Nessa Johnston and Anneke Kampman

I will leave you now and this loudspeaker will take my place

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# **ABSTRACT**

Notions of 'presence' and 'liveness' run through academic theories and popular conceptions sound mediation generally, and mediation of voice in particular. This article looks at experimental video that engages with these questions, particularly around the notion of the 'authentic' voice and vocal 'presence'. We will demonstrate how these different experimental approaches explore the interaction between voice, vocal technique and audiovisual technology, thus challenging and interrogating conventions of how the soundtrack represents the voice and (in conjunction with the moving image) the audiovisually mediated body. Presenting Anneke Kampman's work as an experimental practice-led research response to seminal theories of sound and the film soundtrack, we provide further context through engagement with key examples of earlier video art and sound art by Vladan Radovanović, Richard Serra, and Meredith Monk. Overall, the article intervenes by demonstrating how video art and sound art can address key theoretical questions concerning voice and body in a broader sound and moving image context, as well as adopting a sound-focussed approach to aesthetic analysis of video art.

### **KEYWORDS**

voice

presence

timbre

synchrony

video art

experimental film and video

Notions of 'presence' and 'liveness' of voice run through academic theories of film sound and sound mediation, as a response to popular conceptions of the recorded

voice. To give one example, in her article 'The Voice in the Cinema', Mary Ann Doane argues that 'concomitant with the demand for a lifelike representation is the desire for "presence." (Doane 1985: 163) She describes how notions of 'presence' offer a certain legitimacy to the desire for 'pure reproduction' and that 'technical advances in sound recording ...aimed at diminishing the noise of the system' have the effect of 'concealing the work of the apparatus' and thus reduce the perceived distance 'between the object and its representation', which may allow for a recording to have the appearance of the 'authentic'. Doane brings this point to life by describing a television advert in which consumers are asked if they can tell the difference between the voice of Ella Fitzgerald and that of Memorex tape, and since an ardent Ella fan who appears on screen cannot tell the difference, it is concluded that 'owning a Memorex tape is equivalent to 'having Ella in your living room' (Doane 1985: 164). That the reproduction of Fitzgerald's voice was of such a high quality – her voice so 'accurately preserved' – it is as though it negates the inherent problems with 'authenticity' presented by the existence of the medium itself.

This article is concerned with the relationship between technology, space and the human voice, focusing the discussion upon vocal 'presence' as manifested in the soundtrack. We, Nessa Johnston and Anneke Kampman, have co-authored this article to present Kampman's work as an experimental practice-led research response to seminal theories of sound and the film soundtrack, further contextualized by discussion of related earlier video art and sound art works by Vladan Radovanović, Richard Serra and Nancy Holt, and Meredith Monk and Ping Chong. We follow from Rick Altman's contention that technological processes represent rather than reproduce sound (Altman 1992), and that representations of the voice are therefore inseparable from the technologies used to produce them (complicating notions of vocal 'authenticity'). Reflecting upon the development of recording and amplification technologies from the late nineteenth century to the present day (from early phonograph recordings to digitally-enhanced MP3 files), we analyse the effect of these technologies on the human voice in performance; how they have, with each advancement, altered and influenced the ways in which the voice is experienced and used. The main object of discussion will be the 'mediated voice' or 'vocal object', defined as distinct from the voice as a physiological phenomenon (that is, pure sound produced in a person's larynx and uttered through the mouth) and equally distinct from the philosophical conception of the voice as 'the speaking subject' (that is, the

expression of self as articulated by a speaking voice). The 'vocal object' incorporates the sound emerging from the interactions between breath and a body's vocal apparatus, along with the acoustic properties of the environment in which the sound is produced, the cultural context that conditions the ear of the listener, as well as technology used to record or amplify the sound.

It is also important to stress that the voice is always already 'mediated' prior to any representation. Culture 'colours' the voice, contours its performative capacities and leaves deep imprints on its character – it mediates the voice in terms of its accent, intonation, timbre, cadence, and rhythm. Correspondingly, cultural context affects the way the voice is heard. Jonathan Sterne writes that hearing is 'often reconstructed as a physiological process a kind of receptivity and capacity based on physics, biology and mechanics' and tends to be thought of somewhat inaccurately as a 'naturalized' process, beyond the realm cultural bias (Sterne 2012: 86). This article acknowledges the dimension of cultural mediation and explores how technological mediation can be seen to reinforce and extend it. Through this approach we hope to begin to challenge too-easy dualisms – between bodies and machines, between 'liveness' and reproduction, and between authenticity and mediation. Therefore, we wish to intervene by delineating our discussion to include the spoken and singing voice in performance, including practices such as Extended Vocal Technique, used not only in Kampman's work but also in Monk's work. Extended Vocal Technique or 'Extra-Normal Vocals' are unique singing techniques that differ from place to place, their only binding principle being the refusal to become a fixed standardised practice, including, trills, undertone and overtone singing, rasping, yodelling, ululations, glottal sounds, screaming, growling, and so on. Hence, practitioners of Extended Vocal Technique reflexively incorporate the act of mediation within performance, disrupting standardised vocal styles. We will demonstrate how these different experimental approaches explore the interaction between voice, vocal technique and audiovisual technology, thus challenging and interrogating conventions of how we present not only the voice, but also the audiovisually mediated body.

# Voice and Timbre in the Age of Mechanical Reproduction

The earliest recording technologies, as technologies of mechanical reproduction, constituted a radical shift in our experience of the human voice. In 'The Work of Art in the age of Mechanical Reproduction', Walter Benjamin writes: 'Even the most

perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be' (Benjamin [1936] 1968: 220). Benjamin introduces to these discussions the idea that 'original' artworks possess a certain 'aura' which is absent in an artwork's reproduction. If considered relative to Benjamin's ideas, sound recordings may not be considered as 'authentic' documents of a given musical event due the very nature of reproduction. Reproducibility, in and of itself, revolutionised our relationship to the voice, separating it from the originating body, disconnecting it from any specific time and place. Put simply, a recorded voice can be heard and reheard more or less anywhere, indefinitely, after the original sound was uttered, as Mark Katz describes: 'the dead can speak to the living, the march of time can be halted' (Katz 2004: 78). A technological shift becomes a philosophical shift, problematizing notions of presence and authenticity in relation to the voice. Mechanical reproduction meant that the voice, no longer tied to the time or space in which it occurred, could be manipulated, altered and entered into the social realm of commodification in which recordings are bought, owned, shared and privately controlled.

If mechanical reproduction *dissociated* a voice, the microphone made the presence of a human body audible at close proximity. Simon Frith describes how the microphone 'made it possible for singers to make musical sounds – soft sounds, close sounds... allowed us to hear people in ways that normally implied intimacy – the whisper, the caress, the murmur' (Frith 1996: 187). Just like the camera (specifically the close up) eliminated the need for the broad gestures of a stage performance, the microphone (and loudspeakers) eliminated the need to project the voice – 'a wink could be heard on screen, a whisper could be heard on radio' (Frith 1996:188). Once the recording studio became electrified, a closely held microphone could capture new dimensions of the human voice in particular 'the individuating accidents of intonation and timbre' (Connor 2000: 38), opening up the possibility for new forms of performance that increased the significance of those aspects of the voice.

Sound recording and mediation technologies introduced a (previously inconceivable) distinction between two categories of performance: the live and the recorded. Steve Wurtzler writes that 'the notion of the live is premised on the absence of recording and the defining aspect of the recorded is the absence of the live' (Wurtzler 1992: 89). Notions of 'authenticity' and 'presence' are key to this distinction – that the experience of a performing body, physically present in time and

space is an 'authentic' experience (and, by extension, that recordings are inherently 'inauthentic') is implicitly assumed. It is in timbre, as a category of sound, or musical quality, that technological developments can be traced most clearly. A common understanding of timbre describes it as that aspect of sound considered distinct from pitch or loudness, a unique quality that differs between sonic objects. Although it has objectively quantifiable dynamics - onset, envelope, spectral flux, and so on - timbre is an illusive concept. Enlightenment thinkers such as Phillipe Rameau and Herman Von Helmholtz sought to relate the perceptual attributes of sound to its physical properties, but this empirical approach does not account for our subjective experience of timbre. In 'The Paradox Of Timbre' Cornelia Fales unpicks the relationship between timbre, culture and perception, writing that there is 'a perceptual proclivity on the part of western listeners [...] to focus on melody' a tendency she refers to as 'pitch centrism' or 'timbre deafness'. (Fales 2002: 14) Our descriptions of timbre usually resort to terms from other sensory domains such as 'colour' and 'grain'. In 'The Grain of the Voice', Roland Barthes confirms timbre's conceptual slipperiness, pointing out that its descriptions are often limited to adjective terms – 'woody' 'scratchy' or 'warm' – and these definitions come to take on culturally coded meanings.

Timbre contains considerable information about a sound's source and location, made sense of by the listener, based on their knowledge and experience of a certain acoustic environment. Fales writes: 'timbre is the result of a process of perceptual fusion, whereby numerous signals are grouped by the auditory cortex into the unitary sensation of tone quality' (Fales 2002:15). Since perceived timbre is determined by a range of frequencies, with no single acoustic event corresponding to our experience of it, this leads Fales to state 'perceived timbre exists in a very real sense only in the mind of the listener, not in the objective world'. As Jacob Smith concurs: 'Timbre is a complex perceptual amalgam of sonic information, one that calibrates sound and space and, in doing so, inherently indicates the subjective nature of all perception' (Smith 2008: 57).

Smith highlights how the complex category of timbre indicates the space through which a sound has travelled, and theorises this intimate relationship between sound and space alongside the resulting effect on vocal performance, with the concept of the *sonotope*. A re-reading of M. M. Bakhtin's notion of the *chronotope*<sup>1</sup>, Smiths *sonotope* is similar to Rick Altman's notion of a sounds 'spatial signature', which he

defines as 'the testimony provided by every sound as to the spatial circumstances of its production' (Altman 1992: 252). Sonotope adds to Altman's term the sense that the relationship between sound and space is reciprocal and further, that the nexus of sound and space can have an important influence upon media texts. Therefore, the concert hall can be considered a sonotope that encourages a certain kind of vocal performance, characterised by bel canto<sup>2</sup> timbre, and vice versa, the use of the bel canto timbre suggests the concert hall sonotope. Conversely, the context of a modern recording studio is a space that allows the reconstruction of the spatial signature of a vocal sound (through controlled use of effects such as reverb, EQ, and so on).

It follows therefore that these technological and philosophical shift has implications for the soundtrack, and influential attempts have been made within film studies to tackle the theoretical questions around the mediated voice and body in cinema. The importance of lip sync in conventional narrative cinema hinges upon what Doane has posited as an ideology of audiovisual unity of voice and body, of effacement of the material heterogeneity of sound and image (Doane 1985). She argues that syncing voice and body in film is a process of reconstitution, creating 'a fantasmatic body' (Doane 1985: 162). Furthermore, techniques of voice recording create the illusion of spatial unity, in conjunction with the axiomatic use of convincing, synchronised sound: 'Just as the voice must be anchored to a given body, the body must be anchored in a given space' (Doane 1985: 164). The experimental non-narrative audiovisual works we will now examine are all positioned somewhat outside the frameworks of mainstream film and television production and reception, but all respond in different ways to the more dominant form of the soundtrack, exploding the naturalised relationship between the technologically mediated object voice and moving image.

# Voice and moving image – earlier interventions

Two earlier works of experimental video engage with our concerns in fascinating ways. *Boomerang* (1974) by Richard Serra and Nancy Holt, incorporates the technologically extended voice into the audiovisual context, playing with the idea of feedback and difficulties with mediation. The second work we consider in this section, *Turtle Dreams* (1983) by Meredith Monk and Ping Chong, uses extended vocal technique to explore the ideas of 'presence' and 'absence' within moving image work.

Originally broadcast live on a local television station in Amarillo, Texas, Boomerang is mainly comprised of a shot of Nancy Holt wearing a headset, and as she speaks her words are fed back to her through her headphones. There is a slight delay between her actual speech and the feedback of her voice that she hears through the headphones. About halfway through, the broadcast is interrupted and replaced with a title card which states "AUDIO TROUBLE". For the ten minutes of the video, Holt describes her situation. She speaks of the way the feedback interferes with her normal thought process and of the confusion caused by the lack of synchronism between her speech and what she hears of it. 'Sometimes' she says, 'I find I can't quite say a word because I hear a first part come back and I forget the second part, or my head is stimulated in a new direction by the first half of the word'. The confusion that Holt experiences seems to have a great deal to do with the sound of the voice she hears as it comes back to hear. Holt is in a sense 'stuck' in the middle of the mediation process, hearing her recorded voice played back to her, immediately dissociated from her speaking body while still in the process of speech, which appears extremely disorientating. She recognises the voice that comes back to her in her headphones as her own but this new voice is a 'phantom', disconnected from her, a cut-off part made into an object and thrown back at her.

We can see Holt on the screen, but we cannot hear what she is hearing, which allows us access to the process of mediation both visually and sonically. Gabrielle Gopinath argues that *Boomerang* emphasises the importance of vocal presence in a manner that 'manifests a resistance to virtual modes that recalls [R. Murray] Schafer's position on schizophonic soundscapes. Viewers can easily extrapolate from Holt's reactions, interpreting them as an individualised manifestation of the problems caused by "audio trouble" in the culture at large: confusion, inability to concentrate and loss of the sense of meaningful distinction between self and other' (Gopinath 2011: 162). Hence, it foregrounds the perils of electronic mediation of voice and the resulting precarity of vocal 'presence', given the mediation process's tendency to create an uncanny sense of disconnection and disembodiment, as well as disrupting the typically naturalised unity, valorised by conventions of lip sync, of screen body and voice.

Meredith Monk's vocal work is often characterised by her use of romantic vocal gestures, styles that soar between dynamic ranges in quick succession. Her composition *Turtle Dreams*, which features a video accompaniment directed by Ping

Chong, sees Monk use the voice with a greater focus on uniformity and group interaction.<sup>3</sup> The vocal melody in this work was written for a solo voice which is split between four singers, two male (counter-tenor) and two female (soprano); the interactions between all voices combining to form a single melodic line, making it difficult to perceive a single voice apart. The piece sets up a system where anything that breaks or becomes individual from the form appears as violent or hysterical in some way. The male voices are particularly high (counter-tenor) and as such there is an ambiguity as to whose voice belongs to whom. This ambiguity is consolidated visually – alternating between a wide shot of all four performers, usually in a line, and close-ups of individual performers' faces, but as the performers begin to sing they move in and out of the camera's frame, further dissociating the relationship between a vocal sound heard and a body on the screen.

Turtle Dreams establishes a disconnect between the voices and bodies of the performers on the screen, foregrounding the constructed nature of the relationship between sound and moving image. The artificiality and construction of audiovisual space in this video work is further emphasised visually by the use of a brightly lit white studio space in which depth is barely discernable and the floor and walls indistinctly merging into one. Dressed in contrasting plain black clothing, the four figures thus veer further into the realm of visual abstraction. However, Monk and her ensemble's use of Extended Vocal Technique draws attention to the timbre and grain of their voices, hence their voices sound noticeably *embodied* – even if the soundimage relationships in *Turtle Dreams* have the effect of introducing ambiguity and disunity of voice and body. Turtle Dreams therefore deconstructs the notion of vocal 'presence' on the soundtrack, with the vocal performance of the singers and the audible corporeality of their singing voices being at odds with the manner in which their voices seem unmoored from their screen bodies, and in turn their screen bodies seem unmoored and free floating in the blank (non-) space of the brightly-lit featureless studio.

# **Voice and Loudspeaker**

Anneke Kampman has produced a series of new audiovisual works, running in parallel to her research, using creative forms to express theoretical findings. Each work explores a facet of the technologically produced voice, from the heavily mediated voice on *I will leave you now and this loudspeaker will take my place*, to

explorations into vocal 'presence' on *The Voice from the Loudspeaker*, to composition using the technologically extended voice *Encyclopedie*. The Max MSP patch Kampman developed to process the voice in these works was designed to be used as an additional tool for improvisation.

I will leave you now and this loudspeaker will take my place<sup>4</sup> seeks to expose the paradoxical nature of sound recording by allowing the audience the opportunity to see the microphone, which (we assume) 'produces' the recorded sound that we are hearing. It comprises a single close-up overhead shot of a speaker, placed on the floor and facing upwards, with a microphone suspended above it. The microphone swings from side to side, in and out of both sides of the frame initially, and over the course of the piece's four and a half minutes it gradually loses momentum, becoming gradually confined to the frame. Meanwhile, the shot is contained as a moving frame-within-aframe, on a black background, initially moving from side to side across the screen, in tandem with the swinging movement of the microphone. The shot gradually becomes bigger, its side-to-side movement correspondingly diminishing, so that by the third minute the shot of the loudspeaker and microphone is no longer a frame-within-aframe, instead taking up the entire screen. Meanwhile, we hear sounds fading in and out in a rhythm loosely corresponding with the visual movements of frame and microphone, which mostly fall within the frequency range associated with the human voice.

Recordings are not documents of a particular reality but should be thought of more as the product of certain collisions, or representations of interactions – in this case between a voice, acoustic space and a microphone, between a hand and a computer, between a mechanical speaker and a listener. In *I will leave you now and this loudspeaker will take my place* the resulting vocal object is so completely obscured by technical processes that it bears little resemblance to the voice that originally produced it, oscillating between Kampman's own voice and electroacoustic sound – the two elements repeatedly conflated. Sound possesses a unique capacity to cover its own means of production, so by appearing to show the apparatus of sound recording Kampman aims to highlight that it can never truly be 'exposed'.

All of the sounds audible in this work have been generated using Kampman's own voice and its interaction with technology, microphones (SE Electronics Titan, Shure SM57) and software programs such as Ableton Live, Kampman's own custom built Max MSP processing patch and ProTools. What we hear in this work is a human

voice broken down through these processes of mediation, the vocal *object* so completely obscured by technical processes, that it now bears little resemblance to the voice that originally produced it, however it is still recognizable as a human voice. By allowing the voice to be heard completely merged with the technology used to produce it, the work highlights the important role that these technologies have to play in the production of vocal sound and that our perception of these sounds cannot be analysed separately from the technologies used to produce them. The act of hearing is a culturally inscribed process, and this research leads us to surmise that it is often the case that our experience of the sounds that we hear via the soundtrack conform to our expectations of what we (via the visuals) believe we ought to be hearing. The practice of sound design for the cinema is reliant on this misperception, however it is not that sound is subordinate to a visual image, but rather reaffirms the multi-sensory symbiotic relationship between hearing and viewing – the 'audio-vision', as conceptualised by Michel Chion (1994).

The cultural context of the act of listening is further explored in the related work *Encyclopedie*<sup>5</sup>, composed using vocal processing and aiming to capture the tension between the 'pure' *bel canto* style voice and the digitally stretched voice. This work sees Kampman's technologically extended voice move beyond the range of the acoustic voice (using Max MSP to shift its frequencies) reducing it to abstract values, in order to resist preconceived notions of how the female voice should sound. The aim is to make audible the merging of the human and machine, exploring the possible timbral dynamics produced as a result of interactions between the two. The video piece that accompanies this sound work features Kampman's own body, layered and manipulated in a way that visually mirrors the processing of the voice.

The 5.1 sound installation *The Voice from the loudspeaker*<sup>6</sup> is Kampman's tribute to Yugoslavian electronic music pioneer Vladan Radovanović's 1975 stereo sound work of the same name. The original piece was recorded using magnetic tape and Radovanović is the original author of the scripted text featured within Kampman's work. It recreate's Radovanović's work as a 5.1 surround sound mix, spatialising it in a manner that brings the work to life for 21<sup>st</sup> century ears. This work explores the idea of vocal 'presence' 'in a 5.1 surround context, through Kampman's performance of the text in a number of different locations, using a variety of vocal performance styles (including vocal fry timbre voice) and purposefully shifting the cadence of speech in order to foreground the constructed nature of vocal performance

and of sound recording. The original text highlights the mediated status of the voice, suggesting that we hear a recording as 'complete' – as a single take – even in circumstances when it has been constructed from a number of different recorded events. Initially, statements read by the voice draw attention to the various spatial disjunctions involved in recording and mediation, seeming to partly contradict each preceding statement as well as contradicting itself: 'You can hear me/This voice is in you/This voice is in the loudspeaker/This voice has nothing to do with the loudspeaker/This voice is where the loudspeaker is/This voice is where you are/This voice is reaching your ears', despite being individually accurate statements. The statements in the text also draw attention to the temporal disjunction that takes place during recording: 'Now I am recording/Now you are listening/"Now" is neither of these "nows".

This work highlights the problems with assigning mediated representations of the voice problematic labels like 'authentic'. Using simple processing (reverb, basic editing) techniques Kampman shows the perceived temporality and environment within which a recording takes place is constructed, further highlighting that even when these environments are completely fictitious we accept them as the 'real' thing. The sound of bodily movement and mouth sounds as Kampman speaks have been purposefully left in rather than edited out, as these sounds suggest the 'presence' of an actual physical body somewhere in the recording, though some of these sounds are edited and reorganised as part of the overall composition. These sounds therefore become heterogeneous sonic material, rather than acting to consolidate an implied unity of mediated voice and body within a *fantasmatic* acoustic space.

### Conclusion

The illusory quality of the audiovisually mediated body, in which technologically mediated sound and image seem to work together in apparently 'natural' unity, despite their material heterogeneity, is a dominant feature of audiovisual media from the earliest 'talkies' to film, television and digital entertainment of the present day. Film sound studies has theorised this feature in order to draw attention to it and to question the apparent naturalness of an everyday phenomenon. Meanwhile, sound studies and popular music studies has similarly questioned notions of 'presence' and 'authenticity' in recordings of speech, dialogue and music – notions which continue to permeate popular, cultural and industrial discourses, and which similarly have

recurred throughout the history of mechanical reproduction of sound. With this article, we have presented practice-led, formally experimental research as a response to established theorisations, showing how sound art and video art has the power to directly and vividly engage with sound theory, as well as foregrounding, challenging, and subverting arbitrary yet established conventions of sound recording and audiovisual representation.

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<sup>&</sup>lt;sup>1</sup> Bakhtin's concept of the *chronotope* stresses the inseparability of the spatial and the temporal dimensions of experience: "*Time, as it were, thickens, takes on flesh, becomes artistically visible; likewise, space becomes charged and responsive to the movements of time, plot and history.*" (Bakhtin 1981: 84)

<sup>&</sup>lt;sup>2</sup> Literally translated as "beautiful singing" – *bel canto*'s origins date back to the 16<sup>th</sup> and 17<sup>th</sup> centuries and the rise of virtuoso solo singing for the operatic stage (Stark 1999: 67) and its practice and effects are still seen in vocal pedagogy today.

<sup>&</sup>lt;sup>3</sup> For clarification, we are referring to the audiovisual work *Turtle Dreams* (with music, performance and choreography by Monk, and video directed by Ping Chong) as opposed to Monk's album of the same name.

<sup>&</sup>lt;sup>4</sup> 5 Speaker (+ sub) audio installation with HD video. (Duration: 4 mins 40 seconds). Also developed as a 12 speaker (+sub) Ambisonic array audio installation with HD Video.

<sup>&</sup>lt;sup>5</sup> 5 speaker (+ sub) audio installation with HD Video (Duration 4 minutes). Audio only version available at https://soundcloud.com/anak-anak/encyclopedie/s-50XoX (accessed 1/10/2015)

<sup>&</sup>lt;sup>6</sup> 5 speaker (+ sub) audio installation (Duration: 8 mins).

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#### **CONTRIBUTERS' DETAILS**

Nessa Johnston is Lecturer in Media, Film and Television at Edge Hill University. Her research and teaching interests are primarily focussed on sound in film and moving image media, with a special interest in the sound aesthetics of low-budget, American independent, experimental, alternative and cult films. She has had articles published in *The Soundtrack; Music, Sound and the Moving Image; Popular Music; Alphaville;* and *The Velvet Light Trap.* Nessa obtained her PhD from the University of Glasgow in 2013, which was funded by the Arts and Humanities Research Council (AHRC). Previously she obtained an MA with distinction in Sound Design for the Screen from Bournemouth University, and has carried out freelance sound work for short films and theatre. She is co-ordinator of the NECS (European Network for Cinema and Media Studies) Sound and Music in Media Work Group, and an associate editor of *The New Soundtrack*. nessa.johnston@edgehill.ac.uk

Anneke Kampman is a singer, composer and sound artist. Anneke makes electronic music by exploring her voice as an object: aiming to highlight its poetic, gestural, political and structural potential. She uses technical processes to extend the voice, expanding its sonic possibilities in order to disrupt notions of vocal orthodoxy. Recent works, such as *the as if body loop* (BBC Tectonics Festival) have seen her practice expand to include moving image works, installation and text. Other current projects include *Labyrinthine*, a collaborative new opera premiered at The Other The Self Festival (QO2) in Brussels October 2015, exploring female authorship within the operatic canon. annekekampman@googlemail.com