Growing Up Audiofile: Music Composition In The Computerized Classroom

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Abstract: Based on new research from In and Out of the Studio, this online work considers the importance of early life experiences and formations in the construction of gendered identities and relationships with sound technologies. Constructed out of a practice of dialogic ethnography, Andra McCartney and Ana Friz act alternately as ethnographer and research subject, interacting in a conversation composed around open-ended questions about life experiences. Through this process, they highlight issues such as the importance of early access to technology and encouragement to experiment, the role of feminist support networks and mentors, and the role of formal institutions such as music schools compared to community resources like volunteer-driven campus-community radio stations. They also discuss challenges to women around credibility, confidence and professionalism.

Methodologies

This online work was constructed out of a practice of dialogic ethnography (see also Pegley and Caputo, Keil and Feld 1994). Each of the two participants acts alternately as ethnographer and as research subject, interacting in a conversation in which we interview each other about experiences with gender and sound technologies. Dialogic ethnography is based in the importance to knowledge-building of "second persons", whose aim is friendship, to use Lorraine Code's (1991) formulation. We are both practicing sound artists. It is also important to note that Andra is a professor and director of the current research project, In and Out of the Studio, while Anna is a graduate student and research assistant. We tried to remain aware of this power imbalance, to be mindful of how it might affect the resulting writing, and to attempt to minimize that effect. This dialogue could be seen as a form of role-modeling, since Andra has done other academic projects of this kind. Because this is an early stage of our research, we used this opportunity to test and refine our approach before doing other interviews.

As in Andra's earlier research project with women electroacoustic composers, the interviews were composed around open-ended questions about life experiences, such as "how did you get involved in radio production?" in order to allow each participant to raise themes of interest to her. Following the model of Pegley and Caputo, we each thought about ten significant life moments related to our topic of sound, technology and education, and used these moments as starting points for discussion. We then listened and responded to issues raised by the participants, searching for "generative themes," a term appropriated from Paulo Freire (1983, 1988). Freire advocated literacy education based on the concerns of the participants, and the development of critical awareness of their socio-political position through discussions, which were built around these themes.

A significant departure from Andra's earlier work is the inclusion of early life experiences (thanks to Bev Diamond for this suggestion). The 1993 project on women composers maintained a traditional focus on composers' professional lives. Early results of the new In and Out of the Studio project indicate the great importance of early life experiences in the construction of gendered identities and relationships with technologies.

We are creating this website collaboratively. Each of us wrote drafts of three sections, discussed and edited, and contributed sound clips and images.

Soaked With Sweat

Our first studio encounters were not without anxiety; sometimes to the point where a change of shirt was needed afterwards. The studio commands an aura of professionalism: a feeling that one needs to "know what you're doing" to enter, that neophytes must prove themselves. Where is the shrine where I will bow and present my offering? Ah yes, the control board, an apparatus whose name says it all. Though we eventually become accustomed to and comfortable with the bewildering array of knobs on the board, the routing of auxiliary effects units and so on, early experiences in the studio are not easily forgotten.

For Anna, that first high-pressure moment in a studio occurred in 1993 when she began volunteering at CiTR radio in Vancouver, the campus-community station of the University of British Columbia. She and four other women of various ethnic backgrounds and sexual orientations proposed a spoken word programme entitled Radio Free Women. CiTR, like most campus/community stations, was actively seeking women volunteers in order to represent more diverse social interests and issues, and to reach gender parity on the air; so Radio Free Women was quickly slotted on-air from 5:30-6:00PM Thursday evenings. Unlike Anna's previous experience with radio at CKUT (where, as a first year undergraduate student in 1988 she was assigned to a purgatory of record filing with vague promises of future training), at CiTR the collective was fast-tracked to broadcast before all of the members had even received basic training. They arranged for the volunteer coordinator to be on-hand in case of on-air paralysis, but even so those first programmes in the unfamiliar on-air booth gave them terrible stage fright. Similarly, Andra became involved with CIUT in Toronto in 1993 by filling in Sarah Peebles' show "the Audible Woman". On the night of her first show, her scheduled technician did not show up, leaving Andra to take a whirlwind tour of the studio with the preceding programmer and go on-air alone. In her article "Pirate Writing", Kim Sawchuk aptly describes such a sweaty, nervous radio debut:

Dead air. You fumble for the buttons and the mike. Instead of cassette one, you've pushed two. Panic. You read from one of the typed public service announcements, one of the many items programmed into your time. Panic, as you try to read and decide what to play next. Panic. Even it you could see the monitor, which you can't because you can't talk into the mike, read, and look at the board all at the same time, you can't remember what you've put where. (210)

At the end of a half-hour talk show, the Radio Free Women crew crawled out of the booth, soaked with sweat, shaky, but elated. It was certainly not the best we could do, but we survived, and had an inkling of what familiarity and practice could bring. What overrode the anxiety and sweaty palms of these first forays in the studio was the desire to *do*: to step up to the mic, to make sound and be heard; and we took pleasure in our budding technical competence.

As we become teachers of technical practice, it is apparent that most students, regardless of gender, approach unfamiliar technology like mixing boards and computer software with some initial anxiety. Sawchuk suggests that the studio technology itself is not intrinsically gendered either: "The mike not only broadcasts, it records and therefore listerns. As a technological device it has no inherent gender identity or function: it all depends on what articulations to what hardware you make." (212) However, gender bias is established through social practice and use; and these biases surrounding studio design and use present women with extra pressures to perform. Mistakes are too often chalked up to gender, not inexperience, causing many women to strive for credibility through flawlessness from the first try, and to berate ourselves when we err, feeling we could and should do better.

In radio there can be no silence. Silence equals death-- a sign of your ineptness with technology. Just like a girl they will think. (Sawchuk, 211)

The Radio Free Women collective encouraged one another despite fumblings and dead air, but ultimately Anna would improve as a technician once the show was reduced to two members, and a third woman with experience at another station joined the programme with much higher expectations than just surviving the show without obvious gaffs.

Anna eventually moved from volunteer to employee and began working in campus/community radio training volunteers. When training very different people in the same session (which often consisted of managing big egos while encouraging the reticent and shy) she realized that especially in the context of a community-oriented volunteer-driven organization it was more useful to admit ignorance and try to solve technical problems collectively than to appear all-knowledgeable in front of boys asking technical questions. The goal of campus/community radio is not to establish or entrench hierarchies of knowledge and ways of knowing, but within the loose bounds of the CRTC (federal licensing body) regulations to help people find their own way into radio as a medium; in fact c/c radio seeks to diffuse the authority of technical expertise in favour of community and individual experience and expression. Similarly, people with fewer expectations of instant mastery and a more relaxed exploratory approach inevitably were broadcasting sooner than those with something to prove.

Credibility, Tactics And Techniques

Another manifestation of the credibility-confidence crisis confronting women working with sound, is that opportunities for recording and performance of work slip by, as we decide that our work is not good enough to submit. This was discussed by some of the electroacoustic composers in Andra's earlier study. One composer, who had had a work accepted for Discontact!, a Canadian Electroacoustic Community production, said:

There must be some reason that women don't submit. I must admit that I worried when sending my piece in because it's a very low-tech piece. I think of it as low-tech even though it was done with Soundtools, a high-end digital program. I juxtaposed the sounds, but considering what I could have done with them, it's very low-tech... I've been asked to send tapes to Tellus for release, but I didn't because ... all of my recordings were made on slightly older equipment. I realize in retrospect that they probably were good enough. It was just my fears that they weren't the very latest, up-to-the-minute perfect recordings, that prevented me from

sending them in (Gayle Young, as quoted in McCartney 1994: 119).

The following year, Discontact II! had a call for submissions, and even though Andra was very nervous about submitting a low-tech piece, she did. The field recordings for Arcade '94 (link to excerpt in Shockwave format on the CEC site) were made using a Walkman Pro cassette recorder, which was the only field equipment Andra could then afford. To make matters worse, she ran out of batteries during the recording, and had to do the interviews on a lower quality cassette recorder with a condenser mic. However, she was unwilling to do another take, since the two teenagers being interviewed had said some remarkable things, and Andra wanted to maintain the power of the moment in the recording. She equalized and filtered the voices to reduce noise, and mixed these with the field recordings of arcades. This piece, through its inclusion on the CEC CD which was distributed internationally, has received extensive airplay. It has been criticized from time to time for its low-tech sound, but has also been praised for other reasons: "Among the most satisfying and adventurous compositions are selections by Egils Bebris, Frank Koustrup, Andra McCartney, and Gordon Fitzell." (Review of Discontact! II by Mark Booth, P-Form, Winter 1995). Andra currently prefers technology that is portable and easily accessible. Her recording equipment (minidisk, stereo mic, earbuds, spare batteries) fits neatly into a small leather pouch and weighs only a couple of pounds, which means that she can carry it everywhere; and even though this technology makes recordings with lower noise and better signal quality than the Walkman Pro cassette recorder that she used for Arcade '94, it actually costs less (around $400 Cdn).

Our expertise and home studios have improved greatly since our early forays into sound art. However those early experiences taught us to work tactically with available technologies-- to make the best of the equipment and the recording situation on hand. While media art tends to measure innovation based on the newness of the technology employed, existing or trailing edge technologies still have much to offer. In a deliberate application of "low-tech", Anna brought only a cassette recorder with an external stereo mic to the protests in Quebec City, Canada during the

Summit of the Americas in April 2001. Her intent was to record live street sound, and knowing that the situation on the ground was extremely confrontational (police employed thousands of rounds of tear gas over the course of the weekend), she chose a recording device that was portable, discreet and expendable in the case of loss, damage or arrest. Those field recordings were nonetheless of acceptable quality, and became the basis for There's a risk of arrest if you turn right, composed together with Richard Williams, which has since aired widely.

Listen To Some of Andrea's Work:
andrasound.orgworks on ORF Kunstradio

Swimming the Reef (Shockwave) Silence Descends

River Writing (near bottom of page, Real Audio format)

Child's Play

Gender theorists discuss how early socialization tends to encourage gender conformity that constrains girls' attitudes towards technology: girls are taught to relate, and boys to tinker (Whitelegg 1992: 179Ð180). This childhood learning of gendered roles happens in the family home, playground, school, and mass media. A morning spent watching children's Saturday morning television programming still reveals advertisements and programs that encourage girls to see themselves as passive, warm, soft, and caring, relating to soft toys and dolls; boys, as active, cool, hard, and warlike, manipulating tools and machines ranging from cars to robots.

However, each person's socialization varies, and some young girls have access to technologies and role models through their families or other opportunities. One of our aims in this project is to find out where these opportunities exist, and how they can be encouraged. For instance, Anna relates:

(I was) maybe 10 .... 9 or 10 .... and I had a little tape recorder ... I got it from my grandfather ... I got a couple of tapes ... my mother listens to CBC all the time ... somewhere in the house are these tapes of me imitating Don Herron ... basically conducting this morning show ...

interviewing these characters that I make up and do all the voices.

There are several important factors in Anna's story, that provided this as a technical and creative opportunity for her. She lived in an environment saturated with radio, since her mother listened to CBC 8 to 10 hours a day. Her grandfather provided a tape recorder, and she was able to acquire tapes. Listening to CBC radio host Don Herron provided a model of how to conduct a morning show. Anna's mother clearly valued the productions, since she kept them. The technology itself was simple enough for Anna to figure out, and inexpensive enough that adults were not precious about it. All of these factors add up to an experience that gave Anna more familiarity and confidence when she began to speak into a mic as an adult.

When Andra was a child in England in the early sixties, cassette players were not as widely available, and it was her older brother who had the reel-to-reel tape recorder. But her closest friend was the boy across the street, and their games involved car racing and Lego, or making a string telephone and stretching it across the street to talk to each other. Andra also had access to an old windup Victrola and some 78 rpm records, so learned how phonographs work, by winding up the mechanical version. Her grandparents gave her puppets and built a puppet theatre that became the site for her first script-writing, set design, and production efforts (around age 8), which were played to the neighbourhood children in the garage.

But more importantly, Andra remembers often being encouraged by her mum to play alone, to expand her inner universe. Recently, in a working group meeting, someone mentioned that in traditional family contexts, boys are given time to play while girls are expected to learn to serve. However, in Andra's case, her mum would let her leave the dishes and go practice piano or write.

Both of these early life narratives indicate access to technologies, and social formations, that complicate the stereotypical norm described by Whitelegg, and provided some openings for further exploration later in life. At the same time, there were definitely moments of blockage in our sound-technology trajectories as well as opportunities. For instance, Andra wanted to join the Anglican choir, but was told only boys were

allowed. Later, she wanted to do percussion in high school, but again this was restricted to boys. Nevertheless, the other experiences with tinkering, technological toys, free play and production practices were formative.

Mentors And Networks

The importance of mentors and role models for women entering the realm of sound art and production can not be overstated. Women are certainly a minority among composers, sound artists, and sound engineers, which often leads women in these areas to feel alienated and isolated.[1] We commonly stress that role models are necessary to involve women in technical fields where historically they have been excluded, but in addition to seeing women doing the job there must also be support in the form of encouragement and skills sharing. A role model serves as an example in a situation or field -- in other words leading by practice-- whereas a mentor acts in an advisory capacity. Both example and encouragement are valuable to women undertaking technical endeavours such as sound production, and for both Andra and Anna role models and mentors enabled our interests in sound and composition to be more than hobbies or vague aspirations. Our networks have not only included women role models, but feminist mentors, female and male.

Andra notes how the emphasis on tutorial instruction in private and institutional music education affected her confidence and success, depending on the teacher. Her piano teacher in England from age 7 on spoke of her as a star, and she gained confidence in her technical and interpretive skills. A critical and demanding piano teacher when she was a teenager with dwindling interest in classical music contributed to her decision to give up lessons for several years. As a Cultural Studies major at Trent University several years later, Andra took a Directed Study course with Prof. Jody Berland that was a profound learning experience:

> *"Three of us took a directed study with Jody. We did a field trip to New York City, among other things having afternoon tea with John Cage at his apartment. We formed a band called the Nuclear Family, wrote songs together, and did a multimedia performance at the University. I had*

never had such a holistic learning experience - and Prof. Berland did this as a course overload."

Later, Prof. Berland encouraged Andra to publish her first article (McCartney 1984), and collaborated with her on several sound art works, including her first access to a University sound studio in 1992. Andra was fortunate again at York University:

"Prof. James Tenney and his wife Lauren Pratt, then editor of Musicworks, introduced me to other women composers and to the new music community in Toronto. Prof. Beverley Diamond encouraged me to play my work for others and wrote a letter securing my access to the electronic studios while the professor was away on sabbatical. Her support was crucial to my success as a graduate student - she was the perfect antidote for imposter syndrome."

These are all examples of the music-mentoring system working well to ease access and support neophytes. It must be noted here that this is not always the case: in some situations, the intense, private association between established composition teachers and new students results in sexual harassment or other abuses (Wilson 2002).

Another kind of support network is established through the process of ethnography, a methodology that allows the researcher to closely engage with research subjects. The consultants in Andra's first study became a more established network, and were sources of encouragement and inspiration for each other and for Andra. For example, through Sarah Peebles, Andra became more involved in community radio. Wende Bartley gave her composition lessons, and Hildegard Westerkamp drew Andra further into the Acoustic Ecology community. In fact, Andra's research relationship with Hildegard Westerkamp, through a process of dialogic ethnography, became a friendship that extended into professional and creative work, family gatherings and constant communication.

So You Want To Be A Sound Geek: Apprenticeship

The transition from our early experiences with sound making and music to becoming sound artists, composers, or technicians pivots on the question of access: to tools and facilities, to teachers, and to

inspiration. Here Andra asks: which kinds of contexts work best to provide experience and encouragement for women? In Andra's experience, academe provided the community and equipment she needed particularly because of feminist mentors like Bev Diamond, Jody Berland and James Tenney. Without their intervention and encouragement, she might not have gotten permission to use an electro-acoustic studio, nor been able to include sound practice as well as theory in her dissertation. However, it was through access to a variety of different studios simoultaneously, and in the more informal setting of improvisation with other artists, radio broadcasting and her own work interviewing women sound producers that gave Andra the technical and social resources she needed. Anna did not undertake any formal academic training in sound or music, but gathered skills through years of radio broadcasting at UBC's campus/community station CiTR, and group projects at artist-run centres like the Western Front. Though Anna learned largely through trial and error in these informal settings, campus radio and artist-run culture provided an immediate outlet for diffusion of and support for experimental work.

Both Andra and Anna became involved with campus/community (c/c) radio in the early nineties through shows produced collectively. The campus/community radio sector, as opposed to the public or commercial sector, is uniquely mandated to serve diverse communities in the area of broadcast, and to provide access to and programming by groups not heard regularly on mainstream radio. Thus c/c stations actively recruit women, people of colour, queer folk, community and social activist groups, etc, and strive not only to provide a voice for these diverse communities but "to provide facilities and training through which members of the community and interested students may gain knowledge of and experience with radio programming, broadcasting and management." (CKUT Mission) By the early 1990s, due in part to efforts by the National Campus/Community Radio Association (NCRA), c/c radio strove to eliminate barriers for women interested in radio, and to achieve gender parity on-air.[2] At the annual general meeting and conference, a "women's day" was established, where women from various stations would share skills and network, while the male conference attendees were provided with

"unlearning sexism" workshops. It is no surprise, then, that c/c radio stations are a likely starting place for women interested in sound and seeking equipment, experience, and community. (Listen to the Thundergrrrl Radio promotion, CiTR 1998.)

The most immediately rewarding (and nerve-wracking) aspect of radio is the on-air performance--for unlike most other audiophonic practices, c/c radio often involves a weekly or biweekly commitment to broadcast. For Andra, her involvement with Sarah Peebles' (and Auditory Transitory's collective) radio programme gave her confidence to perform, for despite her extensive music training, Andra had been quite anxious about and unused to performing for an audience. Andra also notes that among the women composers that she initially interviewed as part of her MA thesis research, women like Hildegard Westerkamp and Kathy Kennedy, who had a strong do-it-yourself background (including extensive experience in c/c radio), were the ones who seemed particularly open to new genres, situations and ways of working, expressing confidence in experimentation.

What is the value or impact of dialogic ethnography in this study? What does it reveal that other more traditional methodologies might have silenced?

Endnotes

[1]In 2000, Pauline Oliveros widely disseminated a survey questioning the low enrollment of women in the composition and electro-acoustic areas of music faculties in post-secondary institutions across North America. The informal results indicate that in many schools women make up less than 10% of the electro-acoustic and composition programmes, in some cases down from a higher percentage in the mid-1980s. In Montreal, celebrated annual festivals of experimental electro, sound art and electro-acoustic music program few to no women (in 2001, Elektra had no women artists, Mutek included 2 over a five-day festival).

[2]What is the value or impact of dialogic ethnography in this study? What does it reveal that other more traditional methodologies might have silenced?

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