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Pressure and movements

Gender constructions in experimental electronic music

Skriftlig reflektion inom självständigt, konstnärligt arbete

Det självständiga, konstnärliga arbetet finns

dokumenterat på inspelning: **SYNERGY**

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"Sound can be thought of as *pressure* and *movements,* doing cultural work. In the propagation of sound waves, the most audible impression may occur near the beginning of a sounds generation, but the wave reverberates through space indefinitely, continuing to intersect with and influence the other sound waves as physical matter in ongoing interactions.
 Likewise, feminisms and the reactions to them do not go away but continue to reverberate in shared discursive spaces. How debates sound within and across these spaces depends upon one´s orientation toward an argument, how one listens selectively, and how some claims are masked or augmented by their relative power or position."

-Tara Rogers, *Pink Noises*

This text is one part of my graduation work on a bachelor level in electroacoustic composition at the Royal College of Music in Stockholm. The other part is a piece called Synergy, for grand piano and live electronics. It was performed by Lisa Ullén on March 29, 2013, at Fylkingen in Stockholm.

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Abstract

The aim of this text is to examine the field of experimental electronic music with a focus on gender constructions and in particular electronic music's relationship to masculinity. What are some of the recurring ideals and group cultures? Can these suggest causes or in some way explain the gender imbalance in the field?

Due to the expansiveness of the topic, the following text will be divided in to five sections which focus on some of its aspects. In "Male identification and control" gendered stereotypes are analyzed along with suggestions of how they may shape our relationship to technology. "Militaristic symbolism" examines the history of some tools used to make electronic music and its relation to militarism. "Neutrality" criticizes the idea of technology as neutral and "Defensive learning climates" goes in to analyzing the learning environments of electronic music and related technological fields. "Gendered expectations" focuses on how we are socialized to "perform our gender" and how gendered expectations shape us.
"Concluding thoughts" will briefly summarize the previous topics and present ideas about how to work more practically with constructions of gender within experimental electronic music environments.

Introduction

Electroacoustic music refers to a western art music tradition following the "incorporation of electric sound production into compositional practice". "Electronic music" is a very broad definition which today includes several genres and styles. Most music today uses electronic instruments or electronic music technology in its production. By adding "experimental", I aim to narrow the definition of electronic music to exclude more popular genres that may be electronically produced even though they share much of the aesthetics sprung from the history of electronic music. The term "experimental" requires understanding that anything considered experimental and challenging at point in time might be seen as conventional ten years later.

The text is written from a norm-critical perspective. This means that instead of placing focus on persons who are considered as deviant in a certain context, one tries to expose the norms and power structures which cause these individuals to be perceived as different, as well as the consequences of that imbalance.

The question of gender is part of a larger issue of diversity. To support diversity means to recognize, respect and value people's differences by promoting an inclusive group culture.

I will use the terms "men" and "women" in order to analyze the cultural descriptions of gender and how these affect individuals within the social context of experimental electronic music.

Background

My interest in creating music started in a basement together with some friends. We were left to our instruments in a safe environment without being inhibited by many ideals or restraining opinions about how to make music. Somehow my musicality changed dramatically when I joined a public music school. In retrospect, I can clearly connect that change to the stereotypical ideals advocated within these musical contexts. In the case of instrument selection, boys were encouraged to choose naturally noisy instruments that clearly occupied acoustic space and could not be ignored. There seemed to be a silent agreement that electronic and amplified instruments as well as tools perceived as "high tech" were inappropriate for girls. Even at this early stage of musical practice, virtuosity became the yardstick for evaluating students musicality. For example, young guitar-playing boys measured themselves against each other by playing as fast as possible. To me music became a culture defined by competition in exercising a narrow definition of virtuosity. The concept of good music became synonymous with qualities such as speed and the use of advanced techniques.

Quite soon after I started to study electroacoustic composition, I realized that it was a very male domain. Knowledge was conveyed by men, practitioners and student groups were mainly men and the music history I got to learn contained only men. Performance practices, aesthetics, curation, education and knowledge dissemination where defined by a strong masculine ideal. During a history lesson in pre-college, I questioned the fact that all the composers we learned about were male. The response given by my teacher was: "It's because women composers haven´t accomplished anything historically important enough to mention."

Since then I have been connected to a diverse spectrum of platforms dealing with experimental electronic music, from institutional electroacoustic music to independent groups dealing with everything from hardware hacking and software coding to intermedia projects and free improvisation. Gendered ideals and expectations of musical practice are advocated within many of these environments. Although these interest and learning groups tend to have a self image as being innovative and in the forefront, ideals influenced by historical praxis are often promoted. I see this text as an interesting opportunity to examine how gendered ideals are connected with the history and traditions of the experimental electronic music scene, as well as how they effect the shaping of new individuals and future actors within the scene.

Male identification and control

"Patriarchal societies are male identified in that core cultural ideas about what is considered good, desirable, preferable, or normal are associated with how we think about men and masculinity."[1] The male stereotype inherits qualities such as control, strength, competitiveness, toughness, coolness under pressure, logic, forcefulness, rationality and autonomy, to mention a few. These are all qualities that suggest activeness and control over existence and environment. "Domination over nature, i.e. control over the physical world, is a central feature of much present-day technology. Part of the technical worldview (which is the male norm) is the belief in one's right to control the material world. Part of successful socialization as a man in our society involves gathering confidence in one's actual ability to exercise that control." [2]

 In electronic music, control is often fetishized. Spaces built for electronic music can be likened with monuments of power. Studio and concert spaces is often set up with the user in the epicenter and concentric circles of high-tech devices surrounding. Loudness and physical impact on the environment works as a graduation of quality. I believe that mental conceptions of the world are embodied and embedded in technologies. The fact that many technological fields are dominated by men and that technology is associated with masculinity makes it easier for men to relate positively to it, and therefore they are more likely to enter these fields. The strive for control is nothing negative in itself, on the contrary it is necessary in all aspects of doing, acting and thinking. The problem is that qualities such as control are strongly gendered. Attributes associated with being a man is often set in contradiction to the cultural description of being a woman. "Women generally do not think they have a right to control the material world and have little confidence in their ability to; as long as they doubt either, it is very difficult for them to use a technology created by those who accept domination/control as a given." [3] Each individuals attitude, confidence and idea of what is possible in creative work with technology is strongly shaped by these cultural constructions. I believe this has an impact not only on artists' creative output, but on people's ability to imagine themselves actively change things and have influence, both on a personal level and in society as a whole.

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1   Allan G. Johnson, *The Gender Knot (*2005).
2   Margaret Brenston, *Technology and Womens Voices* (1988).
3   Ibid.

Militaristic symbolism

Historically, many of the tools used when making electronic music were developed for military purposes. Broadcast radio was developed in conjunction with military investment during World War II, and recording technologies were funded for their potential as military applications. [4]

When looking at the language and terminology used, there are many references to militarism. In programming for example, words like "trigger", "command", "crash", "bang" and "execute" are very common. [5] "The very act of making electronic music thus unfolds with references to high-tech combat, shot through with symbols of violent confrontation and domination. This persistent militaristic terminology and aesthetic priorates of rationalistic precision and control epitomize notions of male technical competence and hard mastery in electronic music production." [6]

How individuals relate to technology is extremely tied to their early socialization in technological fields. Gaming is a good example of a common gateway to further involvement in the world of computing. The U.S Military and the computer game industry are cooperating to produce games that are released for both military training and commercial sale. [7] The tools of electronic music are not innocent. Its history is not only linked to masculinity, but with power and militarism. "It is thus necessary to lay out a broad critique of genres and issues across multiple histories that electronic music inherits, including affiliations with militarism in the evolution of audio technologies, a logic of reproduction that operates in audio discourses and practices, and the politics of electronics manufacturing in a music culture that privileges planned obsolescence. Together these factors have informed electronic music histories by delimiting who and what counts in such matters as invention, production, and making noise."

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4   Tara Rogers, *Pink Noises.*
5   Ibid.
6   McCarney (2002); Bradby (1993), 156-57.

7   Matthew Thomson, *Military Computer Games and the New American Militarism.*

Neutrality.

Many discussions concerning technology are based on the deterministic presupposition that technology is neutral and follows a predictable path going beyond cultural and political influence; by providing technological tools society organizes itself to support and develop these further and therefore technology is a key governing force in society. The view of technology as neutral (while being culturally connected to masculinity) creates an understanding of women as an opposite "other" to be enticed and adapted into existing practice. When addressing responsibilities for gender inequality to "misaligned women" one fails to see more extensive factors.

Technology is not unaffected by social context and the indoctrinated notions of its developers. The shaping of technology has not been free from preconceptions about the intended users and assumptions about gendered desires. It is not neutral, it is created by humans in social contexts and it embodies social relationships and gender descriptions.

"Are computers gender-neutral?" is a study made at Stanford University, which tested whether computers embedded with the most minimal gender cues will evoke sex-based stereotypic responses. Using computers with male or female voice output, three gender stereotypes where tested. The stereotypes where; "evaluation from males is more valid than evaluation from females," "dominance is more desirable in men than women," and "women know more about subjects that are typically regarded as 'feminine,' whereas men know more about subjects that are typically regarded as 'masculine.'" In all three cases, they found that gender stereotypic responses were obtained. When the computer used the male voice it was regarded as significantly more friendly and more competent, compared to when the computer had a female voice. "The study suggests that any suggestion of gender in a given technology, however minor, may trigger stereotypic responses. For example, visual representations of computer characters and even their language style may elicit gender-stereotypic responses". [8]

Some companies developing tools and hardware for electronic music production have a separate category marketed towards girls.[9] These machines are often less functional and made easier to operate. Often they are designed with stereotypically female attributes and marketed as accessories putting focus on a persons attributes and image, than as something actually

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8   Clifford Nass, Youngme Moon, and Nancy Green, *Are computers gender-neutral?*.
9   An example is RMEs soundcard "ladyface" marketed towards girls.

connected to the activity of making music.

I think it is important to reach a higher awareness of gendered symbolism in design as well as in the marketing of these products. When technical tools and programs inherit simplistic gender stereotypes, it will affect not only the use of these tools, but also the aesthetics and artistic outcome of the artist.

The history of technological intervention, as well as the connected history being told about artists, engineers and developers has always played an important role in shaping the culture of experimental electronic music. We need to raise critical consciousness towards ingrained, universal truths about the medium, but also towards our own web of influence. "..all music, whether explicitly programmatic or not, contains implicit programs that reflect the tastes, politics, aesthetic philosophies and social attitudes of the composer and their historical situation. Such scholars would argue that classical music is rarely about 'nothing', but reflects aesthetic tastes that are themselves influenced by culture, politics and philosophy. Composers are often bound up in a web of tradition and influence, in which they strive to consciously situate themselves in relation to other composers and styles." [10]

Group cultures and defensive learning climates

Within electronic music there is often a reluctance towards cultural expressions that are considered popular or appealing to a large number of people. There might also be a pride in making difficult and esoteric music. The claim to create something new might favor a stance against established cultural references, but when internal musical references coincide with poor communication towards audiences and people not yet initiated in the field, there is a risk that the culture becomes introverted and excluding.

A study made in computer science classrooms shows that many students are unhappy with the social learning climate. " It is a defensive climate characterized by an impersonal environment, in which it is easy to remain relatively anonymous and socially distant. Students are rarely responding to instructors or even speaking in class."[11] Status is often

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10 Ed. Leppert and McClary, *Music and Society*.
11 Lecia Jane Barker, Kathy Garvin-Doxas, Michele Jackson, *Defensive Climate in the Computer Science Classrooms*.

informally accorded to those who display technical skill or provide "valued" information. Students get privileged with higher status when talking in ways that suggest that they excel a certain kind of skill or knowledge. In class, students are asking questions that do not appear to be seeking information, but to be displays of their own knowledge. In this kind of environment there is a non permissive attitude towards making mistakes, which is an important part of learning. Experience is often equated with being smart and this creates an unhealthy reverence around the persons having this "valued" knowledge. Since most people prefer not to be at the bottom of the hierarchy, students often engage in behaviors that demonstrate status and experience. [12] Within artistic and musical fields hierarchal environments often results in uniformity in aesthetic expression. Especially when there is a focus on technical tools and skills as main goals and ends in themselves, rather than as tools and consequence of a musical idea that puts the music and expression in focus.

As Michael Rebhahn discusses in his text "*I hereby resign from new music*", many contemporary composers feel the need to renounce participation in this culture. "If anything, one tendency can be recognized: the aversion is directed at musical exhibits that content themselves with demonstrating a specialized knowledge of decorative material application without reflecting on the originality or, theologically speaking, the necessity of what is formulated." [13]

According to Rebhahn, music that has fallen prey to a self-referential sonic fetishism that does not go beyond craftsmanship – beyond the demonstration of how it is made. artistic and expressive qualities are thus subordinated by an "uncritical willingness with the quality of technically competent details."

Persons using advanced tools and techniques are less likely to to be questioned in aesthetic choices and necessity, while persons working with techniques that are considered simple or "lo-fi" often are held accountable for it. I see this as consequences of an informal hierarchy that stems from communication emphasizing superiority rather than equality, privileging competition over cooperation.

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12 Lecia Jane Barker, Kathy Garvin-Doxas, and Michele Jackson, *Defensive Climate in the Computer Science Classrooms*.
13 Michael Rebhahn, *I hereby resign from new music*.

Gendered expectations

Socialization emphasizes how society sanctions what is considered appropriate behavior while trying to correct inappropriate ones. By "performing our gender" we live up to normative conceptions about knowledge, attitudes and appropriate activities. Normative gender can be defined as a heterosexual coupling of opposites, female and male, masculine and feminine. Our choices with regards to occupation, our attitude, self-confidence and motivation to learn are all heavily filtered and regulated by gendered expectations. Stereotypically male characteristics includes having a natural affinity with technology. Men get involved with technology in early ages and are expected to, beyond their use of machines, to understand how they work, love to tinker, fix and build them. Women have historically been socialized to dismiss machines, use technology only when needed and they are not often encouraged to understand them. Technology represented in media, advertising, manuals, and such often contain assumptions about male and female desires and motivations towards the object.

These stereotypes, in combination with a defensive learning climate, make simple actions reducible to whether they go with or against an expected gender performance. This creates a difficult position where, for a male-identified person, simple things like needing extra help and asking questions goes against the expectation of men's competence with technology. For women, the same need would confirm the stereotype of incompetence. Because of these stereotypes, mistakes made by men are often seen as exceptions or fetishized as a glitch, while women, if there is any uncertainty about their skills, are likely to be viewed as generally incompetent.

These stereotypes also affect the politics of stylistic comparisons. Electronic music composers Pamela Z and Maria Chavez noted that journalists tend to compare their work reductively to other women artists (simply because they are women). Tara Rogers comments on this in her book *Pink Noises*: "This pattern enacts a double reinforcement of electronic musics male lineage, gendering important stylistic developments as male, and grouping women together as other to this master narrative." [14]

There is other kinds of barriers for women to acquire skills that are embedded in a

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14 Tara Rogers*, Pink Noises.*

culture of masculinity and that are largely coterminous with the culture of technology. Wajcman argues: " to enter this world, to learn its language, women have first to forsake their femininity"[15]. Because "doing technology" is so associated with "doing masculinity" many women experience that in order to become part of this world they need to change their "gender performance". They often adopt characteristics and activities coded as male to be part of the group of male colleagues and to be treated like them, while they distance themselves from "the majority" of women. "It is still the norm for commercial interactive infotainments to be male centered. The choice is, essentially, to either go along with the thing and strap on the virtual phallus, or drop out entirely."[16] The most common way of dealing with gender inequalities within institutions is by focusing on what women need to change, by providing role models, mentoring and women's groups, often outside of the "mainstream" activities. This risks creating the perception among women, their male peers, and professors that in order to be successful, women will need "extra help".[17] "Most people do not realize that the "extra help" is not academic, but instead access to the kind of peer networks more readily available to male students."

Concluding Thoughts

Some people hold the belief that pointing out gendered difference in treatment would perpetuate the distinction between male and female identified composers. With the constant repetition of the story of women's subordination a self-fulfillment prophecy might be at risk. Still, feigning indifference by ignoring the question does not lead anywhere. When discussing gender I think it is important to distinguish between the goal and the method. Wendy Brown, who is listed in the anthology *Att vinna framtiden åter*, points out something that too often is forgotten. She says that "theory and politics rarely thrive in each other's company." Just

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15 Jane Yellowlees Douglas, *Women, art and technology.*

16 *Wajcman1991:* 19.

17 Cohoon, J. McGrath; Aspray, William, *Women and Information Technology: Research on Underrepresentation.*

because a political method or program of action has some problems and unwanted effects does not necessarily mean that the project or program should be abandoned. In politics there are rarely any ideal solutions, only strategies that are more or less appropriate in view of the specific situation.

Work with gender and diversity needs to be implemented within education systems. In many institutions and learning situations, work with diversity is done by volunteers and interest groups and solutions are most often implemented outside of the mainstream, e.g., providing role models, mentoring, and women's groups. The same people suffering the consequences of unequal treatment are often the driving forces of the political work concerning these questions. They are assigned the task of defending and explaining their standpoint towards the environment. They educate themselves and eventually come to be seen almost as representatives of the problem itself. Meanwhile persons who maintain normative structures continue to, without further concern, specialize in their field. The absence of consciousness and concern about these issues can itself be seen as a privilege. One key to change is to raise awareness among those in positions of power, to encourage them to undermine the system by simply refusing to live in their implicit privilege. Instead of asking "How do we attract more women to the experimental electronic music scene?" it could be " How can we work to check our privilege and undermine a system that favor men before women within this field?" We need to criticize the whole picture and the overall framework, instead of putting the responsibility on the pieces that do not fit.

The traditional role of the teacher needs to change. Teachers within artistic educations should not pursue an aesthetic agenda or in teaching assume that students have the same goals as themselves. Instead, I would like to see the teacher as someone who promotes discussion and critical thinking, encouraging students to develop their own aesthetic stance. In the classroom both teachers and students have a responsibility to prevent stereotype threat. Encouraging questions is a part of creating an environment where students feel safe. In a defensive learning environment, students tend to form a competitive attitude towards other students. To encourage students to work in groups occasionally can be a way of favoring collectivism instead of individualism. Another way to prevent defensive learning climates on institutions is to demonstrate that diversity is valued. In the entry process applicants could be asked to describe how they may contribute to a more diverse learning environment. Encouraging individuals to consider themselves as complex and multi-faceted can also

reduce vulnerability to stereotype threat.

How electronic music is presented and marketed has a great influence on the new generations of people likely to enter this field. We tend to identify with people that are similar to us. Therefore, the identities of those represented in places where experimental electronic music is created and performed has an important impact. It is common for these environments to have social environments where masculine behaviors and expressions are highly valued. The majority of people doing electronic music are often white skinned, middle or upper class and heterosexual. Music history was canonized within this patriarchal system. To bring in questions of race and class as well as sexuality in to the equation is part of building a more diverse future for the experimental electronic music scene. An alternative music history can be presented by highlighting social identities outside the established history that are not linked to underperformance.

There is often strong resistance to changing systems in which power relations are continuously replicated. Gender are in many ways deeply ingrained in our unconscious or part of our identity, which often makes questions about individuals personal responsibility in maintaining hierarchies very personal. To achieve a higher diversity within musical fields we need to unravel and promote discussion about these often unconsciously maintained structures. Gendered expectations of achievement and progress affects which qualities we identify with and the goals we have set for ourselves in terms of both personal development and career. We are more likely to engage in behaviors and devote ourselves to areas that are consistent with stereotypical gender identities as they are often more encouraged and supported by our environment. We need to evaluate structures which gives some people access to knowledge and networks while others are omitted. There are countless ways to work with these issues.

References

Allan G. Johnson, *The Gender Knot,* Philadelphia, (Temple University Press: 2005)

Clifford Nass, Youngme Moon, and Nancy Green, *Are Computers Gender-Neutral? Gender Stereotypic Responses to Computers,* Department of Communication,Stanford University, Journal of Applied Social Psychology, http://pckamensky.medizin.uni-ulm.de/array1/exchange/trashbox/Literatur.Data/PDF/Naas_1997_AreComputersGenderNeutral-4259916800/Naas_1997_AreComputersGenderNeutral.pdf (accessed 14 sept. 2013).

Donna Haraway, *Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective*, (Feminist Studies, Vol. 14, No. 3, 1988) http://www.staff.amu.edu.pl/~ewa/Haraway,%20Situated%20Knowledges.pdf (accessed 14 sept. 2013).

Ed. Leppert and McClary*, Music and Society: The Politics of Composition, Performance and Reception.* Cambridge University Press,1989. http://books.google.se/books/about/Music_and_Society.html?id=KiHcllqdzl4C&redir_esc=y (accessed 14 sept. 2013).

Jane Yellowlees Douglas, *Women, art and technology,* edited by Judy Malloy, 2003 Massachussetts Institute of Technology http://www.vnbaptist.org/books/academic/UniversityPress/0262134241.The.MIT.Press.Women.Art.and.Technology.Oct.2003.pdf (accessed 14 sept. 2013).

Lena Trojer, Elsa Peinerud, *Leadership Qualifications within Research Organizations,* Luleå tekniska univeritet, 2002. http://www.bth.se/tks/teknovet.nsf/(WebFiles)/03DFB903A2BDCF2AC1256FCA00458EAD/$FILE/A%20Graduate%20School%20for%20Women%20at%20Technical%20Faculty%20.pdf (accessed 14 sept. 2013).

Lecia Jane Barker, Kathy Garvin-Doxas, and Michele Jackson, *Defensive Climate in the Computer Science Classrooms,* University' of Colorado, 2002. http://courses.cs.washington.edu/courses/cse590e/02sp/defensive_20climate.pdf (accessed 14 sept. 2013).

Margaret Brenston, *Technology and Women's Voices,* edited by Cheris Kramarae. (Chapman and Hall Inc: 1988). http://www.medialit.org/reading-room/worlds-apart-women-men-and-technology (accessed 14 sept. 2013).

Michael Rebhahn, *I hereby resign from new music,* Lecture given at Darmstadt 2012, translated from german by Wieland Hoban. http://www.internationales-musikinstitut.de/images/stories/PDF-Datein/NEWS_27.8.12_Rebhahn_-_I_hereby_resign_from_New_Music.pdf (accessed 14 sept. 2013).

Tara Rogers*, Pink Noises, women on electronic music and sound,* 2010 Duke University Press.

Ulrike Mayer*, Electronic music as a mechanism for gender identification,* 2009, Discourses of Popular Music, Gender and Ethnicity, edited by Maria José Belbel / Rosa Reitsamer. Art Centre Arteleku, Spain/Austria.
 http://www.digmeout.org/texte/Mayer_eng_ges.pdf (accessed 14 sept. 2013).

Women and Information Technology: Research on Underrepresentation, *Cohoon, J. McGrath; Aspray, William* 2008, MIT Press, The Open University, U.K. http://genderandset.open.ac.uk/index.php/genderandset/article/viewFile/123/188 (accessed 14 sept. 2013).