Singing corporeality: reinventing the vocalic body in postopera

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Chapter 3

Monstrous Singing: The Politics of Vocal Existence

“Today monsters remind us of the exclusion of the human from life, of life that is more and more being divided from humanity (...)”

Bojana Kunst

„Every creature has a song – the song of the dogs – and the song of the doves – the song of the fly – the song of the fox. - What do they say?“

Adin Steinsaltz

In this chapter my concern is with how singing appears monstrous as a result of existing beyond the body that produces it, with the politics of the monstrous voice and with the consequences this has for the opera. As in One, Steve Reich/Beryl Korot’s video documentary opera Three Tales intersperses technological devices with the performer’s singing corporeality. The actual voice that is heard is the result of the human voice joining forces with technological interventions performed upon it. I argue that the specific vocal expression produced could be named a ‘monstrous voice’, a voice that is non-human, that deviates from ‘the natural’, and that has the sound appearance of a monster.

I shall analyse the body – voice relationship in Three Tales, paying specific attention to the novel techniques of ‘dissecting the voice’ that Steve Reich introduces. The emphasis is particularly on Act 3: Dolly, which raises a number of issues regarding cloning, artificial intelligence and defining what is human, whilst using these novel techniques for singing. I use several theoretical texts in analyzing Three Tales: Bojana Kunst’s “Restaging the Monstrous”, Mladen Dolar’s theories on the

171 Words by Adin Steinsaltz, from Steve Reich and Beryl Korot’s libretto of Three Tales. “Adin Steinsaltz is internationally regarded as one of the leading rabbis of the century. Time magazine called him a ‘once-in-a-millenium scholar’. He has almost completed translating the entire Babylonian Talmud into modern Hebrew as well as English, French and Russian. He has been resident scholar at Yale, and at the Institute for Advanced study at Princeton. He fulfills a unique role as a bridge between those who are religious and those who are not”. Quoted according to: Steve Reich/Beryl Korot, Three Tales, Libretto, http://www.stevereich.com/threetales_lib.html, Accessed: April 15, 2012.
172 Three Tales is scored for pre-recorded tape and ensemble consisted of two sopranos, three tenors, string quartet, two pianos and four percussion players. According to the composer’s note in the score: “All voices and instruments, with possible exception of drums, are amplified”. Three Tales, full score, Boosey and Hawkes, Hendon Music, Hindenburg instrumentation.
politics and linguistics of the voice,\textsuperscript{174} and Brigitte Felderer’s text on speaking machines.\textsuperscript{175} Kunst’s text is about the status of the monstrous body and its political and theatrical productivity based on a division within the human, and the constant production of the norm of what human is and is not. I use this text to develop the monstrous voice concept and to show how the singing body in Three Tales is vocally manifested as a monster. Dolar’s theory helps me to locate the political dimension of the monstrous voice. Felderer’s text brings the historical examination of speaking mechanisms, and together with Connor’s elaborations of disembodied voice, I use it to examine the uneasiness produced by monstrous voices in Three Tales.

In both of their video-documentary operas - The Cave (1993) and Three Tales - Steve Reich and Beryl Korot are occupied with subjects connected with the global distribution of power, whether through religion or technology. The subject matter of this postopera is the media-technology-political events that marked the last century: the explosion of the zeppelin, Hindenburg, in New Jersey in 1937 announcing the approach of World War II (Act I Hindenburg); the atomic explosions from 1946–52 on the Bikini islands during the Cold War (Act II Bikini); and the cloning of the sheep Dolly in Scotland in 1997, which symbolizes technology entering the body and modifying life itself (Act III Dolly). These events are freighted with political connotations. Reich and Korot comment on the extreme development and usage of technology during the 20th century and criticize western contemporary society over ethical issues.

However, Three Tales itself is created with high technology reshaping the opera world, since its visuals and its music are generated by means of complex digital procedures. Asked if they see any contradiction in using sophisticated audio and video technology to question the role of technology in Three Tales and if this piece is advising us to turn away from technology, Reich responds negatively to both questions:

If you want to know, for example, about a certain kind of car or a certain kind of medical procedure, you go to someone who can tell you what is good about them and what is not so good. You don’t take advice from someone who knows nothing about them and has no experience with them. This piece needed artists who had some experience with technology so they could reflect on it and find some inner resonance. What we are doing, reflecting our own experiences and religious outlook, is presenting events of a tragic or ambiguous nature and then in Dolly letting the audience see and hear important scientists themselves in an unusual context of musical


theatre. The audience draws its own conclusions about the character and intent of these scientists and one religious figure.\textsuperscript{176}

Emphasizing his long-lasting interest in the impact of media on the social and cultural environment in which we live, Reich underlines (in the same conversation) “that double-edged sword of the gains and losses of each new technology that we incorporate into our lives is one of the subtexts to \textit{Three Tales}”.\textsuperscript{177} The subtext Reich mentions becomes particularly obvious when singing voices are transformed to sound monstrous, and that monstrosity, emphasizing losses over gains, produces an unsettling effect.

Techniques of changing and deforming the vocal sphere in \textit{Three Tales} coincide with the artists’ implicit critique of producing the monstrous, or ‘deviating’ the human as a clone, robot, or machine. Technologically modified voices indicate that “hybrid connections between nature and culture force us to rethink the borders between different regimes of representation (like science, politics and art)”\textsuperscript{178}. \textit{Three Tales} deals with intersections and interrogations of science, technology, and politics. It is a polemical case study for discussing the issue of rethinking the human that also manifests itself through body-voice relations in this postopera.

**Staging Cloning**

I will here first introduce the subjects Reich and Korot are occupied with in Act 3 \textit{Dolly}. The apparent story about Dolly the sheep, the first cloned mammal, functions as a kind of ‘overture’ to the ethical issues of cloning, and provides a perspective for considering the issue of cloning human beings. Interview fragments putting forward the views of religious experts are juxtaposed with those of leading scientists in the field of cloning and artificial intelligence. Reich and Korot’s criticism over the power-related use of technology is present, and can be read ‘between the lines’ through the construction of the montage of interview fragments and the musical and operatic context in which the materials are incorporated. I also read it through the monstrous voices featured in the piece.

In an interview, Reich comments upon the words of Adin Steinsaltz used in the libretto, referring to the fact that „Adam was too hasty“. There, he makes an analogy with contemporary civilisation being too hasty in relation to technology. Using an example from Zohar, Reich suggests that there might be different contexts which would make the same experience (technological or religious) right or wrong:

\begin{itemize}
\item Ibid.
\item Bojana Kunst, Op. Cit., p. 216.
\end{itemize}
The idea that Adam was too hasty comes from the Zohar, the central book of Jewish mysticism. The Torah makes no mention of which fruit Adam and Eve ate. The apple is never mentioned anywhere in the tradition. The Talmud suggests three possibilities; a fig, a grape or wheat. The fig has clear sexual implications, the grape leads to wine that can alter consciousness and wheat is the cornerstone of agriculture which made possible cities and eventually all our other technologies. Adam and Eve were created on the sixth day and the Zohar says they ate the fruit just two hours before sundown when the Sabbath begins. If they had waited they would have been able to bless the Sabbath with wine, then bread and then enjoy marital relations that are particularly encouraged on the Sabbath. The forbidden fruit would have been permitted when the context was right.179

With this Reich also implicitly suggests that religious norms might serve as an ethical corrective for challenges in relation to new technology.

**Dolly on the Postopera Stage**

Unprecedented for the world of opera, the last Act of *Three Tales* examines cloning and the ethical issues of using technology upon the body. Here is how Act 3 *Dolly* is described by the composer: “The third tale, Dolly, will briefly show footage, text and interview comments about the cloning of an adult sheep in Scotland in 1997. It will then deal extensively with the idea of the human body as a machine, genetic engineering, technological evolution and robotics”.180 The explorations of rethinking the human, questioning the limits and boundaries of the human body and how the body could be defined are represented. The body and the possibility to clone it, or to upgrade it become a metaphor of political power, and the use and abuse of that power is Reich’s and Korot’s critical concern.

The subdivisions of *Dolly* have the titles: Cloning, Dolly, Human Body Machine, Darwin, Interlude, Robots/Cyborgs/Immortality. Korot further explains their decision to pick up the subject: “(...) in contrast to the first two acts, 'Dolly' is looking within, to ourselves, to the impact of technology on our own physical bodies. And it symbolized the whole range of issues now brought about by technology to impact our bodies, not only by manipulating the basic blueprint of that body, but by actually bringing technology into our bodies.”181

Here is the libretto fragment explaining the process of cloning Dolly:

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Ruth Deech\textsuperscript{182} – The process is as follows
Deech – The process is as
Richard Dawkins\textsuperscript{183} – They removed the nucleus from an egg.
Dawkins – No genes in it at all
Deech – Take out, that DNA
James Watson\textsuperscript{184} – DNA is the script – DNA is script for life.
2 Sopranos: The process is as follows
Dawkins – They put in all the genes – from another cell
Deech – Which can come from the skin, the hair, anywhere you like.
Gina Kolata\textsuperscript{185} – They took a frozen, frozen udder cell. From a sheep that was dead
Dawkins – We, and all other animals, are machines created by our genes.
Dawkins: machines, machines, are machines (looped)
Kolata – f r o z e n u d d e r c e l l \textsuperscript{186}
Deech – You pop it into your enucleated egg
Deech – You then fertilize it – with a little electric shock.
Deech – It starts growing.
2 Sopranos: It starts growing
Deech – Hasn’t happened with humans, but it happened with Dolly\textsuperscript{187}

The words that the scientists utter seem to emphasize only the technical side of the cloning. We rather see them overwhelmed by the miraculous procedure of cloning than preoccupied with ethical issues regarding cloning, at least in the interview fragments that Reich and Korot present in \textit{Three Tales}. I argue that the description of the cloning procedure and the ease with which scientists talk about it reveal them as not concerned with the consequences that cloning brings to the further

\textsuperscript{182} “Ruth Deech is Chair of the U.K. Human Fertilization & Embryology Authority which oversees embryo research and assisted reproduction and advises the government on related issues such as cloning. She is a Pro-Vice-Chancellor of Oxford University, a trustee of the Rhodes Scholarship Trust and a Fellow of the Royal Society of Medicine”. Quoted according to: Steve Reich and Beryl Korot, “\textit{Three Tales, Libretto}”, \url{http://www.stevereich.com/threetales_lib.html}, Accessed: August 15, 2011.

\textsuperscript{183} “Richard Dawkins is the first Charles Simonyi Professor of Public Understanding of Science at Oxford University. His bestselling books include \textit{The Selfish Gene, The Blind Watchmaker} and \textit{River out of Eden}. He has won the 1987 Royal Society of Literature Award, the 1990 Michael Faraday Award, the 1994 Nakayama Award for Human Science and the 1997 International Cosmos Prize”. Quoted according to: Steve Reich and Beryl Korot, “\textit{Three Tales, Libretto}”, \url{http://www.stevereich.com/threetales_lib.html}, Accessed: August 15, 2011.

\textsuperscript{184} “James D. Watson along with Francis Crick and Maurice Wilkins received the Nobel Prize in Physiology or Medicine in 1962 for their work discovering the structure of DNA. He is the author of \textit{The Double Helix} and the ground breaking textbook \textit{The Molecular Biology of the Gene}. He is currently President of Cold Spring Harbor Laboratory, New York and was the first Director of the National Center for Human Genome Research”. Quoted according to: Steve Reich and Beryl Korot, “\textit{Three Tales, Libretto}”, \url{http://www.stevereich.com/threetales_lib.html}, Accessed: August 15, 2011.

\textsuperscript{185} “Gina Kolata has been writing about science for the New York Times for over a decade. She originally broke the story of Dolly in America and is the author of \textit{Clone - the road to Dolly and the path ahead}. She has a degree in microbiology and has studied molecular biology at MIT at the graduate level. She has taught writing at Princeton University”. Quoted according to: Steve Reich and Beryl Korot, “\textit{Three Tales, Libretto}”, \url{http://www.stevereich.com/threetales_lib.html}, Accessed: August 15, 2007.

\textsuperscript{186} Double spaced letters in this case designate that the words are reproduced by technique of slow motion sound that Reich developed. More about this technique in further text.

development of life on Earth. Unlike the scientists, the robot Kismet that was developed in the MIT laboratories that opens and (with synthesized voice) closes the act, remembers the origins of human life as outlined in Genesis. “And placed them in the Garden of Eden, to serve it and to keep it”, sings Kismet. All modifications and ‘monsterizations’ of human life that scientists talk about through this act, as well as the story of the Hindenburg airship catastrophe and the Bikini islands atomic tests that are the subjects of the first two acts, suggest that the ‘Garden of Eden’ Kismet sings about may not have been kept properly.

The possibility to design the genetic structure of the body, to produce the clone, is a scientific experiment with far-reaching cultural consequences. The fact that cloning allows the multiplication of chosen genetic material introduces the body and life to the age of their technological reproduction. The possibility to interfere with the reproduction processes and genetic structure is intensified with the possibility of the infinite genetic multiplication of the desired specimens. The birth of the first successfully cloned mammal – the sheep Dolly – opened a new era, “the age of biological control,” of producing genetically identical organisms. That raised questions about the ethics of man-made life, made an “intensification of the politics of reproduction,” showed “how scientific knowledge comes to be embodied,” and appeared as a “newly-viable form of genetic capital”. The structure of the inner universe of the body is questioned: “If Dolly were a sentence, we would need a new syntax to parse her, because her counterfactual existence troubles existing grammars of species, breed, property, and sex.” Through discussing the cloning of Dolly, Reich and Korot arrive at subjects involving the possibilities of intervening in the human body and cloning the human.

**Cloning Humans, Artificial Intelligence and Religion as an Ethical Corrective**

Even more unusual for the opera world than singing about cloning Dolly the sheep, Reich and Korot decided to feature some of the leading figures of science and religion as ‘protagonists’, and to expose their standpoints over the issue: “While Hindenburg uses only one 'cameo' interview from the present to comment on the past and Bikini uses none, Dolly is filled with interview fragments from members of the scientific and religious communities”. The interviewees are Richard Dawkins,

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189 Ibid., p. 131.
190 Ibid., p. 120.
191 Ibid., p. 121.
192 Ibid., p. 120.
James D. Watson, Sherry Turkle\textsuperscript{194}, Kewin Warwick\textsuperscript{195}, Rodney Brooks\textsuperscript{196}, Marvin Minsky\textsuperscript{197}, Steven Pinker, Bill Joy\textsuperscript{198}, Jaron Lanier\textsuperscript{199}, and Adin Steinsaltz among others.\textsuperscript{200}

The author's criticism of the cloning confronts the pragmatic views of scientists and the spiritual views of religious experts. Religious experts talk here about the ethical issues raised by the cloning. While Hindenburg and Bikini feature archive documentary video material reworked by Korot, alongside which singing is performed, the video of Dolly features mainly talking heads of scientists and religious experts. Conversations with them were videotaped specifically for Three Tales. Reich intervenes in their speeches, reworking their vocal expressions and making them vocalists of postopera.

The intention to underline the possibilities of intervening in the 'natural' is present both in the libretto and in the realm of monstrous voices produced by the man-machine system. There is a necessity to upgrade the 'obsolete' body, and to make it more accessible and available, mobile,

\textsuperscript{194}“Sherry Turkle is Professor of the Sociology of Science at MIT and a clinical psychologist. She is the author of Life on the Screen: Identity in the age of the Internet and The Second Self: Computers and the Human Spirit. Her current research is on the psychological impact of computational objects ranging from "affective computers" to robotic dolls and pets”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{195}“Kevin Warwick is Professor of Cybernetics at the University of Reading in the U.K. He attracted considerable attention recently when he had a small computer implant surgically put into his arm and is planning further bodily implants. He is at the forefront of those who would like to merge themselves with technology to become the first cyborgs”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{196}“Rodney Brooks is Director of the MIT Artificial Intelligence Laboratory, and is the Fujitsu Professor of Computer Science. His research is concerned with both the engineering of intelligent robots and with understanding human intelligence through building humanoid robots. He books include Cambrian Intelligence (1999) and Flesh and Machines published in 2002”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{197}“Marvin Minsky is Toshiba Professor of Media Arts and Sciences, and Professor of Electrical Engineering and Computer Science, at MIT. His research has led to both theoretical and practical advances in artificial intelligence and placed his imprint upon the entire field. He is the author of The Society of Mind. Since the early 1950s, he has worked on using computational ideas to characterize human psychological processes, as well as working to endow machines with intelligence”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{198}“Bill Joy is co-founder and Chief Scientist of Sun Microsystems. He is co-author of The Java Language Specification and principal designer of Berkeley Unix (BSD), the first ‘open source’ operating system. In 1997, President Clinton appointed him Co-Chairman of the Presidential Information Technology Advisory Committee. His article in Wired, ‘Why the Future Doesn’t Need Us’, produced a huge response and he is now at work on a book expanding this subject”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{199}“Jaron Lanier coined the term ‘Virtual Reality’. He co-developed the first glove device for virtual world interaction and the first virtual reality applications in surgical simulation. He is a visiting artist at the Interactive Telecommunications Program of the Tisch School of the Arts, at New York University, and a visiting scholar at the Columbia University Computer Science Department”. Quoted according to: Steve Reich and Beryl Korot, “Three Tales, Libretto”, http://www.stevereich.com/threetales_lib.html, Accessed: August 15, 2011.

\textsuperscript{200}Previous footnotes contain quotations of short biographies of the interviewed persons. They are at the same time evidences of how Reich and Korot perceive the interviewees. Those short biographies are in this case poetical portraits to some extent as well.
digital. The significant impact of technology on corporeality is implied by the libretto, and the following fragments illustrate it:

Ray Kurzweil: Technology is a continuation of evolution
Kurzweil: we can create things
Kurzweil: far faster than biological evolution
Kurzweil: can create something more intelligent than ourselves
Kurzweil: intelligent machines.
Kurzweil: machines, machines, intelligent, ‘telligent machines (looped)’

(...) Kurzweil: If I scan your brain, download that information, I’ll have a little you, right here in my personal computer.”

Kewin Warwick: The human body is extremely limited. I would love to upgrade myself, (...)

Marvin Minsky: You go and buy this module at the mind store, have it connected to your brain and then you do four or five part counterpoint; (...)²⁰²

Moreover, Act 3 opens and closes with the robot Kismet, who is capable of talking and performing simple gestures. The appearance of the robot at the same time denies the human body and imitates it, becoming its humanoid robot.

Figure 3 – From Three Tales, video opera by Beryl Korot and Steve Reich. Image by Beryl Korot. Act 3, Dolly, robot Kismet

²⁰² Ibid.
It is important to be aware of the religious perspective that artists present. For example, Reich and Korot always use the inscription of the word God as „G-d“ in the projected written text of the libretto. This transcription may be seen as an insistence on the holiness attached to God’s name. From the point of view of religion, the question of the power to create a human being as a clone is problematical. This power, taken from the metaphysical world of religion to the pragmatic world of science, is what concerns Reich and Korot ethically and politically. The words of the biophysicist and philosopher Henri Atlan from the libretto appear as a possible response by Reich and Korot to these issues:

Henri Atlan: The Prophet Jeremiah
Atlan: decided
Atlan: to build
Atlan: an artificial man
Atlan: he was perfect
Atlan: was able to talk
Atlan: immediately he talked to Jeremiah
Atlan: and he ask him
Atlan: „What did you do?”
Atlan: “Well, look, I have succeeded”
Atlan: Say, “No, no no, is not good.”
Atlan: “From now on
Atlan: when people will meet other people in the street
Atlan: they will not know
Atlan: whether you made them
Atlan: or G-d made them”
Atlan: “Undo – me”
Atlan: So that’s what Jeremiah did.

Reich is explicit about the power to create human life in his comments on the issues elaborated in Dolly: „What’s interesting are the potentially useful and the undoubtedly terrifying genetic possibilities floating around now. For instance: are we going to continue to sexually reproduce or are we going to go to the baby store? This seems to be on the way. Would you like to live forever?” He is obviously suspicious about developments concerning 'human machines' and genetic engeneering.

Although the sheep Dolly physically appears to be an animal similar to other animals of the same species, the knowledge about its genetic structure reveals her ‘monstrosity’. Its ‘artificiality’ arouses fear. And the main cause of that fear could be the inability to predict how the artificial might

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203 God’s name in Hebrew is supposed to be written in particular way and with particular respect. Choosing to write ‘G-d’ instead of ‘God’ in English might be seen as a way to show respect towards that tradition. Also, Hebrew script specifies the consonants, and not the vowels.
behave, and how it would be possible to control it. Writing on the human and the inhuman, Agamben underlines the potentiality of power issues that arise: “(...) it is not so much a matter of asking which of the two machines (or of the two variants of the same machine) is better or more effective – or, rather, less lethal and bloody - as it is of understanding how they work so that we might, eventually, be able to stop them.”

Reich and Korot imply that Dolly is a kind of monster but it becomes obvious that their main concern is the prospect of cloning the human.

The monstrosity of distorted voices in Three Tales underlines the subjects of the libretto of Dolly. I read the way vocal expression and body-voice relationship are treated in Three Tales as expressions of the authors' concern about, and critique of, the monstrous perspective of the scientific development of cloning-related issues. I perceive distorted voices in Three Tales as Reich's representation of how the monstrous human, the clone, might sound. In what follows I will discuss the notion of the monstrous and its restaging, according to Bojana Kunst. That notion, as defined by Kunst, allows me to develop the monstrous voice concept.

**Dissecting Voice: Hearing the Monstrous Body**

Kunst explores the “generative potential of the monstrous” that is “being subjected to contemporary economic and political power”. Monstrous is other than human, and a symptom of rethinking the human. “The monstrous becomes the ‘ever present possibility to destroy the natural order of authority’ not because it is some externalized other which has to be swept into the arms of regulating order, but because it is the constant production of otherness in the very human being, so that the human can recognize and define itself.”

The political preoccupation with the monstrous is its domestication, “evidence of which can be found in the ways in which the other (animal, slave, machine, woman, etc.) is continuously humanized to reflect back the face of ‘our’ own (white, western and male) humanity”.

The political dimension of the monstrous is intriguing: “Politically, monstrous bodies serve the purpose of demonstrating what is and is not ‘human’.” Kunst claims that “The monstrous becomes a public object because it has a special function in the sphere of politics: its role is connected to establishing the political division between the human and non-human, where domestication, civilization and culturalization of the monstrous will play a decisive role.”

Domestication, civilization and culturalization of the monstrous may also affect this division between human and monstrous. Kunst claims that “The monstrous can therefore be understood to be a
consequence of a political/ontological apparatus of separation which may disclose to us the
difference between human and non-human.”\textsuperscript{212} In relation to this, Agamben concludes that “Homo sapiens, is neither a clearly defined species nor a substance; it is, rather, a machine or device for producing the recognition of the human”.\textsuperscript{213}

According to Kunst, the human carries monstrosity as a constituent part it embodies a
division between the human and the monstrous: “The caesura inside the human turns out to be visible. The monstrous shows us that the caesura is not between the human and the outside, but is always internal and shifting: human is constitutively inhuman.”\textsuperscript{214} Kunst, however, does not mention a monstrous voice. Perhaps as a result of representations of the monstrous in popular culture – often abundant with terrifying voices and sounds – it is hard to imagine the silent monster. If the division within the human turns out to be visible, it is also, and sometimes primarily, audible. The voice produces an identity, and human identity is problematized when the monstrous voice is heard emerging from the human body. The monstrous voice contains inhuman impurity, the terrifying friction of inhuman noise. The internal caesura within the human that Kunst is writing about is manifested by the monstrous voice, too.

There are two novel procedures that are applied to the voices in Three Tales. Reich invented them during the ’sixties, but they became technically possible only recently. One of them is slow motion sound, where the succession of sound events is elongated but the pitch of the voice stays the same. “The basic idea was to take a tape loop, probably of speech, and ever so gradually slow it down to enormous length without lowering its pitch”.\textsuperscript{215} Reich explains his preoccupation with slow motion sound as a largely abstract interest in dissecting the medium of tape, in comparison to film tape: „The roots of this idea date from 1963 when I first became interested in experimental films, and began looking at film as analog to tape. Extreme slow motion seemed particularly interesting, since it allowed one to see minute details that were normally impossible to observe”.\textsuperscript{216} The other procedure is equivalent to the process of making film stills.\textsuperscript{217} Sound is ‘stopped’ and the last syllable lasts considerably longer than would be appropriate for the conventional pronunciation of the word in question. It is the sound equivalent of a film freeze frame, in that a single vowel or consonant is extended for a long time, leaving a kind of audible vapor trail behind each speaker that becomes

\begin{thebibliography}{9}
\bibitem{212} Idem.
\bibitem{216} Ibid., p. 28.
\bibitem{217} David Allenby, “A theater of Ideas, Steve Reich and Beryl Korot on Three Tales”, Three Tales CD booklet, Nonesuch 7559-79835-2, 2003.
\end{thebibliography}
part of the overall harmony. Both procedures would not be possible without the aid of technology.

These two procedures are combined on a pre-recorded tape with different ways of singing and speaking, both live and pre-recorded, and also with different appearances of written accompanying text that is featured on the video. Slow motion sound is mainly featured in the first two acts, while in Dolly, and once in Bikini, the procedure with freeze frame sound is mostly used. The procedures of 'slow motion sound' and 'freeze frame sound' could also be considered as a kind of dissection of the voice. Dissection according to Bleeker is "(...) to take apart, to analyze, and to examine how (...) 'just looking' is produced". Dissection could be taken as the general procedure Reich applies to the voices, too. The voice has been taken apart, molecularized by a 'slow motioning' or 'freezing' of its recording. We hear its 'molecules' (sound particles) slow down and the intonations change. We also hear the breathing sounds that are impossible to hear while listening to speech of normal speed.

The voice was also analyzed in terms of its connection with the intonation of the enunciated text, meticulously engraving those intonations in both the vocal and instrumental part of the music. The connection between dissection and the monstrosity of the voice lies in the technological means used. Dissecting a voice means perceiving it from a different perspective that enables its molecularization. If it had been possible to literally dissect the voice together with its respective body, I would assume the sound would be similar to the distorted voices in Three Tales.

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219 The way Reich generates the melodic materials of Three Tales is closely connected to the melody and rhythm of the text used. His groundbreaking works Come Out (1966) and It's Gonna Rain (1965) were based on the usage of phasing compositional technique to the recorded vocal units. With Different Trains (1988) for string quartet and tape, Reich developed this technique further. Fragmented melodies played by the strings were extracted from the melody of the spoken words pre-recorded on the tape that is heard simultaneously with live performance. In the video documentary opera Cave (1994), he used this procedure for the first time in a piece of musical theatre, and with Three Tales the technique was developed in complex relations between the speech, speech melody, singing, projected words and projected images.
Behind the singers on the stage of this postopera is the video projection. The singers’ role in the dramaturgy of the scenic events is marginalized since they do not represent any character in the ‘story’ - they are just emitters of the voice. Apart from the live singing of three tenors and two sopranos, there are vocal manifestations that are close to singing in their expressivity, but are derived from speech, and intensified with various effects. Those voices are able to perform beyond the possibilities of the body they originate from. The collision of live singing and the technologically manipulated voice, in this case, creates a result that reflects the division within the human discussed by Kunst.

Commenting upon the museums which contained mechanisms of optical distortion common during the Baroque period, Kunst concludes about their purpose: “They were mechanisms for recognition: only when the spectator can see himself as (for example) an animal, can he really define

\[222\] I have registered eleven different ways of how voices appear in *Three Tales*: 1) Voices of three tenors singing a capella, without instrumental accompaniment or pre-recorded sound, without any technological interventions to the voices; 2) Voices of three tenors singing live with the pre-recorded sound of instrumental accompaniment; 3) Voices singing the text with an instrumental accompaniment, with the text projected on the screen as in karaoke; 4) Instrumental melody extracted from the sound of a spoken text, the words of which are projected simultaneously on the screen as in karaoke, following the rhythm of the speech of the text; 5) Voice speaking, projected from an archive recording, with no accompaniment or other interventions (American soldier in Bikini); 6) Artificial voice singing without an accompaniment (robot Kismet, Act 3); 7) Voices of scientists speaking over instrumental music, without interventions to the voices (Act 3); 8) Voices of scientists over an instrumental accompaniment, with interventions to the voices (repetitions, freeze frame sound, slow motion sound); 9) Voices of scientists over instrumental drones, with subtitles of the text projected on screen (Henri Atlan appearance in Act 3); 10) Voices speaking over the instrumental accompaniment and vocal accompaniment (Dawkins, towards the end of Act 3); 11) Voice speaking over another voice speaking (both with repetitive interventions) over an instrumental accompaniment (with Cynthia Breazeal and Marvin Minsky, towards the end of Act 3).
what he is". Three Tales appears as a kind of 'museum' that contains mechanisms for vocal distortion. Although the listener/spectator cannot hear him/herself there, as the spectator was able to see/hear him/herself in the case of visual distortion that Kunst describes, s/he hears how distorted the human voice sounds. Those distorted voices evoke monstrous bodies as their generators. Thus, Three Tales is a symbolic machine displaying what is and is not human and maybe also what human should not be.

**Singing Machine**

While looking into the relationship between body and voice as one that restages the monstrous, I was intrigued by the possibility of illuminating Reich's intention to 'monsterize' the voice in Three Tales with insights about speaking machines by Brigitte Felderer. I am interested in the similarity between the effects of the voice that does not come (or only partly comes) from the human body in those two cases.

Since the late 18th century there were several attempts to construct speaking machines, automatons, that would be able to imitate human speech. Felderer offers an overview of the work of those authors who achieved significant results in the field. Mathematician Leonhard Euler (1707-1783) in his 1761 letter to a German princess contemplates the possibilities of constructing a speaking mechanism. Mathematician Christian Gottlieb Kratzenstein (1723-1795) was a physicist and anatomist who won the prize with equipment able to produce and differentiate vowel sounds. The apparatus included "(...) separate and distinctly shaped pipe for each vowel: the form of these pipes was modelled on the respective position and cross-section of the oral cavity as it produced the individual sounds."224 The position of the pipes somewhat imitated the structure of vocal apparatus. Another scientist researching in the field was Christoph Friedrich Hellwag (1754-1835), the physician, theologian and naturalist who "was working on a model to explain the mechanism of human speech."225

The best known was Wolfgang von Kempelen's (1734-1804) speaking machine, whose construction began in 1769. As a finalized product, this mechanism resembled some kind of musical instrument that produced the desired sounds according to movements of the instrumentalists' fingers: "This machine should perhaps be thought of as musical rather than a mechanical device, since it relied upon the skilled application of the hands and fingers of its operator to produce the rather rudimentary sounds it did".226 Along with the machine, Kempelen also wrote a treatise

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225 Ibid., p. 160.
226 Steven Connor, *Dumbstruck*, p. 351.
addressed to the general public which might generate interest in producing a human voice that does not originate from the human body.

Interestingly, the purposes of all the above-mentioned machines and mechanisms were quite different:

Euler imagined that his future speaking machine would be used within the political public sphere. Kratzenstein’s vowel machine provided a first step toward an explanatory model of the functioning of the human organs of speech. For Hellwag, such an apparatus represented an imput-output construction which would have allowed the production of the sounds of speech (if these had been translated into precise operating instructions) anywhere and at any time – independent from the body of a native speaker. (...) Kempelen, however, wanted to use his speaking machine to teach the deaf to speak and to assist those with difficulties in pronounciation (...).²²⁷

Two aspects of the use of speaking machines are particularly interesting: 1) the political aspect and 2) the uneasiness that is caused by the gap existing between the human-like voice and mechanical device. I can see a similarity between the effect those machines produced and the effect that electronically transformed singing voices in *Three Tales* produce.

I am intrigued by the particular reactions to mechanical voices:

You will not believe, my dear friend, the peculiar sensation that overcame us upon our first hearing a human voice and human language which did not appear to come from a human mouth. We looked at each other mutely, in shock, and confessed to each other afterwards that at first a shiver had run down our spines.²²⁸

I am interested in what produces that shiver. Reich describes a similar effect when he talks about the deformation of the vocal sphere in *Three Tales*. When he describes Act 1 – *Hindenburg*, he explains the structure where three tenors sing live in an augmentation canon on the words „It could not have been a technical matter“, the words of the German ambassador to the *New York Times* when the Zeppelin exploded. Reich is particularly interested in the aspect of vowel sounds when they are slowed down, as he discovered that they actually are glissandi, sliding up or down. In 'normal' speech, that glissando is not detectable. The voice of Herb Morrison, radio announcer, joins the three tenors, and is gradually slowed down. Reich makes an interesting comment in the context of the monstrosity of the voice, explaining the aforementioned shivering: „(...) Morrison’s manic voice is enormously slowed down, you hear these glissandi, in the vowels sort of smearing against the

tonally stable voices of the tenors. The effect, when coupled with images of the explosion in slow motion, is definitely unsettling." 229

That unsettling effect needs an explanation. And the explanation, I believe, is what, according to Connor, makes the „temptation to attribute personality to it [the voice] irresistible“. 230 When the voice appears as monstrous, the representation of the monstrous body it evokes produces an unsettling effect. Connor also mentions in relation to automatic speaking mechanisms that „none of these talking machines had made much attempt to look like talking heads“. 231 On the other hand, as Connor also writes in connection with the case of one of the speaking mechanism’s experiments „What is disturbing, perhaps, is the very obviousness of the mechanism, in which appearance is heightened into apparition. (...) The voice that is squeezed out through the dead materials of the mechanism becomes the voice of the mechanism’s protest against animation, the voice of its resistance to voice“. 232

The freeze framed and slow motioned voices of Three Tales sound unsettling and monstrous, yet at the same time they are the voices of Reich’s protest against monsterization. There is no apparent political dimension in what those voices say or sing about. But there is the politicality of Three Tales and the voices in it. 233 I am interested in the monstrous voices of Three Tales as an aspect that ‘speaks’ about this piece’s orientation, positioning and effect in the public sphere of society. In that light, I perceive monstrous voices in Three Tales as a critique of monsterization whether that monsterization is read from cloning, fascism (Hindenburg) or violent atomic tests (Bikini). In order to see what the further strategies and tactics of monstrous voices are I will discuss Three Tales in the light of the concept of the politics of the voice by Mladen Dolar.

230 Steven Connor, Dumbstruck, p. 351.
231 Ibid.
232 Steven Connor, Dumbstruck, p. 355.
233 Evoking concepts of philosopher Jacques Rancière, theatre scholar Ana Vujanović discusses the difference between politicality and politics of the art work. According to Vujanović, politicality is the aspect of artistic work, discourse, art work or project that refers to its orientation, positioning and effect in the public sphere of the society. It addresses society’s structure, distribution of power, ideological discourses, subjects that constitute it, or are excluded from it. Vujanović claims that politicality is inevitable aspect of any art work that exists in public sphere of society; she designates as political art specific artistic activity that brings interests for political questions. Ana Vujanović, “Politicality of Art: Police and Politics, Strategies and Tactics”, Deschooled Knowledge – Summer school, lecture manuscript, Herceg Novi, 09.08.2010.
Politics of the Monstrous Voice

The political dimension of Three Tales is divided between the political activism of its narratives (the sphere of political art) and the effects produced by sung voices, written texts and documentary images (the sphere of politicality). The fact that political issues emphasizing sovereign power like the Hindenburg and the Bikini atomic tests are brought to the opera stage initiates a discussion of how those events are represented in opera, and in particular how they are sung about.

Mladen Dolar starts the discussion on the politics of the voice with the claim that “(...) the very institution of the political depends on a certain division of the voice, a division within the voice, its partition.”234 He finds the political force of the voice in its division between meaning and sounding. The division Dolar mentions is between phone and logos: the mere voice and speech as intelligible voice. The dichotomy between phone and logos Dolar brings into connection with the biopolitical “opposition between two forms of life: zoe and bios” explaining that “Zoe is naked life, bare life, life reduced to animality; bios is life in the community, in the polis, political life.”235 In connection with the relation between the voice and speech, Dolar elaborates, recalling Agamben, that there is no such simple externality: the basic structure, the topology of the political, for Agamben, is that of an “inclusive exclusion” of naked life “(...) just as the voice is not simply an element external to speech, but persists at its core, making it possible and constantly haunting it by the impossibility of symbolizing it.”236

Whether elaborating issues of the linguistics or the politics of the voice, Dolar discusses the dualistic principle upon which the voice is built. Evoking an anecdote about Italian soldiers who, on hearing an order, disobey it, neglecting to hear its meaning because they are fascinated by the beauty of the voice, Dolar emphasizes two main functions of the voice: “the voice as the vehicle of meaning and the voice as the source of aesthetic admiration”237, and theorizes about the third one, ‘the object voice’. He states that the voice stands on the axis of our social bonds; he investigates the progression from voice to meaning.238 In opera in general, I argue, the division between the two main functions of the voice, as Dolar sees them, becomes evident, since the act of singing enlarges the gap between the meaning of the sung text and the melody assigned to that text. The meaning of the text often becomes incomprehensible due to the high pitches. Even when the comprehensibility

235 Ibid., p. 106.
236 Idem.
237 Ibid., p. 4.
238 Ibid., p. 16.
of the words is preserved, however, asking the written/spoken text to be sung is to maintain the gap between the meaning of the text and the corporeality of the sound that stands behind it.

In both of those previously mentioned functions of the voice (vehicle of meaning, and source of aesthetic admiration), Dolar sees a lack of understanding of the voice: if there is only interest in the meaning of the words the voice conveys, then the physical dimension of the voice is ignored. On the other hand, the aesthetization of the voice turns it into something of a fetish. Thus, Dolar focuses on the object voice. He defines it by showing what it is not: “(...) there is no meaning that could be assigned to it (...), it does not have the function of a signifier, since it presents precisely a nonsignifying reminder, something resisting the signifying operations (...) this remnant has nothing to do with some irreducible individuality of the voice, the personal surplus over the standard mold. (...) Nor is it reducible to what Barthes has called ‘the grain of the voice’ (...).” 239 Dolar finds the embodiment of the concept of the object voice in aphonia, a hysterical symptom that shows one loosing control over the voice, producing enforced silence “(...) the silence that, all the more, makes the object voice appear, maybe in its pure form (...).” 240 The object voice, as I understand it from Dolar’s writings, is corporeality structured into the language.

Back to Dolar’s claim that the very institution of the political depends on a certain division of the voice, a division or partition within the voice, I note that the way voices appear in Three Tales favours a triple division:

- between ‘natural’ and ‘artificial’ voices (freeze framed and slow motioned voices);
- between live-performed and projected voices;
- between the meaning of the text the voice carries and the sounding of the voice (voices we hear singing the text that is often doubled by the written texts on the screen);

Three Tales appears as an archive of different relations between the body, the voice, singing, speaking, writing and also the visuality of the text. When speech is used, it is often enhanced by instrumental support, melodizing its words in the rhythm of speech. In light of Dolar’s theory, I will now discuss the division between the meaning of the voice and the sounding of the voice in Three Tales, emphasized by doubling the singing with a written text on the screen that is projected following the rhythm of music, rather as in karaoke.

What follows is the excerpt from the libretto at the beginning of Act 1, Hindenburg. The words from the libretto text are ‘drummed out’, typed rhythmically on the screen while drums accompany them in the rhythm of the words’ pronunciation.

240 Ibid., p. 15.

3 tenors: It could not have been a technical matter

Headline: Dr. Hans Luther, the German Ambassador, said the disaster must not cause the world to loose faith in dirigibles and that it could not have been a technical matter.241

When the three tenors part starts, the words they sing are also typed on the screen in the rhythm of singing. There is a doubling of the spoken/sung text by the written text being placed on the screen. This distinctive procedure is used throughout Three Tales. The doubling is often ‘drummed out’ in the rhythm of the text’s pronunciation as in karaoke, but sometimes it also appears as a static text or text collage on the screen. This doubling of the sung text with its written inscription emphasizes the division between the phonetic and the semantic. By writing out the text, its meaning appears more distant from how the text sounds than would be the case if it were only sung. The meaning of the text is emphasized by its written form, while the sung text insists on its phonetic dimension. While I hear the voice, I read the text to catch up with the meaning.

Dolar writes that: "(…) the voice appears as the link which ties the signifier to the body"242 and that “the first obvious quality of the voice is that it fades away the moment it is produced” which makes the body both its birth and death place at the same time.243 If this is true, then 'karaoking' the text to the sung voice could be interpreted as an attempt to emphasize the meaning of the sung text, but also to prolong, to intensify the duration of the ‘life of the voice’. Having in mind that the sound of the voice is constantly problematized by pre-recorded interventions, the written text appears to recall what is undone by freeze-frame and slow motion sound procedures. The voice appears between its fetish and semantic functions that are both problematized: the voice sounds monstrous, and the meaning of the text does not need to be inferred from the voice, since most often it can be simultaneously read from the screen. The technologically enhanced singing body is heard through this fissure between sound of the voice and the meaning of the text it carries, and the effect the deformed voice brings is unsettling.

I perceive the monstrosity of the voices performed through procedures of slow motion sound and freeze frame sound in this postopera as a critique of the monstrosity that authors find in

243 Ibid.
taking the power to create life from God and giving it to science. The unsettling effect those distorted voices of postopera produce is similar to the effect that some of the speaking mechanisms produced before, such as Connor and Felderer wrote about. To hear a voice that is not produced by the human body is a situation that provokes questions. Through monsterization of the voices the intelligibility of the words is corrupted. The monstrous voice produces a shivering effect, and that effect appears as a critique of monstrosity. The meaning of the distorted text could be easily followed from the projected text on the screen. The division between the sounding of this text and its meaning is emphasized, and the politicality of the voice, its ability to intervene into the public sphere, is performed.

By commenting on the political distribution of power, Reich and Korot question if it is at all possible in today’s world for the artist to act as a political individual, and if so, what should the strategies and effects of that activism be. The video-documentary opera *Three Tales* raises questions about political activism in opera. They make their operatic work a field for expressing their acts as political individuals. What is expressed by the text of the libretto is the resistance to the governing platforms of political power and the disagreement of the artists with some conditions, effects and strategies of Western civilization. If Reich and Korot’s comments about the political distribution of power were sung by traditional operatic voices, the effect would have been much different, and not adversely critical, I dare to suggest. Using the monstrous singing voice is what gives their critique its sharp edge. If, according to Steinsaltz’s words used in the libretto, every creature does indeed have a song, or a voice to sing with, Reich and Korot warn us how terrible the voice of artificial humanity may sound. Vocally performing the horror of artificial life, hearing it through non-human, deformed human voice, is what makes their critique poignant, memorable, and effective in influencing the public sphere and the distribution of power within it.

As I showed in Part 1, in both *One* and *Three Tales* the vocalic body has been reinvented. In both of them the voices appear beyond the body that produces them, and the singing reveals the body that has been upgraded by technology. In *One* the effect of such a reinvented mismatch is at the same time an enhancement of performing abilities and a denial of the performer’s uniqueness. *One* demonstrates a fascination with prosthetic relations and with the ways they improve the performativity of the human body and the voice in their mutual relationship. In *Three Tales*, however, the fascination is negative, and the way the body-voice relationship is reinvented I read as an artist’s warning that humanity in incapable of adequately responding to the power challenges that technology brings. A monstrous voice enables this postopera to function as a critique of monstrosity, which the authors see in power-related usage of technology, especially in cloning and genetic engineering.