

A Sonic Trilogy

Sound, ostranenie and social consciousness

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I declare that this thesis is my own account of my research and contains as its main content work which has not previously been submitted for a degree at any higher education institution.

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Abstract

This dissertation probes, connects and applies current research into sound, sonic semiotics and *ostranenie* (defamiliarization/enstrangement). The aim is to deploy the use of shock, counterpoint and incongruity to elicit the attention of a listener to trigger consciousness, provocation and thought, initiating a new perspective on the subject matter. Developing three short sonic works, I activate practice-led research methods to probe the use of sound, incongruity, defamiliarization and imagination to increase the social consciousness of the listener.

Preface

Use of Artifacts: a statement of intent

Although the sonic artifacts that accompany this exegesis are specifically designed to express, exemplify and extend the research discussed in the exegesis, I recommend that they are listened to *prior* to reading this exegesis. The rationale for this ordering of engagement is so that the listener/reader is able to fully experience the artifacts in the same manner as would anyone hearing them on the radio or Internet for the very first time. They can, and should, be listened to once again after reading the entire exegesis and, preferably, at stages throughout the exegesis.

The three artifacts require a combined listening time of approximately four minutes. They can be heard at:

www.westsong.com/brighton/trilogy

Introduction

This dissertation probes the current research into the semiotic and affective qualities of sound and radio, with a focus on radio advertising and in particular the use of humor. Radio is the most common *sonic-only* medium for persuasion and attitudinal change. It is also the most mature sonic medium with the widest research literature on audio cultures. Recognizing this literature I, via sonic artifacts constructed for this dissertation, demonstrate the use of sound to increase social consciousness.

Although research into radio as a communication medium has long been overshadowed by studies of film, television and now video and multimedia, there are numerous studies of radio, television and print *advertising*, and its ability to motivate listeners, viewers, or readers. I propose that the theories gained through studying the use of humor, shock and incongruity to motivate consumers can be applied to the raising of social consciousness in citizens. Rather than using these techniques to provoke listeners to laugh or purchase products, they can be deployed to provoke thinking and, potentially, social action.

This dissertation's goal is to uncover characteristics and variables in the use of sound—particularly through public service announcements (PSAs) on radio or the Internet—that will serve as guidelines for others to create sonic pieces that will increase public consciousness of social needs and problems. It will also enfold the research in the context of sonic semiotics. The dissertation does not deal with the psychophysiology of sound or with the use of individual or mass audience metrics in order to determine the effectiveness of the proposed guidelines. Metrics in particular remain a subject for future research. Although two of the resulting artifacts in this project contain music, this paper is also not concerned with music *per se*, but merely as one element among several that can be used in the production of an effective sonic tool.

The artifacts produced in this dissertation embody current knowledge and, using narration, music and

sound effects, demonstrate how those elements can be combined to create sonic tools for increasing social awareness. The goal is to determine and then experientially demonstrate those principles that appear to be important, if not essential, in creating sonic pieces that will, through surprise and incongruity, capture the attention of listeners, and open them to seeing—and hearing—their society in new ways.

The most appropriate research method is Practice-Led Research. This methodology matches the creative process, being dynamic rather than static. With this method the creator's subjectivity and approach is crucial. To map and track this subjectivity, the methodology activates a cyclical process. When a work of art or other artifact is created, the artist is trying to produce or re-create in the material world something that exists to this point only in the artist's mental world. The clearer that vision, the more likely it is to be expressed with rigor and intent. In a perfect research system, researcher clarity leads to clarity in the artifacts. Alas, this is seldom likely. So the artist must usually perform a cyclical, iterative, trial-and-error process.

This cyclical process makes practice-led research a uniquely living process. While other methodologies may include an iterative process, wherein a protocol might be modified before being repeated in a different situation, the cyclical process in practice-led research is a feedback loop in which there is a continual back and forth exchange between the developing artifact and the researcher. The researcher is continually experimenting, changing, and coming up with new ideas. In most cases, there is little if any lag time between the recognition of the need for change and actually making the change. It is not only a living process, but frequently emerges in real time. Barrett defines the insights that arise from this process as “praxical knowledge,” a philosophical term borrowed from Martin Heidegger, and states that this knowledge “implies that ideas and theory ultimately are the result of practice rather than the

reverse.” She says further that theorizing *out* of practice is a very different way of thinking than applying theory *to* practice.¹ Looking at the relationship between artifact and research, rather than artifact and practice, Smith and Dean consider practice-led research to be a bi-directional process in that creative practice affects academic research, and research in turn affects, and even leads to, creative work. They see both processes as “interwoven in an iterative cyclic web.”² I attest that creating and listening to earlier versions of this project's sonic artifacts directly led to my considering new theoretical approaches which in turn led to modifications in the artifacts themselves.

Biggs and Büchler have asked: “What would be lost if a non-traditional form [such as practice-led research] were *not* used, i.e. if the content of the non-traditional academic thesis were presented in the traditional form.”³ The answer derived from this project is that this dissertation would be entirely theoretical, without the opportunity for the reader—and equally important, this researcher—to listen to artifacts that express the theories; artifacts that can be experienced only sonically in order to fully appreciate the theories. Because I was able to experience actual sonic works rather than theoretical ones, I was able to not only make necessary modifications but to realize the need for someone to listen to them several times in order to fully appreciate their expression of the theory discussed in this exegesis.

An additional advantage of practice-led research projects, particularly those whose artifacts take digital form, is that they can be easily and inexpensively—even freely—disseminated. As Biggs has stated,

1 E. Barrett and B. Bolt (eds), *Practice as research: Context, method, knowledge* (London: I.B. Tauris, 2007).

2 H. Smith, and R. Dean (eds), *Practice-led research, research-led practice in the creative arts* (Edinburgh: Edinburgh University Press, 2009).

3 M. Biggs and D. Büchler, “Eight criteria for practice-based research in the creative and cultural industries,” *Art, Design & Communication in Higher Education*, Vol. 7, Issue 1, 2008, pp. 5-18.

“Research that can be communicated or disseminated is more desirable than research that cannot be communicated or disseminated, because it will have greater impact in its field.”⁴ This dissertation, both exegesis and artifacts, can be easily disseminated through the Internet and one goal is that its information will be easily accessible to those who wish to create similar sonic works.

With practice-led research, the researcher is closely intertwined in the process. As the researcher experiments and learns, both the artifact and the researcher change. The researcher is a practitioner as well—changer, changee *and* observer. The topic studied within the project does not exist until the research project begins to create it; it is birthed by the project itself.

However, this project is not composed of (only) artifacts. The sonic trilogy would not exist without this *exegesis*. The exegesis contains the survey of the current body of literature and the thesis statement, and it makes the argument for a particular conclusion based on the information gained during the project's process. The artifacts are not *the* dissertation but they express the results of the process more fully than could be done with only a written document. As Thomassen and van Oudheusden write:

Theory and practice cannot be seen as separated parts. Theory and practice are partners of conversation who should be equally balanced. The intention is that the exegesis approach should contribute to a willingness to look beyond the immediate concerns of making an artefact; it should enhance an integration of ideas and results from the underlying research into the creation of the artefact ... In our understanding the artefact is an illustration and shows research, the thesis underlies the artefact and describes the connection between the research and the product. The artefact is partly the outcome of the research and is as

4 M. Biggs, "Learning from experience: Approaches to the experiential component of practice-based research," *Forskning, Reflektion, Utveckling*, Stockholm, Vetenskapsrådet, 2004, pp. 6-21.

important as the accompanying thesis.⁵

The artifacts created by this project could exist without the exegesis, but they would alone serve no contribution to the body of theoretical knowledge. The exegesis could exist without the artifacts, but without the expression of the exegesis' theories through those artifacts, there would be no experiential understanding of those theories. Together, they are complete.

This exegesis presents a compilation of current theories focusing on sound, sonic semiotics, humor and ostranenie. Based on these theories, the elements of successful sonic persuasion are enumerated, and then expressed and exemplified through short sonic artifacts which deal with important social problems in the United States, providing the reader with a new perspective toward, and understanding of, the use of sound to bring about increased social consciousness and, ultimately, social change.

5 A. Thomassen and M. van Oudheusden, "Knowledge creation and exchange within research: the exegesis approach," *Working Papers in Art and Design* 3, Vol. 3, 2004.

Chapter I - Sound, Communication and Semiotics

Sound can be seen to have (at least) three components: There is the sound produced, the sound received, and the interpretation of that sound. Conductor Daniel Barenboim has called the ear "probably the most intelligent organ the body has."⁶ Barenboim comments that "the ear remembers, the ear recollects, and that shows you one of the most important elements of expression in music, one of repetition and accumulation."⁷ Sound is something that is far more than just "out there." As Barenboim said referring to neurologist Antonio Damasio:

Damasio says that the physical vibrations which result in sound sensations are a variation on touching, they change our own bodies directly and deeply, more so than the patterns of light that lead to vision, because the patterns of light that lead to vision allow us to see objects some times very far away provided there is light. But the sound penetrates our body.⁸

The result of this "penetration" is that sound is very personal. Far from being something experienced only in the mind, sound—as does its subset music—affects us emotionally and even viscerally. It is important to remember that sound is not a "thing". It is not even that which creates the sound. It could be said to be a signifier created by the signified but in reality the signified is not the creator; it is the *action* of the creator that creates the sonic signifier, and the signifier points to that action. As Gazi writes: "Sounds are actions and can only represent the actions of people, places and things."⁹ We hear

6 D. Barenboim, "The neglected sense," *BBC Radio 4*, Reith Lectures (2006),

<http://www.bbc.co.uk/radio4/reith2006/lecture2.shtml> (audio).

7 Barenboim, The neglected sense.

8 *Ibid.*

9 A.Gazi, "Radio sound in the radio future," Department of Communication and Media Studies, National and Kapodistrian

only the sound of a person *doing* something, not the sound of the *being* of the person. Gazi further states that we cannot imagine a sound without its image, that "image follows the sound, as every sound refers and shapes images," and that these images are *visual*, not *visible*. They are the result of imagination.¹⁰

Sonic media is alive, because sound *is* life. Watching moving images without sound lacks any sense of *real*, of presence, because there is a separation, a distance. However, when you as a radio listener listen to a conversation, to someone walking in the woods, or to the sounds of a city—you are *there*. You are experientially in the middle of *there*, surrounded by sound.

Although we may be surrounded by sound, the difficulty in studying sonic media is that sound exists *real time*. It exists only in the immediate moment. Sound can be experienced—and remembered—but only in time, not in space. It is difficult to remember: it is heard and then gone. If a listener concentrates on one sound in a particular moment, the sound that follows is missed. There is no sonic equivalent of "freeze frame." As Ong has stated: "Sound exists only when it is going out of existence. It is not simply perishable but essentially evanescent, and it is sensed as evanescent. When I pronounce the word 'permanence', by the time I get to the '-nence', the 'perma' is gone, and has to be gone."¹¹

Sound that is stored in a way where the recipient has control over it—such as on a compact disk or as a podcast—gives the recipient more control than with radio. There is also a similarity to visual sources. As Gazi confirms, "It is often said that vision allows, even prefers, things to be held still, so that they can be scrutinized in detail, dissected."¹² There is no way to skim sound like skimming the pages of a

University of Athens, <http://sites-test.uclouvain.be/rec/index.php/rec/article/view/5671/5391>.

10 Gazi, Radio sound, p. 118.

11 W. Ong, "Orality and literacy: the technologizing of the word," (New York: Routledge, 1982), p. 32.

12 Gazi, Radio sound, p. 118.

book. Even when viewing a DVD, it is simple to fast forward because visuality becomes the guide through the narrative. The sound is silenced. Therefore, the best use of sound-based media can often be to deploy shorter segments than one would use working with visual media.

Although sound may not stay still, it can deliver information that the visual cannot. Sound is dynamic and can effectively indicate change, particularly immediate change. Think of the sound of an approaching ambulance, or a train before it comes around a bend, or the clicking of an analogue clock's second hand. Sound serves as an aural trigger to generate images, ideas and concepts in the listener's mind. It is a trigger for imagination and visualization. For this reason, the effects of sound on a person are dependent upon the life experience, information and communication systems of the listener.

Because sonic literacy is so undeveloped, researchers and citizens have the opportunity to discover new sounds, new things around us. Yes, there are homilies such as "seeing is believing" but there are also "that sounds right" and "that has the ring of truth." However, to explore sound, we must first learn to *listen* rather than to simply *hear*. Michel Chion proposes three categories of listening: *causal*, in order to determine information about a sound's source; *semantic*, in order to interpret and understand a message; and *reduced*, a name given by Pierre Schaeffer to the listening mode which focuses on the qualities of the sound itself, entirely separate from its source and meaning.¹³ This last form of listening is one which is seldom practiced, and for which many people have no vocabulary with which to discuss it. Reduced listening is greatly aided by recording, enabling one to listen repeatedly to the same set of sounds in order to fully experience and appreciate their various qualities. Although one might think that reduced listening is easiest when the sound is *acousmatic*—that is, the source is unknown—Chion proposes that it is actually more difficult, as the mind continually wants to determine the cause.

13 M. Chion, *Audio-vision: Sound on screen* (New York: Columbia University Press, 1994).

Regardless, the goal of any reduced listening is to simply focus on the sound, *sans* source, *sans* meaning, and as well to focus on the effects of that sound on one's body, psyche and emotions. It is, however, *semantic* listening which needs to be developed and it is semantic listening which is most affected by the emotions.

The power of the emotions in decision-making suggests that most decisions are made instinctively and intuitively rather than deliberately and logically. Antonio Damasio proposes that "emotions and feelings will always be formed precognitively and preattentively, before any information processing takes place."¹⁴ Therefore, we unconsciously make a decision and then it is up to the conscious mind, the rational mind, to decide whether or not to accept the already reached decision, or to countermand it. Our first reaction is unconscious and intuitive; our second rational and considered. In the case of the sonic artifacts produced by this project, the first reaction is to music or sound effects, neither of which requires a decision about content. The second reaction is to consider the intellectual information, the content of which appears to be in contradiction to the previous emotions and feelings conveyed by the music and sounds.

The emotions created, or triggered, by the sonic pieces instigate both consciousness and awareness of the need for political and social change. Bornstein's work, however, shows that "the less aware consumers are of emotional elements in advertising, the better they [the advertisements] are likely to work, because the viewer has less opportunity to rationally evaluate, contradict, and weaken their potency" which indicates that "emotional content in advertising will actually work better if less

14 A. Damasio, *The Feeling of What Happens* (London: Heinemann, 2000), p. 281 as quoted in R. Heath, D. Brandt and A. Nairn, "Brand relationships: Strengthened by emotion, weakened by attention," *Journal of Advertising Research*, December 2006, p. 417.

attention is paid to it."¹⁵ Does this contradict the theory behind this project's artifacts? No. In this project's sonic pieces, *irrelevant* emotional triggers (such as puppy dogs or babies) are not used. Instead, the emotions are triggered within the listener in two ways: the first being the singing voices of happy children, or the inspiring religious strains of a well-known Christian song. The secondary emotions are triggered by what is in effect an *attack* on the first emotions; the pleasant singing is shattered by gunfire, the inspiring music and words of Christian faith shattered by the never-ending recitation of countries invaded by the U.S. military.

The purpose of these artifacts is to experientially demonstrate the theory discussed in this dissertation, but there is an essential element that has been left out of both the *Mulberry Bush* and the *Onward* pieces (but not out of the *Income Tax* sonic work). As Krugman questions, "I wonder also how many of those public-spirited campaigns ever asked their audiences to *do* something, i.e. asked for the kind of concrete behavior that at some point triggers whatever real potentials may have developed for an attitude change to begin or perhaps to complete its work."¹⁶ There is no call for action to the listener, who has presumably been upset if not outraged by the sonic experience and might wish to take some action or seek out further information which will either confirm or deny the information he has just experienced. There may be times when the only goal is to increase awareness; but there may be others when action is required so, as Husak writes, "let people know what you want them to do."¹⁷ I choose to follow Husak's advice only with the *Income Tax* artifact, where a website address is provided for more information.

Communication is not restricted to the use of words. Watzlawick et al. state that communication is

15 Heath et al., *Brand relationships*, p. 417.

16 H. Krugman, "The impact of television advertising: Learning without involvement," *Public Opinion Quarterly*, 1965, Vol. 29, No. 3, p. 355.

17 C. Husak, "PSAS: the Olympics of Nonprofit Advertising," *Nonprofit World*, Sep/Oct 2005, Vol. 23, Issue 5, pp. 18-21.

always taking place, even if the two parties say nothing. They propose that any communication has two elements: the intended message and everything else, such as tone of voice, facial expression, and body position. The message (communication) can be seen as rational or digital; the non-verbal element of the message (metacommunication) can be seen as emotional or analogue.¹⁸ What is important for this dissertation is the theory that any communication, whether between two persons, or between a disembodied person (and product) in a radio or television commercial and the viewer or listener, has its emotional element intertwined with the rational. As an example, Heath et al. point to the huge market success of Andrex toilet tissue in the UK. Comparable, according to consumer testing, in quality to its nearest (but distant) competitor, Kleenex, Watzlawick et al. suggest that Andrex' success is due to the presence of a Labrador puppy in its television commercials. Emotionally, but unconsciously, puppy equals "soft," "cute" and "friendly." It also is unconsciously associated with "loving" and "family." Even though the advertisement's rational message (soft, strong and very long) would seem to apply equally to Kleenex toilet paper, Kleenex does not have a puppy.¹⁹ Andrex and its puppy outsell Kleenex three to one.

The emotional message does not have to be as obvious (or irrelevant) as the puppy. An early pioneer in the manipulation of mass public opinion, Edward Bernays, is considered to have been the founder of the public relations industry in the United States. He also happened to be a "double nephew" of Sigmund Freud, and applied some of Freud's theories to his public relations techniques. Bernays stated that through public relations—the "psychology of public persuasion"—new and valuable ideas could be presented to the public for its consideration, and the public could then accept or reject them as it wished. While Bernays recognized that public opinion could be swayed for less than enlightened

¹⁸ Heath et al., *Brand relationships*, p. 413.

¹⁹ *Ibid.*, p. 411.

purposes,²⁰ he also believed (or at least stated) that it could also be used to educate and enlighten the public and, in fact, that in a country such as the United States *anyone* had the opportunity to present their ideas to the public.

Bernays wrote that a person using this psychological practice should be familiar with the various media organs that are available. In his time, that included radio, lectures, movies, letters, advertisements, pamphlets and newspapers. During the period of Bernays' writing, there were often large costs in using any of these communication media. Today Bernays' ideal is available to nearly anyone who can write and publish their opinions as part of user-generated content on the Internet. How much dissemination and influence these opinions might have is another issue. Andrew Keen, writing in the *Weekly Standard*, takes a strong stance *against* citizen journalists: "Socrates," Keen writes, "was so intent on protecting citizens from the seductive opinions of artists and writers, that he outlawed them from his imaginary republic. ... If you democratize media, then you end up democratizing talent. The unintended consequence of all this democratization, to misquote Web 2.0 apologist Thomas Friedman, is cultural "flattening." ... Just the flat noise of opinion—Socrates's nightmare."²¹ However, for every Keen there is a counterbalance and individuals with strong ideas will continue to change, or attempt to change, the ideas of others.

One of Bernays' most useful observations is, "One method of changing people's ideas has been often

²⁰ Bernays claimed in his autobiography that his book was a key source of Joseph Goebbels propaganda efforts in Germany in the 1930s. "Karl von Weigand, foreign correspondent of the Hearst newspapers, an old hand at interpreting Europe and just returned from Germany, was telling us about Goebbels and his propaganda plans to consolidate Nazi power. Goebbels had shown Weigand his propaganda library, the finest Weigand had ever seen. Goebbels, said Weigand, was using my book *Crystallizing Public Opinion* as a basis for his destructive campaign against the Jews of Germany. This shocked me..." - Bernays, recalling a dinner at his home in 1933 - <http://home.bway.net/drstu/chapter.html>

²¹ A. Keen, "Web 2.0: The second generation of the Internet has arrived. It's worse than you think," *The Weekly Standard*, Feb 14, 2006, <http://shar.es/HWvgc>.

used, and that is to substitute new ideas for old by changing clichés." Bernays gives an example of "evacuation hospitals" during World War I being criticized for the minimal medical services they provided. Changing their name to "evacuation posts" lowered expectations and people henceforth understood that only basic emergency treatment was provided.²² In a similar vein, George Creel (see more information below) wrote "Somebody once said that people do not live by bread alone; they live mostly by catch phrases."²³ One could also say that people do not live with reality, they live with *signifiers* of reality. The creator of sonic persuasion needs to be aware of the value of short, succinct and catchy signifying phrases that will resonate with the listener.

Bernays cautioned that anyone wishing to attempt to influence public opinion must keep in mind that the goal is "social and individual benefit"; a caution perhaps even more important today. If one wishes to increase the social awareness of an idea or subject, it is worthwhile paying attention to this advice from Bernays: "Primarily, however, the engineer of consent must create news ... It is the overt act that makes news, and news in turn shapes the attitudes and actions of people."²⁴ In other words, do not simply produce a press release (which Bernays also happened to invent), make sure the press release is connected with real-world news and a real world event with real people—even if the event is staged and the participants are paid. The key suggestion here is that sonic pieces created to influence people should be connected with the real world, if not connected to an event at least with specific information and news that directly interests and affects the listener. It is also important to reflect on Barnays' street on "social and individual benefit."

22 E. Bernays, "Manipulating public opinion: The why and the how," *American Journal of Sociology*, Vol. 33, Issue 6, May 1928, p.970.

23 G. Creel, "Public opinion in war time," *Annals of the American Academy of Political and Social Science*, Vol. 78, Mobilizing America's Resources for the War. (Jul., 1918), p. 88.

24 E. Bernays, "The engineering of consent," *Annals of the American Academy of Political and Social Science*, Vol. 250, Communication and Social Action (Mar., 1947), p.119.

An example of a large-scale action to manipulate public opinion were the *Four-Minute Men*, who were a part of the *Committee on Public Information* headed by George Creel to promote U.S. public support of the war effort during World War I. The Four-Minute Men were a group of as many as 75,000 American men who spoke in their communities to support the United States' involvement in World War I. Their name allegedly comes from the fact that they delivered their messages in just four minutes, primarily in movie theaters. Four minutes was the time a projectionist needed to change film reels. They were founded with the authorization of President Woodrow Wilson after a suggestion by Edward Bernays. In 1917, seventeen percent of the American population was foreign-born, and another twenty percent had one or both parents born outside the United States.²⁵ In order to reach all of these people and more, Four-Minute Men were recruited from many language, ethnic, religious, social, business, urban, rural and labor communities. The volunteers gave an estimated one million four-minute talks throughout the country.

I mention Bernays, Creel and the Four Minute Men because their efforts are examples of the use of communications to bring about large-scale mass attitudinal change. Bernays and Creel used the various media available at the time, along with the tried and true, age-old communications medium of word-of-mouth, which in effect was that used by the Four Minute Men. Any attempt to use media to raise social consciousness must consider the pros and cons of all available media, and choose those which best express the intended message and which offer the best opportunities to reach the intended audience. As Carpenter and McLuhan wrote:

Each medium, if its bias is properly exploited, reveals and communicates a unique aspect of reality, of truth. Each offers a different perspective, a way of seeing an otherwise hidden dimension of reality. It's not a question of one reality being true, and others distortions. One

²⁵ C. Oukrop, "The Four Minute Men became national network during World War I," *Journalism Quarterly*, Winter 1975, Vol. 52, Issue 4, p. 632.

allows us to see from here, another from there, a third from still another perspective.²⁶

I have chosen sonic media because of its relative ease of creation, its low cost of production, and the opportunities for dissemination through the Internet. Once the medium is determined, it is necessary to focus on text, in this case *sonic text*. When discussing sonic text, the terms "text" and "read" are biased in favor of the visual, as the dominance of visuality extends into the aural world, even though terms such as "sound" and "interpret" might be more neutral and equally as accurate. As with any form of text, sonic text can be analyzed semiotically. Radio advertising can in fact extend the common use of semiotic analysis to include what the listener does *after* understanding the text. "Consumer semiotics" includes, or should include, an analysis of how effective the text is in motivating the listener, either by attitudinal changes or by causing the listener to perform an action, generally the purchase of a product. This, however, is a subject for future research and is not an area covered by this dissertation.

Arning and Gordon propose *sonic semiotics*, "a methodology designed to provide insight into the underlying conditions determining consumer interpretation of [sonic] communications."²⁷ They emphasize that the purpose is not to *measure* consumer response but to investigate how meaning is made and how that meaning influences consumer response. Even more usefully, or at least hopefully, they state, "The predictive power of semiotics allows us to examine sound texts and make suppositions about implicit meanings before exposing the individual execution or overall campaign to consumer groups."²⁸ More specifically relevant to this dissertation, Stern writes: "Deconstruction of meanings involves disassembling the simplistic notion of a singular meaning to uncover assumptions likely to discomfort readers by shaking them out of complacency. Its value lies in the power to strip away placid surfaces and reveal the subversion, suppression, and hierarchical power struggles that bubble

26 E. Carpenter and M. McLuhan, *Explorations in communication: an anthology* (Boston: Beacon Press, 1966).

27 C. Arning and A. Gordon, "Sonic semiotics: the role of music in marketing communications," *ESOMAR*, Congress 2006.

28 Arning and Gordon, "Sonic semiotics."

underneath.²⁹ Codifying sonic techniques of such deconstruction is a primary goal of this dissertation. The imperative of this project's artifacts is to operate on both cognitive and emotional levels. Arning and Gordon write: "Semiotics works on the premise that important communication occurs beyond the ability of the consumer to apprehend and comment on it ... The role of the semiotician must be to bring to the surface underlying meanings communicated by the music [and all sound] which influence consumer response to the advertising. We are proposing that a culturally driven reaction to music and sound must also be considered as part of an insight into creative development, and the consumer response to advertising."³⁰ They observe that music and sound convey meaning in two ways: denotative (surface, obvious) and connotative (unconscious, hidden) with music and sound operating on the denotative level. I would suggest that music and sound can operate on both denotative and connotative levels; that just as with written text, sonic text can affect the listener (or better, *hearer*) both consciously and unconsciously, both obviously and undetected. Arning and Gordon state: "Musical encoding can be understood as the direct effect of music and sound effects on our mood. We can describe this as the denotative level because it is more about impulse, reflex and arousal than interpretation and reflection."³¹ I would suggest that our past experience with the same and similar music can also affect us *unconsciously* to bring a greater, but hidden, depth to the effect that music, or sound, has on us. Each listener engages the sonic text through his or her own past semiotic experience. Yuri Lotman introduced the concept of the semiosphere. He described it as "the semiotic space, outside of which semiosis cannot exist. The ensemble of semiotic formations functionally precedes the singular isolated language and becomes a condition for the existence of the latter. Without the semiosphere, language not

29 B. Stern, "Textual analysis in advertising research: Construction and deconstruction of meanings," *Journal of Advertising*, Fall 1996, Vol. 25, Issue 3, p. 67.

30 Arning and Gordon, *Sonic semiotics*.

31 *Ibid.*

only does not function, it does not exist."³² What is key to Lotman's concept is that all participants in the communicative act must have some experience of communication, be familiar with semiosis. So, paradoxically, semiotic experience precedes the semiotic act.³³ In other words, communication does not exist without *previous* communication. Semiosis is built on semiosis. It is not a goal of this dissertation to explore the original creation of the semiosphere, the Big Semiotic Bang or Ursemiosis. It is sufficient to imagine that there is indeed a field of semiosis in which a culture operates and which makes all acts of semiosis possible. As Lotman points out, a semiosphere is of the moment. It contains cultural fashions which are declining in influence, and others which are increasing. It is everything "contained in the actual memory of culture."³⁴ The connection between the concept of semiosphere and this dissertation is that sonic pieces needed to be relevant to, and in alignment with, the semiosphere which the listener inhabits, recognizing that each listener has his or her own variations on the semiosphere.

Within that semiosphere are an unlimited number of *frames*. Framing is a window, a mental structure, a paradigm through which we perceive and judge a person, a situation, a choice, an opportunity, even reality itself. It is important to note that framing demarks what we see, and what we do *not* see; what is true, and what is *not* true. Inside the frame is truth and reality; outside is untruth and the non-real. If we suddenly flip and view our world through a different frame, we now *know* a different truth, and are likely *not* to notice that we have switched frames. "Common sense" is determined by the frames we unconsciously acquire.³⁵ As cognitive scientist and linguist George Lakoff has written:

32 Y. Lotman, "On the semiosphere," *Sign Systems Studies*, Vol. 33, No. 1, 2005. abstract.

33 Y. Lotman, *Universe of the Mind: a semiotic theory of culture* (Bloomington: Indiana University Press, 2001), pp. 123-124.

34 Lotman, *Universe of the Mind*, p. 127.

35 G. Lakoff, *Thinking points: a progressive's handbook* (New York: Macmillan, 2006), p.39.

Frames are the mental structures that allow human beings to understand reality—and sometimes to create what we take to be reality. Frames facilitate our most basic interactions with the world—they structure our ideas and concepts, they shape the way we reason, and they even impact how we perceive and how we act. For the most part, our use of frames is unconscious and automatic—we use them without realizing it.³⁶

The goal of the sonic pieces in this project is to shatter frames and reveal new ones, to make a particular frame apparent to the listener and then, suddenly, to show that that frame is, at the least, incomplete, if not totally the opposite of reality—or, it must be said, at least *this* researcher's reality. As Hodge and Kress observe "Contending parties seek to impose their own definition of what we count as truth and reality as a decisive moment in the battle for social control."³⁷ The *truth* of the new frames revealed to listeners of the sonic trilogy matches the *truth* of this researcher's own frames.

With this dissertation's sonic piece *Mulberry Bush*, the frame encases a world of happy, playful children; with *Onward* a world where the forces of God and Good are triumphant; with *Income Tax* a country of equality where everyone pays their fair share of taxes. The shattering of the frames in each of these sonic pieces reveals something quite different and unexpected.

When creating such works, it is important to keep in mind this caution from Lakoff: "If you negate the frame, you still activate the frame."³⁸ He extends his point: simply negating the other side's frames only reinforces them.³⁹ As an example, "When [U.S. President Richard Nixon] said, 'I am not a crook,'

36 Lakoff, *Thinking points*, p. 25.

37 R. Hodge and G. Kress, *Social Semiotics* (Ithaca: Cornell University Press, 1988), p. 121.

38 G. Lakoff, "Framing the Dems: How conservatives control political debate and how progressives can take it back," (2003), <http://www.prospect.org/printfriendly/print/v14/8/lakoffg>.

39 Lakoff, *Thinking points*, p.38.

he made everybody think of him as a crook."⁴⁰ Nixon and his speechwriters, apparently unaware that you cannot negate a frame by using a negative (*not, no, never*), simply conveyed to the unconscious of his listeners "I am crook." He would have done better by avoiding negation and stating "I am an honest man." Lakoff has also written that, "Voters vote their identities and their values far more than their self-interest."⁴¹ This would suggest that a sonic piece designed to change attitudes should stress the listener's connection and similarity with the narrator or a character of the piece, rather than try to logically convince the listener of the benefits he might receive with an attitude change. The goal should be to help the listener identify with someone who *lives* in a different frame. Another of Lakoff's cognitive observations is that "repetition can embed frames in the brain."⁴² As the reader can probably testify, this observation is well-known to advertisers, and offers a clear explanation of why we see and hear so many repetitive radio and television commercials. As Lakoff stresses, it is not information or data that changes minds; it is the creation of replacement frames. "People think in frames ... To be accepted, the truth must fit people's frames. If the facts do not fit a frame, the frame stays and the facts bounce off."⁴³ Similar to the "I am not a crook" Nixon statement is the caution to *not* do something, as in "just because everybody litters doesn't mean you should too." As Robert Cialdini points out, "Within the statement 'Many people are doing this undesirable thing' lurks the powerful and undercutting normative message 'Many people are doing this.' ... Much research indicates that both kinds of norms motivate human action; people tend to do what is socially approved as well as what is popular."⁴⁴ Public service communicators should avoid the tendency to send the normatively muddled message that a targeted

40 Lakoff, *Framing the Dems*.

41 *Ibid.*

42 Lakoff, *Thinking points*, p. 37.

43 G. Lakoff, *Don't think of an elephant* (White River Junction, VT: Chelsea Green Publishing, 2004), p.17.

44 R. Cialdini, "Crafting normative messages to protect the environment," *Current Directions In Psychological Science*, Vol. 12, No. 4, August 2003, p.105.

activity is socially disapproved but widespread. Norm-based persuasive communications are likely to have their best effects when communicators align descriptive and injunctive normative messages to work in tandem rather than in competition with one another."⁴⁵

In the early 1900s, there was great hope for radio as a democratic communications medium that would educate and lead people to a better society. In 1932, for example, Bertolt Brecht proposed that "Radio should be converted from a distribution system to a communication system. Radio could be the most wonderful public communication system imaginable, a gigantic system of channels—could be, that is, if it were capable not only of transmitting but of receiving, of making the listener not only hear but also speak, not of isolating him but of connecting him. This means that radio would have to give up being a purveyor and organise the listener as purveyor."⁴⁶

Radio did not maintain the dominance and socially-benefiting aspirations that Brecht and others had hoped (although now it is the Internet which provides those "channels.") Just as sound has been dominated by the visual, so has radio been dominated by television and the related media of film and video. As Lewis writes, "In the field of cultural politics, in places where policy decisions are made, radio lacks status. And this has to do with the status of sound, compared with vision."⁴⁷ As he states later in his article, "Part of the reason for this might be the strong literary tradition which, since the invention of printing and spread of literacy, has put a value on visual rather than aural skills." He realizes that, "film and television...are an extension of the printed word in the sense that they emphasize visual 'reading'. Radio and sound, however, connect with an older oral and aural tradition whose

45 Cialdini, "Crafting normative messages, p. 108.

46 B. Brecht, "Radio as a means of communication: a talk on the function of radio," Translation by Stuart Hood, originally in 'Schriften zur Literatur und Kunst' (Gesammelte Werke, Vol. 18, Suhrkamp Verlag 1967), p. 25.

47 P. Lewis, "Private passion, public neglect: the cultural status of radio," *International Journal of Cultural Studies* 2003 3:160. p. 161.

contemporary traces have been until recently virtually unexplored academically."⁴⁸ As an example, note that in Bignell's *Media Semiotics*, the word "radio" is mentioned only seven times, each time simply in passing and none actually discussing the semiotics of radio. This is in a 241-page book that has entire chapters on magazines, newspapers, television (news, realisms and fictions), cinema, and interactive media. Radio is more than just a poor stepchild. It is, with a few notable exceptions, the forgotten aunt kept in a seldom-visited upstairs room.

In the field of advertising, print advertising, although still widespread, has lessened in popularity as it deals primarily with images and words. Television adds movement and sound so that just as visual dominates in our society, so too does television dominate in advertising. Television is often considered "radio with pictures." It is far more than that, but it is also far less. Because it offers, indeed insists on, much more to the senses—both aural and visual—it offers more; however, because it offers so much, it leaves little room for the imagination. As Ola Stockfelt writes, "what we often call multimedia is actually a state of severe sensory deprivation."⁴⁹ Radio, often referred to as "theatre of the mind," creates a sonic environment and frees the listener to create the visualized *sightscape*. Because each listener brings to a radio listening a lifetime of different experiences, and thus the raw material for a vastly varied *sightscape*, the experience of each radio listener can vary considerably. Any commonality must come from the culture, from common knowledge and experiences. An informative and persuasive sonic piece must touch this commonality in order to reach the widest audience effectively. As Hodge and Kress write, "Each producer of a message relies on its recipients for it to function as intended. This requires these recipients to have knowledge of a set of messages on another level, messages that

48 Lewis, "Private passion, p. 163.

49 O. Stockfelt, "The importance of being audible: Conventionalized sounds in virtual worlds—audio semiotics," *COSIGN-2002*, 2-4 September 2002, University of Augsburg, Germany. p. xvi.

provide specific information about how to read the message."⁵⁰ This can be at the macro, ideological level, or at the everyday, "common knowledge" level; levels which can easily overlap.

The artifacts produced by this project presuppose a common knowledge that the song "Here We Go Round the Mulberry Bush" is a children's song, that the voices singing are children, and that the bangs that interrupt the song are gunshots. With the *Income Tax* piece, it is necessary that the listener be able to recognize the sound of coins being dropped, understand what income taxes are, and be familiar with the names of the corporations that are mentioned. For this reason, I removed the name of the Valero Corporation that had been used in an earlier version of the piece as Valero is a name not yet commonly known to people in the United States. With the *Onward* sonic piece, it is preferable that listeners are already familiar with the song and realize that it is a popular Christian song.

An understanding of sound and its affective powers, sonic semiotics, and the important role of imagination in the listener provides the basis for the next step in this dissertation. The next chapter activates an exploration of humor, ostranenie, and the creation of sonic situations wherein thought, reflection and new perspectives can be provoked in the listener.

50 Hodge and Kress, *Social Semiotics*, p. 4.

Chapter II - Defamiliarization (Ostranenie)

*It is enough for us to stop our ears to the sound of music, in a room where dancing is going on, for the dancers at once to appear ridiculous. - Henri Bergson*⁵¹

In order to bring a listener to a new level of social awareness, it is necessary to provide a psycho-emotional shock that creates an opening for new perspectives to appear. *Ostranenie* (*making strange* or *enstranging* or *defamiliarization*) is the technique of removing automatic perception and allowing—even causing—someone to see or otherwise experience something as if it were for the very first time. Viktor Shklovsky, who coined the term, considered Tolstoy to be one who repeatedly used *ostranenie* in his writing. In defining the term, he cited Tolstoy's diary: "If the complex life of many people takes place entirely on the level of the unconscious, then it's as if this life had never been."⁵² Shklovsky himself then wrote: "The purpose of art, then, is to lead us to knowledge of a thing through the organ of sight instead of recognition. By "enstranging" objects and complicating form, the device of art makes perception long and 'laborious.'⁵³ In short, the goal is to cause someone "to see rather than recognize"⁵⁴—or, with sonic pieces, to *hear*, rather than recognize. Shklovsky wrote further:

After being perceived several times, objects acquire the status of 'recognition.' An object appears before us. We know it's there but we do not see it, and, for that reason, we can say nothing about it. The removal of this object from the sphere of automatized perception is

51 H. Bergson, *Laughter: an essay on the meaning of the comic*, (Whitefish MT: Kessinger Publishing, 2010), p. 5.

52 Interestingly, Tolstoy dated this diary entry (unconsciously?) 29 February 1897 instead of the correct date of 1 March 1897.

53 V. Shlovsky, "From 'Art as device'," *CONTEXT No. 10*, <http://bit.ly/ejDjpd>.

54 B. Helgason, "Sounds abstract: Making strange, abstract sound and abstract listening in audio-visual context," paper, http://this.is/herrahelviti/writings/Ma_essay_vef.pdf. Abstract.

accomplished in art by a variety of means ... The devices by which Tolstoy enstranges his material may be boiled down to the following: he does not call a thing by its name, that is, he describes it as if it were perceived for the first time, while an incident is described as if it were happening for the first time.⁵⁵

Shklovsky observes that another defamiliarization technique used by Tolstoy is to see things from a different perspective, as in the story *Kholstomer* where the narrator is a horse who describes people, their words and their actions from a horse's point of view.⁵⁶ In another example, Tolstoy describes what he sees during a theater performance, rather than specifically what the actors are saying or singing:⁵⁷ People appear and disappear, some wave their arms, one in tight-fitting pants sings, a woman sings and then is dragged off stage, people in the audience clap, somebody backstage makes a loud noise, and so on. In short, he describes exactly what is happening, rather than the illusion the theatrical group wishes to present.

Removing illusion and defamiliarization underlie the sonic pieces produced with this dissertation. The goal is for the listener to see (hear) things anew, to break through habitualized perception, to see things newly and thus reach new areas of understanding. The more familiar an object is, the more important it is to see it with new eyes, and the more shocking is the result. As a test, using what I would term an "essential gaze," I suggest that you stare at an object until all associations crumble or fade away until all that remains is your perception of the object. Conversely, utter a single word aloud repeatedly, over and over. It soon becomes meaningless. Helgason describes this process: "It is a matter of awareness,

55 Shlovsky, From 'Art as device'.

56 V. Shlovsky, "Art as technique," <http://www.vahidnab.com/defam.htm> One observation the horse makes is that people strive not for good, but for *goods*.

57 Shlovsky, Art as technique.

where you turn it and how long you focus. You could probably defamiliarise a domestic object just by looking or even staring at it for a long period of time, aiming your awareness on one thing until it 'cracks' and then 'breaks down' under the pressure of your mind powered stare. The object is no longer what it used to be."⁵⁸ The familiar only remains the familiar until we take the time to truly observe it, rather than simply note it in passing.

A successful use of *ostranenie* when creating a sonic piece would be that after hearing the piece, a listener would articulate that after the sonic event the world appears different. One irony here is that a *sonic* piece could cause someone to talk about never "seeing" the world the same again. It is difficult to escape from the dominance of visual terminology.

One of the key factors producing defamiliarization is *irony*. Irony can manifest in many forms, from the verbal to the dramatic to the situational, from the simple "that's certainly an interesting painting" meaning "I can't stand that thing", to the execution of someone for breaking a law against attempted suicide. Stern confirms that, "Because irony is rationally apprehended, it seems appropriate for messages conveying intellectual status."⁵⁹ Thus the use of irony is very appropriate as the goal with this dissertation's sonic pieces is to use irony to produce emotional reactions leading to intellectual realizations. Although not likely an effect within this dissertation's artifacts, irony can have the additional advantage of causing the person who understands the irony to be self-satisfied. Rhetorical irony as a technique entertains an audience clever enough to disentangle real meanings: people feel

58 Helgason, Sounds abstract.

59 B. Stern, "Pleasure and persuasion in advertising: Rhetorical irony as a humor technique," *Current Issues & Research in Advertising*, 1989, Vol. 12, Issue 1, p. 32.

special when they solve a puzzle or get the punch line of a joke.⁶⁰

This dissertation's *Onward* piece ironically contrasts the inspiring music and words of the song with the very non-Christian and non-inspiring, almost dirge-like litany of the names of countries invaded by the US military since World War II. The semiotic juxtaposition of the two elements—song and narration—is intended to cause listeners to view both elements differently: to see the US military actions, at least in part, as fervent crusades against the "other", as well as to see the well-known song as less religious and more warlike and aggressive than it is usually understood to be. After the first few stirring bars of the song, we hear the voice of George W. Bush. His words reveal the framing of the piece and, even more so, how he and his administration framed the military invasions of Iraq and Afghanistan. As an extension, his use of "crusade" and "evil doers" creates a frame through which can be seen, and interpreted, all of the military interventions done by the United States since World War II. Aristotle captured this moment where hearing difference leads to thinking differently.

Liveliness is specially conveyed by metaphor, and by the further power of surprising the hearer; because the hearer expected something different, his acquisition of the new idea impresses him all the more. His mind seems to say, "Yes, to be sure; I never thought of that."⁶¹

Aristotle referred to the surprise of someone hearing something other than what was expected. *Surprise* or *shock* is another element of defamiliarization. In the advertising industry, the type of surprise used is sometimes referred to as "shock advertising," a type of advertising more often used in print advertising than in television or radio. Dahl et al. realized that, "A shock advertising appeal is generally regarded as

60 B. Stern, "Pleasure and persuasion, p. 27.

61 Aristotle, *Rhetoric*, Book III, Chapter 11.

one that deliberately, rather than inadvertently, startles and offends its audience."⁶² Shock is generally connected with moral offensiveness: Harming innocent people...putting children in provocative situations (e.g., sexual, violent)"⁶³ Dahl et al. refer to shock advertising as "a combination of norm violation and surprise." However, it is not necessary to offend morality to create surprise. The advantage of surprise is that it "encourages further cognitive activity as individuals seek to understand the source of their surprise."⁶⁴ That "further cognitive activity" is one of the goals of this project. Dahl et al. write that shock is very good at attracting attention.⁶⁵ With this dissertation's artifacts, the initial attention-getting shock is intentionally provided by the initial single coin falling in *Income Tax*, the first gunshot in *Mulberry Bush*, and the beginning musical fanfare in *Onward*.

Another key element producing defamiliarization is *incongruity*. Lee reports that "recall differs between congruent and incongruent information. Unexpected information elicited better recall than expected information, and irrelevant information yielded inferior recall compared to relevant information."⁶⁶ It is obvious from this pattern that the incongruity must be between two *relevant* pieces of information. Directly related to relevance is the concept of "the everyday." Alden and Hoyer in their study suggest "that advertisers might enhance the effectiveness of humorous ads by employing contrasts between expected and unexpected events that are truly surprising but not impossible, once

62 D. Dahl, K. Frankenberger and R. Manchanda, "Does it pay to shock? Reactions to shocking and nonshocking advertising content among university students," *Journal of Advertising Research*, September 2003, p. 268.

63 Dahl et al., Does it pay. p.270.

64 *Ibid.*, p. 271.

65 *Ibid.*, p. 277.

66 Y. Lee, and C. Mason, "Responses to information incongruency in advertising: the role of expectancy, relevancy, and humor," *Journal of Consume Research*, Vol. 26, September 1999, p. 156.

against indicating the importance of moderate, rather than slight or extreme, contrasts with reality."⁶⁷ Further, "Ads which employed a contrast between everyday life and the unexpected were generally perceived as more humorous than those employing a contrast between everyday life and the impossible."⁶⁸ One response to incongruity is *humor*. They are closely linked. Kant saw laughter as "an effect that arises if an intense expectation is transformed into nothing."⁶⁹ The goal of this dissertation's artifacts is to *not* fulfill the expectations of the listener, and rather than produce laughter as a result of the unfulfilled expectations, produce thinking which leads to reflection. Humor can disrupt, can cause us to see things differently than we had expected.

Alden writes that there are two schools of thought about humor: one argues that humor results when an incongruity is resolved. The punch line makes sense of the information previously provided in the joke. A second argues that the incongruity itself is sufficient to produce humor, no resolution being necessary."⁷⁰ Both agree that incongruity is the key ingredient in humor. Raskin states that a "verbal or written communication is considered a joke when the 'text... is compatible fully with two distinct scripts and the two scripts are opposite in certain definite ways such as good-bad, sex-no sex, or real-unreal." The third element, the punch line, "switches the listener from one script to another creating the joke."⁷¹ With this project's artifacts, the "punch line" is not text in the narrative that produces laughter, but rather text or sound that produces thought. With *Income Tax*, it is the silence when corporate coins are expected; with *Mulberry Bush*, it is the final narrative words that give the statistic of the number of

67 D. Alden and W. Hoyer, "An examination of cognitive factors related to humorousness in television advertising," *Journal of Advertising*, June 1993, Vol. 22, Issue 2, p.35.

68 Alden and Hoyer, An examination of cognitive factors, abstract.

69 I. Kant, *The critique of judgment* (Cambridge: Hackett Publishing, 1987), p. 203.

70 *Ibid.*, p. 30.

71 V. Raskin, *Semantic mechanisms of humor* (Boston: D. Reidel, 1985), pp. 34-35 as quoted in Alden and Hoyer, An examination of cognitive factors.

children and teens killed daily in the United States by firearms; and with *Onward*, it is the long, repetitive list of countries invaded by the U.S. military.

Humor can also be a key tool to attract listener attention. A survey by Madden and Weinberg of advertising agency executives indicated that humor is effective at gaining attention, it is more effective at doing so than nonhumorous ads, and gaining awareness for new products is a particular strength of humor.⁷² According to Madden and Weinberger, radio and television were perceived as the media vehicles best suited to humor.⁷³ Therefore, "The belief is that to bring humor 'alive', the ability to use sound is a key ingredient distinguishing radio and TV from the nonbroadcast media."⁷⁴

None of the sonic pieces produced by this dissertation can be considered humorous, but they contain elements which under certain conditions can produce humor. Instead of providing punch lines intended to produce laughter, they provide factual information intended to produce thought. With *Mulberry Bush*, a situation that appears to be one thing is revealed to be the opposite, but the revelation does not lead to a humorous conclusion. With *Income Tax*, an expected sound (many coins dropping) does not appear, but again the "punch line"—the explanation why the sound does not appear—is not humorous. *Onward* can be seen as a form of intellectual, but non-humorous, *double entendre*; the perspective on a crusade is certainly different for the crusaders than it is for the targets of that crusade. :

Once the principles of ostranenie—in particular irony, surprise and incongruity—are determined, it is possible to combine those principles with knowledge about sonic elements—such as voice, music and counterpoint—to produce guidelines that can lead someone to the successful creation of sonic artifacts intended to provoke individual, and social, change. The third chapter extends the application of

72 T. Madden and M. Weinberger, "Humor in advertising: a practitioner view," *Journal of Advertising Research*, Aug/Sep 1984, Vol. 24, Issue 4, p.24.

73 *Ibid.*, p.25.

74 *Ibid.*, p.25.

ostranenie to probe how its characteristics can be used to persuade.

Chapter III - Elements of Sonic Persuasion

A sonic artifact intended to bring about new understandings in listeners can be broken down into a number of generic elements which provide a palette from which the sonic designer can choose. Not every sonic work will use all of these elements, but they should all be initially considered as potential components of any sonic creation of the type discussed in this dissertation. This chapter briefly discusses each of these elements and, where relevant, provides examples of their use in this project's sonic trilogy.

Voice

Voice is concerned with *number* of voices used as well as with the qualities of those voices. Stern writes that "The most important decision in message construction is what kind of person to use, for messages can be expressed by whatever persona type is deemed most effective. In other words, message discourse or content can be represented as an autobiography, as a story, or as a drama."⁷⁵ There is no doubt that the person of message construction is important. Equally important, however, is the choice of the voice(s) that will deliver that message. A study by Oakes and North "assessed the impact of the congruity between the actual age of the participants and the perceived age of narrator voices upon responses to a radio advertisement for a fictitious university. Attribute transfer caused by stereotypical age perceptions provided the explanation for results indicating that an incongruous (older) narrator significantly reduced perceptions of the image attractiveness of the advertised university."⁷⁶

Their study indicates what is likely intuitively, that it is as important that the qualities of the voices

75 B. Stern, "A revised communication model for advertising: Multiple dimensions of the source, the message, and the recipient," *Journal of Advertising*, Jun 1994, Vol. 23, Issue 2, p. 10.

76 S. Oakes and A. North, "The impact of narrator age congruity on responses to a radio advertisement," *Journal of Marketing Communications*, 2010, abstract.

used (age, gender, nationality/ethnicity, apparent educational level) are just as appropriate as the text itself for the intended audience. As Johnson writes, "The power of what is spoken lies as much in the voice as in the words, in what is heard as much as in what is understood. What someone says is perhaps of secondary importance to the vocal presence: whose flesh does not tingle at the sound of Hitler's voice, even if we don't speak German?"⁷⁷

Crisell stresses an important point when he writes: "If the word-sign does not resemble its object the listener must visualize, picture or imagine that object. But there is an important difference between words which are written or printed on a page and words on the radio, and that is that words on the radio are always and unavoidably spoken. They therefore constitute a binary code in which the words themselves are symbols of what they represent, while the voice in which they are heard is an index of the person or "character" who is speaking."⁷⁸

Potter's study of the effects of voice change on cognitive overload on radio listeners indicates that there is a definite advantage when changing radio voices frequently. He reports that "heart rate data suggests that something as simple as incorporating more than one voice into radio programming is beneficial because it increases the amount of processing resources automatically allocated to encoding information contained in the audio message."⁷⁹ The use of more than one voice for this project's artifacts would have been inappropriate, but Potter's recommendation is valuable for those intending to produce radio works of longer length and who are concerned about retaining a listener's attention

77 B. Johnson, "Voice, power and modernity," in *Talking and listening in the age of modernity: Essays on the history of sound* (eds. Damousi, J. and Deacon, D.) (Canberra: ANU Press, 2007).

78 A. Crisell, *Understanding radio* (New York: Routledge, 1994), p. 43.

79 R. Potter, "The effects of voice changes on orienting and immediate cognitive overload in radio listeners," *Media Psychology*, Vol. 2, 2000, pp. 168-169.

during the entire work.

Retention

Retention refers to the memorability of the sonic piece. My intention is that after people hear both the *Mulberry Bush* and the *Onward* pieces, they will not hear those songs without thinking of the information that accompanied them in these works; that the songs will act as "triggers"—memory stimuli—that cause the listener to automatically recall and experience the emotions and information he or she experienced when the pieces were first heard. An example of this is the fear that many people experience when they hear the "shark music" from the movie *Jaws*. One researcher, James Kellaris, states that any song can become an *earworm*,⁸⁰ and that no special qualities are necessary. Beaman and Williams reported that "Simple and repetitive tunes are more likely to become overlearned over a short time period ... but exposure to the tune is the critical factor rather than the characteristics of the tune *per se*."⁸¹ Both pieces of music used in this project are already familiar to listeners, so there is the possibility that either could function as an earworm, but ideally as a memory stimulus as well.

Simplicity

The simpler a point is, the easier it is to remember, and therefore to act upon. "Simplicity" is a key quality in Heath and Heath's book *Made to Stick*,⁸² which suggests ways of creating "ideas that survive." In his "Eight-step design process" for behavior change produced at Stanford University's

80 An *earworm*, originally *Ohrwurm*, is a song or bit of music that one 'can't get out of one's head." A. Hughes, "Beyond Dr. Earworm, James Kellaris, University of Cincinnati," <http://magazine.uc.edu/issues/0408/doctor-earworm.html>.

81 C. Beaman and T. Williams, "Earworms ('stuck song syndrome'): Towards a natural history of intrusive thoughts," *British Journal of Psychology*, No. 101 (2010), p. 649.

82 C. Heath and D. Heath, *Made to Stick: Why Some Ideas Survive and Others Die* (New York: Random House, 2007).

Persuasive Technology Lab, B.J. Fogg's first step is "Choose a simple behavior to target."⁸³ Simplicity is an essential goal for attitudinal change as well as behavioral change. The sonic works for this dissertation are focused on very simple messages: "Many large corporations pay no income tax (but you do)," "Many young children are killed by guns," and "The United States has repeatedly invaded countries since World War II (while claiming to be peaceful)." Husak's advice for public service announcements "help them see your issue in a light they haven't seen before,"⁸⁴ can be followed by simplifying the message so that it can be more easily received and understood.

Simplicity applies to the *message* delivered, and not necessarily to the *means* by which it is delivered. Potter and Choi report that their study using college-aged subjects indicated that "the more complex an auditory message is structurally, the more positive the attitudes, the greater the arousal and self-reported attention resulted, and the greater the memory."⁸⁵ The structural features used in the study were voice changes, production effects, sound effects, and music onsets.

Length

The optimal length for a sonic work is dependent on the medium of transmission (such as radio, podcast or Internet), associated costs, the message it will deliver, and the attention capacities of the intended audience. The advice from *NonProfit World* is that when creating public service announcements (PSAs) the length does not matter and that just under 60% of PSAs are 60 seconds long.⁸⁶ However, it is useful to keep in mind that audiences are used to short bursts of information and

83 BJ Fogg, "Creating persuasive technologies: An eight-step design process," *Persuasive '09*, April 26-29, Claremont, California, USA.

84 C. Husak, "PSAs: the Olympics of nonprofit advertising," *Nonprofit World*, Sep/Oct 2005, Vol. 23, Issue 5, p. 18.

85 R. Potter and J. Choi, "The effects of auditory structural complexity on attitudes, attention, arousal and memory," *Media Psychology*, Vol. 8, No. 4, 2006, p. 416.

86 Husak, PSA: the Olympics, p. 19.

entertainment. For example, television sound bites (audio/visual clips of a candidate speaking) in American presidential election are on an average no more than eight seconds, whereas in 1968 sound bites of 60 seconds were not unusual.⁸⁷ The average was 42.3 seconds.⁸⁸ The length will be determined by the medium used for dissemination, such as radio or Internet. The three sonic pieces produced for this dissertation are 52, 58 and 1:57 minutes in length.

Silence

Silence is a key component of sound. Indeed, without silence there could be no sound. Silence can be used to indicate lack of sound, to contrast with sound, or to provide an opportunity to *think*. Silence is an important element in two of this project's artifacts. In *Income Tax*, silence indicates the lack of the sound of coins which in turn symbolizes the fact that a number of major corporations paid no federal income taxes. In *Mulberry Bush*, silence is used very briefly after each gunshot (or set of gunshots) to contrast with the gunshot and to reproduce the feeling of being "stunned into silence." After the final gunshot, there is a longer period of silence before the closing statistical message. Although silence is not used in *Onward*, it is *intentionally* not used. There could be silence, or at least a longer pause, between the names of each country invaded by the United States. By having only the briefest of pauses, the list of names washes over the listener in what appears to be an endless litany of countries with no break for the listener to absorb the enormity of the list and its significance.

Repetition

Repetition provides a rhythmic effect which can be used to relax the listener but also to build up tension or to (almost monotonously) express a point. In *Mulberry Bush*, the children sing with a happy,

87 C. Fehrman, "The incredible shrinking sound bite," *Boston Globe*, January 2, 2011.

88 K. Adatto, "The incredible shrinking sound bite," *The New Republic*, May 28, 1990, p. 20.

joyful rhythm. The gunshots, particularly when they come in a series, have their own rhythmic signature. Rhythm is used in *Income Tax* briefly with the sound of the taxpayer's coins and again, briefly, with the reading of the names of the corporations. In *Onward*, rhythm is a significant element, both in the rhythm of the underlying song and in the rhythmic, droning repetition of the names of the countries in which the United States has militarily intervened since World War II. Without repetition, none of the pieces would be able to fulfill their emotional goals.

Contrast and counterpoint

Contrast is an essential element for humor, and equally valuable in creating a sonic piece that stimulates thought. In *Mulberry Bush*, the contrast is between happy, singing children and gunshots, which represent violence and death. In *Income Tax*, the contrast is between a "little person's" (the median taxpayer's) payment of taxes and huge corporations' (seven of the country's largest) very silent non-payment of taxes. In *Onward*, the contrast is between the religiosity and actions in the name of God signified by the lyrics and music, and the aggressive military actions of a country that purports to follow religious principles.

Music can counterpoint the narration so that each element is heightened by the presence and contrast of the other, resulting in an intensified experience. The emotion from this contrapuntal experience can be triggered in the future. As Arning and Gordon state about music and film images, "Such is the power of this process, that when the music is heard in another context, the original emotional expression it stimulated is felt again."⁸⁹ As mentioned earlier, for many people the music from the movie *Jaws* serves as such an emotional trigger, viscerally repeating in people the emotions they felt when first seeing the movie and, in effect, literally "standing in" for the shark itself. Arning and Gordon further write, "This form of inter-textual sonic linkage does not involve the listener/subject in a conscious process. Rather,

89 C. Arning and A. Gordon, *Sonic semiotics*.

the effect takes place at a level below personal perception, a level which enables us to construct 'meaning' instantaneously and which relies upon an ability to remember and make an emotional investment in a familiar sound. This paradigm has come to be known as 'low level processing'.⁹⁰ The artifacts produced by this project make use of low level processing through their trigger of emotional reactions to the sound and music heard by the listener.

Ostranenie (incongruity and surprise)

As discussed in the previous chapter, ostranenie (through surprise, incongruity and irony) is an essential element. Heath and Heath see it as an essential quality in getting and holding attention.⁹¹ In *Mulberry Bush*, the gunshots shockingly intrude on a happy scene of singing children (and most likely in the minds of listeners, dancing children as well.) Hearing this for the very first time, the listener is expecting the singing to continue to the end of the song, without interruption. The unexpected attack on the children's world by violence from the adult world destroys expectations and the familiar and provides a visceral and psychic shock to the listener. In *Income Tax*, it is the dashing of expectations in the listener who likely expects to hear a huge clamor of coins representing the large tax payments of corporations. In *Onward*, it is not a sudden shock but a gradually realization of the very large number of countries that the United States has invaded and the contrast between those actions and the words and music of the song. It is the increasing momentum, the accelerating realization of just how many countries are on the list that provides the shock. All of these use ostranenie to create an opportunity to provoke a new understanding in the listener.

90 *Ibid.*

91 Heath and Heath, *Made to stick*.

Intellectual reaction

Although emotion is a key element of all three pieces of the sonic trilogy, the goal is to create a new intellectual understanding of the subject. In *Mulberry Bush*, the factual information is saved for the end, after the last shot has been fired and the singing has abruptly stopped. Only after the narrator has delivered the information is the listener aware of what he has just heard—and its significance. In *Income Tax*, after the listener realizes that the corporate names he has just heard—prior to the silence—are all names of companies that have paid no federal income tax. There is then a pause, followed by the address of a website where the listener can obtain more information. This is the only one of the three sonic pieces that makes a call for action. In *Onward*, the fact that the United States has taken military action against other countries should be no surprise to the listener, so the fact that this has occurred is provided early in the piece. The point of the piece is not that the United States invades other countries, but that it has happened so many times. With each new name spoken by the narrator, the listener becomes more aware of a formidable and seemingly endless pattern. If a sonic work is successful, the listener will finish with a different understanding than he had prior to hearing the piece.

Text

Text in this project's artifacts is as important as sound. In fact, it *is* sound since the text is spoken. This dual nature, both words and sound, is the same as in oral conversation, the difference being that the listener to a recorded work can only *imagine* the visual appearance of the person speaking the words. With *Income Tax*, the sound was imagined by the researcher before the words, but the text is vital to explain the significance of that sound (and silence) and to put forth the specific names of the non-tax paying corporations. Sound without text, would be meaningless; text without sound would be understandable, but lack the emotional punch provided by the sound.

Mulberry Bush would make no sense without the spoken explanation at the end of the piece, and as with the spoken text in *Income Tax*, the text of *Mulberry Bush* would have no impact without the sound. Again, the text is essential, but without the power of the sound it would have little if any effect on the listener. It is essential as a component, but incapable of effectively standing alone.

In the third piece, *Onward*, the sound (music) never ceases, yet it would be simply an inspiring song—and lyrics—without the counterpoint of the spoken text. Again, the text alone would be impressive, but lack the emotional thrust provided by the music. All three are at their heart sonic pieces, none could function with their full power without both text and sound.

Sonic texts can draw from unlimited possibilities, yet the limitations of listening suggest some preferred limitations. Sonic texts must be evocative, enabling the listener to visualize what he cannot see. Sonic texts must be succinct, because their existence is ephemeral. Sonic texts must be clear in their signifieds, because there are no visual clues to assist interpretation. Sonic texts should ideally be memorable, because it is difficult, and often impossible, to recapture sound with one's memory unless it made a strong impression when first heard. The goal of all three sonic pieces for this dissertation was to create sonic texts—and the sound effects to support and intensify those texts—that would meet these standards.

Music

Music creates emotion (or, better, *triggers* emotion) and, when appropriate, is extremely important in the success of a sonic work. Two of the project's pieces use music. The first is *Mulberry Bush* where a children's playful and joyous circle dancing song represents a world of fun and safety. The counterpoint of gunshots indicates otherwise. In *Onward*, the music is uplifting and spiritual, representing the good and the holy. The contrast of soldiers and war heightens the emotions produced by both elements: the

peaceful and the violent. The music for both pieces was selected to provide the strongest and most emotional contrast to the text, which had already been determined.

Sound effects

It is possible to have a sonic work without "sound effects," but in most cases their use greatly enhances the work. A sound can be far more than just the "sound of" something. Crisell points out that what he refers to as "extended signification—a form of stereotyping" is commonly used on radio. "An owl-hoot, for instance, may open a documentary about feathered predators or it may evoke not merely an owl but an entire setting—an eerie, nocturnal atmosphere, as it would in a melodrama or a programme about the occult. A crowing sound frequently signifies not only 'a cock' but 'daybreak', while the sound of strumming may suggest not simply a guitar but a Spanish setting.⁹² What a sound connotes can be far more reaching than what it denotes. Miller et al. confirmed their hypothesis that "Radio commercials containing sound effects will create greater imagery processing than will the same commercials without sound effects."⁹³ Druker points out that to "show" anything on the radio requires that thing to make a sound. And not only a sound, but a recognizable sound, one that hopefully all listeners will associate with the particular thing.⁹⁴ A quiet dog does not work on radio.

Not surprisingly, a study by Miller et al. indicated that the use of sound effects in radio commercials enhances the evocation of mental imagery. Three approaches were tested: sound effects, vivid verbal messages, and instructions to imagine. Results indicated that sound effects "had the greatest impact on imagery and affective responses" with vivid verbal messages a close second, and instructions to

⁹² Crisell, p. 46.

⁹³ D. Miller, and L. Marks, "Mental imagery and sound effects in radio commercials," *Journal of Advertising*, Vol. XXI, No. 4, December 1992. p.84.

⁹⁴ D. Druker, "Listening to the Radio," *Theatre Journal*, Vol. 43, No. 3, Radio Drama (Oct., 1991), p.335.

imagine having a very weak, if any, impact.⁹⁵ Since a radio commercial or PSA will generally have a verbal message to inform or persuade, the sound effects can be seen as a useful, and even vital, enhancement to the basic commercial. Certainly, without the sound of falling coins or gunshots, this project's artifacts would not work at all.

Druker describes a radio drama which created an "audio portrait of a television studio using sound fragments to position the listener" as "part of the field being observed."⁹⁶ I would suggest that while there are techniques that can be used to bring a listener 'into' a radio drama, such as ambient sound or voices and mumbling from background characters even when the main characters are speaking, it may be the case that a listener is always "in" the radio drama. Visual is sensed as an external event; one *sees* something apart or outside oneself. The aural is sensed internally. Although the sound is sourced externally, one "hears" it internally, just as we may "hear" our internal thoughts. As Barenboim points out, "sound penetrates our body. There is no ... physical penetration ... with the eye, but there is with the ear."⁹⁷ In a sense, if a radio production wishes to give the listener the feeling of being *external* to the drama, it must make special efforts, perhaps using a radio equivalent of Brecht's *Verfremdungseffekt*. Brecht himself created several "epic radio" programs with the same approach as his "epic theater," keeping—and enforcing—the separation between performers and audience very obvious through characters speaking directly to the audience and other Brechtian devices.

Druker reports that an engineer at National Public Radio told him that, "gunshots do not 'sound' like gunshots on radio unless the recorded sound fragments are enhanced in some way."⁹⁸ The goal of the

95 D. Miller and L. Marks, "The effects of imagery-evoking radio advertising strategies on affective responses, "

Psychology and Marketing, Vol. 14, Issue 4, July 1997, p. 337.

96 Druker, *Listening to the Radio*, p. 330.

97 Barenboim, *The neglected sense*.

98 Druker, *Listening to the radio*, p.326.

enhancement is to "let the audience hear what it thinks it would be hearing in real life."⁹⁹ Most sounds in film are not 'real.' They are created in the studio because 'real' sounds, authentically recorded, do not sound realistic to a theater audience. As Ola Stockfelt writes: "Just recording and replaying a gun-shot, a kiss or a slap in the face won't do the job—the recording doesn't get the sound right, and even if it did, it wouldn't convey the narrative meaning of the events. In practice, the 'real' sounds on film became as conventionalized and stereotyped as the musical signs. Like all effective and widely used sign systems, this has been developed into conventions that we tend to take for granted, and that we might even mistake for the 'natural' sounds of the world."¹⁰⁰

In the famous shower scene in Alfred Hitchcock's movie "Psycho", we hear Janet Leigh's character's screams as she is being stabbed to death. They are, however, not actually screams but instead the sound of string instruments; it is the audience that viscerally and mentally converts the high-pitched notes of the stringed instruments into a woman's screams, and for most people it is "screaming" that remains in their memories. Sound has its own clichés, its own sign system, its own "reality creation." In *Income Tax*, coins denote money and, in this piece, income taxes in particular. They also connote work, sacrifice, and citizen obligation. In *Mulberry Bush*, the music signifies happy children; on a more general level it signifies childhood, happiness, safety and peacefulness. The gunshots on the other hand, represent violence, adulthood and perhaps the envy of many adults toward the imagined carefree lives of children. In *Onward*, the music represents God, Church and Jesus, but it also represents the "battle for good" and the "triumph over evil."

While sound effects are just one component of "sound" in a sonic work, they (along with voices and music) complete the reality of the world which the sonic designer has created. We ourselves inhabit a world filled with non-vocal and non-musical sounds; such a world should at least be considered even

99 Druker, *Listening to the radio*, p.327.

100 Stockfelt, *The importance of being audible*.

for a brief sonic piece.

Emotion

Emotion is another key element in Heath and Heath's *Made to Stick*. They suggest a message should make the listener care, should provide a feeling with which the listener can identify and will associate with the message.¹⁰¹ With *Income Tax*, the sound of coins dropping—symbolic of the listener's own income tax payment—connects the listener with the piece. When he hears the silence representing the taxes paid by major corporations, he is likely to experience the emotion of anger. With *Mulberry Bush*, the music can trigger emotions and memories of childhood; shattered by the emotional and even physiological shock triggered by the gunshots. With *Onward*, the music can emotionally inspire the listener—until his mind starts to pay attention to the narration. It is not necessary to use puppy dogs and babies to produce emotion;

All of the above elements were considered when designing the three pieces of this project's sonic trilogy. If one or two were occasionally not used, it was because they were deemed inappropriate for the particular work. All will remain in this researcher's sonic toolkit for future use. The reader can judge the effectiveness of those used for this project by listening to the three sonic works expressing the theories discussed in this exegesis.

¹⁰¹Heath and Heath, *Made to stick*.

Chapter IV - Project Artifacts

Since this project is concerned with sound, it was essential to include actual sonic examples that express the results of the research. Sound is experiential, so I wanted to give the reader of this dissertation a sonic experience, and there was also no way I could fully explain and express my project without applying the theory to actual sonic pieces. The artifacts embody the exegesis, and while they *could* stand alone without an exegesis, I believe that by combining the exegesis and the artifacts there is a richer learning experience. This chapter provides my observations and additional detail about the artifacts and highlights of the creative process.

Income Tax (Income Tax in US)

Listen: <http://soundcloud.com/napamick/income-tax/s-EHu39>

This piece was inspired by the Beyond War sound piece that used BBs to represent thermonuclear weapons. (See Appendix) Its most important element is sound effects: the sound of coins falling to represent the federal income taxes paid by the median American taxpayer contrasting with the "the sound of silence" representing the non-taxes paid by many American corporations.

Design Process - I remembered a use of sound by the Beyond War organization in the 1980s. They used the sound of a small copper BB to represent a 15-ton thermonuclear bomb, followed by the sound of 5,000 more BBs to represent *all* the thermonuclear bombs in existence at that time. It was powerful and unforgettable. My initial thought was to use coins to symbolize the federal income tax paid by the *average* middle class taxpayer in the United States in 2009 (the last year for which figures were available.) I was able to find that statistic only for the *median* taxpayer. I originally hoped to create the sounds by dropping silver dollars, but the logistics of that proved too difficult to accomplish.

I also considered using instead this theme: "Ladies and gentlemen, please stand for the national anthem of the home country of the corporate headquarters of the following companies," and would then play the national anthem of the Cayman Islands while the narrator read a long list of US corporations that have a headquarters in the Caymans. I decided against this version because the national anthem of the Caymans turned out to be *God Save the Queen* and most Americans would likely assume when they heard it that it was actually the American song *My country, 'tis of thee*. Also, most of those corporations have only *subsidiary* headquarters in the Caymans, not their main headquarters. Using the *coin* version turned with the names of the country's largest tax-avoiding corporations out to be the best choice.

Mulberry Bush (Firearms in the United States)

Listen: <http://soundcloud.com/napamick/mulberry-bush/s-EHu39>

This piece serves as an experiential metaphoric expression of the statistic that every day in the United States an average of nine children or teenagers are killed by firearms. The piece not only sonically expresses that statistic; it also comments on a society which would produce, and allow, such a reality to occur. The statistic itself is precise yet abstract. The sound of the gunshots makes the statistic more real, more visceral. The use of the gunshots to jarringly and dramatically interrupt the playful singing of the young children makes the visceral effect even stronger, because the gunshots, followed by a brief silence, contrast sharply with the innocent and happy singing. The result is that the listener can literally *feel* the statistic.

Design Process - My initial concept was to use a series of gunshots, with each representing a person killed in the United States by a gun during the year 2010—or perhaps just over the period of one week

or one day. However, my research revealed the statistic that an average of nine children or teens is killed by firearms every day in the U.S.¹⁰² and that worked perfectly. The next task was to choose the music. I considered *Ring Around the Rosie*, *Rock a Bye Baby*, *Row Row Your Boat* and *Here We Go Round the Mulberry Bush*. The concept was that children would be singing, there would be the sound of gunfire, and then silence, followed by: "Every day in the United States, nine children or teens are killed by firearms." I decided not to use *Ring Around the Rosie* because the words "all fall down" foreshadowed my intended shock, and for the same reason did not use *Rock a Bye Baby* ("cradle will fall"). *Row Row* was too closely identified with the "life as stream/dream" metaphor and I wanted a piece there was more neutral, more straight forward, just children happily singing. So I chose *Mulberry Bush*.

I had hoped that the piece would begin with many children singing and work its way down to only one, who would then disappear with the last gunshot. However, I was unable to obtain, or create, a recording of a diminishing number of children singing, so I used a full group throughout the entire piece.

Onward (US military interventions since World War II)

Listen: <http://soundcloud.com/napamick/onward/s-EHu39>

Barbara Stern refers to irony as "any statement that conveys a meaning different from the one it professes to give; a discrepancy exists between what the words say and what they mean."¹⁰³ This piece is intended to produce an ironic disconnection between the lyrics and words of the well-known religious song "*Onward Christian Soldiers*," and the information provided over the song by a narrator. That narration lists, one by one, each and every country where the United States has used its military forces since World War II. The narration is preceded by a mix of short audio clips of former US

¹⁰² Each Day in America - <http://www.childrensdefense.org/child-research-data-publications/each-day-in-america.html>

¹⁰³ Stern, *Pleasure and persuasion*, p. 25.

president George W. Bush as he refers to the American military efforts as a "crusade" whose goal is to put an end to "evil doers."

The narration and audio clips, in contrast with the religious music and lyrics, are intended to produce a jarring disconnect, a semiotic collision, as it were, that shocks the listener sonically, and hopefully viscerally, providing a new, or expanded, way of viewing the actions of the United States government over the last 65 years.

Design Process - The initial concept was to have a music background while a narrator slowly read the names of countries in which the US military has militarily intervened since World War II. Researching several websites,¹⁰⁴ I put together a list of those countries. The next step was to choose music that would contrast with the list of countries. I first considered using *We are the World* or *Give Peace a Chance*, but decided that the martial feel of *Onward Christian Soldiers* was most appropriate. The first version did not explain the significance of the country names until the very *end* of the piece. I thought it would be more dramatic to save this for the finish. With the next version, I moved the explanation to early on, so that the listener would understand the significance of the names of the countries as he heard them. I believe this is much more effective. In a later version, I added George W. Bush's comments on crusades and evildoers to the beginning of the piece, which also proved to be a worthwhile change. As an aside, it is interesting to note that such stirring music was written by the same man—Arthur Sullivan—who wrote the music for the satirical *Gilbert and Sullivan* operettas.

104 <http://academic.evergreen.edu/g/grossmaz/interventions.html>

<http://killinghope.org/>

http://www.thirdworldtraveler.com/Blum/US_Interventions_WBlumZ.html

http://en.wikipedia.org/wiki/Timeline_of_United_States_military_operations#1990.E2.80.931999

None of the three sonic pieces turned out exactly as I initially envisioned. I note the use of a visually-oriented word for conceiving a sonic work. For example, I believe that the *Onward* piece turned out better than originally intended because during the course of its production I had the idea to add the voice clips of George W. Bush. I would have preferred that *Mulberry Bush* used a recording that had a diminishing number of children's voices until finally there was only one child singing before the final gunshot. However, as I said, it was not possible to bring this about. The key point is that the sonic pieces took on a life of their own, and the back-and-forth flow between the exegesis and the artifacts resulted in a composite total dissertation with which I am very satisfied.

Conclusion

Through this exegesis and its accompanying artifacts, I have demonstrated the importance of sound effects, counterpoint, incongruity and defamiliarization in the creation—and reception—of sonic works designed to increase social awareness in the listener. I have integrated current and past research on radio, humor, incongruity and commercial advertising into a foundation that supports and explains the design and structure of this project's artifacts. The result is a combination of theory and practical guidelines that can be used in the future by those who also wish to create sonic works that can cause listeners to view their society with new perspectives, by provoking thought, reflection and awareness of social needs and conditions.

Practice-led research has proven to be an excellent method for my research and I would encourage others to also consider its use. I urge those with similar interests to experiment with the information and guidelines proposed in this dissertation by producing sonic works on subjects appropriate to their communities, large or small. Areas not covered by this project include dissemination, metrics and attitudinal changes in listeners. I hope that researchers and creators will be attracted to studies in these aspects of sonic media. They are welcome to use the three sonic artifacts I have created in any way they wish in their work.

As we live in a culture dominated by the visual, I would hope that anyone, sonic creator or not, will benefit from the information produced by this dissertation and gain a new appreciation of sound and its value. Despite the efforts of some scholars, the sonic medium has remained delegated to second-class status since the advent of visual-heavy television. Sound is an integral part of our environment—not only our external environment but our *internal* psychic environment as well. It, and we, deserve better.

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Appendix - Scripts

Income Tax Script

- SFX: One coin being dropped.
- Voiceover (VO): Here is the sound of the United States federal income tax paid by the median taxpayer in the United States in 2009. Two thousand seven hundred and ninety dollars.
- SFX: coins being poured
- VO: Here is the sound of the combined United States federal income tax paid by Exxon/Mobile, General Electric, Bank of America, JPMorgan Chase, Boeing, CitiGroup, and Wells Fargo.
- SFX: silence
- VO: Think this is unfair? Visit usuncut.org

Mulberry Bush Script

SFX: Sound of children singing "Here We Go Round the Mulberry Bush." Continues through start of second chorus: "This is the way we wash our clothes."

SFX: Gunshot.

SFX: Silence.

SFX: Singing

SFX: Two gunshots in a row.

SFX: Silence

SFX: Singing

SFX: Four gunshots in a row.

SFX: Silence.

SFX: Singing

SFX: One gunshot.

SFX: Silence.

SFX: Singing.

SFX: One huge gunshot.

SFX: Long silence

Narrator: "Every day in the United States, an average of nine children or teens are killed by firearms."

Onward Script

SFX: Background: Mormon Tabernacle Choir singing *Onward Christian Soldiers*, opening with fanfare.

Voice: Audio clips of former U.S. president George W. Bush saying:

"This crusade...this war on terror...we will rid the world of the evildoers..."

SFX: Music continues, then decreases volume under narration.

Narrator: "Since World War II, the United States has intervened with military forces in more than 47 countries."

Narrator continues to slowly speak the names of the following countries:

Afghanistan, Albania, Angola, Bolivia, Brazil, Cambodia, Central African Republic, Chad, Chile, China, Colombia, Congo, Croatia, Cuba, Djibouti, Dominican Republic, Egypt, El Salvador, Eritrea, Ethiopia, Ghana, Grenada, Guatemala, Haiti, Indonesia, Iraq, Iran, Kenya, Laos, Lebanon, Liberia,

Libya, Macedonia, Nicaragua, Oman, Pakistan, Panama, Peru, Philippines, Rwanda, Saudi Arabia, Serbia, Sierra Leone, Somalia, South Korea, Sudan, Vietnam, Yemen, Yugoslavia, Zaire.

SFX: Music increases in volume, continues, then fades out.

Beyond War BB Script

<http://www.danoday.com/play/metaphor/>

In the 1980s, the non-profit organization Beyond War frequently demonstrated the number of thermonuclear warheads in the world with a brilliantly simple use of sound. They would drop one BB into a bucket to indicate one nuclear bomb 15 times the size of the ones dropped by the Americans on Hiroshima and Nagasaki. They would then pour 5,000 more BBs into the bucket to demonstrate the number of nuclear weapons currently existing worldwide. This sound piece was the inspiration for the Income Tax sound work included in this project.

Stan Freberg Scripts

Stan Freberg is a comedian, writer, and advertising agency person who was extremely popular and successful in the United States in the 1950s and 1960s. He has won numerous advertising awards for his innovative radio commercials, radio programs, and recordings. Following are three examples of his unique work, included here to illustrate the wide variety of entertainment and information that can be communicated by the use of sound and its stimulation of the imagination..

John and Marsha

<http://www.westsong.com/brighton/trilogy/john.mp3>

Freberg produced the "John and Marsha" hit record in 1951. An example of voice, and the effect that variations in voice can produce. The entire dialogue consists of the repeated use of just two words, each person (both voices by Freberg) repeating the other's name, with varying emotions ranging from passion to laughter:

Man: Marsha

Woman: John

Stretching the Imagination

<http://www.westsong.com/brighton/trilogy/stretching.mp3>

Created by Freberg in 1964 to promote the benefits of advertising on radio. An example of the range of visual imagination that sound can stimulate. The dialogue and sound effects (SFX) below are the core of the piece.

Man # 1: Radio, why should I advertise on radio, there's nothing to look at, no pictures.

Man # 2: You can do things on radio you couldn't begin to do on TV.

Man # 1: That'll be the day.

Man # 2:

All right, watch this...hmm...OK people, now when I give you the cue I want the 700 foot mountain of whipped cream to roll into Lake Michigan, which has been drained and filled with hot chocolate, then the Royal Canadian Air Force will fly overhead towing a 10-ton maraschino cherry, which will be dropped into the whipped cream, to the cheering of 25,000 extras...All right...

Cue the mountain (SFX - Rumbling, sliding down ways, huge splash)

Cue the Air Force (SFX - Drone of large number of propeller-driven bombers overhead)

Cue the maraschino cherry (SFX - Whistle like a bomb dropping, ends in giant squish sound)

OK, 25,000 cheering extras (SFX - Crowd cheers)

Now, you wanna try that on television?

Vietnam War

<http://www.westsong.com/brighton/trilogy/vietnam1.mp3>

Created by Freberg in 1970 at the request of U.S. Senator Mark Hatfield of Oregon in support of legislation to end the war in Vietnam. Below is an excerpt from this example of using (black) humor to increase social consciousness.

Sound: Machine gun firing, battle sounds.

First Man: And over here we have the 1971 Vietnam War Toy.

Second Man: Is that the same war that's on TV every night?

First Man: That's right.

Second Man: What do you do with it?

First Man: You must wind it down...watch.

Sound: Phonograph record of machine guns reduces to very slow speed.

Second Man: It's still going.

First Man: Oh, yeah. I never said it stopped.. It just winds down.

***Four Minute Speech (1918)*¹⁰⁵**

A typical speech given during World War I by a Four-Minute Man

from Words That Won the War by James R. Mock and Cedric Larson

While we are sitting here tonight enjoying a picture show, do you realize that thousands and thousands of Belgians, people just like ourselves, are *languishing in slavery* under Prussian masters?

Driven into slavery, after they were lured back home by Prussian promises—Prussian scraps of paper.

Read the stories of deliberate *governmentally ordered* brutalities as told in the book, *German War Practices*, recently published by the Government's Committee on Public Information. Read how the Prussian war lords

105J. Mock and C. Larson, *Words that won the war* (Princeton: Princeton University Press, 1939), pp. 123-124.

robbed Belgium, pilfered and stole. How they extorted fines of millions of francs for trivial reasons—e.g. 5,000 francs [5,000,000?] (\$1,000,000) in Brussels because of an attack by a policeman; 200,000 marks at Tournai for refusal to send a list of citizens. Taxes went to 50,000 francs a month and more in Belgium.

Prussian “Schrecklichkeit” (the deliberate policy of terrorism) leads to almost unbelievable besotten brutality. The German soldiers—their letters are reprinted—were often forced against their wills, they themselves weeping, to carry out unspeakable orders against defenseless old men, women, and children, so that “*respect*” might grow for German “efficiency.” For instance, at Dinant the wives and children of 40 men were forced to witness the execution of their husbands and fathers.

Now, then, do you want to take the *slightest* chance of meeting Prussianism here in America?

If not, then you’ll have to help in summoning all the resources of this country for the giant struggle. For resources will win the war.

Here’s the way you can help save our resources. Instead of throwing money away on unnecessary things, buy Thrift Stamps, 25 cents, and War-Savings- Stamps, \$4.12, worth \$5 in five years, 4 per cent compound interest. They’re good as government money; like a mortgage on the U.S.A. Here’s one of the War-Savings Certificates, and here’s a Thrift Card. Ask at any post office, any bank, or store wherever you see a W.S.S. sign.

It is up to us. We, the people, must win the war.