



Choral, Public and Private Listener Responses to Hildegard Westerkamp's *École Polytechnique*

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ABSTRACT

Hildegard Westerkamp's (1990) composition *École Polytechnique* is an artistic response to one of Canada's most profoundly disturbing mass murders, the 1989 slaying of fourteen women in Montreal, Quebec. Using the theoretical model, derived from Haraway, of the cyborg body, and analyzing the import of the mixed media (voices, instruments and electroacoustic tape) incorporated in the music, the authors examine the impact this work has had on some of those who have heard it and performed it, based on the responses of choristers and listeners in several studies. The authors explored how those who engaged significantly with the music, (including those who had no personal association with the actual events of the 1989 massacre), were able to make relevant connections between their own experience and the composition itself, embrace these connections and their disturbing resonances, and thereby experience meaningful emotional growth.

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INTRODUCTION

On December 6, 1989 fourteen women were shot to death at École Polytechnique, University of Montréal. The killer then turned the gun on himself. This massacre brought public attention to the issue of violence against women within Canadian society. The 21-year-old gunman, Marc Lepine, left a note about his motivation for the killing spree, indicating it was retaliation for what he perceived as injustice because of female advancement. Lepine was denied entrance to École Polytechnique, based on low achievement, but he attributed his inability to gain entrance to this post secondary institution to the fact that the admission of women left fewer spots for men. Moreover, survivor accounts paint a horrifying picture of deliberate selection: Lepine entered one common area and several classrooms, separating the female students from the male, and then shooting them. The date of the event was made a national day of remembrance, and many artworks have been made that refer to this mass shooting.

Plays such as Adam Kelly's *The Anorak* (2006), and popular songs such as "Montreal" by the Tragically Hip and "Montreal Massacre" by Macabre, make reference to this event. Hildegard Westerkamp's electroacoustic and choral composition, *École Polytechnique*, is another artistic response to December 6, 1989. Such works continue to emerge: in 2009, the film *Polytechnique* was released in Quebec, amid controversial audience response, including a thoughtful letter to a Montreal newspaper by Eve Langevin, one of the choristers who sang Westerkamp's piece in its premiere performance. It is challenging to attempt an artistic response to something so socially and politically shocking. Westerkamp's piece attempts to encounter the tragedy head-on, challenging performers and listeners to come closer to the pain, grief, and complexity of December 6, 1989; it does not shy away from the reality of what happened, attempt to aestheticize it or to deny the horror associated with it. Yet, at the same time, it is a response that aims to lead choristers and listeners to hope and renewal.

Westerkamp, a Vancouver-based composer renowned for soundscapes, scored this commemorative work for bass clarinet, trumpet, piccolo trumpet, percussion, the church bells of the Église St.-Jacques at the University of Québec, mixed choir and tape. Commissioned by New Music America in 1990 in Montreal, where it was also given its premiere, *École Polytechnique* was a means through which the composer could "talk back" to this atrocity, "to make room to remember it, to feel what needs to be felt, to breathe, to heal, to hope, to transform energies, and to understand the work that is ahead of us" (Westerkamp, 1990, p. 2).

What follows is an analysis of responses to this artwork, based on critical response in the press, a reception study (of *École Polytechnique* and related works by the same composer) among Toronto high school music students in 1998, and the verbal accounts of choristers in the University of Guelph Choir who rehearsed and performed *École Polytechnique* in the fall of 2006, as well as some comments from previous performances of the piece. The performance that is the focus of interest

here, on December 2, 2006, in Guelph, Ontario, was conducted by Dr. Marta McCarthy, who also interviewed the choristers after the event – names of those interviewed have been changed - and who provided an additional insider perspective on the experience of preparing this piece for performance.

ANALYSIS

While the piece is continuous, it is conceptualized in five sections. The dynamics of each section will be discussed below.

1. LIFE
2. VIOLENCE and DEATH
3. AFTERMATH
4. MOURNING and the UNDERWORLD
5. HEALING and NEW LIFE.

PART ONE – LIFE – 00:00 – 5:59

The tape part begins with audible breaths, adapted from the tape of another of Westerkamp's works, *Breathing Room*. Unlike *Breathing Room*, however, *École Polytechnique* features a mechanical heartbeat heard from the very beginning that acts as an anchor throughout most of the piece (in *Breathing Room* this sound does not commence until 45 seconds into the piece). This mechanical sound has a number of different functions. In one way, it complicates the organic sounds. Since it is clearly mechanical, and is interacting with the organic breathing sounds, it creates the impression of a body that is only partly organic and partly technological, a concept that Donna Haraway (1991) denotes as a cyborg body or organized body. In this case, it can be thought of as a sonic cyborg body (McCartney 2000) as it manifests through the soundtrack. This mechanical sound is so constant and foregrounded that when it is removed during the Death section, its absence is striking. Like a held note in a film soundtrack, its very regularity adds to the feeling of suspense. The juxtaposition of organic sounds of nature with the sound of a clearly electronic, constructed source that artificially represents a bodily sound, creates a situation of irony, as Haraway uses the term in her analysis of the cyborg concept. This idea of the sonic cyborg body is more fully explored in an article on *Breathing Room* (McCartney, 2000). This is not a new-age, comfortable application of soundscape recordings to calm the listener. Rather, in the analysis of *Breathing Room* it became clear that the juxtaposition of breathing sounds and sounds of nature, with a persistent electronic drone, creates feelings of anxiety in listeners who wrote of natural scenes overwhelmed by artificial incursions, but also of human survival in the face of danger. This uncanniness of electroacoustic representation of the everyday is perhaps the reason that film-maker Gus van Sant used other soundscape work by Westerkamp in the soundtrack of his film *Elephant* (2003), which is built around the story of the Columbine school massacre in the U.S. The uncanniness of everyday sounds used out of context gives a sense of mysterious lurking power and brings to

mind the fear of unexpected violence that can emerge suddenly and unexpectedly out of everyday situations.

The tolling of church bells, beginning at 0:04 and returning at various critical intersections of the piece, is another ironic juxtaposition within the soundscape. Listeners at the Feminist Theory and Music Conference in Montreal (8 June 2007) heard portions of *École Polytechnique* as part of a lecture (“The performance journey to *École Polytechnique*”) given by McCarthy, and registered strong reactions to hearing the tolling of church bells. For much of this audience, the bells were a powerful symbol of religious institutions that have participated in the disempowerment and alienation of women.

For the composer, however, the connection between the bells and the Church was not troubling.

Large bells like that are powerful, musical sounds in the soundscape, creating a mood, a tone in the landscape where they occur. I grew up with such sounds and love them. Yes, they are an expression of religious institutions, which can be disturbing to many, but never has been for me. Thanks to the religion, which I have hardly practised in my life, we have incredible architecture with astounding acoustics in many cases, plus these powerful sounds. In any case, the scale of the *École Polytechnique* massacre warranted such powerful sounds in my opinion. (Westerkamp, email, 16 July 2007)

Not involved in the composer's decision to include bells, but perhaps still significant is the fact that during the World Wars, church bells were routinely melted down to manufacture armaments in Europe, a specific connection between bells and violence (Freeman, 2008). While church bells evoke a variety of symbolic associations, the pitch of the bells is intentionally disquieting. A conductor may choose to incorporate bells from their own performance venue, or to use a recording of the bells for which the piece was originally commissioned at L'Église St.-Jacques, University of Québec. If the former is chosen, the bells should be tuned similarly to those of L'Église St.-Jacques – that is, A435Hz rather than A440Hz. The tonal frictions and musical tensions that result, because the other instruments are tuned to A440, are deliberate, reflecting the complexity of a reality in which conflicting emotions and experiences must co-exist (Westerkamp, 1990, p. 2).

The first six minutes of the piece are, for the choir, “very much about sound making, and very much about breathing and creating long tones carried by the breath. The choir creates a texture, a mood” (Westerkamp, email, 20 November 2006). The choir is directed to breathe in unison with the tape, starting with two audible breaths. One long uninterrupted chord, with staggered breathing, emerges from a dyad of B-flat and F; pitches are added gradually, developing into a multi-note cluster, creating a drone that undulates in amplitude, with a crescendo as each breath on the tape recedes, and a decrescendo as a new breath is heard. “The first six minutes really are one long sonic meditation moving from the first chord to total dissonance (from a peaceful to a disturbing sound)” (Westerkamp, email, 20 November 2006). The instrumentalists are asked to perform similar amplitude changes, so that the breathing

on tape is always audible. Westerkamp encourages choir members to explore their own breathing rhythms, since unison is not a goal. The vocal cluster is accompanied by increasingly ominous sounds on the tape, leading to the first gunshot (recordings of an actual semi-automatic rifle), as a herald of the tragedy of December 6, 1989.

PART TWO – DEATH – 6:00 – 8:22

The heartbeat ceases. We are transported to the panic and horror of the scene by the sound of sirens and the actual recordings, overlapped in an overwhelmingly chaotic mirage, of live media reports. The choir members, each holding two small rocks collected from their region, strike the rocks together in tandem with the explosions on tape. The effect is all the more powerful for being high in frequency yet surprisingly low in volume; the impact of the gunshots is felt as much as heard. Because the choir is, in effect, amplifying the gunshots, thereby brought closer to the violence of the moment, the choir seems to represent the complicity of society – a society that tolerates and nurtures certain forms of violence. There are a total of fourteen gunshots, one for each woman, each followed by a scream from the choir. The Death section concludes with one final shot (the one that symbolizes Marc Lepine's suicide), followed by the gong and a deep chord sung by the men, (an open fifth which has medieval associations), a scene of total emptiness.

PART THREE – AFTERMATH – 8:23 – 12:59

The third section, Aftermath, resonates with real-life experience in that it emerges gradually and almost imperceptibly from the ashes of the horror. From the previous section, the overlapping voices of eager reporters continue, as does the “irregular, urgent breathing through instrument” (Westerkamp, 1990, p. 12) in the piccolo trumpet. The tam tam is struck in the same accented manner, though more softly. The sounds of the media reports gradually fade, and a siren is heard, amidst piercingly high, harshly attacked notes from the bass clarinet. The percussionist begins a series of sforzando long tones; the first of these tones creates a sense of ceremony, ushering in the choir. In unison, the choir members repeatedly intone the names of the fourteen female victims, first in prayer, and then in urgent invocation. This recitation of names serves to awaken in the performers and the listeners a realization of the victims’ individual personhood; at the same time, the repetition of the names, combined with a very gradual crescendo, reinforces the enormity of the event as a mass killing. As the choir voices become louder and more insistent, the church bells are layered in a seven-note cluster, and the wind instruments punctuate the texture with ethereal effects, such as subtle glissandi and siren-like screeches in the extreme high range. The bird sounds return in the tape. After reaching an emphatic fortissimo, the choir voices gradually recede, continuing to speak the names in an urgent whisper. Accompanying this whispering is the waterphone, playing low frequency notes with a bass bow. A modal melody emerges from the trumpet; as a variant of the melody heard only thirty seconds before the first gunshot, this tune is now inseparable from the memories of the event. Its charmingly folk-like character suggests innocence, perhaps the innocence that is presumed to preclude sudden violence. When heard again with a broader interval between the first two notes

(significantly, the interval is the inversion of its first appearance), the melody seems to tear apart the choir: the unison chanting evolves into individual utterances of “sob-like, distressed breathing” (Westerkamp, 1990, p. 17). The Aftermath section ends with quiet reflection: the instruments playing gentle long tones and the choir breathing audibly but calmly.

PART FOUR – MOURNING – 13:00 – 16:10

A period of Mourning follows. Beginning at 13:00, the choir begins to breathe in unison with the tape, with an emphasis on the exhalation. After the first breath, the choir is directed to produce a whispering or humming sound with the exhalation, which seems to expel anger, horror, and fear, and to allow people to inhale new life and hope. The choir is also asked to rattle their rocks and to blow like a gentle wind. In discussion during rehearsal, choir members at the University of Guelph decided that the rocks might symbolize the grave, but also the stirring of spirits, rising to new life. One member wrote that the rocks could also represent the heart breaking over the loss, while the wind “beautifully represents the release of the women’s spirits and their peaceful rise to God” (Adsett, email, 3 November 2006). A similar interpretation – of singing that was sent to the skies for healing of the victims – was expressed about the original performance by chorister Eve Langevin in her letter to Le Devoir (2009).

PART FIVE – HEALING AND NEW LIFE – 16:11 – 20:00

Parallels between the final section – Healing and New Life – and the opening section – Life – create a form of palindrome. The tape part from 16:00 until the end of the piece is similar to Breathing Room, with environmental sounds accompanying each breath, and the mechanical heartbeat beginning again at 16:25. From 16:10, the choir is directed to sing one chord, with staggered breathing, as at the beginning of the piece. However, this time, the singers move from a multi-tone cluster to a single pitch (B-flat, played first by the trumpet). They then expand to a four-note chord and finally end on just two pitches, B-flat and A. Significantly, this forms an approximate retrograde of the opening Life section. This conclusion is hopeful, yet the dissonance in the final chord – the A in the choir creates a semitone with other singers and a tritone with one of the organ pitches – reminds the listener that peace and non-violence are very fragile. Participating in the rehearsals and performance of such a piece challenges the performers to their core: they must remain open and vulnerable enough to be totally engaged in the process yet must also channel their emotional response towards an accurate, convincing, and meaningful performance. This is particularly true for the choir members, who are, in the composer’s words, “the expressive, emotional voice” of the work (Westerkamp, email, 17 December 2006).

TENSIONS AND CONTRADICTIONS OF LIFE-FORCE AND CORPOREALITY

École Polytechnique presents several significant elements of tension and contradiction, which serve to convey to performers and listeners the complexity of the issues confronted by the musical work. Probably the most apparent of these tensions exists between the recorded tape and the live sounds. While the use of technology can be a de-personalizing factor – rendering live performers superfluous and giving the composer total control – Westerkamp's own bodily presence in the soundscape recording through the recording of her own breathing, and her faithfulness to the sounds of the environment she records reclaim the human, the organic and the corporeal.

In this way, there is a deeply personal corporeal presence embedded within a technological context, reflecting an ironic stance that McCartney (2000) has referred to as the creation of a sonic cyborg body. This is a body that breathes in nature, while being propelled by an electronic heart, in which artificial and organic parts survive uneasily together.

A wide range of listener responses to the breathing sounds used in École Polytechnique, and a related tape work, *Breathing Room*, have been reported. *Breathing Room* was made at the same time as École Polytechnique, and the tape part of the latter piece is very similar to *Breathing Room* in structure and materials. *Breathing Room* is structured around the breath. Various natural soundscape sources filter through the breath, which is accompanied by an electronic drone following the rhythm of a fast heartbeat. McCartney attributes her “vaguely anxious” feelings in an initial response to *Breathing Room* to the fact that the sound of breath is a constant reminder of our mortality, and our physicality, and that this physicality is complicated by the addition of an electronic heartbeat, creating a sense of a body that is partly organic and partly technological, an uneasy cyborg. The feeling of threat or stress was identified with the breathing, even though Westerkamp recorded relaxed breathing. Several singers in McCarthy's choir, (having been absent at the first rehearsal of École Polytechnique), were terrified by the breath, which they interpreted as that of the killer stalking the victims. This response of threat resonates with that of some respondents in McCartney's study of *Breathing Room*, who also interpreted the breathing as an indicator of stress or threat. McCartney noted that often media representations of breathing are found in stressed or dangerous situations, like threatening phone calls or signs of danger in horror film soundtracks. In contrast, Westerkamp's amplification of relaxed breathing attempts to establish intimacy between composer, performers and listeners. Nevertheless, the media representations of breathing continue to have a strong effect, particularly within the context of École Polytechnique. Choir director Marta McCarthy experienced embarrassment upon first hearing the breathing, later recognizing that the breathing brought out powerful resonances of discomfort with her own corporeality. Indeed, she experienced the intimacy that Westerkamp intended, but found that it rendered her extremely vulnerable. In addition – and perhaps another example of influence from the media –

the audible breathing, and the unexpected experience of intimacy it created, reminded her of the "heavy breathing" she associated with sexual encounters. This deep and instinctive shame associated with her female-ness, residing in the body, was all the more potent because of her role as conductor of the third performance of *École Polytechnique*.

Another aspect of corporeality found in *École Polytechnique* is the repetition of the names of the women who died in the massacre. The choir members are asked to take these names into their bodies and their memories, reciting them like an invocation. This corporealisation of the names was an important part of the experience of many choir members, as we note later in the section on choral responses to the work.

CHORAL RESPONSES: CHALLENGES AND WAYS OF COPING

École Polytechnique was presented at the University of Guelph (in 2006, the third performance of the piece), as part of a programme entitled *Singing Peace*. *École Polytechnique* was performed right before intermission, so that it would be the central focus, and was preceded by Whitney Berry's four-minute dedication to the Women of the Montreal massacre, entitled *Prayer*. The modal harmonies and sorrowful chant-like melody of *Prayer* helped to set the tone for *École Polytechnique*, and the inference of its text, bookended by the Kyrie eleison from the Roman Mass, was absolutely clear: "Our mothers, who art in heaven; our daughters who are in pain, our sisters, now only a memory, shadowed by his name."

For the audience, this preparation of the central artwork, combined with a lengthy (written and oral) explanation from the conductor, seemed to provide a context in which they could listen and absorb the impact of the work. (Their respectful silence at the end, combined with numerous verbal reactions gives us cause to believe this). A choir rehearsing this work repeatedly, however, must experience the work much more intimately. They must process it at a deeper level and they must identify with the victims on a visceral level, to the point of recreating some of the sounds that would have resonated from the scene on the day of the massacre.

Kathy Kennedy's *Choeur Maha* performed *École Polytechnique* in 1994, in Montréal. She comments on her choir's reaction to the piece:

My choir [...] are continually in crisis about it, and every rehearsal is a group discussion. Last night at rehearsal people's reactions were just SO strong to this piece. Unlikely members being really emotional ... me too, I guess... as a group we've torn it apart from every motivational, musical, social, political, logistical aspect. (Kennedy, email, 2 December 1994)

Though far in both time and location from the original setting, the University of Guelph Choir members had a similar reaction. Said one of the singers, Emily,

Even rehearsals were an emotionally draining experience. I was finding I'd come home from rehearsing a bit of that piece and need to talk about it with someone and debrief before being able to do anything else. As a choir we spent a lot of time outside rehearsals talking about the piece and our emotional reactions to it. Although

the performance was very powerful and I received plenty of positive feedback from audience members after the concert, I think our own discussions around our feelings about the piece made a larger impact on us as performers. In the end, I was glad we were able to do this, and I think the experience brought us closer together as a choir. (Emily, email, 6 July 2007)

It seems that, by allowing oneself to be immersed in the emotional import of the work, and by experiencing and processing these (often unwelcome) feelings as an ensemble, in the disciplined process of rehearsal, the singers were bound to create connections with other areas of their lives.

Beyond the musical and vocal challenges of *École Polytechnique* – some choristers had never seen a graphic score – the piece was destined to broaden the choir's and audience members' perceptions about music and about the relationship between music and conflict. For the University of Guelph choir, the screams were one of the most challenging aspects of the entire piece. This singer's words are representative:

Far and away, the thing that unsettled me the most was the screams. A scream is a real, personal, visceral reaction to shock, pain, terror, etc. The scored screams created a conflict for me. On the one hand, I felt that if I were going to scream, I had to let go and scream "for real" - no embarrassed or half-hearted attempts, no faking. I felt as though, if I were going to get this close to an event in which fifteen people lost their lives, I had better do what I was doing authentically. The other side of the coin was this: I had no personal frame of reference for a real and immediate fear for my own life. I had no personal frame of reference for watching someone lose her or his life in front of me. But, in order to do justice to the event, I felt like I needed to scream as though I was in the middle of that experience. (Yvette, email, 6 October 2007)

In anticipation of this dilemma, the conductor asked choir members to suggest words that represent the range of emotion that would have been experienced, and to access particular responses for each scream. The resulting list included: shock, disbelief, anxiety, terror, horror, fear, starting to panic, sheer horror, panic as a response to other screams, reality dawning, anger, frustration and desperation, horror-outrage, and finally, Armageddon (a slightly longer scream, using one's full range). The list was distributed with the following note:

Please add to the list as you take yourself through such an event in your mind. Also, remember that this represents more than the specific tragedy of 1989 in Montreal. Our screams should contain/represent our response to all violence, especially that directed at "the innocent" and vulnerable. Please look deep into yourself to find the place where you care enough to give voice to your shock, horror, and outrage. (McCarthy, rehearsal note to University of Guelph choirs, October 2006)

This process of discussion and reflection enabled singers to engage more fully with the *Aftermath* portion of the work, producing screams that emerged from an authentic sense of empathy.

However, some University of Guelph singers found themselves experiencing the full impact of the piece only at the dress rehearsal. Conductor Marta McCarthy explains,

They were members of our Chamber Choir and had had less rehearsal time. I had made the mistake of assuming that these more advanced singers would process the issues on their own, and my rehearsal approach tended to be more clinical. The result was almost disastrous. The night of the dress rehearsal, I noticed a number of women, and for the first time, some of the men, standing in the choir but not singing. I thought from their body language that they were being divas, having not accepted their role as part of the soundscape. In fact, as they explained to me afterwards, they were defending themselves from the forcefulness of the emotion which threatened to overwhelm them. David, for example, stood with his hands crossed in front of him in a stance that appeared not only negative, but almost antagonistic. He wrote to me an explanation the next day: "I was surprised and overwhelmed by my own emotional reaction to the piece last night. [...] – I can't really explain it" (David, email, 2 December 2006). [...] Another singer, a young woman, wept inconsolably throughout the entire dress rehearsal. She called me at midnight that night, but could not speak through her sobs. She did, however, manage to perform the piece the following night at the concert. (McCarthy, 2007, p. 8)

The piece clearly challenges performers on a subconscious level that may affect them in dramatic physical and psychological ways. Allowing time for their minds and bodies to absorb this impact is critical to help the singers to participate empathetically, and to deliver an emotionally honest performance.

REDEFINED PERFORMANCE RELATIONSHIPS

Preparing *École Polytechnique* also offers an opportunity to examine and shift the roles and relationships within the ensemble setting. In order to co-ordinate the live performers with the electronic sounds, the conductor adheres (carefully but not slavishly) to a stopwatch. The conductor becomes the time-marker, literally, relinquishing the right to control tempo, or to introduce *rubato*, to the technological entity of the recorded soundscape. Again, the human and electronic factions must co-exist, however uncomfortable that coexistence is, recalling McCartney's (2000) image of the sonic cyborg body.

Contrastingly, the *avant-garde* aspects give the choir members more individual control than in the traditional choral context: throughout the piece the singers are invited to breathe, hum, whisper, at their own rate and in their own way. The conductor encourages them and helps to regulate a balance of such effects throughout the ensemble, but ultimately, the individual singers are responsible for these nuances and for the collage of sound they create. As Westerkamp stated, "the choir is the expressive voice" (Westerkamp, email, 20 November 2006). The instrumentalists, too, take an active role in creating the sonic landscape, breathing through their instruments, improvising some pitch sequences, and using other extended techniques. The use of improvisation by the instrumentalists also challenges the organizing control of the conductor.

For the conductor, these shifts in control can be unsettling, given the foundation of the conductor's role based on nineteenth century male models of leadership, epitomized by military dictatorships which succeed through power, distinction,

“otherness,” and abuse. Recent models of conducting suggest a different relationship between the conductor and other performers, in which power can be shared and gesture can be more suggestive and facilitative than controlling. Conducting pedagogue James Jordan (1996) insists that the conductor’s internal preparation combines the sensation “that you feel when you are about to share and give something to another person you admire” with “the almost instantaneous receiving of that person’s innermost feelings – all wordless and unspoken” (Jordan, 1996, p. 60). One of the conductors in McCarthy’s (2006) doctoral study described his approach to conducting with similar respect for the ensemble’s input:

You’re dealing with something that’s already alive and glowing and you become part of that, and there’s still a lot of responsibility on your part as the conductor, to make something of that, but you’re starting already somewhere where the lights are on, and it’s glowing. (McCarthy, 2006, p. 159)

Ericson’s (1994) comparison of conducting with teaching a baby how to walk also emphasizes facilitation rather than manipulation:

Don’t control this tiny human being. Just support as necessary, encouraging the child to take steps. Hold its arms, if necessary, or just the hands, or offer one finger – whatever the child needs to feel confident and, at the same time, independent. (Ericson, 1994, p. 24)

Moreover, York (1999) envisions the conductor’s vulnerability as his/her most potent tool. He states, “Passion links the soul of the listener to the soul of the composer. The singers see it in the conductor and receive it as deep respect for them and for the music” (York, 1999, p. 31).

The structure of *École Polytechnique* suggests such a collaborative relationship between the conductor and the other performers, by imparting the control of the tempo to an electronic tape. In addition to providing this structure, the literal sounds on the tape prompt critical meaning-associations. The composer insists that all the performers – including the choir director and the choir – “must be intimately familiar with the tape part. In fact,” she says, “each performer should use the tape rather than the other performers as a point of orientation, because all instrumentalists as well as the bells and the choir perform quite independently from each other” (Westerkamp, 1990, p. 2).

As Westerkamp’s words imply, the prominent role played by the electronics is more than structural – an emotional relationship must be built between the taped sounds and every performer. As conductor, Marta McCarthy found,

I had anticipated that the shots would disturb the singers, but in fact, I was not prepared for the range and intensity of their emotional reactions, from the very beginning of the soundscape. After the first rehearsal, several women told me that they could not sing the piece. For Nadine, it was “too close to home” because she had a dear friend who was shot in Montreal just one year ago. Two other women said they could not explain why – they had no personal connection to the event – but as soon as the soundscape began, they were physically unable to sing. I asked that they attend the rehearsals and try, if possible, to process their reactions; but I assured them

that if on concert night they still couldn't sing, that was ok. Of eighty singers, only four declined to sing in the end. (McCarthy, 2007, p. 9)

When asking performers to engage in a process that evokes disturbing and perhaps inexplicable reactions, the leader needs to honour these responses without judgement or question, while always leaving room for the singers to participate fully. Encouraging continuous open discussion and honouring the collaborative relationships embedded in the musical score are vital components of the preparation journey.

ENGAGING THE ACTUAL VERSUS RE-ENACTMENT

A controversial aspect of the piece, particularly associated with the gunshots and the screams, is the question of re-enactment. Westerkamp's compositional voice is sometimes misunderstood, by performers and listeners alike, as one that sensationalizes. Instead, she explains that she is speaking with "an emotionally frank voice," one that:

...wants to be very real about what happens inside us when we experience such a thing. It IS what happens and it shapes and colours one's whole life whether one wants it or not. And I do believe that one should not have to shut up about it, just because it is hard to take for oneself and others. (Westerkamp, email, 20 November 2006)

Performers and listeners may feel invaded by this. "Why stir everything up again?" (as one listener said in an email with McCartney, 1 February 1995). Emily explained how she progressed through and beyond that reaction:

In the beginning, when we were first working with this piece, I felt it was such a literal recreation of that specific event that I had trouble figuring out where that fit in to any kind of healing process. I imagined myself in the position of sister, mother or friend to one of the victims, and thought that as such I would never want this piece to be performed – how could we force others to go through a recreation of such horror? What would anyone learn? I did gradually come to look at the piece as less of a specific recreation of that one event, and more of a representation of the experience of any woman who has dealt with some form of violence in her life. After spending more time talking with other choir members, and with our director, I decided that I would be able to perform the piece, mostly because I asked myself if a friend of mine, who has dealt with violence in her own life, would want me to do it, and would see this performance as a path to healing. The answer was yes. (Emily, email, 18 June 2007)

Another perspective on this issue comes from Eve Langevin, a chorister from the original performance of the piece, in her letter to the newspaper *Le Devoir* in Montreal, after the release of the controversial film *Polytechnique*. She refers to the required artistic attitude to deal with this kind of event as one of "terrible sobriety" (2009) that does not aestheticize violence or focus on the perpetrator. Similarly, Wendy Chun (1999) discusses how the news media focus on the testimony of the perpetrator, in an attempt to understand the event, undercuts the experiences and testimony of the victims and survivors of the massacre. Chun advocates a greater engagement with the actual victims, a continual re-reading of the event, and most

importantly, a politics of listening. Through listening, it is possible to partially experience trauma empathetically while acknowledging gaps in understanding or experience that prevent complete identification as a victim. The experiences of these choristers indicate that for some of them, the performance drew them to a greater sense of empathy with the victims of the massacre, through listening and naming.

The act of chanting the names was identified by many choir members as the most moving part of the process, and a turning point from experiencing inarticulate pain to having the ability to incorporate and articulate feelings and thoughts about the event. Edward, one of the University of Guelph basses, addressed the choir at their first rehearsal, "Isn't it interesting that we all remember the name of Marc Lepine, but who of us, until now, remembered these names?" (McCarthy, 2007, p. 10). The recitation of the names of the victims displaces the spectacular media focus on the perpetrator and brings the memory of victims into the present. The impact of reciting the victims' names was felt in rehearsals and, in a fresh way, during the performance, as explained by choir member William:

Speaking the names was the most powerful part, for us, because we were dealing with real human beings, [he shakes his head with the memory of its impact] – real human beings – but also I think for the audience: that's when their eyes changed from 'deer in the headlights' to being really moved. It changed from just music that shocked them, to a story about real people. And when I saw this reaction of the audience, it was all the more moving for me. (William, interview, 21 April 2007)

Another shift in the music occurs after the first shot, when the recorded part focuses on the media frenzy, which proves profoundly disturbing at this point in the piece. The high volume of this part of the recording, and the overlapping of reports contribute to an impression of violation, gross insensitivity, chaos, and soulless sensationalism. The authenticity of these recorded excerpts help to remind the performer and the listener of the stark reality of the event, and of society's complicity in generating fascination with horror.

CATHARSIS IN COMMUNITY

Tamara Bernstein's review of the premiere notes that the performance "taps into ancient lamenting traditions, with their cathartic and healing functions that historically served both the individual and the community" (Bernstein, 1993, p. 20). The structure of the piece leads people from individual grief, through a communal verbal expression, and back to individual contemplation and articulation. Like its partner composition, *Breathing Room*, *École Polytechnique* represents this movement between realms, where inner bodily sounds such as breathing are amplified and become public, and environmental sounds are taken into the private body. *École Polytechnique* also explores a movement between individual and community life. For some, this movement in the context of such a traumatic event is too painful; for others, it is necessary because of the nature of the event. As we discussed earlier, choir members believed that the recitation of names afforded them a personal connection to the victims; while this was the beginning of understanding and incorporation of the sonic and emotional context, it also ensured our vivid

retention of the specific event. Therefore, it forms a sort of bridge between the living and the dead, yet also, according to Bernstein, a bridge between the individual and the communal:

The choir brings us back to the outer, communal world by speaking the names of the victims, accompanied by tolling bells. As the ordered recitation grows louder, the choir disintegrates into a multitude of separate shouting voices. Westerkamp then takes us into a meditative musical space punctuated by soft, random-sounding cries from the instruments. Life gradually returns with the sound of water, a few birds, gently tolling bell, and once again the heartbeat and breath, accompanied by the soft sustained sound of the choir. (Bernstein, 1993, p. 21)

For Bernstein, this movement from individual to community and back again is an important facet of the healing function. This movement from individual to community is also discussed by Kim Sawchuk in a radio interview with Westerkamp from the same time:

Because I live in Montréal, I found it disturbing and moving. There has been a deep scarring on the public: it's not gone away; it shouldn't be erased [...] I thought your composition and its setting, which created a gathering of people, was one appropriate way to work through one's painful contradictory feelings. It stresses the importance of individual life and community life in the midst of this violence. (Sawchuk, 1990)

For Sawchuk, the scarring on the public from this event continues and should not be ignored. The voice is one medium for this kind of work. Although the way we use our voices is socially constructed, pieces such as *École Polytechnique* invite us to extend boundaries between different forms of vocal expression. As Newham (1999) observes, "There is a culture in Papua New Guinea where the word for crying is also the word for singing." (p. 53). Scoring the piece for SATB (rather than only women's voices) may also be considered a significant symbol of the communal element. The greater range of pitch in the tone clusters and the resulting intensity of resonance paralleled the capacity of the work to resonate more broadly. At the same time, enabling the young men in the choir to participate in the voicing of horror facilitated their being emotionally moved by it.

For the University of Guelph Choirs, rehearsing and performing *École Polytechnique* was a profound process: the grief released by the singers seemed to awaken their longing for connection and perhaps even to free them from whatever blocks, numbness or resistance they experienced. Westerkamp commented, "So, I agree with you that in the end and ideally, it can be rather healing to go through such an emotional storm, through which some of your choir members have gone – hard as it is at the moment" (Westerkamp, email, 16 December 2006). The foregoing stories of those who have prepared, performed, and listened to *École Polytechnique* suggest that the painful disruption experienced on their first encounter with the work gave way to emotional growth and a strengthening of the bonds in the group. This music offers an emotional experience that is painful but important in its possibility to further understand and articulate feelings related to violence and death. Most importantly, this experience takes place in and through the musical act of rehearsing and performing.

TRAUMA, TIME, PLACE, AND MEMORY

The issues brought into horrifying relief by the events of December 6, 1989 are no less urgent today, or in other parts of Canada. Yet some choral performers struggled with the issue of contemporary relevance. Yvette (a singer at University of Guelph) pondered,

Because I was six when the Montreal massacre happened, I don't have a sense of it as an event that happened in my lifetime. I was too young to remember things like first hearing the news, where I was, who told me, how I reacted, how it affected me in the days following, etc. Now, the problem with this as it relates to *École Polytechnique* is that I felt as though I was being asked to put myself in the middle of a situation for which I had no frame of reference. This led to a feeling that I was appropriating an experience that I knew nothing about. *École Polytechnique* puts you right in the middle of the experience. The soundscape creates the atmosphere of apprehension and high anxiety; the news clips are a direct link to the day of the event; the repetition of the names creates a real human connection to what's happened. (Yvette, email, 6 October 2007)

For this chorister, the composer's use of soundscape materials and the act of giving voice to the victims' names create an experience that bridges gaps of time and place to facilitate empathy. The issue of to what extent the *École Polytechnique* massacre can be representative of all violence against women, across time, place, and context, is one that arises repeatedly in the scholarly literature, since this event has become emblematic of such violence in Canada. When McCartney played Westerkamp's piece for high school music students in the late 1990s in Toronto, many of them had never heard of the massacre before, or its relevance to the issue of violence against women. This brings into question how such an event at a specific time and place can come to be representative of all violence in all times and places, how well it works in a commemorative context. These concerns about contemporary relevance suggest some curatorial possibilities for works like *École Polytechnique*, in which this musical representation of a former traumatic event could be included in a program that includes other works about different situations of violence. Memorializing an event such as the Montreal slaughter, (by performing Westerkamp's work), while also performing, and processing, (through improvisatory music-making and discussion, for example), more localized and more recent events, facilitates a deeper understanding of the connections between them. The inclusion of other art forms, such as poetry and painting, has the potential to engage the physical sensations more powerfully and thereby intensify the response and keep the memories alive for future generations. Moreover, the import of the event and its representations would be open to change and articulation, just as the musical structure of *École Polytechnique* encourages change and articulation in each chorister and listener.

CONCLUSIONS

The sonic cyborg body is evoked from the first seconds of Westerkamp's piece through the integration of technological, organic, mediated, and live elements. Bodily and technological boundaries are crossed throughout the work, as the listener hears

the composer take all kinds of environmental sounds into her body through the breath, as the human breathing is propelled by a mechanical heartbeat, and as the media frenzy accompanies the real screams of the choir. This sense of uneasy integration is maintained through much of the piece, as the choir and listeners grapple with the horror of the event and their difficult emotional responses to it.

The word 'healing' comes up repeatedly throughout the composer's score and the choir's responses. This is not a return to some imagined holistic state, but more akin to the healing that occurs after a traumatic operation. The chorister is asked to incorporate and express sounds of trauma, at times struggling with or rejecting that process the way that a human body might seek to reject a newly installed pace-maker. There are strange rules that need to be learned, unfamiliar processes to undertake, new scars. In the cyborg manifesto, Donna Haraway advocates politics based on affinity rather than identity. The outcome of this study further suggests that affinity and practice can be especially powerful. It is the musical repetition of harmonies, rhythms, and names of the victims, as well as the experience of singing together and of discussing the ramifications of the piece with each other and with the choir director, that create a profound, sustained practice on the part of the ensemble. This profound, sustained, communal encounter with the artwork and the issues it raises offers hopeful possibilities for emotional confrontations with difficult and traumatic situations.

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