a centre addressing the margins and instead becomes resonant, radically open to feedback, decentred in its openness; a node embedded in social practices rather than a rigid framework determining such practices.

RADIO SPACE IS STILL THE PLACE

Radio Corax, Halle's free and independent community radio station, was the initiator and host body of the Radio Revolten festival in 2006 and again in 2016. The station, made by and for its listeners, engages politically and culturally with its community and asks, what is at stake, here, now? How can communities have agency in radio space? Radio Revolten

in the context of Radio Corax also confronted this question with regard to radio art experimentation: what is at stake, here, now, and how can radio art further evoke and reveal the myriad potentials of radio space? In response, Radio Revolten ruptured radiophonic norms of format, duration, listening habits, aesthetics, infrastructure and the poetics and politics of broadcasting. Radio as art, surely, but more precisely: radio as a proposition, as potential, where often medium and content might become one and the same. Radio as instrument, as infiltration, as environment; radio understood as taking place in complex media ecologies; radio enacted as an often messy collaboration of many with many, over a month and over distances very small or exceeding the city limits. Radio Revolten did not ask "what is radio" or even try to describe "what is radio art", but asked how to radio, and *how* radio might be and what it is in the process of becoming.

Free radio, radio art, and expanded transmission practices take place in the context of constantly shifting signals generated by radiophonic activities human and non-human, terrestrial and extra-terrestrial; they jump the garden gate, trespass property lines, disobey the controls of broadcast licensing and spectrum allocation. Radio Revolten proposed radio as its own content and radiophony as an orientation, not a platform: radio as a complex of distances finite and infinite, variably the size of a table top, a room, an edifice, a street, a tower, a city square, the edge of town, or the entire radio dial. As Tetsuo Kogawa states,

the content of a programme might not change the listener, but the transmitting space itself could.⁷ The space of transmissions are material and imaginary, including but not limited to radio casting, as well as other performative transmissions in performance, action, ritual and conversation.

Radio Revolten carried with radio in a myriad of ways, and presented international and local artist activities as proposals and explorations of the present and future of wireless transmission. These activities were enacted across extensive temporary frequency infrastructures, with a dedicated city-wide festival FM (UKW) frequency which was also relayed on AM (MW) as the only remaining AM station on the air in all of Germany during October 2016. Radio Revolten was also ground zero for a flurry of micro-casting, with numerous small transmitters made in workshops and brought along by artists as a key ingredient for installations, performances, and live actions, along with baby monitors, walkie-talkies, microwave ovens, revolving receivers, giant copper antennas, micro-casting between existing stations on FM and AM bands, and employment of all manner of portable wireless devices. Some works sought to explicitly make activity across the bands of the electro-magnetic spectrum audible, from very low frequency sculptural antennas picking up electrical fields to high frequency radio receivers tracking activity by WLAN or mobile phones. Together these activities across the electro-magnetic spectrum challenged the limits of government systems

for licensing and control of frequencies, claiming instead that the public needs more meaningful access to these invisible but real spaces. As industry seeks to migrate radio broadcasting to digital and satellite platforms, Radio Revolten called for the FM band to be reserved for culture and community use.

Radio space may be envisioned as a continuous, available, fluctuating area, inhabited by interpenetrating and overlapping fields and bodies. Radio space refers both to the symbolic spaces of cultural production such as a radio station as well as to these dynamic spaces of electromagnetic interaction in which contemporary life takes place. As some frequencies empty out (such as Citizens' Band, long wave, medium wave and eventually FM), there is renewed interest to re-occupy these fallow frequencies with new activities. For 30 days and nights, Radio Revolten sought to describe, enliven, and inhabit these vacant lots on the radio band.

Radio, in its ephemeral nature, takes place, and then releases it again. Radio space expands and contracts, accepting all comers as they manifest. A place of delight as much as danger, where small quotidian freedoms overlap with systems of command and control. Radio Revolten began with a claim for occupying the radio dial and taking up space, and then releasing it again. Radio is not *only* for you, but it is *also* for you.

TRANSMISSION ECOLOGIES

When I first became aware of radio art as a genre sometime around 1990, it was still primarily linked to terrestrial broadcasting, which is to say, radio art as programming transmitted from a studio to listeners. I was disabused of this idea when I encountered a key Canadian text *Radio Rethink*, which explored recent artists' use of radio both inside and outside of the studio.⁸ *Radio Rethink* was both an art exhibition and anthology, and provided valuable insight into a growing variety of international practices and texts addressing radio's potential outside of the commercial or state formats that dominated the medium at the time, including moving the site of radio into the public sphere, largely through micro-transmission and social activities. The struggle for access to this radio space was paramount, as much as the struggle to redefine what might be possible within radio space.

In the intervening decades, a surge of artists have continued working across disciplines and truly expanded the boundaries of radio art by exploring all aspects of wireless-ness from analogue to digital; a surge often generated in independent contexts such as community, artist-run or pirate radio both long-running or temporary, artist-run centres and collectives, as well as from the public radio institutions willing to step outside the bounds of the radio studio such as the inimitable ORF Kunstradio, Austria. These various platforms, artists' groups, and informal networks have enabled

a vigorously collaborative and international culture of making, bending, re-purposing, and critical technical and cultural re-appropriation of radio.

An important aspect of contemporary artists' practices with radio has expanded beyond the circumstances of broadcast to engage with what Anthony Dunne refers to as Hertzian space.⁹ Referencing Heinrich Rudolf Hertz, who demonstrated the existence of electromagnetic waves through experiments with UHF and VHF frequencies and whose name is now the unit of electromagnetic frequency measurement, Hertzian space is the physical space of electromagnetic activity which overlaps visible empirical reality while remaining itself mostly invisible; accessed, influenced, and manipulated by electronic and magnetic objects, and informed by imagination and experience. Electromagnetic energy occurs across a very broad range of frequencies, including "natural" radio generated by stars and gases in space or by lightning and planetary storms on earth, as well as electromagnetic waves that belong to the built environment in the form of communications and entertainment systems of the public, private, and military ilk. Even though human sensory perceptions are mainly able to transduce wavelengths in the area of visible light, human bodies and devices alike also register electromagnetic activity as physical, measurable, and affective. Hertzian space is fundamentally relational, described by overlapping fields of influence. However, for artists working with transmission and waves, the ex-

trasensory nature of Hertzian space allows for a productive slippage between what is real and what is imagined.

Electromagnetic waves transmit power; electromagnetic fields exert influence. An oddly digital "dit-dit-dit-ba-blip-ba-dit" emanating suddenly from a television or audio system is the result of the device picking up the wireless signal between a nearby cell phone and the cell tower, and makes audible the electrical power engaged around a mobile phone just before it rings. This side effect of solid-state and non-linear circuits interacting with radiophonic signals demonstrates how objects overlap and interpenetrate one another due to expanded presence in the form of electromagnetic fields. Dunne describes such objects as radiogenic, as they "function as unwitting interfaces between the abstract space of electromagnetism and the material cultures of everyday life".¹⁰ Among such objects, the human body is another radiogenic element, a "crude monopole" antenna, which, like other aerials, "links the perceptible material world to the extrasensory world of radiation and energy".¹¹ Radiogenic objects are not discrete things, and always function in relation to one another, with potentially unpredictable results, as "electricity sometimes goes where we send it, and sometimes it chooses its path on the spot, in response to the other bodies it encounters and the surprising opportunities for actions and interactions that they afford".¹²

To describe these manifold relationships across the dial and in Hertzian space,

“transmission ecologies” reads accurately, as it refers to processes rather than the idea of the electromagnetic spectrum as a map of quantifiable or saleable real estate. I intend transmission ecologies to mean not just a symbolic space, but also an invisible but very material Hertzian space of electromagnetic interactions. In this final sense, ecology is not about homeostasis, but about constant change, where media function also as environments, and environments as media.¹³ Thinking ecologically about transmission suggests more than “who owns the airwaves” by questioning the shifting relationships and territorialisation between all actors in the environment, from human to device to localised weather system to nearby star. These relationships also support a theory of technology where people are not the absolute controllers of things, but where a push and pull of collaboration occurs within complex material and cultural environments.

Bertolt Brecht’s oft-cited notion of transception¹⁴—the ability to send and receive—may be expanded from a dream of two-sided wireless communication to polyvalent communication once the agency of non-human actants returns to the conversation. More than people talking amongst themselves, transception becomes a way to describe many nodes interacting in transmission ecologies, human and non-human. Many radio artworks recognise and reveal these complex horizontal radiogenic interactions among people and things in digital and analogue networks, simultane-

ously subverting the notions of singular artistic and technological control. Transmission is thus conceived as an open, indeterminate process, where reception and listening are active positions, and which are still as prone as ever before to instability, noise, and lost signals.

Among contemporary radio and transmission artists, practices remain eclectic. The amateur transmission contraptions of the early twentieth century could be presented as contemporary artworks, and many current media and interdisciplinary artists are intent upon recreating or riffing off of these early improvised devices, whether they be sculptural antennas, or re-purposed televisions, or working from circuits outlined in old *Popular Mechanics* magazines. Some works presented at Radio Revolten referenced early radio technologies (such as Joyce Hinterding’s *Aeriology* or the exhibition *Unsichtbare Wellen* at the Stadtmuseum Halle), while others appropriated recent technologies both common or specialised (such as mobile phones, barbed wire, microwave ovens, light-powered transmissions using plants as antennas, or custom built micro-FM transmitters), or developed hybrid networks, or imaginary or impossible systems. The era of the early radio amateur was one of openness before the institutionalisation of radio frequencies censured the experimental free-for-all. Today, contemporary artists reaffirm that need for openness both on-air and online; open in terms of free exchange of expertise and knowledge as well as open and unfettered public use of airwaves.

WILDERNESS IN WIRELESSNESS

The transmission ecologies of most contemporary cities are completely jammed with signal. Signals saturate and wash across all municipal boundaries to expand the urban footprint across countryside or wilderness, but the nature of these signals is in flux. As television stations and radio stations transition to digital modes, corporate media giants buy up the newly available spectrum to profit from increased data transfer capabilities. Old frequencies are emptied of the familiar sound of stations and voices, to be filled by new activities of encrypted data transmissions.

When the anthology *Radio Rethink* was published in 1994, media activists and artists interested in radio struggled primarily for access to frequencies, and sought through a variety of strategies to combat the dominant technological and cultural norms of radio broadcasting established by state and corporate formats which were so widespread and becoming ever-more generic and entrenched. It was the era of hundreds of identical-sounding stations, and we struggled for diverse and different voices to be heard. As the internet became more readily accessible and computers more cheaply available, online platforms opened up with the promise to allow everyone to make their own content and to share it with anyone else, regardless of geography. Digital on-demand streaming and the distribution mechanisms of social media and the podcast promised that everyone might become

a sender, and find their specific niche affiliations across the globe. In this new condition of online casting, the local might be replaced by what Tetsuo Kogawa has termed the “trans-local”.¹⁵ However, as Kogawa goes on to note, these new digital forms remain entangled with the formats and conventions of the old, and interests become siloed such that “this complication makes contribution to the control in socio-cultural politics rather than to promote creating and emancipating”.¹⁶ This is now an era with potentially millions of channels which sound incrementally different but have nothing to do with one another, and whose listeners are tracked through the mechanisms of big data. The dial fills with data, and human voices now compete with the digital languages of artificial intelligence.

Free radio stations, defiantly non-commercial and embedded in local communities, continue to challenge the monopoly of radio formats while remaining open to diverse voices and sonic dispositions. The radio is made by listeners-become-programmers, and many shows rub elbows that might otherwise never have met. In this sense, the transmission ecology of community radio is best realised as being broad and deep in its differences. For listeners of Radio Corax, one favourite music show might be followed by an entirely different kind of music or spoken word programme, with different aesthetics and cultural contexts and possibly in a different language, encouraging listeners to share the listening of their community across differences.

Online platforms currently tend to cater to known and quantifiable preferences, and to reinforce habits, opinions, practices and assumptions; radio at its best is a space where the next sounds are unknown and the unexpected is welcome. Music and storytelling and political news and radio art all share the dial somehow with encoded military communications and submarine locators, with encrypted traces of higher frequency data transfer and air traffic control protocols, with electrical fields and sunspots and starlight, all in a complex and ever-changing wilderness to critically explore, to listen to, and to tell.

Radio Revolten's dedicated FM frequency sought to undo the imperatives of regular licensed listening—doing largely away with the programming grid and with the regular guidance of a programme's host, and seeking instead improvisational, durational, spontaneous and sometimes surreal radio actions connecting many spaces of transmission. Radio spaces nested within one another, and gave way from one ambiguous or imaginary space to another. One day's programming consisted mostly of the live transmitted journey of a festival goer hitch-hiking from Bratislava to Halle; another of a fox sniffing around the woods with a microphone on its collar; another evening presented an ambiguous live encounter from multiple points of view with a mysterious man suddenly sleeping half-naked on the street on a wet night; still another, the deep static oscillations of energy fields and ionospheric activity. The festival radio station

also played with familiar and intimate formats of radio broadcast that continue to culturally resonate, from the radio play to the weather report to the silky voicings of the late-night radio host. As Gregory Whitehead notes:

Such reinventions of entrenched cultural patterns initiates a special sort of dance with listeners, who are now placed in the position of being both 'at home' and bewildered. In my experience, the familiarity turns the initial fog of confusion into a welcome space of free association, while also being wrapped in the comforting embrace of a familiar form. The essential play in such a poetics bounces between cultural expectations and creative otherness.¹⁷

Such experiments revel in the domestic wireless made weird, while opening the dial to human and non-human transmissions.

Radio listening, in the sense of listening to waves and stations, remains both intimate and public, secret and open. Turning on and tuning across the radio dial generates no data footprint, and beyond the edges of the AM/FM radio dial lies an ever-changing geography of radio spaces. To return to Susan Douglas' note that early radio amateurs "were not deterred by a lack of secrecy or by interference from other operators",¹⁸ these circumstances of broadcast, both resolutely public and protectively intimate, are the main attraction for radio artists.

The feeling of distance with the slippage between real and imagined location, the

instability of signals, and the ephemeral quality of listening which may nonetheless leave deep impressions: these were key conditions of transmission which made Radio Revolten possible. The festival understood radio art as a wide-ranging diversity of activities undertaken across the electromagnetic spectrum as well as across the geographical space of the city and beyond. These conceptual re-orientations towards transmission and radio technology did not permanently transform citizens' legal access or enable immediate radical change, but provided a perspective from which to pay attention, to critically appraise the status of media and radio spaces, to conduct interventions and infiltrations, and to encounter, amidst all the din of mediated culture, the potential for time-based expressions of difference and reverie.

1. _____ Susan Douglas. *Inventing American Broadcasting, 1899-1922*. Baltimore, M.D.: Johns Hopkins University, 1987. p. 195.
2. _____ Jesse Walker. *Rebels on the Air: An Alternative History of Radio in America*. New York, London: New York University Press, 2001. p. 13.
3. _____ Douglas, pp. 197-198.
4. _____ Dieter Daniels. "Artists as Inventors and Invention as Art: A Paradigm Shift from 1840 to 1900", in *Artists as Inventors/Inventors as Artists*. Daniels, Dieter, and Schmidt, Barbara U., eds. Ostfildern, Germany: Hatje Cantz Verlag, 2008. p. 5.
5. _____ Douglas, p. 234.
6. _____ Walker, p. 22.
7. _____ Kogawa, Tetsuo, and Jan Philip Müller. "From Casting to Translocal: A Mail Interview with Tetsuo Kogawa", in *Radio Space is the Place* symposium programme. Hahmann, Helen and Sachsenröder, Stefanie, eds. Halle (Saale), Germany: Radio Revolten International Radio Art Festival, 2016. p. 9.

8. _____ Augaitis, Daina and Mary Ann Moser. "Introduction", in *Radio Rethink: Art, Sound and Transmission*. Augaitis, Daina and Lander, Dan, eds. Banff, Alberta: Walter Phillips Gallery, 1994.
9. _____ Anthony Dunne. *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design*. Cambridge, Mass: MIT Press, 2005.
10. _____ Ibid. p. 111.
11. _____ Ibid. p. 111.
12. _____ Jane Bennett. *Vibrant Matter: A Political Ecology of Things*. Durham, N.C.: Duke University Press, 2010. p. 28.
13. _____ John Durham Peters. *The Marvelous Clouds: Toward a Philosophy of Elemental Media*. Chicago, London: University of Chicago Press, 2015. p. 3.
14. _____ Bertolt Brecht. "The Radio as an Apparatus of Communication", in *Radiotext(e)*. Willett, John, trans. Strauss, Neil, ed. New York: Columbia University Press, 1993. p. 15.
15. _____ Kogawa, p. 8.
16. _____ Kogawa, p. 9.
17. _____ Gregory Whitehead. "Radio's Art", *Earlid forum*, 14 August 2017; <http://www.earlid.org/posts/radios-art/> (accessed 28 April 2018).
18. _____ Douglas, p. 195.

1



Genesis

Helen Hahmann
Ralf Wendt

In May 2014 Radio Corax received a visit from someone that sees in community radio the image of dusty market squares under a glistening sun, who hears the languages Hindi and Rasha when he thinks of radio, and considers FM a medium for the dissemination of information as necessary for survival. Vinod Pavarala, UNESCO representative for community media, professor for communication studies at the University of Hyderabad, India. Pavarala is one of the most influential figures in the fight for the democratisation of the Indian media landscape, for the licensing of community radios in India, and is the founder of India's Community Media Forum. For more than fifteen years his research and practice thereby serve as an essential contribution to the participation of primarily rural communities in social processes through the use of the FM communication space.

Pavarala's first visit to Halle served as an exchange on the future practice of community radios. A "future workshop" was held by Radio Corax and the State Media Authority of Saxony-Anhalt. We invited Vinod Pavarala to take part in the workshop together with four other radio visionaries: The Canadian radio artist and scholar Anna Friz, British and German radio artists Sarah Washington and Knut Aufermann, and Elisabeth Zimmermann from ORF in Austria. Together with Radio Corax, the group discussed not only hosting a radio art festival in Halle in the near future but also using the FM frequency band after the changeover to digital radio for non-commercial free spaces for radio activists and artists. Our demand is: FM for Culture and Community!

What can community radio sound like? When is it free of fossilised formats, quotas and service constraints? How can radio sound when it is occurring in a collective, when it becomes a space for discussing local and global social issues? How does radio programming change when access is considered strictly in artistic terms? In May 2014, we dreamt of a future Radio Revolten festival that illuminated all the nooks and crannies of radio beyond the borders of Halle with an independent, temporary frequency. A festival that would allow collaboration between artists and the radiomakers at Corax. A festival that would bring the whole spectrum of international radio artists to Halle and manifest the future demands on radio.

As the initiator and host of such a novel world-wide festival, Corax could build upon a history which has inhabited an emancipatory and experimental space of freedom since its inception:¹

- 1989 Rumours of a pirate radio in Halle's Kellner neighbourhood
- 1990 First thoughts of an alternative radio in Halle
- 1993 The idea of a radiophonic subversion originates in the left-radical paper "Subbotnik in L.A." and the association "Corax e.V.—Initiative for Community Radio" is founded
- 1997 Pirate radio campaign in Halle during the student strikes and the festival of alternative media "Schrägstrich"
- 1998 Moments of experimental radio during a 48-hour radio event by Corax
- 2000 Beginning of non-commercial radio in Halle on FM 95.9; during the first broadcast on 1st July 2000 sculptor Martin Braun exhorts: "You must take it seriously, it is art!"
- 2006 Radio Revolten festival on the Future of Radio takes place in Halle (20th September – 21st October)
- Since 2006 Development of mobile radio broadcasts based on streaming and mini-FM

The city of Halle's 1200-year celebration in 2006 was to be accompanied by an exceptional radiophonic programme. As a community radio station, Radio Corax invited scholars, radio artists, and radiomakers from community and public radios to think about the future of the medium for an entire month. The festival was broadcast from the Roter Turm (Red Tower) dating from the middle ages at the centre of Halle's market square, the architectural expression of a new civic self-consciousness vis-à-vis the authority of the church.

1. History according to: Thomas Kupfer. "Auf den Spuren freien Radios in Halle", in *Radio Revolten... Festival zur Zukunft des Radios*. Corax e.V., ed., Halle (Saale): Verlag für Revolten, 2006. p. 18.

through the city, and the Red Tower's glockenspiel chimed the station identifications of radio stations worldwide upon text message command. Morning sports broadcasts animated passers-by for their early-morning exercises, the voices of senior citizens echoed across the city centre, and a ghostly medical centre in the city's centre bore witness to a month of radio art and the anarchic appropriation of the medium. At that time we demanded:

WE WANT

roadside radio, puberty radio, silent radio, world radio, rotating radio, mobile-casting, non-participatory radio, participatory radio, entertaining radio, difficult radio, realistic radio, fictive radio, interstellar radio, erotic radio, perplexing radio, such-radio, body radio, desolate radio, absurd radio, hand-made radio, subcutaneous radio, automatic radio, sovereign radio, flexible radio, temporary radio, eternal radio, subversive radio, neuronal radio, thought radio, power radio, energy radio, digital radio, net radio, future radio, radio off!²

In the aftermath of the festival, Radio Corax sprang into the net of Radia, the international radio art network. Some artists from the region also began to discover radio for themselves. Radio Revolten 2006 is remembered by many radio artists in the Radia network as a milestone. As it is by Corax radiomakers.

The curators we invited for the Festival's 2016 edition also have strong memories of this unique radio encounter in Halle. Sarah Washington and Knut Aufermann (aka Mobile Radio), representing the seminal radio art station Resonance FM, were not only excited spectators of 2006's Radio Revolten, but broadcast their first two-frequency intervention. Washington writes about one of the intense radio experiences she had at the festival.^[chap.6] Ten years later Mobile Radio had many other projects including a three-month biennial radio station in Brazil behind them, and a memorable collaboration with Corax at the *Addicted2Random* Festival 2013.³

2. Breitsameter, Sabine, Ralf Wendt and Johannes Wilms. "Einleitung in die Radio Revolten", in *Radio Revolten... Festival zur Zukunft des Radios*. Corax e.V., ed., Halle (Saale): Verlag für Revolten, 2006. p. 9.
3. The Imaginary Radio Band No.1 performed the opening concert of the Addicted2Random Festival on 10- July 2013. The performance took place in the impressive glass-hall of the Händel-Haus Halle and was also broadcast on Radio Corax. Band members included Mobile Radio, the computer-musician André Damaio from São Paulo, performer Xentos Fray Bentos from London, and tuba-virtuoso Børre Mølsted from Norway.



MARTIN BRAUN, MAROLD LANGER-PHILIPPSEN, RADIO REVOLTEN 2006

Marold Langer-Philippesen placed his builder's trailer turned broadcast studio directly on the market square as a visible sign of the conquest of the space and Corax's breaking out of radio's normed pathways. Small local FM stations were built and operated, mobile radio pedalled

Anna Friz was a participating artist and scholar at Radio Revolten 2006 in Halle with a conference presentation, an installation and a performance. Inviting Anna Friz as a curator for 2016 brought the immense radio-philosophical background of North America on board. Elisabeth Zimmermann, director of ORF's Kunstradio, brought with her a connection to their thirty-year-old network, including the EBU's Ars Acustica Group.

The team of curators was rounded out by the programme coordinator of Radio Corax and performance artist Ralf Wendt. We moved along in our preparation for a radio art festival in Halle and gained the Stadtmuseum and the Moritzburg as major project partners. For the realisation of the entire festival, the trust and the sponsorship of the German Federal Cultural Foundation and Media Authority of Saxony-Anhalt were indispensable.

For the radiomakers at Corax, another Radio Revolten Festival harboured the vision of understanding and implementing radio in a radically new way and thereby making a collectively-created exceptional radio programme. A new edition of this festival promised to sow enthusiasm for the medium, connect with international radiomakers and the like to alter our radio's daily practices.

The 2016 Radio Revolten festival exceeded our expectations. The radio festival headquarters arose in two buildings in Halle's city centre. From the darkest corner of the cellar catacombs to the extreme tip of the radio mast mounted on the roof. In the direct vicinity of the market square, for one month both buildings at Rathausstraße 3 and 4 became an international testing ground and thinking space for the medium of radio. Over one hundred international radio artists, and more than two hundred community radiomakers gathered in Halle during this month of radio. Three large national and international radio conferences were held during the festival. More than 20 international radio artists wrote manifestos for radio to enliven the festival. Together they affirmed: "FM for Culture".⁴ In light of this concentration, a press report appeared in October 2016 titled: "Halle Becomes Radio Capital of the World for 30 Days".⁵

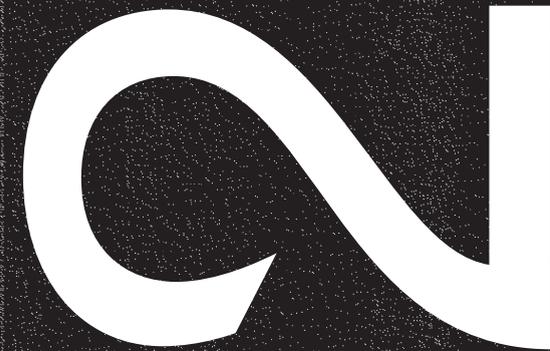
UNESCO representative for community media, Prof. Vinod Pavarala from Hyderabad, returned to Halle in October 2016 for Radio Revolten. Could it be an omen?—The Oracle of the Hausmannstürme^[chap. 11] prophesied during the last days of the festival: The next Radio Revolten is already extending its antennas towards the global south.



4. ^{cf.} Programme Magazine of Radio Corax, October 2016; <https://issuu.com/Corax/docs/pz-oktober>, and "FM for Culture! Revolten-Artists start a Radio-Manifesto", Radio Revolten; http://radiorevolten.net/en/de-fm-for-culture-20-kuenstler_innen-beginnen-ein-radio-manifest/ (accessed 23 April 2018).

5. Detlef Färber. "Halle wird 30 Tage Radiowelthauptstadt", *Mitteldeutsche Zeitung*, 7 June 2016; <https://www.mz-web.de/halle-saale/festival-halle-wird-30-tage-zur-radiowelthauptstadt-24185348> (accessed 23 April 2018).

BILLBOARDS ON THE MAIN ARTERIES INTO HALLE IN SEPTEMBER 2016 ANNOUNCING "WELCOME TO THE RADIO CAPITAL OF THE WORLD"



Let it be Radio: Case Study Radio Revolten

Knut Aufermann

Artists are people driven by the tension between the desire to communicate and the desire to hide.
D.W. Winnicott

I don't like the titles of curator or artistic director that are prescribed by the professional art world, I much prefer the term organiser. On a handful of occasions during the last 15 years I have been in the fortunate position to start a radio station from scratch, always as part of a team effort. The following four ingredients are key, regardless of size and duration of the project: location, tools, personnel and of course the prerequisite of a transmitter.

Radio is a function of locale. This is as true for the point of origin of the signal, traditionally some kind of studio setting, as it is for the transmission footprint that is confined by the radio horizon. The Radio Revolten broadcast site centred around a rather low key studio affair plus an anteroom, located on the second floor of Rathausstraße 4, which was not accessible to the general public. This was a deliberate choice, we opted out of the goldfish bowl setting favoured by commercial radio and art institutions alike, instead we offered a space that by the simple act of closing the door could turn into a chamber for undisturbed experimentation.

All signals for broadcast had to pass through the inconspicuous mixer situated on an office table that, along with most other studio furniture, had been discarded from Halle's town hall across the street and stored in their basement awaiting disposal. The act of labelling this broadcast mixer revealed a web of tie-lines to other acoustic spaces that greatly increased the number of possible transmission sources. An initial drawing from October 2015, long before the determination of most festival locations, shows that this entanglement of sites in the centre of Halle became the blueprint for not only a technical set-up but also for the subsequent radio programming. For me this was essential organisational planning, or if you prefer, radio art curation.

Apart from the main studio, there were four outside locations which were brought on air on a daily basis. The Radio Revolten Klub performance venue, consisting of the stage and a laid-back couch-centred conversation corner, was linked to the studio by a 100-metre-long multicore cable that found its way between the adjacent buildings, going through ceilings and walls, sliding across the garden, crisscrossing reinforced concrete bars and entering through broken windows. The

daily performances by an unprecedented roster of international radio artists were framed by a routine handover from the privacy of the radio studio to the bustle of the Klub and back again.

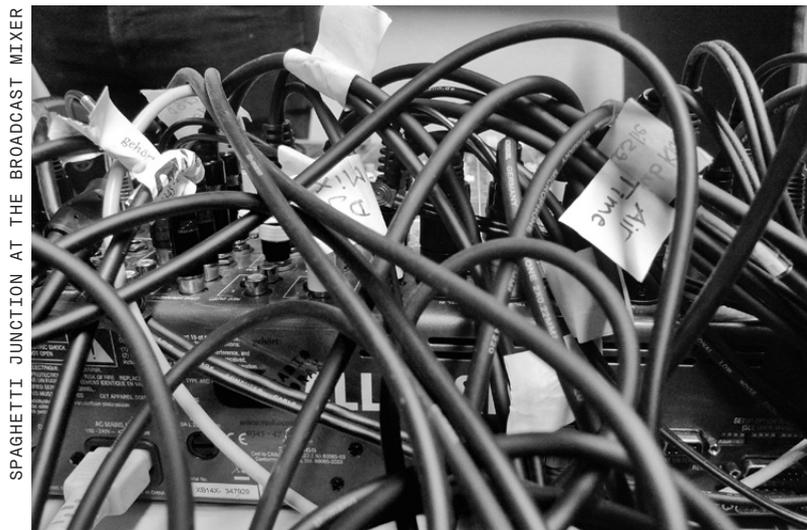
Another feature that rendered the studio acoustically porous was radio head *Leslie*. First employed by Mobile Radio at the Deep Wireless festival in Toronto, Canada, in 2015, *Leslie* is capable of transmitting binaural sound live within a 50 metre radius of the studio, thanks to wireless lavalier microphones situated in his (or her?) ears. In the hands of the radio crew, *Leslie* transformed into an all-purpose tool, roaming the corridors and streets, triggering responses unlike any other radio microphone and literally lending an ear (ortwo to be precise) to the listeners.



The two other regular connections into the studio used tried and tested internet technology to stream audio from remote locations. One was a constant IP-based link from the den of the Radio Oracle who was occupying the former tower warden's octagonal flat more than a hundred feet up in the Hausmannstürme on Halle's market square. The other was Radio Corax's most basic unit for reportage, an iPhone with an audio streaming app, which allowed for high quality mono feeds from almost anywhere at any time. The portability of the smartphone allowed for roving outside broadcasts, for example a series of night walks where the radio team went hunting for unusual electromagnetic fields in the town.

A fifth, conceptually rich, source of outside input to the radio programme came in the form of an open microphone situated in the exhibition *Unsichtbare Wellen* at the Stadtmuseum Halle. A simple red button allowed visitors to activate the microphone, which was directly connected to the studio in Rathausstraße 4, and a visual alarm would alert the radiomakers that a member of the public wanted to speak live on air. Whilst this resulted in the odd yet welcome intervention, most requests to communicate were unfortunately overlooked in the heat of live radio broadcasting.

These and many other temporary forms of point-to-point transmission allowed for the main radio studio to become a hub and melting pot for incoming signals, the equivalent of laying many different sets of cutlery on the table in anticipation of a feast.



SPAGHETTI JUNCTION AT THE BROADCAST MIXER

The appropriation of a radio transmitter releases immense creative energies. The importance of having our own FM and AM infrastructure for the festival cannot be underestimated. With the technical know-how of the Radio Revolten and Radio Corax team, and the critical support from the Martin Luther University Amateur Radio Club and the local Freifunk¹ initiative, a resilient broadcast infrastructure was created with a radio transmission chain that was independent from any internet or telecom provider.² Only a power cut or equipment failure could interrupt regular service, both of which happened on rare occasions, and were quickly remedied by our own crew.

The final building block allowing us to form an environment of maximum freedom for visiting radiomakers was achieved through the provision of helpers. The notional assignment was blurred here: we were explicitly not looking for technicians, presenters or producers when we assembled the festival radio team, but for curious communicators. Four local radio enthusiasts who had the desired qualities needed for the job, Tina Klatte, Jan Langhammer, Georg Nickol and Annett Pfütznner worked closely with Resonance FM's long time studio manager Chris Weaver and Radio Revolten curator Sarah Washington.

My role in the team was to inject some guidelines, challenges, joy and chaos into the radio station. Every evening the on-stage performances at the festival provided the basic structure for the radio schedule, as all events were conceived for twin live audiences, one in the Radio Revolten Klub and one listening to their radios elsewhere. Further content related to the festival, such as the Radio Oracle broadcasting from above the market place,^[chap.11] a live feed from one of the exhibition installations, or the broadcast of the *Radio Space is the Place* conference proceedings, meant that there were a few other foreseeable events in the daily schedule, but these only filled a fraction of the available airtime. Equipped with the toys and tools described above, settled into a bespoke web of acoustic and radiophonic spaces, the key question was: Can we improvise the rest?

The answer was yes.

To do so we needed to employ unusual tactics. Live radio trumped pre-recorded works. Time constraints lost their potency because the next item on air had yet to be chosen. The schedule was written and rewritten in real time. Speech and music were exchanged for voice and sound. Throughout October, the open invitation we had given to the festival artists, crew and friends to come and make radio increasingly bore fruit. As predicted, the final week of programming was crammed full of shows which had needed a month to gestate.

Radio art ['reidiəu a:t] (noun) happens when the radio has drunk too much art or art has swallowed too many radios. It is an anarchic aesthetic element that appears when the conditions are right. Radio Revolten provides a perfect breeding ground for it.³

The question of language was treated nonchalantly, however switching mainly between German and English was considered appropriate for guests and listeners alike. Translation only happened on a casual basis whenever participants felt it was desirable. Besides the

1. Freifunk is a non-commercial grassroots initiative that builds decentralised free wireless Wi-Fi networks in German cities.

2. In certain circumstances, the ability to transmit radio while minimising outside interference is a matter of great consequence. This was palpable during a recent visit to Athens when I was shown the transmitter which physics students had bastardised out of an old valve radio receiver in 1973. They had used it to stir up a revolt which, even though tanks were engaged to put an end to the pirate broadcasts, eventually helped lead to the downfall of the Greek military regime in 1974. Cf. https://en.wikipedia.org/wiki/Athens_Polytechnic_uprising (accessed 15 January 2018).

3. <https://radiorevolten.net/en/> (accessed 15 January 2018).

FM and AM transmission in Halle, the festival radio was also broadcast in its entirety on Resonance Extra, a DAB radio station covering Brighton and Hove on the southern coast of England. Furthermore, it was relayed five days a week on FM in Berlin and Potsdam during the slots of the Pi Radio union, a decision that was unexpectedly made only days before the start of the festival. An open invitation to the 25 member stations of the international Radia network to re-broadcast our radio stream at will was also regularly taken up. All of this combined, rendered obsolete the idea of an audience defined by any target.

Initial proof that our way of making radio was challenging to connoisseurs of traditional radio formats came in the form of a listener email one day after the start of Radio Revolten Radio.

From: M_____ H_____ <xxxxx.xxxx web.de>
 Subject: anarchistic tosh
 Date: Sun, 2 Oct 2016 01:18:43 +0200
 To: info@radiorevolten.net

Eventually any attempt wanting to make EVERYTHING SOMEHOW essentially NEW and DIFFERENT ends in a disaster !

Some things just cannot be IMPROVED or DEVELOPED FURTHER !

Your NOISE STUFF is crap, disgusting, poor and cannot stimulate ANYTHING, except revulsion and DISAPPROVAL !

If you don't care for music or useful noises, but only for the opposite – for revolt, then you are real and wasted DEVIANTS !

Stop this crap and do something meaningful ... !

The immediate response to this message from Radio Corax's director Mark Westhusen took this for what it was—a bouquet of veiled compliments: "I'd say, we've done everything right."

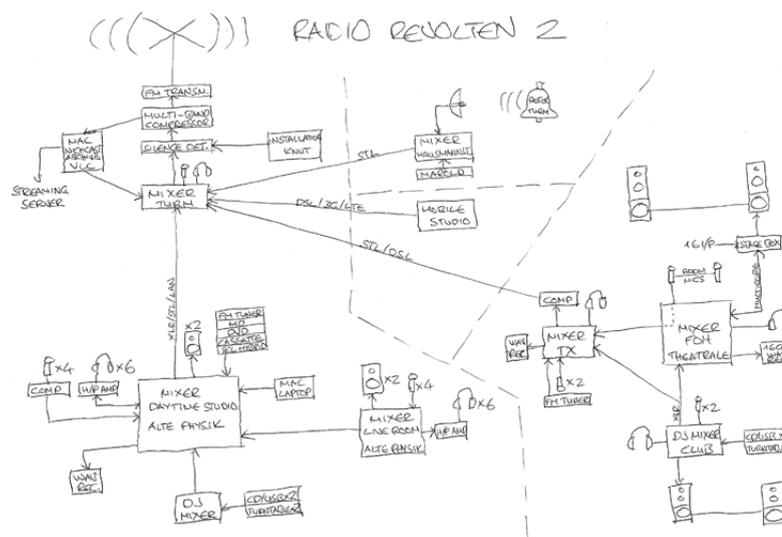
The question of what constitutes radio art was debated in a series of shows called "Wikipedia-editing on air" in which two seasoned Wikipedia editors (Helen Thein and Udo Israel) in conjunction with additional experts (Elisabeth Zimmermann, Ralf Wendt and myself) attempted to establish live on air the entry for "Radiokunst" (radio art) for the German Wikipedia.⁴ Our first draft was deleted by a higher ranking editor within two minutes. We persevered, at times with the help of listeners, and succeeded in constructing an expanded article during and after our radio shows. This became something of a tradition when it was taken up again during the documenta 14 radio programme *Every Time A Ear di Soun* in 2017. One aspect that is not mentioned in the article, even though it was the underlying motive for the exercise, is that this Wikipedia entry itself can be considered a work of radio art, as it was created during a live radio art programme.

Over the 30-day life cycle of Radio Revolten Radio a development took place, borne by a critical mass of artists and radio enthusiasts in town: people came to un-expect the expected.⁵ The radio team gathered for a show under the motto "Don't be prepared" (for description

4. _____ <https://de.wikipedia.org/wiki/Radiokunst> (accessed 15 January 2018).

5. _____ I heard this reversal of the exclamation "Expect the unexpected" first from the English comedian Simon Munnery, circa 2003 on Resonance FM in London, when he objected to my use of this common phrase and demanded that we should really instead strive to "Un-expect the expected".

FIRST DRAFT DETAILING THE RADIO REVOLTEN WEB OF RADIOPHONIC SPACES



see below). In other programmes technical difficulties were faked, live painting occurred, and silence was celebrated. Some hours followed traditional show formats. It was not a twisted logic that drove the programming of the radio but the will to play, experiment and give over to individual perspectives on the world. The regional press in Halle, bereft of prior knowledge, coined the term "Radiowelthauptstadt" (world capital of radio), for their city which was hosting this international radio festival. What a wonderful world it became.

From: R__ S_____ <xxx xxxxxxx.org>
 Subject: radio revolten
 Date: Mon, 17 Oct 2016 04:57:18 +0200
 To: info@radiorevolten.net

Thank you for the wonderful "radio revolten"!!!
 I wish for radio to be like this all of the time—completely free-form and without ego.



Mometric Monday
 24th October 2016, 6 p.m.
 Radio Revolten Radio 99.3 FM 1575 AM
 by Jan Langhammer

Writing about music is like dancing about architecture.
 Thelonious Monk

Sitting in front of a blank document waiting to be filled with impressions of the “Mometric Monday” performance it feels a little bit like it felt then: a lot of uncertainty combined with a joyful expectation. What could possibly go wrong? This performance was an experiment. There was only one rule: no agreements in the first place. So what was the initial setup? Seven people who had never performed together before, four microphones, one binaural dummy head—called *Leslie*, two turntables, one guitar and a lot of other gear (including rubber balls) we could and would use later on. I think there is no sense in trying to explain what was happening during the two hours we were performing together. There is an archive at www.radiorevolten.net where people can listen to this show. Maybe it’s a good idea to search for the spirit of this unique collaboration. There’s this photo shot by Marcus-Andreas Mohr who has the amazing ability of making himself invisible in a room (he’s a very big guy), where Sarah Washington is holding some tiny things up in the air while her face is radiating a mixture of happiness, excitement and pride. Yet, writing about pictures is a little bit like showing pictures on the radio. Maybe it’s a good idea to have a look at the time and especially the date when this performance was happening. It was the third week of the Radio Revolten festival so we had already got used to each other and developed some kind of routine. Well, as much routine as one can develop in a scenario where the daily schedule was sometimes created at the very day, the very hour. Maybe we simply got used to improvisation and to embracing the unforeseen and maybe even loving and enjoying it more and more as the festival went on. There was a point during the performance when we agreed that the beginning of the festival felt already like it was years ago ...

Maybe it’s a good idea to focus on some very special magic moments. Sarah offering a box of chocolates which were eaten on air. Knut showing us how to play a record backwards on a turntable using only a roll of gaffer tape. Tina disappearing and making sounds from outside the studio. Georg’s attempts to get in contact with her. Annett and Sarah bringing a big sack of rubber balls into the studio and playing with them. Chris trying to improve his articulation with chestnuts in his mouth which were given to him by Tina. Me creating sounds with rubber balls rolling down the strings of my guitar. Sarah entering the studio with a microphone attached to her head looking like a unicorn and interacting with the rest of us. *Leslie* falling off the turntable again and again (he never broke). And, and, and ... Maybe it was the spirit of the festival that brought us from one

point to the other. Of course there were moments when we had no idea what to do next. Moments where our on-air-plane was about to crash-land but then some of us would come up with a new impulse providing extra fuel for the association-flight and the show went on. I never had the impression that one of us would dominate our performance, but it was rather a very smooth process with a rotating centre which was switching from one person to the other.

Maybe it was hard to follow us as a listener. Maybe it felt like listening to a bunch of children exploring their new playground (I definitely felt like that). Maybe it was chaotic and exhausting (it definitely was).

But ... hell yeah! ... it was fun.

A large, white, stylized letter 'N' is centered on a dark, textured background. The background has a grainy, almost fabric-like appearance with some vertical lines and faint, illegible markings. The letter 'N' is bold and has a slightly irregular, hand-drawn quality.

Time and Format

Udo Israel

What is the relationship between radio format and time? Let's start off with the German term "Formatradio" (formatted radio):

A radio format or programming format describes the overall content broadcast on a radio station. [...] Radio formats are frequently employed as a marketing tool, and are subject to frequent change. Music radio, old time radio, all-news radio, sports radio, talk radio and weather radio describe the operation of different genres of radio format and each format can often be sub-divided into many specialty formats.¹

Assuming that a radio format is something that makes nearly every minute of a 24 hour day into a clearly identifiable part of a programming whole, the factor "time" plays no role. "Formatradio" is always the same. As are its components and the conditions of its production (and consumption). Whether at three o'clock in the morning, two o'clock in the afternoon, or seven o'clock in the evening—the same sound, the same tone of address: a cheerfully effusive informality or a serious formality. The same superficial messages, the same news ...

What role did the parameters of time and format play at Radio Revolten? Maybe the following:

In the durational works of Myke Dodge Weiskopf (*All Night Flight*), Knut Aufermann (*Changing of the Guard*), and Antoine Bertin (*12 Hours in the Life of a Fox*) I get an exaggerated impression of how format radio works. I turn it on, know what it's about, there's little variation, and I turn it off. Three hours later and apparently nothing has happened. Radio as a medium of performance, as something that occurs in a temporal progression, but apparently stands still. Nothing changes. Just as the same old droning of service stations that are interrupted only by the same old traffic reports.

¹. _____cf. "Radio format", Wikipedia; https://en.wikipedia.org/wiki/Radio_format (accessed 25 April 2018). In German, the pejorative term "Dudelfunk" is sometimes used in place of "Formatradio". "Dudelfunk" describes a kind of monotone, expectable sound of a radio station.

MYKE DODGE WEISKOPF, *SHORT WAVE MUSIC: ALL NIGHT FLIGHT*
2nd October 2016, 10 p.m. – 6 a.m.

“Welcome on board—we are pleased you’ve chosen us for your flight!” Atmospheric cracking and hissing, bits of voices, scraps of melody from the ethereal anywhere, jumbled speech in shortwave quality, Goa trance. Sofas, mattresses, and blankets are installed in the Klub for overnight guests. Noise level and timescale of an intercontinental flight. The journey continues. Boarding and disembarking are not allowed. One more drink at the bar. Two revellers are woken at five in the morning for landing.

MYKE DODGE WEISKOPF
SHORT WAVE MUSIC: ALL NIGHT FLIGHT



What did Radio Revolten want to achieve with its radio programme? Was Radio Revolten a view into the future of the current developments of commercial programming (or radios competing with commercial stations)?

Not really. While “Formatradio” is primarily concerned with target groups and market shares, artistic works for radio operate in the fields of long-form dramaturgy, contemplation, trance, or experimentation. It doesn’t matter how many people are following the respective work. Consequently, Knut Aufermann’s permanent sound installation *Changing of the Guard*² is not accessible at all for long periods. Art also takes place without an audience. “Formatradio”, in contrast, would have been finished here.

A second approach. What role did the shorter programmes play? Broadcast forms, forms of debate and discussion, narratives and messages, types of 24-hour programming.

A flashback: Journalism studies during the early to mid-1990s in Leipzig. Preliminary exams. Concerning genre theory and the differentiation between news, report, commentary, reportage ... For me it was even fun. In the oral exams I chatted with both examiners about the relationships between theatre reviews and football reports. It felt good. That’s probably why it didn’t matter at all in the end that I hadn’t read the current work by Günter Grass.

A few years later I discovered that the theoretical, completely meaningful study of style plays a very different role in the everyday journalism of public and private-commercial radio stations. There, the manners of

2. Changing of the Guard by Knut Aufermann is an artistic alternative to the silence bridge. That means it is an emergency programme that starts when the regular programme of the radio station fails e.g. for technical reasons.

speaking or how material is used or narrated doesn’t matter at all. Terms tumble around. An original recording³ quickly becomes its own genre that has to obey the same laws as an event info. As neutral and factual as possible, voice recordings are above all there to support what was just said. It becomes most absurd in a form that hardly exists anymore in everyday (commercial) radio. Three or four sentences cut from a discussion, a little ambient noise—the mini-feature is done. Or better yet: the featured contribution.⁴

What does this manner of dealing with journalistic forms tell us? Why is the existing diversity of information and narration formats reduced to a comprehensive mono-audio culture—on top of that, with the effect that the often-cited, sub-specialisation does not contribute to any diversity of content or broadcast forms?

Among the 50 most-played titles in the formats ‘CHR Rhythmic’ and ‘Urban’, for example, 38 titles in August 2002 were identical—an overlap of 76 percent. Every second title in the ‘Active Rock’ format was also played in most of the 50 ‘Alternative’ formats. Every third title in a CHR (Contemporary Hit Radio) format is also played on the top 50 playlists of a ‘Hot AC’ station, etc.⁵

If the increase in formatting and recognisability of programmes brings a decrease in the variation and diversity within a programme, why do we then need a continually increasing number of formatted stations? A radical reduction would be more logical: one, two, or three channels for musical entertainment instead of 300, one, two, or three channels for news instead of 50, one, two, or three channels for fiction instead of 0, a channel for art ...

Did such radical thoughts play a role when considering establishing a Radio Revolten frequency in addition to the frequency of the host station Radio Corax? (And a third on medium wave.) Only for the duration of the festival.

Already in 2006 for the first edition of Radio Revolten there was a festival frequency that accompanied the exhibitions, performances, and conferences with its own on-air programming. Yet unlike 10 years ago, in 2016 there was much less integration and involvement with, the existing programming of Radio Corax. It was an experiment in what could be even more independent: a festival radio.

A radio format is a strategically determined, unified orientation of a radio programme in which all contents, music and vocal contributions are determined in their type of combinations, structure and presentation. [...] A central, but not necessary criterium in these considerations is the audibility of the programme.⁶

And how did this radio sound?

Radio Revolten Radio, day 2: A table tennis game is on.⁷ Not a tournament, not a reportage, only a wireless radio dummy head as microphone next to a table tennis table. Ping – pong – ping – pong – ping – pong – pong. The players count along: 9:3 ... A radio stands next to the

3. The German term is “Originalton” or “O-Ton”. It’s the acoustic material, e.g. an interview snippet or a soundscape of a demonstration that is used to produce a radio report.
4. An untranslatable term from German “der angefeaturete Beitrag”.

5. Wolfgang Hagen. Das Radio. Zur Geschichte und Theorie des Hörfunks – Deutschland/USA. Paderborn, Munich: Wilhelm Fink Verlag, 2005. p. 369. And cf. DiCola, Peter and Kristin Thomson. 2002. “Radio Deregulation. Has It Served Citizens and Musicians? A Report on the Effects of Radio Ownership Consolidation following the 1996 Telecommunications Act”, p. 64; http://www1.udel.edu/nero/Radio/pdf_files/FMCRadiostudy.pdf (accessed 18 December 2017).
6. cf. “Hörfunkformat”, Wikipedia; <https://de.wikipedia.org/wiki/Hörfunkformat> (accessed 04 September 2017).
7. Peter Lanceley vs. Knut Aufermann (ringmaster: Ed Baxter) Radio Revolten Zentrale garden, 2 October 2016, 1 p.m.

table. The festival frequency is turned on—there are spherical delays, an echo, feedback ... is that art now? No idea. It is radio time, time at my kitchen table, it is live.

And the same thing happens with Sophea Lerner and her breakfast radio show. Nothing has to happen at all. The pure atmosphere is enough for me as a listener to feel well attended. There are people playing ping-pong for me and people who send me their greetings. People who address me and don't leave me on my own. In a certain way these overtures are similar to those of a format radio, which I also don't listen to very carefully. They murmur in the background and provide the feeling of being safe.

SOPHEA LERNER, *BREAKFAST RADIO*
25th October 2016, 11 a.m.

It is Sunday morning—the voice on the radio greets me and then I hear the sound of rain. Or is it street traffic in the distance? Telephone voices alternate with barely perceptible human sounds, children screaming, sounds from a microphone in the wind, repetitively beeping jingles—all interrupted by spoken interjections announcing incoming tweets that describe breakfast habits. Greetings from very distant worlds.

This breakfast takes place by no means at the kitchen table or a nice cafe around the corner. It is an utterly virtual meal, displaced from any time of day. Porridge-like nourishment prepared from tubes in a weightless environment.

How much diversion is needed to create such a feeling?

Memories of Radio Revolten 2006 awaken. All performances are over, the exhibitions taken down, the Revolten hangover nearly slept off. Only the festival frequency continues to broadcast on 99.3 FM. A tune, a song, a farewell. Unending. *Hey Joe*, sung, whispered by Kristin Oppenheim—the Revolten echo on for a long while.

One or two years later, during Christmas, 95.9 FM, the whole editorial staff has taken off. Holidays are days on which nothing much happens in alternative projects either. But there is still programming. The reminiscences of the year 2006 becomes a recording—about 2 minutes long, sung with a slightly scratchy voice and sounding like a recording from the street—repeated again and again. And thus spreading the peace and quiet that is so desired at this festival and that the other radios would never want to occur.

In the babble of frequencies, this permanent and unadorned repetition is a place of rest. And it builds a bridge to the programming concept of the local television station with minimal personnel requirements. One hour of featured programming a day, then 23 repetitions. A very calculated, predictable pattern with the effect that, although the programmes are heard by a lot of people, nobody really follows them. The station markets the available advertising spaces accordingly.

ANTOINE BERTIN, *12 HOURS IN THE LIFE OF A FOX*
10th October 2016

A fox is equipped with a microphone and monitored acoustically. Seven hours. Or longer. Rustling, sniffing. No edited compilation with the “highlights” from the life of a fox. Did anyone really follow the whole thing? No matter. Many people heard it. Radio doesn't

need to keep me permanently informed and up-to-date in precise snippets. It can also be the place at which we come together as a community. Separated by space, perhaps offset by time, most certainly in differing (emotional) conditions, but somehow connected.

Everything is available as message. What the foreground is, what the background is: what is important, what is unimportant; what trend, what episode; everything proceeds in a uniform line in which uniformity also produces equivalence and indifference.⁸

8. Peter Sloterdijk.
Kritik der zynischen Vernunft.
Vol. 2., Frankfurt am Main:
Suhrkamp, 1983. p. 564.

IN THE KLUB

The performances in the Radio Revolten Klub start at 8 p.m. According to the programme. In reality, tonight's performers were still waiting in the Vietnamese restaurant across the street for their food. Or the soundcheck took longer. Or the hall is still not really full because audiences for art are never on time anyway.

The programme has already switched over to the live broadcast from the Klub. Not on time, of course. But it is necessary to bridge the time, to prepare for what follows. Not always for predictable periods of time. The classical method works for three or four minutes: Where are we, who is expected next on stage, what do we know about the artist. And here we depart from the worn-out paths of non-artistic programming. I intentionally did not read up on who had published what and where before this moment. I'm just not interested in whether it is a person who could be seen at MoMA or heard on ORF or whether it's going to be a total premiere or an experiment. I'm interested in the moment.

My feelings are: sizzling expectation, a slight jadedness from hours full of earlier excitement, or often enough more of a dull wait in the back corner of the Klub, lit only by the rotating colours of the LED spotlights. Precisely in these moments it's difficult to fill the air with chatter. However, in teams of two it usually works incredibly well, because plenty of topics flutter through your brain at a festival



IVOR KALLIN, GEORG NICKOL, UDO ISRAEL

and you talk, question, and reflect together. But alone at the mixer it can happen that I decide to bring up the microphone installed in the room and listen to the sounds of the venue filling up. Jumbled voices, scraps of speech. And after indeterminate periods of time I have the feeling: I'd like to say something about that here.

After the performances, it's time for conversation. The performers leave the stage and gather on the sofa for a talk. The topics arise from our descriptions of what just occurred. The course of these conversations is unpredictable. Sometimes guests jump right into a philosophical discourse, sometimes we get lost in an exchange of daily experiences, sometimes it's almost a classical question and answer game. The great appreciation of having the freedom to not have to watch the clock and to be able to take time to just have fun is palpable on the two or three evenings where this is not the case, because at 10 p.m. it has been arranged for another radio programme to begin elsewhere.

Maybe the knowledge of this operating principle produces the panicky fear of "dead air". Time and again there are attempts to broadcast nothing. But these experiments have proven rather unsuccessful. For who listens to nothing?

Radio Revolten 2006: the performance in the club is over. Much too early. It could have easily lasted another 30 minutes. A discussion is expected. Or a transition. My sparring partner with information did not show up. I don't know what I should say. So I lay the microphone on the table and broadcast: nothing. Only the sounds from the club. The technician in the Corax studio can't stand this kind of broadcast and throws on a random selection of music instead.

Of course the technician has only one thing in the back of his mind. After 10 or 25 seconds of signal failure, the emergency loop is turned on. But why is the pre-recorded programme called an "emergency" loop? Where is the emergency, when something doesn't play for a change? Who defined this silence as an emergency?

KNUT AUFERMANN, *CHANGING OF THE GUARD*

Installation, October 2016

When I step into the control room in the tower of the former Department of Physics, the installation is in operation. It has been running for almost a month already.

I hear the ebb and flow of sounds, humming, feedback, a continuous tone in an endless loop.

Sometimes the sound, the tone, the noises change. Sometimes they seem like interwoven mini-structures. I stay 10 minutes, maybe 15—a mini-excerpt of the work. Nobody knows the work completely. It could be experienced in situ, heard daily for an hour when you enter the tower of the former Department of Physics for a tour. Or else when Radio Revolten Radio malfunctioned, as it operated as its emergency loop. Does radio need an audience?

Yet in the year 2016 it is still possible to broadcast two minutes of nothing. Only then is Knut Aufermann's production automatically connected as an outage tape. Aside from the test broadcast before the start of the festival, this moment occurred three times.

The way silence is handled illustrates perhaps one thing very well: Time is a sensitive topic. Not only with broadcast outages. Everyday radio (not only commercial) follows the clock very closely for regular programming.

In reports without original recordings as well as in interviews, long text passages quickly become tiring—especially if they have no dramaturgic 'red line'.⁹

Moments in which the standard 2:30 minute format is disrupted almost never happen on the service waves. The complete automatization of the programming sequence prevents situations from occurring that were possible 25 years ago and occasionally did happen.

1990. DT64 is still broadcasting on FM. The Top 2000 are being announced—a seven-day-long experience of two thousand hits, one after the other, that the station's audience somehow have chosen as their favourites. In my early to mid-20s—a good eight years of which were socialised through the station—it was a big event. Best not to miss one minute. Which is impossible of course. At some point I have to sleep. And then: somehow the schedule comes undone. 10 to 12 songs an hour are just too many. Someone calls, they're switched live on the air, the moderator lets him talk about this or that song, the stories behind them, and more ... Suddenly, in the middle of the night, it's not the super hit parade anymore, but talk radio. It wasn't planned like that. And I wanted to hear the next 20 spots. But still I can't turn it off. I listen until 2:30 a.m.

At Radio Revolten 2016 few expectations were created ahead of time. The announcements online and on paper remained rather vague. Like going to sneak previews at the movies, most of the audience comes to the performances without concrete ideas. And discovers very quickly that subsistence exists unconsciously there. There are past experiences and prejudices of what radio art is, should or can be, how a performance occurs, what radio is, a radio play, music, concerts.

How exciting or surprising a performance or broadcast is perceived depends largely upon one's existing knowledge. Do I already know the broadcasts of *SUBstrakt* and *TINYA*? Have I already seen Mr Vast live? Or is radio art for me already a container, a form like the news.

In the year 2010, approximately: At Radio Corax the morning magazine is on air. A is moderating and the news is scheduled on the hour. I'm waiting for the typical orchestra (borrowed from a large film studio). It doesn't come. Instead, in the morning hours unusually quiet music plays and A tells me that in Mexico and Nicaragua things are becoming restless again. A wasn't there, but conveys to me very convincingly that this is not fairytale hour. The music plays a bit and I think my thoughts. Then A tells of a labour dispute in France. And later, the topic is data retention in Germany. A takes me along, quotes, names sources, takes 10 ... 12 minutes or longer, interrupted again and again by quiet music. That was information for the moment. Instead of "listen and pay attention!" it is "I have something to tell you".

The change in perspective, the deviation from the normal programming takes me aback, surprises me, perhaps even makes me listen attentively. In times of an intensified fight for our attention, this effect could actually become a preferred stylistic device.

Yet everyday radio relies almost exclusively on the fulfilment of expectations. Expectability is something like the basic precondition

9. Andreas Klug. "Der gebaute Beitrag", *Material für Aus- und Fortbildung in Bürgermedien*, p. 3; http://www.mediensyndikat.de/grafik/material/der_gebaute_beitrag.pdf (accessed 18 December 2017).

for high listening rates (in the commercial sense: success). Even the few places involved in such experiments are labelled precisely as such. Attention: Art!

Was Radio Revolten Radio an alternative concept to this kind of pre-formatted programming? Was it a place of permanent unexpectedness?

There were numerous ideas about the experimental treatment of the medium. One of them was foregoing service structures. Among other things, the daily routine also involved: A Morse code message serving as station identification. It appeared irregularly but repeatedly to tell long distance radio listeners around the world that Radio Revolten Radio is on air. Without any recognisable jingles the radio team seemed rather naked. It took a few days until a whole series of station jingles emerged and appeared in the programme. Not necessarily produced differently than jingles at commercial stations.

Again and again there was also: What will you be able to experience today on 99.3 FM? A classic case of reporting, orientation, at least moderation. If a total break with the formats and programming of other stations was planned, it wasn't successful. However: Could I have even perceived a permanently unexpected, continually surprising into the smallest details, non-formatted programme as such?



Music — No Music

Knut Aufermann

The history of North American radio is littered with acronyms that identify a station's musical scope such as MOR (middle of the road), AOR (album-oriented rock) or CHR (contemporary hit radio). At Radio Revolten we created our own acronym called MNM, which stands for the question and answer combo: Music? No music!

Eager to impugn the unquestionable truths of traditional radio formats, we forfeited the discussion of which styles of music might be conducive for a radio art festival by questioning the need for having music at all. Rather than losing ourselves in a philosophical discourse, a truly experimental approach of "let's see what happens if we don't worry about music" was applied to the programming of Radio Revolten Radio and the daily live events.

The elementary decision to be free from music on the 24/7 festival radio station was never communicated as such. It seeped in through the cracks as guest artists were invited to offer generative sound installations to fill the night programme, turntables were used to play blank records, and a hard drive with an extended radio art archive replaced the need for a music library. Even the statutory radio silence bridge that kicks in on air during prolonged signal dropouts did not contain the obligatory *The Sound of Silence* by Simon & Garfunkel, but was instead supplied by one of the festival's radiophonic installations.^[chap. 11]

In this chapter are collated those stage performances that by set-up, association or artist, emerge from the sphere of music but were first and foremost considered as radio art. Of course many forms of radio art contain musical elements and many radio artists have a background in music. However, all invitations to the artists were made with a clear emphasis that their performance(s) should be conceived for both audience and radio transmission alike.

This uncommon viewpoint did not imply any difficulty for the artists who the curatorial team considered the vanguard of today's radio art. To communicate a festival dedicated to this little known art form, posed however a challenge for our public relations team to appeal to visitors without using the familiar vocabulary of music concerts. A 24-page festival newspaper delivered to most households in Halle and the decision to offer entrance to nearly all events free of charge, were part of our efforts

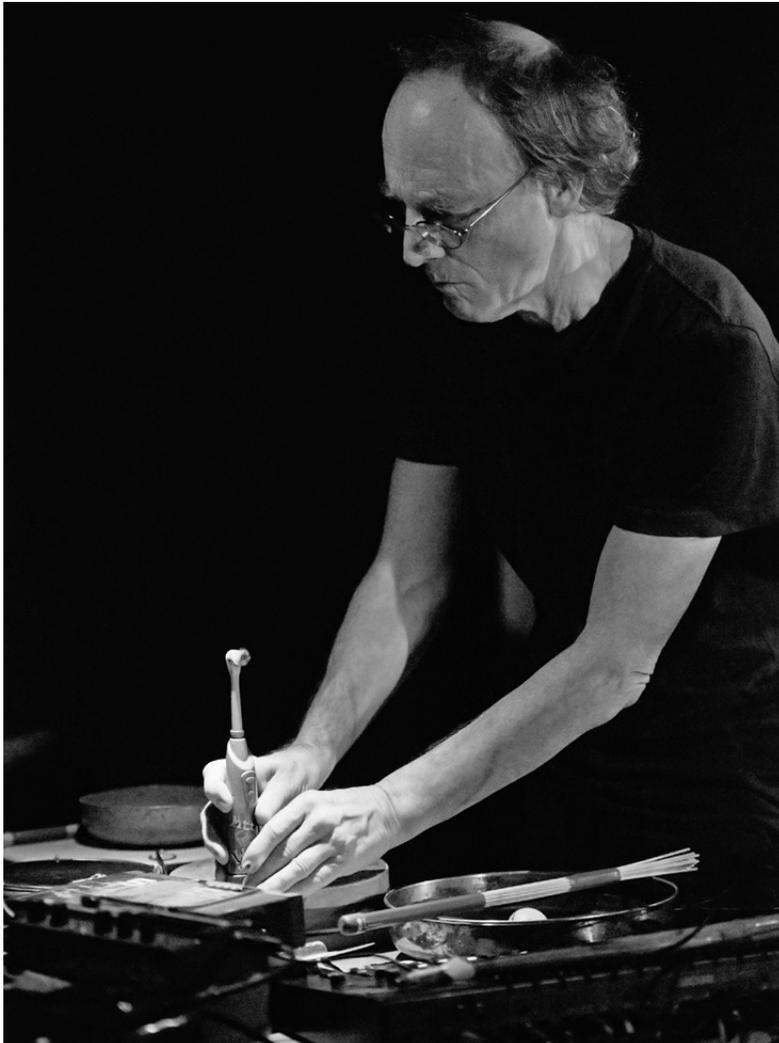
to entice an audience into the world of radio art, taking in along the way some incredibly inspiring music.

Listening to radio, be it at home or in a venue, is different to listening to music. The attentiveness can be the same, this was evident in the audience's dedicated concentration, night after night at the Radio Revolten Klub, regardless of what was being offered. The difference lies in the intent of listening. Music concerts can carry copious amounts of preconceptions for audience and performers alike. The ideal state for receiving radio is listening without intent. Just extending your antennas into the field of sound.

CHRIS CUTLER

Known around the world for his music as a drummer, Chris Cutler has readily produced works for radio whenever the chance has arisen. Two very different programme series, *Out of the Blue Radio* for Resonance FM (2002-2003) and *Probes* for Ràdio Web MACBA (2012 -) have

CHRIS CUTLER



reached a monumental scale. While *Out of the Blue Radio* collected more than 300 half-hour long field recordings made by people around the world at 11:30 p.m. GMT for a daily slot on Resonance FM, *Probes* tries to achieve nothing less than to pin down a complete history of 20th century music of the Western world and all its influences. Originally started as a four-part podcast series it is now in its sixth year and after 21 episodes hasn't yet concluded the initial chapter of "pitch".

Both series were discussed and presented in subsequent shows on Radio Revolten Radio. The second broadcast included a live studio performance of improvised music with Chris Cutler on drums and Tonic Train (Sarah Washington & Knut Aufermann) on electronics, another entry for the festival's long list of premieres.

The live performance by Chris Cutler at the Radio Revolten Klub was a solo on his fully electrified drum kit, an instrument that saw its first outing in the late 1990s. Nearly all parts of the kit and a table full of various percussion instruments are picked up by microphones and piezoelectric transducers with the option of live processing the sound. These two spheres, the acoustic percussion space and the amplified electronic effects space were interwoven beautifully on stage, aided by the high end PA system, allowing a perfect integration of ringing cymbals and artificial reverb. Cutler often adds an additional, radiophonic layer to this evolving sound world by playing back an unedited field recording made on the day in the vicinity of the venue. In the case of Halle (Saale) this strengthened the festival's already tangible connection to London, as Halle's market square landmark, the medieval Roter Turm found its way into the performance, chiming out the same melody as Big Ben.

JOHN BISSET

Sometimes an artist's technical rider defies expectations. Guitarist John Bisset, who arrived in tandem with sound poet Ivor Kallin from London, announced that he'd bring his own strings but that we should look for an electric guitar and amplifier for him. A member of the Radio Revolten Radio crew kindly offered his well kept combo, even the strings were to Bisset's taste and did not need changing. The first outing was a solo show for the festival radio, a two-hour long carte blanche and for the first time the radio studio expanded acoustically across the whole building. Due to non-existent soundproofing the guitar could be heard on all floors of the former civil service building, invading every crevasse of the neighbouring festival offices and the radio art installations situated below. Every now and then a sound engineer with sweaty hands and face could be seen crossing the studio floor to visit the restroom. As dusk fell on Halle, a hybrid of material-testing and exorcism had begun, punctuated with short interventions by Ivor Kallin, who was unable to stem the flow of cascading guitar chords.

'A hint of Dada pulsates through the ether', I thought after five minutes of strangely thin and tenuous guitar sound that was audible on the 99.3 frequency. After another five minutes in which there was hardly any change in the firmly struck riff I begin to feel sorry for the unknown guitarist's fingers, another ten minutes

and my astonishment turns into sheer exaltation—without the trace of a drop in energy the guitar sound drills itself into my brain like a machine and erases everything that had just preoccupied it. ‘Carry on!’, I think, and the unknown artist carries on, ceaseless, powerful, relentless, minimally transposed. ‘Marvellous’, I think, and anticipation rises when I learn that it was John Bisset who had tantalised his instrument and who together with Ivor Kallin was going to repeat it live on stage the following day.^[chap. 8] [Rudi Guricht, listener]

DINAHBIRD AND JEAN-PHILIPPE RENOULT

Shruti box, field recordings, music loops. This was the list of main ingredients for the performance of Paris-based long term artistic collaborators DinahBird and Jean-Philippe Renoult. Active in many varieties of radio art, ranging from installation to radio features and live performances, it came as a surprise when they revealed that they had never played together as a duo on stage before. This premiere, that was appended to their set-up of an installation in the festival’s exhibition *Das Große Rauschen*, combined some of their personal, longtime preoccupations, DinahBird’s collection of field recordings and Jean-Philippe Renoult’s obsession with his treasured shruti box and short loops taken from iconic pop music tracks.

I witnessed the event from the Radio Revolten Radio studio where my task was to watch the broadcast audio levels in solitude. This was not to my detriment—on the contrary. Carried by the rich acoustic drone of the traditional Indian instrument, the performance was a perfect occasion to close your eyes and start swimming in the sound. I set the volume of the precision monitor speakers placed in front of me to “dream” and drifted off. If I had felt like it, I could have made my way to the venue, two flights of stairs down and along a long corridor.

One of the remarkable qualities of Radio Revolten was that I was not in a unique listening position. Many people in Halle were in the same situation, where time was locked across radio space. A listener could have



DINAHBIRD AND JEAN-PHILIPPE RENOULT

got up from their dinner table, transferred their attention from the kitchen radio to the earbuds of their FM equipped mobile phone, cycled down to the market place avoiding the treacherous tram tracks and walked into the performance venue without missing a heartbeat, in perfect sync with the music. Listening at home with the knowledge that the source of the transmission was publicly accessible and within reach created a bond singular to Radio Revolten’s model of local live radio.

ANDREA-JANE CORNELL

Ever since John Cage chose the sounds of detuned short wave radios as compositional material, it has become part of the canon of music. Before that it was the domain of some avid short wave listeners whose hobby gave them an appreciation of the sounds in-between channels. Today, musicians can create their own worlds of emulated radiophonic bliss, controlling and extending the meditative character of pitches emerging from the hiss. Modest movements are the technique



ANDREA-JANE CORNELL

Andrea-Jane Cornell uses, her hands traversing across a myriad of small electronic boxes and yet producing one defined sound. Is it music? Is it radio? Is it composed or improvised? Is it even necessary to define it?

Andrea-Jane Cornell: I am trying to create a sphere of sounds that takes everybody out there in there, into that space with me. I play not in a traditional sense but in a sense that I love the movement that it makes. Like a seesaw or like an ocean that moves along. I then try to populate it with other little moving sounds but there is always this big pulsing bass of life that goes through. And it definitely switches up to something that is propulsing. I began with my heart, just my heart beat ... and a little bit of effects and then it builds and gains texture ...

Gabi Schaffner: Did you have a microphone to your heart?

Andrea-Jane Cornell: Yes, I did.¹

1. _____cf. Gabi Schaffner. "A Sphere of Multitudes", Radio Revolten Diary 24 October 2016; <http://radiorevolten.net/en/a-sphere-of-multitudes/> (accessed 11 February 2018).

Three festival performances included a strong visual element due to the fact that for these artists the invitation to Radio Revolten coincided with their own current artistic preoccupation that called for the use of light as well as sound.

ROBERTO PACI DALÒ

Prior to his scheduled festival performance, Roberto Paci Dalò accepted the invitation of the Radio Oracle for a joint late-night performance



ROBERTO PACI DALÒ
1915. THE ARMENIAN FILES

in the Hausmannstürme high above Halle's market square. The Radio Oracle's activities constituted a festival inside the festival with many more, often unannounced events besides the scheduled daily show at 5 p.m. Every now and then a substantial part of the Klub's audience disappeared soon after the end of the evening's live acts, having been handed small pieces of paper by a tall figure dressed in orange, inviting them to an impromptu concert in the tower. The clandestine audience recruitment, the long spiral staircases that needed climbing and the offer of spirits guaranteed these seances an atmosphere of exclusivity and serendipitous conviviality. Once we had gained the Oracle's trust, some of those night-time get-togethers were also allowed to be broadcast on our festival FM frequency at short notice.

Experiencing Roberto Paci Dalò's live performance *1915 The Armenian Files* was a touching experience. Live clarinet and prepared sounds in combination with the film projection gave the Klub an intense atmosphere which was shifting between the moments in which one is totally aware of the tremendous and shocking history of the Armenian people and the moments in which one is immersed into this poetic piece almost forgetting history. [Elisabeth Zimmermann]

KONRAD KORABIEWSKI AND ANNA FRIZ

All eyes were on the screen for a performance in which the fades were set to white or black in Anna Friz's slideshow of grainy and bleak photography featuring electrical infrastructure, in correspondence with Konrad Korabiewski's sounds that included Citizens' Band (CB radio) recordings and improvised music using analogue synth and electronics. Inspired by their part time residence in a remote fishing village in East Iceland, where Friz and Korabiewski run the artist collective and mobile curatorial platform *Skálar*, they invoked the radical change of light that characterises life just below the arctic circle, a theme that was also fea-



KONRAD KORABIEWSKI AND ANNA FRIZ

tured in two late night radio shows which lead up to their performance. Radio Revolten diarist Gabi Schaffner describes their performance as follows:

As we see the images on the screen unfold from pure white into snow covered landscapes with the giant silhouettes of electric poles, Korabiewski improvises on samples, field recordings and material taken from international CB-bands, most of them originating from Iceland and Chile. As the piece develops, the imagery stays with the interplay of black and white, showing shots of “antenna forests” and tangled wires photographed by Friz in Iceland and in Valparaíso, Chile.²

2. _____cf. Gabi Schaffner. “Resounding Sculptures & Iceland CB”, Radio Revolten Diary, 29 October 2016; <http://radiorevolten.net/en/resounding-sculptures-iceland-cb/> (accessed 11 February 2018).

AKI ONDA

We had the great fortune of converting a former canteen into a bona fide performance space. The enormous task of creating a venue from scratch allowed for a flexible approach to each evening’s stage layout, as none of the sound and light installations were set in stone. One of the artists who took their time to rearrange not only the seating but also opted for an idiosyncratic positioning of a mixture of loudspeakers was Aki Onda. The idea for his performance had formed during a residency in San Francisco in which he began to probe a given space with the help of found objects and playback of recordings he had made on cassette during his journeys around the world. Radio Revolten saw a specific iteration of this process which included a backing track of recordings of radio signals and the use of an array of radio receivers, with the addition of powerful strobe light torches. Exploring the space and alleys left open by the surrounding audience, throughout the performance Onda continued to position radios tuned to different frequencies around the



AKI ONDA

room, making use of the varied acoustic characteristics offered by the wooden floor of the former refectory and the tiled walls of the erstwhile kitchen. The radio sets, imported from his native Japan and therefore only partly overlapping with the frequency range of FM transmissions in Europe (76–95 MHz vs 88–108 MHz), threw up shades of white noise and interferences mixed with local radio emissions—some of which came from as near as the installation works housed in the neighbouring festival exhibition *Das Große Rauschen*.

TOM AND ECHO ROE

So this guy gets up on stage amongst all this radio noise, calls himself on skype, coughs and starts shouting Donner Party lyrics down his phone: “pestilence surrounds us as we go about our work, sickness and disease in every nook and cranny lurk, you may soon succumb beneath this ever present threat, you cannot avoid it so it’s meaningless to fret” and then all this stuff comes out of the static, voices, tunes, commercials all chopped up, what kind of DJ is this? Finally, his daughter climbs up to join him, she’s like 10 years old and drops some messed up Carly Rae Jepsen into this mix and rules the room. I mean, come on? [Imaginary audience member]

If there is anything close to a permanent setup equivalent to what we were trying to achieve at Radio Revolten, then it would be Wave Farm / WGXC in upstate New York, with their joint community and art radio station, parkland exhibition site, artist residency programme, radio art archive and study centre. Wave Farm became an official partner of our festival and we were very happy to be able to entice the US’s principal radio art family away from their radiophonic Garden of Eden to join like-minded members of the radio art network Radia from around the world for a long overdue get-together, and for Tom and Echo to present their easy-going approach to mixing music and noise on stage.



ECHO AND TOM ROE



The deployment of disc jockeys was handled in an improvised manner at Radio Revolten. The term was originally coined in the radio landscape of the 1930s, for people who announced and played gramophone records on air. Fast forward to the 21st century and the importance ascribed to DJs has reached preposterous levels. To address this issue meant literally going back to using a hand-cranked gramophone player during the opening of the exhibition *Unsichtbare Wellen* at the Stadtmuseum in Halle. While the radio programme was kept virtually free of DJs, the after-show playback of music for the enjoyment of the audience in the Klub was decided more often than not on the spot. However, due to the multifarious mixture of festival guests available, this led to some memorable occasions of people spinning other people's tunes. Here for example is festival diarist Gabi Schaffner moonlighting as DJ Geranium Blonde, breaking with the tradition of playing uninterrupted music by employing only a single turntable.



I Like this Voice on the Radio ...

Are you familiar with the expression “station voice”? The voice that stands for the whole station—forceful or sonorous, youthful or distinguished—a sound that we’re not supposed to forget, that is associated with the station forever. “Listener connection” is the magical phrase, founded on an understanding or on the assertion of a dialogical principle. While the radio station doesn’t have a face, its living presence is created via the voice and influenced by the nature of an individual’s vocal cords and resonating cavities, by their experience and professionalism, by life and pleasure, and by one’s willingness to form a human connection.

When the first German wireless transmission found its way from the VOX building in Berlin into living rooms in 1923, its delivery was spoken as if on stage. People were virtually screamed at by the moderator in the hopes of reaching everyone vocally. They apparently didn’t have much faith in microphones and transmission technology at the time—not until years later did an understanding set in that radio communication could be an intimate experience. One person speaks, another listens and speaks along in thought. The listeners’ powers of imagination are perhaps so great because the location of voice production on the radio remains in the realm of the spectral. The transformation of the basic “one to many” situation into a kind of dialogue by the listener elevates the radio voice to a kind of distant but directly mediated reality, even to an imaginary dialogue partner with whom I want to share something personal. But it’s good that I don’t really know the speaker; I would quickly lose the courage to actually believe that we can talk to each other. And thus, the radio voice remains today as an object of projection that allows the possibility of intimacy through the presence of a sound conveyed from the receiver in a completely private environment (kitchen radio, car, etc.).

Questioning the emotional content of the radio voice raises a host of issues that bear witness to its over one-hundred-year history: the variety of voices can be differentiated according to how state-supported or how independent the station was, from the highly energetic speech of most radio stations up until 1945 to the fragile, purring sound of the nightly radio voices on public radio of the post-war era.

Radio as a medium today remains above all a virtual mouthpiece for entertainment providers and well-researched depictions of the world

surrounding us (offering preferably something new)—a shortcoming that artists have criticised since the beginnings of the radio, although they were not only concerned with experimental or aesthetic substance. When the Futurists criticised art as a product of bourgeois society, radio was much closer to possible situations of direct intervention. Faced with gramophone recordings and theatre performances, contemporary artists around the world were drawn to the immediacy of radio like a magnet. And this radio, if you please, should not only broadcast “meaningful” and “informative” content, but also let the voice be heard as an organ of revolutionary literature, as Kurt Schwitters formulated in Hans Richter’s *Zeitschrift für elementare Gestaltung* (Journal for elementary construction) in 1924:¹

Because ‘it is not the word that is the original material of poetry, rather the letter (...) Consistent poetry is made of letters. Letters have no idea. Letters as such have no sound, they offer only tonal possibilities, to be valued by the performer. The consistent poem weighs the value of both letters and groups.’

Eight years later a Stuttgart radio station provided a live spoken example of Schwitters’ radical demand, namely an extract from his *Sonate in Urlauten*.

Schwitters was firmly convinced that this kind of sound poetry on the radio could only happen in real time; a second time it would have to sound completely different than the first time, and the third time different again. Sound poetry like Kurt Schwitters’ radio production for the South German Radio (SDR) in 1932 found later reminiscence in radio art productions by Michael Lenz, Grace Yoon and others.

The demands on radio as a component of social reality and a mode of aesthetic communication before 1933 went much further than the individual aspirations of the Dadaists and Expressionists. “The art of the speaking chorus” was very popular and, aside from the translations into many languages, Brecht had whole passages of his radio play *Lindberghflug* spoken in chorus to make the thirst for knowledge audible.

In the post-war era, the Brechtian concept of a distanced, depersonalised voice in the form of a speaking chorus or an expressionless recitation of texts faded into radio’s rush of subjectivity.

The intimate voices of radio plays transmitted into living rooms to hold dialogue with listeners, could hardly be held close enough to the microphone while recording and, with the works Günter Eich, Ingeborg Bachmann, Wolfgang Hildesheimer and others, were suggestive of a “private” listening room. The (above all nightly) dialogical demeanour of the voices was a magical method, appropriate for creating an authentic stream of images in the listener’s mind—the “other reality” as a parallel world, generated via radio, the real-time medium par excellence.

Some Radio Revolten artists withheld their own voices and sought instead submissive tools to set their own texts to music. A classical reproduction of the radio play from the Weimar Republic takes place in the performance of Xentos Fray Bentos’ piece *The Monad*.

A speaker performs pre-written roles, accompanied by sounds, live music, by fog and objects as if on a spartan theatre

1. _____ Kurt Schwitters. “Consistent Poetry Art”, contribution to ‘Magazine G’, No. 3, 1924, ed. by Hans Richter; as quoted in: *I...is Style*. Gohr, Siegfried, and Luyken, Gunda, eds. Rotterdam: NAI Publishers, 2000. p. 151.



stage. The happening is live, the text is enhanced through the person reciting the text, his arrogance, his horizon, his mood, his handwork. The live moment is captivating, the tempo is quick; a theatre performance for the radio in the traditional style of the first radio play in the history of radio, broadcast by the BBC in 1923, *A Comedy of Danger*.

In a lecture in Bremen in 2005² on the radio piece *To Have Done With the Judgement of God* by the French dramatist Antonin Artaud, Wolfgang Hagen contends that voice on the radio must be neither “live on air” nor authentic. Hagen describes an “ontological dilemma” that confronts the voice and the body on the radio:

Back to Artaud’s epoch-making work from 1948, with which, as I’d like to contend, radio art of post-war modernity begins in Europe. Artaud, who demands the full immediacy and directness of expression of living singularity in his Theatre of Cruelty, engages in a pre-produced, reproducible work in *To Have Done With the Judgement of God* that appears to contradict all directives of his theatre postulates. This is only reconciled in his delusional but intelligently rhythmical monologue of ecstasy that calls for a body without organs, a cry for nothing less than an organ without a body, for a disembodied voice.

For, as said, all words, once spoken, are dead. And the radio is their medium. There is no better definition. The radio is the medium beyond the judgement of God, there, where dead words reside and the source of the lost voices blaring at us. [...] Radio tears voices and corporeality to shreds, and it is radiophonic art that wants to build a tonal bridge to the unfathomability of the dead signs, knowing that reality and the real can never be represented by the medium.

And so the representation of the human voice at the Radio Revolten festival was also a portrayal of artistic and artificial intercourse with one’s own corporeality. A rare moment of the auratic occurred most notably in the performative approach of the work by Alina Popa and Irina Gheorghe from Bucharest. Their Bureau of Melodramatic Research “investigates how passions influence contemporary society”.³

The precision of the smiles on their faces and in their voices is captivating, as if the situation were an unbelievably joyful occasion in which we are granted permission to participate. The back and forth of the cleanly staged ping-pong handoff of words displays a presence otherwise only characteristic of “true” conversation. The disconnect is fascinating; the listeners become part of a bewilderingly real presence, of a performance far from theatre and the calculated production and implementation of voices. Everyday patterns of office hierarchies, daily sexism, and the constant willingness to perform and identify with exploitative enterprises appear playful in the presence of these alien-like creatures. The phrases slip naturally from their lips; their constant smiling freezes one’s own expression. The reactions in my own body are also palpable: I want to free these women from their smiling voices, I want to see and to hear the evil and aggression in them.

2. _____ Wolfgang Hagen. 2005. “Serialisierung des Radios – Serialisierung von Radio-Kunst?”; http://www.whagen.de/PDFS/11012_HagenSerialisierungdesR_2005.pdf (accessed 5 November 2017).

3. _____ of. <https://radiorevolten.net/en/irina-gheorghe/> (accessed 15 January 2018).



But they don't release me from the torture they serve up as the most charming of gifts in this gloomy Radio Revolten Klub.

On the same evening, SMOO—the performance duo from London—leave everything that seems possible in the deconstruction of language far behind them. The chords of John Bisset's Fender guitar, beaten brashly with a shamanic patience, are joined by the person of Ivor Kallin; as if coming from his lair, he surges to the microphone in a voice reminiscent of the Tower of Babel. The fragments that gush forth in split-second intervals in the raw Scottish dialect of Glaswegian, in Russian, Yiddish, Spanish, German and never-before-heard languages of the desert and rainforest seem to describe something: an unbounded inner world in which we can all participate perchance, an emotionally laden cacophony of the childish and elderly, of the deeply religious and the world revolutionary, of nonsense and desire, of failure and success, of literature and kitchen recipes.

What is so fascinating about this intuitive marriage of Ivor Kallin's voice with the Bisset guitar? It is the concordance of this alien head with its earthly speech organ—Kallin's voice is ready at any time to receive signals from space and to ground them at lightning speed on the radio. Interstellar communication requires such media; Burroughs greets from the moon: language is a virus from outer space and the duo SMOO, aka Ivor Kallin and John Bisset, are blind passengers on spaceships. Their message destroys all meaning in the radius of the radio transmission.

The destruction and transformation of semantics forms a thread through the programming of Radio Revolten like an anarchically discussed audio tape. The composers' approaches to speech and the human voice as musical material in early radio art from the 1950s and subsequently, for example in the WDR Studio Akustische Kunst, were based in their shared fascination with treating speech as a system of signs that transports meaning and calls for action and as an expression of socially and interpersonally relevant conditions. The conscious act of turning away from reflexive speech frees the listener from the person who enters into the process of communication hierarchically. The listener becomes an involuntary participant precisely through the de-familiarisation of speech.

In the radio piece *The Tribune*⁴ by Mauricio Kagel, the listeners of the festival frequency are on the side of the testing populists, or rather on the side of the manipulating crowd. The art is not admired, but one's own reaction while listening.

Hours later on the same frequency we listen in on the lab of Ferdinand Kriwet, who called for and composed works from voices and sounds mixed on a console. With his works, Kriwet is a predecessor to the recent compositions on the radio that Ernst Jandl invokes in his Frankfurt Poetics Lecture as the charm of "depraved language".⁵

Christoph Schlingensief's *Camp Without Borders*⁶ in the festival radio programme destroys the boundaries between staged and live broadcasts. The faking of the authentic, exaggerated by the unspeakable in the Yugoslavian War, comes across more powerfully than any live moment. *The War of the Worlds* and Orson Welles' dying reporter in the Martians'

4. _____ Mauricio Kagel. *Der Tribun*. WDR (Cologne, Germany), 19 November 1979, 56 min.; available at: Wergo, DDD, 89/84.

5. _____ cf. Ernst Jandl. *Das Öffnen und Schliessen des Mundes: Frankfurter Poetik-Vorlesung*. Darmstadt, Neuwied: Luchterhand Verlag, 1985. p. 33.

6. _____ Christoph Schlingensief. *Lager ohne Grenzen*. WDR / DLR (Cologne / Berlin, Germany), 23 June 1999, 34 min.; available at: http://www.church-of-fear.net/downloads/lager_ohne_grenzen_low.mp3 (accessed 5 November 2017).

fire comes to mind. The authentic voice has become a plaything of radio art precisely because of its proscribed character.

Is the Radio Oracle Marold Langer-Philippson really speaking live while high up in Hausmannstürme above the city, or is it a pre-recorded broadcast that merely tells the correct time?

What kind of voice does an oracle have? Is it important what it actually says? Does a disembodied voice foster trust? Does it create the space that I normally don't have?

An oracle is inviting, yet hierarchically separated from us; it is erotic and dangerous or unsettling. The attempt of the oracle's voice to awaken trust can also create distrust. But the voice is there, for hours—I can empathise with the guests or if entranced, secretly enter into the conversation myself. Better yet: the oracle prophesies all alone and reports associatively on Armenian villages, on outer space or the cold high up in the invisible Hausmannstürme. Many stairway steps are necessary if a person wishes to associate the voice of the Radio Oracle with a body. So one rather lets it be and listens instead to just the disembodied being broadcast at exactly 5 p.m. when the market bells toll. Things really get exciting when the voice becomes brittle after speaking for hours, when the age or fatigue becomes audible, when the "grain of the voice" (Roland Barthes) briefly lends the ominous radio creature a figure or perhaps even a face.



Alessandro Bosetti works with vocal utterances beyond language and nearly incomprehensible linguistic fragments. His approach "voice as trash" allows him to utilise such non-linguistic voices and even our breathing air as potential material. This concept is illustrated in the workshop *Hand Made Radio Art* by Alessandro Bosetti and Anne-Laure Pigache at Radio Revolten, which ends in a collective vocal performance. Gabi Schaffner writes in her festival diary:



+++ imagination rays and light + focus + vision +++ speaker as mouth + planes + sparks + notes+ breath + hiss + contemplation + perception = sound loudness +++ inuit breathing⁷

The performance of choral breathing, composed sighing, and arranged vocal fragments returns again to the radical approaches of the early 1970s. Precisely these non-linguistic aspects of voice had long been a door opener in the Fluxus movement and the WDR Studio Akustische Kunst in Cologne for the deconstructive goals of creating a consciousness for new (unique, unformed) content matter from the tabula rasa of the fragments of meaning. The shambles of this non-linguisticity seems to be a declaration of bankruptcy for Bosetti. The speechlessness seems like an unintentional reminiscence of the postmodern, unwilling and unable to articulate the coming, the existing, and the has-been. The theatricality of the performance, reminiscent of the 1920s, robs the action of its anarchic potential and bridles the non-linguistic expressions in a corset of aesthetic composition.

The radio play author and playwright Heiner Goebbels deconstructed the radio voice in the 1990s in order to create new textures in listeners'

7. _____ Gabi Schaffner. "Handmade Radio Art", *Radio Revolten Diary*, 25 October 2016; <http://radiorevolten.net/en/handmade-radio-art/> (accessed 5 November 2017).



minds. In his adaption of Heiner Müller's text *Landschaft mit Argonauten*, the voices of passers-by on the streets of Berlin that Goebbels brought into contact with the Müller text become inhuman, almost mechanical or animalistic. The appearance of the (generally comprehensible) voice speaking on the radio, stripped of all meaning, allows the listener to endow it with significance, or simply an emotional pleasure of sentiment or suffering. The transformation of the human voice from a medium that generates meaning to that of bestial externalisation has doubtlessly become the subject of work in artistic radio today.

We don't only say what we want to say, our daily language is full of acoustic by-products. The Canadian composer and sound artist Emmanuel Madan dissects the "ums" and "ahs", the sighs and swallows, of a televised debate between incumbent German Chancellor Angela Merkel and her SPD rival Peer Steinbrück before the parliamentary elections in 2013. Madan's installation *Black-Red* doesn't display the conflict of political ideas but is rather a battle of words between sounding bodies from 16 separate miniature loudspeakers.

Lucinda Guy opens her closing ritual of *Radio Revolten* with an interesting experiment: everyone present was asked to call each other in pairs and turn their speakers on the loudest volume. The resulting conversations mutated within a very short time to a concert of feedback loops and created an enriched radio space in two ways: the use of cellular connections—audible at 30 different locations in the room—as well as the transmission of the resulting interferences in the whole room created a fantastic experience of language becoming music.

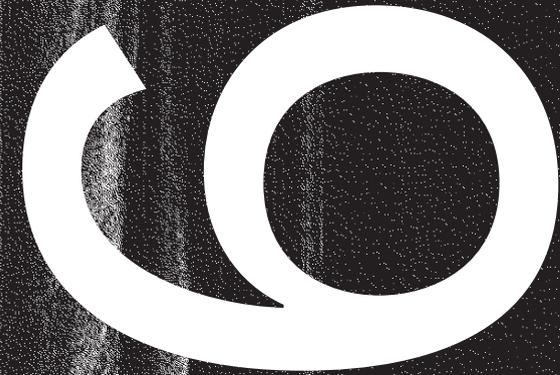
The voice is the representation of the person on the radio. The listeners' expectations and projections are coupled to the vocal and linguistic image, charged with cultural and subcultural contexts through one's experiences, wishes, desires or even emotional crises. No wonder then that whole biographies were and are associated with some voices. The raw voice of Joe Strummer (The Clash) is an icon of a whole generation. The same is true in some circles for Laurie Anderson, Bob Dylan, John Lurie and Tom Waits.

But even locally the radio voice transmits a power of association far beyond the present moment. Radio stations invest a lot of money in the typical sound of their voices—Knut Aufermann explains:

In the *Revolten* studio we had an industry standard device from the company Jünger for 'voice shaping' that analyses voices live and adjusts the EQ and compression in seconds to give the voice more gravitas. With this device we could plug the connector into any microphone we wanted, like in the old telephone switchboards, including the soft crackling. In the first days, the question was asked repeatedly: 'Would you like a BBC voice?' and, after trying it out, the answer was usually 'no'. To quote Georg: 'Every time I plug the thing in I want to immediately read the weather or traffic report.'

The voices of the studio crew of Radio Revolten are associated with an exceptional month of the medium of radio. Knut Aufermann, Georg Nickol, Jan Langhammer, Sarah Washington, Chris Weaver, Annett Pfützner, Chris Booth, Udo Israel and Tina Klatte are the vocal representatives of 30 days of wild radio. In collusion with the enigmatic radio DJ Johnny Head In Air, Tina Klatte roamed the Radio Revolten building looking for her radio voice. Staircase wit in the literal sense, for she had already found it, her own dark, yet curiosity arousing and quietly inviting voice. Where are they, those vulnerable and wounded voices in the mass medium of radio? Where is the voice, damaged by alcohol and nicotine, that sounds in the nocturnal shadows of the metropolis proclaiming the pains of the world? Why are the voices trained at acting schools and radio stations the aural image of the 21st century? I can't listen to them anymore; they fall through the cracks, they are dead voices in a living body, worms that eat up all the body's energy while claiming to be the new age—rich sound versus substance; contentment versus accusation.

At the Radio Revolten festival—beyond the roles and shows, functions and excitement—there were many voices of radio art: calm, relaxed and un-theatrical, yet occupying space naturally and speaking of a different radio art, announcing, sounding and singing, screwing up and silencing. On the next evening, they were raw and unschooled, delivered by megaphone, and to be heard on many frequencies through the whole city and beyond, worldwide.



Under the skin

Sarah Washington

What is significance? It is meaning, insofar as it is sensually produced.

The pleasure of the text is that moment when my body pursues its own ideas — for my body does not have the same ideas I do.

... the grain of the voice, which is an erotic mixture of timbre and language, and can therefore also be, along with diction, the substance of an art: the art of guiding one's body.

Roland Barthes¹

1. _____ Roland Barthes. *The Pleasure of the Text*. Oxford: Blackwell, 1990. pp. 17, 61, 66.

IF RADIO IS NEAR, WE ARE FAR
IF RADIO IS FAR, WE ARE NEAR

I always maintain that, in general, sound affects us more profoundly than image, having an uncanny ability to enter and stir up our murky and uncharted depths. On the one hand this enables us to feel as if our brains have been taken apart and rearranged (hopefully for the better) after a particularly intense aural onslaught, on the other hand we lack defences to prevent audio triggers from accessing our worst imaginings. Through experience we know it is the sound that scares us by far the most in horror films.

By way of example, I need only relate an experience from the first Radio Revolten festival in 2006, when I encountered the performance work of Anna Friz for the first time. I was excited to be meeting a fellow artist: someone dealing similarly with radio transmission as a live performance experience. So I settled low into my seat, and into myself. I was open, ready, as receptive as I could make myself to what was about to occur, thrilled to have the chance to intimately connect with a kindred performer.

There were dozens of little radios hanging from the ceiling all around the darkened room, which had the atmosphere of a clandestine underground venue. Sounds began to spark from various transmitters into the radios, jumping across them as Friz droned an accordion from a partially obscured corner, lulling us into a drifting state of consciousness. Members of the audience were either hanging around the performer, propped up against the walls, or seated on cubes underneath the radio array. After a hypnotically-spoken introduction, snatches of breath and voice abstractly appeared from the static, moved around, faded out. Difficult to hear at first, then growing, swelling gradually into some kind of narrative. The awareness of a crowd gathering momentum crept up through a dense, eerily hovering soundscape, voices urging onwards motion, propelling an emergent yet still obscured story. I was wrapped up in the experience like a shroud.

All of a sudden I had a realisation which arrived as if I'd been struck over the head. With a shock I zoomed back fully into my body, recognising with dismay that I had no choice but to leave the room as quickly as possible. The voices were becoming ever more distraught, to the point

where a sense of panic was filling the air. I realised I was in such a deep state of consciousness that I couldn't shield or fully separate myself from whatever damage was occurring to the distressed protagonists. Unlike when taking in the daily horrors of the news, with filters and defences set high, I had rendered myself vulnerable enough to assimilate the unfolding chaos as if I were a part of it. Damn, I wanted to stay, but I needed to protect myself and limit any further effect.

Sitting on a small sofa outside the room I became apprehensive, because I'm a vivid dreamer, and sure enough that night I had the most intense nightmare of my life. A genuine night terror of being endlessly pursued by some unidentifiable horror, world-shattering disaster at every turn. The following day I met Anna for the first time. We sat close to each other on the small sofa, eager to finally get together. I opened with: "You gave me the worst nightmare of my entire life!", and she batted back: "Great, that means it was working. I wasn't sure how far it could go!" I asked her what the voices embedded within the drones and crackles of her radioscape had been running away from. They were in fact recordings of witnesses to a school shooting in her home town. "But you should have stuck around," she continued, "as I brought it safely back down."

Talking to Anna about it now, she tells me:

I recall that as I began the performance, I felt a bit worried for the audience not knowing what was about to happen, so I added the spoken introduction and included a recitation: 'don't be afraid', which I also returned to at the end, as part of the long slow denouement.

The thing I was looking for with the piece was: what does it take to empathise with someone over distance? There were small takes of breath, then more panicky/short/gasps etc., and finally parts of speech, parts of people's testimony with some street ambience behind them, all quite short. After this version I edited the work more intently so that the content was less dominant (the incident at the school) and added a few more voices of others being confronted with various kinds of gun violence (including police violence). The intention was to directly feel that speaking body, those breathing bodies who were now far away, heard over radio/over a recording. Hence the title, *You are far from us*. My thought was, how much expressiveness does this format (radio) and even a low fidelity medium (crappy small mass-produced radios) offer? Can low fidelity amplify feeling? So in that regard, you demonstrated that yes indeed, this is all very possible, maybe too possible! Actually, as I worked on that piece a bit more through other iterations, I really felt that the radios were themselves sleeping uneasily, releasing the dreams they had from the broadcasts they had transmitted during the day, so that's why the piece eventually changed name to become 'Respire'.

ANNA FRIZ, YOU ARE FAR FROM US.
INSTALLATION, ARZTEHAUS, RADIO REVOLTEN 2006



There are several elements which translate into the corporeal experience of sound: neurons triggering in reconfigured pathways, vibrational energetics induced by physical and metaphysical waves, deep emotional chills. On top of that, it's the process of transmission which makes the whole concept of radio a close analogue for interpersonal communication, on levels we can't yet fully grasp. We can't see radio waves any more than we can observe the unspoken information travelling between our bodies. Yet we sense and feel. We receive, we transmit. So much is said without words—the most important stuff, whole worlds of experience and insight. I sometimes entertain the (not uncommon) notion that everything which occurs in time—past, present or future—can be considered as one single pool of information which is technically available to us, should we discover how to diligently fine tune to its multiplicity of frequencies. Meditation for example, is a technology already available to us which is reported to support unconventional exploration of time and space. Many of the greatest artists, scientists, and mystics speak of information flowing through them, not originating from them. If there is truth in this, their abilities must have something to do with becoming receptive enough to allow for transmission (of knowledge, ideas or feelings) to be detected.

It seems to me that there is a fundamental energetic relationship between the body, radio technology, and the constitutional workings of the universe. Our bodies comprise one organic element of an electrically enhanced system for the emission and detection of energy as electromagnetic waves. I suspect that this is why humans will never give up the idea of radio, it's something we recognise—we're in it, it's in us, it surrounds, penetrates and vibrates us, and encourages us to participate by lending our communications a larger scale. Radio is also a direct physical link to the cosmos, allowing us to set our signals off into space, and sending us innumerable unintelligible messages across the vastness.

This helps us to consider why it is that radio pairs so fittingly with the human voice. It is because, consisting as it does of carrier waves for information—which enable our sounds and natural atmospherics to hitch a ride on top of them, radio itself is a voice. Which begs the question, the voice of what? Radio is a technique the universe offers us for the excitation of waves. It is also part of the way the universe delivers its existence: through radiation of subatomic particles within a spectrum of electromagnetic energy. From a modern-day technological perspective, we are only just beginning to listen closely enough to decipher what the universe is communicating.

When broadcasting our own voices, as well as all the intimate sounds of breath and speech, there is the bodily posture and emotional attitude of the radio performer to consider. How is our protagonist situated—standing, seated, lying on the ground? Are they anxious, peaceful, excited or morose? It is easier for a listener to detect a state of mind than a physical stance, but if we pay close attention we will be able to discern further details. Body posture is very evident in the BBC Radio 4 show *Bunk Bed*, where playwright Patrick Marber and writer Peter Curran “lie in the dark together and discuss life's great mysteries”.² This produces a strikingly different effect than any kind of regular discussion on public radio, on both body and mind.

² www.bbc.co.uk/programmes/b095tjwb Bunk Bed, Episode 6 BBC Radio 4, 28 September 2017, description available at <http://www.bbc.co.uk/programmes/b095tjwb> (accessed 28 February 2018).

Those who make live radio will often have experimented with various modes before they find the voice and posture that suits what they wish to convey for a particular type of content. For instance, I very much enjoy standing up when I want to project vibrancy and urgency, and sitting close, slightly curled over the mic when I am focusing on intimacy or reassurance. If I happen to listen back to old broadcasts I can hear my physical status. The entire body is in the radio, on the radio, transmitting through the radio and picked up by the body listening to the radio, not just with ears and brain: as if an invisible hologram is projected, and washes in through our every pore. No wonder then, that when the content touches us deeply it can sometimes give us goosebumps—we can be so receptive to other beings via the airwaves that they could be sensed to inhabit us.

When it comes to the transmission of emotional content, and reconfiguring neurons to affect states of consciousness, the Portuguese artist Paulo Raposo gave a master class through his live radio performance at Radio Revolten Klub in 2016.

Gabi Schaffner

Radio Revolten Diary, 11th October

Rock'n'Roll Station: Paulo Raposo³

Raposo's performance had the distinct feel of poetry, much of it owed, I think, to the quality of his deep and soft voice. Based on the song of a French singer and songwriter he developed a radio show that was compelling and fragile at the same time. He explains more in this short interview:

Gabi: How did you put this all together?

Paulo: I have no idea.

Gabi: You had one radio attached to the top of a microphone stand.

Paulo: Yes. This radio was picking up the frequency of Radio Revolten, so this was just coming into the channel again. The idea for this piece came from a song by Jac Berrocal, a French musician, the song is from 1977 and it is called *Rock'n'Roll Station*. And this was evocative to work upon. So I improvised basically. Everything I was saying, I improvised it, except the beginning which has the lines of the song in Portuguese but then I transformed this into some sort of mystical thing (laughs). And the song is about this memory: “It was 1959 in the observatory, do you remember?”... really strange elements that are not really clear, so this is about the blurring of the memory. And at times I am using the sounds of different spaces that I recorded in places with different acoustic properties, but also some you cannot really identify, so there is some mystery.

Gabi: It was a great soundscape. And there was this place that sounded like a huge cavern ... with dripping water.

Paulo: That was in the basement of my building!

Gabi: Must be a huge basement!

Paulo: No no, it is really small but it has this acoustic, so we ... with Silvia [Coelho] ...

Silvia: I recorded the sound in the basement.

Paulo: The drops of water are from an abandoned building.

Gabi: You put it together, the basement sound, the water ...

Paulo: Yes. And also from a big church just the silence, just the reverberations without anything.

Gabi: A composition put together to form the background?
 Paulo: As I was speaking I put one or the other sound together. So, yes, you can say it is an electro-acoustical recorded composition with the live voice improvisation.
 Gabi: In the last part you were saying something about the shadow ... or shadows ...
 Paulo: I can't remember anything I said. Really.
 Gabi: So it's all gone.
 Silvia: He was saying his voice was something like a fossil.
 Paulo: Hmm. It was just something that was flowing from me. I can't remember what it was.

3. _____ Gabi Schaffner. "Rock'n'Roll Station: Paulo Raposo", *Radio Revolten Diary*, 11 October 2016; <https://radiorevolten.net/en/rocknroll-station-paulo-raposo/> (accessed 7 March 2018).

LICKING OUR LIPS WITH RADIO

Paulo Raposo was able to conjure a hallucinatory tactile state by casting himself adrift on the airwaves in front of a live audience, with no care of making sense or being understood. Instead, in this delicately evolving radioscape layered with complimentary field recordings, returning radio waves and voice, he elegantly employed the art of indirectness. The overall effect was remarkable, and he was able to bring his piece to a fizzling conclusion whereby the sounds seemed to disintegrate into an infinite number of miniscule fragments in front of our ears—which were left hanging, scanning the space for minute traces of sparkling sound. He also mastered a fractured poetic deployment of the voice: the body's innate colouring tool, and also radio's fornicatory modelling material. Perhaps this relates to what Roland Barthes called "writing aloud", which he described in the following way:

Due allowance being made for the sounds of the language, writing aloud is not phonological but phonetic; its aim not the clarity of messages, the theatre of emotions; what it searches for (in a perspective of bliss) are the pulsional incidents, the language lined with flesh, a text where we can hear the grain of the throat, the patina of consonants, the voluptuousness of vowels, a whole carnal stereophony: the articulation of the body, of the tongue, not that of meaning, of language.⁴

Barthes goes on to discuss cinema as the site of capture for such "speech close up", but he may just as well have been describing the way that some experimental artists work with voice through radio today:

... and make us hear in their materiality, their sensuality, the breath, the gutturals, the fleshiness of the lips, a whole presence of the human muzzle (that the voice, that writing, be as fresh, supple, lubricated, delicately granular and vibrant as an animal's muzzle), to succeed in shifting the signified a great distance and in throwing, so to speak, the anonymous body of the actor into my ear: it granulates, it crackles, it caresses, it grates, it cuts, it comes: that is bliss.⁵

4. _____ Roland Barthes. *The Pleasure of the Text*. Oxford: Blackwell, 1990. p. 66.
 5. _____ Ibid. p. 67.

All of which puts me in mind of Ben Watson's compulsive philosophical cut-ups in his long-running radio show *Late Lunch with Out To Lunch* on Resonance FM in London. In an enigmatic interweaving of flesh, word and esemplastic music, the boisterous materiality of voice and body conspire with the collapsed and condensed nonsense of shattered texts to force new meanings into being. As listeners we receive more text, more voice, more body and perhaps more sense than we know what to do with.

THE BODY IN BROWNIAN MOTION: AS SNOWSTORM, HISSING STATIC

Now we get closer to the really big stuff: the microcosm. In performance, Steve Bates delivers sound as mass to pulse the walls yet which feels like it has the effect of rearranging you at the molecular level. For sheer power, it is most closely reminiscent of the work of that monumental room-shaker Mark Bain, although in place of a forensic barrage of pure infrasonics, Bates sets up a system designed to process deeply embedded narrative content. Neither the volume nor the force of the resulting abstracted sound are quite as overwhelming as they first appear to be, which upturned my expectations; although powerful and all-consuming, you are not compelled to exit the space in fear of bodily collapse. The amazing ME Geithain PA system on loan to our Klub was a willing partner in pulling off this magic trick.

Gabi Schaffner
 Radio Revolten Diary, 8th October
 Hallucinated Sounds⁶

Steve Bates talks about his radio performance

Gabi: This was...

Passer-by One: Very well constructed!

Gabi: These sounds you just talked about ...

Passer-by Two: Well done! You really pulled the spectrum from big big bass to diddy tunes ...

Steve: Thank you.

Gabi: ... are sounds that are derived from acoustic hallucinations?

Steve: They are based on stories about these hallucinations. In a world of people who hallucinate sound, it is incredible there is no one way to describe it, so I have been drawing from literature and from scientific journals ...

Passer-by Three: Thanks man! Terrifying, Steve!

Steve: But tonight I made a soundscape meant to be a hallucinatory soundscape. Some of the things I am working with are specific frequencies people have recorded for hallucinating. For example, Robert Schumann famously hallucinated entire pieces of music he would then write down. Later on in his life his hallucinations were reduced to hearing a single A5. That piano note, that frequency showed up also in my piece. So I am drawing on so-called historical experiences that made their way into recordings in different ways.

Gabi: Then you did research and recreated those sounds? Or is it more like a poetic reconstruction?

Steve: It's not so much a recreation as using those stories as inspiration. So sometimes it is quite specific like Robert Schumann, and there are these A5 piano notes in that piece and this is also close to 880 hertz which was a tone you heard at the beginning of the piece. So sometimes it is very literal and sometimes it is more evocative.

Gabi: For me it felt at times like being thrown into a minimal techno club dungeon. There are references to dance music.

Steve: Yes. They are more so when I perform other pieces. This was a very different performance to me. This is based on a project I have been working on, a multi-year research project. I started the research in 2014. And for tonight I thought I'd prepare a series of sketches or scenes, so it is much more structured. Usually I perform more improvised and "off the cuff", so to say.

Gabi: One thing that struck me was that when it was so loud that the walls were almost shaking it reminded me of very strong forces of nature like earthquakes and thunder and of the feeling of awe or even terror it can induce in people.

Steve: For me the whole subject of auditory hallucinations is very much of the body, so it is related to people's experiences, and I can only interpret them as I am not that person. And I am hearing other people's stories, very powerful stories ... It is also a challenge because I don't want to be flippant or light with material—for some people here who are listening it is very dramatic. So there is this balance I am trying to make my way through. But what is among the nice things in regard to this, is I make many kinds of presentations and talks about this project and every time I've talked about it or performed somebody has come to me after it and shared a personal experience, or from someone they know that has been exposed to one. Prisoners and soldiers in confinement also often hallucinate, sometimes it is also visuals or scents. You can also hallucinate scents. So for me the project is really encompassing and making you think about otherness. Ultimately I can be standing right next to you and our experiences would be very different ... I mean they are definitely different ... It's a very interesting thing that in North America and in Europe, for people who hallucinate voices it is more often negative voices and it can be multiple voices at the same time. Like I hear somebody saying "I am a horrible person, I don't deserve to be alive".

Gabi: Maybe it is a Western construct of personality that is related to this?

Steve: It is a social and a cultural thing too. For example they did a study about people who hallucinated voices in the US and in Ghana in Africa, and also some place in Pakistan and it was only the people in the US whose voices were negative, whereas the people in Ghana in the survey tended to hear voices that weren't negative they were more ... maybe banal. One of the researchers proposed that this is because the US is a very individualistic society and that there is a real stigma attached to hearing voices. And this is about people

PAULO RAPOSO



STEVE BATES





who are not schizophrenic, this is not pathological and my whole project is about this: the hearing of voices not being pathological.

What impressed me about Bates' engagement during his performance was his reaction to a dropout of the festival radio signal, which he had wanted to feed-back on itself. Revolten Radio had temporarily gone off air due to an unknown technical problem, and when it jumped back into life in the middle of his set he instinctively reacted, tearing down the fourth wall between himself and the audience and piercing the tension of the performance bubble, which in the next instant closed back in around him. Thrusting a radio high above his head, he shouted over the top of the colossal noise: "We're back on air!". In that moment, being there on air was the most important thing.

6. _____ Gabi Schaffner. "Hallucinated Sounds", *Radio Revolten Diary* 8 October 2016; <http://radiorevolten.net/en/hallucinated-sounds/> (accessed 7 March 2018).

BURSTING OUT THE SEAMS

Let's turn our attention away from external excitation and how that affects us internally, to look more directly inside, at sound that is literally emanating from under the skin. The kinds of things you experience in a quiet house on a silent street or inside an anechoic chamber: the whooshes and whirls of blood circulation, the low thrusting drive of the heart, the mosquito-drone of the nervous system. The kind of sounds that could perhaps be mistaken for noises produced in the upper atmosphere, as can be heard at natural radio wavelengths, VLF. Or that are otherwise comparable to the low rumble audio spillage of motor-driven devices, or the gurgling flow of liquid or air surging through a system of pipes. Sounds that exist under the skin and have the ability to drive you round the bend. This was the area addressed by one of the installations at our festival exhibition *Das Große Rauschen*.

DINAHBIRD AND JEAN-PHILIPPE RENOULT, *THE HUM* 10 radios of varying ages, two cheap Chinese FM transmitters, and a pair of perfectly functioning ME Geithain RL906 speakers. Have you ever lain in bed at night, unable to sleep, and tried to identify the noises surrounding you? Is it the fridge? The pumping bass from downstairs' speakers? Is it coming from outside? Or perhaps it is inside of you? If this sounds familiar, you might be a victim of *The Hum*. Thousands of people worldwide have been plagued by *The Hum* since the first reported hearings in the 1940s. Those who hear it often describe it as a low pulsing drone with no obvious source. No cause has been clearly identified, though various features of modern life have been blamed—power lines, satellite debris, mobile phone masts, micro-seismic activity, even low-frequency submarine communications. This installation explores our experience of *The Hum*. Using ear-witness accounts, field recordings, electromagnetic interference and drones, intertwined with our own human hums, we wish to reclaim *The Hum* as a companion and acoustic ally that soothes your ills away. [*Das Große Rauschen*, exhibition brochure]

Radios were fixed on the walls around the room and the lighting was carefully diffused to a monotonous dislocated blue, inducing a visual unease equivalent to the aural hum. The audience sat inside the installation, disorientated by eerie light and the sound of detuning radios, as voices from the speakers imparted their various experiences, and scientific studies concerning the “Hum” were presented. I wondered how many of our visitors had experienced this phenomenon for themselves, as I certainly have encountered it, without knowing that it was “a thing”.

An aside. When *The Hum* ambushed me about ten years ago, periodically over the course of a few months, my initial assumption was that it was a sound produced internally in the body. However, any certainty was gradually eroded by a creeping obsession which eventually gave way to frantic bursts of activity in search of an external source. This involved middle of the night escapades to check out my neighbours’ heating systems and wine presses, looking out for the newspaper delivery van to hear if the engine was running, pontificating about mysterious military operations and other fantastical potential sources of powerful long-range waves—like a secret cellar nightclub whose stonking sub-bass could travel miles up river! The episode came to a conclusion on a trip to the alps. I knew that if the sound came with me, it was emanating from within. And sure enough, as soon as my head dropped to the pillow, there it was again: my very own Hum. This was a profound relief, and it signalled time to let it go on its mysterious way. Perhaps to disturb someone else’s peace of mind. “Wuuuuuumm wuuuuuumm”.

There were other strange goings on and unsettling experiences to be had in Radio Revolten Zentrale at Rathausstraße. Our two large interconnected buildings were a playground, a rabbit warren, a hidden monster’s lair, allowing for desires both dark and light to be played out by the many people who came along to help and stayed to explore. The place was captivating, inviting us to romp and frolic around it—all the while with the feeling it was keeping a close watch on our comings and goings. One place which held an especially strong draw for a few people and gave inspiration to their various radio creations was the dank, insalubrious cellar. A team of programme makers from Radio Corax were especially curious, and embraced the adventure when they descended the uninviting, ever-darkening staircase.

Revolt from below – Radio Corax’s current affairs team rustles through the underground with Steve Bates
by Nina Westermann

Free radio sometimes prides itself on being difficult. The habits of our listenership can be challenged politically, socially or even acoustically whereas we, the editorial staff, have complete freedom of choice whilst working from a clean, dry, and technically well-equipped studio. During Radio Revolten, the audience could hear what happened when we decided to make our work difficult for ourselves. One day the current affairs team decided to broadcast the lunchtime magazine show from the cellar of the Radio Revolten headquarters in Rathausstraße. When I was asked to write about this event I could hardly remember the contents of the show, but what had stayed with me was the

N.W.

feeling that had developed in those vaults during its two-hour duration. The basement had been virtually untouched for 16 years. In the midst of all kinds of accumulated junk, wooden crates and Christmas decorations, we sat in the dark and cold, surrounded by cobwebs and fluff, comforted only by candlelight. The sensory overload triggered by unknown surroundings, sensory deprivation from the lack of sunlight and isolation from the outside world, were on the one hand exhilarating whilst also slowly driving me to despair. When listening back to the archive recording, it came as a surprise that the topic of the show had been intoxication, delusion and the borderland in-between. Fittingly, we began with the track *Tanz im Quadrat* by Die Tödliche Doris, to ride out some technical problems with our transmission. Not only were we stuck in a cellar, we also had to use mobile streaming technology to connect to the Radio Corax studio, which pushed our stress levels even higher. In the two hours that follow however, we quickly forget about this and deeply submerge ourselves into talking about the fiction of people lapsing into delusion, and making spontaneous philosophical deliberations on the motivation for and use of intoxication. We talk about escape, losing control, freedom, drugs, love and the connection between intoxication and noise [Rausch and Rauschen in German] which is also prevalent in radio art. Slowly the tensions of making live radio recede, and we start to talk freely and easily, as the [Weimar punk band] Warriors of Darkness used to sing: “Nüchtern bin ich schüchtern”—“Sober I am shy”. Suddenly there is a visitor at the bottom of the stairs leading to our temporary abode. Steve Bates is one of the radio artists who are in Halle this October. In his works he is preoccupied with auditory hallucinations and because this fits perfectly with our topic he joins our show for an interview. Crouched down in a circle we listen to his sound installation and he explains why and how people come to imagine sounds. The way this can lead to paranormal delusions is laid out in the novel *The Haunting of Hill House* by Shirley Jackson that Steve appropriately recommends. While the microphones are muted for a moment he tells us that our underground transmission station is the best studio he has ever visited. We programme makers however are less and less convinced of this fact as time passes. Slowly we begin to hear mysterious sounds coming from the pipes on the walls, it continues to get colder and time seems to pass incomprehensibly. When we end up hearing a story about a baron who is driven to madness by a tapeworm, our thoughts turn to the animals that might scuttle between our feet, protected by the darkness. The end of the show feels like a salvation, we come up to the light-flooded courtyard of Rathausstraße, where everyone else is acting dead normal. It is a feeling of relief mixed with a touch of perplexity. What kind of show did we produce just now down there? For sure it was a unique radio experience for all involved, though I would rather not want to repeat it. I think I speak for us all when I offer this advice: get intoxicated by life, not by vaults!

NOBODY HERE BUT US BODIES
OR: THE BODY AS NO-BODY

We come full circle to close with a hypnotic radio voice, capable of oozing into your system and raising those goosebumps; or setting you adrift, disembodied on an ocean of indeterminable waves, as illustrated by an excerpt from a radio show.

Through looping washes of muted electronics, outdoor spaces and far static, a pulsing beat edges us deep into late-night reverie. We are lulled awhile as if swaying in a space cocoon or bobbing in an underwater bubble, before an equally comforting and discomfoting voice informs us that we are not the passive night-time radio receivers we think we are.

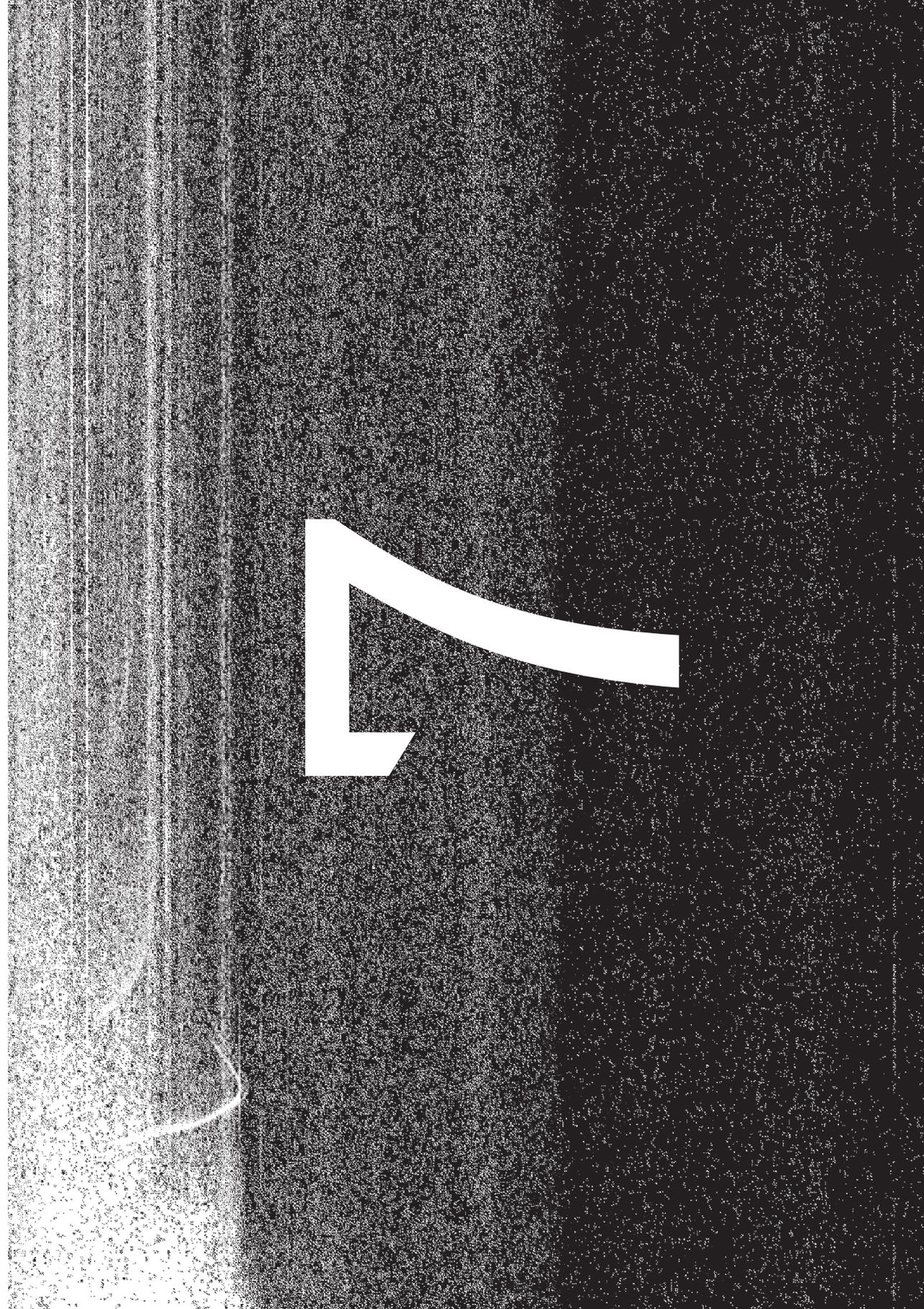
ANNA FRIZ, *XRRB*

Nocturnal outpost, distance monitoring, and experimental radio beacon. With special guests Jeff Kolar & Rodrigo Ríos Zunino
6th October 2016, 00:00, Radio Revolten Radio 99.3 FM 1575 MW

Anna Friz, from the broadcast:

This is a nocturnal listening station which means that you don't just listen to us, we listen to you. This is after all, radio that listens. It was bound to happen, of course it was. The radio isn't always going to tell you just what to do, when to drive your car safely without traffic, or whether or not you need an umbrella, or whether you're late for work, or whether or not you should be filled with despair because it's only bad news on the radio. No, this is radio that listens. And sure we have a clock and it's more or less accurate, but don't you hear it tiptoeing across the space continuum, don't you hear it stretch for the next step, don't you hear it plodding up the stairs?

Now with our bodies fully primed to receive transmission, we are ready to relay anything.



Radio Drama: Eventfulness in the Medium of Real Time

Tina Klatte

In his 1932 essay *Funkliteratur* (Radio Literature), media theorist Rudolf Arnheim wrote: “that a favourable development can only come about when both entertaining and didactic plays make aggressive use of the artistic radio play”.¹

Arnheim’s call for an analysis of the aesthetics of radio and the medium itself to take place beyond the confines of the genre was a plea for an experimental radio space that remains unanswered today. In the first years of the medium, the “form of artistic radio play” represented the discovery of radio as an autonomous medium that, beyond its function as a news and transmission medium, “itself had to produce events for broadcasting: media events”.² When referring to the radio play, Arnheim called on the radiomakers of his time to create broadcasts “unique to radio” with its own means.

An event unique to radio was presented in 1924 when the first German-language radio play *Zauberei auf dem Sender* (Magic on the Radio)³ disrupted the broadcasting. The “fairy tale teller” interrupted the planned musical broadcast, music was suddenly played that no one wanted, while, simultaneously, urgent messages were read. The broadcast runs out of control, but the microphones can’t be turned off and the listeners hear: “Everyone is doing whatever they please. The station has gone crazy.” In his “Attempt at a Station Play-Grotesque”, the artistic director of the Frankfurter Rundfunk⁴ Hans Flesch, in the form of a wizard, turned the broadcasting studio itself into a place of action by opening an experimental space for the exploration of radio as an artistic medium. While Flesch’s radio play went live on air as an unrepeatable premier broadcast, its aesthetics of the simultaneity of language, music and sound anticipated the artistic approach of technologies of reproduction and formed the basis of all future radio art.⁵ Arnheim also posited: “Audio film is necessary!”⁶ and advocated using talking films that would allow the use of montage and collage as an artistic means—as the filmmaker Walter Ruttmann then did in his collage *Weekend*,⁷ commissioned by Flesch. The critic Arnheim and the producer

1. Rudolf Arnheim. “Funkliteratur (1932)”, id.: *Rundfunk als Hörkunst*. Frankfurt am Main: Suhrkamp, 2001. p. 196.
2. Hans Burkhard Schlichting. “Hörspiel. Zur Hermeneutik akustischer Spielformen”, in *Literaturwissenschaft. Ein Grundkurs*. Brackert, Helmut and Stückrath, Jörn, eds. Reinbek bei Hamburg: Rowohlt, 2004. p. 227.
3. Hans Flesch. *Zauberei auf dem Sender. Versuch einer Senderspiel-Groteske*. SÜRAG (Frankfurt am Main, Germany), 24 October 1924, 22 min.
4. Südwestdeutsche Rundfunkdienst AG (SÜRAG).
5. Wolfgang Hagen explains in his essay “Über das Radio (hinaus)” how Flesch’s production makes storage media and recording technology audible, that, due to the military application of radio as a means of transmission, was not used for broadcast, let alone for radio art. cf. Wolfgang Hagen. 1993. “Über das Radio (hinaus)”, p. 10; http://www.whagen.de/PDFS/11280_HagenUeberdasRadiohin_1993.pdf (accessed 27 December 2017).
6. Rudolf Arnheim. “Hörfilm tut not!”, id.: *Rundfunk als Hörkunst*. Frankfurt am Main: Suhrkamp, 2001. p. 82.
7. Walter Ruttmann. *Weekend*. Funk-Stunde A.G. Berlin, 13 June 1930, 11:10 min.

Flesch thus turned away from the real-time productions of contemporary radio plays which occurred as costumed theatre productions in front of the microphone and simply used the medium's technology to make popular theatre performances accessible to the masses.

In contrast, their contemporary Richard Kolb elevated the immediacy of real-time radio dramas to the "essence of radio":

Capturing a radio play in our minds invokes such fine vibrations of the soul—each breath becomes palpable—that they cannot be reproduced on a gramophone record. The power of the mental experience exists ... only in the present, through simultaneous experience.⁸

The radio play theorist Kolb, who was promoted to station director in 1933, propagated an aesthetic of the radio that was founded on the veracity of the moment through simultaneous experience.⁹ The disembodied voices from the wireless set should become "one's own voice" for the masses of tuned-in listeners.¹⁰ Kolb's real-time radio play was governed by a dogma of authenticity that was maintained in the realm of the "people's receiver"¹¹—with all the means of technological reproduction—and its aesthetic of "inwardness" that radio play productions continued into the 1970s.

Since its beginning, the experimental space of radio has existed in a field of tensions between fiction and authenticity, between transmission and the creation of presence. To speak of radio plays in the context of a radio art festival that wants to play with the limits and possibilities of the medium implies moving within this field of tensions and its traditions.

What is called radio art today is, at best, still radio play in the Arnheimian sense: a play with the technologies of the radiophonic. In radio art, the fact that the live moment is also one of these technologies is often neglected, and its productivity thus ignored, in favour of technologies of reproduction:

This tension, arising everywhere people observe how the future becomes the present, should not be underestimated [...] An art whose essence contains the progression of time, that namely only an infinitely small part of it is existent and present, should not deprive itself of the inherent appeal of this time progression by defining the future or the past.¹²

Of course each radio broadcast (whether pre-produced or not) is an event that occurs singularly in time, as media and theatre scholar Barbara Büscher writes:

Moreover, that the programme not only wants to testify to an event but also produces one itself is perhaps lost in the normative flow of the programme and its viewing, but is still structurally relevant.¹³

But the structural relevance does not satisfy the desire for the live moment that, when the broadcasting space remains closed, takes place (again) on the theatre stage:

8. _____ cf. Richard Kolb. 1930, quoted by Wolfgang Hagen. 1993. "Über das Radio (hinaus)", p. 17.

9. _____ "The singer, sound artist or radio player who stands before the recording device doesn't sing or play directly into the radio instrument anymore and therefore no longer directly for the listener. The contact between both, leading to an intensive experience via the simultaneous vibrations of the soul across the bridge of invisible electrical waves and beyond, is broken." Richard Kolb. *Horoskop des Hörspiels*. Berlin: Max Hesses Verlag, 1932. p. 73.

10. _____ "The disembodied voice of the radio play becomes the voice of one's own self. We know this as conscience, warning, doubt, hope, faith, in short: as emotions, desires and inhibitions." Kolb, p. 55.

11. _____ Wolfgang Hagen describes how Goebbels, as the Reich's Minister of Propaganda, creates true moments of the fiction of radio as a transmission device through reproduction and editing technologies that the theoretician Kolb had envisioned: "Kolb describes the technological basis of radio communication, to be always and only a means of transmission, as a simple metaphysical law. Goebbels utilised this metaphysical principle as a tool of propaganda. That is precisely the difference between fiction and simulation." Wolfgang Hagen. 1993. "Über das Radio (hinaus)", p. 17.

12. _____ Rudolf Arnheim. "Hörfilm tut not!", p. 82.

13. _____ Barbara Büscher. "Radiophone Ereignisse. Zum Verhältnis von Live-Aufführungen und medialen Aufführungsformaten", in *Hörspielplätze. Positionen zur Radiokunst*. Hörspielsommer e.V., ed. Leipzig, Germany: Voland & Quist, 2010. p. 156.

The stage performance is attractive for us because we are more concentrated there than in the studio and completely different things can occur among the musicians. Besides, one has the direct feedback from the audience.¹⁴

Radio play producer Andreas Ammer thereby describes what is missing in everyday situations in the production of radio plays: the concentration of the present, the release of the production into the moment owing to its unrepeatability, and the communication with the environment. Just as Wolfgang Hagen postulated the "exodus of sounds"¹⁵ from the radio, so are events moving increasingly from the theatre stage and performance setting into the radio space, without this being an event space itself.¹⁶

Radio Revolten gave space to the real-time qualities of radio and to the medium as a form of contemporary art. The festival reopened the question of the simultaneity of presence in radio art: What happens when the radio studio becomes the place of the live performance—and when it becomes publicly accessible, or goes beyond this space? Radiophonic works were heard that occurred or were "performed" live in the radio studio, in urban environments and in the Radio Revolten Klub—not as a plea for an "absolute presence" but as a game with the future becoming forever present.

"Simultaneity is the condition of the participatory experience only with true events. But what 'happens' in the broadcast space?"¹⁷ asks Hans Flesch in 1922 and consequently produces a radio play that makes the broadcasting space into the place of the event. On 17th June 1994, radio play producer Hartmut Geerken and musician Famoudou Don Moye gave a possible answer to Flesch's question.¹⁸ They open a live session in the radio play studio of Bayerischer Rundfunk with megaphones, whistles, percussion and all kinds of other musical instruments. But they are not alone as the artists' communication space is expanded to listeners who are invited to react to what they hear in 15-second telephone calls:

both communication media, radio and telephone, are connected in a 'fairy ring'. The radio stands in contact with certain listeners (authors, musicians, artists, friends) by telephone, meaning the listeners can influence the happening of the radio play, listeners in the range of transmission can even react to what they hear. Certain listeners have a democratic voice in what is heard and played during the broadcast of the radio play. The communication facilitated by radio and telephone is not smooth and uncommitted as with a physical partner, but more robotic in their isolation. Through the complete duration of the radio play, Famoudou Don Moye (Art Ensemble of Chicago) and Hartmut Geerken play/speak independently of the telephone calls in the studio. Moye and Geerken have the opportunity to respond to the incoming telephone calls. An intentional arrangement of the listeners' contributions is not intended. The listeners' contributions organise themselves in dissipative structures. An open, lopsided structure presses forward.¹⁹

14. _____ Ammer, Andreas and Gaby Hartel. "Technik der Gefühle. Intensität ist der letzte Luxus. Gespräch", in *Hörwelten. 50 Jahre Hörspielpreis der Kriegsblinden*. Bund der Kriegsblinden/Filmstiftung NRW, ed. Berlin: Aufbau-Verlag, 2001. pp. 211-213; quoted by Büscher, p. 149.

15. _____ "In our interconnected world of information and communication, radio plays an increasingly smaller role. It reproduces the existing worlds of sound, but hardly gives them form itself anymore." Wolfgang Hagen. 1993. "Über das Radio (hinaus)", p. 23 and online http://www.whagen.de/PDFS/11280_HagenUeberdasRadiohin_1993.pdf (accessed 27 December 2017).

16. _____ As in the works of e.g. She She Pop, andcompany&co or Rimini Protokoll: "The live recording of a theatrical performance forms the acoustic foundation, the fertile soil for the future radio play." WDR radio play dramaturge Martina Müller-Wallraf on Deutschland 2 by Rimini Protokoll; quoted by Büscher, p. 150.

17. _____ cited in: Wolfgang Hagen. 1993. "Über das Radio (hinaus)", p. 10.

18. _____ Hartmut Geerken. *Hexenring*. BR (Munich, Germany), 17 June 1994, 70 min.

19. _____ Hartmut Geerken, description text of *hexenring*, <https://hspdat.to/pages/Datenbank/?p7=hexenring> (accessed 27 December 2017).

In Geerken's "interactive" live radio play, the radio studio actually does become a laboratory, an event space of unmediated, simultaneous participatory performance which usually only sounds as a quotation (often from the production) in pre-produced listening events.

This quotation of the studio as an event space is programmatic in Christoph Schlingensiefel's *Rocky Dutschke '68*.²⁰ While the theatre performance of the piece was declared to be a "sit-in", "in which the encounter of the actor with the audience becomes direct and physical",²¹ the pre-produced 1968 meeting in the radio play studio produced a negative event. A radio play production of the Bayerischer Rundfunk makes clear that the real-time play with listening and the listeners does indeed occur, yet not in the spaces of public broadcasting, but in those of community radio. Under the title *Radio Las Vegas*,²² the station presents an edited version of the performative series of the same name by artist Mariola Brillowska and musician Günter Reznicek. The "anarchic Radio Late Night Show", performed by Brillowska and Reznicek live on air between 1998-2000 on FSK (Freies Sender Kombinat) in Hamburg, is portrayed as a historical document on public broadcasting.

The Radio Revolten Radio also offered invited artists the opportunity to open up broadcast spaces as "immediate" play-spaces. In his *Hauser* performances, Ralf Wendt relocates these acoustic spaces outside; the radio studio is brought to the street which then becomes an event space for station and receiver^[chap. 10] where the impossibilities of the fictional occupy a double space: the public space of the city and the acoustic space of the radio:

For example, over a small speaker on the street I played back the voice of a woman I had recorded; she could have just as well been there herself. And conversely, I can also create a situation in which the listeners and passers-by can intervene. For me the fascination of the real-time moment is locating the fictional with the real. If I can follow along with what is happening in real-time but I don't know what is happening there anymore? Can he fly, or what?

Wendt's performances show how editing and montage can break the linearity of a broadcast in a live radio play. The openness of the live moment is a tool of his play just as much as are the produced sound elements. How and when each of these is employed is not determined through classical production techniques, but by the performers themselves. Just as in Geerken's *Hexenring* (Fairy Ring) the rhythm of the play "results" from the course of the individual decisions of the performers ("an intentional arrangement of the listeners' contributions is not intended"),²³ in Wendt's radio performances the confrontation with the moment takes place in the traversing of space. The radio is thereby not simply a medium of transmission for a performance, but itself becomes a participant, as do the listeners who can intervene in the radio space with their receivers.

The radio plays by Geerken and Wendt take place in the confrontation with and acceptance of the moment and the planned staging of the moment.

The voices of the radiophonic event thus do not only depict prescribed moments but also call them forth. "Voices awaken the radio play

20. Christoph Schlingensiefel. *Rocky Dutschke '68*. WDR (Cologne, Germany), 7 January 1997, 50 min.

21. cf. <http://www.schlingensiefel.com/projekt.php?id=t005> (accessed 27 December 2017).

22. Mariola Brillowska, Günter Reznicek. *Radio Las Vegas*. BR (Munich, Germany), 13 March 2015, 54 min.

23. Hartmut Geerken, description text of *hexenring*, <https://hspdat.to/pages/Datenbank/?p7=hexenring> (accessed 27 December 2017).

MARK VERNON



HENK BAKKER AND LUKAS SIMONIS





to life, grant the word spontaneity and the happening currency. When one considers this, the importance of a speaker's personality becomes clear."²⁴ In his canonical *Elemente des Hörspiels* (Elements of the Radio Play), radio play dramaturge Werner Klippert identifies the voice as the fundamental element of the radio play,²⁵ whose embodiment²⁶ is decisive for the outcome of a production.^[chap.5]

In the prevailing production of radio plays, which uses the "artistic word"—existing only in the form of a script—to bring it to life, the selection of a "speaker's personality" still means the choice of the appropriate actor. Although, throughout the history of radio plays, there have been numerous approaches to overcome the discrepancy between the (live) voice and (dead) text and to break the authenticity dogma as formulated by Kolb,²⁷ contemporary production styles tend again towards creating an authentic audio theatre. When the speaker "embodies" the written word just adequately enough, the invisible material of the radio play is conveyed; the "living" word is evoked by recording scenes at the "original locations" and by speakers improvising based on texts rehearsed in the theatrical style of theatre (the actors and actresses learn the texts by heart before entering the studio).²⁸ In contrast, when opting for the personality of speech, radio plays with original recordings and performative works don't begin with a text that needs to be embodied, but instead with the personality of the speaker. This approach can be expanded if the experimental radio space opens itself to the voices as a real-time event space.²⁹

"It is a live radio play, so you have to imagine that we are in a radio studio." The radio play duo Dr. Klangendum is standing on the stage of the Radio Revolten Klub. The passionate producers and musicians Lukas Simonis and Henk Bakker run the sound studio Worm/Klangendum in Rotterdam and organise a diversity of sound and radio happenings:

Klangendum likes history as much as it looks ahead. To give a new twist to an old but not yet worn out genre like the radio play [...].³⁰

In the Radio Revolten Klub they present their live radio show *The Gazers*: a live mix of original recordings, soundscapes, voices and instruments, which they brought to life again the very next day in the Radio Revolten Radio studio. Guitar, bass clarinet and electronics are set up once again, and *The Gazers* rings out anew—and differently. The live performance allows the artists to develop and re-interpret their work by its "restaging", a practice rarely happening to pre-produced radio plays.

Every evening the Klub at the Radio Revolten headquarters becomes a publically accessible radio studio as the location of radio plays, performances and concerts that are broadcast live on the Radio Revolten frequency. The shared time of the real-time medium is expanded by a shared room that makes different forms of acoustic art audible and visible.

^{24.} Werner Klippert. *Elemente des Hörspiels*. Kühmeyer, Anette, and Herbertz, Peter, eds. Saarbrücken: PoCul, Verl. für Politik & Kultur, 2012. p. 115.

^{25.} "One can ask what can be left out before the radio play stops being one, and one concludes that, aside from the technical medium, only the voice remains." Klippert, p. 53.

^{26.} "The voice in a radio play is in truth the form of the optically formless." Klippert, p. 116.

^{27.} e.g. the Brechtian choir, the artificial use of voice in the period of the so-called "Neues Hörspiel", or the performance of artistic texts by "untrained" voices (as in Heiner Goebbels radio play *Verkommenes Ufer*, based on a text by Heiner Müller).

^{28.} As for example in the productions of the German radio play directors Paul Plamper or Judith Lorentz.

^{29.} The drama and later radio play *Die Anmaßung* (Carsten Brandau. *Die Anmaßung*. SWR, Baden-Baden, Germany, 19 September 2017, 39 min.) thematises the differences between artificial and authentic "speaker personalities". The director and radio play author Carsten Brandau composed a one-person piece for the actor Manuel Harder. Harder is both figure in and presenter of the piece and must—and this is the pretension ("Anmaßung")—negotiate his person and his role live on stage: a radio play text par excellence in Klippert's sense, a play for the voice. In contrast to the stage production, the radiophonic work is not broadcast live on air, but is negotiated during the production process.

^{30.} cf. <http://klangendum.nl/klangendum/> (accessed 27 December 2017).

As theatre pieces were once adapted for radio plays, today radio plays should be written that reach beyond their medium to find their place in the world, that may also work on the stage, that are a spectacle.³¹

This is the demand of radio play producer Andreas Ammer for the current experimental space of radio to also find a visible public sphere beyond the airwaves.

The Resonance Radio Orchestra from London—which brings radiophonic art to the stage—provides such a spectacle. Under the direction of Ed Baxter, CEO of official festival partner Resonance FM, the group opens *Radio Revolten* in St. Ulrich's Church, by dedicating the radio play *Larry Shipping in the Abbey and Saaleaue at Planena* to Halle in their first ever performance in German. The specially assembled cast of the Orchestra includes Adam Bushell (percussion), Peter Lanceley (electric guitar, voice), Joe Qiu (bassoon), Milo Thesiger-Meacham (electronics, harpsichord) and Chris Weaver (electronics). The renowned actress Marie Anne Fliegel, who lives in Halle, intones the complex narration by Ed Baxter and leads the audience through a web of obscure references.

A day after the performance at St. Ulrich's Church, members of the Resonance Radio Orchestra and several international guests of the festival decide to bring at very short notice two further pieces of the group to the Radio Revolten Klub stage, this time in French and Spanish respectively. "We might as well, while we are here ...".

The artist and radiomaker Anna Raimondo and foley artists Céline Bernard visualise an art from the beginnings of the "broadcast play" in the Radio Revolten Klub. Their live radio play *A Mermaid is on Air* uncovers what is hiding "behind" the sound of the sea by creating a creature that defies visual attributions: "They say I'm white, but I could also be black or even blue ...", says the mermaid that only exists on air, not on site.

Jim Whelton, aka Xentos Fray Bentos, pushes the limits ad infinitum of acoustic narration's unique quality of not requiring visual evidence. The prolific artist, musician and radiomaker creates universes of expansive absurdity in his live radio plays (on air and on site in the Radio Revolten Klub)—the dramaturgic thread that one is inclined to follow sprawls forth, only to lose itself again. Whelton conducts narratives with voices and synthetically produced noises that consistently elude rules and processing. At Radio Revolten Klub he performs the live radio play *The Monad*, which in its German translation circumvents Whelton's foul language. The text is given voice by the performance artist Ralf Wendt who is disappearing in the fog of dry ice, while the audience searches for references:

This is so typical of your civilisation—not that that would be my first choice of word to describe you. You have absolutely no sense of the nature of longevity. I'll prove it to you.
One fine day, your most brilliant scientists invent a storage medium that will last for 3,000 years.

31. Andreas Ammer. "Trojanisches Pferd. Das Hörspiel auf der Höhe von Zeit und Technik", in *HörWelten. 50 Jahre Hörspielpreis der Kriegsblinden*. Bund der Kriegsblinden/Filmstiftung NRW, ed. Berlin: Aufbau-Verlag, 2001. p. 296; quoted by Büscher, p. 148.

RESONANCE RADIO ORCHESTRA
WITH MARIE ANNE FLIEGEL



ED BAXTER, DIRECTOR
OF RESONANCE RADIO ORCHESTRA



PETER LANCELEY
RESONANCE RADIO ORCHESTRA





‘Such genius’, you say. ‘Let us store the entire archive on the new medium. Every word ever spoken. Every thought ever inscribed.’

‘Hurry’, you say. ‘Stick them all on the new medium. This way they will last forever.’

Then what happens? Within a hundred years, the only remaining machine that can play back the archive languishes inside a glass case in the forgotten wing of a dusty museum.

Another two hundred years after that, war breaks out. In the chaos, a looter snatches the machine from the bombed out museum. He rides into the desert where a sniper blows his head off. The machine tumbles off the saddle into a bottomless sandpit. It remains here, lost for over 5,000 years.

The archaeologists who eventually discover it can only agree on one thing. They have no idea as to the purpose or operation of the machine.³²

Willem de Ridder, also a master of the art of spacious narratives, uses the public radio studio of the Radio Revolten Klub to test his art of storytelling by letting selected individuals from the audience participate in the narrative.^[chap. 9] Alessandro Bosetti also uses the common space to let the listeners play a role. In his live performance *Minigolf*, together with Anne Laure Pigache and the Neue Vocalsolisten, the unsuspecting listeners become the material of the play. It takes some time before the audience, sitting in front of the black screen and listening to the voices, becomes aware that their actions and reactions influence what is being said to them.^[chaps. 5, 9]

32. Excerpt from *The Monad* by Xentos Fray Bentos; <http://radiorevolten.net/wp-content/uploads/2016/10/Der-Monad.pdf> (accessed 27 December 2017).
33. Ed Baxter. *Instant Whip Manifesto*; http://radiorevolten.net/wp-content/uploads/2016/09/2016-09-22-premanifest_komplett.pdf (accessed 27 December 2017).

Whereas Bosetti maintains the distance inherent in the radio situation by rejecting the visual yet simultaneously transcends it by allowing interaction with the public, Mark Vernon’s performance creates a two-fold presence. Vernon executes visually and audibly what Ed Baxter formulates for Radio Revolten in his *Instant Whip Manifesto*: “Radio is a manifestation of presence, it exists in the present, like breathing in and out.”³³ Vernon’s audio piece *Dead Air Spaces* gives diving instructors, singers and other breathing experts the chance to speak while he measures the passing of time himself with his own breath. With bi-nasal microphones, whistles and balloons, Vernon allows his breath to be experienced in various ways during the composition. Close to the ear, it generates an unpleasant and oppressive intimacy while pointing out the corporeality of listening. At the same time, the performance refers to the passing of time in a real-time medium that always tries to avoid “dead air” (silence) and cuts out breathing pauses in favour of forceful verbiage. But the unplanned sometimes still breaks into formatted radio as, for example, on the 13th September 1990, when the news presenter at the

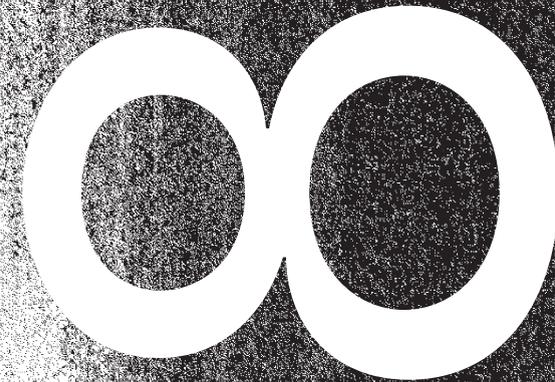
Bayerischer Rundfunk, Peter Veit, slept through his “entry” and, instead of the news, nothing was heard for minutes. Over a decade later, radio play producer Eran Schaerf invited Peter Veit into the studio to have the newscaster who had been overcome by sleep talk about his experience.³⁴

This illustrative drama of radio silence makes clear how radio, as a “news and broadcasting medium”, really is newscast and can only deal with “real events” as an exception when they do occur. The real-time radio dramas and plays of Radio Revolten show how radio can again become an event space. The traditions of “broadcast plays” and “audio theatre” can proliferate in the experimental space of radio with performative approaches and the use of contemporary technologies. That this experimental space should not only be on the stage but also find space again within the medium of radio is a demand of Arnheim still worth striving for:

All departmentalisation into special categories—lecture and music, literature and radio play, presence and eternity, writer and reporter, director and technician—is the worst evil in radio.³⁵

34. Eran Schaerf. Heute ist Mittwoch der 10. Dezember. BR (Munich, Germany), 26 July 2009, 46 min.

35. Rudolf Arnheim. “Funkliteratur (1932)”, id.: Rundfunk als Hörkunst. Frankfurt am Main: Suhrkamp, 2001. p. 196.



Cabaret

Sarah Washington

Cabaret rolls into town as “the cosmos of hope”.¹

1. _____ “Marcuse argues against anti-art because it seems to be a rejection of art’s responsibility to show ‘the cosmos of hope’.” Malcolm Miles. Herbert Marcuse. *An Aesthetics of Liberation*. London: Pluto, 2002. p. 137.

RADIO AS PERFORMATIVE DISCIPLINE

When speaking for the radio you cast yourself as performer, whether that means simply presenting yourself as a slightly larger than life version of your everyday persona, exaggerating an aspect of your personality, or else taking on a dramatic character role. Certain types of performance for radio are so visually (or otherwise) engaging that they deserve an on-site audience, in addition to playing to the unknowable ears of radio land. Inviting spectators into a studio is one thing, but occasionally the opportunity arises to provide a spectacle for a larger crowd—at the same time adding a heightened atmosphere to the signal being relayed to distant listeners.

What do we call this type of radio? Live-to-air is a fairly good description, but perhaps a little too ambiguous. Public radio attributes this term to standard live music broadcasts, so what extra quality can we assign to an event that is made especially *for* broadcast and at the same time is performed to an audience in a venue? To fulfil this brief, the artists have to be thinking in two places at once: the venue and radio space. For the venue audience, the atmosphere is animated by the electrifying vitality of transmission. Through markers provided by announcements and extraneous sounds, the radio audience receives a reminder that they are not alone: listening is shared. By attending to both audiences, events become supercharged with connection to all those who are tuning in, whether in person (unmediated) or through a black box (at a remove).

Ed Baxter of Resonance FM describes the complexity for the performer when outlining the work of the Resonance Radio Orchestra:

RRO simultaneously addresses both the remote audience of the acousmatic transmission and the physically present audience in the real-time environment, grappling with the sense of displacement this entails.

We often fall back on the overly simple term “radio performance” but I prefer to call the endeavour “performative radio”, as this strengthens the idea of staging and everything that entails for the production of an event for an audience, be it in a venue, in public space or even in a radio studio tightly packed with “onlisteners” (onlookers). This is the arena



from which some of our festival acts radiated out into the territory of cabaret: by using combinations of drama, music, song, and spoken word; often carried out with high humour and deep politics. The only aspect of the burlesque missing perhaps from the Radio Revolten Klub was the striptease, nevertheless some of the performances certainly embodied aspects of the risqué in their parodic treatment of topical themes and cultural memes. It is not always the flesh which has to be laid bare for the sake of revealing entertainment.

NIGHTLY REVOLTS

One of the great fortunes of Radio Revolten was to have at our disposal a festival centre large enough to be able to create a decent-sized concert and club venue. It had taken a great effort by the festival's Project Manager HeLen Hahmann to acquire a suitable building that could meet all of our desires and requirements, which included copious office and work space, a radio studio complex, an extensive series of exhibition rooms, and the social hubs of a cafe and garden. As luck would have it, we had absolute free rein over the building kindly lent to us by property developer Robert Hammerl. Many people from Radio Corax worked on knocking down walls in the two largest rooms to turn them into a neutral canvas onto which a diverse range of performers could project themselves. The stage area became a makeshift black box theatre space, the auditorium's decaying bare walls warmed by the glow of offbeat ballroom lights knocked up from salvage. A few steps ascended into the back of the venue, where a motionless mirror ball light-dotted every surface and a giant backlit picture of a radio dial signposted the way to the sofa studio corner. This was where the radio commentary took place before each show and between the acts, and where the evening's artists retired after their performances for an informal chat with a group of hosts. Off to one side of the performance area was positioned a well-run bar, which allowed events to be carried out free from disturbance. The seating arrangements could be configured however an artist saw fit, to enhance the effect of their work.

On certain evenings the Klub had the appearance of an edgy underground music dive, walls layered with slide projections and the place populated by an interesting-looking bunch of misfits. On others it had the vibe of a secret cabaret cave, the atmosphere pregnant with the near certainty that something peculiar or eccentric would occur. On such nights the focus was tunnelled intently towards performers on a darkened stage. In the true spirit of typical German "Kabarett", revolving around the twin axes of political satire and gallows humour, notably varied acts delved theatrically into the realms of contemporary socio-political commentary and artistic invention. It was a potentially risky strategy given that humour does not always translate across languages and cultures, yet this was a critical choice. Even the most challenging or unfamiliar art can discover anchorage in hearts and minds by utilising laughter, engaging the funny bone as an antidote to conditioning. Art then becomes capable of getting to the heart of a matter to deliver a killer punch.

The artists featured in this chapter proved willing to utilise any means necessary to relay their messages. Each worked the audience in their own way to build an energetic vortex, sucking up every last drop of attention.

Some demonstrated a refined ability to overwrite the DNA of existing performance strategies with radiophonic information, others branched out from standard broadcast practices into communication with a live audience. All in all this was a fortified demonstration of the breadth and depth inherent to the art of live radio, a discipline that need not conform itself to any restrictive definition, or narrow its field of operation to preconceived notions of what art for the radio should sound, or indeed look like.

And so we turn to our contingent of lusty radio comedians and social commentators: a string of poignant multimedia poets, unhinged DJs, pop philosophers, transgressive musicians and rogue technologists. It was their responsibility to deliver the cosmos of hope (and hiccups of wonder).

THEATRE OF THE ABSURD

On one intriguing night in the Klub, nothing adorned the stage except for two performers in identical costumes. Combined with their synchronous actions, this rendered them uncanny in their manifestation of twin-automata from a human resources training department. Prepare for the Bureau of Melodramatic Research (Irina Gheorghe and Alina Popa) with *Protect Your Heart at Work*. As in real life, don't let the professional smiles fool you ...

In the post industrial economy the commodities are intangible: a feeling of well-being, personal satisfaction, a sense of uniqueness and individuality, connectedness and protection. We produce emotions, trade in knowledge, invest on the market of ideas, speculate on compassion and monopolise happiness. Buy for a smile, sell for a laugh. Affectivity, knowledge, communication, social skills, kinship, creativity, human contact, proximity, forms of life are at the heart of the mechanisms of production and valorisation today. Under the present conditions, there is a high need to update the protection rules at the workplace. Since the workplace is everywhere and we embody the work, these rules become more and more important. What are the ergonomics of contemporary emotional work? How to avoid the repetitive strain injuries caused by recurrent smiling, compassionate inflections of the voice, endless nodding? We need new protection today because we no longer have a job, we are the job.²

One precarious question hovered over the surface of this training session for Smile Gymnastics: Who is laughing at who? The comedic timing of the piece was perfected towards summoning queasy discomfort in pursuit of acidic social commentary. Were the audience mere arm's-length spectators of a satirical horror show, or were they being surreptitiously engaged as participants in a charade—cast as recipients of a cutting critique of unexamined behaviour and problematic relationships to the constructs of society's conventions?

2. "Protect Your Heart at Work", The Bureau of Melodramatic Research; <http://thebureauofmelodramaticresearch.blogspot.de/2012/12/protect-your-heart-at-work.html> (accessed 23 February 2018).

BUREAU OF MELODRAMATIC RESEARCH
(ALINA POPA AND IRINA GHEORGHE)



WILLEM DE RIDDER AND RADIO PLAYERS



Allow the collapse of time and space.
Nothing exists, only your smile does.
Artifice is natural, natural is artifice.

I am struck by a lingering, complex impression of a charade, within a charade, within a charade. Let's hear what our impressive festival diarist has to say.

Gabi Schaffner
Radio Revolten Diary, 26th October
Smoo and the Glass Ladies³

And while they smiled and explained their smiles it became clear that this is a really serious matter: Smiles at work. Bodies at work. Bodies being machines at work. Smiles being the tools for the machines at work.

Not necessarily, but rather self-evidently this was about women at work. Most of us sell with our smiles, n'est ce pas? ... The Bureau of Melodramatic Research "investigates how passions shape contemporary society, as well as our affective relationship to an awe-inspiring unhuman universe."

The results of their investigation is (re)presented by the figure of the "Glass Woman". Part imaginative / part alter ego of the performers, she embodies the emotional mechanisms that make life in capitalist cash flow so agreeably smooth ...

The performance is quiet, concise, poetic and shot through with piercing irony.

3. Gabi Schaffner. "Smoo and the Glass Ladies", Radio Revolten Diary 26 October 2016; <http://radiorevolten.net/en/smoo-and-the-glass-ladies/> (accessed 23 February 2018).

This particular event in the Klub was a double bill of bizarre humour, the accompanying act being equally difficult to classify as anything other than a kind of distorted radio theatre—but for completely different reasons. The duo SMOO complimented Ivor Kallin's surreal comedic antics with John Bisset's incessant guitar drone-thrash. While Kallin performed a string of sound-poetry skits with gusto using simple props, a viola, and madcap gestures, the guitar didn't let up for a second. As human hullabaloo, SMOO's anarchistic mangling of language and music was widely appreciated.

Gabi Schaffner
Radio Revolten Diary, 26th October
Smoo and the Glass Ladies

The viola sounds at times like tape noise while Bisset on his Fender guitar strums his chords in an accelerating trance mode. One might not have yet decided this is some totally weirdo folk or minimal or maybe atonal music when Kallin steps up to the mic, produces a much-thumbed folder in a greasy plastic jacket and opens his mouth.

G. S.

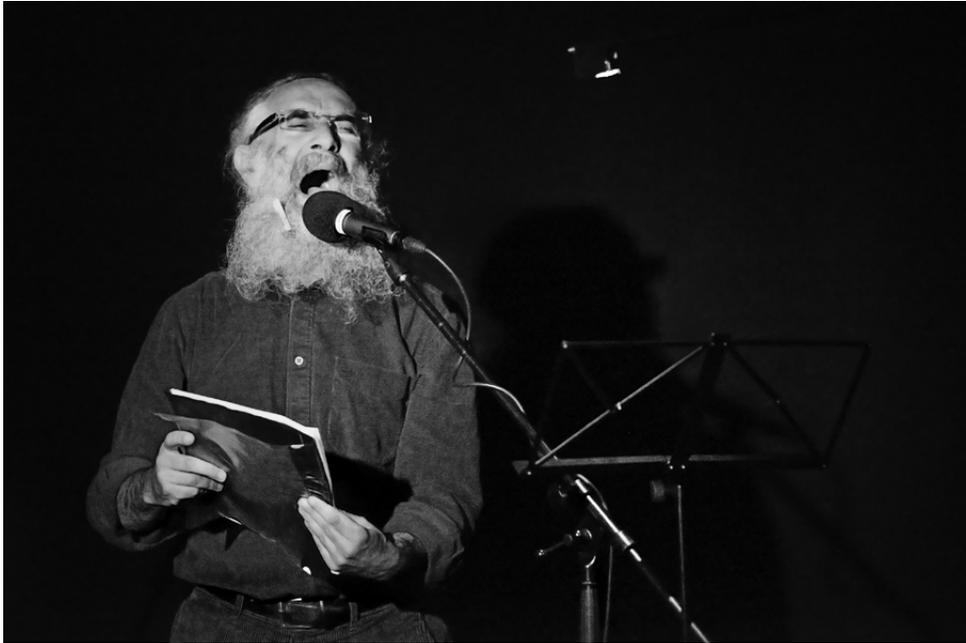
Out comes a stream of words taken straight out of Catweazle's dictionary: Are these rhymes? Songs? Mad Prayers? Hymns? Magic spells? He waves his hands like a hobgoblin chasing owls, he prances around and patters like a New Delhi cheap-jack, with him you hear a thousand languages in only three minutes and a hundred jokes in ten, but you may not recognise one word in them. Meanwhile Mr. Bisset has accelerated his persistently grungy folk rhythm so far as to induce occasional headbanging in the audience. These are happy happy times I think, watching Ivor licking or chewing the backside of his viola, and then taking it back to his chin (not before having wiped it clean on his trousers), everywhere I look I see lit-up smiles on the faces, feet tapping, and heads nodding. Mr. Kallin's recital continues, now with real (but actually what does "real" mean?) words in it: "Sauerkraut" for example, "hat" and "hatstand" and "street" and there is even a dialogue rendered between a "John" and another person.

I notice a clothes peg in his beard and I have no idea what it is for and I don't need to know either. Truly, who cares as long as you just can't help smiling and enjoying this concert.

The enthusiastic reception to both of the evening's acts came as a relief for me as they were my festival "wildcards", curatorially speaking. We had decided that each of the five curators should be able to insert two acts into the line-up who, due to not being equally known by all of the team, hadn't achieved enough votes in the general selection process. When the day came I wasn't sure how these particularly idiosyncratic performers would go down in Halle. In being responsible alongside Knut Aufermann for the festival's performance programming, I felt a slight apprehension for the first time, which made me suddenly unsure as to why I had chosen to put both wildcards together on the same night. As it turned out, the two acts made for a perfectly weird and wonderful cabaret pairing which resulted in genuine ear to ear grins, amidst any remaining bafflement. The most brave (or should that be reckless?) artistic decisions—made without due attention to the nagging concerns of the conscious mind—are often the strongest. These two long-standing collaborative duos exemplify and embody such strength of character.

THE OLD RADIO DEVIL RESURFACES

In the history of strange happenings on the radio, and when it comes to engaging the public in adventures of both mind and body by exploiting the potential of mass media to exert influence, one figure looms large. Willem de Ridder's madcap radio escapades are legendary, his status as a Fluxus luminary secured; still today his compelling voice lures the unsuspecting listener onto ever stranger terrain. As fanatical about radio as he ever was, and continuing to push its boundaries and transform its modes of operation, he is a radio tour de force. In recent years he has been more interested in intercommunication, with his project Ridder Radio which looks in the opposite direction of the traditional one-to-many broadcast model.



... Ridder Radio, the radiation station to get rid of your mind. [...] It's not like radio as we know it. It is much more intimate, cosy, close and confronting. You type something and the voice responds. Sometimes you can see her/him/them on a webcam image to make the contact even closer. The most important aspect of Ridder Radio is the content. The Living Content. It is not just chatting and hanging around, but the possibility to make friends and go deep into life itself. Old fashioned radio is one way traffic. The boss talks, you better listen. Even Talk Radio is mostly very authoritarian. You better behave (misbehave) or you get spanked. Our listeners have become friends and come back all the time. Slowly but surely more and more friends are discovering this little corner of the world where we support each other unconditionally. You're perfect.⁴

⁴. Willem De Ridder, "Welcome To This Ridder Radio Station Where You Too Can Feel At Home"; <https://www.willemeridder.com/eng/page.htm> (accessed 23 February 2018).

His voice still pops up occasionally on regular radio stations. Resonance FM in London is forever coloured by an oft-recurring station identifier reciting this hypnotic refrain: "I don't care about you. I don't want to please you. I don't want to be something special, I just want to be in the moment, to totally let myself go ..."

When looking to provide a storyteller for a radio cabaret, they don't come more fantastical than this.

Gabi Schaffner

Radio Revolten Diary, 16th October

Needles and Pigs 2: Willem de Ridder⁵

Willem de Ridder's live show happened to coincide with his 77th birthday. Probably everybody with a great and long and famous past is eligible to highlight his (or her?) favourite reminiscences on such a day ... making elaborate jokes, and taking the audience onto a journey through one's biography.

De Ridder packaged the (his)story of media into a handy parcel of storytelling ... possibly not quite in sync with today's concepts of gender and cerebral hemispheres. Being intimate with the listener—does this necessarily involve asking him (or her) to masturbate with the phone turned off and the radio on? I am not sure whether I get this right, but there was also a story about motivating people to get into their cars and drive and then turn off the lights on the motorway. Maybe this was not literally meant to be realised. I pondered: Is radio making about exerting influence on the listener?

Part of this connection to action was definitely owed to de Ridder's Fluxus past. "Is there time? There is no time." But let us switch to the radio play that he very charmingly initiated with four members of the audience. Starting with a little pig that dreamt of going to the North Pole and a bird to accompany it, the story went on with a continually expanding set of characters, involving a coat-seller (later a dragon), a cinema visit, a princess, a prince (formerly the bird), a nightmare-come-true changed political landscape (Trump got elected), an excursion down a trap door, complete with a wardrobe to disappear in. It was funny and entertaining and surely de Ridder's proclamation that it needs only a set of people⁶ with preferably independent

minds to create a radio play proved true. Even though most classical tropes of fairytales were employed, the play had its moments of psychological ruptures and/or (dis)closures.

Yes Gabi you got it right, it was during *Great Oto Derby (GOD)*⁷—an episode of so-called Radio Directed Theatre performed for Dutch national radio VPRO—that listeners in their thousands turned out for a night of high adventure, after de Ridder had asked them to get in their cars and follow his directions. According to legend, the instruction to repeatedly flash headlights off and on again while driving on the motorway raised some eyebrows in parliament ...

5. _____ Gabi Schaffner. "Needles and Pigs 2: Willem de Ridder", *Radio Revolten Diary* 16 October 2016; <http://radiorevolten.net/en/needles-and-pigs-2-willem-de-ridder/> (accessed 23 February 2018).
6. _____ In this instance: Vivien Barth, Georg Nickol, Rodrigo Ríos Zunino and an unknown member of the public.
7. _____ For further details including a map of the route see Continuo's weblog (2009) *Willem De Ridder: De Grote Oto Derby*; <https://continuo.wordpress.com/2009/10/14/willem-de-ridder-de-grote-oto-derby/> (accessed 23 February 2018).

THE MAGIC LANTERN REINVENTED

After the fairy dust had settled on *Willem de Ridder's* theatre of the airwaves, the stage was reset for an altogether other version of the fantastical for radio, provided by a special delegation from the north of England. *Mary Stark* was performing for Radio Revolten at the invitation of art instigator *Glenn Boulter*, who by virtue of his credentials had been requested to bring two artists with him to Halle (the other being *Robin the Fog* who performed on another evening in the duo *Howlround* with Radio Revolten Radio producer *Chris Weaver*).^[chap. 13] As visually stunning as her performance was, *Stark* simultaneously managed to run up a radiophonic universe from film projectors, sewing machine, story and song.

Mary Stark – Stitching Sound by Helen Thein

Mary Stark casually enters the stage. First, she puts up a line, then hangs filmstrips on it as if they were laundry items. During these tasks, which look like the housework of a film archivist, she begins to tell a story about the dress she is wearing. She made it herself. She learned how to sew from her grandmother, who'd been a tailor in Manchester in the early 20th century. She loved to sing. But singing was forbidden during work. On the contrary, the noise of the sewing machines was terrible, the work was exhausting and arduous. Mary Stark sings. A simple song that she learned from her grandmother. The old mechanical sewing machine in the background is silent—until Mary Stark begins to take single filmstrips, sews them together, puts them into the waiting film projector and runs it. Suddenly, we are in a sound-picture-cosmos of sewing machine tackers, film projector noises and flickering freeze frames from buttons, threads and material.

The rhythmic sounds of machines become a symphony, the pictures cite the early Nouvelle Vague, from the time when cinema was just developing. Mary Stark begins to move faster

MARY STARK

BLINDFOLD BABIES
(FELIX RAEITHEL AND FELIX KUBIN)

and faster between sewing machine, film projector and the audience—some of whom she measures up with tape. The film strips are cut according to the length of the guest's arms, sewn, exchanged in the projector, laid aside and stockpiled. The Radio Revolten Klub has suddenly become a sewing workshop, a cinema and a factory floor. And we are right in the middle of a radiophonic-filmic cultural history of the textile industry. An unforgettable soft-as-silk evening in black and white.

Glenn Boulter continued the evening's cinematic theme by showing two films from the sound art and new music organisation Octopus Collective, which he co-runs in Barrow-in-Furness. Both were new commissions, created by the artist/filmmaker Helen Petts. One showed archive footage from the widely admired Octopus festival Full of Noises, and the other was a touching portrait of the sorely missed soprano saxophonist Lol Coxhill.⁸ Across a range of productions including their music and sound art festival, artists residencies, workshops and performances, Octopus have been consistently involved with the topic of transmission, engaging from the very beginning with radio artists such as Mobile Radio⁹ and Mark Vernon.¹⁰ Aside from developing performative broadcasts through their residency programme, in the past they have run a series of radiophonic commissions called F.O.N Air, and launched a swan-pedalo pirate radio station on the boating lake at their local park. Together with the art collective SoundCamp they have recently been developing a series of broadcasts and installing open microphones on Walney Island, and are currently planning a radio project for Barrow's indoor market.

8. _____ Lol Coxhill was also a willing radio collaborator, periodically dropping by to take part in Clingradio, the live six-hour Saturday evening show produced by Sarah Washington for Resonance FM from 2002-3.

9. _____ The collective radio art project of Sarah Washington and Knut Aufermann.

10. _____ Mark Vernon co-runs the esteemed radio art festival Radiophrenia.

CHASING WAVES IN THE DARK

One figure who is extraordinarily active in the radio art scene is the musical polymath Felix Kubin. Experimental radio drama (Hörspiel) is such an integral part of his life that his teenage daughter Bela Brillowska is already taking over the reigns of the family business. For his two live performances at the festival he worked with Felix Raeithel; as the act Blindfold Babies they created a high energy evening of radio delight through the haphazard playing of vinyl records and analogue synthesizers. It was nice to imagine that some of those listening at home were also partying alongside, as per the prior notification: "Es darf getanzt werden—im Radio Revolten Klub oder vor den Radiogeräten." Dancing is allowed—in the Radio Revolten Klub or in front of the radio sets.

Sightless Djing with the Blindfold Babies
by Helen Thein

Listening to the radio is seeing acoustically. We don't have an image of the person who speaks or sings. The bodies of those who are making music are also absent. We only have the sound which speaks to us, informs us, puts us to sleep or shocks us. In this however we remain passive. The only thing that we can do is to turn the radio off.

But what happens when the people who supply those sounds in the radio are themselves blind? When they reach into their record crates without knowing what will end up on the turntable. Does this work? Will it be danceable? And what does it look like?

Felix Kubin and Felix Raeithel aka Blindfold Babies invited people to a blind taste party in the Radio Revolten Klub. It all seemed familiar: stage lighting, DJ mixer, decks and two handsome guys standing behind it—donning red and yellow sleep masks over their eyes.

What happened then was radiophonic punk that froze every vinyl junkies' neck hair into a Mohican. These fragile vinyl records don't usually tolerate the touch of human skin. The sweat clings to the grooves, the grease attracts dust and renders the vinyl unplayable. But if you can't see then you have to touch, and feel for the centre of the record in order to place it on the turntable. The faces of some audience members contorted in pain when the needle struck the vinyl and skipped diagonally across it instead of settling into the merry-go-round, and worry lines appeared on their foreheads when a disc didn't fit back in its sleeve and was in danger of falling to the ground. And musically? It was a pleasurable evening with rare music pulled from the record crates of two music junkies who even when blindfolded demonstrated a fine sense for selecting trashy pearls out of the big universe of pop music. Along the way they sent up vinyl fetishism with visible pleasure and at the same time paid homage to it.

THE SUFFRAGETTE ELECTRIC

The artists Barbara Kaiser and Tamara Wilhelm, performing as the duo z.b.: ..., must be able to do cabaret in their sleep as it appears to be sunk deep into their collective memory. While they are busy spinning yarns into whichever form may take their fancy, even when veering towards kitsch they do not indulge in po-faced faux-irony, being self-confident enough to incorporate both popular and unpopular culture as equally legitimate material in their art. Kaiser and Wilhelm are deliverers of casual charm for effortless entertainment, and have been active for many years in diverse explorations of whacky performance art rooted in sound. Be it in the seminal Vegetable Orchestra, this longstanding trio-turned-duo z.b.: ..., or scaled up to full-on theatrical productions, they glide with ease from pop culture to sound art in a single breath and defy any expectation of their next move. On the one hand, we in the audience have to tune-up our minds to keep pace with the outpouring of invention, on the other we are offered ample pause for absorption of their humour or a poignant moment. They are apparently at ease with each of their tricks; such as swirling lights in balloons, becoming intimate with microphones, bursting out into cheesy pop songs, or donning protective goggles as they stride into the audience screaming at full throttle in an attempt to shatter wine glasses. So delicately balanced is their realisation of these finely-honed skits, that at any given moment you



may find yourself oscillating between laughing out loud and squeezing a tear from your eye.

On this particular evening in the Klub, z.b.: ... were representing the international radio art network Radia. They asked the evening's moderator Knut Aufermann to employ his talent for audience deception (acquired through broadcast experience) so that they could carry out a meta-joke—which proved to be so successful that they were themselves left feeling astonished. Before taking to the stage they had requested that he should announce their performance to be about the love letter exchange between Emmeline Pankhurst and Nikola Tesla. Aufermann played his role of earnest host, z.b.: ... played theirs by reading out the fictional letters; some of the audience were so excited to discover this unknown intimate connection between those contemporary instigators of votes and volts [ouch!], that it rendered them none the wiser to the fakery.

THE RINGMASTER TAKES HIS SEAT

And now for the moment many had been waiting for, yet without fanfare or drumroll the style-setter and pioneer of much innovation in the North American radio art scene quietly took the stage. Here was another cabaret veteran born to the discipline, possessing an innate ability to wrap an audience around his every rousing, rhythmic, word.

Gregory Whitehead

by Helen Hahmann

From somewhere I had heard that when Gregory Whitehead saw the performance space, he decided not to perform his recent work *On the Shore Dimly Seen*, a stirring account which reveals the cruelty of no-touch torture at Guantanamo Bay and questions the impunity of the perpetrators. Instead he decided to share one of his “greatest loves” with us, what he calls: live to air radio cabaret. I remember wondering back then if the Radio Revolten Klub was too comfortable and cosy for the cruel realities that we have to confront outside of this protected temporary radio space. At this phase of the festival, I badly wanted more explicitly political and revolutionary discourses to float into Radio Revolten.

From the shimmering off-space in the back, between the cushions of the armchair, I couldn't see Gregory sitting at the table on stage, a few loose papers laying in front of him. I didn't see the lively gestures of his arms and hands and the expression of his face while juggling Revoltian chants, scrabbling with words and singing with the audience. Only my ears were following the joyful “Schnipsel”, the snippets he came to offer. The first scrap was dedicated to the rhythm of the line “Radio Space is the Place”, which was the title of the two day conference during Radio Revolten he had just been attending. Whistling and whispering this line, it almost felt like he was putting a spell on the venue we had reclaimed as our radio headquarters, and on the people inside of it, by saying: “Rathaus drei muss leben!” (Rathaus three must live!).

The snippets of text Gregory Whitehead brought to the stage were very strongly connected to the festival, which was also reflected in his perception of Radio Revolten as an extraordinary radio place. A little later he wrote an email to me saying: “Was so inspiring for me, and indeed I am wearing my Corax hoodie right now, because I am reluctant to leave all of you, may be a while before I take the thing off!” Remembering his childhood as a soprano, during his performance he transformed the list of names of the conference crew members into the lyrics for a contemporary Gregorian chant. Back then I thought, “What a playful, unburdened and curious way to make radio, to mix up these two parameters, which seemingly would never fit together.”

The spontaneous improvisation of a melody was also the method Gregory chose to put his radio manifesto into sound, which he had written for Radio Revolten one month before the festival started. It was the first time that he read it out loud: “Let us imagine and then create, a radio art that hums and howls against the perpetrators of ecocide and torture.” Here was the reference to the clear political position radio will always have to recognise. It was this line which had made me listen to Gregory’s radiowork about detainee 063 at Guantanamo Bay.

Another part of his all too short 30-minute performance was a call and response exercise that involved the audience. As I only wanted to be a listener, it felt quite uncomfortable when Gregory encouraged the audience (including me) to sing. I awkwardly tried to pick up the melody. I remember, that in this moment I didn’t see how the radio transmission could profit from this murmuring untrained choir. But one section of the exercise got stuck in my head: “The problem with bodies is the reason for antibodies”, an inspiring deconstruction of speech into fragments and sounds, that leads deep into the discourse about voice, language, body and radio which Whitehead has been examining for decades.

When I listened back to the recording of Gregory’s performance, I noticed that I had missed the announcement of Anna Friz introducing him as a radio wizard and mentor for so many people in the room. I started to explore his radio productions, which opened up infinite horizons of how to think about radio and how to make radio in the future. His writings and aural demands, the hissing and the screams set free an immense radiophonic cosmos. Some of the energies accumulated during the festival were channelled into the *Songspiel for Radio Revolten* that I was fortunate enough to create with Gregory just after the sun had set on the festival. *Radio Unbroken!*

MARK WESTHUSEN

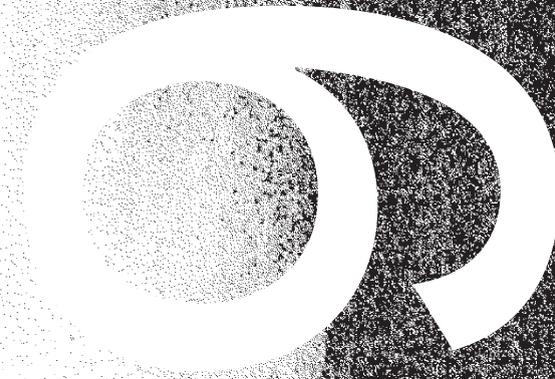


HELEN HAHMANN



Helen Hahmann, our festival Project Manager and a member of host station Radio Corax, was tempted to the stage herself as the final act in the festival's Klub, for a surprising post-punk / industrial noise performance in collaboration with Radio Corax and Revolten finance manager Mark Westhusen. They had decided to mash-up their two regular radio shows into a unique live event: *SUBstrakt feat. TINYA*. Hahmann was situated on the stage, surrounded by all the best-sounding building debris she could lay her hands on, which sufficed as a substantial array of makeshift percussion. In addition, she brought along various curios from her collection of instruments, a testament to her love of world music. This included a set of bones which were strung around her neck: to be played on the chest as if striking her own skeleton. Dressed in a mixture of workwear and outdoor gear which made her look like a "construction-site anarchist"—someone who wants to rebuild and play rather than destroy, she moved deftly between the tinkling of the bones and other small objects to the energetic bashing of great lumps of wood and metal. At the other end of the performance space Westhusen was engrossed in DJing records, gems from his treasure chest of iconic or rare post-punk tunes. There was a gangway which intersected the sideways-on seating arrangement, allowing for a symbolic connection to be made between the performers, and for the audience members to turn their heads from stage to DJ booth and back again as if witnessing some bizarre audification of the 1972 computer game *Pong*. Brave in its conception and surprisingly coherent in its artistry, the performance demonstrated that an unashamedly bold connection had been forged between the divergent spheres of the radio art festival and the "free radio" station ("free" as in politically and culturally independent from mainstream media, but typically much more focused on politics than aligned with art). This event was a fitting addition to the zany pop-up cabaret scene we visited upon the city of Halle for the duration of October 2016.

I hope that it has become clear, from the variety of work presented in this chapter and elsewhere in this book, that there is far more to performative radio than might at first be imagined. This dovetails neatly with a hard-won opinion that it would not be helpful to try to categorically define radio art, because of the artificial boundaries which would be set and the exclusions any particular definition may engender. I find it far more productive to do what we did in Halle: to create the conditions that may allow radio to breathe.



Participation

Helen Hahmann

A swarm. At the end of June, the community of Tingo Paccha from the central Andes of Peru comes together out on the Puna grasslands at an altitude of over 4000 metres. They are joined by guests from the surrounding villages. As many people as possible are needed for the annual chaccu ritual—in an enormous chain they wind across the sparse grass steppes, rocks and mountain ridges, to catch the local wild vicuñas (an ancestor of the domesticated alpaca). The animals are to be shorn and fitted with identification before being released again. Instructions are issued to the chain of people: “Move further apart, over here, down there, move up higher; make the chain tighter; faster now, run! Stop, hold on, go slowly; now clap your hands, make some noise, block the way, shoo them down the slope.” I attempted to follow the movements and logic of the swarm. Several vicuñas succeeded in breaking through the chain just next to me and escaping, almost as if they sensed that I was wholly unprepared for this role, helpless and not knowing what I was doing.



I was reminded of this collective experience when I first saw the choreographed movements of people taking part in the artist group LIGNA's *Movement Choir* on Universitätsplatz in Halle in October 2016. Just as I had experienced the vicuña drive ten years before in Tingo Paccha, I saw a group of people moving together, sometimes confidently, sometimes cautiously. Their function was a very different one, however. This swarm was embodying a voice on the radio. LIGNA's performative access to radio is one of several examples in which the collective was incorporated as a factor in radio broadcasting during the Radio Revolten festival. This chapter asks the question, what is the appeal of participatory radio experiences?



In the case of a live radio performance on stage it is performer and audience who look into each other's eyes. The listener has the immediate opportunity to take part in the radio transmission and to be right at the source of the production as part of an audience. How can the participation of the listener on site be prompted and encouraged? What is the

benefit for the listener on FM when the audience is participating at the broadcast venue? How can a radio performance on stage also enable the listener to be a conscious communicator? What if an audience is excluded from the transmission during a live performance?

For the radiomaker or radio artist, the presence of an audience greatly augments the spectrum of artistic possibilities. The artist in this special (and as yet still rare) situation has to strike a balance between the forces of manipulation and empowerment. Making an untrained crowd spontaneously participate in a performance assumes that the masses will follow the instructions blindly. It takes into account that there has been no time for the individual to prepare their participation, as is the case for LIGNA's *Dance of All—A Movement Choir* and to a certain extent for Alessandro Bosetti's *Minigolf* at Radio Revolten.

At the same time, giving parts of the performance to the audience, i.e. the public, also means giving away control. It is not clear exactly what is going to happen if an extra speaker is invited on stage and handed a microphone to contribute their thoughts to the performance. Willem de Ridder uses this thrill for his live radio drama *Instant Radio Play*, while the Demo Dandies rely on unreleased music productions that the public has handed over to them, retrieved "from damp cellars". These unknown parameters lend an exciting spontaneity to the performance; they give way to rough, timid, unpolished and shyly whispering voices. They insist on real-time radio, they unmistakably confirm place and setting.

According to these circumstances, the position of a radio artist or radiomaker on stage is very different to that of a producer in a studio, where the audience is kept at a distance by the FM signal. When the artist leaves the stage to share his or her practices and knowledge with the listeners in order to produce creative radio moments, participation reveals its purest face. Workshops from Víctor Mazón Gardoqui, Udo Noll and Lucinda Guy at Radio Revolten showed that seminars are the most liberating and embracing way to open up new collective horizons for radio. Overall, it can be stated that Radio Revolten made different suggestions for participatory radio practices. Let us take a closer look at the methods offered by the artists.

THE ARTIST AS MULTIPLIER

Three people lean over the shoulder of a person soldering an audio input onto a USB interface. The hands struggle to hold the tiny parts of the nascent FM transmitter. For days now, a group of ten people have sat ensconced in one of the upper rooms at the Radio Revolten Zentrale with electronics artist Víctor Mazón Gardoqui. Each of them is building their own transmission device which, according to Gardoqui's description, allows "self-managed, non-commercial and non-regulated wireless communications". As with the production of fanzines, mural paintings, poetry and musical expression, radio can be shaped by each one of us—from the transmitter to the broadcast. The most empowering and reflexive way of gaining a feel for radio is a hands-on workshop like Gardoqui's philosophical radio-soldering seminar *Trans/Mission*.



"I can't stop switching my little transmitter on. I'm addicted to it", said Jan Langhammer (Radio Corax radiomaker and member of the Radio Revolten Radio crew) after participating in Gardoqui's seminar, where he built a transmitter that can be controlled with a computer via a USB interface. The objective of the workshop was not only to understand how to construct a DIY transmitter, but also to explore the ways in which this module can be used artistically. The collective performance of the *Trans/Mission* workshop took place in the dim light of the Radio Revolten Klub. Balancing a laptop or smartphone and a radio receiver in their hands whilst changing frequencies and sounds on both devices, made the entry of the group into the venue an overwhelming moment. Sounds interwove, frequencies were captured and set free again. It was a highly empowering way of participating in radio, with control over all parameters in the hands of the radiomakers.

The performance offered an intrinsic view on mini-transmitter techniques and the strategies of artistic practice. The audience gathered throughout the performance space and found themselves in a dense radiophonic landscape. Some people kept their eyes closed, listening intently to the layers of the *Trans/Mission* atmosphere. You heard overlapping jingles from the seats in front of the stage, while the radios on the bar tables added music to the mix. The noisy, snapping sounds of a radio tuned to an empty FM frequency provided the droning backdrop to this collective performance. Morse code sizzled through the air.

Víctor Mazón Gardoqui's workshop was attended by many radiomakers from Radio Corax, who were running two stations during the festival: the permanent community radio and the temporary festival radio. Focused constantly on the realisation of 95.9 FM and 99.3 FM, the workshop interrupted their routines and made them change their role within the festival. Jan Langhammer recalls this experience one year after the workshop took place:

The first thing that comes to my mind when thinking back about Víctor Mazón Gardoqui's *Trans/Mission* workshop is a very tiny detail which made me smile for the rest of the day. Some years ago a good friend of mine gave me a book that was to have a big influence on my life. It was *The Dispossessed* by Ursula K. Le Guin, an utopian science fiction novel describing an anarchic society on a moon orbiting a planet, representing the competition of the two ideologies of the time when the book was published in 1974—Capitalism and Communism. One of the most significant properties of the anarchic society is the lack of possessions. Everything is shared by everybody. This concept is also reflected in the language of this society. If a person wants to have something which is used by another person, they do not ask: "Can I have YOUR scissors?" but rather "Can I share the scissors you are using?"

During Víctor's workshop there was a moment when everybody was just completely concentrated and focused on what he or she was doing, yet the atmosphere was calm and serene. I felt a great solidarity between all of the participants, culminating for me in the very moment when somebody asked me: "May I have the pliers you're using?"

This also corresponds to the subtitle of Víctor's initial presentation, *The Power and Value of Sharing Commons—Experimental trans/communicative techniques Process | Transmission | Collective*. In this presentation Víctor provided a very wide range of information, starting with the meaning of the word “radio” itself, giving a brief overview of the history of radio and wireless broadcasting, in order to explore the various possibilities of radio as a tool of art and resistance in the past and present. This opened up a wide horizon and created an atmosphere of joy and anticipation regarding the actual building of the radio transmitters and the things to come. Looking back, I think the most important and significant result of this workshop is not a physical one. Of course, in the end every participant had his or her own radio transmitter, which is a fantastic thing to play within its own right. However, in my eyes Víctor Mazón Gardoqui managed to transmit a great spirit of liberty and self-empowerment. This was already evident at the very beginning of the workshop, which started with a typical introduction round. This did not proceed in the typical manner, however, as Víctor responded to each and every person in a very unique way, namely by transforming the expectations of the participant into something constructive that could be accomplished during the workshop. And finally, when the moment arrived for thinking about the presentation of the workshop, an idea emerged very organically: we have as many transmitters as there are radio frequencies that can be received in Halle, with one of the Radio Revolten jingles claiming: “In October all other radio stations will be silent.” So this was what we did: Each participant was assigned one of the radio frequencies, resulting in a chaotic noise of overlapping sounds in the room. Then, one after the other, we would switch on the transmitters broadcasting only silence. We were literally silencing all the other radio stations, until there was complete silence in the room. And finally it was true: “Im Oktober schweigen alle anderen Radiostationen.” (“In October all other radio stations will be silent.”) End of trans/mission? Beginning of transmission!

The performance by the workshop participants in the Klub, which also was broadcast via radio thanks to the dummy head microphone *Leslie*, led the way for various further attempts by the radiomakers to try out different ways of broadcasting, inspired by the visiting artists. This empowering moment took place right in the middle of the festival on 16th October 2016. It energised the participating community radiomakers and offered inspiration for their own radio practices. A sensation that can also be projected onto the performance by the Demo Dandies a few days later, where the artists Felix Kubin and Felix Raethe—both from the broader cosmos of free radio FSK in Hamburg—together with the audience succeeded in closing the gap between performer and listener.

“We haven't received too many demos so far, but WHAT we have received is just what we were hoping for/what we suspected. It's gonna be great. Listen to the attachment”, wrote Felix Kubin of the Demo Dan-

dies to the Radio Revolten team a month before their performance. Highpitched Horst was one of the first submissions for the set of the Demo Dandies in Halle. His song *Feine Sterne* is a scratchy and staggering ode to the stars. The proposal to the audience was made public months before the radio concert: send in your demos and we'll play them live on the radio stage in Halle. Some tapes were even handed up to the stage at the event itself:



22nd October 2016

99.3 FM & Radio Revolten Klub, 8:57 p.m.

Ten or twelve different things have been handed onto the stage within only one minute. Some of them have wonderful inscriptions. Some feature mysterious photo collages. [...] I've got something here now, it's been pressed into my hand. We're going to play it untested. By Henry G. [...] Year: 1983, my goodness, that's an old recording. Genre: — Not saying, it's a surprise.

Demo Dandies played the demo tape by Henry G., 9:00 p.m.

Great, a real find! [Applause] Demo Dandies play demos and the audience claps. There is also a delightful little text on the CD. In it, Henry G says: 'Please go easy on this recording. I was 14 or 15 years old and played all of the instruments myself, none of which I could really play.' [Applause] We want people like this here! 'The recording was made without a mixer [Applause] and without drums and without guitar. Using the two cassette recorder method.'

In total, Demo Dandies deejayed more than five hours (!) of unheard tapes for an insatiable crowd in the Klub. Some of the tapes' creators were actually in the audience. People shouted for certain recordings, demanding that the DJs stop talking and get on with it (“Fangt an!”), or just went wild for this unusual mix of music.

23rd October 2016

99.3 FM & Radio Revolten Klub, 00:25 a.m.

Show us that you're here, for the listeners. [Applause and cheers] A great audience here. Expectant. Patient. It tolerates every last demo.

The radio audience must have felt some of the enthusiastic atmosphere that filled the Klub that night, when people were dancing ceaselessly to music never heard before or to the unreleased tapes of their friends brought to their ears through a magnificent sound system. The magic of fresh songs and the ecstasy which built up on the night made for a

unique listening situation. The cassette tape compilation¹ with a selection of these demos could never hope to recreate such a raw live situation.

Demo Dandies offered themselves as multipliers to bring music to the stage which had never previously been broadcast or released as a recording. They reduced their direct influence on the performance to that of a presenter of music. The only thing that infuriated some listeners was the monopoly of the DJs, their hands on the mixers, who decided which tapes would be played next. People could not wait to hear their tapes. This method of opening up a space on air for a demo tape community enabled listeners to automatically become part of a radio production.

Even more direct was the involvement of people in Udo Noll's *Field Radio* workshop, where the participants were invited to focus on the sounds heard when moving through a city or landscape. The acoustic perception of the place could be memorised through a sound recording. Udo Noll—now joined by a community of sound recordists—collects field recordings from places all over the world in his long-term project *radio aporee :: maps*, which has been running since 2006. The sounds are archived on a map on the internet. The extended idea for the workshop was to connect the immediate soundscapes of specific locations with radio. In the radio show in which the workshop's outcomes were presented, Udo Noll expressed the main impulse: "Is it possible to create spontaneous radio broadcasts as a daily—and ideally collaborative—practice?"

Listening closely and exploring sounds of places, imagining a scene not through a picture but through a soundscape, associating further acoustic layers to the soundscape you are in, thinking about which elements of the environmental sounds should be accentuated in the recording—all of these experiences, shared within the workshop group, made the participants listen more closely. One of them was Bernd Kukielka, amateur radio operator, co-founder and member of Radio Corax:

The dreams of community radio broadcasters come true in Udo Noll's field recording workshop! This is what I like about radio as a medium: anyone can do it, become a producer, a broadcaster. You don't even need a studio! Until recently we needed a recording device and a computer for editing, now it's even simpler than that. We have reached a stage of technical development where many people literally already have the necessary means of production at hand. Our smartphones (supplemented by cheap microphones) not only allow us to make decent recordings, but also to produce live broadcasts via streaming apps, so long as internet is available to stream the broadcast!

With *radio aporee* Udo Noll presents the technical basis for real-time broadcasts from all around the world. In the workshop he talks about the technical basis and we try out the options on our excursions through the city. We have the technology in our hands, now we need more suitable broadcasting formats.

The *Field Radio* that the participants created in Halle was transmitted live on the webstream of radio.aporee.org. The live session captured inter-

1. <https://demodandies.bandcamp.com/album/demo-dandies-3-halle-an-der-saale> (accessed 23 March 2018).

actions on the marketplace in Halle, at the Zoological Institute and on Domplatz, where the Lebenskreis-Brunnen (Circle of life fountain) was still splashing in the midst of autumn. In this setting, Martina, one of the participants, read a poem in Spanish while circling the fountain. This unique soundscape, with the crash of the water swallowing words, released that moment of recording and listening from time and place.^[chap. 10]

Meanwhile, Lucinda Guy was working with a group of children in the exhibition *Unsichtbare Wellen* at the Stadtmuseum of Halle. The British radiomaker handed out portable cassette recorders to the kids. In the year 2017 you would describe them as vintage cassette recorders, where you need a bit of strength in your finger to push down the black plastic play button; recorders that sound rough, like words spoken through a telephone; recorders that not only allow cassettes to be played, but also recorded. With this beautifully simple and immediate technique the kids explored the sounds of the museum, recording laughter, whispers and short interviews between themselves. They were largely able to manage the recorders on their own. They recorded, wound their tapes back, listened to what they had recorded and re-recorded when disappointed with the results.

As the workshop took place within the radio exhibition itself, the kids were surrounded by microphones, old radio receivers, a remote radio studio in operation, a recreation of a pirate radio studio from the 1980s, headphones for listening to historic radio moments and a vast amount of other material that could be touched and tried out. They even had the chance to zoom directly into the programme of Radio Revolten Radio 99.3 FM. For this purpose, the exhibition offered a microphone, connected to the festival frequency. If you pressed the button installed, as a signal of transmission for the radio crew at the remote Stadtmuseum radio studio, you could be switched on air at the main festival radio studio. And that's just what the kids did. They spoke to the listeners and presented their recordings, holding their tape recorders close to the microphone. This spontaneous, playful and haptic way of establishing contact via radio wasted no thoughts on a final product such as a finished radio show. The goal was to perceive and discover the possibilities of the sound that is around them every day, to explore their voice, the voices of others, and ultimately create their own tape, including their own colourful tape cover.

THE AUDIENCE AS TOOL

Right at the beginning of the final performance night, Sarah Washington made an announcement: "If you have a mobile phone, please switch it—[pause for a moment] on." The artist Lucinda Guy also got other people involved in making radio. Her performance *A Ritual for Revolten* was the penultimate intervention of the festival, embracing the two buildings of Rathausstraße, and everything that was in them, including the listeners on air, with a spatial ritual bidding farewell to the festival. Within that ritual, the audience, the artists and the crew were invited to assume a role for which they would need their voices and their mobile phones.

Starting the ritual in the radio studio up on the second floor of Radio Revolten Zentrale, Lucinda strode through the corridors, exhi-

bition rooms, stairways, the café, the garden and finally into the Klub with a microphone transmitting live on the festival frequency of Radio Revolten Radio. She entered the crowded Klub, where the audience was following her walk through the speakers. Dressed in a white costume reminiscent of a fairy, she requested the audience to call each other on their mobile phones. The phones subsequently generated feedback and produced interference noises. People held their mobile phones towards the transmission microphone and it sounded like a whole swarm of cicadas echoing in the performance space. The audience and its mobile phones were used practically as an interface, operating through the instructions of the performer.^[chap. 15]

ANNE-LAURE PIGACHE AND ALESSANDRO BOSETTI INTERVIEWED IN THE RADIO REVOLTEN KLUB



During the acousmatic live radio piece of Alessandro Bosetti, the Klub was transformed into a kind of laboratory, with the audience as test subjects. The stage was empty on the evening of 18th October 2016. All that could be seen was a lone mono-loudspeaker on a stand with a spotlight on it. The performance room with the audience was completely dark. What happened next tested the senses of the public and challenged the common expectations of a stage performance. No performer, speaker or singer turned up on stage. People were forced to rely on what their ears were hearing. Perceiving voices and sounds of the live performance, transmitted from—somewhere.

That somewhere was near, almost immediate: a man's voice describing people sitting in an airplane waiting for take-off; followed by a woman's voice starting to laugh and many more voices joining in, while the laughter got more and more abstract; a woman describing one of the guests in the audience in detail, her haircut, the position of her hands, every movement, every wonder crossing her face; the German words of this voice were accompanied by another speaker babbling in French; then followed a monologue in Spanish contemplating the bewildered audience. Where are these artists? How can they see into the venue? How many of them are there? What are they intending to do? The listeners seemed completely at the mercy of the will of the artists.

Bosetti's *Minigolf*, a commission by Deutschlandfunk Kultur in partnership with Radio Revolten, combines both composed and improvised

parts. One of the strongest impressions is the voice of a contemporary female singer from Neue Vocalsolisten, doubled up by Anne-Laure Pigache speaking the same words, as if the melodies had been extracted from the singing. The *Minigolf* piece refers to the monophonic radio technique of the 1930s. All sounds and voices are performed through a single mono microphone and are heard through a single speaker. For the public, the scene was quite unexpected. People eavesdropped on the voices, trying to find orientation during the performance. They were involved in the piece through descriptions of themselves that seemed to come out of nowhere. *Minigolf* challenged the usual listening habits and demanded the audience to engage with the unfamiliar, passive setting: getting involved in the radio performance unintentionally; withstanding the first impulses of instrumentalisation, as there was no chance for the audience to influence the course of the transmission actively; they could only let the acousmatic forces lead the experience.

A quite different form of eavesdropping on people in a radiophonic situation was created during the stage performance of the Dutch Fluxus artist Willem de Ridder. He invited four people from the audience to invent a live radio play on stage:

It's a beautiful game, one that I recommend to everybody. If you are sitting at home bored, change your role and say, 'John, what are you doing there, why are you opening the window, do you want to jump out', and then John goes, 'No, worse'. And before you know it, you are into an incredible story.

Willem de Ridder's performances are driven by the joy of telling stories. On 17th October 2016, the day of his performance at Radio Revolten and a few days after his 77th birthday, he looked back at truly intimate moments of his life, like having sex and the birth of a child. He remembered these situations through sound recordings, made right at that very moment.

When four volunteers from the audience stepped onto the stage they were put into a totally spontaneous, unprepared situation. A venture. A kind of improv theatre on air. And just as in improvisational theatre, this way of making radio is unpredictable; you never know beforehand if the story to be invented is going to be good or not. It reminds us just how poor and rudimentary our storytelling capabilities have become. Spontaneous, collective storytelling is a forgotten practice. Fundamentally it seems to be just perfect for radio transmissions. Through the method of spontaneous storytelling, Willem de Ridder awoke the memory of the traditional social function of storytellers. Back when the written word was less powerful, when it was the storytellers that carried the information, dancing between reality and fantasy.^[chap. 8]

The work of radio group LIGNA motivates an anonymous public to visualise the radio broadcast through the movements of their bodies. The group originates from the free radio FSK in Hamburg. Their basic proposition is that the situation of the person receiving is uncontrollable for the person transmitting, or as stated by Hans Magnus Enzensberger





and enhanced for the Radio Revolten Pre-Manifesto, “the future of radio is dirty”. *Dance of All* was performed by approximately 30 people in the central square of the university campus in Halle, and may have been performed by many more in their offices, car parks, gardens and supermarkets. The *Movement Choir* instructs the participating people through the radio, and the crowd incorporates the voice from the radio. What happens is that a crowd moves in certain ways in a public sphere. This form of intervention attracts the attention of the people passing by and makes them pause for a moment, maybe to reflect on the everyday situation around them. In this way the message sent through radio gains a much stronger impact and is better understood by the people receiving it.

This fascinating performance of *Dance of All* refers to the 1920s, when similar “movement choirs” were understood as social and political phenomena. The *Dance of All* breaks through the routines of public life and renders an anonymous crowd and radio transmission visible. What at first glance could be interpreted as a group remotely controlled by an artist is in truth the addressing of one of the main questions radiomakers should address: how much of my message broadcast through radio is understood by the radio listeners?

INCORPORATING RADIO

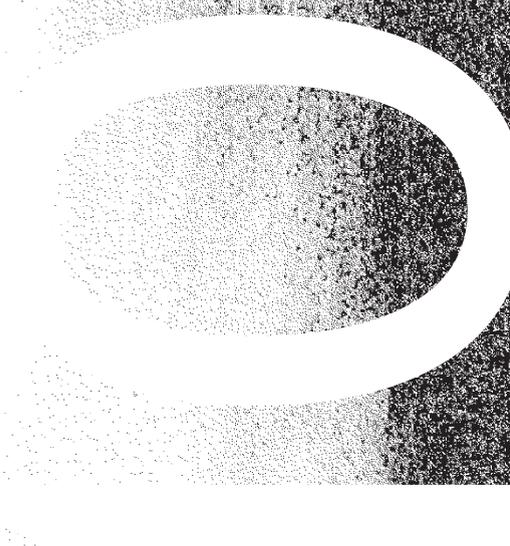
In the exhibition space of Jeff Kolar’s installation *Baby Monitor*: four narrow rooms are linked by opened doors. The centre of each ceiling features an array of suspended baby monitors, others stand in a semi-circle on the floor. They send oscillating frequencies back and forth between the devices in the four rooms. Gregory Whitehead lies on the floor wailing a harmonica into the baby phones, which are set to transmit. The signal is juggled back and forth in all four rooms like an echo between the transmitting and receiving devices. In the rear room of the installation, Anna Friz lies on the linoleum floor next to a baby monitor, also sending sounds through the devices with a harmonica. A guest from the audience steps a little closer to one of the hanging baby monitors and listens out for the signal to see if it is returned from one of the other rooms. At the same time, Annett Pfützner of Radio Corax paces slowly through the first room with the dummy head microphone *Leslie*. She holds *Leslie* close to the standing baby monitors and the harmonica of Gregory Whitehead. On 99.3 FM this acoustic scenario is overlapped by a second stream, transmitted from the exhibition room of Emmanuel Madan’s installation: the alto saxophone of Caroline Kraabel, the bass clarinet of Roberto Paci Dalò and my baritone saxophone. We stand opposite each other for a few minutes, bouncing tones back and forth, before we begin moving around the room. On air the sound of the woodwind trio blends with the shriek of the harmonicas, the breathing and sighing of Emmanuel Madan’s *Schwarz-Rot* and Jeff Kolar’s *Baby Monitor*.

The *Radio Relay Circus* opened up the exhibition *Das Große Rauschen* into an undefined stage, mixing up seven installations with 15 artists and two radio streams to create a unique radio broadcast mix. This closing ceremony for the exhibition was the culmination of participative radio practices performed during the Radio Revolten festival 2016. The *Radio Relay Circus* converted the Radio Revolten headquarters building in Rathausstraße into a huge radio studio, a radio studio more than 300

square metres in size, stretched over two floors, inhabiting (more than) seven different sound sceneries where the listener, the speakers, radio-makers and artists could move freely between one another. People walked through this physical radio space and realised with every step that radio is an intrinsic phenomenon, a condition that we are participating in with our bodies day by day. We alone decide when to allow other people to eavesdrop on our productions.

To understand more about the dimensions of participation and to explore the question of how a collective radio production leads to a notion of potential collective processes that can also shape and create society, further research and further propositions will be necessary. With regard to Radio Revolten, there are many more collective moments that would be worth closer examination. I would like to mention at least some of the further participative productions that emerged during Radio Revolten: the activities of Marold Langer-Philippson in the Hausmannstürme, where he invited listeners, artists and guests up into his radio studio in the tower and involved them every day in transmissions; Gregory Whitehead's cabaret radio show in the Klub, interacting with the listeners and involving the audience as choir;^[chap. 8] amateur radio operator Bernd Kukielka, who entered the Klub stage with Tonic Train for a live radio performance;^[chap. 12] the extra chair at each of the conference round tables, which invited guests to sit down and join in the discussion about radio while being transmitted directly on air; the radio dramas of Xentos Fray Bentos, who produced a series of shows with numerous Corax crew members engaged as actors, such as *Radio Revolten Bridge* with Udo Israel or his *NutzLosVersum* series.

All these examples of different approaches to making radio produced noticeable effects. For some people, whether they were radio-makers, artists or members of the audience, a single critical experience might have been sufficient to rethink usual habits of creating or listening to a radio broadcast: finding ways to disturb worn-out routines; bringing into transmission the notion of heavy white fogs and deep dark nights; shaking the airwaves with noisy blizzards, dadaistic recitations, unpolished interventions and croaky whispers. Participatory radio interventions make a clear announcement to the radio of the future: it is worth keeping practices in motion, questioning repetitions and at the same time developing a strategy to make the constantly changing, impatiently wriggling radio production a routine.



Walking

Tina Klatte

*Let's climb out of our bubbles now,
emerge from behind our screens,
walls, loudspeakers and headphones
and open our ears directly to the environment.
Let's go for another soundwalk.¹*

With a recording device and a windscreen on the microphone, Hildegard Westerkamp began walking through cities and the countryside in the 1970s:

Wherever we go, we will give our ears priority. They have been neglected by us for a long time and, as a result, we have done little to develop an acoustic environment of good quality.²

As a sound researcher in the World Soundscape Project,³ founded by musicologist and composer R. Murray Schafer, Westerkamp wants to develop sensibility for the diversity of acoustic environments. The soundwalk should open ears—from hearing to listening—and sharpen them for the acoustic qualities of the environment.

Lucius Burckhardt's strollology has something similar in mind by making the countryside and cities accessible (again) for perception through attentive strolls.⁴ The interest of the sound researchers at the World Soundscape Project focuses on the ecology of sounds and thus also informs their perceptions. With recordings from out in the field—field recordings—they work on depicting various environments as adequately as possible, cataloguing them, and documenting their changes. The result of their acoustic observations is: we move in increasingly lo-fi soundscapes, in overloaded soundscapes, that as opposed to hi-fi soundscapes, no longer permit a differentiated listening experience.⁵

Sound artist Christian Galarreta takes a series of soundwalks through the city, under the skin of urban lo-fi soundscapes to reveal their inaudible frequencies. With his composition *Electromagnetic Detritus*, he makes the waves of the city's electro-smog audible:

When we accept necessities generated by technological progress and its commercialisation, we are reasserting our mutant condition as urban beings. For example, we live surrounded by

1. _____ Hildegard Westerkamp. "Soundwalking", in *Autumn Leaves. Sound and the Environment in Artistic Practice*. Angus Carlyle, ed. Paris: CRISAP/Double Entendre, 2007. p. 49.

2. _____ Westerkamp, p. 49.

3. _____ cf. "The soundscape is any acoustic field of study. We may speak of a musical composition as a soundscape, or a radio program as a soundscape or an acoustic environment as a soundscape. We can isolate an acoustic environment as a field of study just as we can study the characteristics of a given landscape. [However], A soundscape exists of events heard not objects seen." R. Murray Schafer. *The Soundscape: Our Sonic Environment and the Tuning of the World*. Rochester, Vt.: Destiny Books, 1994. p. 7.

4. _____ cf. "That which we call strollology must therefore strive to simultaneously identify not only our modes of perception per se but also how these are determined, for only then will it be possible to arrive at new and unusual judgments on matters long since known." Lucius Burckhardt. 1995. "The Science of Strollology", in *Why is Landscape Beautiful? The Science of Strollology*, Ritter, Markus, and Schmitz, Martin, eds. Basel: Birkhäuser, 2015. p. 233.

5. _____ cf. R. Murray Schafer. *Klang und Krach. Eine Kulturgeschichte des Hörens*. Frankfurt am Main: Athenäum, 1988. p. 155.

imperceptible electromagnetic fields coming from our technologies of communication. We accept them as normal in our daily life despite the consequences they generate on our physiologies.⁶

In a similar fashion, the Radio Revolten Radio crew together with the artists Víctor Mazón Gardoqui and Rodrigo Ríos Zunino brought the nocturnal soundscape of the city of Halle to their listeners' ears. Equipped with detectors and broadcast devices, the soundwalkers explored the hidden sounds of the city: the radio splutters with the real-time chirping, buzzing and humming of trams, display boards, and telecommunication equipment. The fascination for electromagnetic waves that invisibly and inaudibly make up the ether as well as the technologies of their sonification become the material and subject of radio art in very different ways during Radio Revolten: as electro-smog in the antenna installation by Joyce Hinterding [chap. 12] or as musical material for example in the performance by Anna Friz, Jeff Kolar and Kristen Roos. [chap. 13] The radio as an auditive medium can bring the unheard outdoors to our ears thus bringing disregarded and overheard sound landscapes into focus. But beyond the puristic, ecological focus of soundscape pioneers there are also soundscape compositions that deal with acoustic environments, human perception, and their interplay: with his composition *Waking in Nima*, soundscape artist Steven Feld describes his individual aural experience of the morning soundscape in Nima, a neighbourhood in the city of Accra in Ghana; in his piece *Sonopolis*, musician and biologist Francisco López composes a city as organism from urban field recordings he collected over several decades; in *The Only Good System Is A Sound System*, the trio Soundwalk Collective crawls under the concrete skin of the Berlin music club Berghain to create a hauntological composition of desire.⁷

For a long time, field recording remained a specialty of individual sound researchers and artists who published their recordings on CD. In the 21st century the internet and the smartphone created new modes of production and distribution for acoustic observations. With the web platform *radio aporee*⁸ media artist Udo Noll has developed a world-wide sound map that, as a global field-recording archive, in a sense continues the

6. Christian Galarreta, *Raw Field Recordings II: Electromagnetic Detritus*, 2017, CD and online: <https://chrsgalarretaprojects.bandcamp.com/album/raw-field-recordings-ii-electromagnetic-detritus> (accessed 8 November 2017).

7. cf. Mark Fisher, *Ghosts of My Life: Writings on Depression, Hauntology and Lost Futures*. Winchester: Zero Books, 2014. "In hauntological music there is an implicit acknowledgment that the hopes created by postwar electronica or by the euphoric dance music of the 1990s have evaporated—not only has the future not arrived, it no longer seems possible."

8. cf. <https://aporee.org> (accessed 8 November 2017).

World Soundscape Project, while expanding the pool of contributors. Anyone can contribute their acoustic observations as long as the submitted material meets the criteria: the recordings should exclusively depict the soundscape as "purely" as possible, without interfering noises or edits.

On the radio aporee stream I can let myself as a listener be led randomly through the sounds of the global sound map, but the platform also responds to incoming live sessions: at Radio Revolten, I was listening to a group of radiomakers broadcasting live via a smartphone from the market square in Halle. A list of local consumer goods is being read on air as the first exercise during the workshop *Field Radio*, given by Noll. The smartphone functions here as a barrier-free transmitter, which Udo Noll is convinced can create a Brechtian "communication apparatus"⁹ 2.0.:

With every-day technology, a mobile phone, you can turn any situation out on the street into a radio broadcast. It is possible to create spontaneous radio broadcasts as a daily practice, and ideally a collaborative practice.

Yet this utopia, turning listeners into broadcasters and vice versa, has restrictions, as one participant notes: Noll strictly limits access to his platform; only the users admitted by him can broadcast live. On the other hand: if everyone is broadcasting, who is listening? And, what is actually being broadcast?

When in 1927, shortly after the establishment of radio stations, Brecht called for the direct transmission of public life, meaning the Reichstag parliamentary sessions and above all the "great trials", his concern was the lifting of censorship and the possibility of partaking in the process of the rule of law, which should take priority over a mediated public sphere.¹⁰ In the present media reality this potential of the medium, to make the becoming of the future—and even its creation—directly accessible, is realised either as a staged reportage moment or as excessive live streaming, eviscerating the allure of the immediate to a state of idleness. "It is like Facebook for sound", summarised a participant of the field radio workshop, "I didn't even feel like I was on radio". Cultural technologies for real-time broadcasts have already been established: live streaming on Facebook and YouTube, or sending voice messages via WhatsApp are everyday practices. But especially Facebook and YouTube show that these technologies don't necessarily give voice to diversity, rather they primarily serve to publicise the individual as a consumer (and producer) of the dominant order (and also the interception of any attempt to disrupt this reproduction).¹¹

Radio aporee has limited its focus to classic field recordings and thereby to the quasi-objective depiction of soundscapes. Yet real-time radio from the field could also be an



9. "Change this apparatus over from distribution to communication. The radio would be the finest possible communication apparatus in public life, a vast network of pipes. That is to say, it would be if it knew how to receive as well as to transmit, how to let the listener speak as well as hear, how to bring him into a relationship instead of isolating him. On this principle the radio should step out of the supply business and organise its listeners as suppliers." Bertolt Brecht. "Der Rundfunk als Kommunikationsapparat. Rede über die Funktion des Rundfunks", id.: *Schriften zur Literatur und Kunst 1, 1920-132*. Frankfurt am Main: Suhrkamp, 1967. p. 134.

10. "I think you have to come closer with the apparatuses to the actual events and not be limited to reproductions and presentations." Bertolt Brecht. "Vorschläge für den Intendanten des Rundfunks", *ibid.* p. 124.

11. The dramaturgy of post-democratic theatre "has learned to incorporate the criticism and all forms of protest into its order. It doesn't seem to matter at all what is communicated. It depends on as many people as possible sending and receiving information. Everyone should promptly report on their actions, their desires and their anxieties. [...] The web of being, things and their relationships creates a surface of transparent points that summarises who they are, what they like, their momentary emotional state, what they consume or they avoid. [...] The patterns created by the masses of information creates the basis of the maps. It provides oversight of a terrain in which conflicts are neutralised by visibility and designation. Movements are supposed to be recognised, rarely to stop them, more usually to facilitate and speed them up." Hans-Christian Dany. *Morgen werde ich Idiot. Kybernetik und Kontrollgesellschaft*. Hamburg: Edition Nautilus, 2. ed., 2014. p. 21.

UDO NOLL, FIELD RECORDING



opportunity to publicise a personal view on the environment and its affairs.¹² That would mean leaving the claim of objectivity behind (that of the archivist, cartographer or ecologist) and dedicating oneself to the field with one's own focus without reproducing the modes of self-presentation that dominate social media.

12. "Being seen and being heard by others derive their significance from the fact that everybody sees and hears from a different position. This is the meaning of public life [...]" Hannah Arendt. *The Human Condition*. New York: Doubleday, 1959. p. 52.

EN PASSANT

*I wanted you
And I was looking for you
But I couldn't find you
I wanted you
And I was looking for you all day
But I couldn't find you, I couldn't find you*

*You're walking
And you don't always realize it
But you're always falling
With each step, you fall forward slightly
And then catch yourself from falling
Over and over, you're falling
And then catching yourself from falling
And this is how you can be walking and falling
At the same time¹³*

The serious flâneur in Paris in the 1840s strolled with a turtle on a lead, reports director Elke Schmid of the Écoleflâneurs, a school of promenading she founded together with the performer Thomas Schütt in Berlin.¹⁴ Together they initiated Jan Langhammer from the Radio Revolten team in the art of strolling: with a walking stick "that one can operate playfully", explains Thomas Schütt—and otherwise, without mobile phone, without measurable time, without cigarettes, without money, and, above all, silently "to stay in your own film", says Elke Schmid: "Let yourself be led by the city." The radio crew follows Langhammer's silent exercise in promenading perception for a while; yet without having insight into his perceptions, we decide to let him carry on his way unheard. "Écoleflâneurs use the opportunity—with minimal effort, without interventional tendencies—to enter into and move under the skin of the public sphere and create some fresh air there", explains Thomas Schütt. And this is precisely what we used the last hour of Radio Revolten Radio for:

If we think about the implications of what we're doing here ... if thousands of people around the world were going about and depicting their nocturnal cityscape in such a way, you could save a lot of money on travel.

13. Laurie Anderson, *Walking and Falling*.

14. Marold Langer-Philippsen invited Écoleflâneurs for a couple of radio shows for his oracle radio. On 7 October 2016 Écoleflâneurs invited listeners for a joint stroll through Halle, cf. <http://radiorevolten.net/en/event/radioradar-meet-the-ecoleflaneurs/> (accessed 11 February 2018).

The voice grins audibly, moves along, grabs the megaphone and sounds noisily through the night streets of the city of Halle. On air, we eavesdrop on the public, but our steps seem to be the only ones on the pavement, our voices remain unanswered.

So the radio is then a substitution, if the city is not a city that never sleeps ... to always have something whispering ...
Are you trying to say: I turn the radio on when I can't stand the silence?

We deliberately miss our destination—the transmitter of Radio Revolten waiting to be turned off in the tower of the former Department of Physics. We turn into an alley, discover an underpass and practice a full-throated, echoing yodel. Going our own ways and coming together again, we lose ourselves in sounds and thoughts. Without a "where to" and against the rhythm of the city, the flâneur traverses the urban. Not demonstratively, not with the intention of a dandy—even if they do stand out and disturb when their gaze rests too long on the faces of passers-by—rather in that they make their unintentional, idle perambulations through the city into a setting for a change of perspective, for altered perception. The "counter-movement" generates alienation¹⁵ and the literal "letting oneself go" allows one to fall upon what one encounters. "What kind of clan or aberration is it that doesn't want to search, but always only find? We fatalists of chance even believe: Search not, and you will find. Only what looks upon us do we see. We are only capable of—that which we are not responsible for", writes the Berlin pedestrian pioneer Franz Hessel in his Paris diary.¹⁶

One night I encounter sounds on Radio Revolten Radio until the crack of dawn, *12 Hours in the Life of a Fox* by Antoine Bertin. The microphone attached to the animal registers its path and opens a special perspective on the environment through movement. I listen to the panting from the radio receiver on the edge of the bed, enter into the undergrowth, crawl into a den, and then into a dream, and when I awake I'm fulfilled with the nocturnal foray. Stopping, letting go, diving into listening—and looking up again, perceiving the surroundings differently. I listen in passing and my perceptions take a walk, just like the flâneur writer. For when Fernando Pessoa walks through the lower city of Lisbon (*The Book of Disquiet*) it concerns Lisbon just as much and just as little as Jack Kerouac's road trips across the USA concern San Francisco or L.A., or Walter Benjamin's drug induced walks concern Marseille (*On Hashish*). The surroundings are discovered in the interplay with oneself, which is supposed to develop in and through being under way. The stories also tell of the movement and make it comprehensible; they are neither chronological nor prepared narratives that must only be performed, but discoveries in exposing the self.

The drops of the sweltering greenhouse and a quiet gurgling can be heard in the background as Hartmut Geerken tells of his experiences

15. A self-alienation that is already completed in the feeling of being lost before it could be proclaimed and, as a consequence, the dislocation occurring as a (re-) localisation. This is how Edgar Allan Poe reflects the distanced, observing attitude of the flâneur and the hounded loneliness of the big-city inhabitant from which it may have arisen, in his short story "The Man in the Crowd" from 1840.

16. Iris Bäcker. 2010. "Berlin-Bilder von Franz Hessel und Walter Benjamin. 'Flanieren' im Raum und in der Zeit", in *Deutsch-russische Germanistik. Ergebnisse, Perspektiven und Desiderate der Zusammenarbeit*. Kemper, Dirk, and Bäcker, Iris, eds. p. 107; <http://www.dirk-kemper.de/docs/onlinepub/Iris%20Baecker%20-%20Berlin-Bilder%20von%20Franz%20Hessel%20und%20Walter%20Benjamin.pdf> (accessed 8 November 2017).



with the structures of public radio: he had wanted the “speech” of the northern white-tailed bumblebee that he explored in his piece *bombus terrestris* to set in during the evening news—“but I wasn’t allowed to”. I invited Hartmut to a morning walk through the greenhouses in Halle’s Botanical Garden, which were permeated by the waves of his sound works during Radio Revolten. We have a conversation live on air—while walking, standing, looking. A conversation that suddenly becomes concentrated, the voices leaning into each other and forgetting the surroundings while the ambient noises provide pleasant evidence that we are not in the studio—and then I look up and discover the mimosas and the room opens up again, sneaking back into our conversation; from the “touch-me-nots” we come to the cotton salad that burns the tongue, and from there to the mushrooms that were a means of survival for Geerken as a child. The extension of the radio studio to the “outside” provides a conversational situation—downright banal in its everydayness—that allows a spontaneous back and forth of topics and paths, led naturally by my interests while also leaving space for the sounds of the environment (the unexpected appearance of bird warbles) as well as allowing broadcast time to be led by chance and permitting us to be quiet now and then without an alarming silence immediately breaking out in your radio.

How would it sound if the inadvertent discoverings of the flâneur were used consistently as a narrative strategy for the auditive (real-time) medium of radio? Around 1930, the writer Franz Hessel brought the art of flâneuring from Paris to Berlin. In aimless wanderings, Hessel turns the big city into text. En passant he reads the urban, yet not for the sake of the surroundings, but for reading and writing. In the self-alienation, the counter-movement, the chance of the wandering gaze captures signs that Hessel reassembles in his “Picture-book in Words”.¹⁷

Strolling is a kind of reading of the street, where people’s faces, displays, shop windows and café terraces, trams, cars and trees turn into many equal letters that form words, sentences and pages of a continuously renewing book.¹⁸

On foot Hessel discovers in unintentional deconstruction a form of collage, as William S. Burroughs even more radically imagined thirty years later a text production method: “The Cut-Up Method”.¹⁹

You cannot will spontaneity. But you can introduce the unpredictable spontaneous factor with a pair of scissors. [...] Take a page of text, cut it into four parts, and reorder the four parts. [...] Cut-ups are for everyone. Anybody can make cut-ups. It is experimental in the sense of being something to do.²⁰

Voices from the studio comment on our on-the-road broadcast in the final hour of Radio Revolten:

If you have used any electronic devices in the past thirty days, please switch them off now.

The live streams from the city space are complemented by voices from the studio. Anna Friz, Jan Langhammer and Elisabeth Zimmermann form another level as “producers” in the studio space. With fingers on

the controls, they decide what the listeners get to hear, they select and intervene: “Ready for take off, or landing—as you wish.” On the different levels of production of mobile radio (mobile broadcasters and “producers” of the broadcast), the unintentional observing and the deconstructing “gaze” as methods of creating new perceptions can bring forth fruitful moments—in the sense of the unpredictable and unheard of—when they are employed, or permitted, not as a means unto themselves but as initiating moments. And finally, of course, a final level is formed by those receiving—the listeners—who, listening “unintentionally”, can assume a focused-unfocused position to what is heard.

SOUND WALKS

*I’ve come to hear sound as a movement that gives us each other, as both gift and threat, as generosity and agitation, as laughter and tears, marking listening as a highly provocative relational sense.*²¹

On the penultimate night of Radio Revolten the audience was invited to an auditory experience en passant, *Radio Relay Circus*. The Radio Revolten headquarters opened itself completely to the ear and to the motion of sounds. A festival of hearing and being heard. Inspired by John Cage’s score for *Musicircus* from 1967 and John Bisset’s *Relay* festivals, organised by the British musician which ran for a decade in London from the 1990s, the Radio Revolten headquarters becomes an animated space of sound: invited artists and musicians intervene in the exhibition *Das Große Rauschen*. In each room an interaction occurs between those sounding and the sound of the installation: Gregory Whitehead and Anna Friz communicate via harmonica over the baby-monitor network that Jeff Kolar had installed across four rooms; Caroline Kraabel and Helen Hahmann bounce saxophone notes to each other amongst the non-verbal sounds emanating from Emmanuel Madan’s installation; Chris Weaver and Mark Vernon sit across from each other as if in a sound duel—equipped with tape recorder, mixer and all sorts of sound tools, they interrupt the humming sounds of DinahBird and Jean-Philippe Renoult’s installation. The traditional categories of musical production play no role in the *Radio Relay Circus*: there is no written score,²² the performers are not necessarily professional musicians, the stage is everywhere, and the prevailing simultaneity of events counteracts the expectations and desires of the concert-goers. The audience of the extended sound installation can decide which sounds they turn their ears to, move amongst the rooms and mingle, take a drink at the bar, and pause in the staircase for small talk. The recipients are invited to be playful with perception, which they have autonomy over. Through permanent self-localising in the wandering sound space a feeling of lost-ness can develop. Analogous to the movements between dance floors at a music club, uncountable bodies move about, from room to room, searching—or letting themselves be led by the sounds. And there is plenty of time for this; the sounds wander through the space

21. _____ Brandon LaBelle. *Acoustic Territories: Sound Culture and Everyday Life*. New York, London: Continuum, 2010. p. xxv.

22. _____ The score for *Radio Relay Circus* was told to participants by instigator Knut Aufermann: Musicians: Play and move around freely (unless tied to loudspeakers), find new groupings and interactions.

Audience: Move around freely and create your own mix. Radio technicians: Move microphones around freely and create your own on-air mix in the studio.

Duration: 3 hours (start: 20:00, end: 23:00)
Personnel: Anna Friz, Gregory Whitehead (voice, harmonica), Caroline Kraabel (alto saxophone), Helen Hahmann (baritone saxophone and Talerschwingen), Roberto Paci Dalò (clarinet, bass clarinet), Hannes Lingens (percussion), Chris Weaver, Mark Vernon, Sarah Washington, Knut Aufermann (electronics), Fari Bradley (concertina), Rodrigo Ríos Zunino (spinning radios), Julia Drouhin (beer bottles, voice), Annett Pfütznier, Georg Nickol, Jan Langhammer, Marold Langer-Philippsen, Tina Klatte (radio microphones and mix).



for nearly three hours. Mingling myself amongst the wanderers, I stop in the installation by Steve Bates, the room which Knut Aufermann now fills with feedback loops, when the radio artist Julia Drouhin comes up close to my ear and produces a bright-echoing soft sound using a glass bottle, which I lean towards curiously. The radio broadcast also makes the simultaneity of events audible. With the wireless dummy head microphone Leslie and a smartphone as a second wireless mic, we move through the sound space while the streams are merged in the studio into a single composition.



INTERVENTION

*Self be your lantern
Self be your guide –
Thus spoke Tathagata
Warning of radio
That would come
Some day
And make people
Listen to automatic
Words of others ...*²³

A street musician crosses the road junction, she plays her saxophone, hums, sings, stops at the light and says aloud to herself: “I’m waiting for the green man”, then she greets: “Hallo, hello”. This is how a passer-by could have interpreted Caroline Kraabel during her on-air walk at Radio Revolten. In her weekly programme *Taking a Life for a Walk* on Resonance FM the musician walked through London for several years with one hand playing the saxophone and the other pushing a baby buggy: “Everyone should do this, making music while they go about their everyday lives.” In her Radio Revolten performance *Going Outside* she traverses the city of Halle with the wide-eyed view of a foreigner. On her way from Halle-Neustadt towards the centre she turns the city into a resonance chamber, answering to the sounds of the city with her instrument and enticing sounds from it.

^{23.} Jack Kerouac. *Mexico City Blues (242 Choruses)*. New York: Grove Press, 1990. p. 119.
^{24.} LaBelle, p. 90.

Claiming an informal space within the everyday, the walker might be said to push against ‘official’ scripts through the force of crossing the street, or side-stepping the crosswalk for an alternative path. [...] The individual body in this regard is not so much a resisting agent, but a movement in continual negotiation within surrounding patterns. From this perspective, the small space of the sidewalk offers a generative stage for narratives that unfolds this process while bringing into relief new configurations, sudden excitement, arguments, an entire promiscuous and difficult economy at the heart of public life.²⁴

For the radio listeners and the passers-by who cross her path, the pedestrian embodies a movement, her movement, that occurs in harmony with the everyday motions of the city. A sonorous strolling, that becomes instantly audible, for a twofold audience that follows her on-air and meets her on-the-road. The chance may thereby occur that listen-

ers cross paths with Kraabel and become involved in the happening. In a completely different manner, Ralf Wendt's *Hauser* performances are also a making-visible and interrogation of movements in public, and the creation of a counter-public moment:

What if Hauser is one of us? Who are we then?
 If he is free, are we then prisoners?
 You are looking for the exit
 You believe that Hauser will show you the exit
 Maybe this is correct
 But the exit is a dead end
 Hauser is a freak of civilisation
 Without its fears, he wouldn't exist
 Well, you believe he is a saviour—but forget it

In the narrow staircase of Hausmannstürme an “uncivilised” being is presented to the spectators: Hauser, who suddenly escapes and, vaulting the spiral stairs, disappears screeching and clanging noisily into the night streets. A listening space opens up in which uncontrolled chaos reigns, there is shouting and cheering, a progression of Hauser fans passes by, song and bird screeches. With small radios to their ears, the spectators try to follow the performance of Ralf Wendt and Larry Jones that, at this moment, is forging its way through the half-darkness of the city and the radio.

RALF WENDT, HAUSER, IN THE WOODS



Yet two blocks further on, the performance is only audible, and the followers are left behind as listeners—the current events emanating from radios through the almost empty streets.

Whoever now has the window open and the radio turned on is going to participate in a pitiless intervention into the public order, whose real stage is the city and radio space. “The rich undulations of auditory materiality do much to unfix the delineations between the private and the public”,²⁵ and the radio as an auditive medium penetrates ^{25.} Ibid. p. xxiv.

RALF WENDT, HAUSER, IN THE WOODS



into the most private spaces while simultaneously generating a mass public sphere. Wendt's interventions operate on the borders of these imaginary yet authentically effective spaces. With a somatic-sonorous presence firing off “foreign materials”, recordings from past moments and voices and sounds from other realms, Wendt hacks public space. In radio space additional voices and narratives are audible, which are also played “back” through the audience's radios into public space. The invisible generation is realised for a short moment: “What we see is determined to a large extent by what we hear”, writes William S. Burroughs in the 1960s to describe his vision of the “invisible generation”, that understands sound recording devices as everyday tools of intervention: “when several hundred tape recorders turn up at a political rally or a freedom march suppose you recorded the ugliest southern law men several hundred tape recorders spitting it back and forth, you now have a sound that could make any neighbourhood unattractive”.²⁶ Hauser (“the freak of civilisation”) lays out vociferously and mercilessly in a head-long rush the contradictions of the desire for freedom. “Yes, we are prisoners in the prison of our own creation. What would happen if Hauser showed that you don't need to build a prison at all?” asks a voice from the radio. In Wendt's *Hauser* performances, a defence of private space as refuge that permits a fearless intimacy meets the decisive refusal to rob the public of the private.²⁷

^{26.} William S. Burroughs. “The Invisible Generation”. WUSTL Digital Gateway Image Collections & Exhibitions; <http://omeka.wustl.edu/omeka/items/show/9535> (accessed 11 November 2017).

^{27.} “Compared with the reality which comes from being seen and heard, even the greatest forces of intimate life—the passion of the heart, the thoughts of the mind, the delights of the senses—lead an uncertain, shadowy kind of existence unless and until they are transformed, deprivatised and de-individualised, as it were, into a shape to fit them for public appearance.” Hannah Arendt. *The Human Condition*. New York: Doubleday, 1959. p. 46.

recording and transmission devices could make space for renewed communication within society; but of course not without a prior complete reset of the traditional ways of making radio—manner of speaking, moderation, handling of time and duration, and more.

Marold Langer-Philippson

off with the unbearable german radio vocabulary. clear view into

the alphabet soup. off with this crap linearity. i expand discretely into all directions. to reach a goal is not my aim. for what i have in mind i am all but an alternate host, a latchkey child, a quarterhuman.

Hartmut Geerken

When I make radio I'm not interested in you at all. I cannot look into your body to find out what you feel or in your brain

to find out what you feel, or in your brain
to see what you think. All I can do is go
into my own body and brain. When I
totally enjoy what I am doing, you will too.
Feelings never lie. When I am totally
into it, you are too. Time disappears
and nobody gets tired.

Willem de Ridder

Radiophonic technology is
accessible for beginners and
provides a wide spectrum

of possibilities to invade
invisible territories. Radio
can be a transmission vessel
for uncensored content or a
musical instrument to occupy
public spaces and create
agoradios.

Julia Drouhin

Looking towards the present of
ecological-political disaster, I can only
think of radio short wave or whatever

THINK OF RADIO, SIMILAR TO WHAT EVER, as a strategic piece of technology. What if the internet was gone? What if the telecommunications grid collapsed in certain places? Whenever there's a disaster—earthquake or the such, a radio network is always a crucial emergency tool to be put in place. Antennas, wave, receivers, devices, battery, codes. Wireless and wired. I cannot think of radio art as separate

from this. If radio art is isolated it becomes an anecdote. Radio art means to continue the experiment with technology.

Leandro Nerefuh

Radio is radiation. It is not limited to radiophonics using AM, FM, DMB and so on. Radio means all sorts of radiation from artificial “radio” transmission to natural thunder from human brainwaves

critique, from human brain waves to catfish's electricity, from a microwave oven to car's VLF noises and so forth. Radioart is an unlimited way of dealing and playing with radiation. Critical, deconstructing and hyperising approach to the existent art-forms of radioart cannot remain in the field of "aesthetics" any more. It has to be involved in ecology,

micro-politics and the philosophy of technology, too.

Tetsuo Kogawa

The future of radio is dirty. While the digital mode of production tends to clean the sound, radio will still intervene in everyday situations. This intervention is not controllable; it is a dirty situation. The materiality of the dispersed voice, dispersed sounds, dispersed noise produces

sonitus, whisper otherwise produces a rest, a remainder, strange to its surroundings, something that is not natural—and not artificial, something uncanny, living and not living at the same time.

Thus, something unexpected could become organised by radio, unknown movements, a different mode of listening, the pleasure of dispersion: the constellation

of listeners becomes an association, a different way of organising the social relations, a different mode of production, the means do not serve an end, but become part of a play.

Ole Frahm, LIGNA

When we say radio, we mean all the frequencies on the electromagnetic spectrum that can be utilised for the

transmission of information.
When we say radio, we also mean all the little silences and extraneous static in between these frequencies.

In a utopian ideal everybody knows how to build a radio set and how to use it to receive and transmit information. In a utopian ideal, communication

will be democratised and there will no longer be any need for centralised commercial media distribution networks.

Ilya Rogatchevski

& Laura Michelle Smith

I wish for radio transmissions (analogue and digital) that broadcast silence. This could be real silence from real spaces such as in “The most beautiful

(such as in the most beautiful
train journeys in Germany”)
or artificial silence, to which if
necessary, every now and then
a whispered “You are hearing
nothing” is added.

Rochus Aust

Space is STILL The Place!

Famoudou Don Moye

AI

Up in the Air

Ralf Wendt

Standing at a height of 646 metres before it collapsed in 1991, the transmission mast used by the Warsaw Radio-Television was the tallest man-made structure ever built and was duly noted as such in the Guinness Book of World Records; it took until 2008 before it was superseded by the skyscraper Burj Khalifa in Dubai. The Warsaw Radio Mast was erected in 1974 at Konstancinów in central Poland, with a transmission power of 2,000 kW to serve the entire Polish community throughout Europe on long wave.

Terrestrial transmission of radio waves has always necessitated the need to overcome physical obstacles to the signals, such as large buildings in urban environments. The most prominent tall buildings possess this crucial quality—signals need an unobstructed path just as you need a vantage point on a high tower to be able to see to the horizon. If a chosen transmission site is more than 500 years old, as is the case with Halle’s Roter Turm (Red Tower)—a symbol of civil pride in the Middle Ages, then the fascination with making radio can quickly turn into a melancholic romanticisation. Imagining that Halle’s century-old buildings might have been planned as transmission towers, opens the mind to thinking about radio and the public sphere.

HAUSMANNSTÜRME

The Hausmannstürme, a pair of towers in Halle’s market square which are part of the Market Church, are named in reference to the job of the warden—“Hausmann”. This was a live-in post for someone to watch over the city from a lofty height and sound the tocsin if there was a fire, a municipal job from the 16th century that was necessary to remain continuously occupied. One of the desirable qualifications of the warden was the mastery of a brass instrument to accompany the evening chorale. Although no tower watchman has lived high above the city since 1916, the musical tradition is still maintained by a tower brass ensemble. For Radio Revolten in 2016, a radio artist occupied the former living quarters of the warden’s family, whose rooms at the top of both towers

were connected by a narrow outdoor bridge, where the remains of a swing mounting bear witness to the life of the watchman's children. Marold Langer-Philippen settled into the south tower as Radio Oracle and broadcast daily for one hour beginning at 5 p.m., from perhaps the most exclusive radio studio in the world. Whoever wanted to visit the Oracle had to climb 225 steps to reach the unexpectedly cosy little studio, in which instruments, a computer, and books in 20 languages filled the cramped space. Framed by jingles scored for the occasion by the Viennese composer Rupert Huber, ringing out at 5 and 6 p.m. on Europe's largest carillon from the neighbouring Roter Turm, special guests could pose their questions to the Oracle. In addition, the Oracle further broadcast his musings as a webstream for nearly the entirety of each day.

Festival diarist Gabi Schaffner remembers her visit vividly:

Two walnuts and four acorns collected from the Botanical Gardens in Halle became my set of questions for the Oracle. What's really in them remains unknown as we didn't break them open. Instead, our musings wandered from colours (including *The Colour Out of Space* by H.P. Lovecraft) and smells to the way water spirals out of a drain, GPS programming, parallel magnetic fields influencing the brain to the Australian bush, and moved basically around the experience of getting lost or walking in the 'wrong' direction.

The Oracle told me, though, that all directions are good. I went down the steps, crossed over to the record shop around the corner and wasn't seen for the remaining hour.¹

1. Gabi Schaffner.
"At the Oracle", Radio Revolten
Diary 9 October 2016;
<http://radiorevolten.net/en/at-the-oracle/> (accessed 26 February 2018).

Slovak author Michal Hvorecký recalls his sitting with the Oracle:

Marold invited me to the ideal place to get to know the city. He installed his radio opposite the Red Tower, 43 metres above the market square. Martin Luther preached three times in the church in which the tower was then a part of, furthermore during the Baroque era Halle was a centre of Protestant pietism, which Hermann Hesse later rebelled against.

Over two hundred claustrophobic spiral staircase steps above the market square, Marold set up a complete sound studio and a small library. A watchman family of six once lived there. Marold left hardly any space for himself. Once or twice a day city residents came to him and said what they had to say over the ether. By radio and internet, the signal was transmitted far away, its echoes reaching over oceans. That is, I believe, a truly free radio.

And yet the Radio Oracle acted more as a good listener than as an esoterically charged authority on the future. As Elias Canetti describes it:

The Ear-witness tries not to look, but hears all the better. He comes, stays, shirks unnoticed into the corner, looks at a book or a display, hears what there is to hear, distances himself, unaffected

and absent. One might think he isn't at all even there, he is so good at disappearing. He's already somewhere else, he's already listening again, he knows all the places where there is something to hear, takes it all in and forgets nothing ...²

The Oracle always prophesied live and off the cuff, and the same was true of course for its radio—aside from a station-identification signal, nothing was pre-programmed, each day sounded different and was dedicated to a different topic.

The studio up in the lofty heights became a key venue and a vanishing point. The live radio play series *Hauser* began and ended there; the conversations with the Oracle were exclusive and separated from the daily hustle of the city. Each radio situation in the tower was by nature personal, its aura shared with the listeners while also providing a maximum of intimacy. The rooks and migrating geese were closer than the pedestrians in the city. It seemed only right that the Radio Oracle had vodka in the tower; whoever climbed these stairs and braved the narrow bridge to reach the studio became part of a truly unique radio experiment.

2. Elias Canetti.
Der Ohrenzeuge... Fünfzig Charaktere.
Frankfurt am Main:
Fischer Verlag, 1983. p. 40.

FORMER DEPARTMENT OF PHYSICS

Crows tend to chat; they "tell" each other things. According to recent research, ravens have a vocabulary of over 2,000 terms. But their conversations on the towers of the city are exclusive; there is no "audience", they are simply too far from the ground.

And so they sat, the crows and jackdaws, on the venues of radio art in October 2016—Roter Turm, Hausmannstürme, and the transmitter headquarters at the tower of former department of physics at Friedemann-Bach-Platz, which is invoked here by Knut Aufermann:

Let's imagine that we could sense radio waves like we can sense light waves. After all, both are electromagnetic waves, just propagating within different frequency bands. So if we were able to see radio, the tower of the former physics department of Halle's university would have been the most psychedelic artwork of the festival. Violet-blue oscillating signals would shoot from the unassuming FM antenna in sync with the vermilion lighthouse-like pulsations emitted by the long AM antenna that connects the old brick building's shoulders with its head, like a fully opened pair of compasses. Every day they would be joined by flashes of yellow, orange and green as the amateur radio operators fire up their roof zoo of antennas, communicating with fellow wireless enthusiasts on different shortwave bands. True to their form as waves, the colours would create the most complex and mesmerisingly beautiful patterns of interference in the sky. They would not only refract around objects but easily penetrate walls and ceilings, flooding the exhibition rooms of the museum Moritzburg on the opposite side of Friedemann-Bach-Platz, the glass houses of the nearby Botanical Garden and everything else in their reach before thinning out to the tune of the inverse square law.

VIEW FROM THE TOWER OF THE FORMER DEPARTMENT OF PHYSICS



STUDIO OF THE RADIO ORACLE



UP IN THE AIR II

Alas, radio waves stay all but hidden to our senses and so the audience that made their way to the old physics tower came with different expectations. Their reasons to join one of the daily guided tours of the central part of the building were divided into three main categories of curiosity listed in order of ascending floors:

- to see and hear one of the peripheral artworks—my sound installation *Changing of the Guard* that acted as an alternative silence detector for the festival radio
- to gaze at the actual radio transmission equipment installed in the amateur radio club station on the top floor and the correlating antennas on the roof
- to take in the unique view over the city of Halle

Out in the open and exposed to the elements, the visitors could contemplate the acute triangle this tower formed with the two other towers on the market square that hosted Radio Revolten, the Hausmannstürme of the Market Church and the medieval Roter Turm. Some with a very sensitive disposition might have felt the electromagnetic fields created by the antennas, once they had climbed the final and scariest cast iron spiral staircase to reach the roof. “Will this affect my pacemaker?” is a question I won’t forget being asked standing up there. Reinhard Krause-Rehberg, professor of physics and resident amateur radio enthusiast, managed to put my mind at rest on this issue as well as many other questions relating to the materiality of radio. He had been waiting to get involved in Radio Revolten since the festival’s last incarnation in 2006. To meet him and the custodian of the building, Dr. Frank Steinheimer, in the very early planning stages of the festival was crucial. Their infectious energy and support allowed us to roam the upper levels of the tower day and night long before official permission was granted by the authorities. Perhaps being involved in the physical side of radio transmission is a continuation of the childhood desire to climb trees, to gain height, to reach an overview of things below, and to communicate further. Some visitors to the tower were fortunate enough to encounter Reinhard Krause-Rehberg at the peak of their climb, explaining the different branches of antennas for long distance conversations with the fervour of a 10-year-old.

Radio stations have an interest in avoiding long stretches of silence (i.e. “dead air”) in their output. A device called a “silence bridge” is therefore inserted into the transmission chain, which automatically plays pre-recorded music when a certain duration of silence is detected. For Radio Revolten Radio, this period was set to the maximum pre-set of 125 seconds, roughly 20 times longer than for conventional radio stations.

Changing of the Guard offered an artistic alternative for this technically essential role: a continuously playing sound installation as source material for the silence bridge.

Frauke Rahr and Tim Kurth described Knut Aufermann’s artwork as follows:

Changing of the Guard is a generative audio piece of variable length, designed for the radiophile festival Radio Revolten 2016. It consisted of a specially configured digital mixer, loudspeakers, and several audio devices such as FM transmitters and receivers, variable notch filters and a CD player spouting Morse code. The mixer controlled a web of feedback loops between the hardware that counteracted any attempt to fade to silence. This way, a permanently changing acoustic space of quiet and loud tones emerged, that, with the help of programming and chance, merged into a composition over time. This could be vigorous and vibrant, but also soft and faint. *Changing of the Guard* decided this on its own.

The audience gets the impression of a machine speaking to itself and to them. As if an artificial intelligence is negotiating or even fighting with itself over some important issue. The spectator or demonstrator does not need to interfere at any moment, the artwork is sufficient in itself.

The beauty of this “failure loop” surpassed the regular radio programming on occasions, for the continually changing feedback constellation developed a peculiar magic of its own that could be followed for hours at a time during the festival. Once the Radio Revolten studio crew even intentionally caused a signal failure so that the installation could be heard on air.



ROTER TURM

The more than 500-year-old Roter Turm (Red Tower) in the medieval centre of Halle is crowned on its tip by a sphere whose long spikes were conceived to ward off evil spirits, yet they offer us the appearance of antennas that transmit in all directions. During the first Radio Revolten festival in 2006, the festival frequency was broadcast from this point



across the city. From this centrally located structure, which is also the tallest in Halle, the Viennese artist Rupert Huber projected the voices of senior citizens across the market square. Furthermore, the sound installation *Radio Campanile* ran there from 22nd September to 15th November, 2006. Using the midi control of the glockenspiel, it consisted of Wolfgang Heisig's composition *Carillon Carilloff*, a permutation of Big Ben's melody, and an interactive installation that allowed anyone to instantly request by text message that the bells play any one of 48 jingles from radio stations around the world. The tolling of the bells could be heard worldwide via a webstream.

In 2016 three artists used Roter Turm for their radiophonic artworks: [Anna Friz](#), [Sarah Washington](#), and [Hans W. Koch](#). Here [Elisabeth Zimmermann](#), Radio Revolten curator and editor of ORF Kunstradio talks about the installation *The Envelope of the Hour* by Anna Friz:

Festival visitors and Halle tourists stumbled in from the dark staircase into a large open room with a high ceiling lit by a window. They were stopped by a sound that seemed to enlarge or resonate the room with no immediate indication of its origin. You had to bend down to inspect the loudspeaker boxes, but they seemed to be only parts of a delicate yet stable framework that momentarily held and spit out again the tower, the installation, and the sound.

[Anna Friz](#) worked in the tower on the themes of time and radio. The melody of the tower's clock chimes correlated exactly with the Elizabeth Tower of the House of Parliament in London, whose largest bell is better known as Big Ben. One also speaks of the "Westminster Chimes", whose basic motif was supposedly borrowed from the aria *I Know That My Redeemer Liveth* from the Messiah by Georg Friedrich Händel, who was born in Halle (Saale). Moreover, the clockwork mechanism guides the time cards of the employees in the nearby city hall, the tower thus functioning as the city's internal clock. Anna Friz describes her motivation:

Bell towers have historically marked and measured social activity and the tempo of a day with their sonic presence in a town. Today time is determined globally under International Atomic Time, a coordinated time standard established by a network of caesium clocks operating in various countries, synchronised and transmitted by satellite and shortwave frequencies worldwide. The advent of atomic time means the second is now the fundamental temporal unit, no longer defined as a fraction of a year determined by cosmological measurement (such as Earth's rotation around the Sun) but as a vast number of very quick oscillations.

Likewise, time standardisation functions as a normative field of influence—from time obedience (social behaviours in response to the chime of the clock) to time discipline (internalisation of punctuality such that behaviours anticipate the clock). Meanwhile, quotidian perceptions of time continue to elude such regularity, and even digitally networked devices may fail to synchronise. *The Envelope of the Hour* is a multi-channel sound installation made from audio manipula-

A. F. tions of the radio broadcast of the atomic clock and sounds of the bells, exploring the sonic resonance, suspension, drift and decay of atomic and mechanical clock time.³

Time is a social convention that permits, coordinates and disciplines communal activities. In the cosmos, time is an inconstant and relative dimension; on earth, it is a linear dimension that is dependent upon mass, energy, and distance and becomes the dictum for concurrent actions. The medium of radio unwittingly serves this law. The seemingly slavish frequency of time checks on the radio synchronises us with the submissive utilitarianism of our social existence. Irrespective of sunrise, twilight, and the seasons and regardless of personal mood, individual time perception or the stretching of time in an individual's intensive moments.

On the walls of the former belfry in Roter Turm there are words scratched in many languages and notes by visitors from past centuries. The mixture of incomprehensible and partially illegible characters recalls the history of the construction of the Tower of Babel, whose blasphemy in the biblical story led to the breakup of humankind's single language into thousands of others.

3. _____ Anna Friz. "The Envelope of the Hour"; <http://radiorevolten.net/en/radio-revolten-in-the-red-tower/> (accessed 26 February 2018).
4. _____ Sarah Washington. "In the Air We Share"; <http://radiorevolten.net/en/radio-revolten-in-the-red-tower/> (accessed 26 February 2018).



The UK artist Sarah Washington transforms this putative "punishment" into audible opulence. Presented on loudspeakers situated at discrete locations inside Roter Turm, *In the Air We Share* was described as a "chance-based sound installation composed of multilingual words and phrases which recall profound transcendental experiences. As the bodies of visitors become fully engaged in climbing the tight spiral staircase, ordinary distractions are left behind on the ground. Voices within the tower transmit information about an elevated state of being, calling upon something other than the physical body to ascend through space."⁴ There was also an accompanying broadcast version for three radio frequencies which aired during the festival.^[chap. 13]

Marold Langer-Philippsen recalls:

... seldom have I heard more direct, deeper accounts whereby voices from the ether or a recording device or over two frequencies reveal in all possible languages, whence they come, where they go. (Which is otherwise to be heard rarely or not at all on the radio today.)

At certain times, entry to the bell tower was permitted only through a narrow door from the marketplace; a tightly curved spiral staircase that led continually upwards. After some effort ascending the very first turns, a few steps later, sounds would begin to resonate quietly through the stairway and the visitors would then encounter *In the Air We Share* by Sarah Washington. Upon entering the first high-vaulted chamber of the tower, hints of words and phrases tumbled down through a large hole in the ceiling. Once in the room above, one could rest and immerse oneself into the space as voices swirled around, seemingly from nowhere in particular: addressing each other, themselves, the tower, the empty space, you. After a time, listening carefully and striving further upwards, one's own breath covered the discrete tones and sounds, which higher up the coiled staircase transmuted into secretive whispers from behind a closed door.

Interpersonal and universal transmission was the key theme of the work. Jean-Philippe Renault has the following to say about his encounter with it:

The etymology of the word communication says to us that to communicate is to be in religion with someone, with something. Sarah directs us, guiding us through a stair directly connected to a belfry-antenna ... there's nothing more 'in religion' than that. 2 frequencies in a stair ... a double entendre ... It speaks to you in a turn ... that's a twist. *In the Air We Share* is turning the turn into a confessional experience. Keywords: dialogue, confession, alcove, religious, double, double entendre.

Washington reports on her experience in the tower:

Spending time by myself with the two installations in the Roter Turm was a very special experience. The drifting voices from mine would gradually blend with the gentle drift of atomic time coming from Anna's installation, augmented by the whirring mechanics of the clockwork mechanism of the tower timepiece and the carillon's regulatory bongs. At any of the bare openings in the tower walls, or through lofty wooden doors or slatted shutters, the sounds of the bustling market below and, over the month, the comings and goings of a great many of the citizens of Halle rose up—to at once dispel the strong feeling of enhanced separateness from the everyday and amplify it. I locked myself alone in the tower to make daily checks, and this time felt like high privilege indeed. At first I had wanted company, as to install the speakers where I wanted them was a bit treacherous, necessitating a climb over a barrier and staying close to a wall to avoid falling a great depth through



the big hole in the floor. But I soon became accustomed to the tower, it welcomed me and I treasured my intimate time within its calm and solid embrace. When the moment came to remove the equipment I passed the gaping hole with grace, and felt like I never wanted to leave the building. In fact, I delayed our farewell by setting up an overnight recording, so that I could one day check back on the progression of words throughout the night and hear how Halle woke up with the installation. The voices infusing the tower seemed to fit so well there, and none of us wanted to be parted.

For the opening performance of Radio Revolten, the sounds of *8. Sinfonie*, a radio-controlled composition by Rochus Aust, was performed by the 1. Deutsche Stromorchester (First German Electricity Orchestra) and the carillon, saturating Halle's market square with brutal force. Giant metal horns called quadrophones blasted sounds from the roof of a department store and from the balcony of the town hall into the ominous weather of an approaching thunderstorm, as timeless as whale songs or recordings from the first days of the universe. With a backdrop of gathering black clouds and lightning bolts, the echoes of the 1. Deutsche Stromorchester filled the air above the market place. The radio-controlled glockenspiel composition from Roter Turm provided the inner skeletal structure of this expansive monster in the air while diarist Gabi Schaffner checked the mood on the ground:

On the market the people are drifting by, eddies flow and expand around the stands, not only by the rain water. In the air too, eddies are forming ...

'Well no, these walrus choirs ... that was horrible really! After that it was sort of ok, I mean, you know what I mean ... a melody.' 'This is not music, that is.'

The man adjusts his sleeve and points to the security badge sewn to it. A woman in a pink shirt packs pears back in their crate.

'Well, from time to time it sure sounds nice ...'

She gets interrupted by her boss: 'Disgusting, I'd say! Utterly disgusting!'

A slender elderly gentleman under a blue umbrella radiates tranquillity and smiles.

'This is absolutely beautiful!'

A couple of youngsters, long hair, goatee (him), black clothes: 'I think it is real strange music, unusual ... Nothing that I would hear actually. What's that stuff about?'

The marketer with the gingerbread stand says the sounds are 'too loud'. His daughter stands next to him and listens. 'Interesting at times, though. When there is melody or structure you could maybe call it music, but these irritating sounds in between are not nice at all, not beautiful, I mean.'

I suggest the thought that life isn't an easy listening thing either and that one has often to also cope with irritations or other things that are wrong.

'But when I turn the radio on, I know what to expect and what I want to hear, I've got a choice then. And this makes the differ-

UP IN THE AIR 11

ence for me. I can decide what I want to listen to but I cannot decide here on the market place. But as I said, sometimes it sounds okay, then it's just aggravating.'
Indeed, many people felt the sounds were 'too loud'. Even though some of them may certainly listen to much louder stuff at home or in their cars, this may be to them more 'beautiful'.⁵

The event was directed by one radio frequency and transmitted by a second one. How would it be if the whole city were transformed like this into sound, if, like Arseny Avraamov's *Symphony of factory sirens* in Baku in 1922, sirens and car horns, factories and choirs were also incorporated, conducted by a frequency from a radio receiver?

5. _____ Gabi Schaffner. "...those whale songs!", *Radio Revolten Diary* 2 October 2016; <http://radiorevolten.net/en/those-whale-songs/> (accessed 26 February 2018).

HANS W. KOCH



Quieter and more reserved, the Radio Revolten festival also bode farewell from the market square with a concert by Hans W. Koch, who played his own composition in Roter Turm, the world's second largest carillon, while the audience down below listened to accompaniment of recordings from Halle's zoo on two radio frequencies. The radio once again connects the public to a real-time happening via the city's towers.

And so, the towers of the city of Halle will be remembered above all as radio towers, as the one month of radio art on the three frequencies ended symbolically when all broadcasts were cut off in the tower of the former Department of Physics. All that remained was the on-air emptiness and the towers in the sky that fell again into their Sleeping Beauty slumber.



Here's a thing about antennas, everybody uses them intuitively for the reception of wireless signals. It is as if we have developed a natural sense for capturing the electromagnetic field that surrounds us by waving a rod of metal in the air. Somehow this act in itself is considered passive, benign and suitable for people of all ages. Reception however can only be completed if it is coalesced with the act of transmission. The transducer of choice for transmission is again the antenna, but this time the rod of metal obtains an aura of the unexplained and forbidden. The expulsion of waves from an antenna we learn, is best left to the experts. To radiate is a privilege that comes with strict rules and governmental control.

Radio Revolten brought together a large international pool of antenna-phile artists, many of whom are versed in both kinds of electromagnetic action, the receiving and the emitting type. Concealed in their luggage were more than a dozen small unlicensed radio transmitters that took up residence throughout the festival's locations and spluttered their artistic contents out to intended and unintended receivers.

Our state sanctioned FM and AM broadcasts in contrast were licensed by the media authority of the state Saxony-Anhalt and approved by the Federal Network Agency as they ran at power levels that were two to three orders of magnitude higher. For the operation of these transmitters we found accomplices in the local amateur radio scene. Ham radio operators are remnants of a time when radio transmission was in the hands of hobbyists, a reminder that the licence to radiate was originally not bestowed by governments but by the soldering irons of early electronics enthusiasts. A throwback to those early days is the permission which remains for certified amateur radio operators to build communication equipment without the need for approval by a technical control board, a little-known loophole in today's times of total regulation.

This is the story of the festival's AM transmitter in the words of Tino Neubauer (DM1NT),¹ who built it from scratch for Germany's only AM radio station in 2016: Radio Revolten Radio.

When I took part in the long night of science 2016 as part of the astronomical club Halle, the sky was overcast. Unable to observe the sky and devoid of anything else to do, I walked over to the stall of the amateur radio operators. There I encountered a few weary old men who listened to what was going on in the air. I was less interested in the radio communication since I had enough equipment of my own at home. I only had a nodding acquaintance with these OMs (old men), as male amateur radio operators call themselves. Reinhard Krause-Rehberg (DK5RK) asked me casually if I knew how to build an AM transmitter. AM stands for amplitude modulation, or as I call it, antique modulation, as it is hardly used anymore these days. In theory this is pretty easy. I replied that I would first have to read up on it. Then I asked for the reason for this task. Reinhard tried to explain to me what Radio Revolten is or was supposed to become. My thoughts were, "Corax, isn't that this ultra left-wing radio station which plays a lot of strange stuff?" It sounded like a one-way ticket with no return. I didn't take the whole thing seriously at first and soon forgot the request to ponder the issue as the clouds receded and I hurried back to my sun telescope. This was on the 23rd June 2016.

At the beginning of August, Reinhard called me and asked how the transmitter was progressing. I was flabbergasted and asked if I should really build it. "Of course", he said, "who else could do this but you?" I confess to feeling slightly anxious at that moment. On the other hand, an AM transmitter can't be too difficult. After all I had built several amateur radio units in the past, and those could do much more than just transmit on AM. When I heard the required transmission power I wasn't sure anymore if I should do this. But then, what's life without challenges. I thought of an initial concept and then started searching online. A lot of tips were to be found there on how to construct such a thing, most of which utilised tube technology and reminded me of the times of The Beatles. This was unacceptable for me. This technology was state of the art when my parents were young, a long long time ago. I wanted to work with modern means. During my research of circuits, I came across MOSFET power amplifiers. They seemed suitable for 2 kW transmitting power. The first trials however were sobering. Tiny amounts of overmodulation or mismatch of the antenna meant certain death for the transistors. I blew up around 30 of these small black components until I reached the conclusion that I needed to change my plans.

Two weeks later I still couldn't report any success and grew slowly frustrated and disillusioned. Then I found a magazine article on so-called LDMOS power amps. These were running on a much higher voltage and would withstand even a short

1. _____ Every licensed amateur radio operator has a unique call sign, which divulges the country of origin and is used as identification during radio communication. Amateur radio club stations also often have their own call signs and furthermore temporary call signs can be obtained for special amateur radio events.

T.N.

circuit at the antenna output, according to the manufacturer. There was even a nice company video online which showed a lab worker creating flashes of lightning at the output of the power amp with a screwdriver without damaging the unit. "Brilliant", I thought, "this is the solution."

During the first tests, the truth about these flashes of lightning turned out to be just a seduction by the advertising industry. Had I tried this with our transmitter, the power amp would have blown up instantly. My first attempts with the new technology ended with the death of the power amp transistors, worth approximately 230 Euros. This prompted an immediate call for help in the ham radio scene. Uwe (DM2GG) immediately offered the use of his own module including heat sink. I gladly accepted it, now I was able to progress. With the module on my workbench, temporarily wired up, everything seemed to work without problems. Now I needed to measure it. My measuring station could only gauge up to 200 W and we wanted ten times the power. Reinhard helped out with a 4 kW dummy load which he had borrowed from the nuclear research centre Rossendorf (HZDR) near Dresden. With it I could finally test everything accurately, including whether the power amp delivered clean signals. Now I only needed to find a case and an appropriate power supply with enough output.

The casing I found in a skip of the oil refinery in Leuna. It must have been a rejected industrial PC from [energy giant] ABB. I couldn't use anything else from it. For the power supply I used a 48 V 2,200 W unit from the mobile phone industry. This would not be capable of generating a full 2 kW output power but 1 or 1.5 kW would be possible. Now I had a case, a power supply, a power amp and little time. It was nearly the end of August and I had nothing ready to show. Several stages were still missing, namely a transmitter module, a preamplifier and the filter for the output signal. Also a measuring gauge would be handy. This was supplied by Steffen (DO2A) from Wolfen. It was able to display up to 2 kW and looked great in the milled front panel which I crafted in several sessions after hours at my workplace. The final missing part was the low pass filter at the output stage. For this I ordered a few large toroids and wound them with 2.5 mm copper wire. On the measuring station everything looked very good, this should work fine. When I saw the technical requirements of the Federal Network Agency I was confronted with the next problem. It stated a maximum deviation of 1 Hz from the allocated frequency. This means that for every 1,500,000 oscillations only one oscillation more or less was permitted. This can only be achieved with GPS synchronisation or with an expensive oven-controlled crystal oscillator. GPS was not an option because the necessary parts were not easy to come by in Germany. Luckily I still had an oven-controlled crystal oscillator laying around that was salvaged from an old civil service radio communication unit, calibrated to 1 ppm. Thus I could fit everything into the casing and start the first continuous test. The transmitter ran overnight using the Rossendorf dummy load. When I entered the room in the morning it was as warm as in



T.N.

midsummer. The transmitter however was working robustly and with more than 1,000 W at a satisfactory rate. During the finishing touches I promptly shot my 15,000 Euro measurement instrument to pieces. I had connected it directly to the transmitter which was set to maximum. The 200 W gauge input didn't tolerate 1.2 kW for very long.

By now it was the end of September. The antenna was hung, the transmitter was finished and we could do the first tests on air. For this I had prepared a short announcement which went out via an MP3 player for a few hours. I think it was a Saturday and I was happy that I had finally finished the transmitter. It was one week until the start of transmission and I could catch my breath. The joy didn't last long. On Monday, when we wanted to start the official test, the transmitter only performed at 20 W. What had happened? The techie guys from Corax had done a test on Sunday and cranked up the transmitter to maximum power. This in turn wasn't tolerated by the antenna. Two extension coils had burned away and the power amp was once again defunct. It was hard to know what to do. We express ordered a new LDMOS module from the Netherlands. I had my hands full to change the module and fine-tune it with just a few days before the start of transmission. My measuring station was still out of order, but my boss kindly allowed me to use the company measuring stations for this purpose. Thus the transmitter was ready and available in due time and could broadcast Radio Revolten Radio for a month at 1 kW continuous power. The rest is history. Afterwards there were requests to convert the transmitter into an amateur radio power amplifier, which I declined repeatedly. There were also ideas to keep broadcasting on medium wave, but unfortunately the permissions are too difficult to obtain. At this moment the transmitter is sitting in a room at the university and is waiting for its next usage.

The instigator of the medium wave festival broadcast and the person responsible for the construction of the corresponding long antenna at the old physics department of the Martin Luther University in Halle was Reinhard Krause-Rehberg (DK5RK), professor of physics and member of the university's amateur radio club.

Regular broadcasting on AM had ceased in Germany with its final emission on Deutschlandfunk during New Year's Eve in 2015. I listened to this very last show and thought it was a real pity, that was what triggered the idea to transmit on AM alongside FM from our DL0MLU club station. We gained the license to do so from the Federal Network Agency in record time. The assigned frequency, 1575 kHz, used to belong to the former broadcast station 'Burg' near Magdeburg. According to the international frequency allocation plan we were allowed to transmit with up to 1 Megawatt of power.²

² A month of radio at 1 Megawatt, besides the obvious lack of infrastructure for such power levels, would have eaten up half of the festival's budget in the cost of electricity alone.

Besides the FM antenna we now also needed an AM antenna. Even though the roof of the old physics department spans 50 metres, we could not quite achieve the 95 metre antenna length nominally needed and resorted to the use of extension coils to realise a dipole aerial that is resonant at 1575 kHz. Almost all the OMs of our club were involved in the rigging of the antenna.

The festival's AM transmission captured the imagination of listeners, artists and press alike. Amplitude modulation radio in Germany was reborn, albeit temporarily, and repurposed for experimentation in cultural space. Of course there was a limited listenership, but a rather communicative one. Amateur radio operator Bernd Kukielka (DL6MOG) acted as the lightning rod for listener reports that were coming in fast and pointed to antenna adepts in Germany, Finland, Sweden, The Netherlands, Belgium and Austria who had managed to filter out our signal from the noise. Regular Morse code jingles sprinkled across the Radio Revolten Radio programme had been included to help with their endeavour. One particularly engaged listener, Matthias (DD3MB), made a late night 300 kilometre round trip to Halle to try out his improvised homemade detector radio, a device that allows AM reception without batteries, simply powered by the radio waves.

Almost humble in comparison, our FM transmission utilised a hired 100 W transmitter and ground-plane antenna that delivered high fidelity stereo sound to Halle and its outskirts, and a little message to car radios via RDS. Partner stations in Berlin, London, Vienna, Brussels, Nantes, Devon and New York State,³ who at times relayed our signal, augmented our distribution via frequency modulation and made FM the most common mode of reception for our listenership.

Political debates in many countries, and the first decision to abandon FM transmission taken by Norway, demonstrate that even this most technically mature form of radio broadcast is at the brink of being superseded. Successive digital radio technologies promise to deliver more channels while



3. Pi Radio Verbund 88.4 (Berlin) & 90.7 (Potsdam), Resonance FM 104.4 (London), ORANGE 94.0 (Vienna), Radio Panik 105.4 (Brussels), Radio Campus 92.1 (Brussels), JET FM 91.2 (Nantes), Soundart Radio 102.5 (Dartington), WGXC 90.7 (Greene and Columbia county, New York State).

at the same time control over them is handed to fewer companies. As a byproduct of this development, hundreds of millions of FM receivers hurtle towards obsolescence.

Our repopulation of the AM band with radio art was proof that an old technology can be revived. It underpinned the claim that "FM is for CULTURE" which was writ large at Radio Revolten. This time, when the long arm of the authorities reaches for the terminal off button for FM radio, tinkerers and amateurs, artists and activists, will consider it a mere devolution of power to them. The knowledge and the art of analogue transmission is here to stay.

ANTENNA PLAYGROUNDS

Several installations, performances and somewhere in-between hybrids at Radio Revolten were an appreciation of antennas. Two entropically opposite forms of three-dimensional dispersion of aeriels were on display in the work of the Australian artist Joyce Hinterding. Her installation *Aeriology* dates back to 1995 and was one of the few seasoned works shown at the festival. Kilometres of thin copper wire were strung up by being wound around columns at precise spacing to create a shimmering permeable wall. The columns in this instance were octagonal and holding up the ceiling of the Gothic vault of the arts museum Moritzburg. The wire acts as an extra-long antenna that indiscriminately picks up any electromagnetic impulses and is tapped for both audible and visual signals via loudspeakers and oscilloscope respectively. Had *Aeriology* been installed right after the construction of the Moritzburg, a good 500 years ago, people would have heard natural radio, produced by lightning near and far as well as the activities of the sun, such as flares and sunspots. In our times the detectable sounds are predominantly byproducts of the nearby electrical systems installed for power and lighting.

Contrary to the geometric tension of her installation, the performance by Joyce Hinterding given together with her partner David Haines used copper wire antennas in various degrees of unravel from which they extracted and filtered a multiplicity of radio signals.





RENI HOFMÜLLER



A giant antenna was the eye-catcher when Reni Hofmüller took to the stage to perform her piece *Resonating Sculpture II, Handarbeit*. Scanning through the different strata of the electromagnetic spectrum with the help of her computer controlled scanner, she captured a paint shop's worth of coloured noise that burst uncontrollably into the venue.

In her diary, Gabi Schaffner describes Hofmüller's performance as a cosmic voyage:⁴

These are harsh sounds that DIY artist and activist Reni Hofmüller puts forth through the speakers: crackles and patter that come and go in waves, sometimes at an ear-piercing loudness. In their intense density they remind me of sun storms and cosmic radiation. Her 'Resonating Sculpture' hangs cobweb-like behind the mixing desk and reflects the light in its copper veins. For the pattern of gleaming stripes which acted as an antenna, she chose the lines of her left hand; they catch whatever radiation frequencies permeate the air in this 'radio space' of the Revolten Klub. Hofmüller's fingers move nimbly from the laptop to the controllers, adjusting, modifying and modulating the noise waves. Her gaze is fixed on the screen, while the audience submerge in row after row of chairs. Soon I am under the impression that they are the passengers on some kind of spaceship where the pilot navigates them through galactic storms.

Overall, few festival performances drew heavily on radio's penchant for white noise. However, FM listeners were always able to add their own noise to everything by slightly detuning their set whilst AM listeners experienced, well, is there a word for the opposite of noise cancelling?

Ilia Rogatchevski and Laura Michelle Smith descended into what could be called the cellar of the radio spectrum, and just like with the buildings of our festival headquarters, there were treasures to be found below. Very low frequency or VLF is part of the radio spectrum where the wavelengths range between 10–100 kilometres.

4. Gabi Schaffner. "Resounding Sculptures & Iceland CB", Radio Revolten Diary, 27 October 2016; <http://radiorevolten.net/en/resounding-sculptures-iceland-cb/> (accessed 8 January 2018).



Used for submarine communication or time signal transmission, the band is also the playground of atmospheric noise. Commissioned to make work for the festival by Resonance Extra, Rogatchevski and Smith went hunting for interesting VLF in Halle using a handheld detector, and presented their findings at the Klub. Every portable radio that Smith placed carefully around the venue during their performance felt like a keyhole into another sonic universe.

To capture the atmosphere of another aerial wielding evening in the Klub, which I took part in, I turn to the delightful musings of Radio Revolten diarist Gabi Schaffner and allow myself the odd reflection on her comments:⁵

Tonight—or yesterday night as you read it now—it was “Tonic Train (Sarah Washington and Knut Aufermann, both initiators of the Revolten festival) und der Funkamateure”. A name that could do well as a band name. Funkamateure Bernd Kukielka was introduced as a co-founding member of Radio Corax and as an expert for Morse code.

The performance was a real premiere. Sarah Washington and I had hoped to work together with a radio amateur, and Bernd Kukielka felt like the perfect match, even though he was not an experimental musician. We only talked briefly about what might happen on stage. Our joint sound check had to make do as a quick rehearsal, however it was immediately clear that our modes of listening were compatible.

G. S.

While listening I felt like being plunged into an acoustic jungle book (of the Northern Hemisphere) overlaid with teenage space novel imaginations. Somebody else in the audience felt reminded of being in the acoustics of a department store with people jostling all around the place.

As bodiless as this music may seem, it is as much owed to sensitive instinctive feeling (English has no word for the beautiful ‘Fingerspitzengefühl’ which means ‘handling something by the

5. Gabi Schaffner. “FM Enlightens the Lonely: Tonic Train und der Funkamateure”, Radio Revolten Diary 12 October 2016; <http://radiorevolten.net/en/fm-enlightens-the-lonely-tonic-train-und-die-funkamateure/> (accessed 8 January 2018).

G. S.

tips of your fingers’—literally as well as metaphorically) as to conscious decisions about what to let through to the speakers. Doesn’t it also look as if these people are performing an operation on some mysterious semi-organic system? See how their fingertips tremble at the buttons, observe minute movements of manipulating their devices. And I wonder why the bearded man holds his hand almost throughout the whole performance over the antenna of this little radio?

TONIC TRAIN & THE RADIO AMATEUR



Let me touch on the fact that all three of us were dependent on antennas. Amongst her homemade instruments including one with an on-board transmitter, Sarah Washington operated a synthesizer with a built-in FM radio, Bernd Kukielka (DL6MOG) had brought along a shortwave receiver with a long but well hidden antenna trailing through the venue, and I played with my small antenna forest which consisted of two small FM transmitters and a receiver. The reason for hovering almost motionless above one of the antennas was that the capacitance of my hand influences the frequency the transmitters are working on and any small movement induces chaos into a complex web of feedback loops which shape the sound.

‘Tonic Train’ is an outdated and almost forgotten term for ‘continuous interrupted waves’. Indeed, the arrangement of the different sound waves all linger on for a while, interrupted, permuted and/or accompanied by Morse signals, radio messages, fluttering, whirring, squeaking and humming interceptions. Speaking of permutations, I threw the word Aetherwellenmusik (ether wave music) into the anagram generator, always a fine way to find out about the words behind the word (or the waves behind the waves).

Humane Streikwelle (Human strike wave)

Weinkeltermühsal (Winepress hardship)

UKW erhellt Einsame (FM enlightens the lonely)

A radio band that has not been adequately covered so far in this chapter, but which brought the message of Radio Revolten into the furthest corners of the globe, is shortwave. Halle's amateur radio operators wanted their own share of radio activity and populated various dedicated short-wave frequency bands with a plethora of ancient and cutting edge communication methods such as Morse code, single sideband (SSB) telephony and phase shift keying, 31 baud (PSK31) radioteletype at a maximum power of 400 W. They had applied for a special call sign for the festival, DM16RRV, which the local operators used throughout October to contact distant colleagues. The unique propagation of radio waves in the shortwave band, behaviour known as the skywave, allowed the signals to bounce around the globe, ping-ponging between surface and ionosphere. 5,600 contacts were made with correspondents in more than 100 countries, from Chile to India, from South Africa to South Korea, sparking curiosity about the festival. All of them were sent a special Radio Revolten QSL card⁶ to confirm that they had been in touch with Halle.

Finally, as a present by a commercial shortwave broadcast company based in Western Germany, the very last hour of Radio Revolten Radio was also broadcast on 3985 kHz short-wave at 1 kW power, conjuring up a miraculous trinity of simultaneous FM, AM and SW transmissions. Did anybody manage to listen to all three of them at the same time?

6. _____ QSL (short code for "I confirm receipt of your transmission") cards are posted between amateur radio operators after a wireless conversation. They contain the call sign of the sender and often further technical information. The cards serve as a final proof of the successful radio communication and are deemed collectible. To reduce postal costs, the Radio Revolten QSL cards were sent out in batches through the system of the German Amateur Radio Society (DARC).



All radio artists rely on technology to create, capture, transmit, receive and reproduce sound. In some cases the technology is a standardised toolkit used for a set purpose, such as the recording, editing and broadcasting of a radio play for public radio. Other approaches consider parts of the technological chain as material for artistic expression, by misuse or extension of existing equipment or the appropriation of unusual technologies. Some artists even turn to design and build their own electronic devices.

In this chapter [Anna Friz](#), [Gabi Schaffner](#) and myself highlight the individual techniques that eight Radio Revolten artists have developed through the creative use of technology. The works are emblematic for the three major strands of radio art that pervaded the festival: installation, performance, and broadcast.

To begin with, Anna Friz, in her role as curator of the festival's radio art exhibition *Das Große Rauschen: The Metamorphosis of Radio*, shines light on the installations of [Jeff Kolar](#), [Kristen Roos](#) and [Maia Urstad](#), who utilise different frequency bands of electromagnetic waves as material for their respective artworks.



[Jeff Kolar's](#) *Baby Monitor* inhabited four interlocking rooms in the exhibition space on the second floor of *Das Große Rauschen*. Featuring hacked wireless baby monitors suspended from the ceiling and gathered upon the floor which transmit uneasy lullabies and snatches of overheard ambient on-site sounds, *Baby Monitor* managed to both domesticate these former offices, and to make strange such private domestic surveillance associated with security and parental care. Wirelessness allows baby monitors to be mobile, such that the attentive parental ear(s) may always accompany the sleeping subject of what Kolar terms “soft surveillance”. This domestic monitoring is rendered benign through the camouflage of baby-friendly white and pastel plastic enclosures. Nonetheless, these devices share functions and frequencies with cordless phones and walkie-talkies, and are, within range, open frequencies easily overheard. Baby monitors have a range that typically exceeds the territory of the home, transmitting the

interior soundscape of a sleeping infant to neighbours or the street. Kolar's installation hummed and blipped, as though the monitors themselves were lulled by the score, that was in turn open to interferences from other devices or simply the acoustic traces of nearby visitor activity. *Baby Monitor* created a delicate feedback loop between the two frequencies from one end of the interlinked rooms to the other, the monitors humming to themselves in the absence of baby or parent, in a dusky light suggestive of permanent naptime.

Kristen Roos is preoccupied with electrosmog (particularly from high frequency bands where WiFi and mobile phone communications occur), low frequency sound, and creating installations specific to a site using scavenged objects from the space as well as the material features of the building itself, such as walls, doors, windows, or floors. *Acoustic Radiator* incorporated all of these strategies in one installation. Local WiFi activity was tracked using a high frequency RF receiver that translated the data into sound, which manifested as percussive clicks and taps. A synthesizer subdivided the rhythms and routed them to modified speakers placed in two interlocking rooms, which physically vibrated a door frame, discarded metal radiators, and, with a powerful subwoofer, used bass frequencies to further rattle a stack of metal radiators. Lighting emanated from fluorescent fixtures (also scavenged from the building) that had been placed on the floor, such that light seeped from beneath the fixtures rather than radiating from overhead. Visitors turned on the receiver and experienced high and low frequencies in concert—the insistent nasal percussion of the RF sniffer triggering rolling swells of bass amplified by the vibrations of the metal radiators. The rooms were no longer arranged for office work but became instead the site of material interplay between the invisible infrastructures of contemporary data transmission, and the physical relationships between sound waves and discarded office fixtures.

Maia Urstad's multi-channel radio installation *Meanwhile, in Shanghai ...* installed in the Stadtmuseum Halle reflected on the simultaneity of radio broadcasting, and on the expansiveness of radio space, held by all the receivers in the world emitting sound and programmes at the same time. In radio space it is always now, but all the radios tell their local time as a measure of the distance between them. Urstad's composition, realised with three transmitters and a host of radios suspended from the ceiling to hover just above the floor in an orderly grid, consisted of an interplay of sampled radio broadcast voices, music, announcements, tones, and static. Not every radio was functional, and some radios were salvaged fragments with naked circuit boards, thus implicating even the broken radios as belonging to the population of world radios that are both close and far away. The sounds spatialised across this field of radios accumulated and dissipated, meandered and thinned to a sparse chirp and hiss, then faded



up again in another chatter of enthusiastic interference and cross-talk. Visitors ambled between the aisles of suspended radios, their bodies causing small bursts of interference and noise to erupt in the radioscape.

The artists Jeff Kolar, Kristen Roos and Maia Urstad are all collectors, favouring a host of radio receivers, several mobiles of baby monitors, or literally piles of discarded radiators and a series of fluorescent light fixtures. In each of their installations, common mass produced objects gained focus in the company of peers, shifting from object to crowd, from consumer good to material constituency. Urstad's muster of radios lined up precisely to emphasise radio's ubiquitous role in timekeeping and in upholding the international grid of time-zones. Roos' radiators vibrated with the transduced frequencies from WLAN and mobile phone communications—radiators made radio. Kolar's monitors swayed like children's mobiles, prone to small eddies of feedback between themselves. In each of these installations, the materiality of wirelessness affected fellow devices and visitors alike—all share the circle of transmission.

Each work asked, what is the space of transmission? Is it heavy, is it light, is it intimate, is it wide, is it safe? Who is implicated, what is the territory? Radio enables data streams, radio tells the time, radio reveals distances, however small; radio shakes the radiators and rocks the house to sleep.

All of the invited installation artists also felt at ease carrying out live performances, as many of them have a musical background of one sort or another. This led to a series of planned and improvised events in which old and new collaborations became part of the festival's calendar. In the following interview¹ Radio Revolten chronicler Gabi Schaffner caught up with Anna Friz, Kristen Roos and Jeff Kolar, who had just shared the stage for the first time, and where they had left behind the vapour of microwaved soap.

¹. cf. Gabi Schaffner. "Microwave Meringues 2", *Radio Revolten Diary* 6 October 2016; <http://radiorevolten.net/en/microwave-meringues-2/> (accessed 28 April 2018).



ANNA FRIZ, JEFF KOLAR AND KRISTEN ROOS

Schaffner: I understand that the three of you never played together. Can you tell me about the various parts in your concert, what you were doing?

Roos: I was just picking up different frequencies from the things I have here, like microwaves and the phones. The phones they have a frequency and they communicate between each other. It's 1.9 gigahertz for the phones and the microwaves are 2.4 gigahertz, so it's a different tone. The WiFi router is the same frequency as the microwave oven.

Schaffner: What did you put in the microwave oven?

Roos: I boiled some water first and made tea. And then it was soap. It has air in it, so it puffs up a little bit when you microwave it.

Schaffner: Did you count on the olfactory element?

Roos: Yes. (Laughs)

Schaffner: Do you work with different smells?

Roos: Just this one. I like that it has this kind of sickly soap smell. Some people thought it was wax or something. And the soap reacted differently to European microwaves. In North America they puff up really big, they become like very big meringues. I think they are just more efficient in Europe so they become more like cracked sculptures.

Schaffner: How did you decide who's doing what at what point in time. Did you have a plan?

Roos: Yes. Well, I work with these frequencies from appliances. We kind of went through three different sections. It started with the WiFi router, that tick-tick-tick sound, that's the router, one was about telephones and then it went to the microwaves and these kind of drones.

Schaffner: Jeff, what were your elements?

Kolar: That's a good question. Anna just told me that I was landing a plane.

Friz: Yes. Those big bass riffs, that was you.

Kolar: They weren't probably as loud. I think I was probably the bass line ... keeping time. And the clicking-clock in the beginning, so I was the time-keeper pilot.

Schaffner: What about that big radio that was standing between you and the audience?

Friz: That's two small radios on top of a synthesizer. Go and have a geek-gawk and see it for yourself.

Schaffner: Ah! (Walked up there. To Anna:) And yours was the voice ...

Friz: ... And also the little feedback boxes and the tiny synthesizer ... and the mouth harmonica.

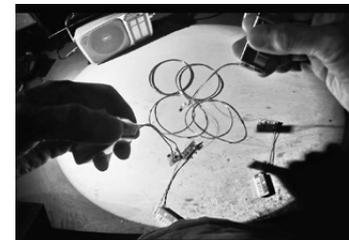
Schaffner: Your piece was about an answering machine feeling lonely. What about this aspect of long distance ... and speaking into space?

Friz: It was all about all these things and ... home radiation. It was about imagining all this activity of these things we're having in the house, including the answering

machine. You know, no-one calling ... or maybe somebody has left a message on your voicemail and you didn't care for it ... (mimics:) "You know, this is my role in life, I am your voicemail, and now nobody listens to me anymore ..."

Another premiere of the festival arrived by file transfer from Tetsuo Kogawa in Tokyo. Instead of taking an arduous intercontinental journey he had opted to develop and film a new performance called *CONCILIATION OF SFERICS* in the comfort of his home. True to form his endeavour included the design and construction of a set of a new type of mini radio transmitter. These were "all band" types, covering all frequencies between 500 kHz and 100 MHz, where AM and FM stations operate. Rather than transmitting sounds themselves, they acted as local frequency jamming devices that create audible interferences between each other. The preparations involved an extensive test series of how to best interact with and capture them on camera.

Here are Gabi Schaffner's impressions² written after the screening at the Radio Revolten Klub:



Tetsuo Kogawa did not come to Halle in person but he sent a video. Of course, Kogawa is legend. Based on his DIY instructions on how to solder electronic parts, boards and wires together as to make a radio transmitter, a worldwide community of radiomakers and activists has sprouted and bloomed into fruition.

In his mail communication Kogawa said it had taken him twelve attempts to make the video. It proved to be 16 minutes of utter pleasure in image, sound and humour. Raised by his hands from a table lit like a circus ring, four transmitters—each with a red antenna that dangled down from it like the coiled tail of some little alien animal—engaged in a conversation that was solely contingent on their spatial relationships and the immediate parameters of the momentum. Radio is about communication and this was animated radio ... animated by the flow of frequencies, the conductivity of the air and the varying distance between the participants. The feel of witnessing a discussion of little creatures from outer space was very strong and more than once I recalled that orange (or was it yellow) "hop ball alien" from the movie *Dark Star* that emitted similar sounds. As far as I can further remember, this whistling and squeaking creature was then partly responsible for the catastrophe in which the plot ended, but then again, this happened only because it was so much disliked and disrespected and not fed properly (vegetables!).

Subsequent to the screening, the festival's live sound engineer Claus Störmer edited Kogawa's film by overlaying the announcement and the audience's reaction at the Radio Revolten Klub, to create an audiovisual documentation and thank you card to Tokyo, that can be found online in the Radio Revolten archive.³

2. _____ cf. Gabi Schaffner. "Radio Cabaret + Alien Creatures", *Radio Revolten Diary* 31 October 2016; <http://radiorevolten.net/en/radio-cabaret-alien-creatures/> (accessed 28 April 2018).

3. _____ cf. <http://radiorevolten.net/en/tetsuo-kogawa/> (accessed 28 April 2018).

When it comes to considering artists' instruments of choice, there can hardly be more difference in technological maturity than between Tetsuo Kogawa's newly hand-made transmitters and the Revox B77. This 1/4" open reel tape machine is an unwieldy monstrosity that has long since disappeared from radio studios. For decades it was the main audio editing tool available, one which demanded not only aural but also haptic skills from the operator who had to physically cut tape with a razor and rearrange it with sticky tape. No radio producer in their right mind would exchange it for the digital editing stations of today, but strangely enough such a once industry standard tape machine still fetches a considerable price on the second-hand market. As with much outdated analogue equipment, a mixture of technical sophistication and idiosyncratic design features make the tape machine irresistible to technology recyclers.

ROBIN THE FOG (HOWLROUND)



Two artists who have made the fashioning of tape loops their trademark modus operandi are the Londoners Robin the Fog and Chris Weaver, aka Howlround. Instead of presenting tightly edited material,

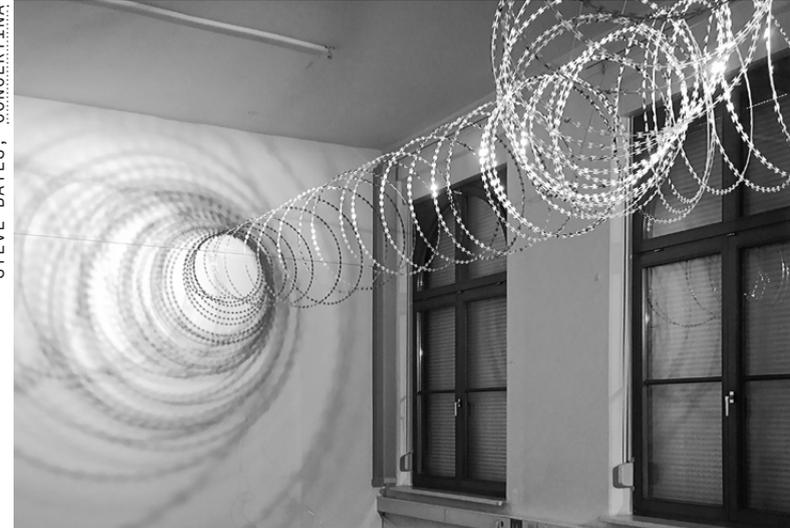
CHRIS WEAVER (HOWLROUND)



they take their machines to the stage and feed them prepared tape loops that vary in length depending on the available space. The loops, some of them several metres long, are made anew for every performance and contain site specific recordings that lend themselves to tape manipulation such as the variation of playback speed. The result was a performance that dwelled on hauntingly beautiful tones soaked with the unique sound quality of analogue tape, brought about by two men hopping back and forth between their rotating reels, who might as well have been wearing lab coats. No other Radio Revolten night had a stronger response from the teenage section of the audience who crept up to the front to inspect those mythical machines during and after the show. Howlround decided to do an encore a day later when they re-emerged on the festival radio for an impromptu live session and left behind their distinctive litter: dozens of tape loops that transformed into studio decoration.

Razor blades, similar to those that Howlround use to edit magnetic tape, made another appearance at Radio Revolten, this time in a much more sinister form in Steve Bates' installation Concertina. A roll of military grade barbed wire, featuring thousands of blades, was stretched across the ceiling of the largest exhibition room in Rathausstraße 4, as if it was sitting atop an invisible fence. The work was installed at a time when some European countries, in fear of an influx of Syrian refugees, decided to drape their borders with these lethal defences that are trivially called concertina wire due to the way the rolls expand. Maybe some of the victims of armed conflict who had managed to reach Germany and were now part of the Radio Revolten team had wandered along such fences during their flight. Bates made sure to order the wire from a company who had refused to supply it to authorities who would have used it against refugees. Armed with a pair of specialised leather gloves he wrestled the wire into shape and then transformed its function: he attached a radio transmitter to one end of it and thereby turned it into a giant antenna, mimicking a guerrilla technique that reduces the traceability of rebel radio stations. His radio station however transmitted a beautifully meandering drone of low frequency harmonics mixed with sounds recorded from a concertina, a free-reed musical instrument which was exhibited on a plinth in the room.

STEVE BATES, CONCERTINA





Concertina is a reflection on limit, border, threshold, the inter-relationship between sound/music and military techno-culture, and border enforcement and contemporary migration patterns.
[*Das Große Rauschen*, exhibition brochure]

An open mind was needed—rather than protective clothing—to handle the immaterial and ephemeral work of Sarah Washington. Her broadcast *In the Air We Share* made use of a once-in-a-lifetime opportunity—the availability of three radio frequencies for use at the same time: Radio Corax (95.9 FM) and the two Radio Revolten frequencies (99.3 FM & 1575 AM). The 15-minute-long piece was a derivative of her installation of the same name inside Roter Turm, where hidden speakers randomly released multilingual snippets of speech which recalled insightful transcendental experiences. In the version transmitted via the radio waves, three different tracks were played simultaneously on the three frequencies, the broadcast of which turned out to be a less trivial technical feat than expected. It also created a dilemma for the listener, suddenly there was an active choice to be made about which channel to choose. Washington eased this conundrum during a soft-spoken and lengthy introduction that allowed the listener to ponder the setting and maybe go and look for a second or even third radio receiver to be able to pick up all of the transmissions at once. Listening to any of the three channels on their own would still offer a viable version of the piece, however each extra radio set added another dimension.

An open-air setting was prepared for an encounter with the multi-frequency broadcast by the festival's Radio Oracle Marold Langer-Philippsen. This was high above Halle's market square on the outdoor bridge that connects the two rooms of the former tower warden's flat. Here profound cut-up messages emanating from three radio receivers mixed with the bustle of street life drifting up from below and led those who had climbed those hundreds of stairs to involuntarily close their eyes. During the broadcast the exoticism of the radio technique faded into the background and gave way to a state of deep listening. The transmission ended with a dark and husky voice declaring: "In meditation, everything comes together. These are glorious moments. It's like being in a state of grace."

Festival artist Sally Ann McIntyre later recalls "the architectures of air and voice, like lattices and ricochets, cellular structures twining around each other like vines. Such a beautiful poetics of memory and indeterminacy, and really beautiful radio."



I had one of my most beautiful acoustic experiences in the Venezuelan coastal rain forest—alone, 2 o'clock in the morning, 1,800 metres above sea level, and forty kilometres from the nearest human settlement. Nerves and ears stretched to the limits of human perception to partake in the faintest sounds of living creatures hidden in total darkness: the magical split tones of a distant tinamou, the strange extra-terrestrial clicking of a nightjar, the human-like songs of a potoo, interrupted again and again by the high whistles of a poison dart frog on the threshold of audibility.

Back at home, for hours I was unable to separate myself from the unfamiliar (and still unknown) sounds collected on online platforms like *xeno-canto.org* by crazy people like myself in the most remote corners of the planet. Afterwards, I spent two more hours on the roof terrace, fascinated by the few perceptible sounds of bats swarming in the nearby park, knowing that still 95% of their vocal range remains hidden from me. If there existed a radio station that played exactly that, I would be its most faithful listener.

When the purr of a cat comes from the radio, above all the purring of the wonderful radiowork of the fine artist Terry Fox (2008) *The Labyrinth Scored for the Purrs of 11 Cats*, then that is a very special moment indeed. [Elisabeth Zimmermann]

The extension of radio broadcasts into the field of non-human sound production provokes wonderful questions and thought processes.

In her feature *Animalia: From Human to Animal*, Grace Yoon fantasises about the possibilities of animal-human communication through the imitation of animal voices.¹

1. Grace Yoon. *Animalia: Von Mensch zu Tier*. SFB, SWF, DLR (Germany), 1996, 52 min.

On ORF Kunstradio, Robert Jelinek broadcasts insect mating calls that would sexually stimulate fleas, cockroaches and mosquitoes—if the radio were only turned up loud enough:

Did you experience a plague of insects last summer? Did you manage to finally free yourself from the great itching? Did you think that your home was free of insects in the winter? That all the critters were in a deep hibernation? You wish! With

Phonohomicide II a unique sound programme has been developed that, with subsonic frequencies, reanimates, hypnotically lures and mobilises insects. It activates the following insects: ants, fleas, woodworms, cockroaches, lice, mites, moths, gnats, silverfish and spiders. The musical aphrodisiacum was developed in cooperation with the Research Centre for Biology in Vienna. An overture for the insect world.²

Hartmut Geerken equipped a bumblebee nest with microphones and assembled the recordings into an impressively intimate invitation to the daily rhythms of a bumblebee colony. The piece, *Bombus Terrestris*, is complemented only by Geerken's voice at the moment of attempted contact with the large earth bumblebees.

Hartmut Geerken about *Bombus Terrestris*:

it is an aspect of the arrogant self-understanding of man that he only understands as language that which he himself understands. yet the humming and buzzing of bumblebees is one of the oldest languages on this planet. bumblebees hummed and buzzed long before humans uttered their first sound. worldwide there are some 500 bumblebee species, 63 of which have their home in europe, 46 of which in german-speaking lands, and 31 in germany. the 'bombus terrestris', the large earth bumblebee, is the most common bumblebee species in germany. wings that briefly touch the microphone or legs that crawl quickly across them create the acoustics of a broadly tuned radio station. remaining are only the sibilants. when listening closely, one discovers a meta-language of which the bumblebees likely suspect nothing. each listener discovers other meta-languages and thereby hear their own radio play. the audio recordings for 'bombus terrestris' occurred in different ways. the stereo microphones were placed in various locations around or in the nest. i assembled the thus-produced differing acoustic qualities seamlessly one after another, but not over each other.³

Zach Poff picks up the pond life at Wave Farm, N.Y. with hydrophones and streams it online (Pond Station, 2015). Knut Aufermann offers a worldwide broadcast of fermenting grapes from a cellar on the Mosel. Wolfgang Müller, together with artists he has befriended, gives voice to extinct birds in the radio play *Séance Vocibus Avium*.

Each participant must leave his or her body and slip into the body of a bird. At the moment of becoming-a-bird, the music and the musician disappear. We hear the calls of long-silenced birds.⁴

In the radio play *Starlings from Hjertøya Sing Kurt Schwitters*,⁵ Müller has birds (known for their art of imitation) from the Norwegian island Hjertøya located in the Moldefjord sing poetic imitations of Schwitters. According to Wolfgang Müller, since starlings also copy from each other, it is quite possible that the original sonata supposedly composed on this island by Kurt Schwitters, who spent his summers there, was heard and also sung by the starlings. Schwitters was known to practice outside while making sounds.

2. _____ Robert Jelinek. *Phonohomicide II*. ORF Kunstradio (Vienna, Austria), 21 November 1999; http://kunstradio.at/1999B/21_11_99.html (accessed 18 March 2018).

3. _____ Hartmut Geerken. *bombus terrestris*. BR (Munich, Germany), 20 November 1998, 78 min.; <https://hspdat.to/?p7=bombus+terrestris> (accessed 18 March 2018).

4. _____ Wolfgang Müller. *Séance Vocibus Avium*. BR (Munich, Germany), 3 August 2008, 55 min.; <http://www.wolfgangmuellerrrr.de/Seance> (accessed 18 March 2018).

5. _____ Wolfgang Müller. *Starlings from Hjertøya sing Kurt Schwitters*. Radio Corax (Halle (Saale), Germany), 2011; https://archive.org/details/radia_s25_n308_Corax_Mueller_Schwittersstare_320kb (accessed 18 March 2018).

OPENING OF HARTMUT GEERKEN'S INSTALLATION OPEN OUT THE HOTHOUSE





I myself composed a Dadaistic radio concert for the Art's Birthday 2017 on ORF Kunstradio based on the sounds of birds which have impressed me the most. The recordings of brown bitterns, pittas, black-throated loons and various nocturnal birds provided not only material for compositions, they also allowed the listener to reminisce about remote regions of the world which have hardly been touched by humans.

On the other hand, I also think of *Radical Radio* by R. Murray Schafer, the unconditional listening to the world and "its nature".
[Elisabeth Zimmermann]

The list of artistic radioworks with sounds from the surrounding (or distant, or imagined) natural world would likely fill its own catalogue, for the increasing expediency of the medium of radio increases the desire to bring back to our daily lives the sounds of non-human creatures disappearing from our (more and more urbanised) world.

The visitors and listeners to the project *Landscape Soundings* by Bill Fontana could listen to the Hainburger Au in the year 1990. During the Vienna Festival, microphones, directional radio and telephone lines were installed for a short two weeks in the Donau-Auen National Park near Vienna and the sounds of birds and frogs were broadcast on the Maria-Theresien-Platz, which lies between the natural history and art museums in the centre of Vienna, as well as on ORF Radio.
[Elisabeth Zimmermann]

It exists the desire to reflect the human construction of that which we call nature. Different from the scientific urge to describe an objective nature, the (not only radio) arts are driven by a will to archaically construct a view of nature. While the visitors to curiosity cabinets were amazed at the unbelievable diversity of "creation", we today are more concerned with the ruptures in our own selves created by the desire for difference from non-human nature. When in *Anna Friz's* radio artworks a lonely dog howls in the background of the tender sounds of wind and water, then, listening, I feel the attraction and the melancholy of loneliness (mine), but I don't hear the reason for the howling of the dog (nor do I want to know it).

On the festival frequency of Radio Revolten, an entire night is taken up with sounds broadcast by a fox on its forays. Antoine Bertin realised this recording in the work *12 Hours in the Life of a Fox*. The shift in perspective pertains not only to the listeners, but also to the medium of radio itself. Listening to participate in a hunt and massacre, in eating and running, puffing and panting alters our view of the fox's existence as well as our view of the otherwise usual nightly music programme.

Sally Ann McIntyre offers an excursion into the history of bird sounds recordings during a nocturnal radio hour on the festival's frequency. Shellac records and early vinyl pressings represent the urge to find order in the rich variety of animal sounds in the rainforest, the fascination with approximating these sounds through imitation, as well as the artistic extension of human vocal chords. McIntyre shares her enthusiasm for the nearly impossible attempts to document remote bird species in the inaccessible mountain regions of Myanmar and Thailand. The cracking of worn-out shellac records combines with a choir of

voices in which the individual species threaten to vanish and a ghostly presence unfolds.

But it is much more than a romantic excursion into “earlier” times; inherent to biological radio, as we wish to call it here, is a radical demand: for the afterwards, for human liberation, and the liberation from the human domination over nature which still determines our relationship today.

Walter Benjamin, in his critique of human domination of nature, formulated an achievable stalemate as the supreme goal of industrialisation that seems reasonable to me:

Since there no longer can be a ‘back to nature’, nor a domination of the same, there remains only an in-between, a Shabbat for man and animal. [...] [A]nd in the mutual suspension of notions of humanity and nature there nests in the rescued night, in the dominated relationship, something for which we have no names and that is no longer either man nor animal.⁶

For the festival, Harmut Geerken installed numerous speakers in the Botanical Gardens which, over the four weeks, played to the tropical plants in the greenhouse. Some of the plants blossomed and told in turn wondrous stories from the night, others remained shyly reserved, enjoying themselves quietly. Yet others liked the music less, Hartmut Geerken recalls:

some plants don’t like radio. everyone noticed that in the four weeks of my broadcasting in the greenhouses in the botanical garden the plants there tried desperately with their delicate sprouts to escape the sounds through the tiniest cracks in the glass roofs. but the so-called arcimboldo radios are different, of course. on the inside, these devices are built similarly to crystal radios, also called detectors, that no longer need to be connected to the grid but rather work only with induction current. radio license fees also do not apply. but the housing, similar to the vegetable season, is like the faces of arcimboldo which consists of carefully selected vegetables and fruit. the rings of savoy leaves function as speakers; tomatoes and plums replace the knobs for the volume and tuner. the traditional magical eye is composed here from the husk leaves of purslane. the basis of all radio technology is the principle of the broadcaster/receiver. this also applies to the biological radio. there are plants that send out messages that other plants of the family can receive. in the african outback there is a bush that emits a bitter substance when eaten so that animals leave it alone. the phenomenal thing, however, is that the same type of bushes in the near vicinity also secrete this bitter substance at the same time, although they are not eaten themselves. also in my garden the plants are placed so that they are together with other sympathising plants. this promotes their mutual growth. if plants with negative attitudes towards each other are planted next to one another, they will only have troubles for the whole year. we thus should not ask ourselves whether existences outside of the human nature can use radio

H.G.

as a means of communication. they already have their own broadcast/reception module whose working mechanisms we cannot (yet) comprehend. i have also experienced that a carrot that i cared for months in my garden sends out different messages than a carrot that i would buy in a plastic bag at the supermarket. my body is the receiver of such messages and reacts either positively or negatively accordingly. animal sounds have played a big role in my life since my childhood. as a pupil i would spend hours in the woods luring a sparrow hawk that had its nest with three chicks nearby by imitating its call. when the parents disappeared once for a few minutes, i climbed up, stuck two of the young woolly balls into my pants pocket and raised them on all sorts of meat. the small birds didn’t miss anything because i could communicate with them in the sparrow hawk language. when they were fully fledged, i carried them one last time with leather gloves and returned them to nature. when i was with famoudou don moye in africa, i witnessed pygmies hunting for mushrooms. when one of the men discovered a good mushroom, he called loudly, repeatedly, in falsetto, an animal-like “hut hut”. the others came to him and marvelled at the mushroom. for years moye and i have made this call our own. when we saw each other at an african market or when we had gotten lost in a crowd before a concert hall, one of us would call “hut hut” and we quickly found each other again.

of course cage was right when he said that everything audible can be music. but what bothers me is the word music. this ambiguous term should rather vanish completely from our vocabulary. the same for the word art. but what then should we call that which we make? the word “sound” is also pretty worn out. maybe you shouldn’t try to call what we do anything. language is a much too weak and ambiguous medium to signify that which reaches our ears.

approaching animal sounds vocally means for me a rejection of language in the traditional sense. there is no worse means of communication than language. when a sound passes over the lips, the misunderstanding is already pre-programmed. since from when language has first existed, it has failed: in politics, religion, economics, and family. i telephone daily with famoudou don moye and our conversations are completely free of misunderstandings. we communicate in a kind of fantasy language that is similar to some animal languages. i am currently planning a radio play that only works with such meaningless articulations. but i don’t know if radio stations will go for something like that. we’ll see. the russian futurists tried something similar and failed. but failing again and again is also a progression.

6. cf. Walter Benjamin. 1972, quoted by Giorgio Agamben. Das Offene. Der Mensch und das Tier. Frankfurt am Main: Suhrkamp, 2003. p. 91.

Peter Courtemanche has the plants in the Botanical Garden themselves broadcast during the Radio Revolten festival. His delicate and fragile sensors register the changes of frequency in the plants as they take in nourishment by transporting water and transform it into an audible event. The apparatus is visually submerged in a forest of leaves and testifies to a respect for the “monitored” being.

P.C. Too often our attempts to interface with the non-human world, at the level of popular culture or mainstream culture, end up creating a lot of distress and destruction for the environment we choose to ‘help’ or interfere with. Humans like to change things. They like to modify everything. It’s rare to find a person who can leave things alone and simply watch or listen.

The piece I showed in Halle, *Bio-electric Radio*, merges inorganic electronics with the organic materials of a vine plant. One reason for this is to question why so many of our industrial technologies ignore the living and evolving biological world in favour of silicone, stone, and steel. The piece asks the listener to think about what is going on inside the plant. What are the plant’s natural electrical and chemical systems? If we listen to the plant, is there something that we can learn about ourselves and our technological choices? Regarding Cage: I think his theory has been proven many times over by amazing sound works that have been done both before he proposed his ideas and since then. It’s not so much a question of any sound/noise being music rather as a question of how we want to define the word ‘music’ and what we are actually interested in hearing.

I would like to think that if ‘biological radio’ became a term, it might refer to sounds and processes that come out of biological environments. It could be artworks like *Bio-electric Radio* or other radio-informed outdoor installations. It could be the creative use of field recordings from green-spaces. Ideally it would be open to a broad set of interpretations, artists and radio producers could play with the idea in different ways. My interest is to bring new ideas and hidden living systems to light. So I hope that ‘biological radio’ will help inform the way people think about the natural world.

If there were a ‘biological radio’, maybe more people would learn to hear between the lines. [Elisabeth Zimmermann]

The only living creatures at night in the former Zoological Institute on the Domplatz in Halle are the kestrel in the attic, the hamster that lives in the basement of the behavioural biology department, and a few fish in the aquarium. Otherwise, the building is full of exhibits of dissected past lives—one of the largest natural science collections in Germany and a fascinating view of earth’s life forms—silent, yet that still speak. In the radio installation *Collector’s Radio (radio or not, you can’t hide)* I present on the square and on FM a selection of volume-dependent playbacks of the building’s sounds created by a random generator. The hamster’s nocturnal business pervades the Domplatz and seduces the senses of passers-by to enter with their mind’s eye into the house of dead animals and to restore them to life. The creaking of floorboards in the venerable lecture hall creates the soundtrack for a live broadcast



PETER COURTEMANCHE, BIO-ELECTRIC RADIO

of the morning magazine of Radio Corax. Lukas Holfeld reads his own stories on the human-animal relationship, Sally-Ann McIntyre and I discuss the fascination of the icy sounds of the black-throated loon on Norwegian lakes and noises only heard from the nest of the New Zealand albatross. The feeling that the historical display boards on the wall are about to move can hardly be suppressed. Radio animates the dead scenery; the living scenery animates the dead radio.

And as if the host, Radio Corax, were not already predestined qua name (corvus corax, Latin for the raven, who, according to Greek legend, heralds the truth in a cawing voice) to launch a “biological radio”, the closing concert of the festival featured Hans W. Koch playing the world’s second largest carillon in the Roter Turm and additionally utilising the sounds of animals to great effect.

There are lights and there are shadows. There is a trumpeting elephant on the radio that I hold in my hand, then a sound like a cable slithering over a concrete floor. At a distance of some 10 metres others are standing like myself: silhouettes with radios in their hands. Above sounds the glockenspiel of the Red Tower ... single notes, chords, and brief non-melodic sequences. A group of children running here and there circles me. A man approaches timidly and stares at my radio trembling with the cries of tropical birds. Then it is silent, yet I hear other bird swarms flying from the devices of my distant neighbours.

Hans W. Koch’s composition *glocke + tier* (bell + animal) for glockenspiel and two groups of performers with portable radios (on two different frequencies) began at 6 p.m. on the market place, and the citizens of Halle hurry busily over the wide square on their last Sunday errands, hands in pockets, holding their bags, clutching mobile phones or umbrellas.

As the concert ran its course, the performers began their perambulations. A flattering, queeking, crying, and growling spreads as a shimmering tapestry of sound from one end of the market place to the other, broken by clatter on cobble stones, scraps of conversation, noisy children, by the hissing of wet bike tires, by the clapping of skateboards, by giggles and laughter. During the whole time, the bells ring and chime, creating an interplay of surprising intervals, unusual congruencies, and harmonic convergences.

As unusual as the relationship between animals and bells may seem at first sight, the whole place gradually becomes transformed into an interactive, mobile orchestra. And with the long shadows of passers-by and performers gliding over the black asphalt, the scenery took on the aura of a magical shadow theatre.⁷

7. Gabi Schaffner. “Bells and Animals”, *Radio Revolten Diary* 30 October 2016; <http://radiorevolten.net/en/bells-and-animals/> (accessed 18 March 2018).



Sarah Washington

*Time beats ever faster, its rapid tempo creates a more vital emotion, which in turn demands a more powerful expression ...*¹

Piet Mondrian

1. Piet Mondrian. Natural Reality and Abstract Reality: An Essay in Dialogue Form. 1919-1920. New York, NY: George Braziller, 1995. p. 59.

WHAT'S GOING ON?

If you happen to experience some sort of discomfort or denial while reading this chapter, I'm sorry ... although delighted to be the one to provoke you. There is more going on under the surface of appearances than we may wish to acknowledge, or perhaps better stated: there are many things we encounter which we either choose not to name or have no capacity to. Some would surely express concepts and occurrences differently to the way they are described in these pages. What we are essentially discussing here are the mysterious forces which lead us to a sense of recognition, or lift our spirits, at those times when a work of art gives rise to a profound experience. Unfolding through the following examination of artistic contributions to Radio Revolten is a telling of how such feelings come to be generated, what it means to follow an instinct for seeking out a deep sense of connection between something inside and outside of yourself, and most importantly—where that can bring your art. The affecting qualities of the following artworks speak for themselves, therefore this half-hearted appeal to rationalists stops here. The time for crossed wires has passed.

In any event, Hartmut Geerken & Famoudou Don Moye will kick off the proceedings to shake us out of any impasse.

Gabi Schaffner
Radio Revolten Diary, 22nd October
Duo Infernal²

The Webster's dictionary offers the following meanings of "infernal":

1. hellish; fiendish; diabolical: an infernal plot.
2. extremely troublesome, annoying, etc.; outrageous: an infernal nuisance.
3. of, inhabiting, or befitting hell.
4. Classical Mythology of or relating to the underworld.

So, was Geerken's & Don Moye's concert in the lecture hall of the Botanic garden hell ... or heaven?

It was definitely outrageously stunning, hellishly diverse, and inhabiting a heavenly (or hellish for some) realm where music is free to take whatever form you might give it in the shape of cymbals, drums, bird pipes, xylophones, table harps, Asian flutes, self built kalimbas, knots of mussels, bongos, gongs, desk bells, bamboo sticks, wooden trumpets,—and radios too. The table that occupied the full width of the room was entirely covered with instruments. I sat close and I counted on a stretch of maybe two metres 22 different sounding-objects.

Much of the music was percussive, starting with a booming drum duo and much was owed to the African roots of jazz. But these roots grew every couple of minutes into full grown musical plants, plants with wildly striped leaves, lush foliage and colourful blossoms. There were all shapes and textures: flowers like elephants and some like stalking tigers, spiky bushes spilling metal notes and also, in between, very tender and fragile plants with fine stems and minuscule yellow, pink and white flowers.

The two men paced leisurely up and down the table, one joining the other in constant changes of resounding objects. The aerial roots of their infernal creation entwined with the microphones, with the aura of the plants brought in by the audience, stirred unforgettably vibrations in the body and via transmission sent their sonic tendrils far into the ether.

2. _____ Gabi Schaffner. "Duo Infernal", *Radio Revolten Diary*, 22 October 2016; <http://radiorevolten.net/en/duoinfernal/> (accessed 19 April 2018).

Email to Hartmut Geerken

24th August 2017

Dear Hartmut,

Thank you for agreeing to answer some questions for our Revolten book concerning the amazing performance of Duo Infernal.

If English doesn't work well enough for you, feel free to write in German and we will have it translated.

All my questions revolve around one theme, so you can simply address it in any way that feels good to write about. It can be as long or as short as you like.

I am writing a chapter on rituals, and that is where I think your performance belongs. Perhaps you remember we discussed shamanism briefly on the following day, and you told me you were off to Greenland to work with some shamans. This is my point of interest, given that I had such a strong energetic reaction to the performance (I could not sit down, I had energy shooting up and around inside me, in a way that I usually only experience when I practise Qigong). It was so funny to me how the crowd pent up all that energy, and then exploded with applause at the end. To look at them you would think they couldn't have cared less, but you had them rapt.

This is not an easy thing to write about, so if you want to take it in a different direction, please do.

These are the kinds of things I want to know:

Do you consciously construct your performances to move yourselves and your audiences to profound experiences? Alternatively, is this a happy by-product of your profound connection to other musicians?

How much are you consciously dealing with shamanic practice in your music? Is it a topic of discussion between the two of you in Duo Infernal?

Is this deep effect your performances evoke something that has developed over time? Did it come instinctively, or were you actively seeking it out?

Do you take part in other activities that induce similar experiences? If so, how do you bring this into your music?

In essence I'd just like to have some words from you about how you see the subject of shamanism in relation to music performance, to find out how you view music that has the ability to raise the spirit in ecstasy, and what we gain or learn from these experiences.

The CD³ is really good, I'm so happy that you put it out.

Please feel free to tell me to bugger off if you don't want to answer, now you have seen the questions!

Love Sarah

3. _____ Hartmut Geerken & Famoudou Don Moye, *Duo Infernal*. Vol. 3, *Radio Revolten Rant. Cool In The Pool*, with Hartmut Geerken and Famoudou Don Moye, AECO Records, AECO 0019, June 2017, rec. live at Radio Revolten 2016, CD.

Email to Sarah Washington

26th August 2017

dear sarah,

thank you for your mail & your comment on our ritual. unfortunately it is too rare that one receives any remarks on performances/books, generally on creative products. happily i read your comment.

let me continue in my mother tongue. the subject is very sensitive & difficult to explain in a foreign language.

moye & ich kennen uns seit etwa 35 jahren. schon als wir uns zum ersten mal in unserem haus in athen getroffen haben, finden wir an, in meinem sogenannten percussion environment mit instrumenten aus der ganzen welt musik zu machen. kurz danach waren wir schon auf tournee in schwarzafrika im trio, zusammen mit john tchicai. dort hat sich für mich (für moye wahrscheinlich früher) das manifestiert, was man gemeinhin als "ritual" bezeichnet. wir sind auf unserer reise durch drei afrikanische länder musikalisch nichts anderem begegnet als ritualen. das hat nichts mit konzert oder einer aufführung einer komposition zu tun. das ritual ist eine spirituelle form, die von meditation bis ekstase gehen kann, & sie ist eigentlich nicht für ein publikum gedacht, sondern es ist eine intime angelegenheit für die am ritual teilnehmenden. auch das abendländisch geprägte wort "musik" ist da fehl am platze. ich kann an

einem ritual nur teilnehmen, wenn ich die anderen teilnehmer sehr genau kenne. da dies sehr schwierig ist, ziehe ich das duo allen anderen besetzungen vor. wo das fantastisch funktionierte, waren, neben moye, die duos mit sunny murray & mikel ranta. wenn moye & ich zusammen "arbeiten", sind unsere gehirne über lange strecken kongruent. wir haben uns noch nie über das, was wir machen, unterhalten. es gab vor unseren auftritten nie einen plan oder eine übereinkunft. weder wie wir beginnen, noch wie das ende sein soll, ist gegenstand von gesprächen. jeder moment ist überraschung! wenn man sich so lange zeit kennt & sich schätzt, braucht man keine spielregeln mehr. die klanglichen bewegungen sind ähnlich der schwarmintelligenz von vögeln, wo wie auf kommando der schwarm die richtung ändert. wir reden vor allem über internationales essen & trinken, über musik haben wir, glaube ich, noch nie gesprochen, ich erinnere mich wenigstens nicht daran. doch, einmal, 1985, im trio mit tchicai, in athens grösster konzertthalle: der moderator sagt uns an, wir stehen, bereit für den auftritt, hinterm vorhang & plötzlich fragt tchicai: wie sollen wir anfangen? ohne zu überlegen sage ich: wir rennen so schnell wie möglich auf der bühne zu unseren instrumenten & spielen von der ersten sekunde an so schnell wie möglich, so viel wie möglich & so laut wie möglich. es war ein fulminanter konzertbeginn mit spontanen parametern in der letzten sekunde, zu hören auf unserer lp *cassava balls*.

irgendwie scheue ich mich, das was wir machen, schamanistisch zu nennen. schamanismus ist ursprünglich ein religiös magisches phänomen, das über eine person in ekstase kommunikationen herstellt zu anderen welten. schamanismus auf andere formen zeitgenössischer kreativität zu übertragen ist eine problematische hilfskonstruktion. auch wir sind, wenn wir agieren, aus der herkömmlichen welt hinausgetreten & leiten töne/sounds/vibrationen/geräusche weiter, die von irgendwoher zu uns kommen. das hat wohl mit spiritualität zu tun, aber nicht mit religion. eine art magie, gereinigt von allen negativen konnotationen, ist bei unseren auftritten immer präsent.

du fragst mich, ob ich andere aktivitäten pflege, die ähnliche ergebnisse zeitigen. ich praktiziere seit einem halben jahrhundert mehr oder weniger regelmässig tai chi. wie das auf meine musik einfluss hat, darüber habe ich mir noch nie gedanken gemacht. irgendwie hängt doch alles miteinander zusammen. ich habe mir nie gedanken darüber gemacht, wie ein publikum reagieren könnte. eigentlich spielen wir nicht für ein publikum, sondern wir machen eine reise in unser innen & lassen das publikum daran teilhaben, was wir auf dieser reise erleben.

love,
hartmut

Translation:

Moye and I have known each other for about 35 years. From the first moment we met in our house in Athens, we began to make music in my so-called percussion environment with instruments from around the world. Not long after, we were

on tour as a trio in sub-Saharan Africa, together with John Tchicai. That is where it manifested for me (for Moye probably earlier), what is commonly termed as "ritual". On our journey through three African countries, we encountered nothing other than rituals in music. It has nothing to do with concerts or a performance of a composition. The ritual is a spiritual form which can range from meditation to ecstasy and is not really intended for an audience, but is an intimate matter for the people who participate in the ritual. The western reading of the word "music" doesn't fit here either. I can only participate in a ritual when I know the other participants very well. Because this is very difficult, I prefer the duo above all other groupings. The duos where this worked fantastically, besides Moye, were with Sunny Murray and Mikel [Michael] Ranta. When Moye and I "work" together our brains interlock for long periods. We have never talked about what we do. Before our performances, there was never a plan or a consensus. Neither how to begin nor how the end might be are subjects of conversation.

Every moment is surprise! When you have known and appreciated each other for so long you don't need playing rules any more. Our movements in sound resemble the flocking behaviour of birds, which change direction as if by command. We mainly talk about international food and drink, I believe we haven't yet spoken about music, at least not that I can remember. Oh yes, once, in 1985, in a trio with Tchicai, in Athen's largest concert hall: the host announces us, we are standing behind the curtain ready for the gig and suddenly Tchicai asks: "How shall we begin?" Without thinking I say: "We run as fast as possible across the stage to our instruments and play from the first moment as quickly as possible, as much as possible and as loud as possible." With spontaneous parameters at the last second it was a barnstorming concert-opening, which can be heard on our LP *Cassava Balls*.

Somehow, I shy away from calling what we do shamanistic. Shamanism is originally a religious magical phenomenon that establishes communication with other worlds through a person in ecstasy. To transfer shamanism to other forms of contemporary creativity is a problematic crutch. When we play we also escape the everyday world and transmit tones/sounds/vibrations/noises that come to us from somewhere else. Perhaps it has to do with spirituality but not with religion. A kind of magic, cleansed of all negative connotations, is always present in our performances.

You ask me if I pursue other activities which produce similar results. For half a century I have been practicing Tai Chi more or less regularly. I have never thought about how it influences my music before. Somehow or another everything is connected. I have never pondered how an audience might react. In a sense we don't play for an audience, but we are making a journey inwards and allow the audience to participate in what we discover on this journey.

Love,
Hartmut

This exchange drew me to further reflect on the possible development thousands of years ago of shamanistic practices into systems for physical and spiritual exercise, for example Qigong and T'ai Chi Ch'uan. My contention was strengthened that performances such as those of *Duo Infernal* serve to induce energetic activation just as these ancient practices do.

I then realised that the performances which have resonated with me the most over the years have all shared a ritualistic element or approach. This is probably what primarily attracted me to the Krautrock and post-punk scenes, as bands like Faust and Dome were able to conjure up an electrifying atmosphere by combining intense pulsating soundscapes with an extraordinarily immersive dramatic structure. After emerging from an induced trance, the sensation left you feeling like you'd had your brain neurologically rearranged (turned fully around in your skull even!)—in the process raising your consciousness to a new high. While fans of the music may be able to experience these great effects, I guess that many would hesitate to recognise a spiritual aspect even to these most sublime performances. Yet groups who are able to operate on this level, whether by intent or instinct, engender an especially meaningful devotion in their followers precisely because they are able to unlock new realms of insight and interconnection. This inclines me to view their work as a type of primal mysticism, akin to shamanism perhaps in its techniques, without sharing any mythologies.

Like Geerken, I do not want to obscure such experiences by associating them with any form of religious dogma. What I imagine they share with formal worship is an intensity of inner experience that they have the ability to evoke. However, I fear that traditions which impose arbitrary codes and adhere to outlived fictions may well obfuscate the deepest responsibility we should take towards the development of our species. The measure has to be whether we are able to concern ourselves fully with the business of accelerating human potential in all its colourful expression—a goal we stumbled towards at Radio Revolten by creating space for the unorthodox art you will read about in this book. "A kind of magic, cleansed of all negative connotations ..."

It's what we sorely need.

THE DARK (K)NIGHT OF THE SOUL

Where better to continue with the idea of mind-twisting than the following event performed by festival instigator and co-curator Ralf Wendt, carried out in public space with a sense of exquisiteness and brutality in equal measure. We may require a jolt to open us up to higher realms of consciousness.

HARTMUT GEEKEN



FAMOUDOU DON MOYE





Sarah Washington
Radio Revolten Diary, 25th October
Hauser in the cities⁴

I am angry, the causes of which I don't fully understand or want to explore beyond the feeling it is one of those days. I need to go home to be alone, uninterested in hanging around the cold strange night for interventionist radio. About to leave the Radio Revolten Klub as the Oracle places a radio into my hand. OK, all is clear, I will follow the action as it unfolds. The prospect of another powerful investigation of Halle's public space by Ralf Wendt is, naturally, too compelling to forgo. The radio crackles and splutters as we tumble into the crisp air. Slowly, I begin to wander towards the marketplace as rumour says this is where the action begins (who knows where it will end?). A group of youthful Russian visitors follow on. When we reach the square I hang back, mesmerised by the rays of light shining up over Händel's head in the misty gloom. I stop for photos, then my attention jumps back to the radio in my hand as the focal point of this moment. I hold it up for a portrait with the towers. A dishevelled man enters my view as if dropping from the sky, I watch him while shielding myself with the radio. He bends as if to sit on a bench, but instead slides to the floor in a fluid move, managing to swing his carrier bag under his head like a pillow. Asleep instantly, in shorts. Surely his skin will freeze to the ground. Who is this unusual creature? Am I needed to intervene or is it an elaborate hoax? It looked like a deliberate descent to the pavement, as if into bed. But I need to keep an eye on him. Perhaps this man decided to die on that spot.

I wait and watch. The Russian group circles Roter Turm. They hear their own voices on the radios they are carrying. But how? The locals at the tram stop don't want to notice the frozen man, but start to realise they have no choice. Somebody needs to call the emergency services. A small figure known to me approaches and looks concerned. She crouches down at the man's side. Is this part of the action, or has she stumbled across a terrible situation? The Russian group gathers around. One throws a coat over the man's bare legs. But then they start to sing. They know the game. They hear themselves clearly on the airwaves now and celebrate the situation with a mournful tune.

In the meantime some sort of guard arrives from across the square. He joins two agitated young men already convinced of the situation's surface appearance. Suddenly, the dying man jumps up and charges across the vast empty market place towards the Hausmannstürme. I now see for certain who it is; the figure had been unrecognisable in its potent psychodrama. The group rushes after him to catch him banging loudly on the tower door. He is swiftly swallowed by the building and the door slams shut.

An ambulance arrives on the scene—elaborate embellishment, but most likely real. The crew also bang on the tower door, and start to question people nearby. The audience disperses

back into the square: the heat is turning up a little and it is getting uncomfortable. The ambulance crew must make certain, so they approach me as a solitary bystander. At first they want a native German speaker. I manage to confirm that the man was an actor, part of a performance, a true radio drama. Although unsettled, they seem satisfied by my assertion, and the fact that so many people are holding radios. But the two young men are angry and want me to take it. How can you do something so real just for show? That's categorically beyond the realms of decency! Sorry I say, I don't understand all of your words.

Nobody knows if this is the end of the show. The ambulance disappears after making a circle of the square. A few minutes later figures appear on the lofty bridge between the towers. The Russians wave and cheer. They raise a huge "Thank you" into the night sky. One takes a delighted selfie with me, and swaps email addresses for a photo exchange. He is very warm. Football fans start to offload in greater numbers from the trams, drunk from the city's game against Hamburg. They too sing out across the square. A young unemployed man lingers to question us all about our lives. Very curious and engaged. He who is known becomes unknown. He who is unknown becomes known.

4. Sarah Washington.
"Hauser in the Cities", Radio
Revolten Diary 27 October 2016;
[http://radiorevolten.net/en/
hauser-in-the-cities/](http://radiorevolten.net/en/hauser-in-the-cities/) (accessed
19 April 2018).

Which just goes to show, not only can you play tricks on an audience's perceptions by deceiving them over the airwaves: if you are good enough you can do it with real-life action—even to people you know well who are supposedly aware of the artifice in progress. The effect is eerily phantasmagorical; hats off to Hauser as imagined and embodied by Ralf Wendt, aided and abetted by Tina Klatte and Marold Langer-Philippson. This is art which makes you question not just superficial appearances, but everything you think you know about your socio-political environment. Through employing shock tactics to produce a radical shift in perception, it offers a sideways glimpse into "reality" as pure construct, a mere stubborn consensus of opinion. This in turn implies that we have a profound agency and freedom to assemble the world around us into more productive images and narratives. All we need do is step up to the duty of choosing to see things differently.

CARNIVAL (THE HOT ONE) COMES TO HALLE,
WITH CHAOS AND LOVE

Next: a missing performer from Brazil (Leandro Nerefuh—the Artist in Absentia), a room full of adults blowing up balloons to squeal the air out of them, a ritual to protect Halle from mosquitoes and elephants, and a "distance healing".

Gabi Schaffner
Radio Revolten Diary, 19th October
Mosquito Magic: Pipa Musical⁵

How can you chase away a mosquito that is irritating you?
Answer: imitate the male mosquito's buzz and the bloodthirsty female will leave. Pipa Musical from São Paulo brought the tropics to Radio Revolten. Their performance sparkled in a fusion of vocal samples, poetry, pot plants, beats and balloons and drew on the ancient and idiosyncratic rituals that influence the daily lives of people in Brazil. Still, a much more serious topic was underlying the impromptu performance: in the last couple of months, the Dengue virus has even outrun the Zika virus, its prevalence having increased by 82% compared to 2014. Multiple strains of Dengue are circulating in some parts of Brazil, and infection with one strain doesn't provide immunity from the others.

Rogério Krepeski and XTO who made their first radio shows on the occasion of Knut Aufermann and Sarah Washington's Mobile Radio BSP project in 2012 during the 30th São Paulo Biennial, both maintain strong bonds to traditional folk beliefs. I was curious to know more.

Gabi: Tell me about the collars [garlands] you are wearing. Do they have a meaning?

Rogério: The meaning is that we are playing about the rituals, and the act to go to the wardrobe and choose the clothes and the accessories is a ritual everyday.

Gabi: What kind of rituals?

XTO: In Brazil our official religion is Roman Catholic but we have a lot of different folk beliefs that mix with it.

Rogério: For example the red colour here is for Ogun, the god of war.

Gabi: What belief are your colours about?

XTO: I believe in carnival. Just colours we use them are special for carnival. The carnival is a very serious ritual for us. That mask I made, I made for carnival. And also these collars are very special and my friends fight for them.

Rogério: In fact in carnival we all join together to celebrate this big party for our country.

Gabi: Do you then buy these collars or is there someone who gives them to you? They look precious ...

Rogério: It is not really precious but is made by XTO.

XTO: I really have problems in pricing them because every time I do them I enter into some kind of trance ... So when I make it I don't think ...

Rogério: You know these high-heels girls, you know the posh ones, they will maybe not like these collars. This is more for the alternative ones.

Gabi: Maybe. Maybe not. Tell me about the mask you were wearing. It is also like a magician's mask.

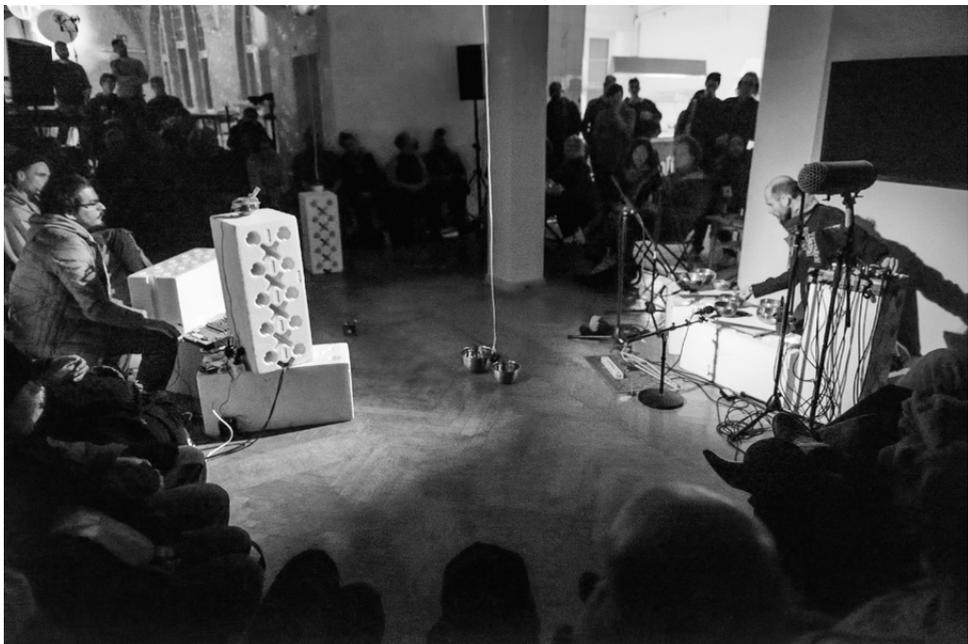
XTO: I did that for carnival a lot of years ago. I met a photographer, his name was Charles Fraser and he was looking for folk cultures and their masks. And there I suddenly saw a lot of masks like those that I had made. I think there is something like a collective consciousness ...



FERNANDO GODOY M AND RODRIGO RÍOS ZUNINO, 360°
INSTALLATION, DAS GROSSE RAUSCHEN



FERNANDO GODOY M AND RODRIGO RÍOS ZUNINO
PERFORMANCE, RADIO REVOLTEN KLUB





Rogerio: ... a collective soul.

XTO: But when I was doing it I didn't think much about this.

Rogerio: We want this rich entity and we want to bring those good vibes.

Gabi: Your show also dealt with the Dengue fever in Brazil which is transmitted by a mosquito.

XTO: It's very serious!

Rogerio: We are having this problem yes, and we are far from a solution.

XTO: In fact we celebrate here ... we make a cult of the extinction of that mosquito. Also for our friend who should be here with us. Five days ago he got infected with Dengue and he missed all of this special event. Now he can't be with us.

Rogerio: So our performance was very different, not like we thought about it. Because we tried everything to heal him from here. We were working at the performance until the last minute before it started.

5. _____ Gabi Schaffner.
"Mosquito Magic: Pipa Musical",
Radio Revolten Diary 20 October
2016; <http://radiorevolten.net/en/mosquito-magic-pipa-musical/>
(accessed 18 April 2017).

WHAT GOES AROUND COMES AROUND

One of the images conjured up by the name "Revolten", which means "revolts" in English, is the notion of rotation. Revolution as in 33 $\frac{1}{3}$ or 45 rpm. Coincidentally, in the build up to the festival we wanted to arrange a small exhibition, showing new pieces by the curators which would lay the groundwork for the events to come: calling ideas into being and establishing a framework for exhibiting radio art installations in Halle. One of the works was to be a large spinning radio-speaker, a radiophonic version of the *Leslie* speaker found in Hammond organs. This pre-exhibition did not take place, so you can imagine our delight when we received details of the following work which was to be shown at Revolten. The installation *360°* by Chilean artists Fernando Godoy M & Rodrigo Ríos Zunino did the exhibition proud, spinning its way on to becoming the star of *Das Große Rauschen*. Sophea Lerner describes it as follows:

In a darkened room four small radios hang from the ceiling, dimly lit from above. They spin. Faster and faster. Slower. Almost stopping. Going back the other way. Spinning and spinning. Each receiving as it spins; a crackle, a between signal that is modulated as the antenna rotates, flickers spins slows. *360°* [...] rewards and invites sitting for a long time to simply listen, partly because within what appears to be very simple is an endless subtle complexity. It goes around and around but changes all the time. Many small revolutions.

FERNANDO GODOY M & RODRIGO RÍOS ZUNINO, *360°*
DC motors, Arduinos, LED flashlights, small radios, short range
radio transmitters, assorted construction materials.

Rotation, spinning and circumambulation are integral parts of physical and spiritual worlds: being present in planetary orbits, spinning electrons, micro and macro physical world and also ancestral spiritual traditions all over the planet. This installation

reflects upon rotational and vibrational phenomena, as well as radio and sound waves and how they spread across a given space. An array of sounds is broadcast through short-range radio transmitters to small radios that are constantly spinning, causing the sounds to be perpetually transformed and distorted. These radios resemble Dervish dancers spinning around the centre of their being, clearing their minds and entering in deeper contact with the unseen side of perception. The trance induced with this contemplative dance / dynamic meditation that emulates the planets' orbits around their axis and around the sun, seeks to bridge the mundane and divine by entering into altered states of consciousness that allow us to explore the beyond.

[*Das Große Rauschen*, exhibition brochure]

Gabi Schaffner

Radio Revolten Diary, 3rd October

Everything Spins ...⁶

Gabi: You just said 360° was about satellites ... and failures ...

Rodrigo: Yes. There was an invitation by Anna Friz to Fernando and me and when we thought about it we found the idea of that first Chilean satellite and its failure very attractive. There was a lot of media hype and it never went anywhere. But this led to the concept of spinning and how to spin objects and how to spin radios.

First of all we had to metamorphose ... to change the object from a radio to something else. In the way it spins it becomes maybe more like a flying disk or you can take many interpretations into it. Also what is interesting, everything is spinning around everything. So electrons are spinning around in the atom, molecules are spinning around other molecules, everything spins around even when you get to the galaxies.

So it was very attractive to spin the radio, to spin the signal from various sources. For the sound we used some electromagnetic recordings from different sites and also some singing valves whose sounds are activated by the spinning and are fed into loops and make sound layers.

Gabi: Where did you take the recordings from?

Rodrigo: The recordings were made in the mine, there is a very deep copper mine in Chile, super big. Fernando was there and asked me to join him and we made some really good recordings from machines and different other things.

Gabi: So it's from the mines into the orbit?

Rodrigo: I guess, it's more from within the ear to the outside ear. From within the self to outside of the self. You know also, for me and Fernando when we were doing the piece here, it also works like a time machine. We would go inside and just lose track of time ... and then come out, transformed.

The festival's installation artists also gave live performances in the Radio Revolten Klub. In fact, a strong multi-disciplinary practice was one important criteria for selection when it came to slicing our long list of desired artists in half. Fernando

6. _____ Gabi Schaffner. "Everything Spins ...", *Radio Revolten Diary* 4 October 2016; <http://radiorevolten.net/en/everything-spins/> (accessed 18 April 2016).

Godoy M & Rodrigo Ríos Zunino's quietly fascinating and absorbing performance extended upon some of the themes of their installation, and exhibited more of their talent for building unusual sound devices which have a life of their own.

Gabi Schaffner

Radio Revolten Diary, 7th October

Sufi Radio⁷

There is a slightly eerie feeling when little machines move about the floor, making slurring noises and looking half-cute half-mischievous. Two of those, little speakers, mute except for the sound that emanates from their movement hobble across the parquet: the beginning of Rodrigo Ríos Zunino and Fernando Godoy's performance on the 5th of October in the Radio Revolten Klub, Halle. As the performance unfolds the musicians make use of a quite "organic" instrumentarium: arrays of sound bowls touched by a bow string, or radios hissing static that are spun by the hands of Fernando as he walks through the room. Movement and spinning make this performance unusual if you compare it to the normally silent posture of performers focussing on their laptops or electronic desks. The idea of spinning is central to the artistic concept of this duo: Everything spins! And there is certainly a spiritual dimension to it too that—as I watch Rodrigo turning around and around with a spinning thunder stick in a slow acceleration is reminiscent of Sufi ceremonial dances.

7. _____ Gabi Schaffner. "Sufi Radio", *Radio Revolten Diary* 7 October 2016; <http://radiorevolten.net/en/sufispinnings/> (accessed 18 April 2016).

THE BLACK WIDOW OF TIME

In a festival of extraordinary happenings there are bound to be several which utterly defy description, by rendering language wholly inadequate. The works covered in this chapter for instance. I find it most difficult to pin down Julia Drouhin's *Sweet Tribology*,⁸ which had been added into the programme by a serendipitous turn of events. Nevertheless, it is required of us to attempt the impossible, so here goes ...

8. _____ Tribology: the study of friction, wear, lubrication, and the design of bearings; the science of interacting surfaces in relative motion.

Gabi Schaffner

Radio Revolten Diary, 30th October 2016

Chocolate Relay Circus⁹

If I hadn't known this was true, I would have thought I'd been tele-transported into a gothic fairy tale in one of my (literally) sweetest dreams.

The lawn was strewn with fallen leaves and whispering radios and the crowd gathered around a wooden bench adorned with two record players. Everywhere: intricate details! From the sequins recently sewn to the queen's veil to the embroidered turntable cushions. A very fine choice of music was played, melancholic women's voices and ancient chansons floated through the sunny (!) autumn air that was saturated with



G.S.

the sweet and damp smell of rotting leaves. The tombstones looked grave but not too grave, and the atmosphere was one of general fulfilment and bittersweet satisfaction.

The performance of *Sweet Tribology* is an outcome of a project by Drouhin which was several years in the making. She invited 40 women to make soundworks in response to one minute tracks she had selected from historical Edison wax cylinder recordings. Each resulting piece was then cast as a 45rpm record, in chocolate. When Drouhin takes this show on the road as a “radio picnic” she makes the records before the performance and then, in front of an incredulous public, plays them for the broadcast on turntables before handing them around to be sampled by the assembled crowd—each person breaking a piece off before passing the record along. All the while the spectral strains of the reworked crackly old recordings emanate from radios positioned in a wide radius around the performer. You eat chocolate and your body becomes what you have just heard.

9. _____ Gabi Schaffner. “Chocolate Relay Circus”, *Radio Revolten Diary*, 29 October 2016; <http://radiorevolten.net/en/chocolate-relay-circus/> (accessed 18 April 2017).

In Halle, we were lucky enough to be able to host this special happening in a unique Renaissance-style cemetery, the UNESCO listed Stadtgottesacker, which was commissioned by Cardinal Albrecht in the mid-16th century. The mysterious masked performer (a widow, a ghost bride?) appeared to build up a remarkable crescendo of forces, to a level of intensity where I could easily imagine a Ghostbuster-esque swirling vortex drawn down to and pouring out from the centre of the performance: the strongest possible gathering and broadcasting of energies, comprising all the wonder of the previous month of superlative radio art, signalling a course for future greatness in all our radio endeavours. Phew. I guess we were all getting a bit overemotional by the end of the festival ... and rightly so!

This event was serendipitously sponsored by the curators’ favourite alternative dentist, Thilo Grauheding, who seized the opportunity to create a tooth-improving chocolate especially for the occasion using a sweetener called Xylitol, made from fermented birch bark pulp. Coincidentally, Drouhin uses pink dental silicone to create the moulds for casting her chocolate record sacraments.

THE WHITE BRIDE OF RADIO

All that remains to do is hand over the stage to Lucinda Guy for her festival-closing performance, *A Ritual for Revolten*. This was the culmination of Guy’s month-long stay with her family in Halle, and drew upon the experiences built up over that time—interleaving lingering impressions within an offering of profound thoughts and insights into the nature of radio, its meaningful uses, and the potential it holds for the exploration of inclusion and interconnectivity.



Gabi Schaffner
 Radio Revolten Diary, 30th October
 Bride of Radio Art Stays True to Her Darling¹⁰

“Something’s happening here but you don’t know what it is...”
 Quite freely after this quote we look expectantly at a radio propped up on stage and listen to a conversation between four people (Lucinda Guy, Knut Aufermann, Chris Weaver, Elisabeth Zimmermann) about the Revolten festival, its impending end, future prospects, we hear jokes and musings and the rhythmic ringing of jingle bells. We hear those people gathering their stuff, leaving the studio, clattering through the staircase, opening the big doors and finally, in a procession see them all among us, Lucinda Guy all in white.
 Is she a bride? Yes, she is! Ms. Guy has married Radio Art, a young man sparkling with wit and love of the arts, with a taste for the beauties of life and a vision of an open society where communication is respectful, inclusive and sincere.
 Alas alas, this young man is forced to give in to the King’s law and go to serve in the army. And his bride singing by the shores of Halle’s “salty waves” expresses her unbroken hopes of his return and their happy future.
 Guy’s beautiful voice rings out to the audience, but it wouldn’t be her and her art if we weren’t to be included. Contrary to conventions we are encouraged to put our mobile phones on, pick a number to dial and open the channels to the worlds beyond the festival.
 Need I say my friend whom I phoned was delighted to listen to the choir?
 Thinking back—and yes, I know that I miss out on a thousand details in the fleeting descriptions of any performance—it is strange: although it looked at the beginning like “hmm, just a radio (and an ugly one) to look at and listen to”, I remember best the sounds coming from it of the approaching artists leading the bride into the Klub. It was zero spectacular but I found this playful “rite of passage” from talk to action, from closed group to open group, from being apart to sharing among us the most touching.

¹⁰. Gabi Schaffner. “Bride of Radio Art Stays True to Her Darling”, Radio Revolten Diary 1 November 2016; <http://radiorevolten.net/en/bride-of-radio-art-stays-true-to-her-darling/> (accessed 18 April 2017).

And there we leave it, our life-affirming radio rites and rituals completed. Powerful signals sent out to exponentially increase the sum total of connectivity and deepen our capacity for reception.

Except for a peculiar little addendum:

Tim Kurth & Frauke Rahr, Schraubensendung
by Knut Aufermann

Some rituals are private affairs. The medium of radio can offer the possibility to exhibit them whilst keeping their sense of privacy intact. Tim Kurth and Frauke Rahr for example, are long-time collectors of nuts, of the kind used to fasten threaded bolts. They pick them up whenever they spot them lying on the ground, and note the location on a piece of paper which is used to wrap them for their collection. I witnessed this obsession by accident when Tim, our Radio Revolten IT expert, picked up a discarded nut and logged in his mind the location while we were walking between venues a week before the festival began. Without knowing much about this preoccupation, I suggested to turn the collection into a radio show. Three weeks later a recording landed in the studio, which opened a window into Tim and Frauke's idiosyncratic world of street troves. Affectionately they unwrap each individual screw-nut, consider their appearance and size, ponder the occasion and location where they were found and create an according map of Halle. Many screw-nuts seem to stem from bicycles, which is no wonder due to the proliferation of cobbled streets in town, others were found in high up gutters, prompting a theory about magpies dropping the shiny items in disappointment. Then the radio show takes a turn towards poetic orderliness. A list detailing a fraction of the collected screw-nuts is read out, naming the exact date, location, inner and outer diameter in millimetres, and the metric weight in grammes to two digits after the decimal point. This recital turned into an on-air ritual comparable to the BBC's shipping forecast or a traffic bulletin at the height of the holiday season: a string of names and numbers that, although alien in content and /or language, wraps us up in a kind of cosy familiarity.



A pretty picture:

The expressions of exaltation and horror on the faces of the ship's wireless operators when, on 12th December 1906, instead of the usual Morse code, they first heard the voice of an old man. He spoke eerily into their headsets as if he were sitting right next to them—the voice of Professor Reginald Fessenden from Brant Rock. To top it off: it was followed shortly thereafter by a violin playing the heavenly sounds of Händel's *Largo*.

The original location where the radio waves were produced from was, and often still remains, invisible and unimaginable. The spectral nature of the medium of radio has fascinated and frightened listeners since that first broadcast. Yet not only the voice—apparently appearing from nowhere, its existence disembodied in the ether—is fascinating. There are added overlapping waves; the cracking and hissing of the world which itself produces (acoustic) waves in millions of permutations. “The world is sound”, as Joachim-Ernst Berendt once contended.¹ What's more, a wave cannot go missing; the energy emitted in the form of waves is simply transformed, thereby mocking the ephemerality of the medium of radio. Transmitted waves can be as old as time; imagining this sends the time continuum in our minds spiralling out of control.

Yet above all, it is the reproduction of the physical representation of the signals that seems ghostly. In 1930 the philosopher Günther Stern wrote in his article “Ghost in the Radio” for *Anbruch*, the journal for modern music:

You step out of the house, the music of the loudspeaker still sounding in your ears—you are in it—it is nowhere. You take ten steps and the same music sounds from the neighbour's house. Now, since music is here too, music is here and there, localised and planted in space like two stakes. But it is the same music: here X is singing what he began there. You go further—at the third house X continues, accompanied by a second X, in turn softly accompanied by the discrete X of the first house. What shocks about this?

¹. cf. Joachim-Ernst Berendt. *Nada Brahma: Die Welt ist Klang*. Frankfurt am Main: Insel Verlag, 1983.

Three things, or a trio that can be formulated: First, the expressivity of the respective and emphatic here and there places of the music, or musics, that—despite the congruence of its triplification—maintain their individuality. [...] Second, the possibility of a plurality, even countability of musics, something which is not actually allowed; for every individual piece of music is a small world unto itself which can allow no supposition of any other beyond its own self. That these numerable musics, possible through this being-here and being-there, appearing as Doppelgängers or even Triple-gängers as here and there and there, sound not only the same but are the exact same music itself, makes the phenomenon even spookier. Third, the peculiar monarchical, mutual deceptions of each of these Doppel- and Triple-gängers that claim to be the piece itself but that exist nowhere because they can be heard anywhere.

It is highly peculiar and requiring of interpretation that technology can accidentally be accompanied by ghosts.²

The uncanniness of the medium of radio—disconcerting in time, place and the physicality of its production—continues into the present. The media art association Werkleitz Gesellschaft e.V. dedicated its own small-scale festival within the Radio Revolten festival to this fact, consisting of the installation of the Electronic Voice Phenomena (EVP) collection by Friedrich Jürgenson and a performance by the Stockholm-based artists Leif Elggren and Joakim Forsgren, and the musician Hampus Lindwall. Elggren brought the composers Bach and Händel into dialogue in a musical, dancing séance by applying the methods of the Latvian researcher of audio-taped voices and parapsychologist Konstantin Raudive (1909–1974)—who had worked together with the discoverer of EVP, Jürgenson—to initiate contact with the “beyond” using germanium diodes as “ghost” microphones.

As guests of a live radio broadcast from a lecture hall at the Central Repository for Natural Science Collections in Halle during Radio Revolten, Sally Ann McIntyre discussed with me the beauty of listening to nocturnal field recordings from remote areas of the tropics all across the world. Our themes: the randomness of the recordings, the loud sounds of cicadas that made listening a “search for gold”, coupled with the imagination of being able to hear things that are believed to be lost or are unexpected in the concert of nocturnal sounds. A concentration on the recordings and an attitude of inner expectation generated this search for “ghosts”.

It was not accidental that we met in the “House of Dead Animals”. Sally Ann McIntyre brought three installations to the festival, the newly created *study for a data deficient species (grey ghost transmission)*, *modified radio memorial (a fissure in the line of a public silence)* and *collected silences for lord rothschild #1–4*, in which she deals with the ghostliness of field recordings from ornithologists in New Zealand. For my own installation *Collector’s Radio (radio or not, you can’t hide)*, I chose the building of the Central Repository for Natural Science Collections to bring the silenced voices of the thousands of specimens into a productive relationship with the observers’ imagination of a space laden with history and its universal, inherent knowledge.

2. Günther Stern. “Spuk Im Radio.” *Anbruch. Monatsschrift Für Moderne Musik*, No. XII, 1930, pp. 65–66.



Furthermore, countless minutes of the month-long programming of Radio Revolten Radio highlighted the circumstance already known to the sailors in 1906: the received signal cannot be located in space. The traditional service of radio stations is suspended: a voice announces that for the next few hours we shall accompany a fox wearing a microphone along its nocturnal forays; a Radio Oracle tells the future (how does it know?); the British artist Ivor Kallin switches playfully between four existing languages and hundreds of invented ones; the deep frequencies of Steve Bates shakes the cutlery stored in the kitchen cupboard ...

Aside from the slight shivers of the unreal, the unusual on-air experiments harboured the potential for the unlimited unfolding of one’s own continuation of the received thoughts, sounds or scenarios. The listeners became witnesses to and actors in the creation of meaning; the spectral expansion of the boundaries of the expected was perhaps the greatest treasure of the one-month radio programme of Radio Revolten. The spirits freed by the festival whispered and screamed their desire for a radio-poetry that can and should transcend far beyond the seemingly-real informational content of “normal” radio programming.

SALLY ANN MCINTYRE, *STUDY FOR A DATA DEFICIENT SPECIES (GREY GHOST TRANSMISSION)*

Das Große Rauschen, Radio Revolten Zentrale
Audio recordings, mini FM transmitter, radio receivers,
destroyed nest, archival materials, installation

McIntyre explains her ghost-biological work:

This work re-situates, as a room-sized transmission, a sound library of putative calls of an endemic New Zealand bird, the South Island kōkako, collected by New Zealand wildlife ecologist Rhys Buckingham in remote forested areas of the deep South Island and Southern Stewart Island, when the species was officially declared extinct. Buckingham, who has been searching for the bird for nearly 40 years, was instrumental in gathering the evidence to overturn its conservation status from “extinct” to “data deficient” in 2013. Colloquially known as the “grey ghost” and as mythic and elusive as such a designation implies, in New Zealand the cultural script written around this bird includes the lost memory of a hauntingly beautiful song. This is a sound only amplified by its absence, as well as by its echo in the continued presence, in secure eco-sanctuaries, of the equally beautiful, if different, song of its endangered cousin, the North Island kōkako. The song itself is portrayed as unearthly, as having a “natural resonance”, as one of the slowest and loudest of any song bird. Such cries were perhaps most memorably described by pioneer colonial explorer Charlie Douglas from his camp on the South Island’s rugged west coast in 1892, as “indestructibly mournful. The wail of the wind through a leafless forest is cheerful compared to it. Perhaps the whistling of the wind through the neck of an empty whiskey bottle is the nearest approach to it, and is sadly suggestive of departed spirits.”

Buckingham’s recordings do not present us with this sound. They fail to capture the grandiosity of such a yearned-for aural romanticism. Insubstantial and as compelling as a blurry photograph



S.M.

of bigfoot, the collected calls of the elusive bird clock in at a total length of 1:26. Fragments of uncertain provenance and legibility, the recordings reveal the contradictions of the field recording as presence or “evidence”, and the limitations of recording technologies to transparently document, pointing toward the fiction of the total “natural archive”, and asking questions about what value an archive of the sounds of a species is, once that species has become extinct. In these recordings, the bird hovers on the edge of audibility, refusing to be pinned down to monumental extinction narratives, just as it destabilises the set narratives of imperial ecology, by remaining outside Western scientific forms of knowing which rely on the verification of empirical evidence. The slippery subject of this bird’s continued existence is compounded by the fact that it is a bad match for the tools of empirical observation, both visual and aural. Perhaps all we are hearing is the sounds of “data deficiency”, the slow degradation, through repetition, of an imperfect copy, in the faint traces the bird has left within the New Zealand soundscape, its slow fade-out in the mnemonic resonance of the songs of mimic birds such as the tui, and other voices of the forest which retains fragments of a living memory of a now-lost ecological community. The recent re-classification of “data deficiency” places the bird, ironically, into an even more unknown space. It means we know even less about it, even something as basic as whether or not it exists. In a contemporary era in which observational tools are being re-invented toward worlds of global digital surveillance and data-driven knowledge, which includes projects cataloguing the very building blocks of life (as I write this, the genome of every single member of another extremely rare New Zealand bird species, the kakapo, is being sequenced, alongside associated speculations around cloning extinct species), the grey ghost only becomes more and more elusive. As a case study, the South Island kōkako gives us another way of looking at the invisible infrastructures that permeate our world, the human specificity of knowledge, and all that is left outside of it, that continues to resist empirical codification. Out of our airspace and off our radar, it becomes analogous to the poetics of radio itself, the medium’s ability to evoke the non-representational, the unknown and unheard, the invisible but ever-present spectrum.³

3. _____ cf. <http://radiocegeste.blogspot.de/2016/09/das-groer-rauschen-metamorphosis-of.html> (accessed 15 January 2018).

The art historian Susan Ballard outlines the nature of McIntyre’s preoccupations:

There is something profoundly beautiful and nostalgic about McIntyre’s reanimated voices that move beyond defence and into an ethics of care. In the human languages of affect “shame” is considered immensely disabling. Yet it is a collective shame that McIntyre addresses and in this she engages much more than melancholy.⁴

4. _____ Susan Ballard, “Signal Eight Times: Nature, Catastrophic Extinction Events and Contemporary Art”. *Reading Room: A Journal of Art and Culture*, No. 7. Risk, 2015. p. 81.

RALF WENDT, *COLLECTOR'S RADIO (RADIO OR NOT, YOU CAN'T HIDE)*

Former Department Of Zoology

16 microphones, mixer, two loudspeakers in old valve radio housings, transmitter, playback device

The nightly creaking of old cabinets joins the ghostly closing of doors and their reverberations in the building. Is there really a natural scientist still here? What is he or she doing here so late? Is something odd going on? Where are these strange, gnawing sounds coming from?

Microphones were installed in the attic of the nearly 200-year-old institute, in the lecture hall, in the office of the collection's director, between old glass display cabinets, in the basement at the workplace of the taxidermist, and in between the bones that the students have to study. This created an acoustic image of the building that needed assembling in the minds of the passers-by: the silence of the specimens as eloquent testimony to the 400 years of "collecting" animals, live broadcasts of scientific reflections on the work of the specimens, and the shop talk in the hallway.

The mix was heard on the square in front of the fortress-like building of the institute, and at times on the local radio frequency of Radio Corax. The work simultaneously queried the mechanisms of radio-making through the process of switching microphones. The selection of material was generated by the volume of the signals and random play-out processes. The installation thus became a "field recording" situation, charged by the imaginative powers of the listeners and animated by the spirits of the collection.

RALF WENDT, COLLECTOR'S RADIO



Trans- Positionen

Martin Hartung

To solve the puzzle of the human soul without taking life after death into consideration seems to become increasingly difficult.
Konstantin Raudive, *Breakthrough*, 1971

TRANS-POSITIONEN [TRANS-POSITIONS]

The audio-visual performance *Attempt No. 6* was developed in cooperation with the Werkleitz Festival *Trans-Positionen* [Trans-Positions], which took place 1 – 30 October 2016 in Halle (Saale). In conjunction with the international radio art festival Radio Revolten, organised by Radio Corax, the Festival was addressed to the power of the imagination associated with radio broadcasting. As a result, voices played a central role.

MEDIALITY

Attempt No. 6 references the *Audioscopic Research Archive* of the Swedish archaeologist, opera singer, painter and pioneer of the Electronic Voice Phenomenon (EVP) Friedrich Jürgenson (1903–1987). Put together in this form in 2004 by the Swedish artist Carl Michael von Hausswolff, it was on loan from the ZKM | Center for Art and Media in Karlsruhe and displayed in the foyer of the German Federal Cultural Foundation in Halle (Saale) during the course of the Werkleitz Festival. In 1959, Jürgenson began his studies of the EVP, which he is credited to have discovered in relation to the recording of voices from the other side. Soon after, Jürgenson explored attempts to contact the deceased by means of radio carrier waves in greater depth. According to his own

statements, within eight years he was able to collect 140 audio tapes with over 5,000 individual recordings.¹ Driven and fascinated by Jürgenson's research, an international following for his studies on "intermediate waves" quickly developed, though most of the individuals who looked into the phenomenon over a long period of time were not mystics or members of any cult but astonished and sceptical researchers. Among these sceptics, without claiming any political or ideological agenda, was Jürgenson himself, which seemed to lend more credence to his discovery.²

The Swedish innovator formulated the most decisive argument presented in the field of transcommunication research for the credibility of communication with the beyond, as he repeatedly referred to the empirical data and objectivity of the technical equipment, which includes tape recorders and radio receivers. Even before Jürgenson, such historical figures as Thomas Edison (1847–1931) had worked emphatically to create devices that would make it possible to communicate with the "other side". The intrinsic realities inscribed into any media and their association with magical or ghostly powers have been apparent at the latest since the invention of the printing press by Johannes Gutenberg (c. 1400–1468). A great number of objections regarding the susceptibility of technical equipment to various forms of disturbance and manipulation was countered over and over again with strong arguments substantiating EVP.³ The German experimental physicist and developer

of Instrumental Transcommunication (ITC), Ernst Senkowski (1922–2015), was certain that attempts to establish contact are “not just a matter of technical equipment, [but] also of medial and psychic capabilities that we cannot measure”. He goes on: “The whole thing is a combination of human capabilities and technology, provided we are willing to accept that individuals from the other side are involved.”⁴ In the 1960s, in the midst of the Cold War, Jürgenson himself came to the conclusion: “In our totally rational world where the everyday seems soberly and prosaic, like a freight train that continuously chugs on its prescribed course, in this everyday there is hardly any room for an adventure of such a mysterious kind.”⁵ Regardless which recording method is used, the diverse multi-lingual and often difficult to understand voices can be perceived, though mostly only with a great deal of practice and when the recorded tapes are replayed. The potentially audible voices can never be heard in the process of being recorded. At a conference on EVP held in Koblenz, Germany in 1977, Jürgenson spoke of the necessity of a “revolution of consciousness” in regards to his research, which was difficult to grasp.⁶ After World War II his discovery was both a point of departure and wake-up call for a tolerant and loving co-existence beyond the boundaries of time and space. That same year, *Radio Alice* in Bologna was able to alter the passivity of the radio receivers, as the use of telephone conversations in the broadcasts increased the variability and flexibility of the world of voices.⁷ Such an acoustic vivification was not able to completely change the passive nature of the distribution, yet it did make it possible to directly involve the audience, ensured authenticity and generated a greater level of consciousness among listeners.

ATTEMPT NO. 6

For some time, the Swedish artist Leif Elggren has been integrating the EVP into his practice in collaboration with international colleagues. In this way, he makes reference not only to different claims to power and sovereignty in connection with religious, spiritual and other human life truths, but also to the “respect,

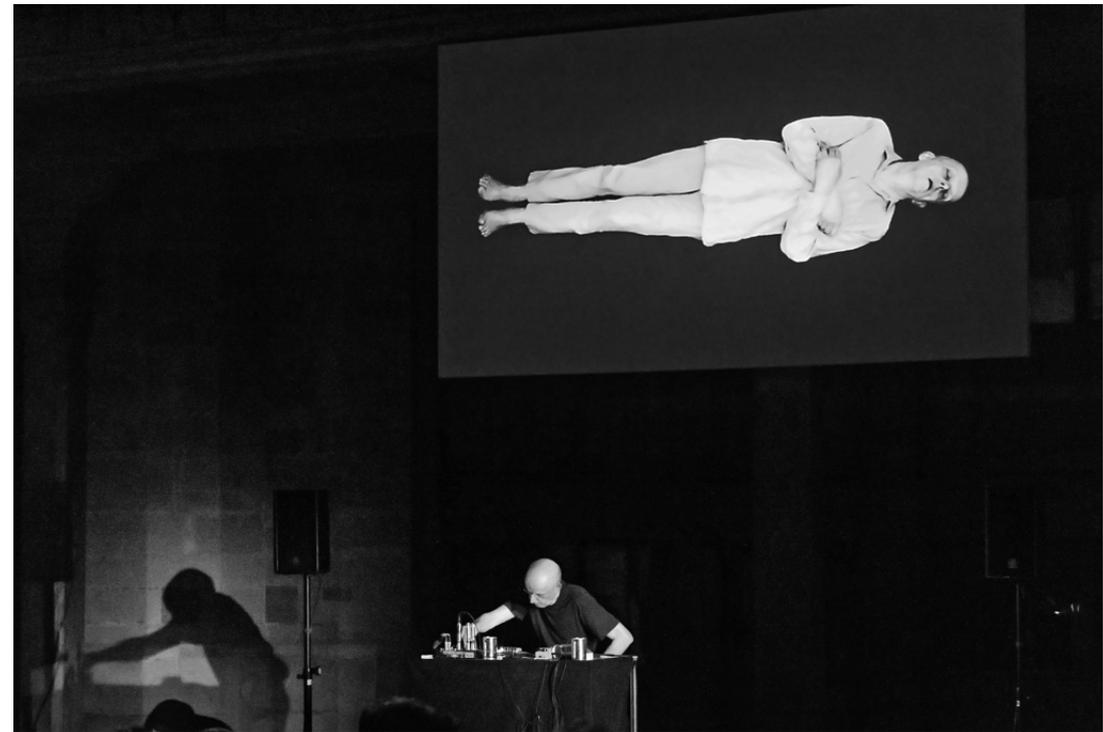
humbleness, kindness and empathy”⁸ that are considered necessary to accept alternative options and dimensions of an understanding of the world. His artistic work functions on different historical planes and along the lines of a mystic destabilisation of the balance of power. Together with Carl Michael von Hausswolff he is co-monarch of the Kingdoms of Elgaland-Vargaland, which were founded in 1992. This micronation with hundreds of members lays claim to all “no-man’s-lands” within the physical boundaries of the earth and is also present in digital form.⁹ In this and in past projects involving EVP the transgressional nature of Elggren’s work becomes evident.

Elggren, the musician Hampus Lindwall (since 2005 organist of Église du Saint-Esprit in Paris) and the Stockholm-based artist Joakim Forsgren have developed the performance *Attempt No. 6* for Werkleitz based on the Electronic Voice Phenomenon that Jürgenson studied. Presented in the Church of St. Moritz in Halle on 8th October 2016, the performance was intended to activate Jürgenson’s archive and at the same time meant to explore radio as an interventional medium between the realms of the living and dead. The recently restored Moritz organ (Sauer organ) from the year 1925 stood at the centre of the piece, which was broadcast live on the London radio station Resonance FM.

The artists attempted to draw Johann Sebastian Bach (1685–1750) and Georg Friedrich Händel (1685–1759) into a dialogue. Although for a time the two composers worked not far from one another in the cities of Halle (Saale) and Leipzig, no personal encounter was ever documented.

POINTS OF CONTACT

During the performance Elggren utilised various techniques, including a method developed by the Latvian transcommunication researcher and parapsychologist Konstantin Raudive (1909–1974), who for a time worked with Jürgenson.¹⁰ A set of Germanium diodes, put together by the Berlin-based programmer and explorer Martin Howse, was used to attempt to initiate contact with the other side. Lindwall integrated this concept of contact into his



organ performance, which featured works by Bach and Händel, along with improvisational interludes.¹¹ The musical element of *Attempt No. 6* opens with Bach’s *Erbarm dich mein, o Herre Gott* (BWV 721; c.1704), later followed by a compositional mix consisting of a theme of Händel’s *Jephtha* (HWV 70; 1751) and the final chorus of Bach’s *St Matthew Passion* (BWV 244; 1727). While, in the performance, Elggren descended into a trance to establish contact with the beyond by means of a two-headed doll that represented Bach and Händel, Lindwall accompanied him on the Sauer organ. Forsgren established a visual link between the performers by operating a camera with a live-feed to a projection screen in the church space. Elggren’s electronic sound register was built around ambient noises from a recorder placed on the floor of Händel-Haus in Halle (Saale), the city in which Händel was born, and from the grave of Bach at St. Thomas Church in Leipzig, where the composer’s bones have been kept since 1950.

Key to the musical elements in *Attempt No. 6* are various ties that can be discerned between Bach and Händel on different historical levels.¹² It can be surmised, for example, that both Händel and Bach played on the Reichel organ in the Marktkirche in Halle, upon

which Händel was trained by Friedrich Wilhelm Zachow (1663–1712) as an organist. Bach was considered a candidate to succeed Zachow but ultimately remained in Weimar until 1717. An additional connection is the so-called Mizlersche Societät—an enlightened “corresponding society of the musical sciences” that was established in 1738. Bach was a regular member and Händel an honorary member of the organisation. Further indirect connections can be traced back above all to three individuals: Händel and Bach were both friends with the composer Georg Philipp Telemann (1681–1767), both visited the noted organist Dieterich Buxtehude (c. 1637–1707) in Lübeck (Händel in 1703, Bach in 1705) and both were treated unsuccessfully by the English ophthalmologist and charlatan “Chevalier” John Taylor (1703/08–1772) for eye conditions that eventually led to each composer’s blindness—a circumstance also reflected in the works of both musicians. Händel, for example, noted on 13 February 1751 on a sheet of music to the chorus *How dark, O Lord, are Thy decrees* from the oratory *Jephtha*: “Reached here on 13 February 1751, unable to go on owing to weakening of the sight of my left eye.”¹³

It is said that Bach, who was based in central Germany, initiated several attempts to

meet Händel, none of which were successful. In 1719, Bach apparently drove from Köthen to Halle having heard that Händel, who lived in London and was far better known, was visiting his native country. The two just barely missed each other. On another occasion, ten years later, Bach once again hoped to meet his internationally acclaimed colleague but then fell sick. He is said to have sent his oldest son Wilhelm Friedemann to Halle to invite Händel to Leipzig, yet this did not work out. Musically, however, the two did manage to come together, albeit quite late, as in his third version of the *St Mark Passion* (composed around 1747) Bach included seven arias from Händel's *Brockes Passion*. In this way, the two were finally closely connected.

CONNECTING BRIDGES

As the cultural studies scholar Andreas Hetzel has pointed out, "the attempt to create a transparent order of knowledge and to completely control social factors based on this knowledge [leads] in the modern epoch to an epistemological and political defence of everything that is ambivalent, uncertain and unusual, which we find manifested in such places as death."¹⁴

Reflecting on communication with the dead does not just serve to challenge conventional conceptions of thresholds, but places the entire materialistic image of the world in question, sheds doubt on parameters of knowledge production and, finally, addresses such classic dichotomies related to the medium of radio as proximity and distance. If radio can appear as an essential interface between life and death, then it acts at the same time as an entry requirement for and mediator of new worlds of experience and consciousness. Following an inclusive conception of art, the audience in the church space was integrated into a specific realm of experience as witnesses to the performance. Whether the attempt to establish contact between the two composers has succeeded can ultimately only be ascertained by either playing back the radio recording or listening carefully to the LP that was produced by Werkleitz, which turns the realm of experience into a realm of possibilities.

1. cf. Friedrich Jürgenson, Sprechfunk mit Verstorbenen. Eine dem Atomzeitalter gemäße Form der praktischen technisch-physikalischen Kontaktherstellung mit dem Jenseits, Freiburg 1967. pp. 107, 121. The book is an edited German version of the Swedish original from the year 1964. In 2004 Hausswolff and Leif Elggren published the English translation of Jürgenson's book (*Voice Transmissions With The Deceased*), which was released by Firework Editions in an edition of 1000 copies.
2. In 1975 the Verein für Transkommunikations-Forschung (Association for Transcommunication Research) was formed in Braunschweig, Germany. Its international members study various aspects of the subject.
3. Jürgenson considered the "radio method" to be the most complex but also the most effective.
4. cf. Gesa Dröge, Instrumentelle Transkommunikation und Sterbebegleitung. - Wie passt das zusammen? Was uns Sterbende und Verstorbene lehren. Annäherungen und Einordnungsversuche, lecture at the VTF conference at Kolpinghaus, Fulda on 28 May 2016.
5. Friedrich Jürgenson, Voice Transmissions With The Deceased (2004 [1964/67]), p. 13.
6. Friedrich Jürgenson, lecture held in April 1977 at the VTF conference in Koblenz. See: http://www.vtf.de/p08_1.shtml (accessed 15 September 2016).
7. cf. Ole Frahm/Torsten Michaelsen, "Hört die anderen Wellen! Zur Verräumlichung der Stimme im Radio", in Andreas Stuhlmann (ed.), Radio-Kultur und Hör-Kunst: Zwischen Avantgarde und Populärkultur 1923-2001, Würzburg, 2001. pp. 39-61, here p. 42.
8. Leif Elggren, Das Dreidimensionelle Schriftsprache. A journey through the impossible dimensions that is said to be closed for humans. About prophets, seers, saints and other people with the exceptional gift to be able to communicate with other worlds. Dedicated to Dr. Konstantin Raudive, lecture manuscript for The Latvian Museum of Contemporary Art, Riga, 16 July 2006, no page numbers.
9. See: <http://www.elgaland-vargaland.org>.
10. cf. Konstantin Raudive. Breakthrough. An Amazing Experiment in Electronic Communication with the Dead Buckingshamshire: Colin Smythe Limited, 1971.
11. Jürgenson himself was, however, not convinced by the diode-recording-method. Cf. "Wir wollen Verbindung - kein Kauderwelsch" [We want a connection - not gibberish], an interview with Friedrich Jürgenson", in VTF-Post, volume 2/1975 and volume 1/1976. See also: http://www.vtf.de/p0203_1.shtml (accessed 15 September 2016).
12. I would like to express my gratitude to Karl Altenburg from the Handel House Foundation in Halle (Saale) for important suggestions and explanations on this subject. I would also like to thank Kerstin Wiese (director of the Bach Museum in Leipzig) and Clemens Birnbaum (director of the Handel House Foundation and artistic director of the Handel Festival) for their generous input.
13. For more on this thematic complex see the play *Blendwerk* by Andreas Hillger, which premiered on 26 May 2012 at the Handel Festival in Göttingen and Richard H. C. Zegers, "The Eyes of Johann Sebastian Bach", in Archives of Ophthalmology, Vol. 123, October 2005. pp. 1427-1430. I would like to thank Andreas Hillger for lending his expertise.
14. Andreas Hetzel, "Todesverdrängung? Stationen einer Deutungsgeschichte", in Petra Gehring/Marc Rölli/Maxine Saborowski (eds.), Ambivalenzen des Todes. Wirklichkeit des Sterbens und Todestheorien heute, Darmstadt: WBG. 2007. pp. 158-170, here p. 160.



GENERAL INFORMATION

Though they are often seen as opposing phenomena, art and technology are inextricably connected. On one side humans, on the other side machines. We are all familiar with the subversive use of machines, devices and instruments as an artistic method or strategy. Yet without precise technological knowledge, pirate radio operators would not be able to build the broadcasting equipment to disseminate their politically and culturally subversive messages. The history of electronic music includes many close collaborations and a great deal of mutual inspiration between composers, engineers and scientists. In the internet age the time worn question of the irreversibility of the conventional roles of the artist and technician, of the sender and recipient, of the producer and consumer is continually being re-examined. The four-part film programme of the *Trans-Positionen* festival explores the reciprocal relationship between art and technology and counter and mainstream cultures, with a special emphasis on electronic and digital media. The international selection of historical and contemporary films extends the thematic focus beyond radio and television to include unusual forms of speech and the representation of societal crises and political upheaval. The film programme also experiments with its own form: the combination of advertising, documentary, experimental film and music and the performance of a radio essay with film excerpts turns the cinema likewise into an absolute realm of acoustic experience.

THURSDAY, 13TH OCTOBER 2016, 7 P.M.
 COLOURFUL SOUNDS

DAS SCHÖNSTE FENSTER DER WELT
 HERBERT VIKTOR, 1968



“Every age has engendered its own characteristic music, shaped from the same forces that gave rise to the age itself. In our technological age music as an art form is subject to the forces of technology to an unprecedented degree.” These words come from a circular letter of the Siemens company from the year 1963. The answer to this is the synthesis of music and technology: electronic music. In order to advance and further develop the automation of sound production, Siemens created its own studio, which was headed by the sound technician Alexander Schaaf and the composer Josef Anton Riedl and was in operation for three years. The Siemens studio for electronic music is indicative of the openness with which companies approached artistic experiments at the time, a tendency that is also to be seen in the production of elaborate corporate and image films. The film

programme, which includes Riedl’s *Studien für elektronische Klänge* (Studies for electronic sounds), surveys the communication technologies of the 20th century, from shortwave radio to colour television to the mobile phone. Advertising and informational films made by the Philips, Siemens and AEG-Telefunken companies, Oskar Fischinger’s *Radio Dynamics* and a video by Bas van Koolwijk and Gert-Jan Prins, whose visual modulations originate from an audio mixer, will be juxtaposed with films by Mauricio Kagel, Christoph Doering and Michel Klöfkorn, who cast a critical and ironic look at the impending loss of reality in the face of omnipresent and infinitely reproducible images and data.

- Europa Radio, Hans Richter, NL 1931, 9 min.
- Radio Dynamics, Oskar Fischinger, US 1942, 4 min.
- Farbige Klänge, Hans Fischerkoesen, West Germany 1953, 2 min.
- Studie für elektronische Klänge I, Josef Anton Riedl, 1959/62, 3 min.
- Das schönste Fenster der Welt, Herbert Viktor, West Germany 1968, 10 min.
- Antithese, Mauricio Kagel, West Germany 1965, 19 min.
- Synchronator, Bas van Koolwijk & Gert-Jan Prins, NL 2006, 6 min.
- Krause - oder ein beschriebener Film ist halt wie ein erzähltes Mittagessen, Christoph Doering, West Germany 1988, 12 min.
- Studie für elektronische Klänge IV, Josef Anton Riedl, 1959/62, 5 min.
- geht's noch, Michel Klöfkorn, DE 2005, 5 min.

THURSDAY, 13TH OCTOBER 2016, 9 P.M.
 WORLD OF SPEECH

Unlike the five senses that provide us with impressions of the world, the voice lends us a form of expression, instilled with meaning through language. Yet the sounds produced—mumbled, spoken, sung, shouted—are as

MY NAME IS OONA
 GUNNVOR NELSON, 1969



fleeting as they are direct. Sound vanishes in the air. Only with the invention of electronic media was it possible to record, store, alter, play back and broadcast human communication over great distances, turning the voice into an object of memory. Technical reproduction renders perfect what the voice appears to have been all along: an entity outside the body. The four films of *World of Speech* explore the relationship between sight and hearing and the forms of communication that defy rational interpretation and social norms—from the mysterious, vulnerable world of children in Gunvor Nelson’s *My Name is Oona* and Johan van der Keuken’s *Blind Kind* (Blind child), to *Not I* by Samuel Beckett (who in his absurdist theatre and television works continually dramatised the senselessness of the world and the dubiousness of language), to Miriam Bajtala’s new film *Sofern real* (In as far as it’s real) about the depiction of mentally ill people by actors.

- Not I, Samuel Beckett, UK 1977, 13 min.
- Blind Kind, Johan van der Keuken, NL 1964, 25 min.
- My Name is Oona, Gunvor Nelson, US 1969, 10 min.
- Sofern real, Miriam Bajtala, AT 2015, 30 min.

FRIDAY, 14TH OCTOBER 2016, 7 P.M.
 THE BEAUTY OF RADIO WAVES

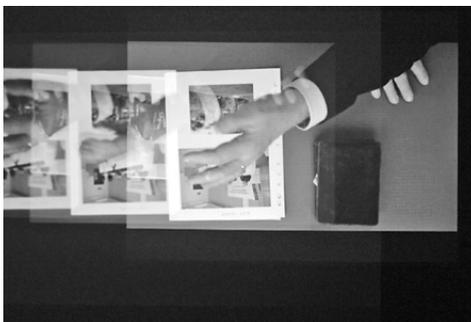
When Walter Klingenberg was executed in 1943 in Munich-Stadelheim for high treason, the life of one of Germany’s first radio activists came to an abrupt end. Even after World War II, illegal radio stations were part of the media culture of both East and West Germany. Among radio and pop culture historians there is now much enthusiasm for pirate stations that broadcast from international locations in order to avoid licensing fees and taxes. Their DJs provided the rising music industry with the necessary element of radical chic. What has been forgotten is that many political radio activists were technicians or engineers whose stations didn’t quite work. Or they had almost no listeners. What motivated them and where did the belief come from that they could change the world without a target group? Did with their great devotion, early radio activists define the conviction that now permeates the digital online

NEK SE ČUJE I NAŠ GLAS
KRSTO PAPIĆ, 1971

world: that freedom can be achieved through technology? Originally produced for Bavaria Radio's *Nachtstudio* in 2013, the 50-minute radio essay *Von der Schönheit der Radiowellen: Über Radioaktivisten und ihren Anspruch auf den Äther* (The beauty of radio waves) (writer/director: Ralf Homann, editor: Barbara Schäfer, sound technician: Siglinde Hermann) will be presented and performed for the first time in a cinema by Homann himself. The performance will include excerpts from the film comedy *Piratensender Powerplay* starring Mike Krüger and Thomas Gottschalk (1982) and Krsto Papi's documentary *Nek se čuje i naš glas* (Let our voices be heard too) (1971).

FRIDAY, 14TH OCTOBER 2016, 9 P.M.
TIME TRAVEL

If a video camera is pointed at a monitor that simultaneously projects the camera image, an optical feedback results: the self-recording picture extends infinitely, similar to the escalating whine of a microphone held too close to a speaker. In Filipa César's film *Transmission from the Liberated Zones* this effect is less an aesthetic instrument than it is a visual representation of the attempt to superimpose

TRANSMISSION FROM THE
LIBERATED ZONES
FILIPA CÉSAR, 2015

history and the present, media images and subjective narratives, which in the face of new wars and refugee crises all revolve around the same thing: the struggle for a life in freedom. In the films of Guy Ben-Ner, Erik Bünger, and Clemens von Wedemeyer, feedback, re-enactment and reproduction are also at the root of an artistic exploration of social conflicts and cultural practices that reflect the conditions of production in the film industry. With a focus on sound and language, monologue and translation in film, the fourth and final film programme also sheds light on the festival's main theme: radio.

Soundtrack, Guy Ben-Ner, IL 2013, 11 min.
The Allens, Erik Bünger, SE 2004, 2 min.
The Cast (Procession), Clemens von
Wedemeyer, IT 2013, 15 min.
Transmission from the Liberated Zones,
Filipa César, DE/SE/PT/FR 2015, 30 min.



Xentos Fray Bentos
Hartmut Geerken
Lucinda Guy
Lukas Holfeld
Sophea Lerner
Michael Nicolai

In this chapter we have collected, side by side, six statements that shine light on the outcomes of Radio Revolten from each of their writers' perspectives. And rather than one coherent image, a kaleidoscope of viewpoints emerge that reflect the diversity of experiences, philosophies, outlooks and passions which were present at the festival. We invite the reader to find the common threads and protracted fractures in these musings on what was the largest festival of radio art, anywhere.

Lukas Holfeld and Michael Nicolai from Radio Corax constructively share their scepticism and doubts about Radio Revolten and the radio art it presented. The intimate memories of Lucinda Guy about her family's intense one month stay and participation in the Radio Revolten team, tell a lot about the overwhelming impact that some of the artists felt during and just shortly after the festival. Hartmut Geerken distracts us with a powerful literary demand for the freedom of radio production and sows the conviction that this freedom must exist on air. Sophea Lerner recaps many of the festival's activities and moods at the end of this chapter. To begin, the British artist Xentos Fray Bentos shares a story that credits the central physical place of Radio Revolten and gives a guess as to what spirit lived in the houses in Rathausstraße 3 and 4 during the festival.

Xentos Fray Bentos

Ignoring all architectural baggage for a moment, forgetting about the Golden Mean and putting to one side the exact nature of the plumbing, I'm sure we can agree that a building is no more than the sum of its inhabitants. If we exclude the unintended fauna—pigeons, pouch rats, woodlice and moths—a building devoid of people is by definition lifeless. Further, on entering inhabited buildings, we are invariably seeped in a particular atmosphere. By turns dull, sleepy, raving, industrious, amusing, scary or sanctifying, the human imprint announces itself over wattle, brick, steel, glass, or concrete.

I was twenty-two when I first stepped into the most negative building I've ever encountered. That building was the Social Security headquarters in Brixton, London. The year was 1984 and Margaret Thatcher's economic war against the lower classes was in full swing. Unemployment had topped three million for the first time since the 1930's. One in eight were out of work. For the first time in history, not being employed had become highly fashionable. I decided I was getting left behind so I quit my job. I was being paid to pack cardboard boxes in larger cardboard boxes. It was a job Robert Rauschenberg would have heartily approved of. After packing the boxes in bigger boxes and sealing them with sticky tape, I had to send them off around the country. When they arrived at their destination, they'd be handed to another low paid worker whose job it would have been to unpack the cardboard boxes I'd packed in the bigger cardboard boxes. However, in these unsavoury times you couldn't simply resign your job and expect to be handed dole. Oh no. Certainly not. There were very strict rules. You were only entitled to the money if you'd been sacked. This was easier to achieve than you might imagine. Instead of boxes packed with smaller boxes, I began sending empty boxes around the country. The companies expecting to receive boxes in their boxes started to complain:

"How dare you send us boxes with no boxes inside!"

My boss, who for whatever reason quite liked me, gave me a long lecture. Dutifully, I

nodded my head and agreed to up my game. The next day, his customers phoned up with another set of complaints:

"How dare you send us more boxes with no boxes inside!"

That was it for me. I was on the dole. A leech. A scrounger. A parasite on the flesh of the State. I can't describe how good it felt to be one of the one in eight.

Every second Thursday, having been segregated alphabetically, I joined the queue of unemployed lazy layabouts. The queue was so insanely long that it took an hour or more to reach the entrance of the building. Once inside, another twenty minutes to reach the counter—provided there were no incidents. There were always incidents. One day, the guy just in front of me, a huge guy with dreadlocks, two hungry kids in tow, was turned away.

"You need to go to the other building, Charles House."

"But I've just come from Charles House. I'm not going back."

"You've got the wrong form. Form B4. You need Form C3."

"I've already been there. I've got my two kids with me. I'm not going back."

"I sympathise but I can't sign you on without Form C3. You have to go back to Charles House."

In their bureaucratic wisdom, the Department of Health and Social Security had sited Charles House (this being the place where you obtained the forms that allowed you to sign on) three quarters of a mile away from the HQ. Doubtless, the huge upsurge in the number of unemployed was to blame for the continuing bureaucratic errors. Almost everyone in the queues had a story about being billiard-balled back and forth between the two buildings.

Once he'd accepted that he wasn't going to get his dole cheque, the dreadlocked man stood away from the counter and looked around the huge signing-on hall. Dotted about were five or six chairs of an aesthetically corporate design—ugly orange plastic welded onto economically tubular steel frames. They were there for the use of the elderly and the disabled. The dreadlocked guy walked over to an unoccupied chair, hoisted it above his head and walked back to the counter. He began

smashing it against the toughened security glass separating the staff from the claimants.

Smack. Smack. Smack. Smack. Smack. His approach was methodical rather than angry. You couldn't help but to admire his purposeful determination. His two kids looked on, open mouthed. The intimidated staff hurriedly left their desks and retreated behind the security door. It had an incongruous nautical-suggestive round porthole set three quarters of the way up. After retreating, a bunch of frightened faces appeared, filling the tiny round window. The staff peered out to check if the man was still attacking the security glass.

Smack. Smack. Smack. Then, the security door opened momentarily and the manager appeared. He was a large no-nonsense Scottish man dressed in a charcoal suit, pale blue shirt. His oversized head was bisected by a serious slick of oily black hair.

"Sir. Calm down."

Smack. Smack. Smack. The glass wobbled like a detergent bubble caught in the breeze.

"Sir. If you persist we're going to have to call the police."

This was somewhat disingenuous. Already, the approaching sound of police sirens cut through the hubbub. The guy with the chair wasn't in the least bit phased.

Smack. Smack. Smack.

A crack appeared in the security glass. A small cheer arose from within a section of our crowd of lazy do-nothings. The rest of us layabouts hung our heads with a cowed resignation. Nothing good was going to come of this.

Smack. Smack. Doingggggg.

As the barrier gave way, the manager flinched, turned tail and ducked behind the door. One of the kids started crying. Having smashed through the barrier, this dad seemed at a loss for what to do next. He dropped the chair, put his arms round both kids and waited for the police to arrive. Such a negative building. You rarely forget this shit.

So great, so exceptional was the degree of negativity that oozed from the Brixton building that I was set on a vibrant quest to unearth its polar opposite. How could I ever rest without experiencing a building of concomitant positivity? The idea of an unsymmetrical "nature" appalled me. The wrong had to be righted. A balance of sorts restored.

At first, armoured with the brassy lustre of youth, I searched enthusiastically. Any day now, I knew I'd wander into that glowing building. I wandered without success. The years fall away, stripping from you like mouldering leaves. Drugs, drink, ennui—all gradually erode your conceits and precious passions. I still held out a small torch toward the dimming prospect of uncovering my fantasy space but I perceived, almost insensibly, that the wind of probability was shuffling the other way. Over time and unrealised, even your most heartfelt desires collapse inwards leaving only a rank smouldering pain that you care not to interrogate, a petty wound you know better than to pick at.

Where does it spring from, this ridiculous need for symmetry? Common sense informs us that it stems from our natural and commendable fear of opposites. Morbid misery as opposed to ecstatic joy. Biting cold set against fervid desert heat. Or consider the equator, where deepest night slams right into brilliant light with barely a mutter of twilight. Nobody would drop a heavy dumbbell on your foot for thinking in this manner. But you'd be wrong. Our need for symmetry has little to do with our appreciation of opposites. It arises from a little patch of real estate somewhat closer to home—our own faces.

Humour me. Perform this little test. Imagine a line running vertically down the middle of your face, from forehead to chin and passing through the centre of your nose. Now, position a mirror on that line, so it divides your face into two halves. Next, angle yourself before another mirror so that one half of the face, along with its reflection, makes a whole. What you will see will disturb you. A version of yourself but somehow unfamiliar. Next, rotate the mirror and reposition yourself so that the other side of the face forms a unified whole. At this point, the operation becomes wholly disturbing. Another character appears, quite distinct from the first. It's deeply unpleasant and unsettling to discover that your identity—that singular self you've taken for granted your entire existence—is, in its most profound state, two distinct beings. All of us are a knock-together—a composite.

If I hadn't completely abandoned my quest for the complementarity of a positive building, it certainly lay forgotten within the tangled rat's nest of my head. An invite arrived to participate in Radio Revolten. The journey was a breeze. An airplane to Leipzig. A train into town. To be picked up by the good natured Jonas from Corax. Halle 2016. A city in make over. I had to breathe deep, deeply, deeper to take it all in. A wrapped Reichstag of a city, re-clothed in a tailored compass of radio-phonetic art and a swaggering suit of sound art.

Tentatively, I arrived at the front steps of the Radio Revolten HQ in the Rathausstraße. Within minutes of entering, the volunteers had located keys and unlocked doors, equipped me with a torch and set me loose in the basement of the huge building. Rotting benches laden with pennants from deceased regimes, an improbable telephone museum—each device sprinkled with dried-out cobwebs and plaster dust, a pile of damp pale blue cards marked “IMBISS Essenmarke 4,50DM”. Emerging from the depths, fresh coffee and cake were pressed into my hands. Over the next ten days, I experienced joy, fun, laughter, generosity, and enthusiasm tempered by the odd sobering spat. The volunteers. A grossly insufficient word for such beautiful shining people. I'd found my building. I'd found my symmetry. I touched heaven. Bollocks to Brixton.

NOTHING BUT NOISE? A CRITICAL REFLECTION ON RADIO REVOLTEN

Lukas Holfeld

On 2nd November 2017 I took part in a discussion that was broadcast live on the frequency of Radio Corax. Participating were Knut Aufermann, the artistic director of the Radio Revolten festival, Ralf Wendt, one of the festival curators, and Alex Körner, who was closely involved in preparing the exhibition on the history of radio displayed during the festival in the City Museum of Halle. I myself was invited as a member of the editorial staff for daily programming at Radio Corax, which was involved in various ways with Radio Revolten. This discussion round was initiated as an attempt at reflection towards the end of the festival. In my contributions to the discussion I took a position that expressed scepticism towards the art forms that I found characteristic of the festival.¹ This could be the reason that I was asked to compose a *critical* contribution to the documentation catalogue of Radio Revolten.

To collect my thoughts and decide what at all I could contribute to such a catalogue, I listened to the recording of the discussion again. Listening, a thought came to me that I hadn't before. I think that in this discussion a radio revolt took place without us, as participants, noticing it: the situation got out of control. The field of moderation and content-determined positioning was completely suspended; the discussion took on its own heated dynamic with all the misunderstandings amongst interlocutors and their completely different points of reference. I didn't have a good feeling at the time in the discussion—I thought something is going wrong here, the fronts had hardened in the course of the discussion in an unpleasant way: on the one side, the demand for free experimentation that rejects any precast framework—on the other side, the demand for a content-determined positioning that requires a certain commitment and theoretical reflection. In retrospect, I think that the confrontation had some productive moments. I think that this discussion gone-wrong must have had something provocative

for the listeners—how did this polarisation in the provisional studio come about? And I think that this kind of provocation could have succeeded in creating a greater transparency. The participants, through the confrontation, were forced to explain their preconceptions and points of reference. This would hardly have been possible in a regular studio discussion in which everyone held to the well-established conventions of classic oral negotiation. I hope that I can contribute to such a potential for insight in my contribution.

But first I have to point out that my perspective on Radio Revolten is limited in a certain way. I approach Radio Revolten as an activist for community radio, which means that from my maker-perspective I have an interest above all in content that, only secondly, searches for forms. As a member of the editorial staff for daily programming at Radio Corax I also only experienced excerpts of Radio Revolten—I can by no means come close to forming a complete picture of all that happened during the month of October 2016 in Halle. Whether the conclusions I reach here are appropriate will have to be measured against the examples collected in this catalogue.

First, I experienced presentations and performances during Radio Revolten that fascinated me and harboured potentials for insight for me. The opening performance on 1st October by Rochus Aust and the First German Electricity Orchestra created a three-dimensional soundscape from the roofs of the market place that gave an idea of how public spaces could be used if they were really granted a free form that was simultaneously combined with a historic reflection on the medium of radio. In the subsequent opening ceremony in St. Ulrich's Church, the curator Anna Friz gave a clever and enlightening talk reflecting on the medium of radio and afterwards the Resonance Radio Orchestra performed a fascinating live radio play that bore witness to the ability to narrate by means of radio. The exhibition *Unsichtbare Wellen (Invisible Waves)* in the City Museum of Halle led me to intensify my analysis of the history of radio, and the installation by Ralf Wendt in the former Department of Zoology led me and other members of the editorial staff for daily programming to deepen the analysis of animal

voices, the relationship between humans and animals, and the narrative form of the fable. The Corax staff became acquainted with new spaces in Halle during Radio Revolten—we regularly left the familiar confines of our studios. I also remember how I once got lost in a room of the exhibition in Radio Revolten headquarters playing accordion to the billowing noises that filled the whole room—an unusually beautiful, playful moment of no consequence. Other positive examples could be cited—but I rather want to try to formulate a criticism. This criticism begins with the following points: on the one hand, a reflection on the demand of the revolt and its positioning within the context of the artistic avant-garde. On the other hand, the indeterminate content of Radio Revolten that, from my perspective, leads to an arbitrariness of form. And finally, the externality of radio art and the activism of community radio.

1.

Whether conscious or not, Radio Revolten stood in a tradition of avant-garde art. On the one hand, through its title: it was the avant-gardists (Dadaists, Surrealists, Constructivists, etc.) who first decisively brought the demands for revolt into the arts or who wanted to supply the artistic means of a revolt. On the other hand, through the medium: the avant-gardes arose at the beginning of the 20th century and discovered the recent medium of radio as a new form of contestation. The avant-gardists developed an interaction with the radio and created forms that work on it or analogue to it—from the Dadaist sound poems and Futurist sound montages to Brecht's radio experiments. But the avant-gardists were not only interested in developing new forms of artistic expression. They also wanted to burst open the well-defined fields of art, bring art into daily life, and associated this with the demands for a fundamental restructuring of the *whole* society. The Situationists formulated this retrospectively, while the avant-garde's critical reflection formulated the demand to simultaneously destroy and create art and thereby achieve a generalised individual autonomy and a common understanding of actual experience. In this demand, the avant-garde was a failure. Despite all the ruptures and fissures, art

remains a well-defined sphere. It has become re-institutionalised through the intervention of the avant-garde: the forms of expression of the avant-garde that were intended to be revolutionary can today be admired in art museums or exist in niches of the cultural landscape without disturbing the course of society in which everyone feels amiss. Whoever wants to build upon the project of the avant-garde today—and avant-garde fragments were present the whole time at Radio Revolten—must reflect upon this failure. Thereby one could possibly come to the conclusion that the project of the avant-garde cannot be readily continued—the historical situations then and now are perhaps too different. But whoever does not undertake this reflection necessarily perpetuates the failure of the avant-garde. Especially when one references the notion of revolts in the name of the festival, one must ask: Under what conditions is a revolt possible at all? Or, the other way around: Why does a revolt, especially in the field of art, seem so impossible today? A treatment of these questions did largely not materialise throughout Radio Revolten and still awaits a follow up.

2.

That such admittedly very challenging questions were never really addressed during Radio Revolten may have had to do with the general orientation of the festival. In the above-mentioned discussion, Knut Aufermann and Ralf Wendt explained that it was primarily concerned with making the complete spectrum of existing contemporary radio art visible (or rather, audible). Favouring this approach led to forgoing any content-related positioning within the field of radio art. My impression was that this created the effect that one knows in large gallery compilations: because of the sheer amount of artworks shown, the confrontation with the content that potentially inhabits individual artistic works gets lost in the background noise and leaves one helpless. An impression of arbitrariness thus arises that is amplified through a specific quality of the medium: anything is radio art as soon as it passes through technical equipment that in the broadest sense has to do with radio or the transmission of sounds. Thus, what remains are above all the memories of squeaking, hiss-

ing, clattering and cracking—but what it *really* dealt with is hard to answer. One may counter: it primarily concerned experimenting with the spectrum of unutilised radio forms. But experimentation for the sake of experimentation is a pointless exercise—a contortion, a noise-making for the sake of contorting and making noise is pure formalism without any clarity about what productive outcomes could result from the process of distortion.² Yet my criticism does not imply an advocacy for a “content-ism” irrespective of form, as is too often the case in loveless leftist political radio productions. I believe that an experiment can only then be productive and display an effect when the point of repulsion in an experimental de-familiarisation process is clear. If Radio Revolten takes place again—whether in a ten-year rhythm or sooner—I think that it would be beneficial if it were accompanied by a general content-related question. Yet it should by no means be proscribed how such a question is to be answered—but a content-related framework would allow a confrontation *between* the artists, which, I believe, would be very much in the interest of the medium of radio. I also believe that a smaller framework could be productive—it would allow the individual works to assert themselves more.

3.

An objective of Radio Revolten that I had personally hoped for was an acquaintance with new forms of radio to bring about a new perspective on my work at Radio Corax. As soon as a community radio station like Radio Corax becomes institutionalised and established, familiar formats and procedures creep in and a wide variety of possible forms of expression remain unutilised. It would have been an outright radio-internal revolt to burst precisely such processes. This—also in the long-term follow-up—largely failed to materialise. If we are honest, we must admit that Radio Revolten left behind few traces in the programming of Radio Corax. Admittedly: a change in form presupposes a willingness and readiness of the radiomakers—it would be presumptuous to expect that such a festival brings such forms to a non-commercial radio station like a service provider. Yet I believe that a separation between the radio artists and the community

radio activists was noticeable throughout the whole festival. This separation was expressed in the festival programming that was broadcast on its own frequency while the daily editors of Corax played around externally at festival locations and, also, at the congress of the Federal Association of Free Radios in Germany (BFR) that was taking place simultaneously in Halle, in which little was said of artistic and experimental forms of expression—this is also by all means intended as criticism of the actors of community radio. I believe there is a mutual scepticism here that needs to be overcome: leftist radio activists shy away from dealing with questions of form, and radio artists are afraid of content-oriented guidelines. This was similarly expressed in the above-mentioned discussion round. By way of contrast, content-focused radio activists should develop a curiosity for forms that lay beyond the ingrained political canon—and the artists could discover that precisely a confrontation with the constraints of form, concept and critic could result in a concentrated aesthetic form. A sequel to the Radio Revolten project should, in my opinion, try to find a conscious approach to these questions.

RADIO REVOLTEN IMPRESSIONS

Lucinda Guy

There was a point, towards the end of Radio Revolten, when I heard myself saying, “This isn’t just the best radio festival ever, and it isn’t just the best festival ever, it’s the best thing ever, that anyone has ever done”.

I think that shows how swept up in it all I was at the time. There was a certain logic though—Revolten went beyond its brief as a showcase for radio art, and also was a model of how a festival can be produced. It felt like a bold and challenging model for arts production, breaking with conventional hierarchies and a lot of the bullshit surrounding arts events, and our ideas of who artists are and why they matter.

And beyond all this, it felt important, vital, in a political sense. Surrounded by a world going mad, in the year of Brexit and the rise of Trump and the far right around the world, we were holding a space on public airwaves for people to be different, be free, be kind to one another. Opening up ideas, whilst other media were shutting them down.

It felt—and still feels to me—so incredibly important to do this. Treating radio as an art form—as a stuff, like plasticine or paint—means there are no fixed messages, no fixed relationships, that life and the way we communicate it can respond, shift, melt and mould. If all radio is propaganda, then radio art is propaganda for the idea that people can be free. Radio and war go hand in hand, so making radio art is turning swords into ploughshares.

Revolten as a venue, and as a community, a physical space in Rathausstraße, broadcasting its own community spirit, its sense of cooperation, playfulness, deep thinking, care and construction, sent out radio waves of hope and an alternative. As far right gatherings took place in Halle’s market square, as we reflected on political changes around the world, Revolten proposed an alternative, and broadcast this outwards, positioning itself as the new centre of the universe, the eye of the storm.

Revolten for us was also a family holiday. We drove across Europe with our two younger children, to spend a month together

in a foreign city, and away from our regular radio station. The long journey was sleepy and strange, I fell in and out of consciousness. In this European dream state, the words jumped around, made new connections. I saw diagonal lines connect radio and art, and realised they were incompatible concepts. This meant they cancelled one another out. Revolten would not be a radio festival, and would not be an art festival. It was set free from the constrictions of either. It didn't need to fit the expectations of a radio festival, and all the earnest, self-congratulatory stuff that comes along with the world of beautifully crafted radio features. It isn't art either—we don't need big personalities, we don't need to show off. Radio art is not just radio + art; wonderfully, it is also neither of those.

All these things became more pronounced as the month went on. The sense of urgency and significance grew, and the artists reflected this more—it felt as though the work created towards the end was work that held the festival itself as inspiration and subject matter as well as platform. More and more the artists were coming together, wide spaces narrowing to a point, a single, flat tone that would finally peter out into silence.

And all these things were in my mind as I dreamt up something to offer. I thought-through so many different things, but kept finding the English traditional song *All things are quite silent* playing over in my mind as the weeks wore on. I began to listen to the words in a different way. The song, which is from the Napoleonic war and tells of conscription and lost love, was clearly written about radio art in general, and Radio Revolten in particular. It told of radio silence, the stillness this allows. I pictured radio art as our true love, threatened and taken from us. War reaches into people's lives and homes, destroying our stillness and safety. Suddenly, all other media was just war propaganda, complicit in the capitalist mess that relied on violence and injustice. We needed to fight and mourn for our true love, its precious airwaves threatened with occupation by commerce.

Now as I'm writing it we are a year on. In October 2017, I'm finding I have many flashbacks to October 2016, the city of Halle, the feeling of being part of Revolten in that place. The two things—the festival and the city—are

one in my mind. The festival used the spaces and geography of Halle to make sense of radio art. Radio art needs spaces to be heard and broadcast in, and Halle seemed to reflect and soak up the radio waves as needed.

Often I was at the flat with the children in the evenings—I couldn't make it into all the performances—and listening on the radio. Some of this I recorded onto tapes (I filled up a tape each day). It was always a joy to tune in to Revolten on the little radios that were always around. Having met so many of the people I was listening to meant I could really picture them, whilst imagining how this station might sound to people who had stumbled upon it. The sense of a radio community permeated every broadcast, and the atmosphere of the building in Rathausstraße.

When I was back at home, I heard from a filmmaker, Florian Fischer, who had tuned into one of my live radio improvisations. At the time he was working on a film and when he listened to Revolten, everything slid together, he pictured some of his film to my sounds to his images.

“So there's a scene in the film where I'm getting in trouble with my own male gender and the enrollments that come along with that ... I'm falling in a kind of subconscious mood, partly creepy, partly sexualised. I took some abstract pictures and just put parts of your set under it ... For me your performance makes total sense, because it's not a rational word that is coming to me, more a meditative voice/syllable from the inside of the body—on the Radio Revolten archive I heard something by you where even a male voice is used—perhaps it makes sense to use this in the beginning of the film, very shortly—to introduce it and later on the female part of it ...”

When I broadcast the piece he heard, I too was in a subconscious mood. I've done a lot of these types of improvisations in other radio stations, but had never felt so deeply immersed in the process as I did in that studio. There, different things came together to allow this level of focus.

Another radio listening experience that will always stay with me was listening to Sarah Washington's *In The Air We Share* from high over the city. This piece was for three channels—Revolten on FM, Revolten on AM and Corax—with a different layer broadcast on each.

Looking out over the market square from the bridge between the towers, a group of us listened together. When you look at a city from a height like this, you can see the component parts as a whole. This mirrored our listening experience, as the three streams came together. Sarah said the timings may not have been exactly as planned, but that whatever came out was how it should be.

We had climbed so many stairs to listen to radio together, and the whole experience of this was part of the artwork. The architecture of the city, height, towers, air and a feeling of floating off high into the atmosphere, were leitmotifs of the festival. The voices Sarah had recorded were spoken for us, there at that time, in that place. Also, the sense of different things joining temporarily for that moment feels symbolic and significant—a kind of radio alchemy, again, a spell for a less divided world.

TOGETHER WE ...? RADIO ART AND COMMUNITY RADIO

Michael Nicolai

Revolt: (noun) an attempt to end the authority of a person or body by rebelling, also “rebellion” or “uprising”. The term “revolt” is frequently used in the context of failed rebellions. Revolt can also be understood in a more individual sense. In this case, the term describes an individual's “refusal” to continue to obey or conform to external or internalised constraints and expectations, like against one's family or social norms.

In light of this definition of the term, it is fair to say that community radios are born from the AGAINST of revolt, that they are in a permanent state of revolt or that community radio is revolt. At least one German manifestation of community radio—“Freies Radio”—might be pleased with this description, because the definition focuses on a differentiation “from”—from radio homogeneity, from mainstream music, from the political mainstream, from a radio for either citizens or potential consumers. Used in the FOR sense, the radio of revolt is one of social alternative, a self-governing tool of media communications that turns would-be consumers into producers and, in this way, allows for the exchange of ideas and opinions through mass media in an open-access and hierarchy-free manner. This is how people and opinions that never—or almost never—appear in the media landscape outside of the social web find access to public discourse. These ideas and opinions are by no means limited to political positions: they can also be formal or aesthetic in nature.

In this sense, it was at most the scale of Radio Revolten in October 2016 that was so astonishing, not the fact that the non-commercial local radio Radio Corax in Halle (Saale) organised the first International Radio Art Festival, which ran for four weeks, during which more than 80 artists, one festival radio, two exhibitions, installations and countless performances at various places in the city could be experienced, heard, seen and sometimes even felt. Because who can do radio art, with its supposed unmarketability, better than community radio?

Artists are rarely featured in public service broadcasting or private commercial broadcasting. However, to gain open access to production resources and air time on FM radio and the Internet, all they have to do is open the doors of the community radio, perhaps join the association that runs the radio, maybe take an introductory course. And this art-experimentation laboratory doesn't even have a lab director who makes decisions on relevance and air time. On the contrary, it is the artists themselves who decide on the programme and all radio-related matters in a collaborative process. Radio art—deliberately or inadvertently—helps explore the free space “community radio” in terms of what is thematically, aesthetically or technologically possible. This is how creative minds provide inspiration for all radiomakers in the field of community radio. The editor of an Antifa magazine finds new forms of expression for her topics. Techno DJs collaborate with artists. It is not only at the individual stations where people who are fuelled by the freedom of art contribute to public discourse; artists also get involved in national and international community radio associations. The artists who discover their place in community radio become radioactivists who work on the development of society towards a world without war, exploitation, oppression and coercion. I HAVE A DREAM!

Radio Revolten did not change Radio Corax. Radio Revolten was accompanied by Radio Corax. The collaboratively planned programme left the shelter of the studio and entered the shelter of the Radio Revolten Zentrale, talked with artists and examined and discussed art. A few individual radiomakers ventured into new, creative territory, working with artists and/or performing with them live on stage. For the most part, this revolt in radio took place on the festival's own frequency. Radio Revolten was a curated exhibition whose art and artists were chosen by a committee of experts. It was an art radio that was broadcast worldwide and that thereby interlinked and maximised small, very-special-interest groups, aka minorities. At a radio station whose programme and aesthetics should be seen as an acoustic challenge for a potential mass audience—an audience that tends to see the programme of community radio, even without an aspect of art, as difficult

or impossible to hear for themselves or also simply in general. Editors from Radio Corax had a difficult time with the art and its ambiguities—art has no “musts”! Mistrust of aesthetic issues, the unformulated and interpretable spaces goes hand-in-hand with art, even in free, self-managed contexts. Political mistrust consorts with another form that questions the artist's relationship to community radio. Is the artist simply taking advantage of the opportunity for air time on community radio in the sense of “it's better than nothing!” because the sphere of public service broadcasting neither offers money nor shows interest? In other words, is she or he really serious about fighting for a better world?

On the one hand, questions like these feed on self-doubts with respect to the power of one's own actions, as well as doubts regarding the perception of not only these actions but also of community radio itself. On the other hand, community radio's collective processes and their social demands are confronted with the extremely individualistic processes and demands of artistic creation.

Perhaps the London-based art radio Resonance FM is reacting to this fact pragmatically with its structure, although it sees itself as a community radio it is rather a non-commercial community of artists' radio, but community radio in the socio-political sense. There is no statute that defines the rules and ideas according to which the radio is constituted. Here, artists are afforded access to radio as a space for creativity. It is the idea that counts, and technical assistance is available for the implementation. Technicians are volunteers and often work in cooperation with the artists who are also volunteers to form fixed teams. Nowadays the programme director decides who will be given the regularly scheduled shows, where in former times it was a collaborative procedure. The programming elements rotate quarterly because there are not enough hours in the day or week to satisfy the demand for air time. The radio-art network Radia also has no set structure with collaboratively formulated rules. Here, any radio or radiomakers who express interest can take part. If someone from the Radia network can vouch for the interested party, then there is nothing else stopping them from getting involved. However, the fact that the Radia members who attended

Radio Revolten had a long meeting during the event demonstrates the desire and necessity for the discussion of content and design in the Radia community.

According to Joseph Beuys, everyone is an artist. This theory is indeed questionable. Nevertheless, there is no doubt that every person is a potential community-radiomaker. By the same token, every artist is a community-radiomaker and, in this context, an original claim of Radio Revolten “FM for Culture” can therefore be underscored and expanded to “FM for Community Radio!” The practice derives from the demand. Because the history of community radio shows that nothing arises from demand alone. Without activity and activism, there would be no community radio, which means that there would also not have been Radio Revolten and that therefore the space for radio art on FM—or DAB+ or whatever the highest standard for broadcasting radio services is currently called—would be limited. It's up to the radioactivists to formulate and create the demand for this space. This is where many of the issues are decided: do the people who make radio accept the responsibility or not? It doesn't matter whether, in the process, they define themselves as artists or journalists or music enthusiasts. However, the radical freedom of art can help expand the bandwidth of that which is to be demanded and help find a form that opens up new opportunities for the fight for community radio everywhere on FM/DAB+/wherever. The announced manifesto of Radio Revolten is anticipated!

VIVA LA RADIO! —
A PROVOCATION.

hartmut geerken

the radio plays of public radio institutions, to which i owe much, are nearing their end. the rule of their structurally founded dictates hampers the free radio play through constricting instructions, inflexible modalities & shady awkward attempts at censorship (“please don't get me wrong, mr. geerken!”). some of those in charge don't know yet (or don't want to know) that the end is near.—the free radios in contrast cannot pay anything, but some of them, which rise above the whole trash of the free scene, don't measure time in minutes & seconds & unrestricted creativity has its permanent place (examples: resonance fm, london, radio revolten & radio corax, halle/saale, kunstradio-radiokunst, vienna). the revolts happen only here. here i see the only way out of the dead end of the public-service broadcasters. here i see venues that offer all possibilities for genuinely creative development, without the malicious studio tricks & without the authoritarian fuss of some people in power.

off with this unbearable speed oriented & polished everyday radio vocabulary. clear view into the chaotic alphabet soup. off with this crap linearity of the omnipresent advertising tsunami. i expand discretely into all directions. to reach a goal is not my aim. plot points are not what i drive at. traditional dramaturgy can kiss my hump. but for the dissipative structures i have in mind i am still an alternate host, a latchkey child, a quarterhuman.

my text, be it for print or the radio, does not exist of pompously trivial bank signatures, but i obviously proceed in a way, in which the letterings of my circumstances, which even for myself are not deducible at first glance, are assessed as illegible or rather incomprehensible. this does not bother me, for what is the typical detachment from an issue actually based on? one could perhaps believe it stems from the profuse hastiness with which all too often sentences, that are tailored for the audience, are thrown in heaps & in no time into the ear of the immature listener. but the issue seems to go deeper when we realise that the degree of incomprehensibility of

an “unambiguous” sentence, written down or spoken into a microphone, generally does not decrease in the slightest. there obviously exists a radio habit to bring supposedly plain sentences into the world like this. but how boring, how unclear is the unambiguous, the perfect, the unmistakable.

not only the rightist but also the leftist literature is on the wrong track. it tells petty little stories with rich plots in great arcs of suspense. yet all depends on the language, written or spoken, read or heard. only the work on the language is political, not the politically oriented topic & sometimes a sentence that turns up as minor point in a system proves to be the the central point. a tiny thing can cause a revolution. sun ra said words are like chemical substances that can react explosively when they are placed beside one another. but which radio places such words side by side?

almost daily i suffer from speechlessness & turn towards the noises & to proto-languages. i have the impression it keeps getting worse. every sentence i write or articulate, release into the world, tries to perfectly adapt to the force field to which i expose it, that is to say it creates connections that i did not intend, forges links with extraneous word fields & evokes shades of plots that i never had in mind. my language expertise consists in recognising the limited number of letters & my knowledge that these keep reoccurring. i understand aesthetics as the highest possible risk when stringing together letters.

when i eventually reach the end of a book or of an acoustic performance, i won't know what kind of book, what kind of radio show it has become, what it was about, what happened in it & how it can be that one word can follow the next.

THE REVOLTEN WILL NOT BE TELEVISED³

Sophea Lerner

Radioart cannot remain in the field of “aesthetics” any more. It has to be involved in ecology, micro-politics and philosophy of technology, too.
Tetsuo Kogawa, *Manifest for Radio Revolten*

Medium wave radio in Germany has been vacant for a while. However, for October 2016 this abandoned band was lit by a temporary station broadcasting from the regional city of Halle. This pop-up station, also on FM, housed in the spiral tower of the vacated Physics Institute invited a question: What if we turn these abandoned analogue frequencies over to artists?

This is a festival that very much happened on the radio, with the installations and performances activated by, and made for, radio and transmission. A once in a decade event, Radio Revolten sidestepped the question of what radio art is to showcase what artists are doing with radio right now, and create a space where artists could experiment together.

Headquartered in a previously unoccupied building in the city centre, alongside performance and installation spaces, the broadcast studio set up by local community station Radio Corax was deliberately kept available for spontaneous collaboration and as a canvas for experimentation. Curator Sarah Washington explained to me, “We’ve been working for years to try to have a radio without a schedule, and we’ve sort of managed it this time. To achieve a mostly open schedule, she says, they had to throw people in at the deep end a bit, but that artists quickly appreciated the freedom. Each day’s broadcast is anchored in a programme of live performances made for, and sometimes about, radio. Live sound effects with all manner of objects, sophisticated microphony, electromagnetic explorations, blindfolded turntablism, virtuoso vocalities ... these performances are as diverse as they are breathtaking.

After the performances people talk deep into the night, converse in shapes on the dance floor, play ping-pong in the garden and get to work on shared imaginaries for possible radio futures. Bringing people together

is critical to the festival’s mission Washington explains, “We wanted to make the network physical instead of having this virtual network. It’s important in this day and age, in times of real turbulence in the world, to bring people together”. Artistic director Knut Aufermann adds, “The important thing was to try and get as many people here as possible to show what they do and to meet and form new alliances, new bonds, new meetings, new ideas”.

Alongside the artworks, performances, and workshops, Radio Revolten hosted two community radio conferences. The overlap of participants in all these events created a fruitful mash up of politics and aesthetics in the surrounding conversations. A day of presentations of various community radio projects by and with diverse groups of refugees show the innovation and diversity in radio form and creative re-purposing digital material alongside terrestrial broadcasting is happening in these multilingual cross cultural and borderless contexts.

This is a deliberate juxtaposition: “Everything we do, every radio project, is about giving people access and that is such a political thing, being in control of your own media, dealing with whatever political regulations there are in the country you are in. The art and the politics for me are completely blended”, says Sarah Washington.

Community radio as a generative context for creative approaches to transmission is also articulated by Anna Friz on a curatorial tour of the exhibition *Das Große Rauschen: The Metamorphosis of Radio*. Friz observes that many of the artists involved in this “open experiment about a transmission ecology” have their roots in community broadcasting.

I speak with some artists who don’t see their work as intrinsically political and some community broadcasters who question aesthetics as a priority. The middle ground is a shared recognition that the freedom to experiment aesthetically is itself political, and can open up new understandings that existing forms and formats might leave closed. Telling diverse stories requires a proliferation of ways of telling.

At the *Radio Space is the Place* conference, the organisers keep a couple of seats on the panels open for members of the audience to join in discussions which explore future

radiophonic collectives, alternative spatialisations, politics and poetics of wireless space, radio as an experimental laboratory, and issues of archiving. Sally McIntyre and Meredith Kooi both make important contributions related to localised listening and critical spaces of micro-transmission. Sometimes place is the space.

At one point the predictable debate surfaces about whether actual radio waves need to be involved for something to be radio. At this point even analogue radio is highly digitised in its own core infrastructure, and the histories of radio and the Internet are closely intertwined. But some are critical of trends towards allowing our listening to be enclosed by podcast subscriptions, curated by playlist algorithms that choose things they expect us to already like. Throughout the conference Anna Friz keeps bringing us back to this question of listening, and to thinking about listeners.

Amidst the collective reflection on filter bubbles following some of the political surprises of polls in 2016; such as Brexit and Trump; the value of listening to things we are not expecting to hear, as a way of better understanding our world, would seem to take on a fresh urgency. Whether digital or analogue, an aesthetics of openness and inclusion is something we need.

The urgency of cultivating, and nurturing, cracks in the media landscape where imaginative possibilities can flourish is brought home to us as Revolten draws to a close and we learn that the Australian Broadcasting Commission has decided to decommission *Soundproof*; an Australian show that many international artists gathered at Radio Revolten have contributed to, including Gregory Whitehead, who reminds me that this decision “reveals a toxic-corporate mindset that rips out the garden for yet another parking lot”, that we have seen repeatedly over recent decades.

Like many other national broadcasters have continued to do since, the ABC has systematically gutted the local ecosystem for creative radio over recent years. Now it has laid out its plans to wind down its primary medium wave network over the next few years as it abandons audiences that listen on air, to chase audiences that can be counted online. If we want new listening experiences, we must

make them ourselves, and find new forms and platforms for sharing them.

When the ABC and other networks have done with medium wave, then maybe it will be time to give the frequency band back to artists ... As Radio Revolten has shown we are not short of ideas for what do with it.

This concentration of the most creative and experimental practices in contemporary radio-making invited the question of radio's future. And here's where things get a little circular ... Radio has always been a future oriented medium, inasmuch as it has inspired future imaginaries since its early days, and its past contains many futures that are still possible. Like the early days of the Internet, the early days of radio were wide open and that futurity still echoes strongly in today's experimental practices. If a revolution turns things around, sometimes things coming around again into a new context is more revolutionary than a narrative of progress that goes in a straight line where the future is always in front of us, and never sneaking up behind us. Doing new things with old frequencies is just the beginning.

1. _____ The audio recording is available at: http://audioarchiv.k23.in/Radio/Radio_Corax/Unsichtbare-Wellen-Talks/2-11-radio-revolten-reflektion.mp3 (accessed 8 May 2018).

2. _____ What I mean may become clearer with an example from music: At the beginning of hardcore punk, scream-like singing was employed rather discreetly as an expression of a furious climax. In later hardcore, at some point screaming became a common and normal component of the expressive repertoire; it became another instrument that no longer expressed a specific rage but that rather served only the audience's expectations of the genre. In hardcore, one screams. It is similar with noises in radio art.

3. _____ A longer version of this text first appeared as a review in the Australian arts publication, Realtime: <http://www.realtimearts.net/article/135/12457> (accessed 1 May 2018).



... when you are driving in your car listening to the radio, and at the moment you arrive at your destination, you park in the driveway, turn the engine off, yet you keep sitting in the vehicle no matter how hot or cold it might be, no matter if you're thirsty or hungry, or if you have an appointment, you just remain seated with your ears stuck to the radio until the very last tone of the enchanting radio programme ...

The gathering of radio artists and philosophers during Radio Revolten at four international conferences and meetings felt like one of these enchanting so-called “driveway moments”. Approximately 200 thinkers and radio practitioners from many parts of the world came to Halle in October 2016 to discuss aspects of community media in Europe and Germany, and to advance the dialogue about radio art. The international radio art network Radia gathered for one of their rare meetings in the offices of Radio Corax; the board of the European section of AMARC, the World Association of Community Radio Broadcasters, came together for a meeting at the university of Halle; the *Zukunftswerkstatt Community Media* of the Federal Association of Free Radios in Germany held their annual four-day-conference parallel to the festival—an occasion where radiomakers enter into an exchange about current needs and future plans to support, sustain and grow the structures of free and community-based radio production; and the festival's own conference *Radio Space is the Place* invited scholars, philosophers, activists and artists to discuss sustainable strategies for the creation of radio art archives, to highlight the possibilities for radio studios to be considered experimental laboratories or to dig for alternative future practices to colour the radio space. Some of the thoughts brought up during these conferences are taken up in this chapter.

Radio Space is the Place focused on the examination of radio art. The gathering was brought together by media scholar Nathalie Singer from the Bauhaus Universität Weimar, Kunstradio producer Elisabeth Zimmermann from ORF, and media scholar, radio and sound artist Anna Friz from the University of California, Santa Cruz. One of the many contributions to the conference highlighted the crucial role and responsibility which radio art has to position itself and react upon political and social circumstances. Writer, artist and philosopher Gregory Whitehead searches for an access point to this emancipatory artistic radio practice in the role that Sun Ra assumed as artist and medium.

Gregory Whitehead

I am aware that this compelling dictum descends from a Kunstradio manifesto, yet to my ears there is a second reference that may bring fresh dimension to our panel's explorations into the poetics and politics of turning on and staying detuned, and that is the composition by Sun Ra named *Space is the Place*. Such an entropic and ecstatic composition strikes my ears as significant for this conference because it reminds us, in the midst of our frequent discussions about what we might create and celebrate within the rich *poesis* of radio space, that radio space is also simultaneously doing something to us: enriching the electromagnetic compost of our subjectivity. For example, consider that the man who wrote *Space Is the Place*, the celestial humanoid named Sun Ra, only came into being through the result of what Catherine Malabou identifies as an "ontological accident", as she writes, "...an absolute existential improvisation. A form born of the accident, born by accident, a kind of accident. A funny breed. A new being comes into the world for a second time, out of a deep cut that opens in a biography."¹

In the case of Sun Ra, whose first existence carried the name Herman Blount, a relatively mainstream swing jazz musician from Alabama, the ontological accident came during an out of body experience through a severe neurobiological collision with the consciousness of a being from the planet Saturn, who, as Sun Ra told his biographer, possessed tiny antennas emerging from both ears, and from both eyes as well, creating a signal, an alien signing, of pure and powerful pulsation, beaming forth a transformative message so pure and powerful that Herman Blount ceased to exist within the same wave form as Sun Ra came into the world, his head brimming with cosmic noise and all the latest news from Neptune. From the point of view of Herman Blount, this is what Malabou calls "destructive plasticity", though from time to time the Arkestra would dip in and out of the discarded Blount world, offering severely decayed echoes of big band swing, with off-kilter unison followed by wild solo improvisation.

Having been born from such existential improvisation within a radio space projected

by an extreme alien Other, it is not surprising that the funny breed named Sun Ra, who once called himself the greatest joke God had ever played on the universe, should compose such intensely radiophonic music as *Space is the Place*, with its chorus that repeatedly falls apart and puts itself back together again; while at the same time, a piece that bleeds from one wounded solo voice into the next, as Sun Ra channels the irretrievably scrambled nature of the universe. Such confluence and simultaneity of entropy and interference perfectly captures the essence of radio poetics, and underscores that while we may seek to interject our consciousness into radiophonic space, radio artists also invite into their ways of being, thinking and sounding the essential qualities of radiophonic space, in all its murky, wet, slippery, unstable and ever-changing flow.

In one poem that strongly resonates with the tale of the *Willful Child* from the Brothers Grimm, Sun Ra writes of a buried arm twisting through the earth and reaching for the sun, then transformed into a sort of lightning rod that plays sounds the world had never heard before. In stark contrast to the vast behavioral algorithm and data mine we still euphemistically refer to as the internet, radio offers those who can handle it, the space of the sounding arm, an arm that beckons us—perhaps—to unplug, de-tweet and detune, an arm extending from those few otherworldly spirits who reject and refuse to be disciplined by the imperatives of the controllers, the commanders and the markets, an arm that pushes, willfully, through the dry-baked earth to release sounds the world has never heard before.

As for more everyday expressions of political engagement: from roughly the time of the album *Space is the Place* through to his death in 1993, Sun Ra established a home base for the Arkestra in a neighbourhood of Philadelphia known as Germantown, a radical community founded by German Quakers and Mennonites in 1683, a community that would in time become the epicenter for the movement to abolish slavery. Ironically, the rather less radical white descendants of the abolitionists would later leave the neighbourhood for more distant suburbs to avoid living amongst the descendants of the slaves their ancestors had helped to emancipate. During my college years

as a student of philosophy and music, I often attended free Saturday live-to-air transmissions from the planet Saturn channelled by the Sun Ra Arkestra in a nearby Germantown park. Though Sun Ra was clearly both composer and conductor within the flow, the egalitarian ethos within the ensemble immediately caught my attention, an ethos that reminds us that while we cannot always control the politics of our creations, we can certainly control the politics within our various projects: lasting change begins within, then pushes out. Arkestra House, where the band practiced and sometimes performed, adhered to a strong and non-negotiable rule of zero alcohol and

zero drugs, which was a life-saving message to send out into the neighbourhood during those years. Finally, Sun Ra and other Arkestra members were deeply involved *within* the surrounding community, with a particular focus on Germantown youth, for whom the radiating presence of Sun Ra was a daily reminder that any future path was possible, so long as the sun kept shining. Then when the power of that shining threatened to explode into a mushroom cloud, as it did during the height of the Cold War, the Arkestra was quick to bring their rhythms and voices into play, as in their 1982 performance of the raucous ensemble composition, *Nuclear War*.

Facing a time of massive global and environmental change, radio would dematerialise and unite all human consciousness. This hypothesis expressed by early futurists provided a starting point in the discourse about radio as a poetic space for disruption and intervention as taken up in the conference discussion about *The Politics and Poetics of Wireless Space*.² After reading the conference text of *Radio Space is the Place* printed above, I asked Gregory Whitehead (GW), if he would enter into a deeper dialogue about how to implement an artistic attitude in today's radiophonic practices.

ANOTHER WEIGHT OF THE WAY

In conversation with Gregory Whitehead

H.H. As radiomakers we are part of a local society and we are moved by what is discussed within that society. I plead to think radio from the local, local in the sense of this place, but local also in the sense of a local radio in the village in India. I believe that we can promote a consciousness of the global via radio, which is so important nowadays. Radio can be the point of contact between multiple life realities. Radio has a great potential to be the mediator to break down the walls of "we" and "the other".

G.W. Yes, the utopian aspiration for radio as a space for incubating global community has deep lungs behind it, and let's not forget that early amateur telegraphic radiophonists understood themselves as participants

in a vast network of maritime safety and rescue. That said, the same finger that responds to an SOS can also tap out a command to attack, and though of course we want to sustain the utopian aspiration, and breathe life into it, we must remain mindful of the darker vibrations as well. Radio may sing that beautiful siren song, and then suddenly, the ship is on the rocks, and the crew drowned. For me, the tension between the two drives—sometimes I have described them in terms of Eros and Thanatos—is at the very heart of radio art.

H.H. Let us face Thanatos. I envision Thanatos in his extreme form in the tremendous power exposed by radio stations encouraging violence leading to genocide in Rwanda and Serbia. The force that delivers suppression and harassment, that feigns and manipulates. But I also see his image in (community) radios that are constantly busy facing and holding against this destructive force: when discuss-

ing for hours how it happened that a misogynistic rap song was put on air and called a joke; when revealing morning after morning cases of domestic violence in a Nicaraguan village through the airwaves—life-threatening for the women in front of the microphone; when speaking out on air without consciously reflecting on the sub-message words also transport. All these incidents are part of communities we live in. Local. Concrete. Just on the edge of the “dark vibrations”. Confusing though, Thanatos isn’t crawling through the radio as the dark and creepy acoustic figure. It is radio artists who snatch off his mask so that we also can hear him behind all that feel-good-easy-listening-rubbish.

G.W. Early manifestos for radio art embrace and even celebrate the two pulses, the one that connects listeners and the other that obliterates. In 1921, Khlebnikov proposed radio as the “spirited sun” of the motherland, a sun that would radiate songs of “lightning birds”. Radio sorcerers would mesmerize national consciousness, capable of healing the sick and increasing worker productivity, with Khlebnikov making the strange assertion that the notes “la” and “ti” had the power to expand muscle capacity. On the mask of Thanatos: absolutely true that the most ominous signals arrive in numb, flat wave forms. In the US, possibly the most ominous being the flat-line drone tone of the Emergency Broadcast System, centralised in 1951 through a program with the typically garbled bureaucratic acronym CONELRAD, what unravels as Control of Electromagnetic Radiation. In the event of a nuclear attack, the plan dictated that FM stations go silent, with AM stations passing emergency announcements one to the next, all to confuse bombers and other lightning birds. The pulse of Radio Eros—dispersed, elusive, polyphonous—remains a constant threat to centralised power precisely because it defies the permanence of emergency, the embedded drone tone that flatlines the open air. Philosopher Santiago Zabala refers to Hölderlin’s wonderful lines, “Wo aber Gefahr ist, wächst/Das Rettende auch”

to promote works of art where audiences become responsible “for an emergency that is absent because of the very danger it implies.” This was the thinking behind my broadcast *On the Shore Dimly Seen*, singing my way through the dark, into the saving power.

H.H. Someone gasps for air. A stertorous breathing. The burden of your orchestration of the interrogation log of detainee 063 in Guantanamo marks the emergency so definitely. Torture. Stertorous screaming. A gruelling radiophonic space. Extending your approach of polyphonous, fragile and tentative sound to bring the threat into consciousness, I’d like to contemplate a special kind of polyphony: the polyphony in community radios. I remember the encounter with a Russian engineer living in Halle, who said that he is a big radio fan and for this reason regularly skimmed through the FM radio spectrum in Halle when he arrived to the city. Without knowing that there was a community radio broadcasting on 95.9 FM, he stopped for various times right there, captured and enchanted by the distinguishing sound in comparison to all other stations: a conversation in Arabic; someone reading a poem through the telephone; a sound journey through the city from the perspective of a toad; though a majority of people are still so irritated by that different way of listening that they judge this radiophonic proposal(s) and question its “professionalism”, and in consequence disclaim it. Although fortunately we don’t need to please everybody.

G.W. Pleasing everybody can only be achieved by finding a lowest common denominator, and “lowest” implies airless, stiff, death itself. Radio invites us into a space of intoxicating bewilderment, calling for us to enter the wilds of vibrational disorientation, find our bearings, figure out where we are and who we are, rocked and rolled by the riptides. For my blood, the most invigorating radiocasts embrace the murky, slippery nature of the space in all its terrifying beauty, and refuse cheap “clarity”

or “resolution” of the sort one hears with mind-numbing regularity on mainstream frequencies. Listeners such as the Russian engineer, in tune with the medium, embrace the infinite expanse of meaningful chaos where all sorts of sounds and ideas, at odds with each other, may nonetheless find themselves on the same dial. Radio thrives on inchoate improvisation, drop-ins, accidents, insomnia, passion and the unspeakable. Some may find that kind of mix “unprofessional”. To my ears, such a rich, sloppy and tangled swamp creates more life than the tight and tidy modules of the mainstream, with the smarmy patronizing hosts, and the coy predictable segues, and the simple-minded enslavement of sound where “moo” always means “cow”!

H.H. The conference in Halle explored this discussion about the poetics and politics of transmission. In one panel Rodrigo Ríos Zunino picked up an approach that understands “noise as a carrier of coded signals”. He wonders if going back to this kind of transmission there might be a possibility to reach the people with information who so often stay unheard and can’t get through. “Maybe the radio of the future will go back to this idea of resistance.” Following him Anna Friz analyses, “what we have been talking about here is a sort of a representation versus metamorphosis. Does radio represent a listenership, an approach, a format? Or is it possible for a medium to be a medium of metamorphosis, a place where something is transformed, something changes? I firmly believe that the story of radio is not over. We don’t know the limits of the medium!” You responded to that by saying, “I want to think that radio remains the medium of individual rejection. Rejection. Rebellion. Just negation. Not going there. Not going to participate. Instead, here is this other weight of the way. The medium that can show another weight of the way.”

G.W. Yes, that phrase “another weight of the way” descends from the voice of Sun Ra, a vibrational being born from intimate contact with an alien radio, a being in touch

with infinite otherness, the otherness of outer space, and all its unfolding sense of limitless possibility, a space of freedom; also a space of entropy and interference, everywhere present in the music of Sun Ra. Traveling to that space of freedom begins in resistance—rejecting the dominant path, where we learn “to be realistic” and “to deliver the goods”. We live in a time, as Günther Anders proposed several decades ago, of inverted utopianism: instead of being unable to make the things we imagine, we are unable to imagine the implications of the things that we make. We are way too passive in accepting whatever comes down the tubes, whether artificial intelligence; toxic data-mining and surveillance media such as Twitter and Facebook; digital radio as somehow “superior” to analogue; CD as “superior” to vinyl, and on and on. In search of a poetics of resistance I think of radio-makers like Anna Friz and her coded telepathies; the blistering vocal interventions of Meira Asher; Karinne Keithley’s *Basement Tapes of the Mole Cabal*; the waves of anonymous free-wheeling pirates; and “odd outsiders” such as WGXC, Resonance FM and Radio Corax.

H.H. The examples you give are strong outbursts from a normative practice. I’m interested in finding out why they are so scarce. We have many (although not enough) free and community radio stations in the world that are not tied to a head editor, director or producer. But many programmes and many stations stick to the conventional formats: moderation, music, moderation; dpa news, weather forecast, another 4-minute song; 60 minutes, 30 minute programmes but much too seldom unsettling 3 hours 13 minutes. I find the considerations you picked up from Günther Anders helpful to get a notion of why so many radiomakers are oriented towards formatted radio. Turning it around: What conditions do radio-makers (including radio artists) need to implement and expand the fresh ideas that are out there, what circumstances are required to storm in new radiophonic directions? Looking at community media realities, many radiomakers

have dropped out of the dominant society or struggle living on the edges of it. People who don't want to fit into the set conventions, that want to dictate what is work, what is "normal", whom to love, how to look, which language to speak. It's these people shaping the "meaningful chaos" on the airwaves and they represent our society so much more than anything else.

G.W. Ossified formats reflect an ossified imagination. A truthful representation of the world's inherent polyphony—and I am including more than human voices here—requires aesthetic and poetic abundance and diversity. Entrenched formats, with tidy introductions and inevitable resolutions delivered by patronizing and complacent hosts, reproduce a comfortable illusion: alles klar, fürchte dich nicht. Such patterns and cognitive rhythms are easy to slip into, like an old pair of pajamas; then we are all

collectively ready to go to sleep! Formats embed distinct ideologies and the heavy weight of convention; when we use them, we let the format do the thinking, willingly sacrificing poetic, imaginative agency. That's why I like to bring Sun Ra and the Brothers Grimm into the mix: Sun Ra's poem that brings to light an arm pushing through the dry, baked earth as a flash of lightning, then transforming into an antenna radiating celestial music; and Grimms' *Das Eigensinnige Kind*, giving voice to the "disobedient" arm that refuses the disciplines and violent punishments of the established order. Given the rampant insanity of our present times, I have my doubts whether the human species will sustain a viable future. Yet if we are brave enough to imagine and create a different way of life, let us tune our ears less to the crunch and bone-rattle of the dry earth, and more to those willful arms, the ones that spark the cosmos!

Throughout the two-day conference *Radio Space is the Place*, researchers and artists tackled further questions addressed to listening habits, technological conditions for radio, and the future role of radiophonic collectives. Some of the results of the conference have expanded into the project Radiophonic Cultures.³

Radio Revolten turned out to be magnetic for radiomakers, artists, and activists alike. The reunion of the Radia network, a non-commercial, independent group of radio artists spanning around the globe, was a special event. As a network without an institutional framework, a physical meeting of its members is quite difficult to realise. Therefore, the meeting of the group was a memorable exchange. One of the co-founders Knut Aufermann reminisces about this encounter.

RADIA EXQUISITE CORPSE

Knut Aufermann

The existence of the Radia network is a small miracle. For twelve years it has gathered a growing number of radio art devotees situated in 30 radio stations sprinkled across the globe. Purely driven by volunteers, devoid of the pros and cons of a legal or administrative framework, Radia members have overseen the production and broadcast of a collection of over 700 radio artworks to date in their weekly joint transmission cycle. Each station produces a show in turn for this significant

radio art network, which comprises community, university, and "free" radio stations, with the addition of one affiliated public broadcaster. Indeed Radio Revolten in 2016 cannot be thought about without taking Radia into account, as it was the central point of contact between many of the festival's artists, curators and syndicators alike.

Vice versa, Radio Revolten offered the opportunity to propose a long overdue Radia meeting, held at the Radio Corax headquarters. Some of the active people in the network had been invited to the festival as artists in their own right, others used their own means or managed to find support to travel

RADIA REPRESENTATIVES VISIT THE RED TOWER



to Halle, meaning that a majority of member stations was represented at this first major assembly for eight years. As such, it was the first face-to-face meeting for many of the participants. During one precious weekend the publication of the complete Radia archive on archive.org was decided upon, international radio art collaborations were incubated, and subsequently several Radia shows were created which featured recordings gleaned from the festival.

True to one of the network's founding traditions, the Radia get-together also resulted in various joint radio-making activities. Two of the festival's performance evenings were branded Radia nights and featured acts associated with member stations in Austria, the Netherlands, Portugal and the US. To close the

gathering, all attendees joined together for a three-hour-long live radio show titled *Radia Exquisite Corpse*. Small groups of Radiators (as the network members call themselves), at ease in any broadcast setting, entered the studio to perform short, often improvised pieces without knowing the contributions that were on air before or after.

Radia membership is continually growing, its producers always able to find a host of new contributors to create unique works for the network. Each station's offerings depend upon the context of the artistic communities surrounding them. Their brief comes down to this: find someone interesting from any field of the arts or elsewhere and ask them to make something engaging for a global radio. Instant radio artists, just add Radia.

Following up from discussing the informal way artists organise radio productions via the Radia network, it is worth considering the development of two pioneering public radio art institutions that have developed rich artistic networks around them. Elisabeth Zimmermann and Miyuki Jokiranta, two dedicated radio promoters and conduits for international radio art, agreed to enter into a conversation with me about the significance of radio art in public radio programming. While Elisabeth Zimmermann's Kunstradio at Austria's National Public Broadcasting Service (ORF) has an unbroken history of radio art production since 1987, Miyuki Jokiranta only had three short years to establish a remarkable archive of radio art broadcasts at Australia's National Broadcasting Corporation (ABC) before her programme Soundproof was cut in the autumn of 2016. Both form important points of contact within the international radio art sphere. In this conversation conducted through a telephone conference session in December 2017, which connected the radio studio of Radio Corax, the Kunstradio office in Vienna and the home of Miyuki Jokiranta in Melbourne, Australia, historical backgrounds, future structures for the genre and curational roles are reflected upon.

HYBRID NETWORKS

In conversation with Elisabeth Zimmermann (EZ) and Miyuki Jokiranta (MJ)

H.H. Your programmes are and were both engaging and really powerful statements about radio art in public service radio. Now we are together for the Radio Revolten festival, a festival promoted by Corax, an independent radio station. I wonder in which ways radio artists overlap and move in both spheres. We actually could expand the spectrum to pirate radios. Radio artists seem to move among all these radio opportunities. How do you perceive the role of radio artists and how would you describe their, let's say, intermediary situation?

E.Z. For Kunstradio the artists are the most important aspect. They are the experts, that's what we believe in and without the artists and their engagement and their encouragement and also curiosity there wouldn't be any Kunstradio at all. So it's always the artists who bring in the ideas. It was the artists who were bringing cassettes to Heidi Grundmann⁴ for her jour-

nalistic programme. They brought her cassettes with audio works and that's why she invented a series called *Kunst zum Hören* (Art to listen to) and out of that Kunstradio developed. Also the homepage of Kunstradio (kunstradio.at) is there, because artists came in 1995 and said: "You need a homepage!" That's how it's developing and I guess it was similar with Soundproof, wasn't it?!

M.J. Well the ABC, Australia's national broadcaster, had a long legacy of late night radio listening and radio art. There was just a brief moment in time about 5 to 10 years where it disappeared. Soundproof was really picking up on that long legacy that had existed from the 1970s and the 1980s onwards. So Soundproof was continuing that history. The reason we were able to kind of hit the ground running so quickly and produce that many shows that fast was because there was a community ready, a community that hadn't been serviced up until that time. There had sort of been a generation that had been skipped. The younger generation coming through didn't even realise that radio art was an option and that there would be a space for them to make this specific kind of form. So Soundproof was absolutely the response to wanting to provide a space for the local commu-

nity to try something new which really wasn't afforded to them. In Australia there aren't many other avenues to be a working radio artist apart from through public institutions.

E.Z. Do you see Soundproof also in the history of *The Listening Room*?⁵

M.J. Oh absolutely. Same contributors, same sorts of exploration. I think, Soundproof shifted a little bit because we were so focused on making sure we could access international audiences. So we really focused on our online offer as well which is why we are very determined to keep the Soundproof archive⁶ up, because now that the show is gone it's really important to have it all available. I think, that's a very slight shift in framework from the kind of purest radio artist. That's where Soundproof maybe went in a little bit of a different direction than some of the other public institutions in our relationship to radio art.

H.H. I'd like to tie in to the picture of a "pure radio artist". Who is a radio artist? Where do the programme makers who contribute artistic works for radio come from? Do they come from experimental music origins; documentary and feature; literature; or do they come from a journalistic approach to radio making that wants to go further soundwise, that wants to look for different ways to describe a detail. Where do they come from? What do you see?

M.J. That was the beautiful thing about Soundproof: we were able to work with the international community as well: the kind of veteran radio artist who self-identifies as a radio artist with practices so polished and so gorgeous, that really we were benchmarking against the European and the Canadian and the American approaches to radio art. There was a generation of old makers that really had kind of faded away a bit, because the programmes like *The Listening Room* and a few of the smaller other programmes had

ended. They didn't have the opportunity to keep up that practice. So the new generation that came through had no knowledge of this language, had no knowledge of this idea of being a radio artist. It was people pulling in from the fringes of experimental music or sound poetry, from a kind of expanded journalism (or expressionistic journalism). Then asking them to push themselves into territory that they'd never worked in before. So, you know, a fantastic experiment for me too to try and figure out how to do that, because we were all moving into this unknown together. I would say there were really only—off the top of my head—two or three people in Australia that say they are radio artists, like John Rose. So it was very much a kind of transformation of artists happening in Australia.

H.H. Elisabeth, we are talking about more than 30 years of Kunstradio. Do you see any schools developing within the Kunstradio context?

E.Z. Well the origin was of course that programme I mentioned before, *Kunst zum Hören*. Heidi Grundmann was reporting mainly on visual arts. Many visual artists also worked with sound in the late 1970s and gave her those works. Then there was a strong connection between Vienna and Vancouver. The radio artists who came to Kunstradio in the beginning were very often Canadian artists. I think the first artist whom Heidi Grundmann ever met who called himself a radio artist was the Canadian artist Hank Bull. This was also because in Canada there is that long tradition of non-profit community radios and also university radios. So there was space on air for artists to do radio. The people who are broadcast on Kunstradio all come from the arts, but there are not many of them who only do radio art. They also work in other fields of art because it's hard to survive only from radio art. So, there is a long history. Kunstradio has been there for 30 years now and many Austrian artists worked the first time with radio in Kunstradio, because at that time there was only the ORF, the Austrian Broadcasting Corporation. It was a monopoly, there was only the ORF

until 1998. Austria didn't have non-profit radio or even commercial radio until then. Kunstradio had connections to some pirate radio stations where artists were involved. So, I would say it's a very long history in all kinds of fields of art—from literature, music, visual arts, telecommunication arts, media art and sometimes somebody comes from film. Though for Kunstradio the artists don't come from a journalistic background.

H.H. I'm curious to explore how your programmes Soundproof and Kunstradio somehow define what radio art is. Both of the programmes run a big archive. As a listener I can enter there at any time via internet and discover a broad selection of radio artworks. For my understanding you are the address to go to, if one wants to think about how radio and radio art are in motion today.

E.Z. In 2001 we started a series called *Curated By* where we asked international artists (artists not from Austria) to think about what radio art is today. We asked them to develop a series of about five Kunstradio programmes with artists from their own country or from wherever about a certain topic. We wanted to broaden our view with this series, to see how radio art is understood outside our own circle we were moving in. So, one is also searching for other thoughts about radio art to give a broader access to the audience, because as a part of the national public radio, I think, it's very important to give a certain broad variety to the listeners. And of course it always has a certain kind of handwriting. Also, if you try to not curate things and give the curation to artists, then of course you choose the artist and ask her or him to please develop a series. In the end the selection is still connected to a certain person. And of course you are defining some things with what you choose to broadcast.

H.H. It's a decision you make what goes on air and what not. Maybe you get offered so many artistic works for radio that you really can decide. What was your policy to pick the pieces for Soundproof, Miyuki?

M.J. Initially it was pure panic. We were such a small team and we were working so hard, you know, it was really just to make sure that something went out every week that we were happy with.

E.Z. It's very hard work to push something out every week and if you start off in the beginning you even cannot rebroadcast something in emergency cases. But, something has to go out every week—it doesn't matter—it has to happen ...

M.J. Yes, it's relentless. I mean, I love that ritual, that weekly ritual. I think, that it is something—you know, if you talk about radio art and the broadcast—I think that there's something in that ritual that makes and forms the work. The question that we would often ask ourselves is about the balance of sound and word. I keep coming back to this idea that before Soundproof there was this gap in listening and so in literacy and in language of both the artists and actually the listeners. We were very careful to offer works that were accessible to people, that were kind of gently inviting rather than push people away. That was partly around the presentation, but it was also around the choice of the works themselves. In that sense, I think, Soundproof tried to find this balance between music and word. In that you wouldn't find a fifty-two-minute programme of purely sound such as soundscape or field recording. There would often be kind of textual works in there as well. I think, that was our way trying to move from this big kind of broadcaster, that was so word-heavy and trying to move out of that into a different space.

H.H. The histories of your two programmes are quite different from each other. But both of you are much more engaged than your job demands, you put in passion and commitment. How did you actually get involved in radio art?

M.J. I won't get into the boring background of politics of working in

a national institution. Basically we started a new unit where fiction works, drama works and sound works were wanted. I gravitated immediately to the sound work, because when I studied in the United States I had an extensive music show on my university station and would often just mess around with my voice and other media sources in a really late night community radio station kind of way. That was really where that connection to that sort of material came from. So I went through very traditional journalism channels, but in the meantime was playing in my own practice with more experimental things.

E.Z. I was still in school when I got the offer to organise the 900 audio cassettes, CDs and DAT cassettes of the archive from Heidi Grundmann. That was in 1991. For three weeks I stayed and arranged the archive. Of course I had to listen to some of the cassettes, because it was not written on them what it was. I remember that I liked the records of John Rose. They were a very big influence for me from the beginning. After that I went back to school. A little later, when I went to university to study comparative literature and Spanish, Heidi Grundmann asked me to make an address archive on file maker. During this time Kunstradio was already doing projects. So I ended up in Tyrol in 1993 assisting the organisation of the symposium *On the air*. There I met Gregory Whitehead, Concha Jerez and José Iges. That way I somehow ended up in Kunstradio and took over from Heidi Grundmann in 1998, when she had to retire.

H.H. It's an exciting and challenging task to work with artists on a radio programme. What is it that keeps you enthusiastic for that work?

M.J. For me it's that really interesting push and pull between a very intimate experience of listening to the radio and the generosity of it being free. I know it's not actually free, but it feels free when you turn on the radio. I think it's an incredibly generous act for artists to put their work out on the radio. There is this certain language and beauty

in the radio artistry. There is a term that they use in my work when they talk about good radio. They say, "it's a driveway moment". The "driveway moment" is when you're driving in your car and listening to the radio- and then stay in your car, in your driveway to hear the end of it. So it's saying, you're so arrested, so captured, that you can't get out of your car. If I can do that for a listener, if any of the artists can do that for a listener, it's worth it. For the moment I don't think that something like Soundproof will come back to the ABC. So now I'm trying to find hybrid ways and new homes for radio art.

E.Z. The wonderful thing about radio is that radio is a mobile and accessible medium. The receiver is not expensive and it's easy to do radio on your own. You basically only need a microphone, a mixer and a transmitter. Radio offers this lovely moment of surprise. That's the big difference to the internet, where I can and have to choose everything on my own. Radio you switch on and you're just there. If you don't like it you just move on and may find something else that you like, that surprises you. On radio you can find those surprising moments when artists do their shows and think differently about the medium. The good thing on radio is that it does not say from the beginning, "this is art", as might be the case in a gallery. So people stumble upon art in radio without knowing what it is and simply get interested.

H.H. In Radio Revolten we took the chance to present all the different spaces where radio art can be found, like installations and exhibitions, performance, and on stage. Where do you want to see radio art spread out to more? What are you missing in the current handling of the genre?

E.Z. Artists have always tried to push the boundaries. When the possibilities for the artists got smaller within the national radio, they went out of big institutions. Maybe they even entered from outside and are now leaving again. They create their own radio stations, build transmitters, do their own festivals. So in some way artists don't need



the big institutions. Artists will always find a way to do radio art.

M. J. I start to see people with values, the ethics of the form of radio art applied in different kinds of ways, just as you said, Elisabeth. This kind of artist of a hybrid nature. If you are in hybrid spaces, then you are going to find ways to shapeshift and adapt the form to places that didn't exist before. So some artists that contributed to Soundproof applied their works in different ways, like in galleries. But it is a value driven thing. They clearly see themselves as radio artists. It's interesting that radio art finds its way into galleries, into temporary spaces, into people's homes, on the community radio stations, on pirate transmissions, but unfortunately not reflected back on the national voice.

H. H. Which networks for radio arts do you know, which alliances do exist?

E. Z. I'm working with the Ars Acustica Group of the EBU. We have an internal exchange of pieces and also joined the *Art's Birthday* parties. We are also working with the Radia network, which is very import-

ant, because it's the exchange within the non-profit radio stations. There is also a big community of radio artists in Latin America which we are trying to connect to.

M. J. When Nova, the Irish radio art programme, was cancelled and also the programme on Catalunya Música in Spain, there was a wonderful comment on the Ars Acustica Forum that said we should come up with a hybrid network that brings together Ars Acustica, Radia, independent producers, community media stations, pirate radio stations to form a network of interested people who can exchange ideas without the kind of hierarchy that is found within the national broadcasters. I think that's really an interesting model going forward because it implies stability to me. But that would be a big undertaking and I don't know where it could come from, who could be the initiator. I wonder, if in the future there will be an opportunity to create such an event and to bring a whole bunch of people together with that intention, at least to place everyone in the same room where the conversation could be held more fluidly.

Miyuki Jokiranta's uniting idea brings me back to the question we faced at Radio Corax during the preparation of Radio Revolten: what relationship could community radio stations take towards radio art in their daily practice? What can community radio broadcasters take away for their existing practice from a gathering like Radio Revolten? A broader reflection on radio art in community radio networks is still missing. During the meetings of AMARC and the Federal Association of Free Radios in Germany in October 2016, radio art was not a subject of discussion. Although there are quite a few artists involved in community radio or who come from that background, the thematic focus of the associations' meetings lies in social, political and historical discourses. Community radio has always taken the position of critical observer, narrator, and commentator, to speak out against discrimination, exclusion, the destruction of nature, war, centralisation, and injustice. How can an artistic approach to radio underline and reinforce that aim? How can we overcome the conventions of the standardised radio formats we choose for our programmes? How can radio art inspire community radio?

Having a space where we can reflect upon and listen to unconventional ways to make radio is desirable for the future. There are many options to open up new ideas for radio and to create connections between radio practitioners. To start off this radiophonic exploration that awaits radiomakers in the years to come, I want to mention one visionary example: it manifests in the invitation of radio artists into community radio networks, like the Bodensee Radiocamp in Germany in 2018. A workshop about *Slow Radio* was recently held there by radio artists Sarah Washington and Knut Aufermann. With their approach of celebrating durational radio formats, which may take time to develop and do not attempt to please or speak directly to the listener, they encourage us to forget all we know about the traditional forms of radio and begin anew, celebrating the pure pleasure of listening closely.

1. Catherine Malabou. *Ontology of the Accident. An Essay on Destructive Plasticity*. Cambridge, Malden: Polity Press, 2012. p. 2.

2. cf. Friz, Anna, Sarah Washington, Bernhard Siegert, and Gregory Whitehead. "Round Table 3: Turn On, Stay Detuned: The Politics and Poetics of Wireless Space". Lecture, Radio Revolten, Hallescher Saal at Martin Luther University of Halle-Wittenberg, Halle (Saale), 27 October 2016.

3. "Radiophonic Cultures – Sonic Environments and Archives in Hybrid Media Systems" (2015–2018) was a SNF-Sinergia research project by the University Basel, Bauhaus-Universität Weimar, and School of Music, FHNW, Basel.

4. Heidi Grundmann was the founder of *Kunst zum Hören*, that converted in the early 1990s into *Kunstradio*. She functioned as its programme director from 1987 till 1998. Besides her on-air programme, she initiated various radio art conferences and events, and contributed essays to groundbreaking publications about radio art, like *Radio rethink... Art, Sound and transmission* (1994).

5. The Listening Room was the sound art programme of Australian Broadcasting Corporation's Classic FM from 1988–2003.

6. cf. <http://www.abc.net.au/radionational/programs/archived/soundproof/> (accessed 20 January 2017).

The image shows the letters 'OS' in a large, white, sans-serif font against a dark, textured background. The 'O' is positioned above the 'S'. The background has a grainy, almost wood-grain-like texture. On the right side, there is a vertical strip of lighter, more detailed texture, possibly representing a book's spine or a similar material.

Team

Knut Aufermann
Helen Hahmann

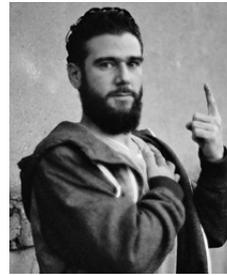
It is impossible to recall all the steps and communication that lead to the realisation of Radio Revolten 2016. Three years of planning, thousands of phone calls, months of construction work, and a rising frequency of team meetings, shared lunches and bottles of wine facilitated a month-long radio art extravaganza and the gathering of people, moments of excitement and DIY power, days of persistence and instances of trembling hands.

The ambition, the character, and the atmosphere of Radio Revolten was shaped by the team of people behind it, which is why we decided to feature them in this chapter. It gives the reader an overview of more than one hundred people who were involved in the preparation and implementation of the festival, to support the work of the hundred or so artists featured throughout the rest of this publication. The short descriptions that we have compiled for each of them are completely subjective and hopefully reflect the diverse spectrum of people that carried the events to completion. We included some memories of those moments behind the scenes that for us defined Radio Revolten just as much as anything that happened on air, on stage or in the exhibition spaces.

The team chapter is also a snapshot of the cosmos of Radio Corax programme makers and highlights the unique scene of non-commercial, socio-cultural activity in the city of Halle. The following list is the expression of belief in community-based radio and a bow in front of all of those who made Radio Revolten 2016 happen. We sincerely hope we didn't forget anybody... but if we did, you are just as equally appreciated.



PORTRAIT SERIES FROM A GOOD PART OF THE RADIO REVOLUTEN TEAM, CREATED BY MARCUS-ANDREAS MOHR AT THE END OF OCTOBER 2016



Alex Klink

Artist and gardener from Halle. Alex planted and maintained the garden that connected both venues in Rathausstraße. He was an invigilator at the exhibition *Das Große Rauschen*.

Alex Körner

Cultural scientist and long-time Radio Corax radiomaker. He balanced his work between the demands of the daily programme of Radio Corax and the compilation of the historical radio exhibition *Unsichtbare Wellen (Invisible Waves)* at the Stadtmuseum, where he later hosted topical interviews. Being a critical observer he questioned the role of artists in community radio.

Alex Schmidt

Graphic designer, illustrator, former Radio Corax radiomaker of the show *Alice Roger* and one third of the artist collective ZYKLOP. Alex devised the graphical navigation system for the Radio Revolten sites in the city and within the venues.

Anas Alsabbagh

Came from Syria to live in Halle. He was part of the *Common Voices* radio team (multilingual programme created by refugees). In the months before the festival he came every day to help renovate the houses in Rathausstraße. Anas and Nicky Koschine built the acoustic absorbers for the Klub while learning each other's languages.

André Kestel

André is a glass and metal artist from Halle. He was handed a very special task: to recreate an amateur radio "bicycle tower" for the Stadtmuseum exhibition, from a single blurred photograph dating from 1923.

Andrea Reichert

Radio Corax current affairs programme maker, radio trainer, and event organiser. Andrea was pushed in at the deep end as stage manager, taking responsibility for communication between artists, security, technicians and curators on many of the performance nights. Since then she has been coordinating Radio Corax events blindfold.

Anna Friz

Academic and artist. In a breathless week before the festival Anna set up the installations she curated for *Das Große Rauschen* supporting Jens Uwe Neumann and Julian Rösler in this tremendous task. During the festival she babysat and repaired the fragile installations, turned them on in the morning and put them to sleep at night. She made radio and performed on stage. Together with Elisabeth Zimmermann she curated and steered the conference of the festival.

Annett Pfütznner

Social worker, radio instructor and Radio Corax facilitator specialising in empowering minority groups to go on air e.g. for the shows *Irrläufer* (a programme for people with special needs) and *Common Voices*. A member of the Radio Revolten Radio crew bestowed with unquenchable curiosity and dedication, she reduced one artist to tears through sheer kindness and fell in love with the wireless radio dummy head *Leslie*.

Anke Zimpe!

Drama educator and musician from Halle and former Radio Corax radiomaker of the show *Leviathan*. Anke helped Olaf Brandt change the locks in Rathausstraße 3 and 4.

Babette Herrmann and Mario Hartmann

Best bartenders in the world. Usually working as hairdresser and rigger, they fell in love with Radio Corax and agreed to run the Radio Revolten bar at the Klub venue. Unflappable by unusual sounds from the stage or audience behaviour. Now paid up members of the station and part of the Radio Corax family.

Beate Flechtker

Berlin-based radio educator and co-founder of Radio Unerhört in Marburg. For Radio Revolten she took one month off from work to help us in Halle. She was found everywhere, from doing night shifts to install the Stadtmuseum exhibition, to organising and moderating the conference of the Federal Association of Free Radios (Bundesverband Freier Radios), to welcoming guests at the information desk at Rathausstraße 4.

Blanca de Rojas

Capoeira teacher, Russian linguist and guest office coordinator for the *Radio Space is the Place* conference. Blanca also coordinated the festival's opening ceremony in St. Ulrich's Church. Her positive energy helped us through some tense moments, following her motto: If in doubt, smile! One of our new Radio Corax members.

Bruno Lux

Former Radio Corax volunteer and now a member. He helped us move cupboards, chairs and tables from the cellar of the town hall up into the second floor of Rathausstraße and back.

Chris Weaver

Chris brought with him a decade of experience as the studio manager of Resonance FM in London as well as life as a sound artist in Dubai. He moved to Halle for two months and had fun whilst taking responsibility for the running of the festival radio studio. Chris left behind ¼ inch tape loops wherever he went and he had a killer response on air to our incognito Radio Oracle ringing the studio intercom: "Come in, I've been expecting you."

Claus Störmer

Unflappable sound engineer. Claus was the brain and soul behind the excellent Klub venue sound, from planning room acoustics, fixing rehearsal spaces, procuring musical instruments at no cost, to mixing live performances almost every night. He recorded and mixed the performance by Hartmut Geerken and Famoudou Don Moye for subsequent CD release. He took the last night off to visit Halle's tram tracks with his bike. Claus became ME Geithain boss Joachim Kiesler's telephone pal.

Daniel Herrmann

Director of the Werkleitz Gesellschaft e.V. and Radio Corax member. The expertise of Werkleitz on setting up a festival venue from scratch was crucial for many of our decisions. Besides the artistic partnership for the festival, Werkleitz arranged the apposite closing party for all festival staff.

Daniel Ott

Radio Corax head engineer. Always ready to wield the soldering iron he supported the

festival hands-on as well as with contacts, expert advice and an interminable amount of loaned technical equipment from both his own toolbox and the coffers of Radio Corax. Inexplicably, nothing was lost.

David Schulze

Landscape gardener, Radio Corax fan and contributor for many years. Cleared the jungle in the garden of Rathausstraße with his chain saw and thinned out the trees to bring some light into the backyard by leaning out of 2nd floor windows with his telescope secateurs.

Egges

Also known as Matthias Eckardt in real life and ruytatz tlenzler in the virtual world. Egges is a painter, artist, and an avid listener of Radio Corax. He showed up in Rathausstraße one month before the festival and offered to make some visual interventions. Egges brought life to three boarded up windows facing the garden with mini murals representing the three frequencies of Radio Revolten. He also painted various rooms in the houses and ran the silk-screen printing station with Vivien.

Elisabeth Ernst

Speech communication graduate and long-time volunteer for the current affairs programme of Radio Corax. A gifted artisan who worked closely with Micha Wengorz to prepare the houses. Star of an emblematic snapshot where she drags a giant mesh of vine deadwood through the doorway of Rathausstraße 3.

Elisabeth Zimmermann

Spending as much time as possible at Radio Revolten in addition to her job as producer of ORF Kunstradio, Elisabeth's humour and optimism provided the emotional support that was needed in the run-up to the festival. She took care of the team when it was close to exhaustion, providing encouragement and big hugs. Elisabeth prepared and curated the Radio Revolten conference together with Anna Friz and commissioned four Kunstradio shows based on festival recordings.

Ewelina Markiewicz

Based in Gdansk and Berlin, Ewelina joined the team to organise the staff rota and the tour of exhibition openings. She helped with

the labelling of the exhibition sites, manned the information desk and looked after the installations at the Roter Turm. Additionally, she was a stand-by person for artist support and stage management.

Fatima Aayd

Radio Corax radiomaker of the *Common Voices* programme. Born in Morocco, fled from Syria and now lives in Halle. She shared many hours with us during the preparations. With Mohammed Medelli she installed the kitchen in Rathausstraße 3 in one weekend, and was always on hand to help keep everyone's chaos under control.

Florian Keller

Radio Corax radiomaker, musician and filmmaker. He produced the Radio Revolten jingles for the Radio Corax programme.

Frank Manthey (Der Emil)

Radio Corax member and programme maker of *Jojo*—a programme by mental health service clients, *Buchfink*—a literary magazine, as well as long-time voluntary Radio Corax technician. A constant source of support during Radio Revolten, he aided Gabi Schaffner with translations for her diary and shared his thoughts via Twitter from almost all live events.

Franziska Stübgen

Graphic designer extraordinaire and creator of the Radio Corax corporate design. She developed the Radio Revolten logo, the website layout, designed the festival's print magazine, the conference reader, the look of the Stadtmuseum exhibition and the huge welcome banners for the outskirts of Halle. She moved her office into Rathausstraße 4 for one month and nearly drowned in work under our demands. Her paint-doused radio lived in Monika's café.

Frederike Merkel

In between school and university, Frederike volunteered in the production office in the build-up to the festival. She organised amongst many other things the delicate overseas transportation of installation objects and the welcome guide for artists and guests. She now studies French literature.

Gabi Schaffner

Artist, photographer, and gardener from Berlin, Gabi was the official Radio Revolten diarist, whose bilingual musings crop up in many chapters of this book. She brought the first batch of plants to the festival garden by bus from Berlin. On a few occasions she took over photography duties from Marcus-Andreas Mohr.

Georg Nickol

Radio Corax programme maker of *Deux Hour de Funk*, designer and good humoured Radio Revolten Radio crew member. Enjoyed making jingles, announcements, Twitter updates and playing pranks on listeners and fellow radiomakers.

Gerd Westermann

Architect and Radio Corax listener. Under his guidance we adapted the Rathausstraße buildings for the festival's needs, he did the structural analysis and arranged the equipment to demolish walls in the Radio Revolten Klub. Gerd constructed the sturdy wooden platform covering the deep drop between house and garden and obtained the permissions for its construction. He always came rushing on his motorcycle to Rathausstraße whenever duty called.

Mandy Einicke, Marie Schultz, Golo Föllmer, Susanne Feldmann

Mandy Einicke is a guitarist and singer in the grunge band *Ballad of Geraldine* from Halle. Together with Marie Schultz they were students at the university of Halle. The team of four contributed to *Das Große Rauschen* with the installation *Stadträume*, which dealt with the soundscape of Halle. The idea for the installation arose from a cooperation between a student class of media scholar Golo Föllmer from University Halle-Wittenberg and Susanne Feldmann from the Stadtmuseum Halle.

Götz Rubisch

Götz is the heart and soul of Radio Corax where he is a technician and radiomaker of *Büchermurm*, amongst other things. He dropped by the festival centre a great many times during the construction period and observed what was evolving. Once he stood in the Klub speechless, shaking his head, then muttering: "You are really crazy". It was just what we wanted to hear.



ELISABETH ERNST REARRANGING THE GARDEN



EGGES PAINTING EARS



KNUT AND PAUL IN DEMOLITION MODE



Helen Hahmann

Ethnomusicologist, radiomaker, Radio Corax shaker and outstanding organiser. Without her agreement to become the festival's general manager, Radio Revolten would not have proceeded past the initial application stage. A few of her many achievements: she acquired the festival venue in Rathausstraße, and in three days flat got sponsorship and all necessary permissions for the painting of a giant mural on a side wall. The urgency of her request for contributions to a pre-festival manifesto solicited the responses sprinkled across this book. Helen's forte was the hellish task of keeping the rest of us in line, not only did she manage and coordinate the many diverse work teams but she never grew tired of chasing after each one of us to keep the wheels turning. The office she shared with Knut Aufermann was the nerve centre of the festival, through which every decision and desire was passed and implemented.

Helen Thein

Librarian and music journalist from Potsdam. Helen coordinated the press office of Radio Revolten and got stuck into many other aspects of the festival like helping to run the information desk. She took her entire annual holiday leave from work to be able to spend one month in Halle. During the festival she made her first radio show called *Auf den Knien des Herzens* (On the knees of the heart).

Helene Flick

Originally from southern Germany, she studied cultural science in Leipzig and lives in Halle where she is an activist, radio trainer and radiomaker for Radio Corax. As part of our guest office team, she looked after guests and artists, picked them up from the airport or train station and showed them around in Halle.

Helmut Peitsch

Helmut is a semi-retired professor for German literature at New York University who now lives in Potsdam, and offered to cast an expert eye over texts. We flooded him with short-notice requests for translations and proofreading. At times he worked all night for Radio Revolten.

Invigilators

At least five employees of the Stadtmuseum were part of the crew that kept the exhibition *Das Große Rauschen* in Rathausstraße 4 open from noon until 8 p.m. every day. Even though they were initially puzzled by the art they were overseeing, they diligently took care of all objects. Their steady companionship in this somewhat chilly task was an electric heater and endless hot coffee from Monika's café.

Jan Ermentraut

Radio Corax member and together with Frank Manthey programme maker of *Jojo*. He is a walking encyclopaedia and a constant active supporter of the station's events such as Radio Revolten.

Jan Langhammer

Writer, jazz musician, radiomaker of jazz programme *Serendipity*, and long-time Radio Corax member. He was part of the Radio Revolten Radio team and coordinated the outside radio productions in the botanical garden and Stadtgottesacker cemetery. He happily lent his guitar and amp to visiting festival artist John Bisset.

Jens Uwe Neumann

Berlin-based sound technician working in national television. Cut his teeth on the idiosyncratic set-ups and exceptional situations of the *Freiwild* festivals in Halle during the late 1990s. For Radio Revolten he was the contact person for all installation artists. Together with Julian Rösler he built up all exhibition sites. His laughter still echoes in Rathausstraße.

Joachim Kiesler and Olaf August

Musikelectronic Geithain boss and his project manager. They gave our artists and audiences the best present ever by agreeing to a loan of 80,000 Euros worth of their reference loudspeakers for Radio Revolten. These fantastic beasts powered our club, radio studios and installation works. ME Geithain didn't ask for anything in return. Radio-fan Joachim said that he enjoys being able to support young entrepreneurs, something he had wished for in his own youth. A heartfelt thanks go to them once again.

Jörg Drefs

Head technician of Werkleitz generally known as Katsche. We besieged him with countless questions concerning electricity, heating and water installation in abandoned houses.

Jonas Katzmann

Unshakable radiomaker from the Friday evening current affairs programme and board member of Radio Corax. As part of our guest office team, he looked after guests and artists, picking them up from the airport or train station and introducing them to Halle.

Jonie Smith

Language teacher from Montreal living in Halle and Radio Corax programme maker of *Bb2/A*. She offered her help for Radio Revolten and supported us in various crucial moments of intense work.

Joshi Riehl

Passionate concert programmer for Halle's alternative venues. He helped out on many nights in the Klub as a stage manager. In return we offered him the hallway for posters of his upcoming gigs (e.g. for Hildegard von Binge Drinking).

Julia Bürger

Student of cultural and media pedagogy in Merseburg. She applied for an internship at Radio Revolten and at first we turned her down, although we immediately realised that our decision was wrong. One month later, we called her into the team with some urgency. She took charge from the first second, furnishing a 6-room guest flat from scratch on a ridiculous budget within 5 days.

Julian Kuppe and Jonah Tschugg

Both are long-term Radio Corax members and listeners. They showed up numerous times when we asked our members for help, personifying the very thing which made the festival possible in this size and dimension.

Julian Rösler

Culture and media teacher, theatre maker and Radio Corax listener. As a volunteer he supported Jens-Uwe Neumann in building up the exhibition in Rathausstraße and the satellite exhibition venues such as the Botanischer

Garten and Roter Turm. A memory of him running up the stairs at 1 a.m., totally thrilled by the opening hour of Radio Revolten Radio broadcast on 1st October 2016. He drove the rented super-sized transporters through the narrow streets of Halle's inner city.

Klub7

We called Mike Okay from the Halle and Berlin based artist collective Klub7 to ask if they would be up for painting the concrete walls in the Radio Revolten garden. After a first inspection, Klub7 immediately agreed to contribute to Radio Revolten with an artwork. Mike spotted the house wall of Rathausstraße 4 that faced an empty construction site with a deep pit and proposed an additional painting for it. We enthusiastically organised paint, a cherry picker, and road closure and Klub7 spent one sunny weekend in July painting the murals. Radio Revolten echoed through their visual homage to free and artistic radio for two more years in the city centre of Halle before reconstruction started on the houses.

Knut Aufermann

Supreme radio coordinator, programmer, and construction worker. He took over a tremendous amount of responsibility and work that went far beyond anything one would expect from an artistic director. Knut moved to Halle in May 2016 to stay for half a year. The first thing he did was help demolish interior walls with a jackhammer in the Radio Revolten Klub. He never missed a single work session, be it clearing the garden, dragging tables or cleaning the construction site. Also managed to prepare for all the official events where he had to represent Radio Revolten, and secured major sponsorship from his favourite loudspeaker company ME Geithain. All this in addition to overseeing the organisation of the radio studio, technical equipment, event programming, and everything concerning the artists. Loved to play table tennis in the garden, and celebrate with unforgettable Mosel wine tastings for the team.

LIGNA and FSK Hamburg

A special thanks is due to the artist group LIGNA and the community broadcaster FSK in Hamburg who lent us two of their ghetto blasters and 100 FM transistor radios.

Lucinda Guy and Chris Booth

Radical radio activists and radio artists. Left their own community radio station Soundart Radio in Devon, UK, and moved with their two younger children to Halle for one month to experience and support Radio Revolten. Both learned German in preparation for their trip. Lucinda ran an exciting radio workshop for children at the Stadtmuseum and Chris spent many days helping with archiving the festival recordings.

Marco Organo

Poet and co-editor of the printed Radio Corax programme magazine living in Halle. Marco translated various texts, sometimes at very short notice. He also helped to carrying dozens of tables and chairs from the cellars of the town hall up to the offices of Rathausstraße.

Marcus-Andreas Mohr

Devoted and distinguished festival photographer. His pictures in this book speak for themselves. He was at virtually every single event of Radio Revolten to take pictures. Sometimes he must have split into two selves to make that possible. Many festival artists now happily use his photos. For Radio Revolten Radio he produced the mirror-image radio show *YHPARGOTOHP-PHOTOGRAPHY*. As the festival drew to a close, his typical composure gave way to reveal a surprising talent for the art of celebration.

Marcus Heesch

Professional painter and amateur baker. He became Monika's café sidekick with his ever-appearing delicious bread sticks that he was always baking. Renowned amongst his friends as "jealasticks"—because you become jealous if someone else has one, they saved many artists and crew members from erratic bouts of hunger. His live on air painting performance with musicians, which he took up again at the festival, makes him most likely the world's most prolific radio painter.

Marian Mortell

Web programmer and media designer from Halle. He implemented the structure and features of the Radio Revolten website.

Mark Westhusen

Executive director of Radio Corax, punk music expert and host of the shows *SUBjektiv* and *SUBstrakt*. Resilient, reliable and irreplaceable as our accountant, he monitored the financial and administrative processes of the festival. He only questioned receipts for table tennis bats, garden fertilizer and kilos of various organic seeds for the daily baked bread sticks. On the last night of Radio Revolten, he bid farewell to the festival with a Radio Corax show mash-up together with Helen Hahmann and her programme *TINYA*, which they turned into a notable live performance event.

Martin Frohburg

Radio Corax radiomaker, technician, and active footballer from Leipzig. He volunteered for Radio Revolten where he couriered the valuable load from Geithain. Martin also cleaned and checked the batteries of more than 100 FM radios and tuned them either to 99.3 or 95.9 MHz for the multi-frequency radio pieces on the market place.

Martin Hirsch

Electronic musician and artistic associate at the department of experimental radio at the Bauhaus-University in Weimar. Martin and a handful of his students planned and executed the live stream of the Radio Revolten conference, which was peppered with their artistic interventions. He also happily supported us with the loan of technical equipment.

Martin Kruschwitz

Engineer, electrician, and carpenter. Martin reanimated the old electrical lines in Rathausstraße 4 and installed the temporary electrics for Rathausstraße 3 with his two electrician friends, expertly isolating and fixing any causes of black-outs. Martin also built the enormous wooden bridge in the garden, which would be used as our balcony to overlook the still life of a construction pit far below.

Maryam Sadate

Actress from Afghanistan and Radio Corax programme maker of *Common Voices*. She supported us in the guest office and at the information desk. Like all the other people living a precarious life fleeing from a war zone we admired her strength, and her ever-smiling face.

Matthias Kassner

One day before the opening of the exhibition *Das Große Rauschen* we had trouble installing the concertina razor wire for Steve Bates' installation. The situation was helpless and we phoned carpenter Matthias Kassner for advice. He arrived with his crew half an hour later, inspected the site, listened to our needs, left for one hour, came back with all the necessary material and raised the installation in one afternoon. He also conjured up the exhibition's partition walls in record time for the *Invisible Waves* exhibition at the Stadtmuseum.

Matthias Schierhorn

Retired engineer and passionate Radio Corax listener. Walked by Rathausstraße 3 in the summer of 2016 and dropped in to offer his help with artist support and guest assistance. After Radio Revolten he became a member of Radio Corax.

Micha Wengorz

IG Metall trade union activist and longtime Radio Corax programme maker of *No Job FM*. Micha was in his mid-60s when he made the Rathausstraße buildings secure through uncountable hours of work. An outstanding craftsman, fixing holes in the roofs, windows, walls and floors. In the months before the festival started we often sat in the garden having coffee and cake.

Michael Nicolai

Project coordinator of Radio Corax, AMARC Europe president and co-host of the punk show *SUBjektiv*. For Radio Revolten he coordinated the communication and reporting to the funding institutions. Not afraid to roll up his sleeves, he was part of a Radio Corax-swarm that cleaned the tiled walls of the Klub with a pressure hose just one day before the first press conference of Radio Revolten in June 2016.

Mohamed Medelli

Construction worker from Syria and radio-maker of the Radio Corax show *Common Voices*. He has lived in Halle since 2015. One afternoon in June 2016 he put aside the spatula and sat with a microphone in his hands in the Radio Revolten garden, interviewing people from the crew about the upcoming festival. Khalid

assisted as his language mediator. When the whole team deliberated if we should dare to touch the sprawling air extractor system in the old canteen in the Klub, Mohamed fixed it for us by tearing it down in less than two hours. The metal parts fell down on the tiles with ear-splitting noise. His energy and his smiles were inexhaustible, as was his supply of ice creams to the office-bound workers.

Monika Heinrich

Feminist, retired educator, former board member of Radio Corax and programme maker of *Emmas Töchter* and *Was wir woll'n*. After helping for weeks to clean the two houses, Monika created the café area of the festival, which gave space to so many conversations and moments of catching our breath. It was not only the artists and visitors that united there, the crew also frequented Monika's Café. A true radio sanctuary, with an ever flowing coffee pot. The old valve radio only worked when a knife was stuck in to hold down the button. It was in the café where we finished off the last wine bottles and slept on the sofas during the clean-up in November 2016. A long goodbye.

Nadja Hagen

Journalist, Radio Corax member and programme maker of *Radio Datscha*. She made sure that at the Moritzburg everything was prepared to install 12 km of copper wire with Joyce Hinterding for her installation. Nadja also coordinates international relations with Kazan in Tatarstan, Russia for Radio Corax, and invited our radio friends from there to visit the festival in its final week, which was a joyous trip.

Nastia Bessarabova

Graphic designer from St. Petersburg living in Berlin. Nick Teplov worked with her photographs to deliver a series of festival postcards which conveyed precisely the radio art atmospheres we desired. By amazing coincidence Nastia moved to Halle just in time for the festival, to take up studies at the renowned Burg Giebichenstein University of Art and Design Halle. To our great fortune she became the designer of this book, as a dedicated envoy in our mission to hold up FM as a free, artistic, and cultural space.

YVONNE RUNS THE CONFERENCE STAND WITHOUT MISSING A BEAT



GÖTZ, ELISABETH AND STEPHANIE AIR CORAX'S CURRENT AFFAIRS SHOW IN THE GARDEN



Nathalie Singer
Professor for Experimental Radio at the Bauhaus-University in Weimar. Nathalie brought her international research project *Radiophonic Cultures* into the Radio Revolten conference and with it her students, who took care of the conference's live broadcast.

Nick Teplov

Expert graphic designer and filmmaker from St. Petersburg living in Leipzig. Brought in at the eleventh hour to ease the design gridlock, he conjured up our iconic airwave-desert poster out of thin air and created the printed manifesto which Radio Corax published in October 2016. He also realised various street banners, one of which was generated in less than an hour, at the point when festival preparations were running at the speed of light.

Nicky Koschine

Former Radio Corax programme maker, squatter, vegan cook and West African music expert. He has two magic hands that can build nearly anything. Together with Anas Alsabbagh he built the interior of the Klub: the molleton-lined ceilings, the sound absorbers, other noise isolation and the drinks bar. Together they removed the light fixtures in the exhibition rooms and darkened the windows in record time.

Niels Holger Wien

Fashion futurologist and long-time Radio Corax supporter. He was a prolific gift giver at the festival, in the form of hand-painted "Wave Maker" jackets, chocolate, cake, impromptu slideshows, or on air commentary in French. His moral support and eager enthusiasm carried Sarah Washington through several exhausting evenings in the Klub.

Olaf Brandt

Cultural worker, Radio Corax fan and gifted DIY person. In an incredible burst of exertion, he changed the locks of more than 30 doors in the Rathausstraße houses.

Oliver Salzmann

Oliver was about 19 years old when he began tearing down interior walls with a jackhammer in preparation for the Radio Revolten Klub and helping to prepare the houses and garden. He lives with his girlfriend in Halle-Neustadt.

During Radio Revolten he worked off more than 500 hours of community service for fare-dodging. Oli was also the representative for four other people who carried out their community service with us. Thank you for your courage and enthusiasm.

Paul Motikat

Radio activist from Pi Radio in Berlin. Radiomaker, musicologist, musician and composer. Head of technical coordination for the festival. For Radio Revolten he moved to Halle. He coordinated the reconnection of the festival buildings with electricity, water and heating, planned and built up the radio infrastructure and produced the exceptional opening scenario on the market place with Rochus Aust. In order to relax at the most breathless of times he loved to fix people's bikes. After the festival he decided to stay and settle in Halle, making a home with the lovechild of Radio Revolten he co-created with Virág Bottlik. We are all proud radio-parents!

Philine Lewek

Theologian, pianist, cellist and Radio Corax member since the age of 18. Board member and devoted activist for an emancipatory society. During the festival she was in an interim phase after spending a year in Marburg. Philine was a fantastic stage manager without equal and authorised bender agent (Absturzbeauftragte). A person one can blindly trust. We admired her gift to hoof out people late at night in the most charming way. She later returned back to Halle and is the current chairperson of Radio Corax.

Ralf Wendt

Radio Corax programme coordinator, with a degree in speech communication and a serious bird watching habit. He ordered a vast amount of the exhibition's objects on his own account in order to make the historical radio exhibition *Invisible Waves* at the Stadtmuseum something really special. Nobody has yet been able to explain how he managed to curate and build up *Invisible Waves*, shape the festival with his indispensable free-falling ideas, his expansive network, and to create his artworks parallel to his ongoing Radio Corax job. We spent many nights with him at the Felsenblick bar high

above the river Saale, listening to the nightingales and planning more radio interventions. His strong belief in Radio Corax and his conviction that nothing is too big or impossible to realise, accompanied by an unbreakable will, is the force underlying Radio Revolten. This attitude made Radio Revolten grow to the size of a Biennial.

Reem van Buuren

Computer specialist from Saudi Arabia and Radio Corax programme maker of *Common Voices*. She supported the festival during the construction phase and later became a team member at the information desk. She drew the words "Radio Revolten" in Arabic in our guest book in a circle, mirroring the form of the festival's logo.

Reinhard Krause-Rehberg

Professor of physics at Martin Luther University Halle-Wittenberg. He translated the Radio Revolten idea for Halle's amateur radio community with his infectious enthusiasm, setting up a fruitful collaboration. Passed on a set of keys to the old physics tower at our third meeting with a wink and a smile, and always had our back.

Robert Sack

As a well-meaning professional radio technician, Robert supplied the festival's radio station with industry standard signal processing equipment and invaluable advice. In return he was able to collect unwanted old physics equipment, and nobody minded his obsession with compact cars.

Ronny Rohland

Web programmer and web designer living in Halle. He has programmed websites for Radio Corax for many years and was assigned to the fine tuning of the festival's website. He listened patiently for a whole afternoon to the spirited ideas of the festival's public relations coordinator Helen Thein and curator Sarah Washington, then went home and made all the wishes come true.

Sabine Wöller

Queer-feminist activist, photographer and social media expert. Called in at short notice to keep our Facebook page running and growing.

Sarah Washington

Artist and activist. Exceptional artist host, team mediator, performance and radio programmer and office support. As a curator, Sarah moved to Halle in June 2016 to share an office with Virág Bottlik and together prepared for all the artists who were to arrive in the city. She took care of some difficult communications within the team and managed to hold everything together with her clear overview. Additionally, she filled up the website, wrote texts for the online presence of Radio Revolten, translated and proofed innumerable others. When the festival studio was completed and the ME Geithain speakers connected up for the first time, she slammed on Chic's *Everybody Dance* to start a party with Jan Langhammer on guitar. One of our happiest moments. Sarah managed the radio team together with Knut Aufermann and oversaw the smooth running operations of the performance programme every night in the Klub.

Sebastian Bauhof

Musician and experimental Radio Corax radiomaker. He voluntarily answered our calls to lend us a hand transporting, carrying and installing various things. He offered to hunt down gremlins in the house on the day when much of the technical equipment failed.

Sebastian Gerstengarbe

Illustrator and graphic artist from Halle. He took up the challenge to coordinate the installation of the radio exhibition *Invisible Waves* in the Stadtmuseum. We called him at short notice two months before the festival started, when the practical realisation was close to breaking point. The entire construction had to be squeezed into less than two weeks. Thanks to his many night shifts, a lot of black dark humour and sorcery, everything was pushed forward and became a reality.

Sebastian Reddehase

Lighting technician for Radio Revolten. He was called into the team as a side-kick for Claus Störmer, and created the memorable chandeliers for the Klub. Unforgettable, and hopefully back at the next Radio Revolten festival: his four-metre long, luminous radio dial which had already decorated the Ärztehaus during the first edition of Radio Revolten in 2006.



Security Crew

We had a handful of lucid people to keep the venue safe during the weekend party nights. Some were radiomakers from Radio Corax, some came from other subcultural contexts in Halle. During one evening at the Radio Revolten Klub, they were called out to a housing estate a few blocks away to defend the partying inhabitants from an assault by a far-right group.

Stefan Walluhn

Radio Corax IT wizard and Freifunk activist. He helped to set up and monitor the wireless network that connected the various Radio Revolten sites to the radio transmitter.

Stefanie Sachsenröder

Media studies graduate and mother of three children. She managed the office of Radio Revolten and was the chief organiser of the conference *Radio Space is the Place*. No one knows how she was able to hold all the responsibility for crew planning and office organisation firmly in her hands, while raising her kids and baking cakes for Monika's café. You didn't see her at the Radio Revolten nights, but she was an absolutely astonishing, indispensable, and powerful force behind the day to day functioning of the festival.

Stephanie Scholz

Coordinator of the current affairs programme and radio trainer of Radio Corax. Thanks to her encouragement and endless strength, various daytime programmes from Radio Corax were transmitted live from the garden and cellar of Rathausstraße, and the attic of the Zoological Institute. The programmes started as usual at 7 a.m. in the morning, which meant being on site at 6 a.m. She delicately weaved Radio Revolten into the Corax programme by hooking up artists with regular programme makers.

Thies Streifinger

Musician, social media expert, former Radio Corax technician and one half of the performance group *Guricht* with Ralf Wendt. He produced various promotional videos before and during the festival. Remarkable for his enthusiasm and willingness to work night shifts in order to finish individual projects.

Thomas Richter

Photographer and videographer who became a Radio Corax member after assisting in an introductory radio workshop. He lifted and pushed uncounted wheelbarrows, branches and tables.

Tim Kurth

Media artist turned network administrator, Freifunk activist and Radio Corax tech team alumnus. Tim set up and maintained the IT infrastructure for the whole festival. Always keen to spend time on roofs and up in towers, his love of heights helped him to find the most suitable wireless connections between distant transmission sites. He seemed to be able to listen to Radio Corax and Radio Revolten Radio simultaneously.

Timo Kliemann

Lighting technician and long-time Corax supporter. He helped us in the first few weeks during the repairs of the venue by coordinating the helping hands, and will be remembered for his unique way of commenting upon and analysing work processes.

Tina Klatte

Tina's organisational skills were a tip-off from Deutschlandfunk Kultur and she agreed to temporarily move to Halle from Leipzig. Before joining the Radio Revolten Radio team, her all-purpose skills filled gaps in many other areas of festival production including administration and press work. She took a weekend off to visit her friends and to de-stress, but returned the same day she left so that she could help out and not miss out on anything. After the festival she had a crazy workload coordinating documenta 14's radio project *Every Time A Ear di Soun*, however Tina is now back in Halle looking after the new Radio Corax radio art residency.

Tino Neubauer

Radio technology engineer. He built the festival's AM transmitter. The first one burned up and broke all his equipment. Tino didn't pay any attention to this incident and started to build a new AM transmitter. He was once spotted at the transmission tower, explaining his creation to visitors whilst holding his toddler in his arms.

Udo Israel

Leading light of Radio Corax since Radio Revolten 2006. He underpins all Radio Corax structures as a radiomaker, board member, mediator, democracy trainer and as an expert having worked for Radio Blau (Leipzig), Radio Lora (Zurich) and Radio Orange (Vienna) from the 1990s onwards. For Radio Revolten Radio, he operated as the voice of the Klub, seated on the sofa tucked away in the back corner where he chatted nightly to almost every artist who performed on the Radio Revolten stage.

Virág Bottlik

Virág single-handedly managed on a nominally part-time post what is usually done by a whole team: she made sure that 80+ international artists had flights, trains or busses booked, suitable accommodation and a signed contract. And everything worked. She also acquired a donation of 15 bicycles to lend to our artists. The only uncertainty available to our guests was being unable to determine her gender based on her name before meeting her in person. Virág means flower in Hungarian, and she certainly embodied this by making Radio Revolten manifest in living material form—through the subsequent birth of her son Ervin, in collaboration with previously unknown fellow team member Paul Motikat. A pair of storks must have spent a night on the radio tower ...

Vivien Barth

We interviewed Vivien for Radio Revolten via a Skype call to a small village in the mountains of Kenya where she had been staying for four months. On her return she came directly from the airport to our Rathausstraße office for the first team meeting. She helped Marold Langer-Philippson to set up in the Hausmannstürme, supported the opening event on the market square and the exhibition openings. Thanks to her we had a silk-screen print station at the festival. Lots of t-shirts, sweaters, hats and bags now sport the unique Radio Revolten logo.

Volker Martin

IT entrepreneur, radio technician and radio collector from Halle. A small fraction of Volker's 1,500 strong radio collection furnished the cabinet of curiosities, a recreation of his home workspace at the Stadtmuseum exhibition

Invisible Waves. For one of the installations, *Stadträume* at Rathausstraße, he even modified six of his valve radios to enable them to play surround sound files.

Yvonne Herrmann

Radio Corax listener and radiomaker. She distributed flyers and programme magazines across the whole city, joined in with cleaning the houses in Rathausstraße a great many times and supported various events during the festival as a volunteer. She loved to hang back and dance for awhile in order to wind down after the hard work was finished.

Let us lead the radio back into
darkness. If there is one such
public portal into the wonderful,
rich chaos of the world then it

is this. Only in this labyrinth of
moaned intimations and screamed
impulsive demands is a world
worth living to be sensed.

Ralf Wendt

Radio 4 Us
Radio lies in the path of an
oncoming juggernaut. It hears
the rumble and decides to
jump aboard for a thrill ride.

It wants to play with its many
friends across the universe
and participate in eternity.
Radio likes to invite asteroids
to party and dances in the
whooshes of their tails. It has
the world at its toes and stars
twinkling at its elbows. Its
hands uphold the mystery
of mother nature. A rainbow of
snarks chases around its head

sparks crisscross around its head.

Its breath is alive, teeming with myriad organisms and artefacts. Air dashes through its body like lightning.

Radio is unbroken. Its heart generates a transgressive force which seeks out matching powers.

Radio is here to help us understand our transmissions.

It wants us to come to know what we are, to show how much of everything it is.

Sarah Washington

Action. Every radio broadcast is an action. It also entails a performance. And it exists in a mode whereby it is on the listening threshold. The radio audience is in a state of half-listening. Keep them there

listening. keep them there.

Locale is everything. I don't live in a society; I live in a community radio station. Radio is rooted in place. (The internet is not a place, it is a non-place, the abolition of place described by Paul Virilio.) Ed Baxter

To raise questions about the society we live in we should make interferences in the usual communication.

I think the utopian reality of radioart is less about having channels and opportunities to show, than to have interested and interesting people to listen.

RodoIpho Bertolini Junior aka XTO

How do we transmit and receive radio *in the open*, beyond our acoustically sealed spaces of

acoustically sealed spaces of familiar and comforting reassurance? How does radio quit its habit of answering our questions and satisfying our needs, and instead question our answers and perturb our satisfaction?

Immanuel Madan

1. The magic of radio is its immateriality and invisibility.
2. Radio is space. In the beginning was the voice.
3. In the beginning was the sentiment.
4. Radio is the public. That's why it must never align itself with mainstream taste.
5. Radio has to educate. Also in nonsense.

6. Radio lures us to the stars and under the earth

and under one ear.

7. Sales figures and audience ratings have nothing to do with quality. Quality is older than its packaging.
8. Now all together: “I’m a human radio station.” Felix Kubin

Radio making is a function of the locale.

Analogue radio is the last

medium with a geographical footprint. In combination with live production this allows for coordinated authenticity.

Avoid delays in transmission.

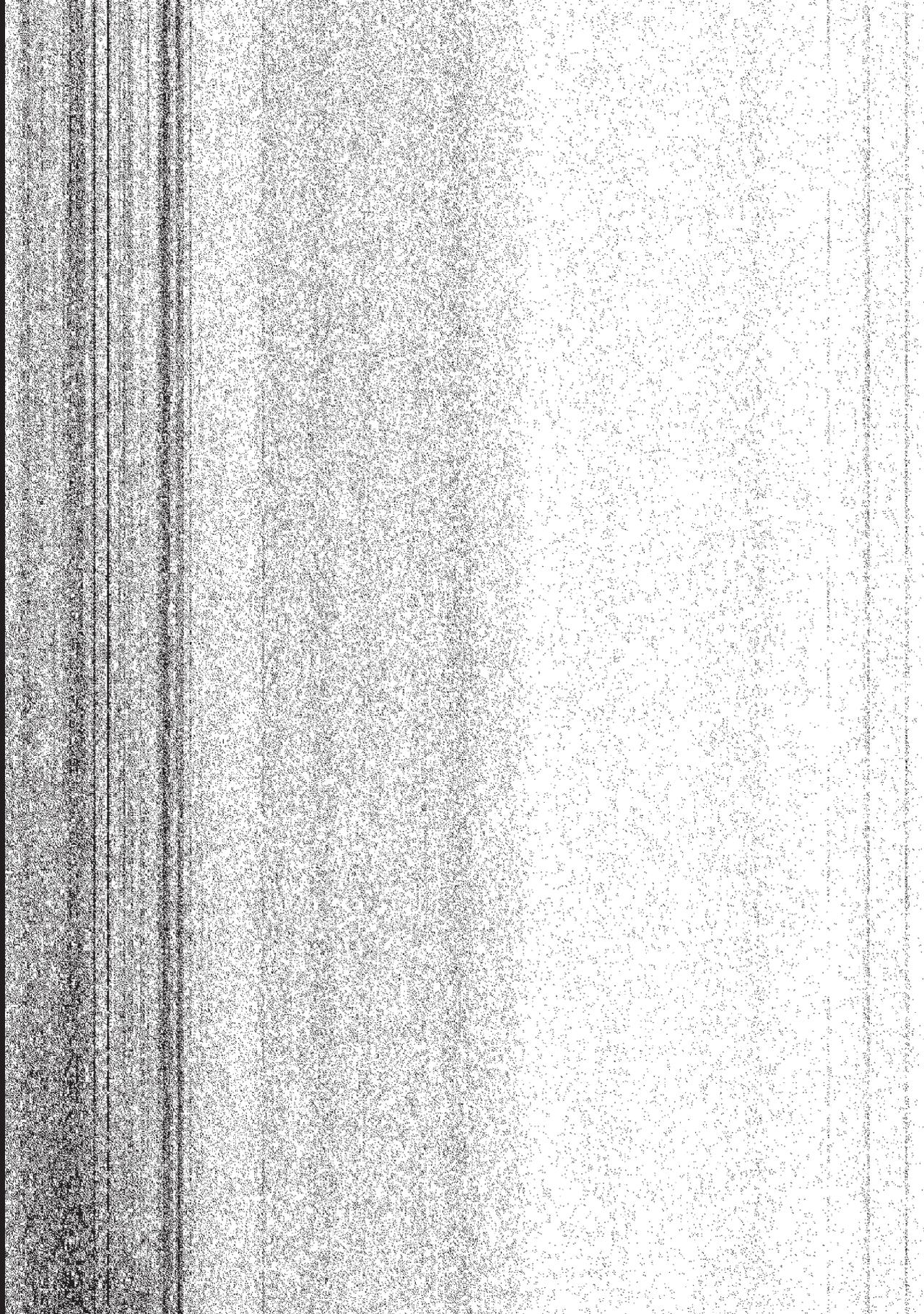
Delays make you speechless and favour censorship and the status quo.

If you want to be in the eye of a storm, lightning and thunder have to hit at the same time

I have to live at the same time.
Analogue radio allows for interference.
Interference is good.
It is the start of communication.

Knut Aufermann

Excerpts from Manifesto texts
written in September 2016
by Radio Revolten artists.
The full version of the texts
you find on the Radio Revolten
website radioevolten.net.



A Knut Aufermann is a radio artist, musician and organiser. He studied chemistry and audio engineering and received an MA in Sonic Arts from Middlesex University in London. From 2002–2005 he was the station manager of Resonance FM in London. Aufermann plays improvised electronic music using various forms of audible feedback. Together with Sarah Washington he runs the project Mobile Radio, investigating alternative means of radio production. Their works have been broadcast on more than 50 radio stations across the globe as well as in gallery contexts, e.g. at the 30th Bienal de São Paulo and documenta 14. Aufermann is a co-founder of Radia, an international radio art network of independent radio stations. Knut Aufermann was the artistic director of the 2016 edition of the Radio Revolten festival.

Rochus Aust studied at the Trossingen University of Music in Germany and at the Royal College of Music in London, moving between the coordinates of visual music, MOVinstallation and poésie électronique. He is a trumpet player, composer and visual artist. Aust has created unique performances in over 40 countries with productions for festivals, institutions and in public space. He is also involved in making recordings for labels, and for radio and television stations worldwide.

B Henk Bakker is a musician, composer, producer, and organiser living in Rotterdam. He creates interactive software environments for performance, using samples and soundscapes to build musical structures which interact with an amplified bass clarinet. He is also engaged in making and producing radio plays, and composing music for dance, theatre and film. Projects include Ghostride, tekno for bass clarinet with Huib Emmer and Subterraneanact, concerning air disturbance and digital grain research. With Lukas Simonis he performs as Xstatic Tics, the project Dr Klangendum is their collection of activities concerning sound in all forms, shapes and places; performances, radio plays, radio shows and releases. Together they manage the analogue sound studio at WORM, Rotterdam.

Steve Bates is an artist and musician living in Montréal. His work listens to thresholds, boundaries and borders, points of contact and conflict. He is currently developing a multi-year project investigating historical and contemporary aspects of auditory hallucination. His work has been exhibited in Canada, the United States, Europe and Senegal. He works in the field, on the air, and in museological, gallery and performance space contexts. These shifting territories reflect the content of his practice.

Ed Baxter is the co-founder of Resonance FM and an Associate Lecturer at London College of Communication. Together with Chris Weaver he won the 2013 British Composer Award for Sonic Art from BASCA. His recent works include *Heart Like a Duck* (2016) featuring Tom Graham; *The Death Of Kodak* (2015) featuring Rodney Earl Clarke; *Score for Open Heart Surgery on Charlie Watts* (2014) featuring Tam Dean Burn; *Sketches for Ascent And Descent* (2014) featuring Dudley Sutton; *Songs of Dissolution and Practicality* (2013) featuring Sam Lee; and *No Such Object* (with Chris Weaver) at Edinburgh International Festival (2012). Baxter curated *Gone with the Wind* at Raven Row, London (2011). He works collaboratively, typically adopting the role of writer, arranger, director and/or producer, only rarely performing on stage himself.

Xentos Fray Bentos (Jim Whelton) is a musician, video and radio artist, writer, performer and sound designer based in London. He produces video and radiophonic works and writes original scripts for radio stations around the world. He has made sound and musical pieces for interactive displays in the Tate Modern, London, Science Museum, London and the National Museum of Scotland, Edinburgh, among others. Whelton performs live experimental music, produces experimental video

and degrades old easy listening recordings. Recently he has been transcribing parts of his extensive collection of writings, transmogrifying them into a radio series for Resonance FM. His prodigious multi-persona pop and plunderphonic musical output which stretches back to the 1970s is the stuff of legend.

Céline Bernard is a foley artist for cinema, television and radio. She also brings the art of foley to the stage: in collaboration with Anne Teresa de Keersmaeker and ROSAS for the piece *The Song* (2009–2015), with François Sarhan for *Enough Already* (2013–2015) and in *The Last Light-house Keepers* created for the Borealis festival in Norway (2014). She has been working in collaboration with dancer Anne Juren for her performances *The Point* (2015), *Comma* (2016), and *Studies on fantastical anatomies* (2017).

DinahBird is a sound and radio artist living and working in Paris. Her practice includes broadcasts, soundworks, installations and audio publications that are inspired by early transmission technologies and archives. Her current interests include old weather, dead media, aeronautics, and high frequency trading. A copy of her radio record *A Box of 78s* has been on an eighteen-month worldwide tour, being passed from radio station to radio station. She is part of the international radio art network Radia.

John Bisset works with music, imagery, narrative and theatre: playing guitar, making animated films, illustrated books, graphic novels, graphic scores, and as leader/composer with the legendary London Electric Guitar Orchestra in their absurdist performances. Since 2009 he has been making films, regularly in collaboration with Ivor Kallin—finding satisfaction in this infinitely flexible and variable medium.

Alessandro Bosetti is an Italian composer, performer and sound artist currently based in Marseille. His work for voice and electronics blur the line between electroacoustic composition, aural writing and performance. He has created a vast body of work, of hybrid, award winning, text-sound and radio pieces for public radio stations worldwide. Current projects include *The Notebooks* based on Leoš Janáček's speech melodies archives, *Mini- and Maxigolf* with Neue Vocalsolisten, and *Trophies*, a powerful speech-loop trio with drummer Tony Buck and fretless guitarist Kenta Nagai.

Glenn Boulter is a Cumbria based artist and curator. Incorporating print media, sound and text, his work has been presented in a wide range of settings from the Royal Opera House's contemporary programming branch ROH2 and the radio station Mobile Radio BSP at the 30th

Bienal de São Paulo (2012) to Barrow Athletic Football Club and village notice boards in Leicestershire. As a founding member of sound art and new music organisation Octopus, he co-curates the biennial festival Full of Noises.

Adam Bushell is a British percussionist exploring traditional folk music, contemporary classical music and experimental improvisation. His regular ensembles include folk band Duck Soup and improvisation ensemble Baby; he has worked with musicians including Chris Wood, Steve Beresford, Michael Finnissy, and The Copper Family. Adam has recently completed a master's degree on improvisation in traditional music. He performs with the Resonance Radio Orchestra.

Andrea-Jane Cornell is a Montréal-based musician and composer who improvises with field recordings, radio waves, objects and instruments. A gleaner of sonorities, she transforms and transmits sounds in performance and across short and long range radio transmission channels. For five years she has been the Music Programming Coordinator at Montreal's community radio station CKUT 90.3 FM. Her meditative sound fields have been presented at Signal and Noise (Vancouver), Modern Fuel's Vapours series (Kingston), Kunstradio (Vienna), and Wave Farm (New York State).

Peter Courtemanche (aka Absolute Value of Noise) is a contemporary sound and installation artist from Vancouver. He creates radio, installation, performance, network, and curatorial projects, and handmade CD editions. His outdoor electronic works draw attention to phenomena that are typically invisible, or overlooked, within our environment. His recent works include *Whirlwind* (2015), and *Bio-electric Radio* (2016). Courtemanche broadcasts the weekly 4-hour-programme *Absolute Value of Noise* on the campus and community radio station CiTR 101.9 FM in Vancouver.

Chris Cutler is an English percussionist and composer, he has worked in soul and R'n'B bands and with the British experimentalists Henry Cow. Cutler has pursued song form works in groups such as the Art Bears, Cassiber, The Science Group and others, and was in the rock group Pere Ubu and has worked with The Residents. He runs the radio-lectures broadcast *Probes* on Ràdio Web MACBA and produced the year-long soundscape programme *Out of the Blue Radio* for Resonance FM in London. He plays 20th century classics with the Hyperion Ensemble and the Bad Boys, and tours the world solo as an improviser with his electrified drum kit. He runs the alternative label ReR Megacorp, and is the author of two books and numerous academic articles.

Roberto Paci Dalò is an Italian musician, visual artist and radiomaker. His works for radio have been broadcast by public radio stations around the world. Between 1991 and 1998 he created and directed LADA L'Arte dell'Ascolto, the international radio festival in Rimini. In 1995 he established the web art radio Radio Lada. He teaches Interaction Design at the University of the Republic of San Marino, is the founder and director of USMARADIO and created The School of Radio, an independent international school for innovative radiomakers.

Julia Drouhin is a French artist, performer, curator and academic based in Tasmania. Drouhin explores the friction in sociality through radio-scapes, installations, and collaborative performances. Her site specific playgrounds reshape common mythologies using field recordings, textiles, edible and or found objects. Her work has been presented in galleries, art centres and festivals in Europe, Brazil and Australia, as well as having been broadcast on numerous airwaves and online radio projects. She is an associate researcher for LAMU (Urban Music and Acoustic Laboratory), member of WAN (Walking Artists Network) and committee member of IRARG (International Radio Art Research Group). In 2011, Drouhin completed her PhD in aesthetics, sciences and technology on the art of walking and radio performances at the Université Paris 8.

Marie Anne Fliegel was born in Lübz (Mecklenburg) and grew up in Rostock. From 1960–1963 she studied at the Ernst Busch Academy of Dramatic Arts in Berlin. Since 1963 she has been engaged in stage productions, including at Görlitz and Gera Theatres, the New Theatre in Halle (Saale), and at the DEFA (Deutsche Film-Aktiengesellschaft). She has also played many roles in television and film productions, which include numerous appearances in crime dramas. She was the guest artist of the Resonance Radio Orchestra at Radio Revolten festival 2016.

Robin The Fog (Robin Warren) is a sound artist and radio producer based in London. His work largely falls under the broad term radiophonics and includes field recording, radiophonic composition and documentary. His production work has included bespoke sound designs and broadcast packages for the BBC and other public radio stations worldwide. He is also a Resonance FM presenter. Robin The Fog is one half of analogue tape duo Howlround.

Anna Friz is a Canadian sound and media artist and media studies scholar. She began broadcasting on campus and community radio station CiTR 101.9 FM in Vancouver in 1993. Since then she has created audio art and radiophonic works for extensive international

broadcast, installation, and performance in more than 25 countries, where radio is the source, subject, and medium of the work. She also composes multi-channel atmospheric sound works for theatre, dance, film, and solo performance. Friz holds a PhD in Communication and Culture from York University, Toronto. Since 2015 she has been Assistant Professor of Sound in the Film and Digital Media Department of the University of California in Santa Cruz. She is a steering member of the artist collective Skálar based in East Iceland and a long time affiliate artist of Wave Farm WGXC 90.7 FM in Acra, New York. Anna Friz was on the curatorial team of the 2016 edition of Radio Revolten, and curator of the festival exhibition *Das Große Rauschen: The Metamorphosis of Radio*.

G Hartmut Geerken studied oriental languages, comparative religious studies and philosophy with Ernst Bloch at the universities of Tübingen (Germany), Constantine (Algeria) and Istanbul (Turkey). He has worked for the Goethe Institutes in Cairo, Kabul, and Athens (1966–1984). Geerken is active as an author, composer, musician, filmmaker, actor, mycologist, bumble-bee-keeper, and publisher of authors from the circle of literary expressionism and Dada.

Irina Gheorghe studied painting and photography at the Bucharest National

University of Arts but ended up making work whose final form involved being physically present. Gheorghe works with Alina Popa as part of the artist duo The Bureau of Melodramatic Research, to investigate how passions shape contemporary society, as well as our affective relationship to an awe-inspiring unhuman universe. She is a co-founder of the artist-run publication *Bezna*.

Lucinda Guy is co-founder and artistic director of community station Soundart Radio in South Devon, UK. She works as a radio trainer and mentor to help people to find their radio voice. Her radio compositions are unscripted, and incorporate hymns, folk songs, metaphysical concepts, found texts and half remembered dreams. She graduated in music, specialising in voice, from Dartington College of Arts, and lives and works with her partner Chris Booth and their four children in rural Devon. She is project coordinator of the new radio art station Skylark in Dartmoor National Park.

Helen Hahmann is a radiomaker and ethnomusicologist from the community radio station Corax in Halle (Saale). Her radio documentaries on music are also broadcast by public radio stations in Germany, Austria, and Switzerland. She was the Festival Coordinator of Radio Revolten 2016 and took part in several performances as a musician.

David Haines has exhibited extensively both within Australia and internationally, for example in the Adelaide Biennial of Australian Art, in the Biennale of Sydney, in the Tarrawarra Biennial and the Kuandu Biennial. He was born in London and lives and works in the Blue Mountains, New South Wales (Australia). His work covers a wide range of approaches and techniques including video, sound, sculpture, photography and painting.

Joyce Hinterding's explorations into acoustic and electromagnetic phenomena have produced large sculptural antenna works, experimental drawings, video and sound-producing installations and experimental audio works for performance. She often collaborates with artist David Haines to produce large scale immersive video and sound works that explore the tension between the fictive and the phenomenal. Hinterding lectures at the Sydney College of the Arts at the University of Sydney.

Reni Hofmüller lives in Graz (Austria) and is active as a DIY artist, musician, composer, performer, organiser, curator and activist in the fields of (new) media, technology, feminism, and politics. She concentrates on art in technological contexts and researches the relationship between art, technology and society. She is a co-founder of *esc medien kunst*

labor, works with the community radio station Radio Helsinki, mur.at (Initiative Netzkultur) and is a member of IMA Institute of Media Archeology.

K Barbara Kaiser is an Austrian sound and video artist, curator and musician. She studied Transmedia Art at the University of Applied Arts in Vienna. She is a founding member of the Vegetable Orchestra. Together with Tamara Wilhelm she formed the mixed-media-performance duo z.b.: She is part of the international radio art network Radia, and the radio play duo Die Audiotapete with Ernst Reitermaier.

Ivor Kallin exploits his heritage through poetry, deploying Scottish and Yiddish as the basis for improvised poetry, with occasional English, when not collaborating with John Bisset in making over 100 films on Youtube as 213tv. He also plays viola and bass in improvised music projects, for example Barrel, London Improvisers Orchestra, Jerico Orchestra, Glowering Figs, and Ya Basta.

Hans W. Koch prefers dealing with the obvious, albeit the non-self-evident. This can refer to using laptops very literally as musical instruments, as well as the translation of a theoretical space such as the “circle of fifths” into real space with the help of 12 loudspeakers. He works as a composer, performer and sound artist. Since 2016,

Koch has been Professor of Sound at the Academy of Media Arts in Cologne.

Tetsuo Kogawa studied phenomenology and semiotics, before he became involved in writing literary criticism, philosophy, and media politics. Meanwhile, his consistent enthusiasm for the DIY handwork of electronics led him to a radical mix of free radio activities and performance art, using advanced technologies. He identifies himself as a nomad practitioner of radio art or radiation art, rather than his official titles of media critic, university professor and museum director. In various cities around the world he has made challenging radical experimentation with radio art, using and exhibiting devices invented by him.

Jeff Kolar is a sound artist, radio producer, and curator. He is the founder and artistic director of Radius, an experimental radio broadcast platform established in 2010. His work activates sound in unconventional, temporary, and ephemeral ways using appropriation and remix as a critical practice. His solo and collaborative projects, installations, and public performances often investigate the mundane sonic nuances of everyday electronic devices.

Konrad Korabiewski is an award-winning experimental sound and media artist, characterised by a marked tendency to

transgress various genres and media, such as sound art, music for film, installations, radio, video and multi-media art. He holds a master's degree in Electronic Music Composition from the Royal Danish Academy of Music. Konrad Korabiewski is an independent curator. He is the founder and director of the artist collective Skálar in Seyðisfjörður (East Iceland).

Caroline Kraabel is committed to improvisation as a way of living and working. As a saxophonist she makes music in unexpected ways and performing in unexpected places, composing and playing written music. She was involved in the creation of Resonance FM, London's art radio station, for which she has made several pieces and series of work such as *Taking a Life for a Walk*.

Rogério Krepski is an industrial designer from São Paulo (Brazil). He explores conceptual designs and new DIY technologies, participating in exhibitions in Brazil and abroad. As a guitar player he also takes a keen interest in sound works and plays with several bands and sound art projects. In 2007 he co-founded Pipa Musical with XTO, a web streamed radio show. In 2012 Pipa Musical developed into a noise performance act.

Felix Kubin is one of electronic music's most dynamic and versatile performers. A lovechild of the home recording era, his activities include

futuristic pop, radio plays, electroacoustic music, lecture performances and works for chamber orchestra. Kubin's music is saturated with enthusiasm for disharmonic pop, industrial noise, and 20th century avant-garde music. In the last 20 years he has released a diverse array of albums, founded the record label Gagarin Records and has played at over 100 electronic music festivals.

Bernd Kukielka is one of the founders of Radio Corax and a member of Amateur Radio Club of the Martin Luther University in Halle (Saale). His call sign is: DL6MOG.

Peter Lanceley is a composer, singer and guitarist. He performs with the Resonance Radio Orchestra. He has also performed in the acclaimed experimental rock group Kinnie The Explorer. Lanceley is the programmer of the radio art station Resonance Extra in Brighton, sister station of London's Resonance FM.

Marold Langer-Philippsen works as a radio and media artist, director, performer, stage designer and musician in the fields of time based arts, with special attention to public space and live broadcast. He lives in Bratislava and Berlin. He has created radioworks for public radio stations, Ars Electronica Linz, and currently collaborates with community radios in Europe.

LIGNA consists of the media and performance artists Ole Frahm, Michael Hüners and Torsten Michaelsen. Since 2002, their work has been devoted to creating temporary situations that employ their audience as a collective of producers, as in their Radio Ballet. Established in the independent radio station Freies Sender Kombinat (FSK) in Hamburg, LIGNA now creates work internationally between radio art, public intervention, dance and theatre.

Fernando Godoy M is an electronics engineer, sound artist and producer who lives and works in Valparaíso (Chile). His practice includes field recording, DIY technologies, electronics, sound installations, sound performances, radio works, web projects and experimental composition. He has been the director of the Tsonami Sound Art Festival since 2008, a platform for the diffusion and development of contemporary sound practices in Chile.

Emmanuel Madan is a composer and sound artist based in Montréal. He is a founding member of the artist collective [The User], and also devotes part of his artistic practice to radio and transmission arts projects, drawing on a long background as a community radio broadcaster. His artistic practice centres around the reclamation and subversion or transformation of found sonic environments and artefacts.

Víctor Mazón Gardoqui's work materialises in three main fields: actions or site-specific performances through experimental processes, exhibitions as consequences of previous actions and as collective work through collaborative groups and seminars in cultural and academic organisations. Since 1999 he has been involved in experimental tactics of media agitation through actions, performances and seminars in public spaces and mass media interventions through the use of sound, light, and custom electronics.

Sally Ann McIntyre is an artist based in Dunedin (New Zealand). She hosts the nomadic small-radius station Radio Cegeste 104.5 FM, reimagining the radio as a form of process-based fieldwork in particular landscapes and social contexts. Working with field recording and archival sound technologies, her projects investigate the history of soundscapes as sites of ecological absence and degradation, and as charted and imagined sites of memory in the creation of alternate sound archives.

Famoudou Don Moye was born in Rochester, New York. He went on to formally study percussion at Wayne State University in Detroit. Moye has worked with Steve Lacy, Pharoah Sanders, Sonny Sharrock, Randy Weston and Art Taylor, collaborated extensively with Moroccan musicians

and since 1969 has been a permanent member of the innovative, avant-garde quintet, the Art Ensemble of Chicago (AEC).

Neue Vocalsolisten consists of seven concert and opera soloists, ranging from coloratura soprano via countertenor to basso profondo. The ensemble's chief interest lies in research: exploring new sounds, new vocal techniques and new forms of articulation, whereby great emphasis is placed on establishing a dialogue with composers. Each year, the ensemble premieres about twenty new works. Central to the group's artistic concept are the areas of music theatre and interdisciplinary work with electronics, video, visual arts and literature, as well as the juxtaposition of contrasting elements found in ancient and contemporary music.

Udo Noll is a media artist who graduated as a qualified engineer for photography and media technology at the Cologne University of Applied Sciences. He lives and works in Berlin and Cologne and is the founder and developer of radio aporee, a platform for projects and practice in the areas of field recording and phonography, sound art and experimental radio. Many of his works have been broadcast in the field of net art.

Aki Onda is a sound artist, performer, and curator. Onda was born in Japan and

resides in New York. He is particularly known for his project *Cassette Memories*, which he compiled from a sound diary of field-recordings collected by using the cassette Walkman over a span of more than two decades. He creates compositions, performances, and visual artworks from those sound memories. Onda often works in interdisciplinary fields and collaborates with filmmakers, visual artists, and choreographers.

Anne-Laure Pigache works on the borders of sound poetry, theatre and experimental music. She is especially interested in improvisation and the quality of direct presence emanating from performers. As a vocalist, she is regularly invited for free improvisation concerts and to perform radio pieces. Since 2010 she has been exploring ever more the specific musicality of speech, with particular interest in the musical and poetic dimension of everyday language.

Alina Popa navigates between contemporary dance and visual arts, the black box and the white cube, theory and text. She draws with concepts, conceptualises with movement, moves with thought, thinks with structure, structures with sound, sounds that are strange or not at all. She founded the performance duos *Unsorcery* with Florin Flueraș, and *The Bureau of Melodramatic Research* with Irina Gheorghe.

Joe Qiu Bassoonist Joe Qiu divides his time between modern and historical instruments. Recently he has appeared as guest principal with the Royal Philharmonic Orchestra and the Dunedin Consort. Qiu studied at the Royal Conservatoire in The Hague. He performs with the Resonance Radio Orchestra.

Felix Raeithel (aka Istari Lasterfahrer) is a digital and electronic musician living in Hamburg. He works on multiple fronts on the de-contextualisation of sound material, the rupture of harmonic conditions and artistic condensations. With energetic live performances and DJ sets he has captivated audiences worldwide with his innovative sound, an assemblage of everything mixed with his up to date soundbwoy dub technics. Since 1999 he has been running the record label Sozialistischer Plattenbau.

Anna Raimondo lives in Brussels and works internationally as a sound artist, performer and independent curator. She completed the MA Sound Arts at the London College of Communication and has participated in several exhibitions. Her radiophonic works have been broadcast internationally. Together with Younes Baba-Ali she is the artistic director of the radio and sound art platform Saout Radio and writes for the French radio art magazine Syntone.

Paulo Raposo is a sound artist, curator and producer based in Lisbon. After studying philosophy and cinema, in the early nineties he started working with live electronics and computer sound; performing, recording and exhibiting works in Europe, the Middle East and the United States. His work spans different sound investigations including in public space and field recordings, audio-visual environments and radio-works.

Jean-Philippe Renoult is a writer, radio producer and sound artist based in Paris. His work focuses on field recordings and the electroacoustical transformation of environmental sounds. He has recently taken up playing the shruti box. Recent works include *A.V.I.O.N.*, a radio installation inspired by the world of aeronautics and *Take Flight*, a composed soundscape made up of planes, drones and disappearances for ABC's Creative Audio Unit. His ongoing audio graffiti project, *Tag Audio Loops*, was nominated for the Marl Media Art Award in 2014.

Resonance Radio Orchestra was formed in 2004. Usually directed by Ed Baxter, it is a floating pool of performers, actors, musicians and engineers seeking to explore a post-expressionist aesthetic. Resonance Radio Orchestra simultaneously addresses both the remote audience of the acousmatic transmission

and the physically present audience in the real-time environment, grappling with the sense of displacement this entails. For Radio Revolten, Resonance Radio Orchestra presented a new work entitled *Larry Shipping in The Abbey and Saaleaue at Planena*.

Willem de Ridder is a painter, storyteller, radio and TV producer, publisher, inventor, musician, actor, talk show host, sound and costume designer and much more. He was the chairperson of Fluxus for Northern Europe. He founded the magazine Suck, the film series Sad Movies and the esoteric organisation Hollandia International. He is best known for his radio shows such as Doodsangst Therapie (Terror Therapy), which he created for Dutch public radio VPRO. His works have been exhibited at the Museum of Modern Art, New York (2011) and the Akademie der Künste, Berlin (2012).

Tom Roe is a sound transmission artist. He co-founded free103point9 in 1997 as a microradio artist collective in Brooklyn, New York. Today, he serves as the artistic director of Wave Farm (formerly known as free103point9). Roe lead Wave Farm's efforts to establish WGXC 90.7 FM, an FCC-licensed full-power non-commercial FM radio station, which has been serving New York's Upper Hudson Valley since 2011. He currently coordinates over 60 hours a week of

Transmission Arts and Experimental Sounds programming on the station.

Ilia Rogatchevski is a Russia-born multimedia artist, journalist and broadcaster living and working in London. His prolific output varies from painting and collage to sound installations and radiowork. Rogatchevski's MA in Sound Art at the London College of Communication explores, via the medium of VLF radio, the impact of electromagnetic pollution on our acoustic ecology.

Kristen Roos is a Vancouver-based sound and media artist. The exploration of underground, low frequency, and electromagnetic sounds is a prominent feature of his work. He has exhibited in artist-run centres and festivals across Canada, the United States, and Europe. His writing on sound and radio art appears in the *Radius GRIDS* booklet published by Half Letter Press, the Errant Bodies publication *Radio Territories* and the New Star Books publication *Islands of Resistance: Pirate Radio in Canada*.

S Gabi Schaffner works as an interdisciplinary artist, curator and radio producer of sound and radio art, text, storytelling and performance. Her works have been broadcast on public radio in Europe and Australia. Her productions include *Hidden Places*, narrated landscapes in Iceland and Australia, and *Self-made Life*, a feature on

Finnish outsider art and the video documentarist Erkki Pirtola. Schaffner co-founded Datscha Radio in Berlin, the temporary radio "garden in the air" which investigates German garden culture and its future ecologies. She was the festival diarist for the 2016 edition of Radio Revolten.

Lukas Simonis is a musician and radio producer based in Rotterdam. He works with Henk Bakker as the X-Static Tics and Dr Klangendum. Around the year 2000 they started producing Radio Worm, a widely circulated radio magazine show. In 2013 they started a radio art series Dr Klangendum on the dutch station Concertzender. Their output as producers and performers of radio plays and other kinds of radiophonia is prolific, including the *Perverse Animals* series—a mixture of fiction, field recordings, soundscapes and documentary. Together with WORM they run an electronic music studio where they host workshops and residencies. Not to mention their live radio performance event *Sniffing Ether*.

Laura Michelle Smith is a London-based percussionist and composer, best known for her work as the drummer in projects Sebastian Melmoth and Gardyloo Spew.

Mary Stark is an artist filmmaker with a background in textile

practice based in Manchester. Since 2012 she has been making 16mm film performances exploring optical sound created from fabric and stitch patterns. Her performances summon absent voices and obsolete industries, involving 16mm film projection, light and shadow, mechanical noise and music associated with textile production. In 2014 Stark undertook a four-week artist residency at LIFT in Toronto. She is completing a PhD with MIRIAD at Manchester School of Art.

T Milo Thesiger-Meacham's exposure to experimental film and art at a young age has led him to range across artforms—including short stories, abstract painting, music, and mixed-media work. The films of Jacques Tati prompted him early on to explore the role of sound in the description of space, place and memory which is currently central to his own work. He worked with The Olympic Park on an event called *Art Moves*. He performs with the Resonance Radio Orchestra and produces work under the name Viewfound.

U Maia Urstad works at the intersection of audio and visual art, primarily with sound installations and performances. Her recent work interrogates the history and methodology of communication technology; from Morse code and other long range signals, to digital terrestrial networks and the use of fibre optics. Radio is

a central theme in her work, using the medium for its auditory, visual and conceptual possibilities. She was educated at Bergen Academy of Art and Design, has a background in rock music, and has been an active contributor to the Norwegian and international contemporary art scene since 1986.

V Mark Vernon is a Glasgow based artist operating on the fringes of sound art, music and broadcasting. At the core of his practice is a concern with the intimacy of the radio voice and its use in radiophonic compositions for broadcast and live performance. His productions for national and international stations range from documentaries and radio plays to soundscapes and conceptual works. He has also initiated several UK radio art projects including Radiophrenia, Hair Waves and Radio Tuesday.

W Sarah Washington is an artist and activist working in experimental music, radio art and on humanitarian and environmental matters. She co-created the London radio station Resonance FM and the radio art network Radia. In the improvised music duo Tonic Train, she performs with self-built electronic instruments. Together with Knut Aufermann she began Mobile Radio in 2005 to produce temporary radio stations, one-off broadcasts, festivals, radio installations and workshops. Washington's radio art series *Hearing in Tongues* (2007)

was commissioned by the Tate Modern. Mobile Radio exhibited the radio station *Mobile Radio BSP* (2012) at the 30th Bienal de São Paulo. For documenta 14 they created the radio series *Render* (2017). Sarah Washington was a curator of the 2016 edition of Radio Revolten, responsible for the performance programme and radio coordination.

Chris Weaver

is a sound artist and performer based between London and Dubai. He is a founding member of the electro-acoustic ensemble Oscillatorial Binnage, musical director of the Resonance Radio Orchestra, and one half of analogue tape duo Howlround. Since 2006 he has been working as an artist duo alongside Fari Bradley, with major commissions for Art Dubai. In 2013 he was awarded the BASCA British Composer award for Sonic Art for the work *No Such Object* with Ed Baxter, commissioned for the 2012 Cultural Olympiad.

Myke Dodge Weiskopf

is an award-winning radio producer, field recorder, broadcast artist, and songwriter based in Los Angeles. He produced the global sound series *ShortWaveMusic* from 2005 to 2013, that aims to preserve the sound of regional and international broadcasting around the world. His sound-art work has been featured in galleries and experimental broadcasting platforms around the world.

He is a staff editor and producer at national public radio KCRW in Santa Monica, California.

Ralf Wendt

works within time-based and literary arts on the deconstruction of human and animal language. Since the mid-1990s he has thematised a poetics of the sub-linguistic through performance, film and radio art. The biggest challenge and most exciting experience for him is to create moments of frozen time. The connection of the performative with the medium of radio led Wendt out of the world of galleries. As programme coordinator of Halle's free Radio Corax he finds working conditions not available elsewhere. He is also active in the performance collective The Wolf In The Winter. As a curator of art, music and radio art festivals, he brings together components and artists of transgression, such as for the performance art festival Freiwild and as the instigator of Radio Revolten 2006 and 2016. For the 2016 edition of Radio Revolten, Ralf Wendt was curator of the exhibition *Unsichtbare Wellen (Invisible Waves)* in Halle's Stadtmuseum.

Gregory Whitehead

is an audio and radio artist, writer and philosopher. He has created more than one hundred radio plays, essays and acoustic adventures for the BBC, Radio France, Deutschlandradio, Australia's ABC, NPR and others. Often interweaving documentary and fictive

materials into playfully unresolved narratives, his works include *Lovely Ways to Burn* (1990), *Shake, Rattle, Roll* (1993), *The Loneliest Road* (2003) and *On the Shore Dimly Seen* (2015). Whitehead's aesthetic is distinguished by a deep philosophical commitment to radio as a medium for poetic navigation and free association. In his voice and text-sound works, he explores the tension between a continuous breath and pulse, and the eruption of chaotic discontinuities, as well as exploring rhythms of linguistic entropy and decay.

Tamara Wilhelm

is a musician, sound engineer and cultural worker who lives and works in Vienna. In her works she deals with electronic sound production according to the principles of DIY and misappropriation. Since 2004 her experimental pop-duo with Barbara Kaiser called z.b.: ... has utilised video, radio drama, photography, performance, installation, popular and improvised music. She is also a member of the groups Vegetable Orchestra, Rheuma 3000, möström, and subshrubs, and active in the IMA—Institute for Media Archeology, and velak, a platform for electro-acoustic music.

X Rodolpho Bertolini Junior aka XTO.

He is an electronics technician who works in visual arts and design. He began producing radio in 2007, when he founded the radio

project Pipa Musical with the artist Rogerio Krepski. At the time they were unemployed and decided to make a web-stream radio show to play music they liked which was elsewhere considered “brega”—a Brazilian term used to describe something that might be nice, but goes against the intellectual mind. In 2012, at the radio studio created by Mobile Radio for the 30th Bienal de São Paulo, Pipa Musical turned into a noise performance act.

Z Elisabeth Zimmermann

is a cultural manager living in Vienna. She studied at the International Centre for Culture and Management (ICCM) in Salzburg and has been involved in organising, coordinating, and curating radio art projects, symposia, CDs, publications, and international telematic art projects. She gives presentations and lectures on radio art projects at national and international festivals. Since 1998, Zimmermann has been the producer of the weekly radio art programme Kunstradio—Radiokunst on the cultural channel of the Austrian Broadcasting Corporation ORF. She has served as Chairperson, and is currently Vice-chair of the EBU's Radio Ars Acustica Group. Elisabeth Zimmermann was a curator of the 2016 edition of the Radio Revolten festival, coordinating the conference *Radio Space is the Place* in collaboration with Nathalie Singer, Professor for Experimental Radio at the Bauhaus University in Weimar.

Rodrigo Ríos Zunino

is a musician, composer, sound artist and producer based in Chile. He makes soundtracks for theatre and interactive comics, creates sound installations and is involved with conducted improvisation. From 2012–2014 he produced the Tsonami Sound Art Festival in Valparaíso and Santiago.

Further contributors on stage or on air in Halle were:
1. Deutsches Stromorchester, Sebastian Bauhof, Patrick Bergel, Chris Booth, Fari Bradley, Alessa Brossmer, Ayse Buchara, Silvia Coelho, Carine Demange, Chloé Despax, Sebastian Dingens, Kate Donovan, Leslie Doumerc, Lloyd Dunn, ÉCOLEFLÂNEURS (Elke Schmid and Thomas Schütt), der Emil, Andreas Feddersen, Golo Föllmer, Marcus Gammel, Ulrich Gerhardt, Daniel Gilfillan, Michael Goddard, Carmen Gonzalez, Wolfgang Hagen, Gaby Hartel, Carola Haupt, Johnny Head In Air, Marcus Heesch, Günter Heß, Philipp Hochleitner, Lukas Holfeld, Ute Holl, Mark Hornbogen, Michal Hvorecký, Udo Israel, Pierre de Jaeger, Miyuki Jokiranta, Larry Jones, Joachim Kiesler, Tina Klatte, Alex Körner, Meredith Kooi, Tim Kurth, Jan Langhammer, Sophea Lerner, Hannes Lingens, Lenka Luptakova, Volker Martin, Niki Matita, Diana McCarty, Sabina Mina, Marcus-Andreas Mohr, Leandro Nerefuh, Georg Nickol, Michael Nicolai, Nordpolzigeuner, Annett

Pfützner, Irena Pivka, Fritz Poppenberg, Emilia Portaluppi, Karen Power, Frauke Rahr, Anna Ramos, Carla Costa dos Reis, Ricardo Reis, Jürgen Rendl, Echo Roe, Robert Schmidt, Michael Seemann, Bernhard Siegert, Nathalie Singer, Karl Schwöswetter, Mila Stern, Claus Störmer, Shanti Suki Osman, Helen Thein, Anne Thurmann-Jajes, Mr Vast, Neil Verma, Daniel Villar, Gérald Wang, Mark Westhusen, Niels Holger Wien, Tomáš Zizka, and Brane Zorman as well as the participants of the Trans/Mission workshop, the Hand Made Radio Art workshop, the Field Radio workshop, Marold Langer-Philippsen's Chorus, the students of Experimental Radio at the Bauhaus University in Weimar and all the anonymous guests at our microphones.



BOTANICAL GARDEN
Peter Courtemanche
Bio-electric Radio
Hartmut Geerken
open out the hothouse

CONCERT HALL ST. ULRICH'S CHURCH
Resonance Radio Orchestra
Larry Shipping in the Abbey
and Saaleaue at Planena

FORMER DEPARTMENT OF PHYSICS
OF THE MARTIN LUTHER UNIVERSITY
Knut Aufermann
Changing of the Guard
Transmitters 99.3 FM & 1575 AM

FORMER DEPARTMENT OF ZOOLOGY/
CENTRAL REPOSITORY FOR NATURAL
SCIENCE COLLECTION
Ralf Wendt
Collector's Radio

FOYER OF THE GERMAN FEDERAL
CULTURAL FOUNDATION
Friedrich Jürgenson
Audioscopic Research Archive
(Werkleitz Festival
Trans-Positionen
in correspondence
with Radio Revolten)

HAUSMANNSTÜRME DER MARKTKIRCHE
(TOWERS OF THE MARKET CHURCH)
Marold Langer-Philippsen
RADIORADAR

KUNSTMUSEUM STIFTUNG MORITZBURG
(ARTS MUSEUM - MORITZBURG FOUNDATION)
Joyce Hinterding
Aeriology

MARKET SQUARE
Rochus Aust and 1. Deutsche
Stromorchester, 8. Sinfonie

MARTIN LUTHER UNIVERSITY / HALLISCHER SAAL
Conference, Radio Space is the Place
Conference of the European section
of AMARC, the World Association
of Community Radio Broadcasters,
Community Radio as a tool in the
political landscape
Congress of the Federal Association
of Free Radios, Zukunftswerkstatt
Community Media 2016

RADIO CORAX
Daily broadcasts and relays
of Radio Revolten on 95.9 FM
Meeting of the Radia network

RADIO REVOLTEN ZENTRALE /
RATHAUSSTRASSE 3 AND 4
Das Große Rauschen: The
Metamorphosis of Radio, exhibition
Radio Revolten Radio studio
Radio Revolten Klub

ROTER TURM (RED TOWER)
Anna Friz
The Envelope of the Hour
Sarah Washington
In the Air We Share

STADTGOTTESACKER (RENAISSANCE CEMETERY)
Julia Drouhin
Sweet Tribology

STADTMUSEUM HALLE (CITY MUSEUM OF HALLE)
Unsichtbare Wellen. On the history
of radio broadcasting and attempts
at its appropriation in the Halle
area, exhibition

ST. MORITZ CHURCH
Hampus Lindwall, Joakim Forsgren
and Leif Elggren
Attempt No.6, audio-visual
performance (Werkleitz Festival
Trans-Positionen in correspondence
with Radio Revolten)

UNIVERSITY SQUARE (UNIVERSITÄTSPLATZ)
LIGNA
Dance of All - A Movement Choir

ZAZIE CINEMA
Film Programme curated by
Florian Wüst (Werkleitz Festival
Trans-Positionen in correspondence
with Radio Revolten)

CHAPTERS

Introduction, chaps. 1,9,19,20

Helen Hahmann
Bio p. 342

Introduction, chaps. 2,4,12,13,20

Knut Aufermann
Bio p. 359

Introduction, chaps. 6,8,15

Sarah Washington
Bio p. 347

Preface

Anna Friz
Bio p. 341

SUPPLEMENTARY TEXTS

Chap. 17

Martin Hartung
Bio p. 353**Florian Wüst**
Bio p. 353

Chap. 18

Xentos Fray Bentos
Bio p. 339**Hartmut Geerken**
Bio p. 342**Lucinda Guy**
Bio p. 342

ADDITIONAL TEXTS

Chaps. 2, 9

Jan Langhammer
Bio p. 315

Chaps. 4, 6, 8, 11, 12, 13, 14, 15

Gabi Schaffner
Bio p. 346

Chap. 8

Helen Thein
Bio p. 315

Chap. 9

Bernd Kukielka
Bio p. 344

Chap. 12

Tino Neubauer
Bio p. 323

Chaps. 1,5,11,14,16

Ralf Wendt
Bio p. 348

Chap. 3

Udo Israel
Bio p. 353

Chaps. 7,10

Tina Klatte
Bio p. 353**Lukas Holfeld**

Bio p. 353

Sophea Lerner

Bio p. 353

Michael Nicolai

Bio p. 353

Chap. 19

Gregory Whitehead
Bio p. 348

Chaps. 11, 15

**Tim Kurth
and Frauke Rahr**
Bio p. 323

Chap. 12

Reinhard Krause-Rehberg
Bio p. 321

Chap. 6

Nina Westermann
Bio p. 353

Chap. 16

Sally McIntire
Bio p. 344

SUPPLEMENTARY BIOGRAPHIES

Nastia Bessarabova
is a designer and graphic artist from St. Petersburg. She studied Graphic Design at the St.Petersburg State University and Book Art at the University of Art and Design Halle.**Martin Hartung**
is a doctoral fellow at the Institute for the History and Theory of Architecture (gta) at ETH Zurich. He has worked on curatorial projects at Vitra Design Museum in Weil am Rhein, ZKM in Karlsruhe, and MoMA in New York. Martin is a member of the Editorial Board for the Art Market Dictionary at the publishing house De Gruyter. In 2016, he curated the exhibition and performance programme of the Werkleitz Festival Trans-Positionen.**Lukas Holfeld**
Lukas Holfeld studied philosophy and sociology. He is the publisher of the magazine Kunst, Spektakel & Revolution and is running the blog aergernis.blogspot.de. He lives in Halle (Saale), plays in a number of music projects and is an active member of Radio Corax.**Udo Israel**
is a journalist, radio trainer and artist in the fields of audio and radio. Udo has worked with Radio Blau in Leipzig, klipp & klang

in Zürich, Orange in Vienna, and since 2006 with Radio Corax in Halle. He has been a Corax board member since 2013.

Tina Klatte

During her German language and cultural studies in Leipzig Tina Klatte was the co-curator of Leipziger Hörspielsommer, a collective listening festival for radio plays. She was the coordinator of documenta 14's radio project Every Time A Ear di Soun in 2017, assistant director for radio art productions at Deutschlandfunk Kultur, and is currently curating the Radio Art Residency at Radio Corax.

Sophea Lerner

is an Australian artist/researcher, educator and broadcaster who moves between Sydney, New Delhi and Berlin. She combines personal, mechanical, edible, spatial, digital and telephonic networks into dynamic, flexible and open architectures exploring sound in public space. Lerner was co-creator of ABC's radio art programme Soundproof.

Marcus-Andreas Mohr

studied Design at the Kunsthochschule, Halle. He is active as a photographer and designer, and teaches media education, art and design. He has participated in numerous

media projects and photography exhibitions in Germany, Romania, Russia and Kazakhstan. In Halle he runs a photography studio and gallery.

Michael Nicolai

has been active in community radio for seventeen years. From 2009 he was Leipziger coordinator for daily programming and in 2016 became the station's project coordinator. He also works as a radio trainer. He has been a board member of the World Association of Community Radios (AMARC) since 2013, and in October 2016 became President of AMARC Europe.

Nina Westermann

studies Cultural Science in Leipzig. Nina is a Corax radiomaker for the current affairs programme.

Florian Wüstis an independent film curator, artist, and publisher based in Berlin. He works on the history of post-war Europe and modern social, economic and technical progress. He co-founded the Berlin Journals-On the History and Present State of the City, and he is the film and video curator of transmediale. In 2016, he curated the film programme of the Werkleitz Festival Trans-Positionen.

musikelectronic geithain

Nikolaistraße 7
04643 Geithain / Germany
Phone: +49 (0) 34341 3110
Email: info@me-geithain.de

www.me-geithain.de

STUDIO MONITORING SYSTEMS

HIGHEND LOUDSPEAKERS

SOUND REINFORCEMENT SYSTEMS

Coaxial reference speakers for outside broadcasting vans up to control rooms

Neatless sound compatibility and high neutrality
Excellent spatiality and staging
Fatigue-free listening even to most complex sound events



THE BOOK WAS MADE POSSIBLE THANKS TO THE SUPPORT OF:

Landesverwaltungsamt
Sachsen-Anhalt
Goethe-Institut
Werkleitz Gesellschaft e.V.
Corax e.V.

International Radio Art Festival
Radio Revolten
Co-host:

the City of Halle (Saale).

Main supporters:
Kulturstiftung des Bundes,
Medienanstalt Sachsen-Anhalt.

Supporters:
Lotto Sachsen-Anhalt,
Kunststiftung Sachsen-Anhalt, Saalesparkasse,
Institut für Auslandsbeziehungen, Land Sachsen-Anhalt, Kloster Bergesche Stiftung, University of California Santa Cruz, Arts Research Institute, Canada Council for the Arts, Office for Contemporary Art Norway.

Main funders of the Werkleitz Festival 2016 Trans-Positionen:
Land Sachsen-Anhalt, Mitteldeutsche Medienförderung, Lotto Sachsen-Anhalt.

The proceeds of the work Radio Unbroken. Songspiel for Radio Revolten was donated to this book. It was created by Gregory Whitehead and Helen Hahmann in the aftermath of the festival and broadcast on 25 November 2016 on ABC's radio art programme Soundproof in Australia.

Special thanks to all the subscribers of the crowdfunding campaign which supported the printing of this book:

Alessandro Bosetti
Carcano, Alexander Vojvoda,
André Haberland, Andreas Florian, Andreas Hamm,
Anna Barta, Anna Friz,
Anna Raimondo, Annett Pfützner, Anselm Caminada,
Axel Niemand, Berthold Seliger, Birgitte Jallof,
Carlo Patrao, Caroline Kraabel, Carsten Stabenow,
Chris Wohlwill, Christian Lange, Christopher Weaver,
Dan Blu, Daniel Gilfillan,
Daniel Ott, David Haines,
DinahBird, Douglas Cameron, Dundalk FM,
Ed Baxter, Elli Röhmer,
Emmanuel Madan, Eric Bielohradsky, Eric Boivin,
Eva Bretschneider,
F. W. Aufermann, Fabian Kösters, Felix Kubin,
Fides Schopp, Frank Steinheimer, Gabi Schaffner, Geoff Kaile,
Geoff McQueen, Georg Dietrich, Georg Nickol,
Gerald Fiebig, Golo Föllmer,
Gregor Lehmann, Gregory Whitehead, Guy Antony,
Hans W. Koch, Hartmut Geerken, Helen Hahmann,
Helene Flick, Ilia Rogatchevski, Jan Philip Müller, Jan Pinseler,
Jan Riege, Jean-Philippe Renoult, Jeffrey Kolar,
Jennifer Müller, Johanna Bentz, John Weide, Julia Drouhin, Karen Werner,
Karl Schönswetter, Karolin Tempere, Karoline Friebe,
Kate Donovan, Katja Sternberger, Konrad Behr,

Konrad Korabiewski,
Kordelia Kirsch,
Kristen Roos, Ladislav Zelezny, Laura Rogatchevskaia, Lenz Mathias, Lukas Holfeld,
Maia Urstad, Mark Vernon,
Mark Westhusen, Marold Langer-Philippson,
Matthias Bader, Matthias Schierhorn, Maximilian Glaß, Michael Nicolai,
Milena Kipfmüller, Miyuki Jokiranta, Nadja Hagen,
Neil Verma, Nico Carpentier,
Niels Holger Wien, Octopus Collective,
Ole Frahm, Olivia Bradley-Skill, Omelianenko Irène,
Peter Courtteman, Peter Dererster, Peter Lanceley, Philine Lewek,
Prof. Nathalie Singer,
Ralf Wendt, Reinhard Krause-Rehberg, Reni Hofmüller, Ricardo Reis, Robert Cole Rizzi,
Roberto Paci Dalò, Robin Warren, Rochus Aust,
Rodolpho Bertolini Junior, Rogério Krepski, Rosa Hertel, Sandra Laborier,
Sandra Naumann, Saskia Mette, Sebastian Bauhof,
Sebastian Wagner, Sergio Amadori, Simon Grab,
Simone Lotzmann, Soundart Radio, Stefan Tenner,
Stefanie Heim, Stephanie Scholz, Steve Bates,
Susan Goldammer, Tetsuo Kogawa, Thies Streifinger,
Thomas Klatte, Tim Kurth,
Tina Klatte, Torsten Rudolph, Victor Mazon,
Vito Pinto, Vivien Barth, Volker Hartmann-Langenfelder, Ward Weis,
Wave Farm, Xentos Fray Bentos, Yvonne Herrmann.

WHEN IT'S ABOUT PRECISION

HPH-MT

PROFESSIONAL MONITORING HEADPHONES



HPH-MT8 HPH-MT7 HPH-MT7W HPH-MT5 HPH-MT5W



YAMAHA

#YAMAHAUDIO

ISSUED BY

Corax e.V.

EDITED BY

Knut Aufermann
Helen Hahmann
Sarah Washington
Ralf Wendt

EDITORIAL COORDINATION

Helen Hahmann
Tina Klatte

TRANSLATIONS

Bill Waltz
Leslie Ocker [chap. 18, Togwether We...?
Radio Art and Community Radio]
Joni Erika Smith
[copy-editing chap. 3]
Denise Wesselsky
[translations chaps. 8, 15]
Julian Wheatley
[translations chaps. 9, 8, 1]

COPY-EDITING AND PROOFREADING

Knut Aufermann
Helen Hahmann
Tina Klatte
Sarah Washington

PHOTOGRAPHY

Marcus-Andreas Mohr

GRAPHIC DESIGN

Nastia Bessarabova
Realised in the Burg Giebichenstein
University of Art and Design Halle,
supervised by Prof. Andrea Tinnes

TYPEFACE

Gräbenbach Grotesk
Gräbenbach Monospace

PAPER

Design Offset

LITHOGRAPHY

Günter Hansmann,
Licht & Tiefe, Berlin

PRODUCTION

Druckhaus Köthen

PUBLISHED BY

Spector Books
Harkortstraße 10
04107 Leipzig
www.spectorbooks.com

DISTRIBUTION

Germany, Austria: GVA, Gemeinsame
Verlagsauslieferung Göttingen GmbH&Co. KG,
www.gva-verlage.de
Switzerland: AVA Verlagsauslieferung AG,
www.ava.ch
France, Belgium: Interart Paris,
www.interart.fr
Southern Europe:
charlesgibbes@orange.fr
UK: Central Books Ltd,
www.centralbooks.com
USA, Canada, Central and South America,
Africa, Asia: ARTBOOK | D.A.P.
www.artbook.com
South Korea: The Book Society,
www.thebooksociety.org
Australia, New Zealand:
Perimeter Distribution,
www.perimeterdistribution.com

PHOTO CREDITS

The copyright for all photographs
are with the photographer Marcus-Andreas
Mohr except for the following:
p. 44 – Stefan Tenner, p. 50 – Gabi Schaffner
[below], p. 53 – Knut Aufermann, p. 60 –
Sarah Washington, p. 85 – Marold Langer-
Philippsen [above], p. 93 – Stefan
Tenner, p. 111 – Gabi Schaffner [above],
p. 141 – Helen Hahmann [above], p. 156 –
Peter Cusack, p. 184-185 – Marold Langer-
Philippsen [below], p. 188 – Marold
Langer-Philippsen, p. 200 – Chris Weaver,
p. 202 – Matthias Bader [small, above],
unknown listener [small, below], Gabi
Schaffner [big, below], p. 206 – Ilia
Rogatchevski, p. 215 – Tetsuo Kogawa,
p. 217 – Chris Weaver, p. 224 – Maia Urstad,
p. 229 – Gabi Schaffner, p. 240 – Sarah
Washington, p. 258 – Georg Nickol,
p. 262 – Chris Weaver, p. 270 – Deutsches
Technikmuseum, p. 271 – Filmform,
p. 272 – Zagreb Film [above], Filipa
César [below], p. 297 – Ricardo Reis,
p. 313 – Helen Hahmann [above and below],
p. 319 – Thies Streifinger [below],
p. 322 – Susanne Schug© 2018 CORAX E.V.; SPECTOR BOOKS,
LEIPZIG

FIRST EDITION

PRINTED IN GERMANY

ISBN 978-3-95905-189-7

