### Honors 177

**MIDTERM** 

Title:

**Body Music:** 

The Fragility of the Human Body

Name: Alexandra Grabarchuk

Major: Linguistics

# ABSTRACT

The human body is a well-balanced yet fragile system, in which people often initiate changes without realizing they are doing so. We frequently consume things the effects of which are at best vaguely known, we partake in physical activities that change our chemistry, and we are even physically affected by our emotional state. Through letting people hear how exactly their bodies react to various stimuli, this project aims to bring a general awareness of how easily our bodily systems fluctuate, and perhaps educate people on what sorts of activities have serious effects on their bodies.

# CONCEPT / TOPIC

This project would involve amplifying naturally occurring internal body noises within an anechoic chamber, which is an environment innately suited for listening to the body. The process would be divided into four different categories: a) natural resting state, b) consumption of food (with choice of GM or organic food products), c) consumption of participant's choice of medication (preferably something they take in their daily life) and d) various states of emotional arousal (attained by being exposed to film clips which initiate the appropriate emotion). The participant would have the choice of recording their "body music" in its different states, and adding those files to a digital archive which would then be subjected to a study for patterns across all participants.

## **CONTEXT & PRECEDENTS**

The context for this project is the society we live in now, which seems to have a paradoxical obsession with the body as an idea and at the same time an utter disregard for the amount and quality of things we put into it.

There are a few precedents for this type of project. The initial idea was given to me by the composer John Cage, who upon visiting an anechoic chamber was surprised that he did not hear silence as he was expecting to. He writes, "I heard two sounds, one high and one low. When I described them to the engineer in charge, he informed me that the high one was my nervous system in operation, the low one my blood in circulation." This experience purportedly led him to compose his famous piece 4:33, which involves a pianist coming out on stage and playing nothing for 4 minutes and 33 seconds, the piece itself consisting of the ambient sounds in the room and any noise made by the audience.

Another precedent for utilizing sound and sound-related technology comes from James Gimzewski and Victoria Vena's Blue Morph project, which used sounds "acquired and recorded by detecting nanoscale motions of the pupa surface using atomic force microscopy (AFM) and optical beam deflection during the developmental stages of metamorphosis."<sup>2</sup>

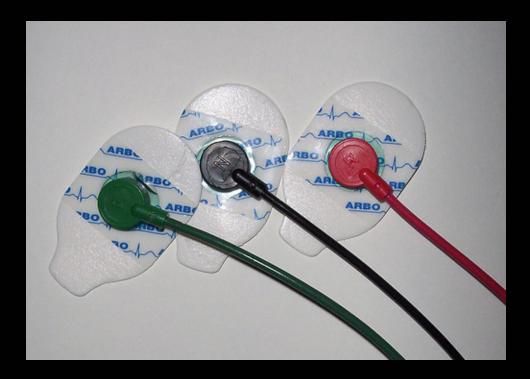
## PROJECT PROPOSAL



http://www.soundlabsgroup.com.au/mm5/graphics/visaton/visaton anechoic chamber.jpg

An anechoic chamber is a room designed in such a way that the walls, ceiling and floor absorb all sounds made in the room, rather than reflecting them as echoes. It is also externally sound-proof.

#### Project Proposal (cont.)



http://www.flickr.com/photos/12005027@N07/1215689008/

Within the chambers, the participant would be hooked up to a system of electrodes with small, sensitive microphones attached to them. The sounds picked up by the microphones would be amplified through a traveler, and recorded onto a computer's hard drive

#### Project Proposal (cont.)

The participant would first be recorded sitting or reclining in a state of rest, for approximately 3 minutes in order to get a sense of the natural rhythms and fluctuations of their body. Thereafter, they would be asked to consume a pair of food items, the first of which would be organically grown and the second of which would be genetically modified. Thirdly, they would be asked to bring in a sample of some medication they take on a fairly regular basis (i.e. acetaminophen, allergy medication, birth control, etc.) and consume it. Finally, they would be shown a variety of film clips (while wearing sound-proof headphones to avoid noise contamination) and their emotional responses to these clips would be recorded as well.

### Conclusion

The aim of this project is to bring awareness of our own bodies to people through a medium not usually associated with monitoring physical bodies – sound. If people hear a significant difference between their bodies in a normal state and their bodies after consuming medication, that difference might lead them to become better educated about the medication and the specifics of how it affects their body. If they notice a significant difference between their bodies while consuming organic food vs. GM food, they will hopefully be inspired to learn more about the type of food they're putting inside their system. And if they hear a significant difference between their body while experiencing happy emotions as opposed to distress or worry, they may be influenced to avoid things that will needlessly agitate their bodies.

### References

1 <u>CBC Saskatchewan</u>. 11-24-2004. Weekly Journal "Art at Work". 04-22-2009. http://www.cbc.ca/sask/features/artist/journal2.html

2 <u>Blue Morph: Research.</u> 2007. UCLA ArtSci Center and Lab. 04-22-2009. <u>http://artsci.ucla.edu/BlueMorph/research.html</u>

## Bibliography / Links

http://www.cbc.ca/sask/features/artist/journal2.html

http://theresonator.blogspot.com/2007/04/john-cage-visits-anechoic-chamber.html

http://artsci.ucla.edu/BlueMorph/research.html

http://www.soundlabsgroup.com.au/mm5/graphics/visaton/visaton\_anechoic\_chamber.jpg

http://www.flickr.com/photos/12005027@N07/1215689008/