

Refining *Uranium*: Bob Wiseman's Ecomusicological Puppetry

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ABSTRACT This paper describes Bob Wiseman's allegorical piece, *Uranium*, arguing that it accesses emotion to alter the consciousness of percipients. Audiences respond with unusual intensity to *Uranium's* tragic environmental narrative. By using puppet theatre, film, comedy, and song to win their trust, Wiseman is able to shock his spectators. With interviews and consideration of the semiotic content of *Uranium*, I explore possibilities for activation of ecological consciousness through performing arts. Building on the shared ideas of Heinrich von Kleist, Gregory Bateson, and Thomas Turino, I argue that Wiseman offers one particularly useful mechanism to advance environmental concerns and learning through the arts. This paper seeks to bridge environmental and (ethno)musicological thought, and has specific relevance to the growing field of ecomusicology, presenting a musical ethnographic case-study in singer-song-writer activism.

Introductions

On a crisp evening that marked the start of Ontario's autumn, Bob Wiseman performed under a full moon for some 2,000 people at the 2009 Shelter Valley Folk Festival. Facing a barn, bundled up in lawn chairs or on tarps, we were a receptive audience. Surrounded by shocked and weeping people, memories from the night haunt me. Wiseman, mid-set, brought the tragedy of nuclear mining home without shaming, tiring, or losing our attention. Later Wiseman told me, "my job would be a breeze if I only had to perform for family-friendly folk festivals."¹

What follows is a musical ethnographic² retracing of the creation of Wiseman's four and a half minute powerful, ecological, allegorical, and political piece, *Uranium*. After positioning this article as ecomusicological, I offer a phenomenological account of the work for the benefit of those who will never witness the piece in person. I then trace Wiseman's career path in order to frame the conditions that allowed him and his collaborators to create *Uranium*. Having described *Uranium* and its creator, I turn to a theoretical exposition of my assertion that Wiseman employs associative semiotic communication that capitalizes on the heightened

¹ Bob Wiseman, interview by the author, Rawlicious Restaurant, Toronto, ON, 17 January, 2010a.

² Anthony Seeger, "Ethnography of Music," in *Ethnomusicology: Vol 1: An Introduction*, ed. Helen Myers (New York: Macmillan Press, 1992), 87–89.

emotional atmosphere of musical and theatrical performance to deeply impact and transform his audience with otherwise unpalatable content. Through this analysis I describe a model for activation of ecological consciousness that troubles dominant environmental pedagogy. In conclusion I speculate on the importance of the fine arts for engaging ethical environmental perspectives.



Figure 1 Bob Wiseman and “She,” the puppet heroine from *Uranium*. Photo from: www.theneighborsdog.tv

My research methodologies include basic musical and textual analyses. Additionally, I drew on interviews with Wiseman and his principal collaborator for *Uranium*, Becky Johnson. I attended a variety of Wiseman’s performances and consulted with Larry Lewis and Chris Cavanagh in their capacities as professional theatre performance artists, puppeteers, and critics who are familiar with *Uranium* and how audiences tend to receive such works. Taken together, these methodologies provide several perspectives on the success and meaning of *Uranium*.

This article is ecomusicological in its examination of a piece of music that features politicized environmental content.³ The article contributes to the field of ecomusicology in

³ Ecomusicology is a burgeoning new field of academia, and the scholarship generating this recent designator, ecomusicology, is primarily (ethno)musicological. Ecomusicology has also been described as ecocritical musicology: *Grove Dictionary of American Music*, (Oxford: Oxford University Press, 2013) s.v. “ecomusicology.” The boundaries of ecomusicology are difficult to delimit, and when compared with *literary* ecocriticism and its centralizing focus on works of fiction or poetry, “ecomusicology” can appear an unwieldy device in its more-than-musical aspirations: Marc Perlman, “Ecology and Ethno/musicology: The Metaphorical, the Representational, and the Literal,” *Ecomusicology Newsletter* 1, no. 2 (2012): 1, 15–21. Some examples of ecomusicological sub-disciplines might include noise pollution, soundscapes, bioacoustics, sound recording methodologies, issues of sustainability (instruments, festivals, equipment, tours), but also less quantitative inquiries into acoustemology, theories of composition and landscape, and understandings of place.

particular and to the environmental humanities in general by highlighting the kinds of contributions musical experiences can bring to ecological consciousness. However, just as *Uranium* delivers a multimedia, multisensory experience, my consideration also moves into the realms of puppetry and film. Holistically, *Uranium* and this paper stretch the meaning of ecomusicology, bridging artificial disciplinary boundaries. In choosing to focus on Wiseman and *Uranium*, my goal is to further establish the relevance of associative and semiotic analysis for ecomusicology and the environmental humanities. I highlight firm ground (ethno)musicologists can find in streams of environmental thought, and by drawing on well-known theorists from both camps, I seek to bring much needed critical awareness to ecomusicology from environmental academics who are not musicologists. Musicologists have a great deal of catching-up to do with respect to environmental thought and the environmental movement generally.⁴

Uranium

We participate in a tragedy; at a comedy we only look.
–Aldous Huxley⁵

Wiseman performs *Uranium* with voice and guitar accompanied by a film. The film is a silent recording of a staged outdoor theatre where puppeteers interpret Wiseman's narrative. *Uranium* is a story of curiosity, love, mourning, and melancholy following classic romantic archetypes with environmental twists. During a typical performance set, Wiseman might perform *Uranium* at any time. He travels with his own computer, an LCD projector, and a projection screen. He either uses the computer, clicks a remote, or has a stagehand begin his videos for him. Wiseman adopts a humorous character to handle the glitches that come with operating through PowerPoint. On stage, Wiseman is simultaneously a comedian, a thespian, a filmmaker, a storyteller, a singer, and a virtuoso musician. When introduced to *Uranium*, generally an audience has been laughing for some time. The "given" nature of *Uranium's* staging is that the piece begins as a light comedy in a humorous atmosphere.

My assertions about audience reactions are based on Wiseman, Johnson, and Lewis's understandings about the reception of the piece. I locate the emotional content of *Uranium* in audience responses to stimuli that are arguably natural and universal, but also constructed by culture-specific norms.⁶ Wiseman has performed *Uranium* for over a decade, all the while receiving feedback on the piece. In the past he has spent as much as two thirds of the year on the road, performing *Uranium* perhaps 50 or more times a year. He plays at bars, clubs, cafes, house concerts, music festivals, theatres, and comedy clubs all across Canada but also in the U.S. and more distant places such as New Zealand and Europe. The demographics of his audiences vary dramatically. In Wiseman's own words, "The typical audience is everyone [...] The typical response [to *Uranium*] is laughter and shock, sometimes crying."⁷

⁴ Aaron Allen and Kevin Dawe, eds. *Ecomusicology: A Field Guide* (London: Routledge, *Proposed*).

⁵ Aldous Huxley, *The Devils of Loudun* (New York: Harper & Row, 1954), 280.

⁶ Peter Stearns, "Emotion," in *Discursive Psychology in Practice*, ed. Rom Harré and Peter Sterns (London: Sage Publications, 1995), 38–45.

⁷ Bob Wiseman, personal communication with author, 29 April, 2013.

My assumptions about the piece are also based on my own viewing of *Uranium* numerous times, as well as the thoughtful suggestions of friends and colleagues who have witnessed it. Twice when I have shown a film of Wiseman performing the piece in academic settings, individuals have been moved to tears, but there is always laughter. Some do not appear to outwardly experience the work so powerfully. At one of Wiseman's performances, I was certain the audience had seen the piece before, and while everyone welcomed the number, no one appeared overwhelmed.

Because *Uranium* is normally performed for a live audience, in the following I take subjective license to provoke in words some of the mood, feeling, and emotions percipients⁸ may experience. At times I slip into the phenomenological present. An appendix includes the lyrics and chords for the song. I also rely on stills from the film as references for my reader.

Processing Uranium

As the lyrics from *Uranium* indicate (Appendix), the story begins in Elliot Lake, Ontario, and "She" is a country girl (see Figure 2).⁹ She is also a simple sock puppet. The cardboard stage framing the scene features a woman's neck and head, blowing air up at the heroine and her scenery, and there appears to be real wind, ruffling the backdrop of rural Ontario. The face that is worked into the stage frame may be a fresh water mermaid, come up from a lake.

The guitar chords at the start are major and (culturally) optimistic,¹⁰ very full, deep, ringing, and open. A slight chorus effect on the acoustic guitar indexes the illusion of echo, and of wide ecosystems, spaces, and landscapes,¹¹ and perhaps nostalgia or reverie.¹² The reverberation is also watery. The tempo seems deliberately slow, with the audience's attention hanging on each phrase. Wiseman creates a sense of vast horizon in his execution. He clearly initiates a cliff-hanging narrative with "but she was curious" at the very end of the first stanza of the first verse. The story appears to be an adventure and an incrementally unfolding yarn.

People begin to giggle, perhaps because she appears an awkward and likable puppet. Susan Stewart writes, "the miniature becomes a stage on which we project, by means of association or intertextuality, a deliberately framed series of actions."¹³ Her bags miraculously float up to her, packed and ready, quickly followed by a Greyhound bus. Her curiosity leads

⁸ I use "percipients" occasionally to remind my reader that audience members participate in numerous engrossing stimuli simultaneously. The singing, guitar, film, storytelling: all of these happen and are perceived simultaneously and incrementally. The result is a synchronous or entrained collective experience of the piece, the sum of these things forming a *moiré*.

⁹ A video of Wiseman performing *Uranium* can be viewed at the journal website: <http://environmentalhumanities.org/archives/refining-uranium/>

¹⁰ Thomas Turino, *Music in the Andes: Experiencing Music Expressing Culture* (New York: Oxford University Press, 2008a), 65.

¹¹ Peter Doyle, *Eco and Reverb: Fabricating Space in Popular Music Recording 1900–1960* (Middletown: Wesleyan University Press, 2005), 138.

¹² Gillian Turnbull, "'Land of the In Between': Nostalgia and the Gentrification of Calgarian Roots Music," *MusiCultures* 36 (2009): 22–48.

¹³ Susan Stewart, *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection* (Durham: Duke University Press, 1984), 54.

her to move to the big city (see Figure 3).¹⁴ Laughter increases as She sticks her head out the window to look at the audience, rolling and rumbling on the bus.



Figure 2 She in Elliot Lake with her packed bags.¹⁵



Figure 3 She on the Greyhound Bus heading to Toronto.

Upon reflection, there is an unsettling foreboding as she travels south, past Ontario's most industrious mining towns. It is too soon for the audience to notice it at first exposure. Wiseman's choruses feature an E minor chord, the only minor chord in the song. The chord accompanies a lift in pitch in Wiseman's sung melody, almost a wailing lament. These minor chords index a (culturally) melancholic sense in this specific context and ring out when we learn in the first chorus that She has gone as far south as she could possibly go, and that She will "sink or swim," perhaps literally through the bottom of the stage.

While the place settings and scenery in the film cycle, the overall framing does not. The puppet figuration of Wiseman's story purposefully emulates the kind of entertainment some have experienced as children. The simplicity of the action is winning. The Super 8 black and white film quality with moments of crayon-like colouring is wistful. The props are things it would seem that many people in Wiseman's audiences could have made or played with in childhood.

When She meets Joe Blow (see Figure 4), a salesman at Long & McQuade, Canada's major musical instrument retail chain, Canadian musicians in the audience are taken in by the reference. Joe Blow has slick long straight parted black hair and a black goatee that reaches to his thorax. He is wielding his guitar, and has on a black t-shirt with a triangle.

Joe Blow shows She his tattoo of a heart grenade, lifting his shirt, daring her to touch it. It beats a screaming lipstick red, teasing the audience with foreshadow. Being inarticulate puppets, their courting seems simultaneously innocent and groping (see Figure 5). This pair "knew their song by heart" and "sung it in the dark" as Wiseman does. The puppets pantomime loosening garments and slip beneath the stage. During the fade to black at this point, Wiseman adds an improvised instrumental flourish to make sure his timing is right for the next sequence.

¹⁴ Raymond Williams, *The Country and the City* (Oxford: Oxford University Press, 1975).

¹⁵ All images reproduced with the permission of Bob Wiseman.



Figure 4 She laughing at Joe Blow's tattoo of a heart grenade.

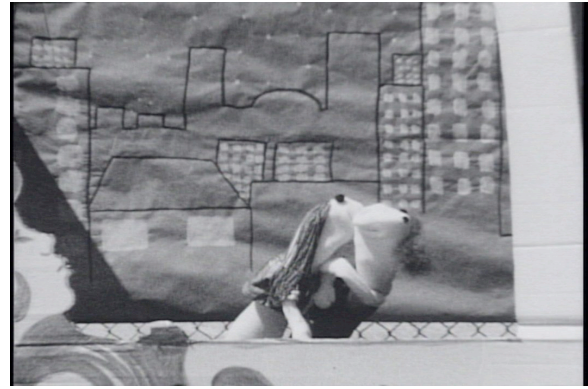


Figure 5 She and Joe Blow slipping beneath the stage in love, under the stars.

As the second half of the song starts, only two minutes and 15 seconds in, She unfurls upwards with a scrunched face and is possibly in some kind of quivering pain. Wiseman slowly parcels out the first line of the third chorus while her dress slips down. Wiseman disrupts his rhythm by choosing the word “accumu-lated” to describe the growth of black moles on her body. Then he speedily blurts out “On-her-32-year-old-skin” like an expletive. Some audience members assume the comedy is not becoming a tragedy and continue to laugh, perhaps hoping she has a treatable sexually transmitted infection. Others fall silent in confusion.

A doctor enters (see Figure 6), a kindly and doddering white-haired person with serious spectacles, a set smile, and a firm professional diagnosis. The doctor stares at her to make sure She understands. Initially, the doctor's appearance raises some awkward guffaws in the audience, but others recoil. Just seconds ago this was a tale of love between cute puppets, and now the trope is betrayed. Worse yet, though the doctor tells her to inform her next of kin, no one appears. She suffers entirely alone. In fact, as Wiseman nails another E minor chord, he wails that She is in “agonizing pain” and cannot lie on her side. At this point, the audience is most often silent.

In her death, “the cancer took her in its arms,” and a curious thing happens: a hand emerges (see Figure 7) from her body. According to Wiseman and his collaborators, and in my own experience, this juncture, the liminal space between puppet and human hand sparks an intense emotional trigger for some. I have taken to warning audiences of the powerful nature of the piece when I play the filmed version because of this moment. The hand in the puppet (Becky Johnson's), in She, slowly retracts. Joe Blow appears and finds She a lifeless shell. The out-of-place disembodied hand actually seems to float into the air, pulsing like a swimming jellyfish. It does so with an aching grace. The hand, her soul, sweeps down to steal Joe Blow's guitar. Joe Blow screams silently, and “he sings no more songs.” The mood is one of a violent loss and perhaps guilt for having taken the first half of the piece so lightly.

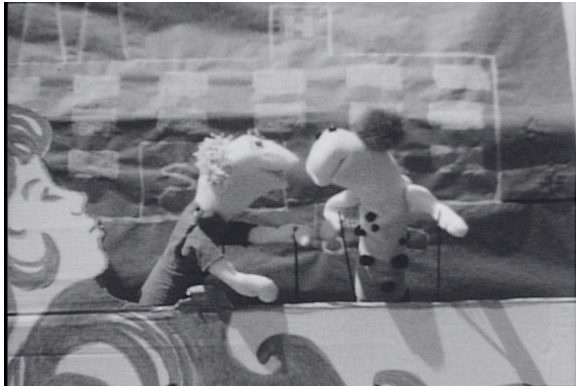


Figure 6 Doctor informs She of terminal cancer with hospital in the background.



Figure 7 She's soul has left her body, represented by Johnson's hand, and floats above Joe Blow, about to steal his guitar.

The thrust of Wiseman's tale slowly becomes apparent when we hear that Joe begins to think, not speak, that city people are evil, represented in the film as a cloud-like crowd on a two dimensional bounded stick placard (see Figure 8). Joe Blow stares at them, stares at the audience, looking for the culprits who committed this crime. He then shakes his head, perhaps at the audience in disapproval or confusion before exiting. Meanwhile the backing scenery is whipping by, North and West back up to rural Elliot Lake, sometimes with touches of colour. The sun is burning down, and we pass by a giant five-cent nickel coin in Sudbury, one of Ontario's key mining regions (see Figure 9). There appear to be representations of other life, green trees and hills, white clouds, a brown moose, and Elliot Lake is blue. We follow She's path home in death.



Figure 8 Joe Blow looks at the city people.

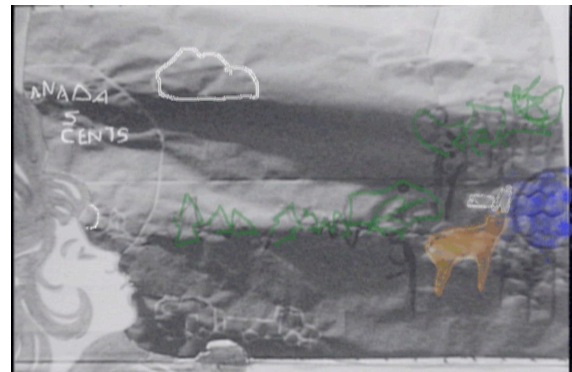


Figure 9 The scenery scrolls past iconic land markers, animals and scenery.

Wiseman's intentions for *Uranium* become transparent only with the final images and words of the song. The scenery rolls past Elliot Lake and continues to a mineshaft, beyond the town and beginning of the piece (see Figure 10). "Why was the woman that he loved, taken so young? She was only from a small town, where they mine uranium." The explanation for her death is another shock at this point, an existential blow on top of the loss of She. Even while Wiseman abruptly takes a quick bow and says "thank you, thank you," it seems he wishes to

highlight the fact that we should not actually move on yet, that we should not be surprised by such stories or be allowed time to recover. Wiseman does not provide any antidotes.

This story, like that of the Canadian tar sands, challenges the pervasive romantic belief that the country is pure and the city is dirty.¹⁶ In 1953 the world's largest uranium deposit was discovered on First Nations' territory, near what would become the planned company town of Elliot Lake, and "For the next 40 years, Elliot Lake produced most of the world's uranium."¹⁷ Canada's history reflects one of violent extractive northern rural resource-grabbing practices that are orchestrated from within major southern urban centres. *Uranium* reflects this history back to Wiseman's audience, holding urban centres of power responsible for exploiting remote northern resources, leaving local tailings and filling global demands that spread Canada's refined nuclear products—products that become urban power and planetary weapons—planet wide. In *Uranium*, the apparently unknowing and yet culpable urban public do not see Joe Blow's pain: they appear rushed (see Figure 8). Locally it may be that Rio Algom and Denison Mines Ltd¹⁸ are responsible for the unquantifiable tailings in Elliot Lake, but demand for uranium is global.



Figure 10 Past Elliot Lake at a mineshaft with a blinking radiation symbol.

Beware of Bob

In order to better understand the authorial intentions behind *Uranium*, I will now provide some details about Wiseman. Almost all of his works are idiosyncratic in that they tend to break from the expectations of the genres they appear to be situated within. Hybrid works like *Uranium* have origins that are pertinent to understanding his successful political artistry. In this case, I argue that there is value in looking beyond this specific work to consider the relationship between Wiseman's more general politics and musicianship. Wiseman unusually reaches past musical activism and personal ethics into the wider world of performance arts in order to inform a larger public. This warrants attention.

Robert Wiseman, born in 1961, grew up within a musical family in Winnipeg, Manitoba. Though he left after one year of undergraduate studies, in Toronto he was exposed

¹⁶ Williams, *The Country and the City*.

¹⁷ "The City of Elliot Lake Webpage," accessed 15 February 2014, www.cityofelliottlake.com/en/cityhall/history.asp.

¹⁸ *Uranium*, by Magnus Isacsson, National Film Board of Canada, 1990.

to avant-garde, free, and improvised music. The discoveries were compelling and a relief for an artist who could not identify with most readily available popular media. In the late 1970s and early 1980s, Wiseman played for a wide variety of audiences while working for Greenpeace. He also became a vegetarian, and eventually a vegan. At the time, Wiseman's eldest brother was helping manage musicians Jim Cuddy and Greg Keelor. In 1984, when Cuddy and Keelor moved to Toronto, they landed on Wiseman's floor. Eventually these three and Bazil Donovan launched Blue Rodeo, an enormously popular Canadian band. Their meteoric rise to stardom was *like* a dream come true. The same reviewers who had thrown out Wiseman's tapes in 1984 dubbed him a genius in 1989. Grant Lawrence, a CBC radio jockey, recalls,

I will never forget the first time I saw Bob Wiseman performing. It was when he was the keyboardist in Blue Rodeo, and it was at an outdoor festival in BC in the late 1980s, and here was Blue Rodeo, these cool lean urban cowboys, and off to the side this wild bearded bushman, just going absolutely crazy on his keyboard.¹⁹

At the climax of Blue Rodeo's fame in 1992, Wiseman voluntarily exited. He was dissatisfied with the musicality, the ethics and ethos, and the cynical and corporate nature of the music industry generally.

One can find a sample of Wiseman's evolving politics from his 1989 debut album, *Bob Wiseman Sings Wrench Tuttle: In Her Dream*.²⁰ After Warner Brothers pressed and distributed 2,000 CDs, they recalled the album and destroyed the first run. Two songs detailed the attempted murders of the heads of Greenpeace by the French secret service. Another documented the tragedy of the Union Carbide disaster at Bhopal. However, it was a song entitled *Rock and Tree* about the murder of Salvador Allende that raised legal red flags. It references a meeting held to consider his assassination. Henry Kissinger, the U.S. secretary of state, Richard Nixon, the U.S. President, Richard Helms, the director of the CIA, and Donald Kendall, the president of Pepsi Cola were all in attendance. Warner Brothers felt that Pepsi might sue for libel.

At the turn of the century Wiseman began consulting with well-known comedians, thespians, and filmmakers in Toronto in part because as he reached his 30s and 40s, he wanted to find more mature audiences who are a minority in many urban music clubs.²¹ By developing a reputation as a skilled and politicized artist who can work in a wide range of artistic media and genre, Wiseman increased his access to fans, networks, NGOs, and interest groups who organize performances. His politicized material reaches more-than-musical audiences.

Wiseman knows that artists must "go to parties, glad-hand, and pander to crowds."²² The most talented artists Wiseman has known will "die in the gutter, broke, who are brilliant ... because they can't laugh at a [a record executive's] joke that isn't funny."²³ In speaking about being a mentor Wiseman said,

¹⁹ Grant Lawrence, Podcast # 99 – The Greatest. *CBC Radio 3*. 13 April. (MP3), 2007.

²⁰ Bob Wiseman, *Bob Wiseman Sings Wrench Tuttle: In Her Dream*, Free Music Archive, (Toronto: Blocks Recording Club, 1989), (CD/MP3/LP).

²¹ Bob Wiseman, "Bob Wiseman webpage," accessed 20 January 2013, www.bobwiseman.ca

²² Bob Wiseman, interview by author, Toronto, ON, 24 May, 2010b.

²³ Bob Wiseman, interviewed by James Walker, *Alternatives Journal Podcast*, 2009a.

When I meet artists, I have to tell people about, you know, the fact that they have to make peace with being an entertainer. A lot of people enter into the world of songwriting because they want to convey something about song; and that's fantastic, but it's completely separate than being on stage in front of a bunch of people. Because suddenly it's about entertainment, which you might be totally insulted about, ha ha ha, but, those are the rules! That's what it is.²⁴

According to Wiseman, political artists often fail to spend enough time honing the ability to entertain a crowd, either with skill, compromise, or novelty in order to reach a wide enough audience to have a significant impact.²⁵ Retrospectively, he feels that while his message has changed very little, his methods of delivery and persuasion, his pedagogy, have changed greatly.

For example, Wiseman feels the average group of citizens at public gatherings barely acknowledge live musicians. Wiseman quite overtly uses comedy to gain greater attention. His situation could be compared to a griot²⁶ who might enjoy special status in which to lampoon, criticize, and even insult an audience. When I asked about his ability to disarm and yet ultimately shock audiences, Wiseman replied,

A friend of mine, who is an activist, an artist I admire, Mendelson Joe, told me, you know, more than once that he believes that if you can make people laugh, you can really, you can tell them anything.²⁷

Most successful solo artists develop stage banter as a necessity. However, as collaborator and comedian Becky Johnson notes, comedy can also be risky, "one of the problems is that working in comedy is inherently irreverent. You can't go through ... script approval ... you step on so many toes actually making a statement."²⁸

Moving beyond comedic repartee, Wiseman feels that he has to cultivate meaningful relationships with his fans if they are going to pay him for his work, tell friends about him, and come to shows. In remaining independent Wiseman can be methodical about his uniqueness,

Some people just write about the same kind of thing all the time, but I write about the different things that screw me up. I think that the great thing in being a songwriter is that you can sing about anything, and in that universe, you can right certain wrongs, you can fix things that seem always broken, and temporarily, during the life of that song, you've fixed it ... I can say stuff about the RCMP tazing a guy to death at the Vancouver airport, and I

²⁴ Wiseman, interview, 2010b.

²⁵ Mark Pedelty notes these kinds of difficulties in greater detail generally with political music in *Ecomusicology: Rock, Folk, and the Environment* (Philadelphia: Temple University Press, 2012).

²⁶ Banning Eyre, *In Griot Time: An American Guitarist in Mali* (Philadelphia: Temple University Press, 2000).

²⁷ Wiseman, interview, 2010b.

²⁸ Johnson, interview.

can call Harper [Canada's conservative Prime Minister] all the things I want to call Harper.²⁹

Wiseman will quickly admit that his most powerful tools to hush crowds are his videos. Oddly, if people have a moving image to view with their eyes, they will close their mouths in order to focus their ears and will ask others to quiet themselves. The silent films also take some of the pressure of the stage off Wiseman, allowing him to be a sideman. Coordinated with Wiseman's playing and singing, the feeling is reminiscent of old black and white films, home movies, and player pianos; the films are grainy, referential, nostalgic, DIY, analog, and intimate.

Refining Uranium

It's really hard to make people care and listen. Because at a certain point, if your piece of art is just as good as a brochure, then, you should probably just make a brochure.
—Becky Johnson, *on Uranium collaboration*

The origins of *Uranium* reflect Wiseman's lifestyle. With periodic visits to small and large destinations while on tour, Wiseman has witnessed countless communities and landscapes change throughout his career. Wiseman first composed *Uranium* in the mid-1990s as he reflected upon the burden that centrally driven mining had on rural Canada. He had seen devastating photos of the results of mining in Elliot Lake and watched Magnus Isacsson's documentary film entitled *Uranium*,³⁰ also about Elliot Lake.

Though the creation of *Uranium* as Wiseman performs it involved several collaborators, the piece is designed for solo performance. In 2003 Becky Johnson and Wiseman shared a bill at Clinton's Tavern in downtown Toronto for a comedy night,³¹ and eventually Wiseman commissioned Johnson to help him create something to accompany a song of his:

What he wanted me to do was take a song that he wasn't happy with in performance. So, something that wasn't quite hitting on stage ... *Uranium* came up as a song, and I think that his problems with it, as I recall, were that it was too obvious. Lyrically, it's very straightforward ... The music is beautiful, but I knew what he was saying ... I think this is the thing about work that is political or environmental, is that it's really hard to be poetic about it. There are so many pitfalls. It can be really overwrought, or sometimes maudlin, or just too obvious, or just factual.³²

From the text of the song (See Appendix), one can understand why both Johnson and Wiseman were concerned that the exposition of the piece was too plain. Johnson's background is in clowning, musical theatre, and improvisational comedy:

²⁹ Wiseman, interview, 2009a; Wiseman's comments here point towards the utopian nature of music making, a theme I will return to.

³⁰ Isacsson, *Uranium*.

³¹ Johnson, interview.

³² *Ibid.*

Uranium ... immediately made me think of puppets, because I was like, “if over-simplicity is the problem, you use these tools.” Because simplicity is what they do ... that seemed to be the way to bring out what the song already had going for it ... I think this is an improv thing: in everything you do, you start to make a promise to the audience, right? You put something forward, and it exists. So negating it just wrecks everybody’s expectations.³³

After explaining her vision, Wiseman gave Johnson a small stipend to go and purchase the necessary materials. Katie Crown, a puppeteer and comedian, helped construct the sock puppets. Magali Meagher, a musician and Wiseman’s wife, constructed the cardboard stage. While *Uranium* is understood by collaborators to be Wiseman’s work—as it is presented in this paper—it is also a collective work. Five people were involved in filming the video version of *Uranium*. They followed a recording of the song played through a boombox to direct stage action. Crown played Joe and the doctor while Johnson played “She,” and they both manipulated the props. Meagher and Levi MacDougal, a comedian, turned the large heavy scroll that included the background scenery. Meanwhile, Wiseman filmed the play.

Mining Uranium

In allegorical terms the “implements” and “shapes” that shadow the light of the fire, and the distant sun of trust outside the cave [Plato’s cave³⁴], seem to represent intelligible concepts or philosophical ideas, some form of intermediate being between mere sensory perceptions (the shadows on the cave wall) and absolute reality. On another level of metaphor, however, they are also figurally equivalent to the objects manipulated by what Plato here calls *thaumatopoiros*, “the exhibitors of puppet shows.”
–Scott Shershow, *Puppets and “Popular” Culture*³⁵

Uranium percipients are denied a conventional narrative catharsis,³⁶ and as a consequence, they are dialogically sprung to imagine different outcomes and choices for its characters. The lack of self-conscious pretension on the part of the puppets creates an opportunity for audience members to engage with the topic of nuclear loss from new perspectives. Through conversation with the piece, audiences are forced to confront the ethical environmental tensions of the work.

Uranium is successful because of its grasp of the whole, its dialogic nature, and its ability to communicate simultaneously at multiple or scalar levels of association. However, there are also very specific sequences and elements of *Uranium* that resonate with individuals to the point of shock and tears. In this final section I discuss some of these more discrete possibilities in closer detail.

Partly in proportion to the ability of people to project their associations onto a puppet, people grieve for She, but why? Employing various media to focus the attention of his audience in a hypnotic and receptive state, Wiseman begins by offering sensory wash and overlap,

³³ *Ibid.*

³⁴ Plato, *Great Dialogues of Plato*, trans. Eric Warmington and Philip Rouse (New York: New English Library, 1956).

³⁵ Scott Shershow, *Puppets and “Popular” Culture* (London: Cornell University Press, 1995), 14.

³⁶ Chris Cavanagh, personal communication with the author, 26 May, 2012.

allowing percipients to achieve a kind of flow.³⁷ In effect, Wiseman regresses his audience, and tricks people into becoming quickly and strongly attached to She. Puppets are iconic representations of humans offering perfect correspondence to the real world, and in modern culture they are also iconic of childhood entertainment.³⁸ Though the ultimate subject matter of the story is adult, the conceptualization of *Uranium* is relaxing, immersive, and swaddling. The narrative landscape appears wide open and the movement from rural to urban seems exciting.

On top of the staging, Wiseman overlays an iconic song form that has eight predictable patterned segments. Like most verse-chorus song forms there are two chord patterns that alternate from an A section to a B and back again. Melodically and harmonically, in *Uranium* four segments are uplifting and exclusively major,³⁹ while the other four contain two minor chords (Appendix). Heard without the help of the film, with a complete focus on lyrics and harmonic progression, one might realize the song is full of foreshadowing and lament, but with the temporarily optimistic visuals of the film and the generally positive narrative from the first half, this realization is forestalled. The audience members assume the humorous patterns will continue and are relaxed, yet with each progressing segment, percipients inch closer to the emotional turning point, when the doctor enters. This penultimate climax appears at first to be a comedic tragedy, but after the doctor enters, staged in front of a sterile hospital with smoke stacks, the youthful playfulness of the piece is lost. Johnson calls *Uranium* cruel in its purpose in that moment: “you feel like puppets won’t do that to you.”⁴⁰

In 1810 Heinrich von Kleist, a German philosopher and playwright, offered an essential essay on the limitations of marionettes for communicating affect. He believed that marionettes could achieve more grace⁴¹ and more unencumbered “truth” than any human because puppets are unable to “strike an attitude”⁴² as they lack spirit and self-consciousness.⁴³ That puppets can teach us grace contradicts intuition and is troubling.⁴⁴ Today, ecocritics argue for animate understandings of “non-humans” who are not “simply the hapless bearers of symbolic projection.”⁴⁵ Those interested in the political animation of beings without voice might ponder puppets as Peter Schumann does:

³⁷ Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper and Row, 1990).

³⁸ Shershow, *Puppets and “Popular” Culture*.

³⁹ Turino, *Music in the Andes: Experiencing Music Expressing Culture*, 65.

⁴⁰ Becky Johnson, interview by author, Toronto, ON, 4 January, 2011.

⁴¹ Kleist, Gregory Bateson, and by extension Thomas Turino whom I discuss below all take interest in the idea of “grace” as a kind of originary environmentally embedded selfless state of being for animals, plants, nature and perhaps once for humans. Grace might also be understood here as an ethical approach to one’s environment.

⁴² Heinrich von Kleist, *Selected Prose of Heinrich von Kleist*, trans. Peter Wortsman (New York: Archipelago Books, 2010), 268–9. Some of Kleist’s ideas might seem inherently anthropocentric by our present measures.

⁴³ Kleist, *Selected Prose of Heinrich von Kleist*, 268–70.

⁴⁴ Ancient Greek philosophers disparaged theatrical mimesis as corrosive to the pursuit of real truth; Shershow, *Puppets and “Popular” Culture*, 15.

⁴⁵ Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2007), 10.

Why are puppets subversive? Because the meaning of everything is so ordained and in collaboration with the general sense of everything, and they, being puppets, are not obliged to this sense and instead take delight in the opposite sense, which is the sense of donkeys confronting the existing transportation system.⁴⁶

Schumann alludes to the hegemony of meaning making in modern communication,⁴⁷ but also to the humorous and unexpected capacity of puppets to reveal the absurdity of everyday human priorities, assumptions, and constructed realities. In *Uranium*, She is poking fun at us.

Why exactly do puppets offer a counter-hegemonic disruption of categorical human assertions? Kleist might answer the question by moving “the puppet from the bottom to the top of transparent hierarchies of representation and social distinction”⁴⁸ troubling the ascendancy of humans over puppets and humans over nature.⁴⁹ Because of their superhuman grace, puppets break down assumptions that humans are in control of (the meaning of) a performance. In other words, puppets represent a compelling chink in the armor of human representation (of the voices) of the material world. Puppet agency subverts anthropocentrism and mocks human egotism.

In *Uranium*, Johnson’s revealed hand is the turning point between laughter and tears as others and I have experienced the piece (see Figure 7). Larry Lewis explains that:

Once you [the performer] establish [within the audience] an identification with a [puppet], the illusion can get further and further away from reality, and the exposing of the hand is the ultimate one, because now there is no illusion that is anything like this inanimate object. Now you see the hand behind it. It is completely bare and completely exposed, and that [if the audience is willing to suspend their disbelief] is the best of all when that happens.⁵⁰

Lewis suggests that revealing a hand might pique the emotional connection with the piece rather than create disappointment. “The illusion is completely exposed, and yet the infrastructure of the illusion is in place.”⁵¹ But what is emotional about linking reality and fantasy together in this way? I think revealing a human hand shifts *Uranium* from the realm of hypothetical metaphor⁵² into reality-correspondent allegory, from the suggestive into the declarative. A being has just died, horribly, and this turn reflects associations with reality, not fantasy. The revelation and the realistic tragedy are paired, and indexically happen simultaneously. Audience members experience the loss precisely as the piece presents itself as

⁴⁶ Peter Schumann, “What, at the End of this Century, is the Situation of Puppets & Performing Objects,” *The Drama Review* 43, no. 3 (1999): 59; somewhat ironically, the instrumental use of donkeys here could be read as anthropomorphic.

⁴⁷ Amanda Di Battista and Andrew Mark, “Resistance for Breakfast: Hegemony, Arts, and Environment,” CoHearance Podcast Series, *Network in Canadian History and Environment* 10 April, 2012, accessed 20 February, 2014, <http://niche-canada.org/category/media/cohearence/>.

⁴⁸ Shershow, *Puppets and “Popular” Culture*, 184.

⁴⁹ *Ibid*, 185.

⁵⁰ Larry Lewis, interview by author, Toronto, ON, 28 January, 2011.

⁵¹ Lewis, interview.

⁵² One might also conclude that the hand represents a larger metaphoric human hand behind the death of She.

allegorical, exposing the artifice of the puppet, foreshadowing the hubris of nuclear mining, the lack of control, and this translates into emotion.

Johnson has another explanation for the work's power at the moment of revelation: "We are basically anthropomorphizing objects right? I mean, you can do it even if they don't have a face."⁵³ She compared *Uranium* to *Wallace and Grommet*, a famous claymation series,

[Watching a villain in a *Wallace and Grommet* film] you're laughing and you're scared, and there is fear of the danger of this thing [the villain], [but] they are all just lumps of clay. So [these entertainers] don't need to destroy [themselves], dig everything up, have all this emotional trauma [in order to successfully transmit emotion] ... Having all this emotion [or trying not to] as a human on stage in front of people reads as something. Whereas a lump of clay will never read as hollow, cold and emotionless ... because when it is on stage not doing anything, it is still just being a lump of clay not doing anything and being itself ... Shapes, and the relationship between shapes [like puppets], just communicate.⁵⁴

Uranium audience members perceive a gestural "silent language"⁵⁵ between the shapes of the puppets, the film, and Wiseman's body instantaneously, and this gestural and graceful dance of communication elicits interpretation and emotion for some.⁵⁶ The song's form, the acoustic reverberations, the puppets actions, the narrative archetype, the repetitive theme of Canadian mining resource extraction arrogance and more, these patterns create a *moiré*,⁵⁷ a summation of these smaller patterns that can activate a more systemic consciousness in audience members when fictional characters collide with reality in the piece.

Gregory Bateson, an environmental systems theorist, believed in the capacity of art to serve environmentally integrative purposes. In contrast to the idea of art as an autonomous aesthetic object, one of Bateson's proposals is that art can be an expression of grace, of depth, the interconnected, what Arnold Berleant called "the sublime."⁵⁸ Art works can socially, psychologically, environmentally, and systemically help to mitigate overly rational short-circuited potentially destructive thought with more recursive "'wisdom,' i.e., in correcting a too purposive view of life and making the view more systemic."⁵⁹ Bateson posits that good art engages longer relay "primary [mental] processes" from the unconscious and environmentally embedded mind. He insists that for ecological purposes we should search for "what sorts of correction in the direction of wisdom would be achieved by creating or viewing the work of art?"⁶⁰

⁵³ Johnson, interview.

⁵⁴ Johnson, interview.

⁵⁵ Edward Hall, *The Silent Language* (New York: Anchor Press, 1973).

⁵⁶ These micro-timed and patterned responsive nuances of interaction are easier to locate with repeated viewings and slow motion playback.

⁵⁷ Peter Harrier-Jones, *A Recursive Vision: Ecological Understanding and Gregory Bateson* (Toronto: University of Toronto Press, 1995), 202–206.

⁵⁸ Noel Charlton, *Understanding Gregory Bateson: Mind, Beauty, and the Sacred Earth* (Albany: SUNY Press, 2008), 150–156.

⁵⁹ Gregory Bateson, *Steps to an Ecology of Mind* (New York: Ballantine Books, 1972), 147.

⁶⁰ Bateson, *Steps to an Ecology of Mind*, 147.

Ethnomusicologist Thomas Turino agrees with Bateson that art engages “primary processes” through symbology and metaphor⁶¹; however, Bateson’s ideas are insufficient for appreciating music as an integrative and transformative social practice. Music is an unfolding aural temporal process, and Bateson’s arguments are primarily focused on the visual. Following Bateson’s footsteps, Turino proposes semiotic categories to consider “how dance and music create and communicate emotion and meaning”⁶² refined specifically for social musical analysis⁶³:

1) *icons*: signs conveying correspondence directly between the sign and the object; i.e., a picture of a horse indicating an actual horse, the sound of a steel guitar and country music, a whistle sounding like a train, or a predictable verse-chorus song form.

2) *indexes*: signs that link signs, objects, and experience by co-occurrence; i.e., smoke indexes fire, jingles index products on TV, a wedding song, thunder before a storm.

3) *symbols*: signs that are used through a mutually agreed upon linguistic system like musical notation. Symbols use other symbols as objects and allow us to theorize and generalize about things that may not be present or available to our immediate senses.

The fluidity between these categories—between what a composer hopes to communicate and what audience members interpret—presents the possibility of dialogic meaning-making. Turino’s observation is that musicking⁶⁴ relies heavily on iconic and indexical communication. He ties the use of symbols in semiotic communication to Bateson’s “too purposive view of life,” metacognitive rationality, and secondary consciousness because with Turino’s symbols, “as the levels of abstraction increase, so the difficulty in understanding the premises on which the messages are based, and in understanding the nature of the communication, increases.”⁶⁵ Turino describes modern life as over-indulgent in symbolic (category 3) communication: “Iconic and indexical signs are signs *of* our perceptions, imagination, and experiences, whereas symbols are more abstract signs *about* things as generalities” (emphasis added).⁶⁶ For Turino, the corrective wisdom element of musicking, the opportunity for grace, is in the activity’s ability to express a balance between sign categories, giving better measure to the communal material—the ecological present—the iconic and indexical.

⁶¹ Thomas Turino, *Music as Social Life: The Politics of Participation* (Chicago: University of Chicago Press, 2008b), 1–22.

⁶² Turino, *Music as Social Life: The Politics of Participation*, 5.

⁶³ *Ibid*, 5–16; Turino’s formulations require the reader to temporarily set aside dominant historical ideas about icons, indexes, and symbols. His categories do not fit precisely within broader established approaches. Turino’s stem from an (ethno)musicologically centered agenda and are well known within his ethnomusicological audiences. My presentation here is significantly condensed.

⁶⁴ Musicking is a term designed to remind readers that music does not exist without people to play or listen to it. Music is to musicking as dance is to dancing; Christopher Small, *Musicking: The Meanings of Performing and Listening* (Middletown: Wesleyan University Press, 1998).

⁶⁵ Harrier-Jones, *A Recursive Vision: Ecological Understanding and Gregory Bateson*, 202.

⁶⁶ Turino, *Music as Social Life: The Politics of Participation*, 13.

Using these same balances between signs, puppets also offer powerful means to communicate in ways that overly rational representations of (ecological) information cannot as Lewis describes:

If someone is feeling bad, they can reach inside themselves and take out this black heart. And of course, we know what that is all about. We know that the act is not what feeling bad is all about. It's completely metaphorical.⁶⁷

For example, in the case of *She*, her cancer spots appear quite exaggerated. The spots beg a “suspension of disbelief” and “poetic faith.”⁶⁸ Rather than dismiss *She*'s absurdly giant moles, audience members initially react by laughing at their implausibility and soon recognize that the size of them indexes the degree of her misery. *Uranium* actually capitalizes on a brief moment of audience guilt here that a realistic presentation of cancerous moles might not capture as effectively.

Mirroring Kleist's sentiments about the abilities of puppets, Johnson insists that if *Uranium* used human actors, it would not work at all because the audience would read the actors' emotions as fake, as overly correspondent, as symbolic. They would not have the opportunity to project their own emotions onto the puppets. The illusion would be bare, but instead of a singularly powerful revealed hand, human actors would show us how to feel. To wit, “puppets are innocuous. If you saw a bunch of people coming on stage, you wouldn't feel as safe.”⁶⁹ Here she implies that human actors signify a more obvious kind of drama that people would be more likely to guard themselves against emotionally. People might be less inclined to suspend disbelief and dispense poetic faith if live actors interpreted *Uranium*.

Though puppets may theoretically be innocuous or emotionally neutral, they do have agency in their ability to communicate grace: “[e]motions can be accessed by objects. I could be walking down the street and find myself feeling sorry for a melted garbage can that was all slumped over.”⁷⁰ Puppets are radical⁷¹ in their ability to escape rational prescriptive emotional representation, particularly in contrast with more modern forms of entertainment. Puppets interrupt dominant expectations through their low-tech and participative dialogic being.

Why are puppets difficult for some to take seriously and so easy to underestimate—a prejudice that makes them all the more potent when they do effectively communicate? Lewis increasingly faces audiences who feel they may be witnessing performances that are sincere but inauthentic. Lewis articulates modern “mistrust of art” as an expression of our deeper fears of the unknown, witchcraft, and magic: “there is a confusion between the hustler and the artist.”⁷² Lewis, like Schumann,⁷³ Bateson, and Turino, believes that over time people are losing touch with more complete semiotic modes of communication:

⁶⁷ Lewis, interview.

⁶⁸ Samuel Taylor Coleridge, *Biographia Literaria: Or Biographical Sketches of My Literary Life and Opinions: Volume II* (London: Rest Fenner, 1817), 202–204.

⁶⁹ Johnson, interview.

⁷⁰ *Ibid.*

⁷¹ Peter Schumann, “The Radicality of the Puppet Theatre,” *The Drama Review* 35, no. 4 (1991): 75–83.

⁷² Lewis, interview.

⁷³ Schumann, “The Radicality of the Puppet Theatre,” *The Drama Review* 35, 4 (1991): 78.

The trend is towards the literal interpretation of everything ... but if you look back at history, that isn't the case, because all art is illusion ... If you are just a caricature, then you are doing something less and unsatisfactory. But, if you go back to 18th century opera ... it was a drama of incomplete and unrealistic characters.⁷⁴

Before the advent of electricity and film, actors would use dramatic iconic and indexical gesture to communicate emotion by fire or candlelight. Method acting was not an essential skill. Rather, pantomime was essential. The expression of an emotion did not require symbolic identification with the emotion. Audiences were forced to project more of themselves into interpretive participation with such works. Newer dominant communicative preferences encourage passive consumption of arts-based information over interactive criticism, projection, and imagination. *Uranium* is refreshing and surprising in its eventual bald-faced allegory, in the degree to which the presentation is rough, in its ability to dialogically communicate to the conscious from the subconscious in a communal setting.

Kleist felt that in order to overcome our loss of unconscious integration with the world, of grace,⁷⁵ we must use participatory dialogue offered by things like plays to contain the alienating handicap of egotistic rationality⁷⁶:

[Kleist] envisaged [dialog] as a system of vices in which the speaker is caught, out of which he must prise his way back into the freedom of complete utterance. Communication is generated by the resistance to pressure and inseparable from both. And the depth of the communication is measurable by the strength of the recoil which accompanies it.⁷⁷

While *Uranium* may not be participatory in the sense of Turino's tighter definition of musicking as it pertains to sustainability,⁷⁸ *Uranium* does beg audiences to participate in the environmental dilemma of its narrative in the sense that Kleist and Bateson convey about the potential of the arts. This distinction describes one kind of relationship between ecocriticism and ecomusicology with respect to singer-songwriters. Qualities of audience participation and engagement are central to both fields. Popular entertainment is occasionally derided by social and environmental critics as individually commodified and divisionary,⁷⁹ especially in contrast to community arts practices and their process-oriented ends.⁸⁰ Like many performance works, *Uranium* works against individuation. People transcend individual experience during *Uranium*, synchronizing and participating collectively with stolen glances, laughs, sighs, moans, and

⁷⁴ Lewis, interview.

⁷⁵ Robert Helbling, *The Major Works of Heinrich von Kleist* (New York: New Directions Publishing, 1975), 36.

⁷⁶ This methodology reminds one of Bateson's metalogues chapters in *Steps to an Ecology of Mind*.

⁷⁷ Ilse Graham, *Heinrich von Kleist: Word into Flesh, A Poet's Quest for the Symbol* (Berlin: Walter de Gruyter & Co, 1977), 13.

⁷⁸ Thomas Turino, "Four Fields of Music Making and Sustainable Living," *World of Music* 51, no. 1 (2009): 95–117.

⁷⁹ Robert Putnam, *Bowing Alone: The Collapse and Revival of American Community* (New York: Simon and Schuster, 2000).

⁸⁰ Clarke Mackey, *Random Acts of Culture: Reclaiming Art and Community in the 21st Century* (Toronto: Between the Lines, 2010).

tears, all together in time. Temporarily, there is community, bringing individuals into an immediate collective internally cohesive present.⁸¹ While short relay activities are normally understood as everyday thinking, potentially egotistic or alienated, musicking as a temporal moment-to-moment process can actually create opportunities for communal experience,⁸² a heightened emotional awareness of a more complete present, expanding the potential for (large relay) impact on environmental consciousness. If musicking is a practice of rebalancing awareness of the existential and immediate,⁸³ of searching for grace, then it is possible that fostering such activities helps to create counter-hegemonic modes for engaging environmental concerns.⁸⁴

Finally, perhaps the most obvious explanation for the piqued emotion of some in experiencing *Uranium* is that in the wake of She's death, Wiseman effectively identifies for his audiences an environmental cause of cancer. This moment is both politicized and emotional for those who have encountered the stigma of cancer, the denial of accountability by powerful corporations, and the impossible burden of proof laid upon individualized victims and their families.⁸⁵ Audience members witness or experience some measure and representation of the consequences of our risk society,⁸⁶ as well as the rage and powerlessness of the environmental movement: an identification with the puppets as pawns of fate. In extreme emotion, in helplessness, if only briefly, for some people there might be opportunity to weep, grieve, or mourn.⁸⁷ By the end of *Uranium*, Wiseman leaves nothing complete. He subverts the semiotic norms of modern entertainment by providing no solutions, forcing his audience to grapple with social and environmental ethical considerations for uranium mining.

Conclusions

Revisiting the position of the performing arts in the environmental movement in an interdisciplinary fashion uncovers kinds of ecological illumination and emotional engagement

⁸¹ Christopher Small, "Prologue: Misunderstanding and Reunderstanding," in *Music and Solidarity: Questions of Universality, Consciousness, and Connection*, ed. Felicity Laurence and Olivier Urbain (London, Transaction Publishers, 2011): vii–xvii.

⁸² Charles Keil, "Participatory Discrepancies and the Power of Music," *Cultural Anthropology* 2, no. 3 (1987): 275–283.

⁸³ Steven Feld and Charles Keil, *Music Grooves: Essays and Dialogues* (Chicago: The University of Chicago, 1994). Keil's theory of participatory discrepancies about timing, tuning, and timbre in musicking is particularly germane to Turino's work, a foundational ethnomusicological concept, and relies on Bateson's observations about differences that make a difference. Feld also adopts Bateson in his work on schizophrenic and schismogenesis.

⁸⁴ Allen Farmelo, "The Unifying Consequences of Grooving: An Introductory Ethnographic Approach to Unity Through Music," Musicians United for Superior Education, 1997, accessed 20 January, 2013, <http://www.musekids.org/UCS.html>.

⁸⁵ Phil Brown, Sabrina McCormick, Brian Mayer, Steven Zavestoski, Rachel Morello-Frosch, Rebecca Gasior Altman, and Laura Senier, "'A Lab of Our Own': Environmental Causation of Breast Cancer and Challenges to the Dominant Epidemiological Paradigm," *Science, Technology, & Human Values* 31, no. 5 (2006): 499–536.

⁸⁶ Ulrich Beck, *Risk Society: Towards a New Modernity* (London: Sage Publications, 1992).

⁸⁷ Richard Courtney, *Drama and Feeling: An Aesthetic Theory* (Montreal: McGill Queen's University Press, 1995), 110.

that are not possible through more traditional environmental pedagogy (economics, history, ecology, technology, statistics, etc.).⁸⁸ As a vehicle for environmental consciousness, musicking troubles dominant environmental pedagogy. However, *Uranium* also troubles boundaries we might ascribe to “music,” and therefore, this paper engages the recombinant field of ecomusicology.

By animating puppets and artworks, by linking song with allegory and ethics, Wiseman encourages connective cognitive processes that tie us to environmental concerns through dialogic experiences that natural sciences cannot access in the same way. Research demonstrates that puppets are particularly good for delivering popular education,⁸⁹ and *Uranium* offers up an ethical dilemma through interpretive participation. With *Uranium*, ecomusicologists have an example of a work that moves beyond discussions of sustainability and other tactics of environmental salvation. *Uranium* extends the place of ecomusicology well beyond the musical academy. The tangible effects of *Uranium* do not result in lighter footprints, but instead present the percipient with an opportunity to slowly “worry the wound,”⁹⁰ to sit with a problem, a loss, undiminished, without obvious solution in order to better resist the acceptance of such losses.⁹¹

Rebalancing or prioritizing aesthetic experiences and analysis of the immediate and interconnected with meta-cognitive theoretical considerations of the future will help ground us in an environmental consciousness of the present. Works like *Uranium* can activate affect, discussion, and positionality in an otherwise potentially apathetic public as it does in my classroom. They offer opportunities to creatively interpret and process ecological perspectives and tie emotion to facts and figures. *Uranium* also creates space to collectively identify with something that is not human which is a challenge for many educators. It is just possible that by using puppets, Wiseman expands our “field of care”⁹² our “sense of self”⁹³ into something more

⁸⁸ Amanda Di Battista and Andrew Mark, “CoHearence Consequences of the Commons: Podcasting, Ecopolitics, and the Power of Listening,” in *Green Words/Green Worlds: Environmental Literatures and Politics*, ed. Catriona Sandilands, Ella Soper, and Amanda Di Battista (Waterloo, ON: Wilfred Laurier Press), forthcoming.

⁸⁹ Anupama Shah and Uma Joshi, *Puppetry and Folk Dramas: For Non-formal Education* (New Delhi: Sterling Publishers Private, 1992).

⁹⁰ Clifton Spargo, *The Ethics of Mourning: Grief and Responsibility in Elegiac Literature* (Baltimore: John Hopkins University Press, 2004).

⁹¹ Andrew Mark and Amanda Di Battista, “Making Loss the Centre: Mourning and Environmental Loss through Podcasts,” in *Environment and/as Mourning*, ed. Ashlee Cunsolo Willox and Karen Landman (Montreal: McGill University Press), forthcoming; Amanda Di Battista and Andrew Mark, “Making Loss the Centre: Melancholy, Mourning, and Environment, Parts 1 and 2,” *CoHearence Podcast Series*, Network in Canadian History and Environment 6 February and 6 March, 2012, accessed 20 February, 2014, <http://niche-canada.org/category/media/cohearence>.

⁹² Michael Golden, “On Music, Interconnection, and Consciousness,” in *Music and Solidarity: Questions of Universality, Consciousness, and Connection*, ed. Felicity Laurence and Oliver Urbain (London: Transaction Publishers, 2011), 30–46; Neil Evernden, *The Natural Alien: Humankind and Environment* (Toronto: The University of Toronto Press, 1993).

⁹³ Aldo Leopold, *A Sand County Almanac* (New York: Oxford University Press 1949).

ecosystemic, providing an opportunity to consider care for other “non-humans,” but this is a project for future research.

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Suggested Links for Further Listening and Viewing

The song that Warner Brothers pulled from Wiseman’s first album which is now available here for free:
http://freemusicarchive.org/music/Bob_Wiseman/In_Her_Dream_Bob_Wiseman_Sings_Wrench_Tuttle/Rock_and_Tree

A piece Wiseman performs on stage about the Vancouver Airport Taser-ing of Robert Dziekanski:
<https://www.youtube.com/watch?v=x89xHqQMzFM>

A short documentary on Wiseman’s work and includes pieces of *Uranium*:
<https://www.youtube.com/watch?v=7U83Jl6cpQc>

A satire of Steven Harper’s (The Canadian Prime Minister’s) politics, "Young Conservatives Against the Environment":
<https://www.youtube.com/watch?v=rWYlfwYRQ1M>

A video from a collaborative performance with Margaret Atwood for post-Fukushima relief funding:
<https://www.youtube.com/watch?v=z6uhNEZj7TU>

A video from Wiseman about global climate change from 1991:
https://www.youtube.com/watch?v=ZM5WA_J52P4

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Appendix

Lyrics and Chords for Uranium

Verse 1:

(G) She was born,
(D) Near Elliot Lake,
(C) But she was curious.

(G) Packed her bags,
(D) One day,
(C) Took the grey hound bus.

Chorus 1:

(Em) As far as it would (C) go,
(G) In Southern Ontari-(D)-o,
(Em) It's sink or swim I (C) guess,
(G) Toronto was her (D) test.

Verse 2:

She met Joe Blow,
Selling guitars,
At Long and McQuade.

He made her smile,
When he showed her his tattoo,
Of a heart grenade.

Chorus 2:

And in the coming weeks,
They didn't speak.
They knew their song by heart,
And they sung it in the dark.

Verse 3:

One day black moles,
Accumulated,
On her thirty-two year old skin.

The doctor told her,
She should contact,
Her next of kin.

Chorus 3:

She was in agonizing pain,
She couldn't lie on her side.
The cancer took her in its arms,
Before thirty-three she died.

Verse 4:

Now Joe Blow wanders,
In a fog,
And sings no songs.

He thinks evil,
All city people,
And wonders about right and wrong.

Chorus 4:

Why was the woman that he loved,
Taken so young?
She was only from a small town,
Where they mine uranium.