

PERSPECTIVES ON MUSIC, THE ENVIRONMENT, AND SUSTAINABILITY  
EDUCATION FROM RECORDING ARTISTS FEATURED ON THE DAVID  
SUZUKI FOUNDATION *PLAYLIST FOR THE PLANET*, 2011

by

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For Alistair and Lydia

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Music can help you survive your troubles,  
Music can help distract you from your troubles.  
Some music can help you understand your troubles.  
And some music can help you do something about your troubles.  
-Pete Seeger (1919-2014)

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## Abstract

The arts have the power to evoke emotion, spark dialogue, encourage innovative thinking, present diverse perspectives, cope with ambiguity and non-linearity, and influence the development of cultural norms. Increasingly used as tools in social change agendas, the arts have been promoted as a critical component for achieving a sustainable future. Through a cultural and social geography lens, this study explores how music, as one of the arts, can be used to encourage pro-environmental behaviour. Using a non-probabilistic, purposive sampling technique, I asked musicians who contributed songs to the David Suzuki Foundation *Playlist for the Planet* to contemplate their environment-related music, in their particular performing contexts, in the light of musical ecocriticism and/or environmental education. Results show multivalent themes emerging around maintaining musical authenticity in both artistic output and off-stage pro-environmental behaviour, balancing environmental messaging with other components in the entertainment context, and the roles of time, place, and audiences.

## List of Abbreviations Used

CBSM = Community-Based Social Marketing

DSF = David Suzuki Foundation

EE = Environmental Education

ESD = Education for Sustainable Development

SD = Sustainable Development

UN = United Nations

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I am blessed with wonderful friends and colleagues who have generously lent me their ears and insights on countless occasions, some of whom have waited patiently for me through the stages of my researching and writing to rejoin them in our own music-making endeavours together. My family has borne the disruption of me going back to school in mid-life with good-natured grace, humour, and support. To them I direct my unwavering gratitude and affection.

Lastly, I offer my sincere thanks to the musicians of the *Playlist* who were so kind to share their time and insights with me. This document is the result of their generosity.

# Chapter 1: Introduction

## 1.1 Prelude

By profession, I am an instrumentalist, arranger, composer, and teacher. I designed and carried out this study on musicians and the environment from the vantage point of a fellow musician, as well as a citizen and parent concerned about environmental issues myself. However, I am not a singer, and my compositional output to date has been confined to wordless instrumental music. I have provided musical backing for many singers, onstage and in the recording studio, and thus have observed vocalists at close range relating to their audiences through both lyrics and music. I also speak to audiences from the stage between numbers in my own performing contexts myself, and building a positive rapport with audiences is part of my practice as well. Additionally, I am familiar with the practical matters of recording, touring, publicity, and other parameters in the music industry that are faced by the participants of my study. These professional experiences may have given me some insight to talk to this group of singers who have engaged with environmental issues directly through their original songs, with some understanding of what they might face, without necessarily imposing my own artistic agenda upon theirs. I feel honoured that these musicians chose to share their thoughts with me.

## 1.2 Context and Motivations

A point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can achieve for ourselves and our posterity a better life in an environment more in keeping with human needs and

hopes... To defend and improve the human environment for present and future generations has become an imperative goal for mankind.” (UNEP, 1972, para. 6)

The statement above is taken from the *Declaration of the United Nations Conference on the Human Environment*, a product of the 1972 conference in Stockholm, Sweden, in which a truly global vision of a healthy and sustainable environment was first articulated (United Nations, 2015). With the momentum from this conference, the UN General Assembly established the United Nations Environmental Programme (UNEP) in the same year. Principle 19 of the *Declaration* states that environmental education (EE) “... is essential in order to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in protecting and improving the environment in its full human dimension...” (UNEP, 1972).

Why is EE so important? What is the environmental crisis that it combats? The answers to these questions are huge in scope. They demand of us that we become knowledgeable about the state of the only planet we live on, and to consider what it is that we value in life, and how much weight we place on these values, such that the demands that we place on the planet do not outstrip its ability to renew itself.

Many diverse yet interconnected environmental issues demand our attention. It is not difficult to rhyme off examples of such issues. For instance, there is 97-98% agreement among climate researchers on the tenets of anthropogenic (human-caused) climate change (Anderegg et al., 2009). There are thresholds for various types of human impact on the environment, beyond which “...important subsystems, such as a monsoon system, could shift into a new state, often with deleterious or potentially even disastrous consequences for humans” (Rockström, 2009, p.472). Biologists suggest that a human-caused global mass species extinction may now be underway if current extinction rates continue unabated (Barnosky et al., 2011). Deforestation plays its role; when humans remove forests to make way for human activities such as agriculture, they remove not only habitat but forest ecosystem services that absorb carbon dioxide, help regulate climate, retain soil, and filter fresh water (World Wildlife Fund, 2016). It is thought that 15% of all greenhouse gases in the atmosphere result from deforestation (World Wildlife Fund, 2016). Furthermore, ocean acidification occurs when increased levels of atmospheric

carbon dioxide react with sea water, imperiling the survival of corals and other organisms by interfering with the process by which they construct their shells, thus endangering entire ocean ecosystems such as our biologically diverse coral reefs (Hoegh-Guldberg, 2007).

A less abstract example of an environmental issue to which many people can relate is garbage, at least when they see misplaced litter around them and feel empowered to help with mitigation and cleanup efforts (Let's Do It, 2016). Farther removed are more remote trash repositories like the North Pacific Gyre, an enormous rotating vortex of floating garbage larger than the state of Texas at the confluence of major ocean currents in the Pacific Ocean (Smithsonian National Museum of Natural History, 2016). This includes microscopic pieces of plastic, the ecosystem effects of which are only recently coming to public awareness (Wright, Thompson & Galloway, 2013).

This is a mere sampling of the many ecological/social issues that the species *Homo sapiens sapiens* must address to avoid irreversible ecological tipping points (Lenton et al., 2008). Environmentalist Dr. David Suzuki observes that “we're in a giant car heading towards a brick wall and everyone's arguing over where they're going to sit” (Suzuki as cited in Goodreads, 2016).

By counteracting ignorance of and indifference to environmental issues, EE is seen as one of the means of tackling the environmental crisis that humanity faces. Given the urgency, it would seem important that environmental educators should try to reach as many people as possible, in all of their diverse learning preferences and contexts, not only to relay information to them on the state of the environment and on what pro-environmental measures to take, but to help them to find for themselves an overarching sense of value for the global ecosystem of which we all are a part. To that end, examining and using diverse pedagogical approaches seems a logical idea. There are many types of EE, with many diverse approaches that broadly fall, depending on context, into the overlapping categories of formal, nonformal, and informal learning, categories which are discussed later in this chapter.

When envisioning EE, a person might imagine a teacher leading students on a nature walk to talk about an ecosystem, an instruction leaflet from a municipality outlining its

recycling program, or some other situation in which concrete information may be passed on. One may not immediately think of the role that the arts play in EE – and yet, we use the arts in our culture all the time to explore our emotions and build our values on a whole range of life issues, including environmental ones. Culture and the arts play a role that should not be underestimated in a comprehensive strategy to integrate sustainability awareness into all citizens: “...Art, culture and education have direct connections with the values that we hold in society and with quality of life.” (Packalén, 2010, p. 121). The arts have the power to evoke emotion, spark dialogue, encourage innovative thinking, present diverse perspectives, and cope with ambiguity and non-linearity (Ernstman & Wals, 2013; Ernstman, van Boeckel, Sacks, & Myers, 2012). Additionally, since art in itself can be a form of creative self-expression in response to events and encounters in the life of the artist, the environment is liable to be a source of inspiration for some artists – a personal, experiential engagement through ecocriticism.

Music is among the possible artistic approaches that can be used in EE. The United Nations has recognized the value of music as an EE tool, having launched the United Nations Music and Environment Initiative with the following two stated objectives:

- to use the popularity of music to promote environmental awareness and respect for the environment among the public, especially young people,
- to assist in the process of “greening” of the music and entertainment industry

(UNEP, 2016a)

UNEP also states that “music is one of the most powerful media to communicate environmental messages to billions of people worldwide – irrespective of race, religion, income, gender, or age” (UNEP, 2016a).

However, natural questions arise as to when, where, and why music could be enlisted to help elicit positive thoughts and attitudes about the environment and sustainability, and using what sorts of techniques. To date there is a limited amount of literature on the role that music can play in the delivery of formal, informal, and nonformal EE. Given the pervasiveness of music in society, its unique artistic attributes, and the large networks of

people who are drawn to particular genres, songs/pieces, and musicians, it is proposed here that the use of music as a tool for EE is a topic that merits more extensive exploration, and from more approaches, beyond the research that is currently available.

This study takes a step on that journey by means of an approach that is new in formal academic literature on this particular topic. It does so through the direct questioning of musicians who have created popular environmentally-themed music and have advocated for environmental issues, in their particular contexts and through their networks. It examines musicians' perspectives on their own environment-related musical repertoire in terms of its artistic components, presentation, and perceived reception, as well as on what sorts of more general implications there may be both for professional musicians who advocate on behalf of the environment and for environmental educators who wish to use music as one of their teaching tools.

### 1.3 Study Overview and Research Questions

This study asks practitioners and performers of ecology- or sustainability-themed music to contemplate their musical eco-criticism or musical ecological education initiatives and impact. The study population is a cohort of Canadian professional musicians who have created songs on environmental themes and have advocated for environmental causes as contributors to a 30-track compilation album released by the David Suzuki Foundation in 2011 called the *Playlist for the Planet* (hereafter referred to as the *Playlist*). The insights from the analysis of the interviews may be useful to other musicians seeking to effectively incorporate green messaging into their stage material, careers, and public profiles, and to environmental educators exploring a holistic educational approach that includes the use of music.

As the principal investigator, I conducted all the phases of this research myself, from its design through interviewing, transcription, coding, analysis, and writing, under the guidance of my supervisor, Dr. Tarah Wright, and the other members of my committee, Dr. Peter Duinker, and Dr. Steven Baur.



The research is divided into two interrelated streams of inquiry. The first stream concerns the music itself – how, when, where, and why to use it in environmental education and advocacy, what may “work” and what may not, what the parameters and challenges are, etc. This includes such topics as musical/expressive techniques in environmentally-themed song output, environmental motivations, visions of sustainability, concert programming, challenges, pitfalls, and perceived “successes”. The second stream examines the lives of the musicians themselves in relation to their environmental work, the challenges, risks and rewards that they have identified in their careers, ideas on business practices, inspirations and cautions for other artists, behavioural modelling, etc. Connecting both of these streams are the pro-environmental actions taken by the musicians in their personal and professional lives beyond the process of creating the music itself that help lend authenticity and credibility to their work. While stemming from two distinct fields – music from the fine arts, and sociology from the social sciences – neither stream functions independently of the other, but are united in their service to a third field, education – specifically, EE and related advocacy. These two research streams correspond respectively to the two research questions below that have guided this research:

1. If music is one of the possible approaches that can be used to encourage pro-environmental thoughts and actions, then how, when, where, and why could professional musicians and environmental educators enlist music to help elicit these thoughts and actions in their audiences and networks?
2. What are some of the sociological and career implications for performing musicians who engage with environment and sustainability issues in their professional and/or personal lives?

Following the literature review in Chapter 2 and the research methods described in Chapter 3, these two streams are respectively explored in publication format in Chapters 4 and 5. They are discussed in relation to each other in Chapter 6.

## 1.4 Thesis Structure

This interdisciplinary thesis is presented in a publication-based or manuscript-based format, as opposed to the traditional monograph thesis. Increasingly common in the sciences and social sciences, the publication-style thesis contains, embedded within its larger structure, two or more chapters which constitute complete articles to be submitted whole to academic journals, and thus are self-contained units which include their own compacted mini-introductions, mini-literature reviews, and mini-methods. As this involves some repetition of information, an overview of how this format is carried out in this thesis is offered below to help orient readers from disciplines where this type of thesis is not as common.

Chapter 1 (“Introduction”), Chapter 2 (“Literature Review and Placement of Research”), and Chapter 3 (“Methods”) are each general, expansive chapters that apply to the entire study. Chapters 4 and 5 are each destined to be submitted for journal publication. Chapter 4 is an embedded paper entitled “Music as a Tool for Environmental Education and Advocacy: Artistic Perspectives from Musicians of the *Playlist for the Planet*”. In the thesis, this chapter functions as the Results and Discussion for one subset of the data in this research, but also contains its own short Introduction, Background (literature review), and Methods taken out of and condensed from pertinent material from the corresponding general thesis chapters. Similarly, Chapter 5, “Engaging with Environmental Issues as a Musician: Career Perspectives from the Musicians of the *Playlist for the Planet*” is a second embedded paper that functions as the Results and Discussion section for the other subset of the data, and also has its individualized and condensed Introduction, Background, and Methods sections. Both streams are united and discussed in relation to each other in Chapter 6, a general “Conclusion” chapter that applies to the entire thesis. Each of the embedded articles also possesses its own Works Cited section, but there is also a general Works Cited section after Chapter 6 which lists all the sources for the entire thesis. The appendices that follow it are relevant to the entire thesis as well.

## Chapter 2: Literature Review and Placement of Research

### 2.1 Literature Search Parameters

Basic definitions of two musicological terms are offered below as an aide to understanding the choice of search terms in this literature review. “Ecocriticism” is an interdisciplinary branch of thought in the humanities that, as it arose and evolved in the 1990s, came to “... address the question, in all of its dimensions, how cultures construct and are in turn constructed by the non-human world” (Bergthaller, 2016, para.2). “Ecomusicology”, the branch of ecocriticism that addresses music in particular – also called “ecocritical musicology” – is “... the study of music, culture, and nature in all the complexities of those terms. Ecomusicology considers musical and sonic issues, both textual and performative, related to ecology and the natural environment” (Allen, 2013, p.193).

The literature search involved open internet search engines, scholarly library catalogue searches, and library databases (Doctoral Dissertations in Musicology, Oxford Bibliographies - Sociology), in the quest for relevant scholarly articles, books, theses, and other types of literature. The search parameters centred on music in relation to the environment in general and specifically to EE. This involved such search terms as music and the environment; music and ecology; music and ecocriticism; ecomusicology; and ecocritical musicology. This also included examining: the role of the arts in general in EE; musical meaning; music as an educational tool; music/musicians and advocacy, particularly environmental advocacy; musical environmental education initiatives targeting youth and/or adult audiences; and protest songs, including examining the phenomenon of the protest song in a wider social context besides environmental, given its long and colourful history as a musical and social entity.

No other comparable academic study was found in the literature search that took the particular comprehensive interview-based approach with full- and part-time musicians in

a scholarly setting that this present study does. However, there is literature to support or give context to the various facets of it, such as musical meaning, educational approaches, the strengths/limitations of music, political protest music, and endeavours in EE and in environmental advocacy that have been undertaken by musicians directed at general audiences and at youth/children. There is also some complementary literature outside of academia directed at general audiences on environmentally conscious musicians. It has also been useful to collect background information on some of the practical music industry parameters which musicians must navigate. However, I believe that this is the first time these facets have all been drawn together to pose questions to musicians on music and the environment in this way. The following sections offer a review of the relevant literature to this project in order to provide context for the thesis.

## 2.2 Environmental Education (EE)

This section briefly traces how our understandings of EE have evolved in the past 70 years into what we recognize today, with the added dimensions and new terminology that have accrued during that time. While relaying scientific information has always formed the basis of EE, we have also come to understand the importance of culture and emotions in developing pro-environmental values in all areas of life, and are developing a variety of educational tools in a wide variety of settings to address that need. I outline the types of EE that can surface, depending on learning context, and give examples for each type of context that can include music. Lastly, I examine the value-building powers and influences that can be exerted by the arts in general in EE, attributes that are also shared by the art of music. This sets the stage for the specific in-depth discussion of music and EE to follow in section 2.3.

### 2.2.1 General Overview / History

Decades before the term “environmental education” came into common usage, the philosophical need to encourage pro-environmental thought in society was recognized. The concept of what we would later call the Anthropocene - the modern era in which human activity can be viewed as a geological force – was described by Russian lecturer Vladimir Vernadsky (Pavlova, 2013). He challenged humankind to develop a worldview and a system of values that would enable long-term harmony between humanity and nature as he brought forth the idea of the noösphere, or “sphere of wisdom” (“tsarstvo razuma”):

Mankind taken as a whole is becoming a mighty geological force. There arises the problem of the reconstruction of the biosphere in the interests of freely thinking humanity as a single totality. This new state of the biosphere, which we approach without our noticing, is the *noösphere*.

(Vernadsky, 1945, quoted in Pavlova, 2013, p.658)

“Environmental education” as a term itself was first coined in 1969 by Stapp et al. in the inaugural issue of the *Journal for Environmental Education*. This definition remained the foundation for future visualizations of EE:

Environmental education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problems, aware of how to solve these problems, and motivated to work toward their solution.

(Stapp et al., 1969, p.34)

Periodic declarations from the United Nations (UN) over the ensuing decades further clarified and built on international conceptualizations of EE, setting forth principles and recommendations for implementation. Early UN conferences, such as the 1968 Biosphere Conference in Paris, tended to be heavily science-focused, with an emphasis on making the public aware of ecological and conservation concepts through educational initiatives (Pavlova, 2013). The Stockholm Declaration of 1972 recognized the interrelationship of humankind and the environment, setting forth principles that included the essential need for EE both for children as well as adults “... to broaden the basis for an enlightened opinion and responsible conduct by individuals, enterprises and communities in

protecting and improving the environment in its full human dimension” (UNEP, 1972, Principle 19).

The Tbilisi Declaration of 1977 was co-produced by UNESCO (United Nations Educational, Scientific and Cultural Organization) and UNEP (United Nations Environment Program) (UNESCO-UNEP, 1978). At this first intergovernmental EE conference, the goals for EE were expanded beyond ecological content to also include “... clear awareness of, and concern about, economic, social, political, and ecological interdependence in urban and rural areas” (UNESCO-UNEP, 1978, Recommendation 2).

In 1987, the World Commission on Environment and Development (Bruntland Commission) met in Norway and produced its seminal report on sustainable development (SD), *Our Common Future* (Bruntland & WCED, 1987):

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs. (Bruntland & WCED, 1987, chapter 2, IV.)

Through the 1980s to the present, the term “education for sustainable development” (ESD) has also appeared in the discourse at the UN and in other forums, sometimes - but not always - interchangeably with EE, with overlapping content and methods (Pavlova, 2013). Pavlova (2013, p.666) states that EE and ESD both share “... an emphasis on life-long learning and inclusion of formal and non-formal education; interdisciplinarity; inclusion of social, environmental, and economic realms; and use of a variety of pedagogical techniques that promote participatory learning, first-hand learning and development of higher order thinking skills”. Where the two terms differ is in emphasis. At least in UN documents, ESD tends to emphasize people and their localities, whereas EE tends to focus more on the environment and its improvement. ESD encompasses wider social issues such as economic development, poverty, gender, governance, corporate responsibility, disaster mitigation, etc., integrating them with natural ecology.

This distinction has not always been made consistently in the literature, however, and some jurisdictions have retained their preferred term for their particular practices and/or questioned the need for a conceptual change at all (Pavlova, 2013).

For the purposes of this study, the term EE is used with the understanding that it is an essential component of the wider term ESD. Some sources below use the term ESD; it will be understood here that that also includes EE. Thus, if a case is made here for using music as an EE tool, that also has implications for ESD, and vice versa.

The 1997 UNESCO Conference on Environment and Public Awareness for Sustainability produced the Thessaloniki Declaration, which allows for EE to be referred to as “education for environment and sustainability” (UNESCO, 1997, point 11). Recognizing that the action plans and recommendations of past EE and ESD world conferences had produced only partial results, the Declaration reaffirms their validity and the need to fully realize them, including the points selected below that are particularly relevant to this study:

In order to achieve sustainability, an enormous co-ordination and integration of efforts is required in a number of crucial sectors and rapid and radical change of behaviours and lifestyles, including changing consumption and production patterns. For this, appropriate education and public awareness should be recognised as one of the pillars of sustainability... (UNESCO, 1997, point 6)

All subject areas, including the humanities and social sciences, need to address issues related to environment and sustainable development. Addressing sustainability requires a holistic, interdisciplinary approach which brings together the different disciplines and institutions while retaining their distinct identities. (UNESCO, 1997, point 12)

While not specifically mentioning the arts, the Thessaloniki Declaration stresses the importance of all societal actors participating in what it describes as a “moral and ethical imperative” (UNESCO, 1997, point 10). It does make a specific recommendation concerning the media, of which the arts are a part:

We recommend that the media be sensitized and invited to mobilize its know-how and distribution channels to diffuse the key messages, while helping to translate the complexity of the issues into meaningful and understandable information to the public. The full potential of new information systems should be used properly for this purpose. (UNESCO, 1997, point 20)

The UN declared 2005 - 2014 to be the Decade of Education for Sustainable Development (UNESCO, 2014). In its end-of-decade report, the UN declared that there still was much to be done in terms of integrating ESD into all educational systems. However, the UN also found that member states and their multi-stakeholder partnerships had at least made a start in converging ESD and general educational agendas, that ESD was making inroads into formal, nonformal and informal education, that ESD in technical/vocational training led to more-sustainable development, and that local commitments were growing (UNESCO, 2014).

This brief overview ties together the various stages of development of EE. This history began with the recognition of the need for EE, an initial definition for EE with an emphasis upon the relaying of scientific information, and subsequent conceptualizations that integrated ecological/environmental/sustainability perspectives into all spheres of human activity, including economic, political, and social. These conceptualizations included the increasing recognition of the need to integrate values and mixed modes of learning into EE, particularly given that the straightforward relaying of scientific information had only produced limited behavioural and policy results thus far. Of particular importance to this study is this need, stated with increasing urgency over the decades, to develop and nurture pro-environmental values. In the sections below, the strengths of the arts (such as music) in helping to develop those values in EE become apparent.

The working definition of EE to be used in this study is Pavlova's 2013 summary from UNESCO-UNEP:

Environmental Education (EE) is the educational process that deals with the human interrelationships with the environment and that utilizes an interdisciplinary problem solving approach with value clarification. It is



concerned with education progress of knowledge, understanding, attitudes, skills and commitment for environmental problems and considerations.

(UNESCO-UNEP, 1983, summarized in Pavlova, 2013, p.656)

### 2.2.2 Types of EE

EE, as well as other types of education, can be sorted into three basic types of learning, depending on the direction from which they come to touch on a learner. EE that involves the use of music can also be sorted in the same way. There can be considerable overlap between these categories, as well as disagreement as to what belongs in each, and in any given learning context there can be a mix of any of them (Colley, Hodkinson & Malcolm, 2002; La Belle, 1982).

Coombs and Ahmed (1974) describe these three basic types of learning as:

- Formal – institutionalized, chronologically graded and hierarchically structured educational system, spanning lower primary school and the upper reaches of the university.
- Nonformal – any organized, systematic, educational activity carried on outside the framework of the formal system to provide selected types of learning to particular subgroups in the population, adults as well as children. In the case of EE, this could take place in such settings as nature clubs, outdoor clubs, Scouting troupes, community groups, etc.
- Informal – the lifelong process by which every person acquires and accumulates knowledge, skills, attitudes, and insights from daily experiences and exposure to the environment. This type of learning can occur almost anywhere, taking influences from family life, friends, strangers, the media, entertainment, the local natural or built environment, and countless other sources.

La Belle (1982) states that a key difference between formal and nonformal education is that the former is officially sponsored by the state, whereas the latter requires no such sanction. Similarly, La Belle distinguishes between nonformal and informal: “A major

difference ... rests with the deliberate instructional and programmatic emphases present in non-formal education but absent in informal education” (La Belle, 1982, p.162). La Belle also states that different types of learning can occur in one given educational setting. For example, formal education may take place in the structured and graded setting of a school, but nonformal learning can also take place in its extracurricular activities, as well as informal learning from its peer groups. In practice, it is a question of which mode may be emphasized at a given time, and in fact it is possible that different modes can send conflicting messages (La Belle, 1982).

The United Nations has recognized the importance of educational endeavours in formal, nonformal, and informal learning in its EE and ESD declarations, as seen in the excerpts below from the 1997 Thessaloniki Declaration:

The reorientation of education as a whole towards sustainability involves all levels of formal, non-formal and informal education in all countries. (UNESCO, 1997, point 10).

Action plans for formal education for environment and sustainability with concrete targets and strategies for non-formal and informal education should be elaborated at national and local levels. (UNESCO, 1997, point 15).

To these three basic types of learning, Mocker & Spear (1982) add a fourth category: self-directed learning. In their matrix of lifelong learning, self-directed learning is an exploratory mode in which the learner “controls both the objectives and means of learning” (Mocker & Spear, 1982, p.viii).

Scenarios in which music can be used as a tool for EE can be found in all four basic types of learning described above by Coombs & Ahmed (1974) and Mocker & Spear (1984). For example, if a children’s entertainer were to perform environment-related songs as an invited guest in an elementary school, that scenario would be considered a formal setting. Nonformal learning may take place when the members of a Scout troupe or a summer camp sing nature songs around a campfire. Informal learning may take place in a wide variety of musical contexts, ordinary and extraordinary, and has the advantage of potentially occurring anywhere. These can range from appreciating the sentiments of a

pro-environmental song live in concert or through audio recordings or videos, to visiting an artist's website and encountering information about the causes for which s/he advocates, to adopting the social norms regarding recycling and trash disposal and other impacts of concert-goers at any particular festival or venue, to singing protest songs on an environmental blockade line. Self-directed learning can also take place practically anywhere. It can occur when, upon encountering an environment-related message in any of the modes above, a learner takes it upon him- or herself to find out further information on that environmental topic.

### 2.2.3 The Role of the Arts in EE

There is a case to be made for increasing the role of the arts in general (including music) in EE, particularly given the value-building strengths of the arts. To make this case requires understanding the nature of those strengths and the contexts within which they can potentially be effective in inducing pro-environmental thought and behaviour.

Historically, the boundaries between the arts and sciences in the western world have been blurrier than they are in the present day (Carruthers, 2006). Leonardo da Vinci and Michelangelo were thinkers from the European Renaissance whose works holistically embodied both arts and sciences. Since the Age of Enlightenment, the arts and sciences have become increasingly more specialized and stratified from each other. During the Scientific Revolution there was a push to disentangle the influences of religion and political hierarchy from rational thought and scientific reasoning in order to allow scientific knowledge to progress unfettered (Bristow, 2011). However, today some educators and advocates would call for some sort of reintegration of the arts and sciences – not to influence scientific reasoning itself, but to make the science more meaningful to more people in a more holistic, interdisciplinary quest for a more sustainable relationship between humans and the rest of the natural world (Carruthers, 2006; Packalén, 2010). Glass (2005) points out that some science centres, such as NASA's Jet Propulsion Laboratory, the Kavli Institute of Theoretical Physics in California, and the CERN particle physics centre in Switzerland, enlist artists to help with their respective areas of

science communication, recognizing that artists have the ability to investigate and communicate ideas differently.

Various authors and activists have sounded a call for greater involvement from the arts in EE. For example, in 2005 American climate activist Bill McKibbin perceived a paradox. In the midst of what he termed “the biggest thing that’s happened since human civilization emerged”, he found that the weight and presence given to the theme of climate change in the arts seemed pallid in proportion to the impacts of climate change on humanity itself (McKibbin, 2005). By contrast, McKibbin argued, a large amount of artistic material had emerged out of the AIDS crisis in preceding decades, and it had had some actual political effect in the handling of that public health issue. He declared that we also must express through the arts what sudden climate change does to us and what it means to us.

When commenting on culture and the arts in general in relation to the environment and sustainability, Packalén (2010) makes the similar broad observation that art and culture have not been discussed much so far in relation to sustainability issues, and yet culture and the arts have their own sources of insight into the human condition that should be included along with insights from policy, science, and economics. Packalén (2010) also makes a distinction between two fundamental and intertwined aspects of culture, of which “the arts” constitute one aspect. The first aspect is those structural elements that make up the recognized institutions and forms of culture, such as music, art, film, theatre, museums, literature, etc. The second aspect of culture is the more fluid anthropological dimension of behaviour and thought, i.e., people’s values, social norms, traditions, practices, and other elements. Packalén (2010) states that often these two aspects are confused, and yet it is the second aspect that affects every sphere of human activity, and it deserves more focus than what it currently receives in order to make both aspects work together more productively.

The arts have certain features that are well-placed to help us come to terms with conceptualizations of sustainable development (SD), and thus also ESD and EE. Ernstman and Wals (2013) state that these features have heretofore been underutilized, and they explain the mechanisms through which they can reach their potential,

mechanisms which can be applied to music in EE as well as any other art. They begin by pointing out that a precise and operative definition of “sustainability” itself has thus far eluded politicians, scientists, advocates, and other players at global environmental summits. This has led to a plethora of interpretations of the term, frustration, and stalled intergovernmental efforts to agree on concrete actions towards sustainability. Ernstman and Wals (2013) outline three reasons why it may not in fact be desirable to define SD too precisely or rigidly. First, SD is time-dependent, for what may work now may not work in the future. Second, SD is place-dependent, for what may work in one location may not transfer well to another. Third, SD cannot become a one-size-fits-all construct, or it risks losing its multi-dimensional effectiveness and relevance, after which it is reduced to stale dogma (Ernstman & Wals, 2013).

Rather than cleaving to a rigid definition, Ernstman and Wals encourage us to embrace a “fuzzy” conceptualization of SD. “Fuzziness” was a term coined by Zadeh (1965) in relation to any concept that defies precise and total description, either because its exact boundaries are not determined, or because its content and value change when applied to different contexts (Zadeh as summarized by Ernstman & Wals, 2013, p. 1647). Zadeh also argues that most issues are not black or white – “bivalent” – but shades of grey on a continuum, i.e. “multivalent”, thus creating multivalued meaning in terms of degree as viewed from multiple perspectives. Given this fuzziness, the efforts to create absolute meaning, divorced from context, only serve to confuse the issue – and Ernstman and Wals (2013) state that this has happened to the term SD. As a way of revitalizing SD and avoiding this conundrum, they recommend applying the principles of fuzzy logic to SD and allowing the term to be revised with changes in time and context, recognizing localized interpretations of it. By conceptualizing SD in this open-ended, ambiguous way, it can continue to create meaning for people as they adapt it in principle to their particular contexts without it stagnating behind overly specific parameters that may not translate across time and place (Ernstman & Wals, 2013).

We can imagine a hypothetical real-world example of this “applied fuzziness”. SD might mean different things to one person whose crops fail and whose well runs dry due to drought, who makes economic and lifestyle changes to preserve precious water,

compared to another person inundated by storms who is trying to keep flood waters from destroying property, roads, and sources of drinking water. Even before touching on any economic, temporal, and/or social disparity that may also exist between these two hypothetical individuals, we recognize that both of their situations relate to water and climate change but make for different adaptations, leading to localized (and personalized) meanings of SD for each of them to help them cope with their particular circumstances. Any art that is generated in response to environmental issues may similarly reflect localized and personalized meanings, for many different reasons that spring from context.

Furthermore, as Ernstman and Wals (2013) point out, while the report on the UN Decade of Education for Sustainable Development lists what its contributors feel are effective forms of learning for ESD: "... interdisciplinary learning, participatory/collaborative learning, social learning, discovery learning, systems thinking-based learning, and problem-based learning" (UN report on DESD as summarized in Ernstman & Wals, 2013, p.1648), it does not describe how ESD could encompass these forms. The arts, Ernstman and Wals (2013) contend, are well-placed to deal with multivalence and fuzziness precisely because of how they organically spring from context - how they can open-endedly present multiple contexts and multiple realities without necessarily having to resolve them with each other.

Ernstman & Wals (2013) illustrate the preceding point by means of two research projects that were both conducted by Eerstman. In these projects, Eernstman elicited and recorded conversations and artistic pieces in mixed genres from community members in two locations in the United Kingdom, inspired by walks through their local landscape. Each participant was given the same open-ended topic: what local sustainability meant to him/her personally with regard to that individual's community through which they walked, with the various features of that landscape eliciting thoughts that were relevant and meaningful to that speaker. In one of the projects, the walking routes were pre-determined by the event organizer; in the other, the route was chosen the participant his/herself. In both, Ernstman and Wals (2013, p.1656) noted "... exploring the question as to whether and why walking is art... The difference between the walk as an artful experience and the walk as a walk, might lie in the extent to which the walker lingers".

“The difference between an A-to-B approach and art lies in being ‘context-aware’ or ‘context-responsive’” (Ernstman & Wals, 2013, p.1657). Whenever the walker exercised more agency over the situation, the more personal and artful the experience became. Multiple visions and expressions of place and local sustainability arose from the experience. Ernstman and Wals thus make the following statement in relation to the use of the artful experience and ESD, which can also apply to the artful experience and EE:

Instead of depending on scientific and abstracted descriptions of what SD *should* mean to people, learning for SD lies in processes that incite communities to yield their own, context and time specific interpretations of sustainable development. (Ernstman & Wals, 2013, p.1657-1658)

We thus see that fuzziness and multivalence are already mechanisms through which we can understand our varied conceptualizations of SD, and that fuzziness and multivalence can already be features of any art that grows out of the human experience. Other environment-related aspects of the human experience can be similarly expressed. Winterson (1995) illustrates, through her own artistic voice, how multidimensional and personal a person’s conceptualizations of nature can be:

But what is Nature? From the Latin *Natura*, it is my birth, my characteristics, my condition. It is my nativity, my astrology, my biology, my physiognomy, my geography, my cartography, my spirituality, my sexuality, my mentality, my corporeal, intellectual, emotional, imaginative self. And it is not just myself, every self and the Self of the world. There is no mirror I know that can show me all of these singularities, unless it is the strange, distorting looking glass of art, where I will not find my reflection nor my representation but a nearer proof than I prefer. *Natura* is the whole that I am. The multiple reality of my existence. (Winterson, 1995, p.149-150).

Knowing this particular strength of the arts to localize and personalize meaning, we can look for opportunities to include it in EE where value-based learning may be enhanced by the witness (and, in some circumstances, creation) of such personalized/localized meaning through art. To do this, we can look at what various scholars in EE have written about value-based learning and about the need to include it.

Environmentalist and educator David Orr (2004, p.12-14) outlines six principles towards re-thinking education such that all learning in all subjects is rooted in an environmental context, including the following principle which he takes from the ancient Greek concept of “Paideia”:

The goal of education is not mastery of subject matter but mastery of one’s person. Subject matter is simply the tool. Much as one would use a hammer and a chisel to carve a block of marble, one uses ideas and knowledge to forge one’s own personhood. For the most part we labor under a confusion of ends and means, thinking that the goal of education is to stuff all kinds of facts, techniques, methods, and information into the student’s mind, regardless of how and with what effect it will be used. The Greeks knew better. (Orr, 2004, p.13)

Orr’s assertion harkens back to the words of the ancient Greek philosopher Aristotle:

Educating the mind without educating the heart is no education at all. (Aristotle, 350 B.C./1999)

On that theme, there is much research to indicate that merely increasing knowledge about environmental issues on its own does not necessarily correlate with increased pro-environmental behaviour (Tilbury, 1996; Kollmuss & Agyeman, 2002; Pooley & O’Connor, 2000; McKenzie-Mohr, 2011; Jurin & Fortner, 2002). The reasons for this may vary with context, including issues of convenience, economics, locus of control, individual values, pre-existing habits, external social norms, and lack of structures to make a given pro-environmental action a practical part of ordinary life (McKenzie-Mohr, 2011, p. 9; Kollmuss & Agyeman, 2002, p. 243-244). Even defining and measuring what actual pro-environmental behaviour is can be problematic when designing EE, as it can be individual, collective, direct, indirect, and/or some combination of many complex factors (Jensen, 2002, p.325-327).

Tilbury (1996) asserts that teaching about ecology and about human/environment interactions is essential, but that it represents a predominantly cognitive approach to EE, and that it is not enough. Other approaches are also essential to work in tandem for environmental knowledge to actually translate into pro-environmental behaviour. In



response to this need, Tilbury developed the three-prong “Head, Heart and Hand” approach to EE. Using the “Head” corresponds to learning “About” the science and the factual information that is encompassed by the cognitive approach described above (terms capitalized in the original publication). Using the “Heart” is learning “In” the environment – developing values and emotional attachment to it, in a student-centred style based on inquiry. This type of EE is open-ended and often delivered in an experiential manner, with direct contact to the natural world. The “Hand” represents education “For” the environment – taking pro-environmental action. Depending on circumstances, the last element of this approach can be a tricky one to implement, particularly regarding more controversial topics, and some practitioners do not emphasize it much (Tilbury, 1996, p.1-9).

Other research on attitudes towards the environment outline similar sorts of approaches with slightly different vocabulary. Pooley and O’Connor (2000) base their research on the premise that there are three domains of response to the environment: “cognitive” (which corresponds to Tilbury’s “Head”), “affective” (Tilbury’s “Heart”) and “behavioural” (“Hand”). They found that attitudes among their study participants towards environmental issues were formed by a combination of cognitive elements, i.e. knowledge, and affective elements, i.e. beliefs and emotions. The proportion of cognitive to affective varied as different environmental topics were presented. Participant experience with a particular topic was not studied in their particular project, but Pooley and O’Connor point to prior research by Millar and Millar (1996) suggesting that first-hand experience with a topic tends to manifest itself more in the affective domain, while indirect experience is more cognitively based, and that affect-based attitude is a better predictor of behaviour (Millar & Millar, 1996, cited in Pooley & O’Connor, 2000). This has implications for greater consideration of the affective domain, with its beliefs and emotions, in designing EE programming (Pooley & O’Connor, 2000).

Tilbury (1996) warns, however, that the “Heart” approach to EE – Pooley and O’Connor’s “affective” approach above (Pooley & O’Connor, 2000) – must be balanced with other approaches to EE, or else problems can ensue. While the “Heart” does bring in values and moral issues, too much emphasis on it at the expense of the other approaches

can overly romanticize perceptions of nature in a naïf and escapist way that is associated by some critics with Gaianist / deep green ideology. Without information on the political, social, and economic dimensions of a given environmental topic, and thus without potential tools of empowerment, students can feel frustrated, guilty, and hopeless about the issue, i.e., too overwhelmed to take action. However, used in conjunction with “Head” (“cognitive”) and “Hand” (“behavioural”) approaches, the “Heart” (affective”) approach provides the momentum and commitment that can carry through to actual environmental learning and behavioural change (Tilbury, 1996).

Jensen (2002) also recommends a balance of EE learning modes, to avoid the sense of negative overwhelm that can occur when scientific information and hands-on experience are presented without making possible an outlet to effect a change in the system. Finding solutions and becoming competent to take direct and indirect action are part of the educational package (Jensen, 2002).

The authors discussed above call for a mix of approaches that include a crucial component of affective, value-based learning. The arts can present affect, emotions, and values around environmental issues as they emerge in a localized and personalized form out of the art-maker’s experiences and perspectives as a fellow human being.

As a potential learner engages with a piece of art, s/he engages with the art-maker’s experience. This can be considered a form of experiential learning. Educational theorist Kolb (1984) defines “experiential learning” as a model of learning grounded in experience. In Kolb’s conceptualization, learning is a process rather than an outcome, and it is continually fed by every new experience that comes along, with knowledge being continually acquired and tested against previous experience. The experience of engaging with art can be one of many such types of experiences, through the creative exploration of an issue.

Carruthers (2006) asserts that the arts are in a good position to affectively address attitudes and feelings by creating artistically experiential conditions in which to examine values about the environment:

The arts can facilitate a process of learning through the engaged senses, bypassing conditioned patterns of thinking and allowing other ways of knowing to come forward, at times subtly, at times overwhelmingly. Whether the work focuses on natural, cultural, or political aspects of their environing world, artists have always been sensitive and responsive to the world. The role of artist as catalyst, critic, and educator is hardly a new development. Oftentimes the work has been urgent, prodded into becoming by the nature of a crisis, catastrophe or political repression. (Carruthers, 2006, p. 5)

While McKibbin (2005) and Packalén (2010) have spoken of a need for a greater involvement of the arts in EE, there have been many ecological art initiatives over the course of the modern environmental movement. Many prominent examples are listed in a 2006 research report prepared by Carruthers for the Canadian Commission for UNESCO (Carruthers, 2006). Carruthers (2006) notes that many early visual art pieces from the 1960s and 1970s in the Land Art or Earthworks movement inflicted ecological damage on the sites where they were located, as the land was really only considered a medium to serve the needs of the artist, not necessarily as an entity to preserve. However, this movement has been overtaken by the much less intrusive EcoArt approach, initiated by Helen and Newton Harrison and inspired by Rachel Carson's (1962) seminal book *Silent Spring*. This approach seeks to work more harmoniously with the natural features of the site and to undo some of humankind's domination over it. Carruthers (2006) also notes that performance art of all sorts has been used by activist groups to draw media attention to issues of concern at protest events, such as Greenpeace activists wearing and using biohazard gear while reenacting the "harvest" of genetically modified corn. In the late 1980s, the environmental group Friends of the Earth created The Arts for the Earth to add the arts to their EE initiatives (Carruthers, 2006). Carruthers (2006) lists projects and organizations working in the visual, theatrical, film, and acoustic ecology arts and discusses some of them in the context of their particular ecological focus. These various foci include: infrastructure and community development; community art; celebration of nature; preservation; environmental bio-remediation; water; non-human/human relations; and climate change and other global issues. Additionally, many of these projects are collaborative with or initiated by indigenous peoples. An example of one such

collaboration is the Caribou Commons, a joint venture between Canadian and American First Nations peoples, conservationists, and artists to protect the calving grounds of the Porcupine Caribou herd on the North American tundra. Its EE initiatives include performance arts, film, and music (Carruthers, 2006).

In summary, there is a perceived need for more value-based environmental learning, and many feel that the arts are in a position to deliver much of that and would like to see more of it. The arts have the ability to embrace fuzziness, multivalence, localized and/or personalized meaning, and experiential learning. In combination with cognitive learning and with opportunities for action/empowerment, the arts can exert a powerful influence in society, and are being recognized and harnessed for these attributes.

## 2.3 Music and EE

Music is one of the arts that can be enlisted as a tool for EE. It is a prevalent part of our culture. It has the attributes discussed previously that apply to all of the arts, but it also has some that are uniquely its own. Aside from any lyrics, pure music has its own non-verbal brand of messaging and referencing, and – in the sense of music theory – its own mathematical elegance quite apart from anything outside of itself. If we are to understand how and why we would ever use it in an educational context, including an EE context, we should look at how the appreciation of a mathematical arrangement of sounds can wend its way into our consciousness, our emotions, and our social interactions – and at how some have used it already in environment-related contexts.

### 2.3.1 The Communicative Power of Music

#### 2.3.1.1. *“Meaning” in Music*

Russian composer Igor Stravinsky once quipped that "music is, by its very nature, essentially powerless to express anything at all." (Stravinsky & Craft, 1981, p. 101). Much can be said both for and against that provocative statement. Stravinsky himself qualified it by later saying that "music expresses itself" (Stravinsky & Craft, p. 101). Taken in its most abstract form, music alone without lyrics conveys very little concrete extra-musical information, if any – often it makes no programmatic references outside of itself at all. Beethoven can make an orchestral woodwind section render recognizable bird calls in his *Pastoral Symphony*, but cannot go into great detail about those birds just in musical notation, and the birds are themselves in service of a musical "narrative", not an avian one (Ingram, 2010). Music is "the only language with the contradictory attributes of being at once intelligible and untranslatable" (Lévi-Strauss, quoted in Patel, 2008, p. 300).

Despite this apparent limitation, music can speak to humankind in ways that reach profoundly into other non-verbal levels of consciousness that are up to the listener to interpret (Sachs, 2007; Storr, 1993; Stravinsky & Craft, 1981). Recent cognitive research is shedding light on pathways by which this may take place (Patel, 2008). While music without text lacks specific and literal semantic content (Patel, 2008), it shares some overlapping processing mechanisms with language. These include:

... the ability to form learned sound categories; to extract statistical regularities (rhythmic and melodic sequences); to integrate incoming elements (such as words and musical tones) into syntactic structures; and to extract nuanced emotional meanings from acoustic signals. (Patel, 2008, p.4)

Of particular interest here is Patel's discussion on the extraction of meaning. In surveying cognitive research, Patel offers a "taxonomy of musical meaning" to categorize many of the most common ways in which people can potentially find meaning for themselves in music – specifically limiting his discussion to instrumental music without words, so as to distinguish purely musical elements from the influence of text/lyrics. Elements from this taxonomy are pertinent to the later discussion of interview content in this study on the *Playlist* artists. Patel's category headings are listed below, with brief summarizations of his work to form working definitions:

1. The Structural Interconnection of Musical Elements - Setting up structural expectations in music, and then filling them – or not, or leading somewhere else with them. Some of these are specific to certain styles of music, some not.
2. The Expression of Emotion - The mood projected by a piece of music (also called “affect”).
3. The Experience of Emotion - One’s own emotional reaction to a piece of music – which may or may not be related to the mood actually projected by it, or intended by the composer.
4. Motion - A sense of going somewhere, progressing; achieved in music both with and without strong rhythmical components.
5. Tone Painting - The musical imitation of things that exist outside of music, onomatopoeically but within the structure of music. This can include allusions to thunderstorms, bird calls, human sighs, etc.
6. Musical Topics - Over time, certain musical techniques and forms come to be associated with certain topics in society, such as military music, music for worship, dance forms, hunting tunes, etc. This also includes the “leitmotif”, a short musical idea that represents a character or concept in a dramatic work that recurs in different contexts in music just as a character might in a theatre presentation.
7. Social Association - The social / cultural context from which a musical piece springs.
8. Imagery and Narrative - A sense of a “wordless drama” that a listener may perceive in a piece.
9. Association with Life Experience - A person may connect certain music to certain events in her/his life because both were encountered in a particular context.

10. Creating or Transforming the Self - Using music to develop a sense of identity, of aesthetically defining one's self, relating to certain styles, forms, etc. Also includes musical trance.

11. Musical Structure and Cultural Concepts - Musical structure that reflects structures in the outside world – for example, the patterns in Javanese gamelan cycles that work out in a mathematically similar way to the Javanese calendar.

(Condensed from Patel, 2008, p.305-326)

Thus, with the use of various elements and techniques of composition and rendition, the stage is open to present real drama and/or to strike a mood and manipulate it, even without text (Storr, 1993). Basic musical elements include pitch, rhythm (organization around a beat), timbre (tone colour), tessitura (where a passage lies in the range of a particular voice or instrument), volume (gradations of loud/soft), harmony, the mix of familiar material versus novel material, the recognition of patterns, and the tension-and-release expectations present in tonal music. These tension-and-release expectations are often exploited by moving away from and then reaffirming a tonal centre (a “home base” - very loosely associated with the physics of the harmonic series), as well as with ideas of consonance and dissonance – notes that, when played together, either sound harmonious (with difference tones that do not pulsate) or in conflict (with difference tones that pulsate or “beat”, a grinding sensation suggesting that they need to be resolved with each other in some way – an easy way to conceptualize this is to listen to a violinist bringing a string into tune with a reference pitch, and to note how the pulsations between the two pitches gradually slow down and disappear) (Levitin, 2006; Benward & Saker, 2014).

Composers, including the participants of this study, make use of a selection of these elements to “tell a story” or “paint” a musical tableau, creating interest through building tension or expectations and then either resolving those expectations or sending them off in some unexpected direction. Some of the potential meanings derived from a piece of music depend very much on what listeners bring to the encounter – whether they are paying attention or not, whether they can perceive changes in pitch/rhythm/etc., whether they like the style of music or not, whether they understand references to other music,

whether the music reminds them of anything else in their lives, what they understand of the lyrics (if present), whether they are making the music themselves, the social setting of the music, and so many other factors that make each experiential encounter with music unique.

### *2.3.1.2 Music and Messages*

Examples abound of how music has been enlisted to enhance all sorts of extra-musical messages with its own unique internal drama and with its ability to attract attention and entertain. The career of Johann Sebastian Bach was bound up as a music director, organist, and composer in the service of either organized Christianity or the European nobility at any given time, and his massive output still continues to fascinate across many generations, cultures, and faiths (David, Mendel, & Wolff, 1998). It would be hard to imagine blockbuster films such as *Star Wars* or the *Lord of the Rings* trilogy without musical enhancement, and indeed such films might be far less entertaining and impactful for most viewers without contributions from film composers such as John Williams (Kettler, 2016) and Howard Shore (Jorgensen, 2010). “We Shall Overcome” is the African-American spiritual that helped galvanize mass protest and unity against racial discrimination in the 1960s in the United States, along with the speeches of Dr. Martin Luther King (Bobetsky, 2015), and the significance of this song is not lost today.

Beyond such examples, music can provide opportunities for many life-enhancing activities. When it is danced to, it provides physical exercise, with the heart muscle working out in its own internal rhythm. When it is played on an instrument or sung, it provides mental exercise. The study and enjoyment of music can have many positive impacts on intellectual, social, and personal development, particularly for youth (Hallam, 2010), but also for every age and stage. It can be used to reach people with cognitive impairment, such as dementia (Sacks, 2007), giving impetus to the whole field of music therapy. Music can act at different times as a stimulant, a relaxant, an anti-depressant, or an agent of spirituality. It provides opportunities for social interaction, whether one-on-one, online, or in a stadium full of people. Conversely, it can also be enjoyed in solitude.



Our choice of music can help us to define who we are as individuals; it can also help delineate social groups and foster a sense of identity and belonging, for better or for worse (Levitin, 2006). All of these manifestations of our musical preferences can develop out of exposure in formal settings (e.g. in the school system), nonformal settings (e.g. private music lessons), and informal settings (e.g. jamming, listening, and/or dancing with friends) (Colley, Hodkinson & Malcolm, 2002).

When the dramatic energy of music is harnessed in the service of actual words in a statement, poem, storyline or other linguistic narrative, the verbal message is given the opportunity to speak to the listener on more levels and to anchor itself in more places in the brain than what might normally be associated with mere language alone (Sachs, 2007).

The power of communal music-making, particularly singing, is another attribute of music that has been harnessed for many purposes. Daniel Levitin, author of *This is Your Brain on Music* (2006), summarized two neurological effects of this in the context of choral singing in a 2013 interview with National Public Radio host Ari Shapiro:

LEVITIN: Well, there's a lot going on, and I guess I'd like to focus on two things in particular. One is that when we sing, it brings us outside ourselves. It forces us to think about what another person is doing - now, I'm talking about singing in a choir, not singing by yourself in the shower, right. We've got to pay attention to what someone else is doing, coordinate our actions with theirs, and it really does pull us out of ourselves. And all of that activates a part of the frontal cortex that's responsible for how you see yourself in the world, and whether you see yourself as part of a group or alone. And this is a powerful effect. The second thing, of course, is there's a whole neurochemistry to singing. We now have evidence that when people sing together, it releases oxytocin. This is the neurotransmitter that...

SHAPIRO: The friendship chemical, or the trusting chemical, or the empathy chemical.

LEVITIN: Exactly. It's associated with social bonding. So, for example, if you show people speeches of politicians, different politicians, and you give them a

dose of oxytocin before they see one particular speech, they're more likely to trust that candidate, want to vote for him, give him money. It just - the oxytocin sets up this real bond and sense of trust and well-being towards the other person. And we get that when we sing. (Shapiro, 2013)

This awareness of one's self in relation to others in the music, combined with a shared pleasurable experience, can contribute to a sense of community. McMillan (1986, p.9) defines a sense of community as having four elements: 1) membership, or a feeling of belonging/relatedness; 2) influence, or a sense of making a difference to the community; 3) integration and fulfillment of needs; and 4) shared emotional connection, including shared experiences. Taking part in a musical experience can itself be an act of membership in which the fulfillment of one's musical role influences the entire group's ability to bring a work to life, and it can for many people be fulfilling, as well as a shared experience.

Part of what this study examines is the lines of connection between an artist engaging with a particular pro-environmental idea, and those who are attracted to that person's music and who encounter that idea. If that idea is embedded in a song, then there is the opportunity for the listener to greet that message in an art form towards which s/he is already voluntarily drawn, and to take from the sentiments of the artist whatever s/he wishes to, as would happen with art on any subject. There is also the opportunity to lower the barriers to trust, particularly when some portion of that music is being made communally with others, or when there is communal movement with or enjoyment of it.

### *2.3.1.3 Authenticity in Music*

The word "authenticity" appears in this study both as a theme arising from codes and in vocabulary used by the participants in the interviews themselves. Part of the research framework, therefore, is to establish the current standard meanings of "authenticity" in musicological literature. This yields reference points to which other contextual understandings of the word can be related.

Authenticity in music is seen as the expression of some kind of “truth”, as being “genuine”, and the opposite of “faking it” (Moore, 2002, p.209-210). Moore outlines three overlapping types of this truthfulness that are discussed in musicological literature, and which help to frame this research, listed here in Moore’s order:

1. First person authenticity – speaking the truth of one’s own situation
2. Third person authenticity – speaking the truth of someone else who is absent
3. Second person authenticity – speaking the truth of the culture, and thus of the audience

(Summarized from Moore, 2002, p.209-223)

People may judge themselves from within, and also be judged externally as a result of the way others perceive them. There can be a feeling of discord when those two perceptions do not mesh, as in the example of singer Donna Summer. Summer rose to fame during the 1970s disco era with a smoldering extended version of the song “Love to Love You Baby”. She felt pressured into recording this very sexualized rendition, and as a committed Christian felt very uncomfortable, inauthentic, and “fake” with the new role as sex symbol that was foisted upon her by the popularity of the song (Barker & Taylor, 2007). Such dissonance can potentially occur for any artist for any number of reasons, potentially including any artist who may advocate on behalf of the environment.

One of the components of authenticity that can arise for musicians who engage in advocacy is the potential for “commodification of protest” (Ingram, 2010, p.236) that can threaten the effectiveness of the advocacy message and the entire cause. That is to say, if a musician is perceived to be making a lot of money from musical advocacy, and/or engaging in it for disingenuous reasons, then that is seen as inauthentic and insincere. This is an important, deal-breaking theme raised in the literature (Bonoguoire, 2011; Allen, 2012; Ingram, 2010; Pedelty, 2012) and it reappears in the Results and Discussion sections of this study on the *Playlist* artists, framing many aspects of it. It also potentially touches on all three modes or “persons” of authenticity as described by Moore above.

Ingram (2010, p. 236) gives the example of Michael Jackson's 1995 release "Earth Song" with Sony, a large record label. With issues of corporate sponsorship and commercial appeal within that context, natural questions arise as to how much an environmental message may be watered down or otherwise influenced. Ingram is also critical of the messianic nature of the song's video and its performance at the Brit Awards, which implied the pop star as an environmental saviour in a way that smacked of commercial music marketing. Pedelty (2012) also points out the sustainability problem of the energy-intensive "stadium rock" phenomenon (including pop as well) by means of such examples as the band U2's massive 360<sup>0</sup> Tour, which spanned over 2009-2011. The band's sustainability rhetoric clashed with visions of 100 trucks' worth of their touring equipment, failing a cost-benefit analysis in the eyes of many critics.

The 2007 mega-concert Live Earth, featuring 150 acts globally broadcast to millions over a 24-hour period, was an intentional attempt to bring a sustainability message to music fans and to prove that large events could be staged in a less impactful way. By means of carbon offsets and other mechanisms, Live Earth did succeed in reducing its footprint below most other mega-events, but it still drew criticism for the apparent contradiction of mega-stars living lavish lifestyles asking fans to reduce their impact and to reduce consumerism (Pedelty, 2012). As argued by the Harvard Law Review Association (2010), carbon offsets themselves only go so far in reducing environmental impact if not also accompanied by reductions in consumption – carbon offsets alone do little to change environmental values and are not effective enough as a mechanism to allow for just "business as usual".

Reverb is a non-profit organization based in Maine, United States, that helps musicians and organizers carry out more environmentally-friendly tours, events, and business practices (Reverb, 2016). General manager Brian Allenby made the following observations, summarized by Bonoguoire (2011), about societal trends, activism, and authenticity, with a prediction towards then-future trends:

Folk singers, those rebels of the 1960s and 1970s, had to be overt [in their musical messaging] because their message was new. Then big musicians switched the focus to their actions [outside of music] because they needed to make sure that

their message was true. The next crop, Reverb's Allenby expects, will combine the two. Instead of creating music from a place of activism, or focusing on ensuring the off-stage legitimacy of their message, musicians will weave environmentalism into their work as they do for other significant issues. The change is one of maturation: Instead of seeing environmentalism as a message or a challenge, Allenby believes it's going to become a part of mainstream musical discourse. (Bonoguore, 2011, p.14).

In summary, the theme of authenticity is a significant one for musicians – to be engaging with environmental issues in their careers for genuine and sincere reasons, and to be seen as doing so as well, for the sake of both the musician and the message. How the musicians I studied discuss and handle this issue in their own work is an important theme in this research.

### 2.3.2 Music and Education: Diverse Learning Styles

In earlier sections on EE above, there are references to documents produced by the UN and various scholars that speak of the need to expand the arsenal of teaching techniques and to extend the reach of environmental messaging beyond the straightforward cognitive relaying of scientific information. Not only can this mean expanding elements of EE into all avenues of learning, as David Orr recommends (Orr, 2004), but it can also mean attempting to reach people who happen to favour one or two particular learning styles over others, people who might be underserved by EE that is delivered in only one style. Riding & Rayner (1998) state that some individual learners do exhibit a preference or predisposition for some styles of learning over others. Therefore, having a variety of tools in one's educational tool kit should be advantageous. Music has the capacity to engage the brain from multiple neurological angles and may thus help address some of that need. For example, one may look at the ideas of classical educational theorist Benjamin Bloom, who describes three general modes of learning: "cognitive", "psychomotor", and "affective" (Bloom, 1976). (Note that Pooley and O'Connor 2000, discussed earlier, also use the terms cognitive and affective in relation to EE; these terms reach farther back in

time in educational theory.) We can take an illustrative example of learning to play the clarinet to show how all three of these modes can be stimulated in the act of engaging with music. Reading musical notation and relating it to the instrument would be cognitive learning; learning how to put together, hold, blow, articulate, and finger the clarinet in time to proscribed patterns would represent psychomotor learning; and the emotional attachment to the music and the joy of producing and/or listening to it, including in social circumstances with others, would fall in the affective category. Dancing or moving to music can also touch on psychomotor and affective learning. Thus, in music connections are made in many different parts of the brain, as opposed to just a few, presenting educators with the opportunity to reinforce concepts from various directions, including experientially, and to reach groups of learners who favour some modes over others.

### 2.3.3 Making the Case for Music and EE

#### *2.3.3.1 Approaches and Strengths*

As described earlier, Pooley and O'Connor (2000) promote a combination of cognitive and affective approaches to EE; music can play an important role particularly in the affective component. Similar threads of value-making through affective learning form part of the holistic educational approach promoted by David Hutchison (1998) (along with the retention of the most positive aspects of the older technocratic and progressive educational movements in North America over the last century). Using different descriptive terms, David Orr's EE philosophy also includes affective value-making in combination with science (Orr, 2004). All of these approaches can tie in with the general concept of experiential learning – learning by experiencing – articulated by educational theorist David Kolb (1984) and discussed earlier – in the case of music, through experiencing musical enjoyment and community connection.

Culture in general, as discussed earlier, is an important part of that value-making process:

Everything we do is culturally determined and that includes economic, profit-motivated actions. Lifestyle patterns and the values of our society are affected to just as great a degree as science, technology, and education. The question now is simply how can the potential for change and development of our culture be accommodated in the context of a more comprehensive strategy for sustainable development? (Packalén, 2010, p. 118)

[The] ability to arouse feelings and create emotional empathy is an especially important aspect of culture. If sustainable development is to be able to attract people and engage their interest, if it is to be able to appeal to our feelings and senses, then beauty, as aesthetics or design, as we often hear it described nowadays, must be a fundamental building block; otherwise sustainable development will have no future. (Packalén, 2010, p. 120)

We now look more specifically at how music can plug into various educational scenarios, and at sources that examine its use in that manner.

There is a model in EE literature that can be used to describe musical environmental messaging. Canadian Doug McKenzie-Mohr, founder of the principles of Community-Based Social Marketing (CBSM) for the promotion of pro-environmental behaviours, speaks of the effectiveness of using “captivating messages” (McKenzie-Mohr, 2011, p. 93-110) and establishing new “social norms” (McKenzie-Mohr, p. 61-81) – including, partly, through leading by example and “modelling” the desired behaviour (McKenzie-Mohr, p.104), as well as enlisting allies to model it in their communities too. By the nature of music itself, there is of course a limit to how much specific practical information can be fed through song lyrics to advise pro-environmental action without the message seeming contrived, like the singing of a list of phone numbers. Indeed, McKenzie-Mohr writes in terms of specific, well-defined behaviours, and not so much in terms of general affect, even while engaging in pro-environmental behaviours can itself create a self-reinforcing affective experience too (Liarakou et al., 2011). However, certainly the strength of music in relation to McKenzie-Mohr’s vision is to create the captivating message that arises in a few moments of value-laden self-expression from the psyche of the artist to be shared as an aesthetic experience with an audience. Social

norms can arise and percolate through the community of people sharing this music, as well as through any advocacy and/or pro-environmental endeavours the artists might also undertake outside of strictly writing and rendering their material. Some musicians may choose to lead by example and model what pro-environmental behaviour they can manage as citizens themselves, and for some (perhaps many) this may form an important part of their credibility – “walking the talk”, as it were. A fan base, then, can act as an informal social network through which ideas can sometimes be shared and affirmed. “The key actor in history is not the individual genius but rather the ‘network’” (Hunter, 2002, as cited in Assadourian et al., 2010, p. 19).

Ramsey (2002) states that music can be a powerful teaching tool in the classroom by making connections to real-life ecological events. This statement is based on his examination of songs connected to two North American events at the intersection of natural ecology and sociology: the Canadian moratorium on the east coast cod fishery of 1992 due to the steep decline in cod stocks caused by overfishing, and the results of drought and agricultural soil management practices in the Prairies during the “dust bowl days” of the 1930s onwards. Both events unleashed profound economic and social consequences, causing migrations of fishers and farmers in search of other economic opportunities, with implications for associated families, industries, services, and communities. Ramsey used these examples to show that these stories, captured in the art of music, served two functions: to relay information on social and environmental issues, and to create interest for them, engaging learners on important issues among all the other modern electronic devices and diversions competing for their attention. While not advocating for the replacement of more-conventional information-giving tools in the classroom, Ramsey anecdotally found in his own university lecturing experiences that music could play an important supplementary role that increased the impact of the subject studied:

It has been my experience that incorporating music into the class—at least at the university level—increased student interest in the topic. This was evidenced not only in written comments in course reviews, but also in general comments made to me by students encouraging me to continue the technique. Beyond evaluations,



however, I also noted an interest in the topic matter through citations of music in assignments that made connections between environmental crisis and cultural impact. Students also came to me with other music they felt would help to illustrate points in class. This allowed me to then provide them with a reference to a journal article, book, or news item.

(Ramsey, 2002, p.195)

In making their case for music as an EE tool, Turner and Freedman (2004) remind us that music was once thought of as a “science” rather than an “art” in western civilization from ancient Greece up until the 18<sup>th</sup>-century Enlightenment. The frequencies of the harmonic series, upon which so much music is based, were thought to reflect the relationships between the movements of the planets – the “music of the spheres”, according to the ancient Greek philosopher and mathematician Pythagoras (Turner & Freedman, 2004, p.46). They also point out the many sounds of the natural world, such as bird song, which humans may find “musical” in the sense of being agreeable, and the many ways in which we have designed some of our music to imitate/incorporate/take inspiration from sounds of nature, citing such artists as Ludwig van Beethoven, Canadian composers R. Murray Schafer and Scott Macmillan, and Canadian singer/songwriter Stan Rogers. Turner and Freedman make the case that music is thus a natural fit for EE, in the sense that it “... can be used to emulate, praise, and enjoy nature, and to tell about issues associated with environmental and social damage” (Turner & Freedman, 2004, p.50). They state that music can play a complementary role along with other educational tools: “... the educational niche of music is one of helping students to develop a sensitive attitude to environmental and related socioeconomic issues, and to thereby foster environmentally responsible behaviour, rather than as a means of conveying detailed knowledge” (Turner & Freedman, 2004, p.50).

Coss (2013) grounds his research into multicultural initiatives on music for sustainability education in the philosophies of music education theorist Bennett Reimer, who asserts that “... every experience of art, whether creating it or sharing it, ‘makes special’ in the way only art can accomplish” (Reimer, quoted in Coss, 2013, p.21). Coss (2013) argues that our emotions and our rational minds work together when we develop our ideas and

attitudes towards the world, and that for sustainability education, we would do well to address both emotional and ecological intelligence. The arts, including the art of music on which Coss focuses, are well placed to cater to emotional intelligence. Coss offers examples of projects in which music has been used as a catalyst into the experiences of others. When, for example, Australian youth are taught African drumming, and thereby experience a little bit of African culture, “music affords students the opportunities to place themselves into the lived experiences of cultures distant from their own” (Coss, 2013, p.23). This can aid in empathetically understanding the impacts of environmental conditions upon other societies. Thus Coss, while not actually using the terms “affective” and “experiential”, is very much engaged with these concepts.

Panos Grames, professional musician and the *Playlist for the Planet* coordinator for the David Suzuki Foundation, notes that music has been a common thread in many social-action movements (Wearing & Jalava, 2011). According to Grames, musicians are usually among the first to step up and support causes such as AIDS awareness and famine relief. He also notes that the ecological crisis is not a problem with nature, but with how humans relate to nature. The arts, he says, provide a means to strengthen this relationship. “We can touch on issues differently, more easily, in an artistic context. Music can speak to environmental issues in an emotional and spiritual way more than [the David Suzuki Foundation] can as a science-based organization.” (Wearing & Jalava, 2011, p.31). For Grames, The Suzuki *Playlist for the Planet* represents one way to bring environmental concerns into the mainstream to reflect the reality that they are relevant not just to a fringe of environmental activists, but to everyone.

### ***2.3.3.2 Challenges of Evaluation***

Musicians who have been motivated to take action on behalf of the environment and sustainability often have a sense of many of the powers and limitations of their art (Bonoguoire, 2011). In the same way that they draw upon both musical and extra-musical experience to create their music in general, they can also draw upon their environmental motivations as well. How exactly this is manifested in their output and non-musical

actions can vary depending on their artistic and social circumstances. Each artist develops a knowledge and intuition of what “goes over well”, artistically and otherwise, with his/her particular audience. Music is, after all, subject to changes of fashion, personal preference, and social context, and what speaks to one person at one point in time will not necessarily translate into success in other instances. When the artistry does not work well, neither does any associated message, and both can be viewed negatively as a result (Bonoguore, 2011). “Anything forced could actually lose fans” states Kim Johnson, commenting on the work of her spouse, musician and environmentalist Jack Johnson, who has partnered with and raised funds for hundreds of non-profit groups (Johnson, K. quoted in Bonoguore, 2011, p.14). Whether or not an environmental topic comes up in a musician’s artistic output, says Kim Johnson, “people like their musicians because they’re talking about all kinds of things”, i.e., a range of topics that may or may not include environmental ones (Johnson, K. quoted in Bonoguore, 2011, p.14).

It is valuable for artists and environmental educators engaging with music to look at what has worked in the past and what is working today, and where challenges lie. However, it must always be kept in mind that to prove that a given piece of artistry has had a given effect that has resulted in measureable action is usually fraught with difficulties (Ingram, 2010). In the context of all the exposure from all different sources that a person might receive regarding a particular issue, including the way that this issue may or may not be supported in his/her own social network, to try to tease out the specific effect of one song may not make for a very robust study except in rare circumstances.

Further research is needed in reception studies to investigate how particular pieces of music have actually affected listeners, and whether they have played a part in organisations or subcultures involved in environmental activism... it is important to note that any critical move from ideological analyses of works of art... to assumptions about their effects on real audiences should not be too rapid (Ingram, 2010, p.236-237).

Additionally, music is always encountered in some kind of context, a factor which cannot be discounted. The degree to which a given listener may engage with a piece of music can vary from intensely interested, to not paying attention at all, or perhaps even to

annoyed. Certainly, rather different levels of attentiveness are assumed, for example, in live presentations in soft-seat concert venues versus piped background music in a shopping mall. The highly amplified musical “wall of sound” that may be presented in the party atmosphere of a pub or a stadium rock concert is apt to be absorbed differently than a ballade in an intimate folk venue, and the intelligibility of lyrics may also be affected, particularly if distortion is present. Consumption of alcohol and other substances, lack of sleep, level of interest in the artist/genre, pre-occupation with other thoughts, and many other factors can influence a person’s level of engagement with the music at hand. Indeed, many people can be more strongly attracted in general to particular elements of music, and pay less attention to other elements that are not as engaging to them personally – some are drawn to beat/rhythm, some to melody, some to words, etc. Some people experience some form of amusia, or an inability to engage with one or more elements of music, such as pitch (“tone deafness”), rhythm, melodic structure, harmony, and so on. A smaller subset of people experience total amusia, and thus do not perceive any sounds as “musical” – and thus do not experience music as an art form at all, nor as anything other than a (sometimes unpleasant) jumble of sounds (Sacks, 2007).

Ingram affirms the wisdom of a cautionary approach when discussing any purported effects that eco-themed music may have on a listener: “... any powers of physical, mental, or social transformation which music may have will result from a combination of social, psychological, and physical factors” (Ingram, 2010, p. 69). Our interpretations of a given piece of music may be as varied as we are as individuals, and not linearly derived from the intent of the composer: “In this light, for the act of listening to music to lead to greater integration with one’s environment will depend on the listener’s pre-existing knowledge of, and support for, the theory of the ecological, relational self on which the theory depends” (Ingram, 2010, p.70).

Rick Kool summarizes below both the challenges and opportunities presented by trying to evaluate even EE programming in general on its own. This likely holds doubly true when examining any artistic components of EE, including the use of music:

As you know, what usually happens [in the evaluation of environmental education] is that we can only measure simple things, and then because that is what we can measure, we say that those simple things are the only real things. So we count numbers, do simple pre-post treatment surveys, look for short-term changes, measure things, and then write our report.

The real things, the ways in which environmental education can change someone's life, are much more subtle and difficult to measure. You can ask questions about meaning, about influence, about impacts, and look at things that aren't visible necessarily over a short time, but become apparent over the long term. This is what we have to consider as we look at effectiveness of environmental education. (Rick Kool, 2000, quoted in Thomson & Hoffman, n.d., p.31)

In summary, we must be cautious about stipulating and trying to measure what “success” or “effectiveness” looks like when using music as a tool for EE. There are bound to be many conceptualizations of what that even means. One person’s “positive” reaction to a musical message could fall on a range from just a mild acknowledgement up to concrete, perhaps paradigm-changing action on the basis of it – but much of that reaction is likely to be bound up with countless other influences in that person’s life. There would be yet even more conceptualizations of what a particular desired concrete action could or should look like as well. It is vital to recognize these and many other chaotic, uncontrollable variables in the way people come to engage with music. It does not follow that some magical sequence of chords and lyrics will induce anyone to run out and commit a random act of recycling. This makes the application of numbers and statistics extremely difficult, and thus lends itself better to other, more-qualitative analytical approaches, “fuzzier” thinking that can embrace this inevitable multivalence, and the careful framing of specific research questions. Yet, to ignore music, and to ignore the arts in general, is to ignore a substantial portion of the creativity that makes us human, through which we find solutions to life’s challenges and through which we find many of our reasons to live in the first place.

### 2.3.4 The Role of Music in EE Initiatives in Modern Environmentalism

The following subsections provide a glimpse into the musical and business contexts in which the *Playlist* artists have been working in the English-speaking North American market. Their musical efforts join a legacy of related efforts by previous and contemporaneous artists. Some of their output can thus be influenced by their own awareness of what has been happening in their profession, in composition, in performance, and off-stage. Sometimes those influences are freely acknowledged. Additionally, the *Playlist* artists must work within a music industry context which has its own goals, conventions and norms, pro-environmental and otherwise, and also thus different conceptualizations of what is considered “authentic”, environmentally and otherwise. Placing the artists in these contexts is important, to see where their roles may be in forwarding pro-environmental thoughts and practices from one point along a continuum to another, and also in examining how they attempt to maintain the authenticity of their messages. Two types of information sources are consulted in providing this context: 1. literature discussing the music, artists, music industry, and social contexts, and 2. examples of influential contemporaries and predecessors engaging with environmental issues in the music industry.

#### 2.3.4.1 *Popular Music, EE, and Environmental Advocacy*

Two publications by David Ingram have been helpful in setting the larger context of modern popular music and ecocriticism: *The Jukebox in the Garden: Ecocriticism and American Popular Music Since 1960* (Ingram, 2010), and “‘My Dirty Stream’: Pete Seeger, American Folk Music, and Environmental Protest” (Ingram, 2008).

The former is a book discussing the social ecology of environment/ecology-related popular music since the start of the modern environmental movement, an era which was heralded by Rachel Carson’s seminal book *Silent Spring* (Griswold, 2012). A useful overview of the repertoire, the genres, and the social contexts themselves, *The Jukebox in*

*the Garden* also addresses the aesthetic and spiritual philosophies attached to some of them, such as Deep Ecology and New Age. Such philosophies have their particular appeal and their adherents, and also their weaknesses, particularly with regard to authenticity in an art form that is also part of a larger entertainment industry. Ingram's cautionary words regarding drawing conclusions on audience impact are quoted earlier in this literature review as well.

Ingram's (2008) article "My Dirty Stream" is a closer focus on the career of Pete Seeger, the legendary folk singer and social advocate who passed away at the age of 94 during the course of this study on the *Playlist* artists. The article discusses his musical career through his various sympathies, from early socialist thought, through the civil rights movement of the 1960s, and into environmentalism. Seeger was an advocate for the cleanup of the heavily polluted Hudson River, next to which he resided. He and several friends built a sloop, the *Clearwater*, with the aim of offering the public an experiential appreciation of the river, and a conservation and stewardship education agency grew out of this initiative (Hudson River Sloop Clearwater, Inc., 2016). His environmentally-themed album *God Bless the Grass* featured a mix of his pastoral vision and the more ardently leftist vision of co-contributor Malvina Reynolds.

In his book *Ecomusicology: Rock, Folk, and the Environment*, Pedelty (2012) argues that we should use music in raising awareness of environment and sustainability issues, but he also raises more questions than answers about the attendant difficulties in doing so. The first chapter describes some of the environmental impacts of touring, particularly with the massive stage shows that are associated with stadium rock, and the resulting credibility problems with environmental messaging; it also outlines newer innovations in the industry to lower those impacts. Subsequent chapters discuss, from a sociological perspective, some popular American folk songs that have become cornerstones of place and of certain social movements in American history, including those of Pete Seeger and Woodie Guthrie. The case study of Guthrie – with his supposed folksy "everyman" image – as hired propagandist for a private corporation seeking to win popular approval of its hydroelectric dam project on the Columbia River, despite its attendant environmental

problems, is a telling signal for musicians to choose carefully the causes that they publicly support.

The rest of the book is an entertaining and subjective chronicle of Pedelty's experiences as an embedded anthropologist seeking to understand the inner workings of the music industry and how environmental messaging might "succeed" in it. He learned to play guitar and sing well enough to form a band and perform in local pubs and other venues, and thereby experimented with delivering environment-related songs. While his experiments did not quite parallel those of professional artists in the industry, and his grant money cushioned him from the realities of earning a living through music, he did make some apt observations about juggling environmental messaging, musical proficiency, noisy venues, distracted patrons, and other details that similarly affect others in the profession as well.

Pedelty and Racheli (2009) questioned local musicians who performed politically themed music in Minneapolis, Minnesota, about their use of political music and what they hoped to achieve with it. Pedelty and Racheli found that their participants felt that the more secure a musician was in his/her profession, i.e. the greater the audience draw and autonomy within the music industry, the more comfortable that s/he felt in speaking out on political issues of concern. Up-and-coming local musicians, therefore, had a much more difficult time making political statements out of fear of alienating their audiences, which they were working hard to build up. While political and environmentally themed music only overlap to a certain degree, both can evoke a negative reaction in a listener who does not agree with the sentiments expressed through it, and/or who does not want to engage with those issues when consuming music. This finding is therefore of interest in this study on the *Playlist* artists as well.

Marcia Ruby is, at this time of writing, the long-time publisher and creative director of *Alternatives Journal*, a national Canadian EE magazine based in Waterloo, Ontario. Her May 2011 issue (Rocking the Environment, 2011, May) is devoted to articles on music and musicians, discussing other artists outside of the Suzuki *Playlist* who have also engaged with environmental issues, as well as promoting the *Playlist* compilation album itself. Articles from this issue that have lent helpful perspectives to my study on the



*Playlist for the Planet* include: Bonoguore's "Do as I Do, Not as I sing" on how some musicians advocate more through action than through song; "Eco Wise Guy" by Mark on the musical advocacy of ex-Blue Rodeo keyboardist Bob Wiseman; Ross's "Escarpment Blues" article on Sarah Harmer's activism to conserve parts of Ontario's Niagara Escarpment; "Opera in the Woods" by Crossman on composer R. Murray Schafer's outdoor opera "Patria"; "Leave No Footprints" by Walsh on Bruce Cockburn's connections between environmental degradation and a loss of spiritual imagination; a practical guide to reducing music product waste by Brooks entitled "iWaste"; "Mama Nature's Fire", an interview with folk musician Greg Brown by Ruby; coverage of the Suzuki Foundation's *Playlist for the Planet* by Wearing and Jalava entitled "Canadian Idols"; and a "Guide to Greener Festivals", on Canadian music festivals that are taking steps to lessen their environmental impact.

An earlier article by Ruby (2007), based on conversations with musicians at the Ottawa Folk Festival, also presents many similar themes in the informal style of entertainment reportage. While both this article and the *Alternatives* articles written under her directorship are composed in a personal and openly promotive voice directed at general audiences, including music fans, my study on the *Playlist* presents the opportunity to address many similar themes through a fully formal scholarly process, as well as to expand on additional themes outside of the scope of those articles. Some of the common threads between Ruby's work and this study, to be later discussed with its results, include the capacity for music to reflect universal truths in a direct and palatable way (Ruby, 2007) and the need to authenticate one's beliefs through not just one's art, but also by other means through one's actions and practices in personal and business realms (Bonoguore, 2011).

The authors discussed above have thus taken a variety of approaches to analyzing environmental engagement in popular music, from surveying the environment-related music of the modern environmental movement, to embedded anthropological research, to informal interviews. Other online sources of information help to form a backdrop in the music industry for the work of the *Playlist* artists.

Actions of ongoing musical advocacy for the environment were taking place during the interview period itself. For example, veteran singer/songwriter Neil Young was embarking on a tour to raise support for First Nations communities affected by the Alberta Oil Sands, and to raise awareness of the industry's impacts on the local landscape as well as on anthropogenic climate change worsened by the greenhouse gases produced by its extraction methods. It sparked an online war of words and even a defensive response from the office of then-Prime Minister Stephen Harper in the Government of Canada (O'Malley, 2014). Young then issued a statement in return, an excerpt of which follows:

The oil sands projects are among the very dirtiest on earth. Per day, the oils sands [sic] operations produce as much CO<sub>2</sub> as all the cars in Canada. While every gallon of gasoline from the cleanest oil sources produces 19.5 lbs of CO<sub>2</sub>, Alberta oil sands derived gasoline produces up to three times as much CO<sub>2</sub> because of the inefficient methods used, potentially bringing the total CO<sub>2</sub> per gallon to almost 60 lbs. This oil is going not to Canada, but to China where the air quality has been measured at 30 times the levels of safety established by the World Health Organization. Is that what Canada is all about? (O'Malley, 2014)

Another example of a contemporary Canadian artist who has been visibly engaged in environmental causes is Sarah Harmer, who co-founded the organization PERL (Protecting Rural Escarpment Land) in 2005 to protect the Niagara Escarpment in Ontario from mining interests (Protecting Escarpment Rural Land, 2012). She addressed this ecosystem conservation issue creatively in her song "Escarpment Blues" (perlofburlington, 2009; Doe, 2007) and documentary DVD of the same name, featuring a walking tour through the area (Maple Music, 2016).

Popular artists in the North American English-language market who have made environmental statements through song in the decades of the modern environmental movement can be found in informal online song lists (and also discussed by Ingram, 2010). They include the aforementioned Pete Seeger, Jack Johnson, Joni Mitchell, John Prine, Marvin Gaye, and many others, showing a wide breadth of causes and activities. These lists may vary in inclusion criteria as to what constitutes an "environmental" song,

and what is considered “inspiring”. They include HuffPost Green (2012), Grinning Planet (Jeantheau, 2014), and the free-content Wikipedia (“List of songs about the environment”, 2016).

#### 2.3.4.2 Examples of Ecocritical Music in Other Genres

Not all eco-critical music falls into the realm of “popular music”. In fact, to date musicologists studying in ecocriticism have tended to focus more on such genres as classical and jazz, rather than on popular genres (Pedelty, 2012). While a survey of genres is beyond the scope of this review, the following projects are two examples of environment-related musical initiatives in Canada outside of the popular music market in recent decades which have received accolades and for which there is a sizeable amount of literature.

Canadian composer, scholar, and environmentalist R. Murray Schafer is the founder of Acoustic Ecology (Canadian Music Centre, 2007), a musicological movement that has had an international journal since 1993 with affiliates around the world (World Forum for Acoustic Ecology, 2016). It is based upon our awareness of the soundscapes in which we find ourselves, and the philosophy that we should “... try to hear the acoustic environment as a musical composition and further, that we own responsibility for its composition” (Wrightson, 2000, p.10). Schafer has advocated for anti-noise legislation, particularly in the “sonic sewers” of urban areas, to mitigate the damaging effects of noise pollution on city dwellers (Canadian Music Centre, 2007; Crossman, 2011). Many of his compositions incorporate elements from recorded natural soundscapes, such as *Music for Wilderness Lake* for twelve trombones. Some incorporate theatrical and spatial elements, sometimes engaging audiences as participants, such as his twelve-part cycle *Patria* (Crossman, 2011, p.20-22). For example, the first instalment of *Patria*, entitled “Princess of the Stars”, is an Ojibwa legend set around an actual lake, with singers and instrumentalists in canoes and on shore. The calls of birds and other environmental sounds are spontaneously incorporated into the performance (Crossman, 2011).

Composer, guitarist, arranger, and conductor Scott Macmillan of Cape Breton, Nova Scotia, wrote *Celtic Mass for the Sea* in 1991; his wife Jennyfer Brickenden wrote the libretto. Performed regularly in Canada and abroad, this fusion of classical and celtic styles (Canadian Music Centre, 2016) is scored for choir, narrator, string ensemble, Uilleann pipes, Irish flute, fiddle, guitar, and celtic harp. Expressing respect for and spiritual awe of the sea (Scojen Productions, 2016), it has been performed in honour of World Oceans Day and used in advocacy for ocean-related environmental issues (Cameron, 2012).

#### *2.3.4.3 Examples of Programming for Youth / Children*

Youth and children form a large subset in the consideration of music and EE, as is exemplified by the very fact that some artists can build careers around musical EE for young audiences. Examples of such performers are given below, in the same way that examples are given in the preceding sections. Children's entertainers can also be influenced by each other's work, and sometimes personally know each other through their work. It is useful to have some understanding of how performers who work with youth adapt their artistic and environmental material to the level of understanding of their audiences in an approach that is sometimes more explicitly and purposefully educational.

Peter Lenton, also known by his stage persona "Peter Puffin", is an Alberta-based musician and (primarily) children's entertainer who specializes in conservation and wildlife themes (Puffin Productions, 2014; ReverbNation, 2016). He draws upon his past experiences as a teacher, curriculum specialist, video producer, and biologist as well as upon his musical talents to create shows and workshops with mixed pedagogical approaches, including not only presenting a mix of up-beat and interactive songs, but also involving audience members in song-creating, playing instruments, dressing up in costumes, etc.

A pioneering researcher in the curriculum development of songs and programming for EE, American David Orleans ("The Earthsinger") compiled a collection of nearly 2700

environmentally-themed songs and arranged them in pedagogical assemblies with stories to create programs that other musically inclined environmental educators could use for elementary school-aged children (Orleans, 2009). He published this, along with co-author Sarah Orleans, as his 1986 master's thesis (Orleans & Orleans, 1986). Some of Orleans' work is preserved and expanded upon by others in the internet age, with online song databases, reference publications from many authors, and educational resources such as *Songs for Environmental Education* (Rodden, 2016).

Examples from among the many other performers in Canada who have used music as an EE tool for children/youth include Raffi (of "Baby Beluga" fame) (Raffinews, 2016), Chris McKhool (McKhool, 2016), Heather and Eric (Vinland Music, 2014), and also two of the interviewees for the present Suzuki *Playlist for the Planet* study, Renee Lamoureux (of Keith & Renee) and Remy Rodden (also the force behind the aforementioned *Songs for Environmental Education* website). *Songs for Environmental Education* maintains a list of EE performers as well (Rodden, 2016).

Some EE projects engage youth by soliciting music from them. Sometimes this might take the form of an environmental song or video contest, such as the Globalvision Song Contest in Sydney, Australia (ASAP, 2016). Some uses of music as an EE tool can be quirky and inventive, such as the Greenup Shower Song Challenge, an initiative of the United Nations Environment Programme, which invites people to conserve water by limiting a shower to the length of one song, with a social media presence on Facebook where they can post their favourite "shower song" (UNEP, 2016c).

Also worthy of mention, in relation to children/youth, is the use of music in films and videos directed at these audiences. An example of this is the animated movie *The Lorax* from Universal Studios (IMDb, 2012, Synopsis – "The Lorax"), with its message about deforestation, restoration, and the natural world, based on the children's book of the same name by children's author Theodore Geisel, also known as "Dr. Seuss". The original music by John Powell (IMDb, 2012, "The Lorax: Soundtracks") includes songs such as "Let It Grow", a gospel-inflected song about the re-planting of "real" trees and the restoration of a previously devastated natural ecosystem.

The concrete impacts of music on behaviour change with children can, as with adults, be difficult to measure, but again, it is important to have the dialogue, and to realize how music can be used in conjunction with other pedagogical approaches. A case study by Lansfield (2015) centered around interviews with some of the students and stakeholders involved in a musical EE initiative in British Columbia, Canada, called *The Jellyfish Project*. Through this program, a youthful and engaging rock band was contracted to tour various schools. Each show opened first with a high-energy presentation of the band's own particular musical repertoire (not environmentally-related), followed by a multimedia presentation "... to increase awareness of younger generations about the poor conditions of the planet... [with] particular attention on the realities of ocean health, overfishing, overuse of plastics, sustainability, and climate change" (Lansfield, 2015, p. 10). The multimedia presentation also included the screening of the trailer to the film *Midway*<sup>TM</sup> (Midway Film, 2012), a visual portrayal of "... the harmful impact that plastic waste is having on our ecosystems" (Lansfield, 2015, p. 28). Lansfield reported generally favourable receptions by students and other stakeholders, both musically and in terms of comprehending the attached environmental messaging, with some students self-reporting that they had altered some of their own behaviours to become more pro-environmental after the program.

However, several factors should be kept in mind. The musical portion of the show did not contain any environmental messaging per se, but was seen as a means to get the attention of youth and make them relate to the performers and their subsequent non-musical environmental messaging (Lansfield, 2015). It was also an open opportunity for the band to self-promote and sell recordings, which led some to question their motives and thus their authenticity (Lansfield, 2015). Additionally, the subsequent multimedia presentation also enlisted other art forms, including the powerful visual imagery of birds harmed by the ingestion of plastics in the *Midway*<sup>TM</sup> film trailer. Because of these and other factors in a complex mix, the specific role and impact of music as an educative tool is a tricky one to tease out in this particular case. However, that is not to say that it was not there, and for some it may well have been a potentially powerful tool in helping to facilitate the other forms of communication that actually contained environmental messaging. At any rate, the study does contribute to the ongoing dialogue about music and EE.

#### *2.3.4.4 Examples of Pro-environmental Music Industry Initiatives*

Various initiatives in the music industry aim at reducing the environmental impact of music festivals, recording studios, packaging, touring practices, etc. In addition to ameliorating the direct effect of industry practices on the environment, such initiatives contribute to the authenticity of whatever pro-environmental messaging may be contained in the music itself and the green credibility of the musicians and their industry (UNEP, 2016b; Bonoguore, 2011).

A rider is a document that outlines what performers' needs are from the venue where they are to perform. It accompanies the contract for the engagement. A technical rider outlines sound system, microphones, stage plan, and other requirements for the performance itself. A backstage rider provides for the comfort of the performers at the venue. It can include things like meals, comfort items in the green room, privacy considerations, etc. Some environmentally conscious performers now also add an "eco-rider" (Touzeau, 2011). An eco-rider lists environment-related requests that the performer wants the venue to fulfill as a condition of her/his performance there. These could include such things as providing recycling stations, printing promotional materials on recycled paper, using only organic foods for catering, helping to facilitate audience carpooling to the show, banning single-use water bottles, etc. Michael Martin of MusicMatters/Concerts for the Environment has been credited with the creation of the "enviro-rider" – a pledge for the actual bands to follow – and a number of other pro-environmental innovations in the music industry (Pedelty, 2012; Jossi, 2011). He has worked with such high-profile musician clients as Jack Johnson, Steve Miller, U2, etc. to help them green their own operations and those of the venues in which they perform.

Examples of some large music-industry greening initiatives are listed by the United Nations Music and Environment Initiative (UNEP, 2016b). These include such popular festivals as: Lollapalooza in Chicago, Illinois, which can draw 225,000 fans annually; Hove, the first carbon-neutral music festival in Norway; Australia's Peats Ridge Sustainable Arts and Music Festival, which runs entirely on renewable energy and has a

large EE component; and Roskilde Festival in Denmark, one of the largest music festivals in northern Europe. The areas of impact on which these festivals focus include energy use, transportation, sanitation, waste, and greener products. Also listed are other industry players, such as the musicians themselves, agencies, recording studios, venues, record labels, instrument and equipment manufacturers, and media outlets (UNEP, 2016b).

A music festival can have a decided impact on its immediate environment (Martinko, 2014; Mitic, 2014). Overwhelming trash, which ends up both in the local landfill and in the local ecosystem, is often the most strikingly visible problem. However, cleaning up can be incentivized. The worst-offending festivals can be shamed and the cleanest festivals praised with good press, as in a 2013 survey of American festivals from the LA Weekly entitled “Which Music Festivals are Dirtiest?” (Baine, 2013). Among the greenest were such festivals as Burning Man (Nevada) and Outside Lands (California); among the worst were South by Southwest (Texas) and Sasquatch – nicknamed “Trashesquatch” (Washington). The “Love Your Tent” campaign at the Isle of Wight Festival in the United Kingdom is an example of an initiative that promotes a leave-no-trace festival camping etiquette, based on the finding that 1-2 tents in 6 had been commonly left behind by attendees (Mitic, 2014).

A study on outdoor music festivals by O’Rourke, Irwin and Straker (2011) provides one example in a music festival context of some of the dynamics surrounding social norms with regard to pro-environmental behaviour. Music festivals bring large numbers of people together, often engendering a sense of freedom and community around the enjoyment of the performances. Depending on how they are organized, festivals can also engender respect for, and pro-environmental behaviour towards, the host community, particularly with regard to litter and proper waste disposal – or not, as the case may be. Study participants observed that if it looked as though no one cared about keeping a festival site tidy, then individuals were themselves less apt to engage in pro-environmental behaviour regarding their own waste at the event, and the experiences of some festival attendees were degraded when trash was prevalent. On the other hand, if waste sorting stations are handy and convenient, and if pro-environmental policies are carefully balanced so as not to detract from the primary entertainment purpose of



attending the festival, then that can contribute to a positive festival vibe that can result in more pro-environmental behaviour on the part of many participants at the event and an enhanced festival experience for those who find trash objectionable. Thus the attitudes of festival organizers and performers towards promoting a pro-environmental, pro-community atmosphere in an event can set up a standard of attainable socially normative behaviour that can percolate through the temporary network created by the event.

Methods of music delivery to the consumer have been diversifying over the last decade. Compact disc packaging formerly was restricted to plastic jewel cases; now there are options for biodegradable cardboard packaging as well. Additionally, many listeners are increasingly bypassing a hard product completely and moving to digital download platforms such as iTunes and to streaming services such as Rdio and Spotify (RIAA, 2016). Each of these delivery methods has its impacts. Weber, Koomey and Matthews (2009, p.i) found that the overall life-cycle environmental impact of compact disc packaging in general is lessened by replacing plastic jewel cases and disc holders with cardboard, although that is highly dependent on the impacts of the material feedstocks and the design of the packaging. In their comparison of the carbon footprint of six music delivery methods, three involving compact discs and three involving digital download methods, they found that, in general, “despite the increased energy and emissions associated with Internet data flows, purchasing music digitally reduces the energy and carbon dioxide (CO<sub>2</sub>) emissions associated with delivering music to customers by between 40 and 80% from the best-case physical CD delivery” (Weber et al., 2009, p.i). The cheap digital download now far overtakes the compact disc; in 2012 digital single sales dwarfed compact disc sales by a factor of seven (Covert, 2013). The Recording Industry Association of America reports on these and other trends (RIAA, 2016).

It thus can be seen that there are ways of building up green credibility in the music industry and furthering pro-environmental ideas – or not, as the case may be. There may also be as great a potential for greenwashing in the music industry as much as in any other industry as well. Concert goers and other music consumers may or may not take in any pro-environmental messaging, and whether an event or product is marketed to them as “greener” may or may not affect how they view it. The artists themselves may or may

not exert any control over the contexts in which they must work, even as they may realise how various factors may support or detract from any environmental messaging. More research in this area would be needed to fathom audience perceptions, but for the purposes of this study, it is relevant to recognize that such greening initiatives do exist and they can play into issues of authenticity and credibility.

## 2.4 The David Suzuki Foundation *Playlist for the Planet*, 2011

My study involved interviews with artists who contributed to the David Suzuki *Playlist for the Planet* compilation album of 2011. As such, some background information on the David Suzuki Foundation (DSF) and *Playlist for the Planet* follows below to provide some context for the study.

### 2.4.1 The David Suzuki Foundation (DSF)

The David Suzuki Foundation (DSF) is a Canadian non-governmental organization dedicated to environmental advocacy and education (David Suzuki Foundation, 2016a). Its mission statement is "... to protect the diversity of nature and our quality of life, now and into the future" (David Suzuki Foundation, 2016a). Its head office is located in Vancouver, with regional offices in Toronto and Montreal. It is supported by over 29,000 donors, and does not accept direct government funding (David Suzuki Foundation, 2016c). The DSF was founded in 1991 by Dr. David Suzuki and Tara Cullis (Suzuki, 2006). Dr. Suzuki is a geneticist and environmentalist, and has hosted CBC Television's award-winning show *The Nature of Things with David Suzuki* since its inception in 1979 (Suzuki, 2006; David Suzuki Foundation, 2016d).

The areas upon which the DSF focuses are grouped into Climate Change, Health, Oceans, Wildlife and Habitat, and Freshwater (David Suzuki Foundation, 2016b). Its goals are to protect the climate through research on clean energy solutions; create liveable

communities through green spaces, public transit, and active transportation; establish environmental rights and justice; transform the economy to work within the parameters of nature; to help Canadians, particularly youth, find their sense of connection with nature; and to build community with the knowledge to make pro-environmental business, consumer, and lifestyle choices (David Suzuki Foundation, 2016a).

#### 2.4.2 DSF Engagement with Music and the *Playlist for the Planet*

In the decades leading up to the creation of the *Playlist for the Planet*, David Suzuki accumulated experiences working alongside musicians on various advocacy projects and events. For example, beginning in 1985 Suzuki became involved in a fledgling annual First-Nations run festival in the Stein Valley, British Columbia (Suzuki, 2006). When organizers created the festival in 1984 they hoped that, by raising the profile of the Stein Valley, its old-growth forests could be protected from logging interests. Over the years, musicians such as Gordon Lightfoot, John Denver, Bruce Cockburn, Colin James, Valdy, Blue Rodeo, Spirit of the West, Buffy Sainte-Marie, and others performed there. Many of these artists had already engaged in activism and donated time and financial support for various causes, both musically – such as Bruce Cockburn’s “If a Tree Falls” about the Amazon rainforest – and outside of music – such as John Denver’s support of many environmental groups around the world. In 1997, the Stein Valley was declared a provincial park (Suzuki, 2006). In another forest-related endeavour, 1993 Australian Peter Garrett volunteered his rock band Midnight Oil to perform on the site of the Clayoquot Sound, British Columbia, protest against old-growth logging, a protest which led to the arrest of over 900 activists before a resource management agreement was signed (Suzuki, 2006). Peter Garrett himself was president of the Australian Conservation Foundation and had run for political office. Midnight Oil had previously engaged in some musical activism through the song “Beds Are Burning”, a call to recognize Aboriginal rights in Australia.

With prior experiences such as these, David Suzuki would later come to enlist Panos Grames to spearhead a musical project through the DSF itself. The result was the *Playlist*

*for the Planet*, a 30-track compilation album released on Earth Day, April 20, 2011 (David Suzuki Foundation, 2014a; Panos Grames, personal communication). Eleven of the contributors were the provincial and territorial winners of the Canada-wide contest set up by the DSF in a quest for original environmental anthems, a contest which attracted over 600 applications and made use of online voting through CBC Radio 3. The rest of the contributors of original environment-related songs to the album were prominent Canadian musicians specifically invited by the Foundation. The album was available for sale in compact disc format as well as in .mp3 format via iTunes. Proceeds went to the David Suzuki Foundation. The album was also featured on CBC Radio by Randy Bachman in his national radio show *Vinyl Tap* for his Earth Day broadcast.

At this time of writing, the DSF maintains ties to a few other EE initiatives that connect with music. It is listed as a partner with the Jellyfish Project, the initiative discussed earlier as an example of musical EE programming for youth/children studied by Lansfield (Lansfield, 2015; Jellyfish Project, 2016). Additionally, singer/guitarist Derek Olive has been cycling across Canada to promote the DSF Blue Dot program, a national campaign engaging Canadians to sign petitions to compel first municipal, then provincial, and finally national governments to recognize a legal right to healthy air, clean water, and safe food (Olive, 2015).

#### 2.4.3 Aims of the *Playlist*

In articulating his vision for the *Playlist for the Planet* and in his 2010 call for applications for the 2011 album release, David Suzuki expressed fascination for the emotional power of music to rally public support. He noted that musicians are often the first to donate time and talent to social and environmental causes. The nation-wide contest portion of the *Playlist* was intended as a mechanism through music to open up dialogue on and disseminate messages about the value of nature and the environment across a diverse spectrum of genres, levels, and artistry (David Suzuki Foundation, 2014c).

## 2.5 Summary of Knowledge and New Areas to Explore

### 2.5.1 Synthesis of Known and Unknown

In this literature review, themes come to light that connect music to EE as one of the possible modes of EE delivery and as an agent of pro-environmental social change. These themes are summarized below.

Musical engagement can occur in formal learning (as in a school music program), non-formal learning (as in private music lessons and community ensembles), and in informal learning (as in listening to the radio, playing an instrument by ear, watching a movie enhanced by a film score, etc.). It can also be self-directed when a person is inspired to write a song, to teach him/herself to play an instrument, to improvise, etc. It has the potential to engage a person from many different angles and engage different parts of the brain through cognitive, affective, and psychomotor modes of learning. It can take place in a huge variety of social and private contexts. Music can, for many people, be an enjoyable part of life.

Pure music has its own vocabulary and means of communication that can affect us, sometimes deeply, at a sub-verbal level of stimulation that connects with our emotions. It can be harnessed to enhance the effectiveness of a verbal message as well, and has been harnessed countless times for many causes.

In EE, it is recognized that it is not enough simply to present factual information about the environment in the cognitive domain and expect learners automatically to adopt more pro-environmental behaviours. They also have to care. Reaching learners also through the affective domain is therefore extremely important. The arts, including music, are well placed to address this. Many scholars call for increased involvement from the arts, including from music, in the sustainability movement.

Like the other arts, music can also address a wide variety of conceptualizations, in many different contexts, of what sustainability and other ecology-related concepts even mean. Music has the capacity to embrace the fuzziness and multivalence that arise out of

genuine feeling and experience across multiple contexts. A listener has the opportunity to experience a little bit of another person's reality in a voluntary and experiential manner when engaging with that artist's material. Music has many strengths and potentials, such as the creation of a sense of community, the dissemination of social norms through music-related networks, and the captivating messages that are (hopefully) backed up with modelling to present authentic and credible conceptual ideas. In conjunction with more cognitive forms of learning, music can potentially carry a pro-environmental attitude into everyday life and reach an expanded array of learners with a wide variety of preferred learning modes.

There is a legacy of musicians' engagement with environmental issues with a wide variety of audiences, and the efforts of the participants grow out of these artistic and social contexts. There are also music industry practices and norms within which they must work, which have some practical implications for how they are able to remain true to their own pro-environmental beliefs. Issues of authenticity and credibility loom large for musicians who chose to engage with environmental topics.

### 2.5.2 Questions in the Field and Place of Study

Musicians who have engaged with environmental issues in their professions potentially have insights to offer in relation to their engagement with environmental issues, both into their actual musical craft and into their lives and experiences as engaged musicians. Their repertoire and general biographical information is generally publically accessible, and some may have had opportunities to share their insights with reporters and others outside of academia. However, to date there have been no studies in the academic realm bringing these insights together in a systematic manner using one consistent set of interview questions as a point of departure to look at both the art and the artist in relation to environmental engagement. The sources examined in this review approach music and EE from various other angles, such as surveying the history of popular music in modern environmentalism, making connections between music and nature, experimenting with the use of music in the classroom, articulating the need for music and the other arts to be

involved in the sustainability movement, acting as an embedded researcher/musician, interviewing musicians who perform political music, studying the footprints of music venues/festivals, recording distribution formats, other industry impacts, etc. Adding insights from the musicians themselves, with their knowledge of their audiences, adds another dimension to what can be known about the capabilities of this art form and about the lives of its practitioners.

Such insights could be helpful to others designing EE that includes musical content, in pointing out contextual pitfalls and perceived success stories, and in creating/presenting materials and points of connection that are relevant and engaging to the target audience. Also potentially helpful to other musicians are any insights into the impacts that engagement with environmental issues may have upon musicians, their careers, and their personal lives. Along the way, various conceptualizations of sustainability, authenticity, and roles of musicians as creators, professional entertainers, and advocates can arise, perhaps even spurring further study.

There are limits to what can be claimed about the effects of music on attitude and behaviour. However, given the place of music in our culture, it deserves thoughtful attention in a manner that acknowledges those limits. Among other themes in this study on the artists of the *Playlist for the Planet*, some connections between authorial intent and some perceived audience impact have been sought out, even if that impact is viewed through the subjective eyes of the artist, with some reinforcement from looking at the dissemination history of the music. None of these connections to impact can realistically be measured empirically, as they are neither linear nor concrete; but knowing that they exist in some form can still be helpful to musicians and educators and be of interest to the general public from an environmental and entertainment perspective. These connections are set in the larger context of the careers, lives, and performing circumstances of these musicians – living examples of some of the paths that music can take to help inspire change.

## Chapter 3: Methods

### 3.1 Overview

I invited a cohort of professional musicians who had written, recorded, and performed their own original songs for the David Suzuki Foundation *Playlist for the Planet* to participate in a one-time, one-on-one interview with me. The semi-structured, open-ended interview questions were constructed around a framework of enquiry into the authorial intent, composition, and delivery techniques for the artist's song, its reception by the audience (as perceived by the artist), its dissemination through performances and recordings, the place of environmentally-themed music in the artist's general body of work, and what other avenues outside of performing and song writing s/he may have found to back up his/her pro-environmental beliefs. Additionally, the artists were asked to reflect on what role music could play in the arena of EE and cultural change toward sustainability. They were asked about the challenges, risks, and positive and negative outcomes that they may have encountered in their engagement with environmental issues as musicians. They were also asked what advice they might give to other musicians engaging with environmentally-themed repertoire and/or advocacy, as well as to environmental educators wishing to incorporate music into their educational programming. A list of the specific questions can be found in Appendix D.

I recorded and transcribed the interviews. I coded and analyzed the transcripts for emerging themes using a constant comparative method in an inductive grounded framework, using NVivo 10™ qualitative analysis software (QSR International, 2014).

### 3.2 Population and Appropriateness

In the fall of 2010, Dr. David Suzuki, founder of the environmental charity the David



Suzuki Foundation, issued a creative challenge to musicians across Canada in the form of a call for an environmental anthem. His call was answered with over 600 song submissions (David Suzuki Foundation, 2014a; David Suzuki Foundation, 2014b). A jury narrowed these submissions down to a selection of tracks that were posted on the CBC Radio 3 website, where listeners could vote for their favourites online in a contest format. One track was thus chosen from each province, plus one from the northern territories as one unit, through this combination of jury selection and online voting (Table 3-1). Additionally, other popular Canadian artists and groups were specifically invited by the David Suzuki Foundation to contribute one track each to flesh out a complete 30-track album released in 2011 called the *Playlist for the Planet* (Table 3-2) (David Suzuki Foundation, 2014a; David Suzuki Foundation, 2014b).

I used a non-probabilistic purposive sampling technique, inviting all musicians who contributed to the *Playlist for the Planet* to participate in this study. In order to maintain consistency throughout the study, I purposively invited one musician from each of the 30 tracks to be interviewed. In a few cases, a given track was attributed to an entire group or otherwise co-authored in some way. In these cases, I invited the group to select one person from among them who would be comfortable speaking about the track's environmental content. Out of a possible 30 participants contacted, 14 agreed to be interviewed, for a response rate of 46.67%. Tables 3-1 and 3-2 show the artists who were featured on the *Playlist for the Planet*, and those who took part in this study.

The choice of the *Playlist for the Planet* as the population for this study was influenced by a number of factors. First, the list represented a tidy and well-contained data pool of English-speaking artists from across Canada with a significant audience following in popular (although not always “pop”) music genres. Second, while these artists all produced environmentally themed work, there was variation among them in the degrees and types of their public engagement with environmental issues. Third, enough time had elapsed between the album release and this study such that the songs had built up a performance history that was of interest in a particular angle of questioning. (Many of the tracks donated by the invitees had also been previously released songs as well, with a

history even prior to the *Playlist*.) Finally, it was a way for me to remove my own biases, areas of knowledge, and musical tastes from the issue of data sampling.

The *Playlist* should not be considered a cross-section of Canadian musical tastes. The jury selection and online voting processes themselves contained their own biases. The tastes of Canadians who do not listen to CBC Radio 3 were also not necessarily reflected. Neither was Francophone Canadian music represented. However, this non-probabilistic study was launched only as a generator of ideas, strategies, and experiences that might inspire further research, as well as for its own insights.

**Table 3-1: *Playlist for the Planet* provincial/territorial contest winners.**

<b>Artist/Group</b>	<b>Province</b>	<b>Interviewee</b>	<b>Playlist Song</b>
Katie MacDonald	NB	-	"Our World"
Ashelin	NL	-	"Song For Mariana"
Delhi 2 Dublin	BC	Tarun Nayar	"S.O.S."
Paper Lions	PEI	-	"Let's Keep It Natural"
Keith and Renee	MB	Renee Lamoureux	"The One"
Glenn Sutter	SK	Glenn Sutter	"Weight of the World"
David Myles	NS	David Myles	"I Don't Want to Know"
Jack Lavoie	PQ	Jack Lavoie	"Heal"
Remy Rodden	The North	Remy Rodden	"Think About the Planet"
Danny Michel	ON	Danny Michel	"Feather, Fur & Fin"
Berna-Dean Holland	AB	Berna-Dean Holland	"Black Gold"

**Table 3-2: *Playlist for the Planet* invited contributors.**

<b>Artist/Group</b>	<b>Interviewee</b>	<b>Playlist Song</b>
Alpha Yaya Diallo	-	“The Climate Is the Heart”
Bruce Cockburn	Bruce Cockburn	“If a Tree Falls”
D.O.A.	-	“We Won’t Give In”
Gordon Lightfoot	-	“Ode to Big Blue”
Great Big Sea	-	“Feel It Turn”
Hayley Sales	Hayley Sales	“Not in His Garden”
Jessie Farrell	Jessie Farrell	“Filthy Habits”
Joel Plaskett	-	“Safe in your Arms”
Johnny Reid	-	“Today I’m Gonna Try and Change the World”
K-OS & Sebastian Grainger	-	“Blackwater”
Lights	-	“River”
Raffi	-	“Sustainability”
Randy Bachman	-	“We Gotta Change”
Rush	-	“Second Nature”
Tanya Tagaq	Tanya Tagaq	“Construction”
Tara MacLean	Tara MacLean	“No Surrender”
The Trews	-	“Be Love”
Todd Butler	Todd Butler	“Prairie Surfin”
Tom Jackson	-	“Water”

### 3.3 Invitation and Consent

Before contacting the artists, the thesis study plan was introduced to Panos Grames, the original director of the *Playlist for the Planet* project at the David Suzuki Foundation. He and the Foundation endorsed the study and provided email contact information for either the artists themselves or for their managers. This lent credibility to the quest for participants and facilitated easier contact that may have helped to increase participation rates from what they might otherwise have been had the artists been contacted independently. It is important to note that the David Suzuki Foundation did not influence

the structure of the study, the nature of inquiry, or the analysis in any way. All of these elements were pre-determined before contacting the David Suzuki Foundation and remained unchanged throughout the study.

The initial contact email invitations for the artists who had been specifically invited by the David Suzuki Foundation to contribute to the album were sent by Panos Grames throughout December 2013, although the wording of the email was supplied by the research team. In addition, I sent out initial contact email invitations to the eleven provincial/territorial contest winners in January of 2014. Follow-up emails and all other communications with those in the data pool were conducted mostly by email, and occasionally by phone. The templates for all initial contact emails and for the more detailed follow-up emails (Appendices A and B) were tailored to address each recipient, whether an artist or a manager. Three attempts were made to reach each artist. If there was no response after three attempts, efforts to reach that individual or group ceased. If a response was received, a Consent Form (Appendix C) was emailed, as per the requirements of the Dalhousie University Research Ethics Review Board. Most often, the artist granted consent by printing, signing, scanning and emailing back the Signature Page of the Consent Form. In some cases this was not practical, particularly when the artist/manager indicated by email that the artist wanted to participate but was on tour or otherwise tightly scheduled, such that s/he had no convenient technical means to print, sign, or scan. In these cases, oral consent was recorded just prior to the interview itself in the same audio recording as the interview.

### 3.4 Ethics

Ethics approval was obtained for the interviews from the Dalhousie University Social Sciences and Humanities Research Ethics Board in agreement with the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (Government of Canada, 2014). Anticipated adverse effects were minimal to none in most cases, but included the potential that the artist could be viewed in a negative light by any institutions or individuals s/he criticized openly during the course of the interview. In many cases,

those critical views may have already been public knowledge, but economic and social ramifications could have arisen in terms of where and how that person could perform for a living and interact in the music industry. No physical or psychological adverse effects were anticipated. No remuneration was offered for participation. No adverse effects of any kind were reported back to the research team at any time during the study.

Participants gave consent in full knowledge that their identity formed a crucial part of the study. Participants were not granted confidentiality or anonymity, but were given the opportunity to review their transcripts and any quotes attributed to them in manuscripts prior to publication, including the contexts in which the quotes were used. It was made clear in the consent form and in the interview questions that the participants should not feel obliged to reveal personal information if they did not wish to. It was important to be able to capture discussions of specific musical techniques, performing contexts, and other informative pieces of data which would potentially have identified the speaker offering them. A musician's profession is already visible and public in ways that many other professions are not, especially to her/his particular fan base. Each musician works within a unique entertainment context. It was anticipated that while some artist statements would relate to broader musical contexts, some could be somewhat idiosyncratic but still significant. In designing this study, this issue had to be considered carefully, as there would be trade-offs to be had on either side. Identification makes possible a rich depth of technical discussion that would be of interest to other performers. However, identification also can potentially inhibit a participant from making a statement for which negative consequences might be feared, were it to be made public. Identification could have prompted any participant to just stick to safe, glossy promotional banter as well. In practice, however, very little glossy self-promotion seemed to take place in these interviews. The artists appeared sincerely happy for the opportunity to speak freely and to contribute to wider academic knowledge, and made statements to this effect. This study appeared to offer them a new context to express themselves on issues that they had been trying to address through their work to some extent anyway.

### 3.5 Interview Processes, Conditions, Impartiality, and Consistency

Once the participants gave consent, they were given their choice of interview format: Skype™ (n=2); telephone (n=11); or in person (n=1). As the primary investigator, I interviewed each participant myself to ensure consistency of approach. Because adding a visual component can change the dynamic of an interview (Palys, 2003), I ensured that my dress and body language were unobtrusive in the instances where they were visible. I was in a position to note the dress, facial expressions and body language of those participants whom I could see. Because this was a non-probabilistic study, and because of the non-adversarial and conversational nature of the interviews, it was not anticipated that adding a visual component to some interviews should skew results significantly.

All interviews followed the same basic pattern. I opened with initial greetings, and inquired whether the participant was comfortable and ready to start. I informed the participant that the formal interview was beginning and that recording was commencing as I switched on the digital recorders. I read out the opening consent summary and the participant reaffirmed her/his consented verbally. The interview then proceeded with open ended, semi-structured questions (Appendix D). The length and nature of each response was completely up to the participant. At the end of the list of questions, I thanked the participant and informed her/him again that the interview would be transcribed and analysed for themes, and s/he would be given the opportunity to review its transcript as well as any direct quotes from it to be used in the study. I then turned off the recorders. Sometimes friendly, off-record conversation continued for a few minutes after the interview ended. A few participants emailed additional ideas to add to their responses to certain interview questions immediately after their interviews; these were added to the transcripts during the transcription process and coded with the rest of the material.

In these interviews I presented myself a fellow musician, such that if the participant wished to elaborate on technical issues, s/he would feel understood. My gender was apparent, and it would have been assumed from having initiated this study that I might have a generally pro-environmental outlook. However, other than adopting the role of an

empathetic listener, I did not reveal information about my outlook or professional or private life unless asked post-interview, so as to avoid influencing what the participant chose to say. The goal was that each participant should feel free to present her/his own perceptions of sustainability and music without inhibition and without fear of judgement (Baxter & Eyles, 1997).

### 3.6 Transcription, Coding, Analysis, Saturation, and Reliability

Two digital recorders simultaneously recorded each interview to ensure backup in case of equipment failure. There were therefore two .mp3 recordings of each interview. I loaded whichever file yielded the clearer audio quality into a software application called “The Amazing Slow-Downer™”, which enabled the adjustment of playback speed for ease of the transcription that followed. In rare instances there were lost words or sentences due to the sound quality of the phone or Skype™ connection, but participants were invited to clarify in the member checking process.

I employed member checking (Baxter & Eyles, 1997) after transcribing each interview, by re-contacting each participant and giving him/her the opportunity to review his/her transcript if desired. This was to ensure that the participants were satisfied that they had expressed what they had wanted to, and also to clarify their meanings so that their ideas could be coded accurately.

I entered the transcripts as internal documents into NVivo™10 qualitative analysis software (QSR International, 2014). I identified and coded all sections of text in the participants’ responses pertinent to music and the environment in an inductive grounded framework organized around the responses to the interview questions.

In my experience as an instrumentalist, and also based on readings and observations on singers/songwriters, EE, and activism, I had anticipated that any engagement with environmental issues on the part of musicians might touch on certain broad areas of their lives and careers. This led to the development of interview questions that were themselves organized in clusters representing a general subject area of questioning –

although there was considerable overlap as well. This thus yielded general codes related to the clusters, child codes related to the actual questions, and grandchild and great-grandchild codes to reflect progressively finer distinctions among responses to the questions (Appendix E). In all, four generations of codes grew out of the data, yielding emerging trends in response to the environmental issues and sociological and artistic conditions that each artist faced. Questions were deliberately left open-ended, and some questions were very broad, such that unforeseen subject areas could still be freely and organically explored.

Question cluster #1 addressed composition and presentation techniques, inspiration, and contexts of the specific *Playlist* song. Cluster #2 expanded upon that to other environment-related repertoire that the artist may have had. In a very general sense, these two question clusters were designed to provide much of the data for Chapter 4 (Embedded Paper 1): “Music as a Tool for Environmental Education and Advocacy: Artistic Perspectives from Musicians of the *Playlist for the Planet*”. Clusters #5 (advice that the participant might have for other musicians engaging with environment-related repertoire), #6 (advice for environmental educators using music as a teaching tool), and #7 (future environment-related repertoire) also contained material relevant to this paper. However, parts of many of the responses in all of the aforementioned clusters were expected to also overlap into the focus of Chapter 5 (Embedded Paper 2): “Engaging with Environmental Issues as a Musician: Career Perspectives from Musicians of the *Playlist for the Planet*”, especially given the open-ended nature of the questions. Question clusters #3 (pro-environmental lifestyle and/or business practices outside of creating music) and #4 (challenges and positive/negative experiences in engaging with environmental issues as a musician) were the leading generators of codes for the more sociological explorations of the second paper.

Later during the writing phase, I again gave the participants the opportunity to review all direct quotes from their interviews that were to be attributed to them, with each framed by the context in which it would be used. At the end of the study, as scholarly papers resulting from the research and this thesis were being prepared for submission, I emailed a short summary of research results to the participants so that they could see the final



product to which they had contributed. I also employed peer debriefing through discussions with my supervisor and committee to ensure that my interpretations were clear throughout the study. Through all of these processes, the stage was set for the exploration that follows below of musicians' perspectives on their art and the environment.

Chapter 4, Embedded Paper 1:  
“Music as a Tool for Environmental Education and Advocacy:  
Artistic Perspectives from Musicians  
of the *Playlist for the Planet*”

Publicover, Jennifer L.; Wright, Tarah S.A.; Baur, Steven; Duinker, Peter N.

#### 4.1 Introduction

Environmental education (EE) is seen as a means of tackling humanity’s environmental crisis by providing citizens with the “knowledge, understanding, values, and skills” needed to find and adopt ways to live more harmoniously with the environment (UNESCO-UNEP, 1978, p. 12). EE scholars recognize that their field extends beyond the relay of factual environmental knowledge into helping learners develop pro-environmental values and biophilia (Jickling, 2010). Environmental educators are thus tasked not only with imparting information on the state of the environment and on what pro-environmental actions to undertake, but also with helping diverse learners in a myriad of contexts to find for themselves a sense of value for the global ecosystem of which we all are a part, so that they are empowered to develop and use their knowledge and skills of their own accord.

When envisioning EE, a person might picture a school teacher leading students on a nature walk, or a municipal recycling instruction leaflet, or any medium or circumstance in which concrete information is relayed. One may not immediately think of the role that the arts can play in EE. Yet, we use the arts in our culture all the time to explore our emotions and build our values on a whole range of life issues, including environmental ones. “...Art, culture and education have direct connections with the values that we hold in society and with quality of life” (Packalén, 2009, p. 121). The arts have the power to evoke emotion, spark dialogue, encourage innovative thinking, present diverse perspectives, cope with ambiguity and non-linearity, and influence the development of

cultural norms (Eernstman & Wals, 2013; Eernstman, van Boeckel, Sacks & Myers, 2012).

Music is among the possible artistic approaches that can be used in EE, and yet there is minimal scholarly literature available on this subject. How, when, where, and why could professional musicians and environmental educators enlist music to help elicit pro-environmental thoughts and actions in their audiences and networks? These parameters have not yet been systematically tackled by scholars. This study attempts to fill some of that gap through the direct questioning of a group of musicians who have created popular, environmentally themed music and have advocated for environmental issues in their particular contexts and through their networks. These musicians all contributed environment-related original songs to a 30-track compilation album released in 2011 by the David Suzuki Foundation called the *Playlist for the Planet*.

While this document focuses on the music itself, a companion paper in this study, “Engaging with Environmental Issues as a Musician: Career Perspectives from the Musicians of the *Playlist for the Planet*” (Publicover et al., 2016, in preparation) also explores the career parameters of these musicians as they attempt to build authenticity, model their environmental ideals, and negotiate the challenges, risks, and rewards associated with their engagement in their professional lives.

## 4.2 Background

### 4.2.1 The Arts and Environmental Education

Research indicates that merely increasing knowledge about environmental issues does not on its own correlate with increased pro-environmental behaviour (Tilbury, 1996; Kollmuss & Agyeman, 2002; Pooley & O’Connor, 2000; McKenzie-Mohr, 2011; Jurin & Fortner, 2002). The reasons for this vary with context, including issues of convenience, economics, locus of control, individual values, pre-existing habits, external social norms,

and lack of structures to make a given pro-environmental action a practical part of ordinary life (McKenzie-Mohr, 2011; Kollmuss & Agyeman, 2002).

To motivate learners towards more pro-environmental behaviours, EE scholars such as Tilbury (1996), Orr (2004), and Pooley and O'Connor (2000) call for a mix of pedagogical approaches. Alongside the straightforward cognitive relay of information about the environment and the behavioural outlets through which to act on that information, they also recognize a crucial component of affective, emotion-based learning. In other words, learners must emotionally care about the issues if they are to be expected to act pro-environmentally.

Processing emotions and building values is a strength of the arts (Packalén, 2010; Ernstman & Wals, 2013; Carruthers, 2006). The arts can embrace the topic of sustainability such that it does not become entrenched and stale with time but remains fresh, rejuvenated, and relevant (Ernstman & Wals, 2013). “Fuzziness” refers to any concept that defies precise and total description, either because its exact boundaries are not determined, or because its content and value change when applied to different contexts (Zadeh, 1965). Rather than embracing an absolute conceptualization of sustainability that does not translate across time, location, and circumstance, Ernstman & Wals (2013) encourage us to adopt a fuzzy conceptualization that allows it to mean something different to people in different contexts. Moreover, since few issues are black-and-white, or “bivalent”, this also allows for shades of grey, i.e. “multivalence”. The arts are well placed to deal with multivalence and fuzziness, open-endedly presenting multiple contexts and multiple realities without necessarily having to resolve them with each other (Ernstman & Wals, 2013).

As a person encounters art, s/he engages with the art-maker’s experience. This can be considered a form of experiential learning. Educational theorist Kolb (1984) defines “experiential learning” as a model of learning grounded in experience. Learning is a process rather than an outcome, and it is continually fed by every new experience that comes along, with knowledge being continually acquired and tested against previous experience (Kolb, 1984).

#### 4.2.2 The “Language” of Music

Music is “the only language with the contradictory attributes of being at once intelligible and untranslatable” (Lévi-Strauss, quoted in Patel, 2008, p. 300). While music without text shares some overlapping processing mechanisms with conventional language, it lacks specific and literal semantic content (Patel, 2008). Because music does not reference that much outside of itself, it is not the most efficient vehicle for delivering straightforward information. However, within its unique mathematical elegance lies a wordless drama that is frequently harnessed to enhance and draw attention to lyrics and other extra-musical elements. For example, it would be hard to imagine a blockbuster film such as *Star Wars* without a John Williams orchestral score (Kettler, 2016). Composer Johann Sebastian Bach served either organized Christianity or European nobility at various times in his career (David, Mendel, & Wolff, 1998). “We Shall Overcome” is the African-American spiritual that helped galvanize mass protest in the 1960s civil rights movement in the United States (Bobetsky, Ed., 2015).

Basic musical elements include pitch, rhythm, timbre, tessitura, volume, harmony, the mix of familiar versus novel material, the recognition of patterns, and the tension-and-release expectations present in tonal music. These tension-and-release expectations are often exploited by moving away from and then reaffirming a tonal centre (a “home base”), as well as with consonance and dissonance – notes that, when played together, either sound harmonious or in conflict (with pulsating difference tones, suggesting a need for resolution) (Levitin, 2006; Benward & Saker, 2014).

It does not follow that some magical combination of sounds will automatically motivate a listener to commit a random act of pro-environmental behaviour: “... any powers of physical, mental, or social transformation which music may have will result from a combination of social, psychological, and physical factors” (Ingram, 2010, p. 69). Our interpretations of a given piece may be as varied as we are as individuals, and not linearly derived from the intent of the composer, where much “will depend on the listener’s pre-existing knowledge of, and support for, the theory of the ecological, relational self on

which the theory depends” (Ingram, 2010, p.70). We therefore carefully pose questions to learn what we can about the effects of music, and acknowledge our limitations.

#### 4.2.3 Music and Types of Learning

Coombs and Ahmed (1974) identify three general types of learning:

- Formal – institutionalized, graded, from kindergarten through university
- Nonformal – any organized, systematic, educational activity carried on outside the formal system to provide selected types of learning to particular subgroups
- Informal – the lifelong process by which every person accumulates knowledge, skills, attitudes and insights from daily experiences and exposures. Occurs anywhere, received from family, friends, strangers, the media, entertainment, the local natural or built environment, etc.

To these three types, Mocker & Spear (1982) add “self-directed learning”, an exploratory mode in which the learner “controls both the objectives and means of learning” (Mocker & Spear, 1982, p.viii).

Music can be used as an EE tool in all four types of learning. A children’s entertainer can perform environment-related songs as an invited guest in the formal setting of an elementary school. Nonformal learning may take place when a Scout troupe sings nature songs around a campfire. Informal learning may take place in a wide variety of contexts, from appreciating the sentiments of a pro-environmental song live or through recordings/videos, to visiting an artist’s website and reading about the causes for which s/he advocates, to adopting the social norms regarding trash disposal/sorting at any particular festival or venue, to singing protest songs on a blockade line. Self-directed learning can also occur anywhere, as when, upon encountering an environment-related message in any of the modes above, a learner takes it upon him- or herself to learn more on that topic. Music can touch our lives in a wide variety of contexts, and thus any

sentiments or values that a musician expresses, either through music or through other actions, can potentially touch on others via the same channels.

#### 4.2.4 Authenticity

Authenticity in music is seen as the expression of some kind of genuinely-felt truth (Moore, 2002). Moore describes three types of musical authenticity: 1. First person – speaking the truth of one’s own situation; 2. Third person – speaking the truth of someone else who is absent; 3. Second person – speaking the truth of the culture, and thus of the audience (summarized from Moore, 2002, p.209-223). People may judge themselves from within, and also be judged externally as a result of the way others perceive them. Dissonance arises when those two perceptions do not mesh. As with any topic, issues of authenticity can affect musicians who engage with environmental topics, who may not want to engage, nor be seen as engaging, for disingenuous reasons.

Authenticity is a vital theme as we examine the experiences of musicians who try to build the credibility behind their first-person statements about the environment that potentially enables them to speak the second person “truths” of a greater society and to engage others experientially in their ideas through art and action.

The segment of authenticity covered by the participants’ music itself, its inspiration, composition, and presentation, is discussed in this paper. Other aspects of authenticity connected to efforts by these musicians to model some of their pro-environmental values in their business practices and lifestyles, along with career implications, are covered in a companion paper in this study (Publicover et al., 2016, in preparation).

#### 4.3 Methods

The population for this study was a cohort of professional musicians who wrote, recorded, and performed their original environment-related songs for the David Suzuki

Foundation *Playlist for the Planet*, a 30-track compilation album released in 2011 by the David Suzuki Foundation. Eleven tracks were the provincial/territorial winners of a nationwide environmental song contest, chosen through a combination of jury selection and online voting from among 600+ submissions. The other tracks, many of them previously released in other contexts, were donated by popular Canadian artists and groups invited by the David Suzuki Foundation (David Suzuki Foundation, 2014a; David Suzuki Foundation, 2014b).

Using non-probabilistic purposive sampling, we invited all contributors to the *Playlist for the Planet* to participate in the study by means of a one-time, one-on-one interview. Groups who contributed were asked to select a single spokesperson. Out of a possible 30 tracks, contributors from 14 consented to be interviewed, for a response rate of 47%. Participants gave consent knowing that their identity formed a crucial part of the study. The semi-structured, open-ended interview questions enquired into the authorial intent, composition, and delivery techniques for each artist's song, its reception by the audience (as perceived by the artist), its dissemination through performances and recordings, the place of environmentally themed music in the artist's general body of work, and what other avenues outside of performing and song writing s/he may have found to back up his/her pro-environmental beliefs. The participants were also asked to reflect on what role music could play in EE and cultural change toward sustainability, and what advice they might give to other musicians engaging with environmentally themed repertoire and/or advocacy, as well as to environmental educators wishing to incorporate music into their programming.

The interviews were recorded and transcribed. Member checking (Baxter & Eyles, 1997) was employed. Transcripts were entered into NVivo™10 qualitative analysis software (QSR International, 2014). Sections of text pertinent to music and the environment were coded in an inductive grounded framework organized around the responses to the interview questions. Four generations of codes grew out of the data, yielding emerging trends in response to the environmental issues and sociological and artistic conditions that each artist faced.



## 4.4 Results and Discussion

In addition to the “how, when, where, and why” of using music as a tool to help instill pro-environmental thoughts and values, authenticity also emerged as an important theme running through the study. The responses of the participants are grouped below into broad discussion areas covering the inspiration behind their environment-related songs, composition parameters, performance/dissemination techniques and contexts, artistic authenticity, and food for thought from the participants’ experiences offered to environmental educators using music and to musicians engaging with environmental issues.

### 4.4.1 Inspiration

All of the study participants indicate that they compose their environmentally-themed repertoire through the same creative processes that shape their other non-environmental repertoire. In general, they are inspired to compose by issues that they encounter that simply move them personally, which applies equally to writing about environment-related issues. For example, Bruce Cockburn strives simply to express what he assesses to be the positives and negatives of the human experience; he does not define any of his songs as “protest” or “motivational” songs per se, but realises that people may perceive some of them that way. Tanya Tagaq describes how she channels inspiration:

As far as creativity goes... it’s just something that involuntarily comes into my head and then has to come out of my mouth, or out of my hands through painting... It’s just a form of expression, so I don’t think it’s something that I have a choice [over] whether or not I have to do it.

A wide, overlapping array of environmental concerns are addressed in the *Playlist* songs and in the artists’ other environment-related repertoire, many stressing the importance of

community, and many connected to their conceptualizations of the natural world (Table 4-1).

**Table 4-1: Major sources of inspiration for the songs of the David Suzuki Foundation *Playlist for the Planet* compilation album, in order of prevalence.**

Sources of Inspiration	Playlist Song(s)	Musician(s)
The natural (non-human) world - including growing things in the earth, such as food	Black Gold If a Tree Falls Feather, Fur & Fin Filthy Habits Construction No Surrender	Berna-Dean Holland Bruce Cockburn Danny Michel Jessie Farrell Tanya Tagaq Tara MacLean
Family, friends, community, interconnectedness with others - including the parenting experience - including creating community through music	Black Gold Heal The One No Surrender SOS	Berna-Dean Holland Jack Lavoie Keith & Renée Tara MacLean Dehli 2 Dublin
Determination to use your gifts, to do your part to make the world better	Weight of the World Heal Think About the Planet The One No Surrender	Glenn Sutter Jack Lavoie Remy Rodden Keith & Renée Tara MacLean
Economic development and resource extraction (e.g. the Alberta Oil Sands)	Black Gold If a Tree Falls Feather, Fur & Fin Prairie Surfin'	Berna-Dean Holland Bruce Cockburn Danny Michel Todd Butler
Climate change specifically	Feather, Fur & Fin I Don't Want to Know Prairie Surfin'	Danny Michel David Myles Todd Butler
The David Suzuki Foundation itself (taking inspiration from its work and its call for environmental anthems)	Heal Construction No Surrender	Jack Lavoie Tanya Tagaq Tara MacLean
Economic disparity, imbalances of power	Weight of the World The One Construction	Glenn Sutter Keith & Renée Tanya Tagaq

<b>Sources of Inspiration</b>	<b>Playlist Song(s)</b>	<b>Musician(s)</b>
Politics, government - including anger at the policies of the then-current federal party in power in Canada, the Conservatives under Prime Minister Stephen Harper	Black Gold Weight of the World Construction	Berna-Dean Holland Glenn Sutter Tanya Tagaq
Influences from other musical and/or acoustic sources	Black Gold Weight of the World Construction	Berna-Dean Holland Glenn Sutter Tanya Tagaq
Abdicating environmental responsibility	I Don't Want to Know Not in His Garden	David Myles Hayley Sales
Consumerism	Black Gold Feather, Fur & Fin	Berna-Dean Holland Danny Michel
General anxiety over environmental issues (very broad, can include other themes listed)	Weight of the World Think About the Planet	Glenn Sutter Remy Rodden
First Nations perspectives (Inuk or Métis, in these cases)	Black Gold Construction	Berna-Dean Holland Tanya Tagaq
Experience doing aide or charitable work	The One	Keith & Renée
Spirituality	SOS	Dehli 2 Dublin

Some participants' songs connect to specific life experiences. Berna-Dean Holland's Métis father overcame societal discrimination against indigenous peoples and his own lack of formal education to provide for his family by working in the Alberta Oil Patch, and yet rued the destruction to the natural landscape that the industry caused. His daughter would go on to study biology in university and work in wildlife conservation, and compose "Black Gold" partly as an ode to that tension in his life, as well as to decry society's addiction to fossil fuels.

The duo of Keith Macpherson and Renée Lamoureux (Keith & Renée) volunteered for the children's charity Free the Children building schools in Kenya, after which they embarked on school concert tours across Canada fundraising and encouraging youth to empower themselves to create positive change. Travelling between Kenya and wealthier

nations, they noted not only the economic disparity, but also a common joy and love of music in general that transcended economic boundaries. This led to the composition of “The One”, an ode to commonalities across all humankind and the need for all people to unite in caring for the world.

For some, such as Jessie Farrell, Tara MacLean, and many others, the experience of parenthood has helped shape their outlook on the environment, their music, and their lifestyles, in terms of reliving the wonder of the natural world through their children’s eyes, bringing them up to be environmentally responsible, and leaving them a healthy legacy. Some, like environmental educator Remy Rodden and museum curator Glenn Sutter, also work with youth regularly or develop educational material that is encountered by youth.

Some participants express ideas on interconnectedness with spiritual overtones. Inuit throat singer Tanya Tagaq advocates for issues that all tie into how humans interconnect with each other and with Mother Earth, whether that be the destruction of the natural world, the effects of colonialism on indigenous Canadians, missing and murdered indigenous women, racism, destructive behaviours within indigenous communities, pollution, etc. Tarun Nayar, of the band Delhi 2 Dublin, also speaks about interconnection and taking a broad approach:

We believe that people have lost that feeling of connection, with themselves, with the people around them, with their environment, and that’s the root cause behind a lot of the challenges that we face. It’s hard to be a mean person when you feel really connected, either to yourself or your neighbours. So we tend to theme our stuff more at... what we consider is the root of environmental degradation, and the root of war, and the root of corruption – than actually explicitly talking about the environment and sustainability.

Berna-Dean Holland also recommends researching any topic that is to be turned into song material and getting to know it well, so that the inspiration to write comes from a genuine and well-founded place.

In all cases, the artists find that writing from what they know and from the heart is the

best way to maintain the integrity, power, and authenticity of their work. This is their approach to first person authenticity described by Moore (2002) – presenting the truth of their situation as they envision it. For them, it is the first step towards becoming a credible spokesperson for the wider culture on the environmental issue at hand – i.e., using first person authenticity to work towards second person authenticity.

#### 4.4.2 Composition

The participants have taken a variety of compositional approaches to express their environmental sentiments through song, ranging from very audience-accessible to more edgy or critical. Many of the participants have written simple, catchy tunes with predictable chord changes and phrases that are easy to remember and to sing along with; others have chosen to make impact by other means, often expressing a musical tension mirroring the tension that they themselves feel regarding the environmental issue at hand.

Remy Rodden, who regularly works with children, receives feedback such as this on his catchy, accessible songs:

I've heard this anecdotally from teachers and so on... you know the idea of the "brain worm", the catchy song that goes in there?... I presented this biodiversity song with a class in Toronto one time, and they went to the museum after that. There was this display on biodiversity, and of course they get there and the kids all break out into the song as they go into the museum.

Some participants, such as Tara MacLean, purposively departed somewhat from their usual compositional style when writing their *Playlist for the Planet* songs, in order to make them accessible and audience-participatory. They have enjoyed witnessing how these songs have stuck with their audiences.

Music can be considered as a form of EE messaging, and can be described in EE vocabulary. For example, McKenzie-Mohr (2011, p. 95) recommends creating a "captivating message" that is "vivid, concrete and personal" when prodding people

towards pro-environmental thoughts and actions. Music has the captivating potential of art and entertainment. McKenzie-Mohr (2011) also recommends keeping environmental messages easy to remember. His educational methods in Community Based Social Marketing are primarily geared towards engaging people in specific and concrete behaviours such as recycling. In recycling, visual how-to prompts can be kept simple for convenience and ease of understanding to encourage habitual behaviour. That analogy could be applied to musical messaging, which tends to be value-based, where a simple and enjoyable song might provoke the thought of a pro-environmental value. A musician's fan base can be considered a network through which such messaging disseminates.

However, for some participants, the issue of whether a song turns out to be simple or more complex has more to do with their artistry and inspiration than with an audience in mind. Tanya Tagaq explains:

This is the thing when you're discussing the human condition in art – I'm not trying to make it sound good, you know? I'm trying to express what it's like to be alive right now... I've never worried about it sounding nice, it sounding right, or I've never worried about whether or not the audience knows how to eat it properly. I refuse to think about that, because otherwise I'll start trying to please people, and then once you try to please people, you're not doing it for you anymore, and then it loses its potency.

We thus see that a "captivating message" can also sometimes be created in more complex ways that do grab the attention, but do not necessarily invite easy singing along.

An overlapping dichotomy, which Tagaq's comment also illustrates, is the contrast between "feel-good" and "not-feel-good" songs. "When a Tree Falls" by Bruce Cockburn and "Feather, Fur and Fin" by Danny Michel are examples of *Playlist* songs with angry statements about environmental degradation, while "The One" by Keith and Renée and "No Surrender" by Tara MacLean exemplify songs with messages of hope and empowerment. The other *Playlist* songs take their place alongside these songs at many gradations along this continuum.

One of the key attributes of music, and of the arts in general, as a tool for EE is its ability to make us at least “feel” something, whether that feeling is positive or negative. Packalén (2010) and Ernstman & Wals (2013) advocate for a greater role of the arts in EE because of this power of affect that can be harnessed to nurture pro-environmental values. Tilbury’s “Head, Heart and Hand” approach to EE (1996), and Pooley & O’Connor’s closely corresponding “cognitive, affective and behavioural” approach both call for a mix of tools with an important component of affect/emotion. Many of the participants articulate their awareness of the emotional power of music as well. Tara MacLean describes her activism as breaking through numbness:

We live in a culture that is extremely distracted and tries to numb itself from feeling what needs to be felt in order to act. There’s a certain sort of anger, and that needs to come through you to say, “okay, I’m fed up with this”. And a lot of people just say, “well, this hurts too much, I’m going to change the channel, I’m going to numb myself to the pain of the world or to the pain inside myself, and that is going to be how I cope”... So I’m trying to actually access a really deep emotional place where people can’t be distracted from it. They have to face “feeling”. And then once you face feeling, whether it’s sadness, or fear, or whatever it is, only then can you... transmute and change that energy and turn it into action.

However, a balance and mix of positive and negative messaging is important. Lazarus and Folkman (1984, p.150) articulate two ways in which humans cope with stress in general: “problem-focused coping” and “emotion-focused coping”. Problem-focused coping is the taking of action to alleviate the stress or threat; it tends to surface when there is some perceived hope of improving the situation. Emotion-focused coping is the management of one’s emotional response to a stress or threat, which can include denial and avoiding dealing with the topic; it tends to surface when the situation is perceived as more hopeless or that the person has little agency over it. McKenzie-Mohr (2011) applies these principles to environmental messaging. Sometimes, negative, threatening messages provide the necessary spur to galvanize people into action (problem-focused coping) more effectively than positive messages, but it can backfire into non-action (emotion-

based coping) if there is no perceived hope for better outcomes with positive and attainable action. McKenzie-Mohr extends this further into environmental problems that require collective action, such as climate change, in which case our perceptions of control depend largely upon our sense of community. “If we feel that, in concert with others, we can have an impact, we are likely to act. If, however, we feel little common purpose, we are likely to perceive that there is little we can do personally” (McKenzie-Mohr, 2011, p.100).

Branagan (2005) alludes to this, and to the importance of a mixture of positive and negative messaging:

The celebratory and creative aspects of the arts bring a balance to environmentalism by lightening its often-confronting messages with creativity and humour. Although anger is an important emotion in activism... it is not sustainable for long periods and can contribute to burnout. Similarly, audiences may turn off if they are continually bombarded with angry messages, whereas use of a variety of emotions (as in a good play) can create a variety of 'hooks' with which to engage people. (Branagan, 2005, p.38)

Richard Louv, author of *Last Child in the Woods: Saving our Children from Nature Deficit Disorder* (2008), and Dr. David Suzuki have both felt the need for their environmental advocacy work to transcend doom-laden post-apocalyptic forecasting and also embrace a sense of wonder about nature and hope for the future (Bede Scharper, 2012). Paraphrasing Dr. Martin Luther King, Louv says: “Any cultural movement will fail if it can’t paint a picture of a world where people want to go to” (Louv, 2012, p.6).

One of the study participants, Glenn Sutter, actually changed one line in his song “Weight of the World” in performance after its release, from “and another dream dies” to “can’t let another dream die”, because he felt that he needed to impart a sense of hope that the weight of the world’s environmental problems – heavy though it be – could be lifted by people doing their bit.

We thus see that the study participants have organically chosen to adopt both positive (“feel-good”) and negative (“not-feel-good”) approaches. A variety of approaches and



hooks can contribute to an overall greater efficacy of messaging. Many participants discuss other miscellaneous composition techniques or “hooks” that they have used, including referencing or taking inspiration from other music, improvising, and using humour. Tanya Tagaq improvises her pieces: “I think a release of control is very important when it comes to expressing yourself, and I like most of my shows to be improvised because of that, so I can just feel what’s happening in that moment with those people in that venue.”

Comedian and musician Todd Butler referenced the staccato strumming rhythms of the “Jan-and-Dean” surf music of the Beach Boys in his song “Prairie Surfin”, imagining a future dystopia where sea levels have risen and flooded the Prairies because of climate change:

I think that vehicle is just perfect for the subject matter... I guess it sort of depends on where you stand, where your beliefs are as far as global warming is concerned, whether it’s actually happening or not, so some people maybe aren’t as enthusiastic about it – but the message is couched in comedy. So I think that that translates for most people. They realise that I’m poking fun at it, but at the same time I’m making a point that... we need to start thinking about this seriously, because it’s actually happening.

The words of Tara Maclean aptly sum up this section, recognizing the diverse ways to engage audiences on issues through music: “You can do it fun, you can be angry, you can be sad, you can be wistful – there are so many gates that you can open to have people come into your music.”

#### 4.4.3 Performance/Dissemination Techniques, Contexts, and Audiences

The results of this study indicate that all participants have had to consider the placement and manner of presenting their environment-related repertoire, with the hope of making a statement that is well-received by their audiences in an entertainment context.

Some of these considerations overlap with the balancing of positive and negative messaging discussed in the previous section. Additionally, the study participants indicate that when putting together a set list for a particular show, they have to decide how to balance the tone of a protest/motivational song with other repertoire in the show, in the same way that they would balance the ups and downs of any show. Bruce Cockburn designs his set lists for general aesthetic purposes that include any environment-related songs that happen to be in them:

I pay a fair amount of attention to putting the songs in order that makes some kind of aesthetic sense, so you don't have a whole bunch of slow songs in a row, and you don't have a whole bunch of big downers in a row, and, and you don't waste all your amusing songs in the first five songs of the set, etc.

Many of the participants incorporate audience participation, particularly communal singing, for adults as well as children. Environmental educator and entertainer Remy Rodden recognizes how effective shared musical experiences can be in reinforcing ideas in a fun way for children through sing-alongs, creating accompaniments, using nature sounds etc. Rodden directly refers to this as experiential learning, or learning through experience (Kolb, 1984), and recognizes that music can create a festive atmosphere for adults too.

Tara MacLean speaks about communal singing not only in her performing career but also her experiences singing at environmental protests:

The songs might be the same but maybe the banter in between songs might be a little bit more high-energy [at protests], because you're getting the crowd going, you're waking them up, you're uniting them... When people are all singing "If we all stand on the road, they can't arrest us all", and chanting, chanting, chanting, and voices raised together – it's so incredibly powerful.

Daniel Levitin, author of *This is Your Brain on Music* (2006), describes two effects of communal music-making through the example of choral singing:

When we sing [with others]... we've got to pay attention to what someone else is doing, coordinate our actions with theirs, and it really does pull us out of

ourselves. And all of that activates a part of the frontal cortex that's responsible for how you see yourself in the world, and whether you see yourself as part of a group or alone. And this is a powerful effect. The second thing... is there's a whole neurochemistry to singing. We now have evidence that when people sing together, it releases oxytocin. This is the neurotransmitter... associated with social bonding... The oxytocin sets up this real bond and sense of trust and well-being towards the other person. And we get that when we sing (Shapiro, 2013).

Communal singing and chanting can be a powerfully uniting activity at protests.

Branagan (2005) discusses environmental rallies:

The arts bring a carnival, yet simultaneously sharp, atmosphere to environmental rallies, creating 'liminal' settings that are conducive to the deep learning necessary for social action. 'Liminal' is a term derived by anthropologist Victor Turner to describe times when the usual roles in social life are momentarily suspended and replaced with an overwhelming - even sacred - sense of collective camaraderie. Such times are characterised by playfulness, experimentation, diversity, freedom, ambiguity and lessened obedience to authority. They can thus be pivotal moments in the lives of individuals and communities, contributing to enduring social change (Branagan, 2005, p. 38).

There is a dichotomy between taking an inclusive versus an adversarial approach to the presentation of environment-related repertoire. David Myles obtained a political science degree after high school, but then diverged from that path into a career in music, which has affected how he has approached environmental issues in the entertainment context. For him, music is refreshingly unifying. While he loves and respects music that addresses serious and potentially polarizing problems,

... it wasn't going to be my thing, just because I felt like I had spent a lot of time in that situation... I wanted to be the type of performer and writer that brought all sorts of people to my shows, young and old, rich and poor – I wanted everyone to feel like they could come to my show... I feel like there's just enough politics out there, that sometimes it's nice to have a space where people can just have a good time and smile.

However, music can also be used in an exclusionary way against perceived adversaries such as government or police, and a protest may serve as an example of this too. Many of the participants have taken part in protests. Tara MacLean was arrested along with hundreds of others in the 1993 anti-logging protests in Clayoquot Sound, British Columbia (Nursal, 2013); her criminal record was later expunged.

Remy Rodden, who tends to keep his school performances apolitical, points out that sustainability itself crosses all partisan boundaries anyway:

Certainly in the education world, if you're going to get into schools and so on, they don't tend to take really strong political views. And in essence, our environmental sustainability is apolitical, because we're all in the same boat...

There follows a certain logic that casting a wider, more inclusive net may reach more people, but the messaging might need to be gentler as a result, so as not to risk some turning away. In their survey of musicians engaged with political activism – which sometimes overlaps with environmental activism – Pedelty & Racheli (2009) found a tension for musicians wishing to speak out on issues but not wishing to alienate fans.

All of these dichotomies discussed thus far – simple vs. complex, feel-good vs. not-feel-good, inclusive vs. adversarial – play into how the participants choose to tailor their programming for different audiences. Some do not tailor significantly, but some others do. For example, Danny Michel plays to general audiences and does not usually tailor, but endeavours to write songs that he feels could be attractive to everyone. Tarun Nayar of Delhi 2 Dublin also does not tailor:

We just try to come at it with as much authenticity as we can from our own standpoint. We don't really think too much about how other people are going to get it; we just try to be as clear as we can about where we're coming from.

Bruce Cockburn gives examples of reasons for tailoring that affect any environment-related songs as much as the rest of his repertoire, but he does not tailor around environmental issues per se, and accepts that some audience members may not concur with what he expresses:

I might do a slightly different show if I'm playing in a small place versus playing in a big place... The bigger the show, the less room there is for very meditative pieces and the more need there is for liveliness from the stage... Or if I'm playing in a place where people don't speak English, I'm not going to do a lot of spoken-word stuff... The time the guy told me he hated "If a Tree Falls" – he liked the show, he made a point of telling me he thought the show was really great but he hated that song – that was in northern Ontario, in a place where there's lots of loggers... I mean I think about it every now [and again] and I think "gee, you know, some people are going to be really pissed to hear this!"

Special consideration is given to children/youth and the learning levels and sensitivities appropriate for them. Remy Rodden does tailor for his younger audiences, for whom the threshold for burnout and turnoff may be lower:

It's about being sensitive about the balance between motivating people through all the negative scary stuff, but [not] to the point where it's too much and you numb out and you don't take any action. So, especially with kids, I tend to keep things fairly light and just touch on the different issues. And start with where we all connect, often with the cute fuzzy animals, so in the habitat songs and the biodiversity songs... fun songs... In my professional life as an educator and as a performer, [I] really try to stay away from the preachy-ness of things, and really inspire through humour and just general understanding.

Comedian and musician Todd Butler researches the organizations who hire him to entertain at their corporate events:

When I'm hired to entertain a bank, for instance, I will customize material that is related to that industry, talking about things that are specific to them. It varies with the audience. If I'm doing a show for an environmental group, or a group that is – I hate to use the term "left-of-centre", but that's more in that political bent – then I will have more of that kind of material in the show. When I'm hired to be a comedian, I don't feel it's my job to preach to people that aren't necessarily on the same page as I am. So I tread lightly when I'm playing for a more right-wing group.

McKenzie-Mohr (2011) recommends knowing one's audience. In environmental Community-Based Social Marketing (CBSM), that entails phone surveys, focus groups, and other detailed methods of getting to know and work with the conventions and norms of a particular neighbourhood or group, in order to stretch people's thinking just the right distance from where they currently are without losing connection with them (McKenzie-Mohr, 2011). Key differences between CBSM messaging and musical messaging are that CBSM is focused on engaging people in very specific and concrete behaviours, and ways must be found to approach people with those messages, whereas the strength of music tends to lie more with affective value-building (Coss, 2013; Turner & Freedman, 2004), and the people who choose to follow a particular performer are presumably already there for the music. For them, the music is the "hook".

Some genres or performing contexts lend themselves to speaking to the audience between songs, including introducing an upcoming song. Many artists mention such preambles. For the duo Keith and Renée, the stories behind their songs, particularly their volunteerism with Save the Children and their advocacy of youth empowerment, are an important and powerful part of their show. Some performing contexts do not lend themselves to preambles, however, as Tarun Nayar explains:

We're basically like a rock band, so we don't do a whole lot of talking in our shows. We just kind of play the music. So there's not really any preamble – the lyrics are so simple, that it's kind of self-explanatory.

In some performing contexts, particularly in noisy venues, clarity and comprehension of song text can be an issue that can interfere with messaging. Jack Lavoie performs frequently in his native Québec to a mix of French, English, and bilingual fans, "so you're never 100% sure if the message is getting across right at that show". However, for Tanya Tagaq, word clarity is not an issue, as her pieces are improvised soundscapes of throat singing:

I don't use words in my shows for a reason, because to address racism and colonialism, it's very difficult for a lot of people to see that and hear that without feeling shame or blame, right? So I just hope that at the end of my concerts people are walking out with an awareness of what it feels like to be a Inuk person. And

then also this niggling thing, like, “oh, what can be done about this, or what can be done within myself?”

We thus see multivalent themes arising out of these conversations, with each participant in a unique context with their particular fan base and performing circumstances. What may work in one setting may not work in another, with differences of genre, demographic, time, location, and many other factors at play. However, they all grapple with these dichotomies and artistic parameters in their attempts to express their environmental values through art, each in her/his own way.

#### 4.4.4 Authenticity and the Art of Music

The participants universally stress the ideas of writing from the heart, of not preaching to audiences, of letting listeners draw their own meaning from the music, and of trying to model the ideals expressed in the music.

They all point out the potentially hypocritical aspects of preaching and its potential to turn listeners off with heavy-handedness, thus damaging the message. Tara MacLean says:

The worst thing you can do for an audience is preach... I think music is like an invitation to open up, and the moment that you start preaching to someone, that can close them. And so... to not preach, but to just “say” something.

Preaching may be viewed as propagandizing, which according to Block (1948) should be viewed with suspicion, with its ulterior motive to manipulate opinion through subterfuge: “In the democratic thesis, facts provide the basis for free judgment and decision; ‘propaganda’ betrays the democratic principle. The latter has no essential preoccupation with truth; it is the ‘guerrilla warfare of communication’” (Block, 1948, p.678). It is this association with an ulterior motive beyond the sincerity and the quality of their art that the *Playlist* artists wish to avoid.

Many participants instead advise letting audiences decide for themselves on the meaning that they draw from the song, as they would with any other art, thus empowering them to direct their own artistic experience. Hayley Sales states:

It's more powerful to let people interpret a song on their own, and let the lyrics speak to them. Sometimes I'll [preamble]... but I try and keep it really short, and then just try and get them involved, clapping or stomping, because I feel it kind of induces this sense of community. And then just let them interpret the song in the way that makes sense to them, and what they take away from it, without being pushy.

Danny Michel concurs: "I just try to do it artistically and throw some images out there, and let people put the puzzle together for themselves and decide however they want to feel about it."

Art that contains some degree of ambiguity gives us freedom to interpret it in our own way, and that can be a pleasurable attribute of it. This was found by Jakesch & Leder (2009) in a study on perceptions of modern visual art. The degree of ambiguity that is most pleasurable – neither too much nor too little – depends on context. This concept of ambiguity may extend to other arts as well, such as music and lyrics. It may be that the artists themselves are in the best position to feel out what balance their particular audiences are most receptive to, with some familiarity as to the references that they might already understand in that genre and what may be new for them.

#### 4.4.5 Music and Environmental Education

The participants offer further insights pertaining to affective learning, pro-environmental messaging, and tips and encouragement for environmental educators wishing to use music as an EE tool.



All participants feel that music can tap into emotions and help shape attitudes about the world. Jack Lavoie states: “Songs are presented to the listening public in an emotional way, because that’s where we get into their hearts through their ears.”

Berna-Dean Holland offers a perspective as both a wildlife biologist and a musician on the strengths of music and the arts in general:

Music is a very universal language... As scientists, we’re speaking to the already informed crowd... everybody understands what we’re talking about, that’s the world we’re in. And so to deliver that to mainstream society – they don’t necessarily even speak the language. But everyone can speak the language that they can either see or feel, and emotion is part of that. If you can emote something and get them to stop and listen...

Affective learning is discussed, using various vocabularies, in the EE writings of Pooley & O’Connor (2000), David Orr (2004), Tilbury (1996), Jensen (2002), Carruthers (2006), Packalén (2010), and others. Harnessing emotions to build values in this way is a strength of the arts and of culture in general (Packalén, 2010), (Carruthers, 2006), with the option to utilize fuzziness and multivalence in the relay of narratives that keep conceptualizations of sustainability fresh (Ernstman & Wals, 2013).

Study participant Glenn Sutter, curator at the Royal Saskatchewan Museum and researcher on human ecology, has presented installations on the topic of music and the environment and identified many roles that musicians can play in EE. He feels that music can both shake people up and help them find stability again. While he recognizes that music can “be aimed at horrible outcomes – like a call to arms”, it can also be aimed at positive goals as well, where it can offer inspiration and comfort, foster resilience, and break down barriers.

The participants recommend picking quality material that is relevant and meaningful to the target audience. Tarun Nayar summarizes, with useful examples:

In general for that stuff to work, the music has to be good! And ideally, relevant to the audience. So if you’re doing a class with a bunch of kids who are Miley Cyrus and Justin Bieber fans, it may be a little bit less effective to use a Neil

Young song [from an earlier generation] to push the point. It's possible that they'll get it, but it's also possible that they'll just think that it's totally irrelevant to their situation... There's a lot of new music that covers these themes, and there's a lot of super-intelligent kids making music these days that cover those themes... Keeping it relevant to the audience is probably the most important thing to get it to stick.

Pedely and Racheli (2009) and Bonoguore (2011) affirm the need for the artistry to be good in order for the message to not fall flat:

Musicians are quick to point out the one eternal truth about their craft: If it ain't good, no one's going to listen. 'You have to be careful before taking on a topic, even a broad one, because if it's badly done, it'll have no impact at all,' Les Cowboys' [Jérôme] Dupras warns. 'To write a song with that kind of message, and for it to be a song that flows and is cool, is easier said than done.'

(Bonoguore, 2011, p. 14)

Hayley Sales, one of the youngest study participants, feels that approaches for youth audiences depend on age. For young children, sing-alongs and visuals are meaningful. In high school and college, youth need to seek out their own music, so reaching them is more a matter of exposing them to artists who also happen to be environmentally conscious.

Many participants note that bringing environmental topics into the entertainment sphere and modelling can help normalize the act of caring for the environment. This not only taps into social norms, but also reaches beyond formal education into nonformal, informal, and self-directed learning (Coombs and Ahmed, 1974; Mocker & Spear, 1982). Hayley Sales states:

Just... make yourself as much a model as possible, and... without blatantly showing it, try to allow people to see it – whether it's through doing charity events or just volunteering and taking photos for your blog, or getting involved in whatever way you can with local organizations. I think that's a really powerful way to go about it. And just caring about it, because whenever you really care

about something it does show through, in whatever ways it can.

Jessie Farrell concurs, speaking in the context of younger audiences:

I also think normalizing practices... is a huge part of just making caring and connecting to the environment so normal on such a basic level for little kids, and they then become adults who also care and connect with the environment.

A study by Aronson & O’Leary (1983) on water conservation practices in a men’s shower room at a university athletic centre illustrates the power of social norms. A sign outlining conservation procedures was adhered to by only 6% of shower room users. However, when an accomplice followed the conservation practice, in the presence of but without speaking to other users, the compliance rate rose to 49%. With two accomplices, it rose to 67%. Studies on littering behaviour by Cialdini et al. (1990) and Reno et al. (1993) have offered refinements on the thinking around social norms, differentiating between two types (injunctive and descriptive) and various contexts whereby one or both may be influential. If social diffusion is a means of spreading sustainable behaviours (McKenzie-Mohr, 2011), a musician’s fan base can be considered an informal network for the social diffusion of pro-environmental values and norms.

## 4.5 Conclusion

This study reveals a constellation of parameters to be considered when using music to deliver captivating messages for instilling pro-environmental values and normalizing discussions of sustainability. Some of these parameters are artistic/creative dimensions best conceptualized as continua between two ends of a dichotomy. Four such continua have emerged: simple vs. complex, feel-good vs. not-feel-good, inclusive vs. adversarial, and direct vs. ambiguous. Each interview participant has had to find his/her own position on each continuum in each particular musical context, so as to reach listeners without overwhelming them, “preaching” to them, or turning them off. Thus there appear to be

flexible, multivalent responses to the challenge of using music for EE that involve finding optimal positions on those continua for each new context that arises.

Five quality dimensions have also emerged from the data in the form of general recommendations from the participants on creating and using environmentally-related music: avoid preaching, recognize the many creative musical “hooks” with which to captivate audiences, make high-quality music, use the music in a way that is relevant and meaningful to the audience, and ensure that any environmental sentiments expressed through the art are sincerely and authentically held. In the midst of these parameters, the musicians in this study, all of whom have been engaging with environmental issues, place themselves and their creations like small lights in the matrix of a multi-dimensional universe. While we should not, as Ingram (2010) reminds us, be too hasty to draw linear conclusions about efficacy, EE can benefit from the dialogue that arises through music, a product of human culture from which so many of us derive intense pleasure.

#### 4.6 Embedded Paper 1: Works Cited

Aronson, E., O’Leary, M. (1982-1983). The relative effectiveness of models and prompts on energy conservation: A field experiment in a shower room. *Journal of Environmental Systems*, 12, 219-224.

Baxter, J. & Eyles, J. (1997). Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers, New Series*, 22(4), 505-525.

Bede Scharper, S. (2012, June 17). From doom to gladness: The future of environmentalism. *The Star.com*. Retrieved from [http://www.thestar.com/opinion/editorialopinion/2012/06/17/from\\_gloom\\_to\\_gladness\\_the\\_future\\_of\\_environmentalism.html](http://www.thestar.com/opinion/editorialopinion/2012/06/17/from_gloom_to_gladness_the_future_of_environmentalism.html).

- Benward, B., Saker, M. (2014). *Music in theory and practice, 9<sup>th</sup> ed., vol. 1*. New York: McGraw-Hill.
- Bobetsky, V. (Ed.). (2015). *“We shall overcome” : Essays on a great American song*. Lanham: Rowman & Littlefield.
- Bonoguo, T. (2011). Do as I do, not as I sing. *Alternatives, 37*(4), 10-14.
- Block, R. (1948). Propaganda and the free society. *Public Opinion Quarterly, 2*(4), 677-686.
- Branagan, M. (2005). Environmental education, activism, and the arts. *Convergence, 38*(4), 33-50.
- Carruthers, B. (2006). Mapping the terrain of contemporary EcoART practice and collaboration: Art in ecology – A think tank on arts and sustainability. Canadian Commission for UNESCO. Retrieved from <http://unesco.ca/~media/pdf/unesco/bethcarruthersartinecologyresearchreportenglish.pdf>.
- Cialdini, R.B., Reno, R.R. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology, 58*(6), 1015-1026. doi: 10.1037/0022-3514.58.6.1015.
- Coombs, P.H., Ahmed, M. (1974). *Attacking rural poverty: How non-formal education can help*. Baltimore: John Hopkins University Press.
- Coss, R. (2013). Multicultural perspectives through music and sustainability education. *Multicultural Education, 21*(1), 20-25.
- David, H. T., Mendel, A., & Wolff, C. (1998). *The new Bach reader: A life of Johann Sebastian Bach in letters and documents*. New York: W.W. Norton.
- David Suzuki Foundation (2014a). *David Suzuki Foundation: Playlist for the Planet*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/> and <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/enter-playlist-for-the-planet/>.

- David Suzuki Foundation (2014b). *David Suzuki Foundation: Playlist for the Planet: Rules and regulations*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/rules-and-regulations/>.
- Eernstman, N., Wals, A. (2013). Locative meaning-making: an arts-based approach to learning for sustainable development. *Sustainability* 5. doi:10.3390/su5041645
- Eernstman, X., van Boeckel, J., Sacks, S., Myers, M. (2012). Chapter 12: Inviting the unforeseen: a dialogue about art, learning and sustainability. In Wals, A., Corcoran, P., (Eds.) (2012). *Learning for sustainability in times of accelerating change*, p.201-212. Wageningen, The Netherlands: Wageningen Academic Publishers.
- Ingram, D. (2010). *The jukebox in the garden: ecocriticism and American popular music since 1960* [Nature, Culture and Literature series]. Amsterdam: Rodopi.
- Jakesch, M., Leder, H. (2009). Finding meaning in art: Preferred levels of ambiguity in art appreciation. *Quarterly Journal of Experimental Psychology*, 62(11), 2105-2112. doi: 10.1080/17470210903038974.
- Jensen, B.B. (2002). Knowledge, action and pro-environmental behaviour. *Environmental Education Research*, 8(3), 325-334. doi: <http://dx.doi.org/10.1080/13504620220145474>
- Jickling, B., Sauve, L., Briere, L., Niblett, B., and Root, E. (2010). The 5th world environmental education congress, 2009: A research project. *Canadian Journal of Environmental Education*, 15: 47-67.
- Jurin, R.R., Fortner, R.W. (2002). Symbolic Beliefs as Barriers to Responsible Environmental Behavior. *Environmental Education Research*, 8(4), 373-394. doi: <http://dx.doi.org/10.1080/1350462022000026791>.
- Kettler, S. (2016). John Williams biography. *The Biography.com website*. Retrieved from <http://www.biography.com/people/john-williams-9532526>.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice Hall.

- Kollmuss, A., Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8(3), 239-260.
- La Belle, T. (1982). Formal, nonformal and informal education: A holistic perspective on lifelong learning. *International Review of Education*, 28(2), p.159-175.
- Lazarus, R.S., Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Levitin, D. (2006). *This is your brain on music: The science of a human obsession*. New York: Plume.
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. North Carolina: Algonquin Books of Chapel Hill.
- Louv, R. (2012). *The Nature Principle*. Chapel Hill, N.C.: Algonquin Books.
- McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: an introduction to community-based social marketing* (3<sup>rd</sup> ed.) Gabriola Island, British Columbia: New Society Publishers.
- Mocker, D.W. and Spear, G.E. (1982). *Lifelong learning: Formal, nonformal, informal, and self-directed*. Information Series no. 241. Retrieved from <http://files.eric.ed.gov/fulltext/ED220723.pdf>.
- Moore, A. (2002). Authenticity as authentication. *Popular Music*, 21(2), 209-223. doi:10.1017/S0261143002002131.
- Nursal, K. (2013, August 11). Twenty years later, the “War in the Woods” at Clayoquot Sound still reverberates across B.C. *Global News*. Retrieved from <http://globalnews.ca/news/774070/twenty-years-later-the-war-in-the-woods-at-clayoquot-sound-still-reverberates-across-b-c/>.
- O’Malley, K. (2014, January 13). Neil Young vs. PMO: Oilsands comments spark war of words. *CBC News*. Retrieved from <http://www.cbc.ca/newsblogs/politics/inside->

[politics-blog/2014/01/neil-young-vs-pmo-oilsands-comments-spark-war-of-words.html](http://politics-blog/2014/01/neil-young-vs-pmo-oilsands-comments-spark-war-of-words.html).

- Orr, D. (1994). *Earth in mind: on education, environment, and the human prospect*. Washington D.C: Island Press.
- Packalén, S. (2010). Culture and sustainability. *Corporate Social Responsibility and Environmental Management*, 17, 118-121. doi: 10.1002/csr.236
- Patel, A. (2008). *Music, language, and the brain*. New York: Oxford University Press.
- Pedely, M., Racheli, D.T. (2009). Is the political troubadour dead? Markets versus politics in local music. *Journal of Popular Music Studies*, 21(3), 266-283. doi:10.1111/j.1533-1598.2009.01196.x.
- Pooley, J.A., O'Connor, M. (2000). Environment education and attitudes: emotions and beliefs are what is needed. *Environment and Behaviour* 32(5), 711-723. doi: 10.1177/0013916500325007.
- Publicover, J., Wright, T., Baur, S., Duinker, P.N. (2016). Engaging with Environmental Issues as a Musician: Career Perspectives from Musicians of the *Playlist for the Planet*. [In preparation.]
- Reno, R.R., Cialdini, R.B., Kallgren, C.A. (1993). The transsituational influence of social norms. *Journal of Personality and Social Psychology*, 64(1), 104-112. doi: 10.1037/0022-3514.64.1.104.
- Shapiro, A. (2013). 'Imperfect harmony': How singing with others changes your life. *NPR (National Public Radio)*. Radio broadcast interview with Daniel Levitin and Stacy Horn, June 3, 2013. Retrieved from <http://www.npr.org/2013/06/03/188355968/imperfect-harmony-how-chorale-singing-changes-lives>.



- Tilbury, D. (1997). Environmental education: A head, heart and hand approach to learning about environmental problems. *New Horizons in Education*, 38, 1-9. Retrieved from <http://www.ln.edu.hk/osl/newhorizon/abstract/v38/1.pdf>.
- Turner, K., & Freedman, B. (2004). Music and environmental studies. *Journal of Environmental Education*, 36(1), 45-52. Retrieved from <http://ezproxy.library.dal.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=15372311&site=ehost-live>
- UNESCO-UNEP (1978). Intergovernmental conference on environmental education. Tbilisi (USSR). Retrieved from <http://unesdoc.unesco.org/images/0003/000327/032763eo.pdf>.
- Zadeh, L.A. (1965). Fuzzy sets. *Information and Control*, 8, 338-353. [doi:10.1016/S0019-9958\(65\)90241-X](https://doi.org/10.1016/S0019-9958(65)90241-X).

Chapter 5, Embedded Paper 2:  
“Engaging with Environmental Issues as a Musician:  
Career Perspectives from the Musicians  
of the *Playlist for the Planet*”

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## 5.1 Introduction

Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend. Conversely, through fuller knowledge and wiser action, we can achieve for ourselves and our posterity a better life in an environment more in keeping with human needs and hopes. (UNEP, 1972, para. 6)

It is certain that our planet faces a myriad of environmental problems (UNEP, 2016c [2016d in thesis]). One of the key sectors the global community turns to in order to fix these problems is education (UNESCO, 1997; UNESCO-UNEP, 1978), as it is believed that ignorance and indifference to environmental issues can be addressed through effective education. Pooley and O’Connor (2000), Tilbury, (1996), Orr (1984), and many other environmental education (EE) scholars recommend a mix of learning approaches for effective EE, including cognitive/information-based, action/behaviour-based, and affective/emotion-based modes. The arts – visual arts, theatre, music, literature, etc. - are particularly well-placed to facilitate the affective/emotion-based learning component of EE and thereby may help people develop pro-environmental values to drive their behaviours (Carruthers, 2006; Packalén, 2010; Eernstman & Wals, 2013). Some authors and advocates, such as McKibbin (2005) and Eerstman and Wals (2013), feel that culture and the arts are of such importance in this regard that they should play a larger role in the push towards sustainability than they currently do.

Music, like other forms of art, has the potential to provoke thought on environmental sustainability. The United Nations Environment Program (UNEP) declares that “music is one of the most powerful media to communicate environmental messages to billions of people worldwide – irrespective of race, religion, income, gender, or age” (UNEP, 2016a). In the practice of their art, musicians themselves can potentially act as environmental educators, whether or not they actually see themselves playing that role. First, a musician can educate and potentially elicit pro-environmental values through their music and performances – a topic addressed in the companion paper of this study, “Music as a Tool for Environmental Education and Advocacy: Artistic Perspectives from Musicians of the *Playlist for the Planet*” (Publicover et al., 2016, in preparation). Second, musicians can create change through modelling pro-environmental behaviour in their professional and personal lives (e.g. donating money and labour to environmental causes, making pro-environmental business and lifestyle choices, etc.). Musicians’ choices in their off-stage lives may bolster whatever authenticity and credibility they may have to speak to/for a wider society onstage on environmental topics. However, the process of engaging with environmental issues may carry potential risks, challenges, and rewards for musicians and for the pro-environmental messages they impart.

This study attempts to understand the efforts of a cohort of musicians to model some of their pro-environmental values in their business practices and lifestyles, along with the parameters – perceived challenges, risks, and rewards – of environmental advocacy in their careers. By means of one-on-one interviews, we have explored the experiences of performing musicians who contributed to the David Suzuki Foundation *Playlist for the Planet*, and who have engaged with environment and sustainability issues in their professional and personal lives. It is hoped that their insights may help other musicians who feel similarly inspired to grapple with environmental issues professionally. It may also inform environmental educators who use music as a teaching tool, and may interest anyone connected to the music industry and music fans in general.

## 5.2 Notes on Authenticity

In musicology, authenticity is understood as the expression of some kind of “truth”, as being “genuine”, and as the opposite of “faking it” (Moore, 2002, p.209-210). Moore defines three overlapping types of authenticity that are applicable both in examining the use of the music itself, covered in the companion paper to this study (Publicover et al., 2016, in preparation) and in looking at the career contexts of the musicians using it:

4. First person authenticity – speaking one’s own truth
5. Third person authenticity – speaking for someone else who is not present
6. Second person authenticity – speaking society’s truth, and thus that of the audience

(Summarized from Moore, 2002, p.209-223)

People may judge themselves from within, and others may also judge them from the outside based on how they are perceived externally. Discord can result when those two perceptions clash.

One issue with authenticity that can arise for musicians who engage in advocacy is the potential for “commodification of protest” (Ingram, 2010, p.236) that can threaten the effectiveness of the message. That is, if a musician is perceived to be making a lot of money from musical advocacy, and/or engaging in it for disingenuous reasons, then that is seen as inauthentic and insincere, and any attached messaging is disregarded (Bonoguore, 2011; Allen, 2012; Ingram, 2010; Pedelty, 2012). Ingram (2010) gives the example of pop superstar Michael Jackson’s 1995 release “Earth Song” with Sony, a large record label, pointing out that natural questions can arise as to how much an environmental message may be watered down or otherwise influenced when corporate sponsorship and commercial viability issues are involved. Ingram (2010, p. 236) also criticizes the messianic nature of the song’s video and its performance at the Brit Awards, which portrayed the pop star as “lone saviour of the Earth’s endangered peoples and

animals” in a way that, in Ingram’s view, smacked of melodrama and commercial music marketing.

Pedelty (2012) also points out that there may be inconsistencies related to the environment and sustainability with “stadium rock” (and pop) shows that carry large ecological footprints. One example that Pedelty offers is U2’s massive 360° Tour of 2009-2011. U2’s sustainability rhetoric, delivered in the course of advocating for global social and environmental issues, clashed with visions of 100 trucks’ worth of their touring equipment. Another example is the 2007 mega-concert Live Earth, featuring 150 acts globally broadcast to millions over a 24-hour period with the intention of bringing a sustainability message to music fans and to prove that large events could be staged in a less impactful way. By means of carbon offsets and other mechanisms, Live Earth did succeed in reducing its footprint below most other mega-events, but still drew criticism for the apparent contradiction of mega-stars living lavish lifestyles and then asking fans to reduce their impact and consumption (Pedelty, 2012).

A conundrum exists in the commercial music business: musicians face a primary directive to make art and to entertain. Some thus may have to tread a careful line between expressing their pro-environmental ideas and possibly alienating some listeners who may not share them – possibly also risking their commercial viability, careers, and income. Pedelty & Racheli (2009) examined the tension between market success and the production of politically-themed music among local- and global-market musicians. They found that full-time musicians usually felt more freedom to speak out on political issues that concerned them, with more career resilience to negative push-back, after they had already established themselves to some degree in their careers. While environmental and political topics overlap only to a certain degree, the possibility of alienating fans can exist in both contexts.

Bonoguore (2011) states that some musicians decide to take the “do as I do, not as I sing” approach. They may not include much actual environment-related repertoire in their stage shows, but they do strive to model their values through other pro-environmental actions, such as playing for fundraisers, raising awareness, financially supporting particular

causes, volunteering, and adopting greener business and lifestyle practices. Such an approach may help to disentangle issues of artistry and entertainment from advocacy.

Many musicians and organizers in the music industry work to reduce the inevitable environmental impact of music festivals, recording studios, packaging, touring practices, and other music business activities. For example, some performers add an “eco-rider” onto the usual contracts with the venues where they perform (Touzeau, 2011). An eco-rider contains environment-related requests from performer to venue as a condition of her/his performance there. These could range from providing recycling stations, to printing promotional materials on recycled paper, using local/organic foods for catering, helping facilitate audience carpooling, banning single-use water bottles, and other actions. Michael Martin of MusicMatters / Concerts for the Environment has been credited with the creation of the “enviro-rider” – a pledge for the actual bands themselves to follow (Pedelty, 2012; Jossi, 2011). He has worked with high-profile musician clients such as Jack Johnson and Steve Miller to help them green their own operations and those of their venues.

Mitigation of environmental damage can also happen at the level of music sales. Methods of music delivery to the consumer have been diversifying over the last decade. Compact disc packaging was formerly restricted to plastic jewel cases; now there are options for biodegradable cardboard packaging, although a musician may or may not have enough negotiating power with their record label to request the latter. Weber, Koomey and Matthews (2009) found that the overall life-cycle environmental impact of compact disc packaging in general is lessened by replacing plastic jewel cases and disc holders with cardboard. Many listeners are increasingly bypassing a hard product altogether and moving to digital download platforms and streaming services. iTunes and other digital platforms have enabled the cheap digital download to far overtake the compact disc in recent years (Covert, 2013).

Examples of large-scale music industry greening initiatives are listed by the United Nations Music and Environment Initiative (UNEP, 2016b). These include festivals like Lollapalooza in Chicago, which draws 225,000 fans annually; Hove, the first carbon-neutral music festival in Norway; and Australia’s Peats Ridge Sustainable Arts and Music

Festival, which runs entirely on renewable energy and has a large EE component. These festivals focus generally on energy use, transportation, sanitation, waste, and greener products. Also listed are other industry players such as musicians, agencies, recording studios, venues, record labels, instrument and equipment manufacturers, and media outlets (UNEP, 2016b).

A music festival can impact heavily on its site (Martinko, 2014; Mitic, 2014). Discarded trash is often the most strikingly visible problem. However, cleaning up can be incentivized. The worst-offending festivals can be shamed and the cleanest festivals praised, as in a 2013 survey of American festivals from the LA Weekly entitled “Which Music Festivals are Dirtiest?” (Baine, 2013), where festivals like Washington’s Sasquatch – nicknamed “Trashesquatch” – rated poorly. O’Rourke, Irwin and Straker (2011) found that the efforts of outdoor music festival organizers and performers to facilitate a pro-environmental, pro-community vibe in an event can set up a standard of attainable socially normative behaviour that can percolate through the temporary network created by the musical event. If it looks as though no one cares about keeping a festival site tidy, then attendees are themselves less apt to properly dispose of their own waste at the event, and the experiences of some are degraded when loose trash is abundant. Conversely, when waste sorting stations are conveniently placed, and if pro-environmental policies are carefully balanced so as to not detract from the primary entertainment mandate of the festival, then that can contribute to a positive vibe that can result in more pro-environmental behaviour by more attendees and an enhanced festival experience for those who find trash objectionable.

In addition to mitigating environmental impacts, initiatives such as those listed above may bolster the authenticity of whatever pro-environmental messaging may be contained in the music itself and the credibility of the musicians and of their industry (UNEP, 2016b; Bonogno, 2011). There are many industry parameters over which individual musicians may or may not exert control, but which can still feed into perceptions of their credibility to speak from their own first-person authenticity and extend it into second person authenticity to speak for the culture at large. They may also help to create a culture in the entertainment industry whereby thinking pro-environmentally can become a

social norm. This study is designed to explore how a cohort of musicians have navigated these issues, and the challenges, risks and rewards they have encountered along the way. To date, this has been partly explored in informal entertainment pieces (Bonoguore, 2011; Ruby, 2007) and through survey and embedded anthropological work (Pedelty, 2012; Pedelty & Racheli, 2009), but to our knowledge, this is the first scholarly attempt to bring as many career parameters together as possible in one holistic package from the perspectives of the musicians themselves, that may potentially inform other musicians who also wish to engage with environmental issues.

### 5.3 Methods

In 2011, the David Suzuki Foundation (DSF) released a 30-track compilation album of environment-related songs called the *Playlist for the Planet*. Eleven tracks on the album were chosen through a combination of jury selection and online voting from among 600+ submissions to a nationwide environmental song contest. All other tracks were donated by popular Canadian artists and groups invited by the DSF (David Suzuki Foundation, 2014a; David Suzuki Foundation, 2014b). Many of these donated tracks were previous releases. Our study focuses on better understanding the efforts of the *Playlist for the Planet* musicians to model some of their pro-environmental values in their business practices and lifestyles, along with the parameters and impacts of environmental engagement on their careers. This includes discussion of the risks, challenges, and rewards that the participants associate with their work, and words of guidance from them for other musicians also seeking to engage with environmental issues in their professional practice.

We used a non-probabilistic purposive sampling technique, inviting all contributors to the *Playlist for the Planet* to participate in our study via a one-time interview. In cases where a group of musicians contributed to a track, the band was asked to select a single spokesperson. Fourteen musicians agreed to be interviewed out of a possible 30, for a response rate of 47%. While this study was not designed to represent a cross-section of



Canadian musicians, the *Playlist* artists who consented to participate did cover a variety of ages (from their 20s to 60s), length of musical careers (from several years to several decades), degrees of full-time/part-time career involvement with music (3-4 part-time, the rest full-time), and audience draw (from local/regional audiences with a few albums to extensive international touring with many albums). In terms of genres represented, folk-related or folk-influenced genres did predominate (see Table 5-1), but not exclusively.

**Table 5-1: Study participants from the David Suzuki Foundation *Playlist for the Planet*.**

Participant Musicians	Genres	Audiences
Berna-Dean Holland	Folk / alt-country	General
Bruce Cockburn	Folk / rock / instrumental	General
David Myles	“Folk jazz” / roots	General
Danny Michel	Folk / world / pop / rock	General
Glenn Sutter	Folk / rock	General
Hayley Sales	Pop / soul	General
Jack Lavoie	Pop / folk / rock	General
Jessie Farrell	Country	General
Remy Rodden	Folk	Children, general
Renee Lamoureux (Keith & Renee)	Country / pop / folk / rock	General, children
Tanya Tagaq	Inuit throat-singing	General
Tara MacLean	Contemporary folk / pop	General
Tarun Nayar (Delhi 2 Dublin)	Bhangra / celtic / world	General
Todd Butler	Comedy / satire / rock / alt-rock / singer-songwriter	Corporate, general

Through semi-structured, open-ended interview questions, we asked the participants to reflect on the authorial intent and composition/delivery techniques for their individual *Playlist* songs, how they felt their *Playlist* songs were received, how they were disseminated through performances and recordings, the place of environmentally-themed

music in their general repertoire, and what other avenues outside of performing and song writing the participants may have found to back up their pro-environmental beliefs. Additionally, we asked them to reflect on what role music could play in EE and cultural change toward sustainability, the risks, challenges, and positive effects that they associated with their engagement, and what advice they hypothetically might give to other musicians engaging with environmental issues, as well as to environmental educators wishing to incorporate music into their programming (for a full list of the questions, please contact the primary investigator).

The interviews were recorded digitally and transcribed. The transcripts were entered into NVivo™10 qualitative analysis software (QSR International, 2014). We used an inductive grounded framework to code the sections of text in the participants' responses relevant to music and the environment. This yielded four generations of codes, revealing emerging trends in response to the environmental issues and sociological and artistic conditions that each artist faced. The participants' responses were verified through member checking (Baxter & Eyles, 1997).

## 5.4 Results and Discussion

The following sections discuss the major themes that have emerged in the analysis of the interview data, grouped into three sections. Section 5.4.1 examines the ways in which the participants have tried to live authentically and credibly by their pro-environmental ideals in both their business lives and personal lives, yielding a diversity of examples which could help other musicians discover what options may be open to them to do similarly. Section 5.4.2 examines some career risks, challenges, and rewards that have emerged for the study participants as a result of their environmental engagement. Examining these dynamics and some of their problem-solving or problem-mitigation techniques may serve to aid other musicians in their attempts to handle either similar or analogous problems when they engage with environmental issues. The final section, 5.4.3, contains general

guidance gleaned from the participants' interviews to other musicians who choose to engage with the environment in their professional lives.

#### 5.4.1 Towards Authenticity

Two out of the three types of musicological authenticity described by Moore (2012) emerge as the *Playlist* artists speak in interview about their personal truths regarding environmental issues: their perceptions of their first person authenticity to themselves, and their second person authenticity to their audiences or to society at large around environmental issues. Any pro-environmental actions that they undertake, beyond the creation of environment-related music, form part of their attempt to stand behind their pro-environmental ideas and create the type of first person authenticity that lends credibility to their public, second person reflections around larger society.

In his interview, participant David Myles describes a possible three-pronged approach to examine the ways through which musicians try to build that authenticity and credibility. He feels that musicians can reveal their values by 1) how they operate as public performers creatively through their music, 2) how they operate as a business, and 3) what they do in their own lifestyles. Myles feels that musicians can, like anyone else, find ways to make their lifestyles more sustainable, and can also find ways to run their music businesses more progressively, not just in terms of the environment but also in how to pay and treat people fairly, etc. He states that whether or not a musician decides to incorporate environmental themes right into a stage show at all depends on her/his personal comfort level with it, but that off-stage actions can play into the effectiveness of any messaging onstage:

It's not going to come off as being authentic or real if it just feels forced or if it's not what you want to do... it's just not going to work, so it's not going to help anybody. It's just so important for people to be real in those [onstage] scenarios... I think some people probably... get up on stage and they do beautiful speeches,

and then they do terrible businesses. I don't know if that's any better than having a good business and not say anything.

Myles' three-pronged, art/business/life organizational approach is corroborated in the literature by Bonoguore (2011) and Pedelty (2012), both of whom have described aspects of musician activists from these three perspectives. In fact, all of the participants in our study have tried to express and model pro-environmental ideals in these three areas. While the participants' onstage musical messaging is covered in the companion paper to this study, (Publicover et al., 2016, in preparation) the sections below examine the other two components, i.e. their various business and lifestyle initiatives. These off-stage efforts can be viewed using frameworks associated both with musical authenticity (described above) and with environmental education (discussed later in this section).

For this study, we looked at what the participants report to have done in their professional lives as musicians. All of the study participants report that they have tried to reduce the environmental impact of their work in the music business. All have done charity and advocacy work for environmental causes, social/humanitarian causes, and causes that bridge both. All have donated time and talent for fundraisers and benefits, and some partake in income donation programs. A few examples are highlighted below, showing the diversity of ways they have found to do this.

After recording an album in 2011 with the Garifuna Collective, an Afro-Amerindian cultural group in Belize (Michel, D., n.d.), Danny Michel raised over \$70,000 through the Danny Michel Ocean Academy Fund (Danny Michel Ocean Academy Fund, 2016) for a local non-profit, environmentally-progressive high school on Caye Caulker, a small island off the Belize coastline (Ocean Academy, 2015). Keith Macpherson and Renee Lamoureux spent two summers in Kenya helping build schools for Free the Children, a charity working to improve living conditions and educational opportunities for children in developing countries (Free the Children, 2016). The duo toured Canadian schools for two years afterwards, bringing music, stories of their volunteerism, and encouragement for Canadian youth to effect positive change. Veteran performer Bruce Cockburn has been involved many social and environmental causes over a four-decade career, including: Oxfam Canada, the Unitarian Service Committee, Amnesty International, the United

Nations Mine Action Service, the United Nations Development Programme, Corporate Watch, Friends of the Earth, War Child, Greenpeace, Campaign for a Landmine Free World, the David Suzuki Foundation, Greenpeace, Doctors Without Borders, and many others (Cockburn Project, n.d.; Cockburn, 2014).

Many participants have donated some or all of the proceeds of a particular album or project to charity. Some partake in business income donation schemes. For example, David Myles participates in 1% Percent for the Planet, a program through which over 1200 business members donate at least 1% of their sales revenue to environmental charities (1% for the Planet, 2016).

Many participants have also found ways of lessening the environmental impact of their businesses. Some participants, such as Jessie Farrell, explicitly write environmental standards into their performance riders, or “eco-riders”, to use a term from Touzeau (2011). Many of the participants make it a business practice to avoid excessive use of non-recyclables, cut down on plastic (including disposable water bottles), recycle, source food wisely, cut down on energy use, etc. Some pro-environmental practices are trickier to implement when travelling than when at home, where infrastructures for waste sorting streams and other practices may vary or have to be tracked down anew in every new destination (Dolnicar & Grün, 2009). Tarun Nayar alludes to these difficulties on a busy tour schedule:

We all carry our own glass bottles and try to use those bottles onstage instead of the plastic ones that we’re often provided with. And we try to eat really consciously... we try to eat organic and support local restaurants and try to avoid chains. And just try to... do what we can as best as we can, keeping in mind that touring is often insane, and we can’t always make the right decisions...

Tara MacLean describes a particular tour that combined education on renewable energy with a mechanism through which the venues were powered with the equivalent of renewable energy:

I was with the band Shaye... we would do fundraisers for WWF [(World Wildlife Fund, 2016)] and then we had WWF fund us on tour with Willie Nelson. We used

that money to [buy] power from Bullfrog to power the stadiums at night when we would play with green energy. [(Bullfrog Power, 2016)]. So then after the show we would sign our CDs, we would give out information about the WWF... and we would also educate people on Bullfrog Power... We started to Bullfrog-Power as many events as we could afford. And sometimes Bullfrog-Powering cost more money than I would actually make in a show! But it was more important to actually bring that message.

There are rough parallels in environmental education terminology around modelling to the participants' efforts to build and meet the challenges of authenticity and credibility described above. For example, Community-Based Social Marketing (CBSM) is a set of strategies developed by McKenzie-Mohr (2011), based on human behavioural studies, to engage people in pro-environmental practices. In this paradigm, pro-environmental music itself and its subject material can be viewed as one possible form of an "effective, captivating message" that is "vivid, concrete, and personal" (McKenzie-Mohr, p. 95). The credibility of the message can be backed up by the act of modelling. Modelling is a component of CBSM that provides the opportunity for learners to see other people, to whom they may relate, translating pro-environmental ideas into action in ways that they can follow or adapt for themselves (McKenzie-Mohr, 2011). Of course, CBSM focuses on engaging people in very specific and concrete behaviours (McKenzie-Mohr, 2011) and not as much on more generalized affective learning, i.e. the creation of emotions and values around environmental issues (Pooley & O'Connor, 2000), which is a particular strength of the arts in general (Packalén, 2010) and music in particular (Coss, 2013; Turner & Freedman, 2004). However, if an artist expresses through song that we should value nature and the environment, s/he can show by behavioural example that s/he values it too. Modelling pro-environmental behaviour thus has the power to build authenticity into the efforts of a musician who engages with environmental issues.

The preceding discussions on authenticity and modelling can also be applied to the participants' lives outside of the music business. They, as many people have done, have made a wide variety of personal lifestyle choices, such as recycling, composting, and reducing general consumption, growing their own food, supporting local food producers,

reducing energy usage, clean transportation, and reducing plastic. Glenn Sutter enjoys year-round bicycle commuting. Renee Lamoureux enjoys shopping in thrift stores and garage sales, redesigning and giving new life to old items. Berna-Dean Holland maintains a natural garden with native prairie flora and habitat for birds and other wildlife. Remy Rodden has mitigated the energy-intensive challenges of living in the Yukon through efficient housing design, a condensed work week to cut down on commuting, and other measures.

Some participants have extensive environment-related business, professional, and/or academic pursuits in addition to their musical ones. For some, these are activities from which they derive their primary income. Berna-Dean Holland has undertaken graduate studies in biological sciences and behavioural ecology, and has worked as a naturalist, conservationist, and zookeeper. She is also a wildlife artist. Glenn Sutter is Curator of Human Ecology at the Royal Saskatchewan Museum and an adjunct professor, researching and organizing community engagement on human sustainability conceptualized as an ecological system (Sutter, 2016). Remy Rodden is a Manager for Environmental Education and Youth Programs for the Yukon government (Rodden, 2016) with his own environmental education music label, Think About Productions. Jack Lavoie owns an eco-friendly landscaping firm in Quebec City.

Many of the participants also specifically mention their efforts to connect their own children with nature, and to integrate their pro-environmental values into their parenting. As Tarah MacLean states:

The most important activism [is] educating our children. What we have is a household that is just really, really aware. When the kids don't turn their lights off, we sit down at the table and we say, "okay, like, let's picture that the planet is an island" – and you know, they actually get really beautiful reminders.

Many participants admit that they could be doing more to lessen their personal impacts. All state that they face the same struggles as anyone else, and also that they are trying. As Bruce Cockburn says: "I compost and I recycle and I try not to over-use and I re-use, and all that stuff. You know, it's just meaningful to a limited degree, but it's the same thing

that everybody has to make choices about... I'm not a paragon of virtue in that regard, but I do my best..."

#### 5.4.2. Challenges, Risks, and Rewards of Engagement

It emerges in this study that the journey towards environmental authenticity and credibility in the music business is not without challenges and impediments for musicians. All participants state that there is room for "greening" improvement in the music industry and in their own endeavours, and many express frustration at what they view as barriers to what they would like to achieve in this area. Other musicians outside of this study may recognize and/or encounter some of these challenges as well in their own careers, or they may encounter analogous ones in other areas of their business. It thus may be useful to look at examples of the particular challenges that these participants have faced, and how they have tried to think creatively and mitigate some of them.

For example, all the participants universally regret the environmental impact of the extensive travelling that most of them have to do to make a living, particularly flying. Flying carries a very high carbon footprint compared to other common modes of travel (Penner et al., 1999). It is seen as a liability in their business that erodes their ability to live up to their ideals. As Todd Butler says: "If I was in a country that was a lot smaller, where the gigs were a lot closer together, then I wouldn't need to burn as much gas to get to my shows". Tarun Nayar adds: "We also do try to travel as green as we can. Ideally it would be great to pull like a carbon-neutral tour like Radiohead, but that takes considerable capital to pull it off well."

Yet, some participants have found partial mitigation strategies for this dilemma. Jack Lavoie buys carbon offsets for his travel through PlanetAir (PlanetAir, 2016). Offsets are invested in renewable energy, reforestation, and energy efficiency projects to lessen and mitigate greenhouse gas emissions. David Myles likes to tour "small and light", with a minimum of equipment and just a few band members. Myles says that he prefers to string a number of performances together in smaller centres within a few hours' drive of each



other, rather than jumping vast distances between larger centres, but still feels discomfort with the flying he has to do:

Being a musician is brutal for the environment... I fly all the time, and I think about that every time I fly... So for me to get up on stage and tell people how to live, it just doesn't feel right, entirely. I can do what I can do in my own life, and certainly try to be as positive as possible in all my music... we do lots around our day-to-day lifestyle, [which] but for my flying would probably be pretty good, but it doesn't matter when you add flying to it every couple of weeks, because it adds up. So it's a tough place to be a guy who's going to sit up and talk about that stuff.

The results of this study also reveal another challenge of environmental engagement for musicians: autonomy. Many of the participants discuss issues around control of the business aspects of their art, and instances where their own values have not meshed with those of their management team or corporate sponsors. For example, Capitol Records once arranged a lucrative tour for Tara MacLean with sponsorship from Stayfree Maxipads (owned by Energizer at the time of writing). This created a dilemma, as MacLean believed that there were waste and environmental issues associated with Stayfree's feminine hygiene products. She felt that the sponsorship was not in keeping with her stated values, and yet to pull the sponsorship would have jeopardized the tour. She went through with it, but felt relieved to end the association upon completing the tour. It highlighted for her the need to inform her label that she had to be consulted before future sponsors were engaged. However, another crisis emerged on a subsequent tour when she, as a member of the band Shaye, was expected to perform on a stage sponsored by Nestlé, a multinational company which she had always personally boycotted because she believed them to be guilty of many unethical environmental and business practices. As MacLean explains, this pushed her too far, and she did not go through with the performance:

I absolutely refused. I didn't do it... but I had to get to that point. I had to be standing in front of a sign with Stayfree, and go, this feels wrong, this doesn't feel good to me. I can't do this [with Nestlé]. My internal moral compass is "I can't

mix my music with this.”

Some participants have had control, in their relationship with their record labels, over how their compact discs are packaged – older-style plastic jewel cases versus biodegradable cardboard – and some have had little or no control. Bruce Cockburn states that he did not initially have a choice when the biodegradable packaging first came out. David Myles observes that cardboard cases are now much more common than they once were, that they are lighter and easier to pack than plastic, and that listeners are increasingly bypassing a hard product completely and moving to digital download platforms and streaming services.

On the topic of autonomy, some participants express the belief that the more famous a musician becomes, and the larger audiences they draw, the more clout they tend to exercise with both the public and with their own management, sponsors, and other stakeholders in the music industry with regard to incorporating pro-environmental messaging and business practices. For example, one of the younger participants, Hayley Sales, expresses the hope that as her career grows and she draws larger audiences, she will be able to stage larger fundraisers without conflicting with her label; she looks to other musicians whom she views as having done this successfully as models. In their study on musicians and political messaging/activism, Pedelty & Racheli (2009) report a similar relationship between the ability to draw larger audiences and increased autonomy with regard to advocacy on issues.

Jessie Farrell voices general frustrations common to many participants around trying to achieve some kind of authenticity to one’s own pro-environmental ideals at work, whether it be because of flying or any number of problem issues; however, she feels the need to persevere:

It’s hard to travel somewhere to play a show for a fundraiser, and not be on the plane and not be affecting the environment... Being someone that’s caring and trying to connect with the environment and be good to it and respect it, I think you’re just going to be depleted at times, and sort of confused and irritated. But I think that you just have to always try your best to always move towards sort of a more sustainable lifestyle. And just by showing that you’re doing it – you don’t

want to preach -- but I try and make sure that the people around me know that that's what I do. And that should be normal.

The participants all recognize that their public platforms can potentially be used to encourage pro-environmental behaviour. They view that as both a potentially intrinsically rewarding, but also challenging and risky, aspect of engagement. Given the very public nature of their work, all of the participants are cognisant of the need to stand authentically behind their ideals and to avoid the disingenuous “commodification of protest” (Ingram, 2010, p.236) referred to earlier in this literature review, which can kill the effectiveness of a message and reflect badly on the messenger (Bonoguoire, 2011; Allen, 2012; Pedelty, 2012).

Recognizing the potential reach of celebrity, Tarah McLean states: “You have a very loud voice when you have a microphone, and you have a very loud voice when that microphone and that song gets on the radio. You have an even louder voice when that voice gets on the television”.

Bruce Cockburn concurs, adding the qualifier that an audience must also be receptive for any message to have an effect:

Famous people, people who have an audience, have perhaps a slightly greater opportunity and a slightly greater responsibility to use that visibility for positive purposes. I'm not a crusader for this; I think you've got to do what's in your heart to do, and if something's not in your heart to do, then you shouldn't do it because you're not going to be good at it anyway. But, we should all do what we can, basically, and some of us are in a position to make a louder noise about it than other people are. But without those other people, that loudness means nothing. So I can get up and sing “If a Tree Falls” and if the whole audience isn't interested, it means nothing at all; but if a thousand people sitting in a room agree with that song and are strengthened in their own resolve by... this, the act of sharing in that song... then it has an effect.

Examples can be found of instances where entertainment figures, for better or for worse, have influenced some portion of public opinion on societal issues, instances which

support why the participants recognize the open potential of public platforms. For example, actress Jenny McCarthy, in claiming that her son became autistic as a result of a vaccine, fanned the flames of public debate over the alleged connection between autism and vaccines long after it had been scientifically discredited (Gross, 2009). Actress Angelina Jolie's public revelation of her positive test for the BRCA1 gene, responsible for a particular hereditary breast cancer, and prophylactic double mastectomy, provoked a spike in testing for that gene and related referrals that may have resulted in more timely treatment for some (Evans et al., 2014).

Because celebrities are recognized by a network of people who have come in contact with their work in one way or another, they are sometimes asked or volunteer themselves to share some of their spotlight with various causes. At the 2015 public launch of the *Leap Manifesto*, a petition to the then-Conservative government of Canada promoting the overhaul of the national economy to incorporate environmental and social values, David Suzuki explained the rationale behind including celebrities such as Leonard Cohen, Ellen Page, Arcade Fire, Feist, Rachel McAdams, Donald Sutherland and others in some of these public events:

It's an entry point in for people who pay a lot of attention to celebrities that you otherwise might not have. It can backfire if celebrities act as if they know about everything there is about it. But what they do is offer their ability to attract press to let people like Naomi [Klein, activist/author] talk to the wide world.

(Suzuki quoted in Ostroff, 2015)

All of the participants, full- as well as part-time musicians, have had some experience of sharing their spotlight in various ways, including at the many fundraisers for which they have played.

The participants recognize the potential for other negative repercussions with this type of engagement. They realise that if they assert an idea that is unpopular with a certain segment of the population, not only is there a risk of turning off potential audience members, but also venues, corporations, sponsors, and buyers who may preferentially book a less controversial performer, in the interests of maximizing audience attendance and revenues. This can be particularly relevant in the world of corporate engagements, in

which the client's needs and expectations for a particular event must be met as a service provided by the hired entertainer, as Todd Butler explains:

I've always imagined that there has been an impact on my career because of my outspokenness in certain areas. It's really hard to tell, because if somebody doesn't hire you for a gig, you don't know that they didn't hire you because they didn't call – and why didn't they call?... But it hasn't stopped me, because I'm just following my conscience. I have to do it.

Many participants also take into consideration the complicating factor of making one's primary income from music. During the interview period, Glenn Sutter, Berna-Dean Holland, and Remy Rodden considered themselves to be part-time musicians, pointing out that they did not necessarily face the same financial pressures – and thus perhaps difficult choices – that other full-timers might face, and that they thus may have a different perception of risk.

Caution has led some participants to self-censor. For example, one of the participant bands, Delhi 2 Dublin, opened up a nationally-broadcast Canada Day concert on Parliament Hill in Ottawa. The Prime Minister of the time, Stephen Harper, was on hand to greet the performers afterwards. Harper's Conservative administration had been sharply criticised for gearing the Canadian economy around fossil fuel extraction, particularly the carbon-intensive Alberta Oil ("Tar") Sands, while ignoring calls to curb carbon emissions, dismantling environmental protections, and overriding the concerns of many First Nations groups (Lukacs, 2015). Band member Tarun Nayar felt so disgusted by these and other policies that he refused to shake the Prime Minister's proffered hand, but suppressed an urge to make an even larger statement:

I think that that was my moment to do something even more dramatic, and I guess in some way I was scared, and I didn't want put the band on the line. But what I really wanted to do was wear a t-shirt that made some kind of a statement on the Tar Sands, like "No Tar Sands" – or even started the show wearing a t-shirt that was acceptable, and then taken off that mid-way through the show – because I knew that we actually had a little bit of a moment there... So I think that that would have been something that could have potentially seriously affected our

future, because I'm sure he wouldn't have appreciated it, but in the moment I decided not to do that, for whatever reason.

Some of the participants have taken part in protests. Situations exist where such engagement, even outside of the music business, may carry risks and ramifications for a musician's career. For example, Tara MacLean was one of over 800 people arrested in the 1993 demonstrations against old-growth clearcut logging planned for Clayoquot Sound, British Columbia (Nursall, 2013). She composed "Song for Clayoquot" in prison. The area was later designated a biosphere reserve. MacLean describes the ramifications that her incarceration could have had on her career, specifically the difficulties of obtaining travel documents for international touring:

I think going to jail was definitely a lifestyle choice – like you could potentially have a criminal record... I was twenty at the time, and my criminal record was actually expunged at the end of the day, so that I can travel freely between countries and into the States, which is great. It made getting a travel visa a lot easier for touring... We weren't criminals... The charge was criminal contempt of court for practicing civil disobedience...

Regardless of the potential for negative repercussions, the participants seem to agree that speaking out is important and rewarding, not only personally for them as concerned citizens, but in terms of modelling and encouraging pro-environmental sentiments in others. Berna-Dean describes moments of spontaneous connection with her audiences as "ineffable and overwhelmingly humbling". Danny Michel says that for every one negative comment he may receive on his work, he may receive "five thousand wonderful ones", including letters from school children. Remy Rodden often receives direct feedback on his work with children and youth because parents, teachers, and educational outcomes are also involved. Hayley Sales speaks about reading her fans' perceptions of her song "Not in His Garden", and about a fan video that was inspired by it (bigoilgreed, 2010):

I've definitely felt that people really respond to it well, and they seem to get really into it... You can tell that they've received the message at the end because they cheer in a way that's different than just cheering for a song – it's like, agreeing

with what you've sung about. And then, there's a viral video – someone [a fan] had made it relating to oil and the oil industry, and used “Not in His Garden” behind it, and it's gotten a lot of plays [online]. So that's another, it's a viral representation of how people are responding to it... Whenever someone brings up a song to me or wants to talk about it, that to me is positive. Like, it connected with someone, they heard it, they got it, they wanted to talk about it.

Remy Rodden and the duo of Keith and Renee find it rewarding to encourage children/youth to find their own ways to effect positive change. Renee Lamoureux states that her duo's song “The One” “...is pretty much about not doubting yourself and just moving forward and, and shining your light, whatever that may be.”

The participants also describe what they see as the courage that it takes to take a stand, despite potential risks, on issues that are meaningful. Tara MacLean offers encouragement to other musicians:

Speak for your time, whatever it is that you're passionate about... One of the things that's the most important to me is to raise my children with a sense of justice – and when you see injustice happening, that you act. It's the people who hid the Jews in Germany. It's the people who stood up for the African Americans in Mississippi. It's the people who see injustice being done and maybe even though it's not popular, maybe even if it puts your own life in danger, like putting yourself in front of a logging truck, or putting yourself in jail... what are you willing to sacrifice for what's right in the world? And getting up and singing a song isn't that big of a sacrifice.

After outlining the potential risk of losing work in the world of corporate engagements for speaking out, Todd Butler maintains: “I feel good in the morning when I get up, knowing that I'm batting for the right team, as far as I can see.”

In advocating for the environment, indigenous peoples, women's issues, and her conceptualization of Mother Earth as a living entity deserving of respect and protection, Inuk throat singer Tanya Tagaq sees a need to bring indigenous and non-indigenous people together: “I guess it's just recruiting – we have to recruit as many people as

possible, and then everyone has to act as a unit, if we can. I know it's like idyllic and communist, but if I can't hang on to my ideals, then what's the point of life, you know? So we just have to do as much as we can."

However, while discussing what rewards the participants perceive in their engagement activities, some of them point out the difficulties of assessing whether they have inspired pro-environmental actions in their audiences or not. This is consistent with Ingram (2010), who cautions against drawing direct lines between the authorial intent of an environment-related song and how it will be received and/or acted upon. Philosopher, psychologist and educator John Dewey (1934) describes art as an experience, and an art object or artistic media as simply the vehicle through which to have an artistic experience, interacting with all that the individual engaging with that art brings to it. This leaves the door open to interpretation; the meaning and value drawn from any piece in any art form is free to differ from the intent of its creator and from audience to audience, which means that impacts are hard to measure and predict. In the context of environmental messaging in song, Bruce Cockburn puts this in pragmatic terms:

When you put on a benefit in aid of something, people come to the show and then they go away from the show having had a good time, feeling like they've done their bit for the cause. And of course they haven't, they've just done their bit for you. Or for their ego, as the case may be. I don't say this in a disparaging way because we all do it, and it's a human thing, and it's better that people should pay attention than not pay attention, even if they do enjoy themselves and then think they've done their bit. But it is an issue... like, what do you expect to get out of putting a song like that out? And one of the things you don't expect to get is that people will suddenly run out and fix it all, because they don't. And although individuals sometimes get inspired by songs – or their own inclinations are sufficiently reinforced by a song – that they will then actually take action, and that does happen sometimes, it's not something you can expect or rely on.

Because of these difficulties, some of the participants feel that it is important to take a long-term view and to manage their expectations regarding the impact their work may have on the audience. Bruce Cockburn cites a 1997 international ban on landmines as



one of the few tangible success stories that he and many advocates had hoped for, but that it was a small drop in a sea of ongoing advocacy issues. He cautions:

Most of the time – and I learned this almost right away, getting involved with issues – you better not attach yourself to the outcome. Because if there is an outcome at all, it may be long after you’re dead. So don’t get involved in Cause A or Cause B based on your expectation of winning something – that’s what you’re trying for of course, and you have to have a degree of belief that your efforts are worthwhile – but don’t expect to see the results of the work, because it will take a long time usually with these big issues. Otherwise, you just burn out.

### 5.4.3 Passing the Torch

The insights shared by these musicians into their engagement with environmental issues may potentially inform other musicians who also wish to engage in similar ways in their professional practice. To that end, when analyzing the interviews, the participants’ responses culminated in three general tips:

1. Above all, make good, engaging art, which is the conduit.
2. Do your research and be authentic to what it is that you know and believe.
3. Don’t preach.

Tarun Nayar articulates the perspective of the musician who has already chosen to pursue music as an art form unto itself, on making good, engaging art for its own sake:

Art is... definitely not there to push a political agenda. I think pushing a political or environmental agenda is only a good idea if it actually reflects your own expression of the world... I think art is, for artists like you and me, and all other musicians – art for us is the holy grail; the holy grail is not environmental sustainability. We’re not singing to effect that change, but we have to sing about what our reality is, and we really believe in sustainable living... So we have to sing about what’s important to us.

Pedely (2012) conducted embedded anthropological research by actually learning to sing, play guitar, and operate in a band with environment-related repertoire, with the purpose of uncovering what environmentally-engaged career musicians experience. He reported many of the same parameters and challenges as the participants of this study do in raising environmental topics with his audiences. Yet, his living did not depend on his art, and music was not his calling in the way that it may well be for many musicians, including the participants of this study. The difference may lie in the initial agenda – which, for Nayar and others, is art.

Glenn Sutter states: “Be authentic, and write what you know... I explore personal experiences, personal insights... Sometimes it comes out as a story with other characters, but those are my thoughts coming from what I’ve been through.”

For Berna-Dean Holland, researching a topic is an important part of expressing herself authentically on it:

Pick an issue that you’re concerned about... Do your homework on it, try to understand it... [Be] genuine... If you’re a person who really cares about it, hopefully that will shine through in your music... Don’t be afraid to just be honest.

There is a delicate balance to find between entertaining audiences and expressing oneself authentically, particularly in certain performing contexts. In using topical issues as satirical fodder as both a comedian and a musician, Todd Butler must tread that line for many of the corporate engagements for which he is hired: “I get hired because I’m funny, and they want to laugh. And so I’ll put a little bit of material in there that pokes them, but generally my job is to make them laugh.”

Bruce Cockburn finds his balance with his audiences on environmental issues in the same way that he would with any other type of song:

I recognize that people buy records to be ‘entertained’. They’re not buying records to study philosophy, or to educate themselves in any way necessarily... So given that fact, I try to write songs that I think are going to move people emotionally and interest them intellectually, and that’s my concession to

entertainment. I write songs that I'm moved to write because something has touched me and produced an emotional response that triggers the creative process.

The ineffectiveness of preaching as a messaging technique is also discussed in the companion paper to this study (Publicover et al., 2016, in preparation). Aside from this, preaching also overlaps into ramifications for the performers themselves, in their relationships with their audiences and how they view their own work. Hayley Sales explains, including a caution against condescension towards audiences:

I think it's a very fine line... the best way to communicate isn't by forcing it down people's throats... As an artist it's much more about you caring about it and allowing that to come through in your work... in a way that impacts people most. Because it's not as though they're being scolded like a kid, it's just that they're looking at you and seeing your love for something, and that hopefully inspires them to care.

Bruce Cockburn distinguishes between music that is written for more external reasons – expressly for entertainment, and/or for some sort of utilitarian purpose – and music that comes from within to authentically represent its creator. For Cockburn, environmental topics should fall into the latter category:

You can be a Tin Pan Alley-type songwriter and write fantasy songs, and funny songs, or just love songs that say the same old thing – and sometimes those are great, sometimes that's what we all want to hear. But... I can really only offer advice to people who are trying to do something like what I do, which is to put truth in their songs, and... have the song writing be an art form. So okay... then the challenge is to... deliver your feelings in a way that allows people to be touched by it – gets past their defences and touches them in some way that means something... You have to be careful not to just lie to people... and [be careful to] avoid the trap of propagandizing. Because, although once in a while you'll see a piece of propaganda that's effective – like, a lot of graphic art that's propagandistic can be a nice poster to have on your wall – but with songs it tends not to be like that, and the more propagandistic it is, the more of a sermon it sounds like it is, the fewer people are going to be captivated by it... You can be

paid to write propaganda, but you can't be paid to tell the truth.

An image problem for musicians can arise when their music verges into preaching and propaganda, when the lines between sincerity and a possible ulterior motive begin to blur. Even Woody Guthrie, a left-leaning American folk icon of the 1930s Dust Bowl days, accepted a contract in 1941 to create musical propaganda for a film promoting the construction of hydroelectric dams on the Columbia River (Pedelty, 2008). At the time, Guthrie was struggling to pay debts and support a family, and the United States was trying to pull itself out of the Great Depression. While such aggressive economic development would bring jobs to the working people he bolstered in song, it would also denigrate the natural landscape that he praised, and the Columbia River would no longer “Roll On” as it did in his ode to it. Guthrie, who had protested the lynching of African Americans in song, and who showed an interest in the indigenous peoples who fished the Columbia River before the dams impeded its salmon migrations, apparently saw no contradiction in also musically praising the forced and violent removal of Indians from the river to make way for modern economic “progress” – or else perhaps this song content, incongruent as it was with the social values he supposedly stood for, was not of his choosing. Interestingly, this would be the last time Guthrie would accept such contractual work (Pedelty, 2008).

## 5.5 Conclusion

This study focuses on a cohort of musicians who have all taken steps in their business practices and personal lives to model the pro-environmental values that they express in song. To them, an important part of being an authentic musician is to write from what they know, believe, and live themselves. They realise that their efforts to live up to their environmental ideals are imperfect, and they also face some frustrating limitations in that regard. These include travel and other industry activities that leave significant ecological footprints, wielding autonomy, using their public platforms to best effect, and other issues. However, they have tried to find creative ways to meet these challenges.

The participants feel that environmental topics are not well-served by music that is preachy, propagandizing, simply utilitarian, and/or of inferior quality, both because of the ineffectiveness of the messaging and in the way that it reflects badly on the messenger. Rather, they would start by placing their art first and speaking their personal truths through it, as they would with any other topic that might inspire them creatively, thus creating the first person authenticity that hopefully speaks through art to the audiences who come to enjoy that art. When this truth resonates with audiences, second person authenticity (Moore, 2002) is created. To achieve this while also making a living as a musician requires a delicate balance, which varies depending on the context and the degree of need for the music to simply entertain or to otherwise serve an external utilitarian purpose. The participants realise that alienating potential fans, sponsors, and buyers in the music industry does not help their careers either. These factors can affect how much or how little environment-related content they may include in their shows, and how much they may prefer to show their values through actions instead of/in addition to through song. Thus, they must find a spot for themselves on the tightrope between the first person authenticity that they feel drives their art and behaviours, and the demands of the industry that allows them to practice and share their art with others.

Despite these risks and challenges, all derive personal satisfaction from trying share and model their pro-environmental values in whatever ways they can. They hope that, through their networks, they can help to create a positive atmosphere where caring for the world we live in is a normal part of life. This research represents one means through which they may share their experiences to help guide other musicians who seek to engage with environmental issues in their work and lives.

## 5.6 Embedded Paper 2: Works Cited

1% for the Planet (2016). Home. Retrieved from <http://onepercentfortheplanet.org/>.

- Allen, A. (2012). Ecomusicology: music, culture, nature... and change in environmental studies? *Journal of Environmental Studies and Sciences*, 2, p.192–201. doi: 10.1007/s13412-012-0072-1.
- Baine, K. (2013, July 11). Which music festivals are dirtiest? *LA Weekly*. Retrieved from <http://www.laweekly.com/music/which-music-festivals-are-dirtiest-4170656>.
- Baxter, J. & Eyles, J. (1997). Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, New Series, 22, 4, 505-525.
- bigoilgreed (2010, May 17). *Hayley Sales – Not in His Garden* [Video file]. Retrieved from <https://www.youtube.com/watch?v=UhmZsGFoRZA>.
- Bonoguoire, T. (2011). Do as I do, not as I sing. *Alternatives*, 37(4), 10-14.
- Bullfrog Power (2016). Bullfrog Power: Home. Retrieved from <http://www.bullfrogpower.com/>.
- Carruthers, B. (2006). Mapping the terrain of contemporary EcoART practice and collaboration: Art in ecology – A think tank on arts and sustainability. Canadian Commission for UNESCO. Retrieved from <http://unesco.ca/~media/pdf/unesco/bethcarruthersartinecologyresearchreportenglish.pdf>.
- Cockburn, B. (2014). *Rumours of Glory: A memoir*. Toronto: HarperCollins.
- Cockburn Project (n.d.). Issues. *The Cockburn Project*. Retrieved from <http://cockburnproject.net/issues/index.html>.
- Coss, R. (2013). Multicultural perspectives through music and sustainability education. *Multicultural Education*, 21(1), 20-25.
- Covert, A. (2013, April 25). A decade of iTunes singles killed the music industry. *CNN Money*. Retrieved from <http://money.cnn.com/2013/04/25/technology/itunes-music-decline/>.

- Danny Michel Ocean Academy Fund (2016). Danny Michel Ocean Academy Fund Facebook Page [Social media page]. Retrieved from <https://www.facebook.com/The-Danny-Michel-Ocean-Academy-Fund-703876759723591/>.
- David Suzuki Foundation (2014a). *David Suzuki Foundation: Playlist for the Planet*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/> and <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/enter-playlist-for-the-planet/>.
- David Suzuki Foundation (2014b). *David Suzuki Foundation: Playlist for the Planet: Rules and regulations*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/rules-and-regulations/>.
- Dewey, J. (1934). *Art as experience*. New York: Perigee Books.
- Dolnicar, S., Grün, B. (2009). Environmentally friendly behavior: Can heterogeneity among individuals and contexts be harvested for improved sustainable management? *Environment and Behavior*, 41(5), 693-714. doi: 10.1177/0013916508319448.
- Ernstman, N., Wals, A. (2013). Locative meaning-making: an arts-based approach to learning for sustainable development. *Sustainability* 5. doi:10.3390/su5041645.
- Evans, G., Barwell, J., Eccles, D.M., Collins, A., Izatt, L., Jacobs, C. ... Murray, A. (2014). The Angelina Jolie effect: how high celebrity profile can have a major impact on provision of cancer related services. *Breast Cancer Research*, 16(5), 442-448. doi:10.1186/s13058-014-0442-6.
- Free the Children (2016). What we do. *Free the Children*. Retrieved from <http://www.freethechildren.com/what-we-do/>.
- Gross, L. (2009). A Broken Trust: Lessons from the Vaccine-Autism Wars. *PLoS Biology* 7(5): e1000114. doi:10.1371/journal.pbio.1000114.
- Ingram, D. (2010). *The jukebox in the garden: ecocriticism and American popular music since 1960* [Nature, Culture and Literature series]. Amsterdam: Rodopi.

- Jossi, F. (2011, April 18). Q&A with CEO Michael Martin of Effect Partners. *Finance and Commerce*. Retrieved from <http://www.lommen.com/pdf/michael-martin-finance-commerce-4-18-11.aspx>.
- Lukacs, J. (2015, August 11). Revealed: The Canadian government spent millions on secret tar sands advocacy. *The Guardian*. Retrieved from <http://www.theguardian.com/environment/true-north/2015/aug/11/canadian-government-spent-millions-on-secret-tar-sands-advocacy>.
- Martinko, K. (2014, July 13). Music festivals are environmental disasters. *Treehugger: Finding a greener future*. Retrieved from <http://www.treehugger.com/culture/why-music-festivals-are-environmental-disaster.html>.
- McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: an introduction to community-based social marketing* (3<sup>rd</sup> ed.) Gabriola Island, British Columbia: New Society Publishers.
- McKibbin, B. (2005). What the world needs now is art, sweet art. *Grist*. Retrieved from <http://grist.org/article/mckibbin-imagine/>.
- Michel, D. (n.d.). Danny Michel with the Garifuna Collective of Belize. *Danny Michel*. Retrieved from <http://www.dannymichel.com/newsite/garifunacollective.html>.
- Mitic, L. (2014, August 18). The environmental impact of music festivals. *The Jellyfish Project*. Retrieved from <http://www.thejellyfishproject.org/home/2014/8/18/k9462no435t52wo24kn2kgqw17wvqn>.
- Moore, A. (2002). Authenticity as authentication. *Popular Music*, 21(2), 209-223. doi:10.1017/S0261143002002131.
- Nursall, K. (2013, August 11). Twenty years later, the “War in the Woods” at Clayoquot Sound still reverberates across B.C. *Global News*. Retrieved from



<http://globalnews.ca/news/774070/twenty-years-later-the-war-in-the-woods-at-clayoquot-sound-still-reverberates-across-b-c/>.

Ocean Academy (2015). *Ocean Academy Homepage*. Retrieved from <http://oaseatide.com/>.

O'Rourke, S., Irwin, D., Straker, J. (2011). Dancing to sustainable tunes: an exploration of music festivals and sustainable practices in Aotearoa. *Annals of Leisure Research*, 14(4), 341-354. doi: 10.1080/11745398.2011.639383.

Orr, D. (1994). *Earth in mind: on education, environment, and the human prospect*. Washington D.C: Island Press.

Ostroff, J. (2015, September 15). Leap Manifesto calls on Canada to change, well, everything. *Huffington Post Canada*. Retrieved from [http://www.huffingtonpost.ca/2015/09/15/leap-manifesto\\_n\\_8141022.html](http://www.huffingtonpost.ca/2015/09/15/leap-manifesto_n_8141022.html).

Packalén, S. (2010). Culture and sustainability. *Corporate Social Responsibility and Environmental Management*, 17, 118-121. doi: 10.1002/csr.236.

Pedelty, M. (2008) Woody Guthrie and the Columbia River: Propaganda, art, and irony. *Popular Music and Society*, 31(3), 329-355. doi: 10.1080/03007760701219079.

Pedelty, M. (2012). *Ecomusicology: Rock, folk, and the environment*. Philadelphia: Temple University.

Pedelty, M., Racheli, D.T. (2009). Is the political troubadour dead? Markets versus politics in local music. *Journal of Popular Music Studies*, 21(3), 266-283. doi:10.1111/j.1533-1598.2009.01196.x

Penner, J.E., Lister, D.H., Griggs, D.J., Dokken, D.J., McFarland, M. (Eds.) (1999). Special Reports: Aviation and the global atmosphere. *Intergovernmental Panel on Climate Change (IPCC)*. Retrieved from <http://www.ipcc.ch/ipccreports/sres/aviation/index.php?idp=0>.

- PlanetAir (2016). Offset. *PlanetAir.ca*. Retrieved from <http://planetair.ca/en/index.sn>.
- Pooley, J.A., O'Connor, M. (2000). Environment education and attitudes: emotions and beliefs are what is needed. *Environment and Behaviour* 32(5), 711-723. doi: 10.1177/0013916500325007.
- Publicover, J., Wright, T., Baur, S., Duinker, P.N. (2016). Music as a Tool for Environmental Education and Advocacy: Artistic Perspectives from Musicians of the *Playlist for the Planet*?. [In preparation.]
- QSR International (2014). *NVivo 10 for Windows: Getting started*. Retrieved from <http://download.qsrinternational.com/Document/NVivo10/NVivo10-Getting-Started-Guide.pdf>.
- Rodden, R. (2016). About. *Remy Rodden*. Retrieved from <http://remyrodden.com/about>.
- Ruby, M. (2007). Environmental odyssey: Live at the Ottawa Folk Festival. *TNQ (The New Quarterly: Canadian Writers and Writing)*. Retrieved from <http://www.tnq.ca/article/environmental-odyssey-live-ottawa-folk-festival>.
- Sutter, G. (2016). Glenn C. Sutter, Curator of Human Ecology. *Royal Saskatchewan Museum*. Retrieved from <http://www.royalsaskmuseum.ca/research-and-collections/sustainability/glenn-sutter>.
- Tilbury, D. (1997). Environmental education: A head, heart and hand approach to learning about environmental problems. *New Horizons in Education*, 38, 1-9. Retrieved from <http://www.ln.edu.hk/osl/newhorizon/abstract/v38/1.pdf>.
- Touzeau, J. (2011). *The Green Musicians' Guide: Sound Ideas for a Sound Planet*. Boston: Course Technology, Cengage Learning.
- Turner, K., & Freedman, B. (2004). Music and environmental studies. *Journal of Environmental Education*, 36(1), 45-52. Retrieved from <http://ezproxy.library.dal.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=15372311&site=ehost-live>

- UNEP (1972). *Declaration of the United Nations Conference on the Human Environment*. Retrieved from <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97&ArticleID=1503&l=en>.
- UNEP (2016a). *Music and Environment Initiative: About*. Retrieved from [http://www.unep.org/music\\_env/about.asp](http://www.unep.org/music_env/about.asp).
- UNEP (2016b). *Music and Environment Initiative: Participants*. Retrieved from [http://www.unep.org/music\\_env/participants.asp](http://www.unep.org/music_env/participants.asp).
- UNEP (2016c). *United Nations Environment Programme: Environment for development*. Retrieved from <http://www.unep.org/default.asp>.
- UNESCO (1997). *Declaration of Thessaloniki*. Retrieved from <http://unesdoc.unesco.org/images/0011/001177/117772eo.pdf>.
- UNESCO-UNEP (1978). Intergovernmental conference on environmental education. Tbilisi (USSR). Retrieved from <http://unesdoc.unesco.org/images/0003/000327/032763eo.pdf>.
- Weber, C.L., Koomey, J.G., Matthews, H.S. (2009). *The energy and climate change impacts of different music delivery methods. Final report to Microsoft Corporation and Intel Corporation*. Retrieved from <http://download.intel.com/pressroom/pdf/cdsvsdownloadsrelease.pdf>.
- World Wildlife Fund (2016). World Wildlife Fund: Home. Retrieved from <http://www.worldwildlife.org/>.

## Chapter 6: Conclusions

In this study, I invited musicians from the David Suzuki Foundation *Playlist for the Planet* to share their thoughts and experiences, through individual one-on-one interviews, on engaging with environmental issues as musicians. I asked them about their environment-related music itself – why and how it was created, when and how it was delivered, and what they felt the parameters were if they hoped to touch people through their music and help create pro-environmental attitudes. I also asked them about the effects and parameters, both negative and positive, of engagement with environmental issues on their musical careers, and how they negotiated those issues. This chapter will discuss significant findings of this research, lessons learned, how these two research streams have interacted with each other, recommendations for future research, and reflections on the contributions this work makes to theory and practice.

### 6.1 Significant Findings and Support

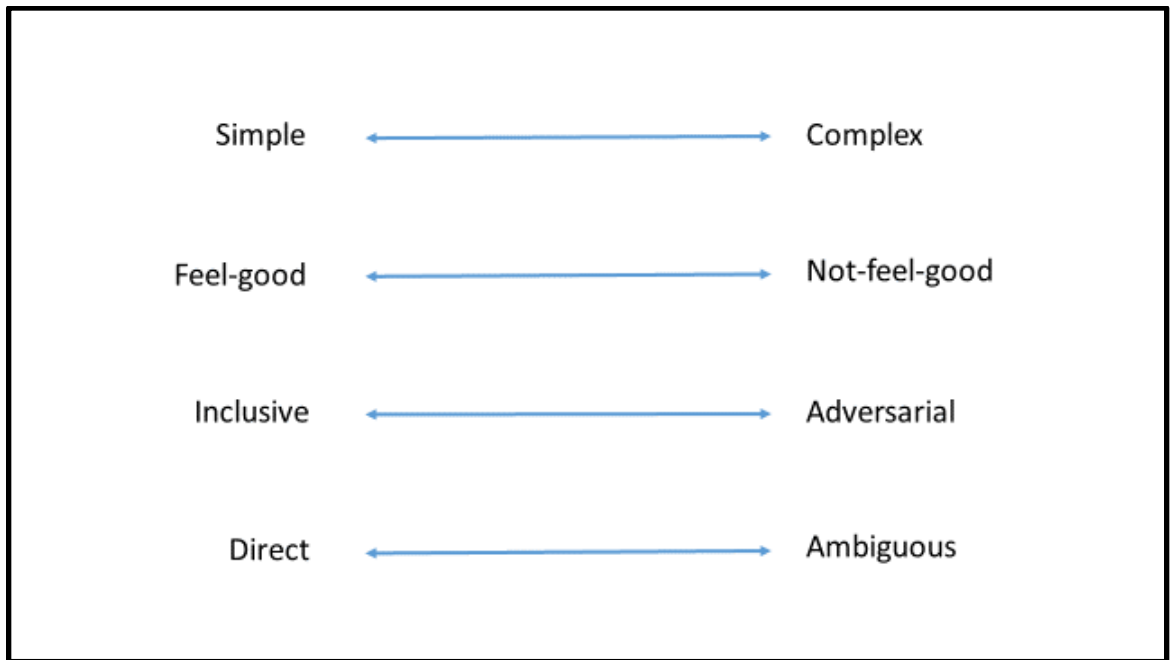
As stated in the study overview above, the research was divided into two interrelated research streams. The first stream dealt with the music itself – how, when, where, and why to use it in EE and advocacy, what may “work” and what may not, what the musical parameters and challenges are, etc. according to the participants. The second stream looked at the lives of the musicians themselves in relation to their environmental work, the impacts/benefits/drawbacks they encountered in their careers, ideas on business practices, inspirations and cautions for other artists, behavioural modelling, etc. These two research streams corresponded respectively to the two research questions which are reviewed below:

1. If music is one of the possible approaches that can be used to encourage pro-environmental thoughts and actions, then how, when, where, and why could

professional musicians and environmental educators enlist music to help elicit these thoughts and actions in their audiences and networks?

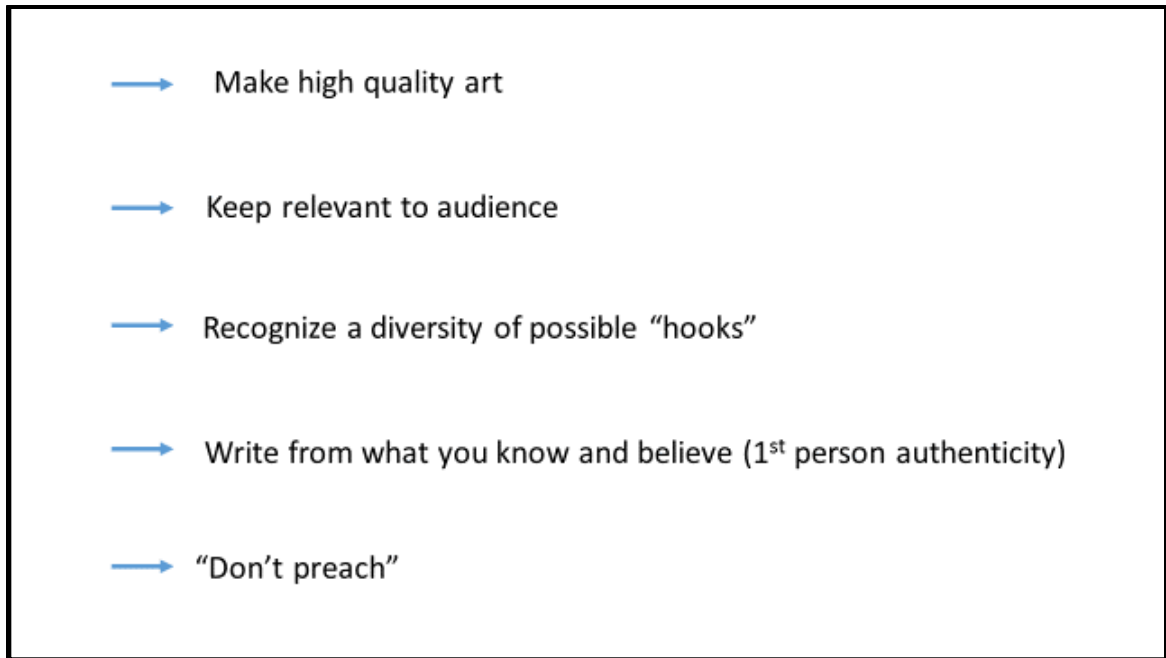
2. What are some of the sociological and career implications for performing musicians who engage with environment and sustainability issues in their professional and/or personal lives?

In this chapter, the main findings for Question 1 are illustrated in Figure 6-1 and Figure 6-2 below, corresponding to Chapter 4 of this thesis. The main findings for Question 2 are illustrated in Table 6-1 below, corresponding to Chapter 5. Following the separate discussions of the figures and the table is an explanation, with a hypothetical example, of how the musical parameters of the figures are nested in and influenced by the career parameters shown in the table. This nesting is also represented pictorially in Figure 6-3.



**Figure 6-1: Artistic/creative dimensions of a hypothetical environmental song.**

Each of the four lines represents a continuum between the two ends of a dichotomy. Together they represent the myriad gradations of choice that might be relevant to a musician when creating an environment-inspired song and deciding when, how, and where to present it. A song will be characterized at one position along each continuum. A song's position on one continuum is independent of its positions on the other three.



**Figure 6-2: Quality dimensions of an environmental song.**

These five recommendations, emerging from participants’ responses directed towards others who wish to engage with environmental issues through music, are intended to more globally inform and advise whatever takes place with a given song, regardless of artistic/creative choices.

Conceptualizing the study results in terms of sliding scales and recommendations which can be adapted to different contexts can embrace both the experiences of the participants and the multivalent approach suggested by Ernstman and Wals (2013). It can give musicians and music-lovers a structure through which to think about environmental engagement through music, without cleaving to hard and fast conceptualizations about what all the various aspects of it mean in a concrete sense – because that may be different in different circumstances, and concrete definitions may not translate across time, space, musical genre, audience demographics, etc. Even each of the participants of this study conceptualized these things in their own personal way. Fuzzy conceptualizations (Zadeh, 1965; Ernstman & Wals, 2013) help to keep the engagement fresh – ideally, perpetually “in style”.

More layers of parameters are laid on when zooming the focus outwards to include any particular musician’s engagement experiences with environmental issues. Some of these

parameters are issues over which a musician may only have partial control, or even none at all, but they can influence the choices over the timing, frequency, manner, place, and other details of this engagement with environmental issues, depending on what a musician feels s/he needs to compromise for and how much autonomy s/he can exercise (and, sometimes, at what cost). To this end, the major theme revealed by research is the need felt by the participants to consider authenticity in their work and personal lives. The particular dynamics that they identify around authenticity are represented in Table 6-1.

**Table 6-1: Musicians striving for first-person authenticity: challenges, risks, and strategies.**

The left column lists the general ways in which the participants report to have tried to create and maintain their first-person authenticity on environmental issues in their careers. The middle column lists various general frustrating challenges and risks that they have had to negotiate in that process. The right column lists strategies that they recommend to deal with each of these issues based on their experiences.

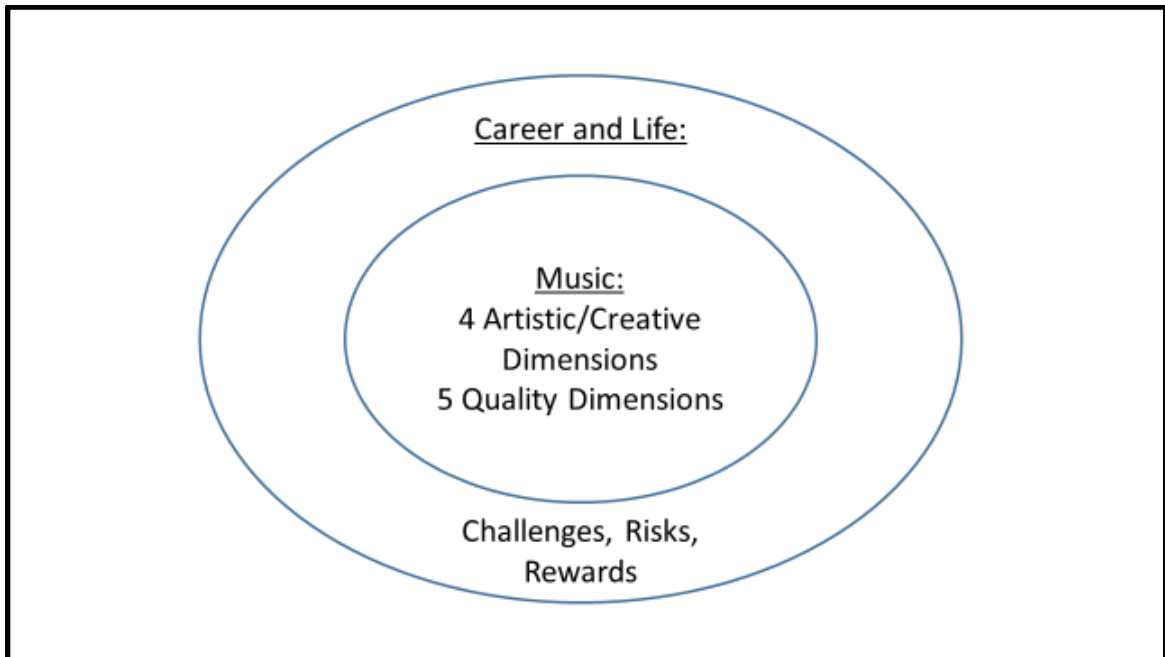
<b>Efforts for Authenticity</b>	<b>Career Challenges and Risks</b>	<b>Mitigation Strategies</b>
Modelling pro-environmental beliefs	Challenges of working/living sustainably in music industry with high impacts, especially in travel carbon footprints	Raising funds and awareness for causes, buying carbon credits, donating money/labour, reducing consumption, sourcing wisely, recycling, etc.
	Autonomy in industry, incl. sponsorship	Becoming more well-known can help
	Facing the same personal foibles as other people in lifestyle choices	Just keep striving to live more sustainably
Speaking out on issues of concern	Can alienate fans, buyers, sponsors who do not share values; can lose revenue	Understand your audiences, what they will accept, and what goes too far; choose wisely
	Reconciling with directive to entertain through music or to serve other utilitarian purpose (sacred music, pub music, film music, etc.)	Above all, make good art; understand the purpose of the context in which you are making music; find balance
	Art for art's sake; art as a calling	Make good art out of your environmental inspiration, and/or simply model your ideals through action
	Being viewed as preaching	Simply show that you care; let others decide for themselves
	Feeling or being viewed as insincere, inauthentic, or propagandizing	Choose topic carefully, know it well; back up your beliefs with modelling, genuinely believe what you write about
	Public platforms amplify your message, but also your risks	Have the courage to speak out, stand by your principles
Hoping to have a positive impact; staying motivated	Managing realistic expectations as to positive impact; impact is long-term and hard to measure	Find own rewards from "doing the right thing" and through connections with fans



There is a tension between modelling pro-environmental actions in the professional and personal lives of the musicians, and the constraints and challenges of doing so, such as the dilemmas of travel/touring footprints, autonomy/sponsorship issues, etc. (Table 6-1, first row). There is a complex set of relationships between several different parameters in the music business that affect how, when, where, and even whether a musician speaks out about issues that concern him/her (Table 6-1, second row). Some of these parameters could already be considered general artistic and business considerations in their own right (Pedelty, 2012; Pedelty & Racheli, 2009; Pedelty, 2008; Ingram, 2010) but they can also be applied to the context of environmental advocacy and EE. These are: alienating others and endangering revenue streams; art for art's sake; using a public platform for advocacy; the undesirability of taking on the role of a preacher or propagandist; and music as a service, be that for pure entertainment, for worship, for a film, to make money, etc. Both preaching and propagandizing contain an element of condescension and the forced imposition of one person's agenda onto another person, and both are frowned upon by all participants. There is also the challenge of maintaining personal morale and longevity of attitude, sustaining the hope and motivation to carry on with environmental education and advocacy as a musician, and also managing expectations on actual outcomes and finding intrinsic rewards to guard against burnout (Table 6-1, third row). As Ingram (2010) points out, determining the real effects of environment-related music is tricky. Furthermore, Kool (2000, cited in Thomson & Hoffman, n.d.) states that even measuring the effects of environmental education programming in general is difficult. Taking pleasure in those ineffable moments of connection with others in the practice of their art, working for worthy causes, and living in harmony with one's own conscience are ways that the participants have found to keep going.

According to the perspectives of the participants, the musical parameters that are featured in Figures 6-1 and 6-2 happen in the context of all the other related parameters in the musician's world in Table 6-1. Therefore, the choices that the musicians make about the music, and whether that music is even created or performed at all, is nestled in the circumstances of that musician's career and what their music represents and/or is being used for (Fig. 6-3). To take a hypothetical example, out of a wish to not be a "preacher" or "propagandist" (Table 6-1), a musician may choose to create a musical message that

pushes a little more in the direction of ambiguity on the “direct vs. ambiguous” continuum (Fig. 6-1) so that audience members can come to their own conclusions about the topic at hand – unless, perhaps, s/he is playing for an audience of school children. If the latter is the case, then there is an added formal educational service element to the performance (Table 6-1), and in keeping the music relevant to that audience (Fig. 6-2 and Table 6-1) and appropriate to that level of understanding, the musician may select for an approach that is a little more direct than with an adult audience (Fig. 6-1).



**Figure 6-3: A framework for musical decision-making.**

I have presented but a small glimpse into the overlapping complexity of artistic and other types of decisions that a musician engaging with environmental issues may be making on a regular basis, whether s/he is fully aware of it or not. Indeed, as Bonogurore (2011) states, some musicians choose not to incorporate much environment-related material into their stage shows at all, but show their pro-environmental values in other ways – which

has the effect of disentangling the musical issues modelled in Figures 6-1 and 6-2 from many of the career issues in Table 6-1. In any case, the participants' goals have been to establish the first person authenticity that might generate the credibility to try to declare a form of greater second person truth that may resonate to maximum effect with their listeners.

The results of my study confirm and enhance understandings of the role that music can play in creating pro-environmental change. They have affirmed many of the findings from the works of Ingram (2010, 2008), Pedelty (2012 and 2008), Pedelty & Racheli (2009), Bonoguoire (2011) and Ruby (2007). These include the call for sincerity and authenticity in engaging with environmental issues, for high-quality and engaging artistry, and for modelling, as well as revealing some of the challenges and risks, such as issues of autonomy, speaking out on issues of concern while still retaining fans and fulfilling entertainment/other needs, and the practical challenges of modelling in an industry with high environmental impacts in travel and other areas.

Other types of literature have either provided the tools to analyze my findings in both an arts and an EE context, or helped me to understand some of the music industry contexts in which the participants must operate. Ernstman & Wals' (2013) discussions of multivalence and fuzziness in education for sustainable development and the arts provided a structure through which the results of this study could be discussed. The vocabulary of McKenzie-Mohr (2011) in *Community-Based Social Marketing* provided a way to talk about the use of music in the terminology of environmental communication and education. The use of music as a tool for EE, as well as the other arts, tied in with the values-based affective learning considered important, in tandem with cognitive and behavioural approaches, by such EE writers as Pooley & O'Connor (2000), Tilbury (1996), Packalén (2010), and many others. Ramsey (2002), Coss (2013), Lansfield (2015) and others provided observations from their particular educational contexts on the use of music as an EE tool. Educators like Orleans (Orleans & Orleans, 1986) and Rodden (2016) have collected songs for use in EE. On the industry side of the research, it has been valuable to examine what sorts of greening initiatives exist in the music industry to back up any environmental rhetoric emanating from it, and to look at what sorts of pro-

environmental norms might be established through it. Knowing some of the limitations on the participants' actions that they have faced in their industry has been necessary to understand how they have tried to navigate this world. Having some knowledge of other musicians outside of the *Playlist* who have also engaged with environmental issues, many of whom are also known to some of the *Playlist* artists and are viewed as contemporaries or role models, has also been useful. Finally, the literature on authenticity in music by Moore (2002) has served as a thread uniting all of these reflections, given that authenticity has been a topic spontaneously raised by every single participant.

## 6.2 Limitations

This non-probabilistic study has served its primary function to generate potentially useful ideas and insights in its grounded framework, without claiming to represent all or any particular subset of musicians who engage with environmental issues. Within that context, there have been some study limitations.

The fourteen participants all expressed pleasure at being able to contribute to this study for reasons similar to those for which they had originally contributed tracks to the *Playlist* – they all felt moved by environmental issues and considered it important to talk about them. However, it will never be known for sure if any of them withheld any comments because of the non-anonymous nature of the study.

While enough interview content was generated to achieve coding saturation, it is possible that there were some elements in the invitation process that impeded some musicians from the *Playlist for the Planet* from participating who otherwise might have done so, and thus made the data even richer. For example, there was an extra layer to navigate in the form of the managers and agents retained by some participants. The hope was that the manager/agent had the interests and the values of the artist in mind when deciding whether or not to respond to a study invitation, but that was not something that we could determine from the outside. In some cases, we may not have been able to penetrate

through the layer of staff who had to help filter and choose which requests to answer among many. However, correspondence with those who did respond was cordial.

Occasionally, managers/agents or the *Playlist* artists themselves stated that, although they appreciated the care taken with the interview content, the consent form was rather long. This may not surprise anyone with experience in preparing press kits, communicating with music buyers, and other promotional activities, where compact and impactful presentation strategies are highly valued. Time constraints may make wading through long wordy material difficult. It was a challenge to develop concise invitation and consent documents that contained all the elements required by the Tri-Council Ethics Review Board that were compact enough for a communication environment that is typically time-challenged, and in which interviews regularly take place with much less formality. It is possible that the volume of required reading material could have been a deterrent to some artists who may have wished to participate, but who were just overwhelmed with time constraints or other issues.

Some of the artists themselves may have been happy to contribute a track to the compilation album, but may have wanted to moderate the degree to which they engaged in open and public advocacy. Also, in at least one case, the original group for a particular track had since disbanded after its release and the members were no longer performing together. In a few other cases, we may not have had up-to-date contact information and more recent contact information was not available online.

### 6.3 Recommendations for Further Research

The multivalent models emerging from this study are open for future modifications, should new research yield further insights in these areas. Future interview-based studies could focus on particular genres of music or audience demographics, and perhaps compare them with other genres or demographics to look more closely at why certain artistic and/or other types of decisions might have been made along various continua because of a particular context. Some musical contexts may, in general, contain more of

an element of hedonism, or didacticism, or attentiveness to lyrics, etc. than others – many possible variables could be explored.

A study could also be designed asking musicians how they feel that their profession, without losing its primary art/entertainment directive, could be made more environmentally friendly. If musicians were fearful of potential career backlash against them for speaking openly on certain topics in such a study, it could be made anonymous. When examined in conjunction with similar surveys of other industry stakeholders, this could open up a dialogue about improvements that could be made and what the various needs of the different sectors of the industry are.

A much larger question is why people choose to act (or not) on whatever pro-environmental sources of influence they may have had in their lives, and how far they might go in their efforts driven by certain amounts and types of motivation. In these sorts of chaotic models, it can be a wicked problem to try to fathom the small affective influence of a particular song, or a pro-environmentally normative experience at a music festival, or the sight of a donation button on a musician's website to facilitate contributions to a particular environmental cause. This is before even considering the contributions of a learner's prior life experiences, the neurological setup with which he/she was born, and many other factors influencing her/his receptivity. This issue has been directly and indirectly raised in previous sections of this document by Ingram (2010), Kool (2000, cited in Thomson & Hoffman, n.d.), and others who have urged caution when attempting to draw direct cause-and-effect lines between stimulus and action, and it is reflected in Dewey's (1934) model of art as an experience. A musician engaging with environmental issues may simply need to have a certain amount of faith that somewhere, somehow, they might inspire a pro-environmental thought in someone, by showing that they have thought about these issues themselves.

Because of this, any study on the hypothesized effectiveness of music as an EE tool and as a motivator towards pro-environmental action would need to be designed very carefully so as not to ask potentially leading questions, or questions to which the answers are difficult to substantiate. Exit surveys after concerts may be tricky to conduct credibly for these reasons. This is not to say that such influences do not exist, only that they can be

difficult to identify. There could be value in scanning any literature which has surveyed for the motivators of pro-environmental behaviour for any mention of music-related influences, and in creating studies through which people can declare if and how they have been pro-environmentally influenced by music, including in social contexts and also in conjunction with other arts. Pedelty (2009) has taken a small step towards identifying roles that music can play in activism by surveying peace, labour, environmental, and human rights activists specifically as to their musical influences, and has stated a need for further ethnographic research into how music functions for such activists (Pedelty, 2012).

#### 6.4 Practical Applications and Implications

It is hoped that the insights gained in this research could be useful to other musicians wishing to engage effectively with environmental issues in their professional practice, and to environmental educators wishing to use music in their EE programming. With its entertainment and social focus, this research could also be of interest to music fans in the general public.

The results from this study are not firm recommendations for more effective environment-related musical programming, but rather a process to help musicians and EE programmers think through any particular musical project that they may have in mind. They may be in the best position to know their own audiences, or if not, this process may help them uncover certain areas which they may wish to get to know better to help them gauge what might go over well and what might not. Fuzziness and multivalence allows this framework to be adapted to a variety of contexts, and the decisions on the type, quality, timing, manner, place, etc. of presenting an environment-related idea through music will be different and fresh for every new context. Decisions could be made for a huge variety of situations: from stadium concerts to campfire singsongs; in schools, homes, places of worship, festivals, pubs and other public watering holes, and wild spaces; online, at dances, on blockade lines, and in the personal listening spaces created by earphones and speakers.

Similarly, the life and career circumstances of each musician engaging with the environment are going to be different as well, but there are still parameters to consider when undertaking such engagement that might not only affect their careers, finances, artistic output, personal satisfaction with engagement, and stamina, but also play into the effectiveness of whatever message they might stand for. Again, each will reach her/his own decisions. A framework can aid in thinking it through. Perhaps even college and university music business programs could include discussions on musicians advocating for causes and on awareness of the environmental impacts of their industry. Such integration would align well with Orr's (1994) wish to see some kind of environmental lens incorporated into every academic discipline.

This research could serve as a mechanism to begin a larger dialogue between artists and scholars about the role that musicians can play in achieving a sustainable future. Ornetzeder and Rohracher (2005) state that exposing people to discussions about sustainability is an important though often neglected factor in social learning and the change processes. As communication is seen as a vector for social change in the sustainability movement (Filho 2000, Oepen, 2000), this research could potentially serve as a channel for advancing discussions around music, EE, and a sustainable future.

Music lovers of all sorts, social anthropologists, musicologists, psychologists, anyone who cares about environmental issues, and anyone simply curious about the way art is put together and how it can affect people could be interested in this topic. Given how ubiquitous music is in our society, and how urgent it is to have conversations on sustainability and to act on those conversations, increasing the dialogue (and the quality of dialogue) in musical and other cultural realms could help. If making and sharing music together really does release bonding neurotransmitters and make us more aware of ourselves in relation to other people (Shapiro, 2013; Levitin, 2006), that would seem to be a positive prelude to actually working together on environmental issues.



## 6.5 Coda

Commercial song licensing issues aside, musicians may never really know all of what might happen to their music down the line, who might be drawn to it, or how it might be changed or adapted to suit someone else's reality. They, like many other artists, launch their creations like so many little boats on the water and watch them bob downstream into an uncertain future. As thoughtful as ever they may be in their craft, they may never know exactly who will eventually pluck up one of those boats and what might be made of any cargo that survives the voyage. Musicians can only hope to build sturdy little vessels with something of worth inside.

“Where words fail, music speaks.”

(Hans Christian Andersen)

## Works Cited

- 1% for the Planet (2016). Home. Retrieved from <http://onepercentfortheplanet.org/>.
- Allen, A. (2012). Ecomusicology: music, culture, nature... and change in environmental studies? *Journal of Environmental Studies and Sciences*, 2, p.192–201. doi: 10.1007/s13412-012-0072-1.
- Allen, A. (2013). Ecomusicology [ecocritical musicology]. *Grove Music Online*. Oxford Music Online. Retrieved from <http://www.oxfordmusiconline.com/subscriber/article/grove/music/A2240765>.
- Anderegg, W.R.L., Prall, J.W., Harold, J., Schneider, S.H. (2009). Expert credibility in climate change. *PNAS*, 107(27), 12107-12109. doi: 10.1073/pnas.1003187107.
- Aristotle (1999). *Nichomachean ethics*, Book 10. (W.D. Ross, Trans.). Kitchener: Batoche Books. (Original work published 350 B.C.). Retrieved from <http://socserv2.socsci.mcmaster.ca/econ/ugcm/3113/aristotle/Ethics.pdf>.
- Aronson, E., O’Leary, M. (1982-1983). The relative effectiveness of models and prompts on energy conservation: A field experiment in a shower room. *Journal of Environmental Systems*, 12, 219-224.
- ASAP: As Sustainably as Possible (2016). Globalvision song contest. *ASAP: As Sustainably as Possible*. Retrieved from <http://www.pledgeasap.com/want-inspired-kids-adults-singing-passions/>.
- Baine, K. (2013, July 11). Which music festivals are dirtiest? *LA Weekly*. Retrieved from <http://www.laweekly.com/music/which-music-festivals-are-dirtiest-4170656>.
- Barker, H., Taylor, Y. (2007). *Faking it: The quest for authenticity in popular music* (1<sup>st</sup> ed.). New York: W.W. Norton.
- Barnosky, A.D., Matzke, N., Tomiya, S., Wogan, G.O.U., Swartz, B., Quental, T.B.,... Ferrer, E. (2011). Has the earth’s sixth mass extinction arrived? *Nature*, 471(7336), 51-57. doi: 10.1038/nature09678.

- Baxter, J. & Eyles, J. (1997). Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, New Series, 22, 4, 505-525.
- Bede Scharper, S. (2012, June 17). From doom to gladness: The future of environmentalism. *The Star.com*. Retrieved from [http://www.thestar.com/opinion/editorialopinion/2012/06/17/from\\_gloom\\_to\\_gladness\\_the\\_future\\_of\\_environmentalism.html](http://www.thestar.com/opinion/editorialopinion/2012/06/17/from_gloom_to_gladness_the_future_of_environmentalism.html).
- Benward, B., Saker, M. (2014). *Music in theory and practice, 9<sup>th</sup> ed., vol. 1*. New York: McGraw-Hill.
- Bergthaller, H. (2016). What is ecocriticism? *European Association for the Study of Literature, Culture and Environment*. Retrieved from <http://www.easlce.eu/about-us/what-is-ecocriticism/>.
- bigoilgreed (2010, May 17). *Hayley Sales – Not in His Garden* [Video file]. Retrieved from <https://www.youtube.com/watch?v=UhmZsGFoRZA>.
- Block, R. (1948). Propaganda and the free society. *Public Opinion Quarterly*, 2(4), 677-686.
- Bloom, B. (1976). *Human characteristics and school learning*. New York: McGraw-Hill.
- Bobetsky, V. (Ed.). (2015). *“We shall overcome” : Essays on a great American song*. Lanham: Rowman & Littlefield.
- Bonoguore, T. (2011). Do as I do, not as I sing. *Alternatives*, 37(4), 10-14.
- Branagan, M. (2005). Environmental education, activism, and the arts. *Convergence*, 38(4), 33-50.
- Bristow, W. (2011). Enlightenment. In Zalta, E.N. (Ed.), *Stanford Encyclopedia of Philosophy* (Summer 2011 edition). Retrieved from <http://plato.stanford.edu/archives/sum2011/entries/enlightenment/>.

- Brundtland, G., World Commission on Environment Development (WCED) (1987). *Our common future*. Retrieved from <http://www.un-documents.net/our-common-future.pdf>.
- Bullfrog Power (2016). Bullfrog Power: Home. Retrieved from <http://www.bullfrogpower.com/>.
- Cameron, S.D. (2012, August 22). *The Green Interview: Hear the Celtic Mass for the Sea!* Retrieved from <http://www.thegreeninterview.com/blog/hear-celtic-mass-sea>.
- Canadian Music Centre (2007). *Composer Showcase: R. Murray Schafer: Biography*. Retrieved from <https://www.musiccentre.ca/node/37315/biography>.
- Canadian Music Centre (2016). *Composer Showcase: Scott Macmillan: Biography*. Retrieved from <https://www.musiccentre.ca/node/37484/biography>.
- Carruthers, B. (2006). Mapping the terrain of contemporary EcoART practice and collaboration: Art in ecology – A think tank on arts and sustainability. Canadian Commission for UNESCO. Retrieved from <http://unesco.ca/~media/pdf/unesco/bethcarruthersartinecologyresearchreportenglish.pdf>.
- Carson, R. (1962). *Silent Spring*. Boston: Houghton Mifflin.
- Cialdini, R.B., Reno, R.R. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015-1026. doi: 10.1037/0022-3514.58.6.1015.
- Cockburn, B. (2014). *Rumours of Glory: A memoir*. Toronto: HarperCollins.
- Cockburn Project (n.d.). Issues. *The Cockburn Project*. Retrieved from <http://cockburnproject.net/issues/index.html>.
- Colley, H., Hodkinson, P., Malcolm, J. (2002) *Non-formal learning: mapping the conceptual terrain: a consultation report*. Leeds: University of Leeds Lifelong

Learning Institute. Retrieved from [http://www.infed.org/archives/e-texts/colley\\_informal\\_learning.htm](http://www.infed.org/archives/e-texts/colley_informal_learning.htm).

Coombs, P.H., Ahmed, M. (1974). *Attacking rural poverty: How non-formal education can help*. Baltimore: John Hopkins University Press.

Coss, R. (2013). Multicultural perspectives through music and sustainability education. *Multicultural Education*, 21(1), 20-25.

Covert, A. (2013, April 25). A decade of iTunes singles killed the music industry. *CNN Money*. Retrieved from <http://money.cnn.com/2013/04/25/technology/itunes-music-decline/>.

Crossman, R. (2011). Opera in the woods: Lakes sing and magic happens in R. Murray Schafer's Patria. *Alternatives*, 37(4), 20-22.

Danny Michel Ocean Academy Fund (2016). Danny Michel Ocean Academy Fund Facebook Page [Social media page]. Retrieved from <https://www.facebook.com/The-Danny-Michel-Ocean-Academy-Fund-703876759723591/>.

David, H. T., Mendel, A., & Wolff, C. (1998). *The new Bach reader: A life of Johann Sebastian Bach in letters and documents*. New York: W.W. Norton.

David Suzuki Foundation (2016a). *David Suzuki Foundation: About us*. Retrieved from <http://www.davidsuzuki.org/about/>.

David Suzuki Foundation (2016b). *David Suzuki Foundation: Issues*. Retrieved from <http://www.davidsuzuki.org/issues/>.

David Suzuki Foundation (2016c). *David Suzuki Foundation: About our donors*. Retrieved from <http://www.davidsuzuki.org/donate/about-our-donors/>.

David Suzuki Foundation (2016d). *David Suzuki Foundation: David Suzuki biography*. Retrieved from <http://www.davidsuzuki.org/david/>.

David Suzuki Foundation (2014a). *David Suzuki Foundation: Playlist for the Planet*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the->

planet/ and <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/enter-playlist-for-the-planet/>.

David Suzuki Foundation (2014b). *David Suzuki Foundation: Playlist for the Planet: Rules and regulations*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/rules-and-regulations/>.

David Suzuki Foundation (2014c). *David Suzuki Foundation: Why music matters to David Suzuki*. Retrieved from <http://www.davidsuzuki.org/what-you-can-do/playlist-for-the-planet/david-suzuki-on-playlist-for-the-planet/>.

Dewey, J. (1934). *Art as experience*. New York: Perigee Books.

Doe, S. (2007, February 6). *Sarah Harmer: Escarpment Blues*. [Video file.] Retrieve from <https://www.youtube.com/watch?v=52vXPZAKDug>.

Dolnicar, S., Grün, B. (2009). Environmentally friendly behavior: Can heterogeneity among individuals and contexts be harvested for improved sustainable management? *Environment and Behavior*, 41(50), 693-714. doi: 10.1177/0013916508319448.

Eernstman, N., Wals, A. (2013). Locative meaning-making: an arts-based approach to learning for sustainable development. *Sustainability* 5. doi:10.3390/su5041645.

Eernstman, X., van Boeckel, J., Sacks, S., Myers, M. (2012). Chapter 12: Inviting the unforeseen: a dialogue about art, learning and sustainability. In Wals, A., Corcoran, P., (Eds.) (2012). *Learning for sustainability in times of accelerating change*, p.201-212. Wageningen, The Netherlands: Wageningen Academic Publishers.

“Environment” (2015). *Merriam-Webster Dictionary*. Retrieved from <http://www.merriam-webster.com/dictionary/environment>.

Evans, G., Barwell, J., Eccles, D.M., Collins, A., Izatt, L., Jacobs, C. ... Murray, A. (2014). The Angelina Jolie effect: how high celebrity profile can have a major impact on provision of cancer related services. *Breast Cancer Research*, 16(5), 442-448. doi:10.1186/s13058-014-0442-6.

- Free the Children (2016). What we do. *Free the Children*. Retrieved from <http://www.freethechildren.com/what-we-do/>.
- Glass, C.S. (2005). The convergence of art and science. *Greenmuseum.org*. Retrieved from [http://greenmuseum.org/generic\\_content.php?ct\\_id=227](http://greenmuseum.org/generic_content.php?ct_id=227).
- Goodreads (2016). *David Suzuki: Quotes*. Retrieved from [http://www.goodreads.com/author/quotes/145364.David\\_Suzuki](http://www.goodreads.com/author/quotes/145364.David_Suzuki).
- Government of Canada (2014). *Tri-Council policy statement: Ethical conduct for research involving humans 2014*. Retrieved from [http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS\\_2\\_FINAL\\_Web.pdf](http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS_2_FINAL_Web.pdf)
- Griswold, E. (2012). How ‘Silent Spring’ ignited the environmental movement. *New York Times Magazine*. Retrieved from [http://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html?\\_r=0](http://www.nytimes.com/2012/09/23/magazine/how-silent-spring-ignited-the-environmental-movement.html?_r=0).
- Gross, L. (2009). A Broken Trust: Lessons from the Vaccine-Autism Wars. *PLoS Biology* 7(5): e1000114. doi:10.1371/journal.pbio.1000114.
- Hallam, S. (2010). The power of music: its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education*, 28(3), 269-289. doi:10.1177/0255761410370658
- Harvard Law Review Association (2010). Uncommon goods: On environmental virtues and voluntary carbon offsets. *Harvard Law Review*, 123(8), 2065-2087.
- Hoegh-Guldberg, O. et al. (2007). Coral reefs under rapid climate change and ocean acidification. *Science*, 318, 1737-1742. doi: 10.1126/science.1152509.
- Hudson River Sloop Clearwater, Inc. (2016). About. Retrieved from <http://www.clearwater.org/about/>.
- HuffPost Green (2012, April 11). “Green songs: Tunes to get you pumped up about saving the environment”. *Huffington Post*. Retrieved from

[http://www.huffingtonpost.com/2012/04/11/green-songs-get-you-pumped\\_n\\_1415776.html](http://www.huffingtonpost.com/2012/04/11/green-songs-get-you-pumped_n_1415776.html).

Hutchinson, D. (1998). *Growing up green: education for ecological renewal*. New York: Teachers College Press.

IMDb (2012). *Synopsis for "The Lorax"*. Retrieved from [http://www.imdb.com/title/tt1482459/synopsis?ref\\_=ttpl\\_pl\\_syn](http://www.imdb.com/title/tt1482459/synopsis?ref_=ttpl_pl_syn).

IMDb (2012). *"The Lorax" 2012 Soundtracks*. Retrieved from <http://www.imdb.com/title/tt1482459/soundtrack>.

Ingram, D. (2008). "My dirty stream": Pete Seeger, American folk music, and environmental protest. *Popular Music & Society*, 31(1), 21-36.  
doi:10.1080/03007760601061456

Ingram, D. (2010). *The jukebox in the garden: ecocriticism and American popular music since 1960* [Nature, Culture and Literature series]. Amsterdam: Rodopi.

Jakesch, M., Leder, H. (2009). Finding meaning in art: Preferred levels of ambiguity in art appreciation. *Quarterly Journal of Experimental Psychology*, 62(11), 2105-2112. doi: 10.1080/17470210903038974.

Jeantheau, M. (2014). "Environmental songs". *Grinning Planet*. Retrieved from <http://www.grinningplanet.com/6001/environmental-songs.htm>.

Jellyfish Project (2016). *The Jellyfish Project: Friends and allies*. Retrieved from <http://www.thejellyfishproject.org/friends-allies/>.

Jensen, B.B. (2002). Knowledge, action and pro-environmental behaviour. *Environmental Education Research*, 8(3), 325-334. doi:  
<http://dx.doi.org/10.1080/13504620220145474>

Jickling, B., Sauve, L., Briere, L., Niblett, B., and Root, E. (2010). The 5th world environmental education congress, 2009: A research project. *Canadian Journal of Environmental Education*, 15: 47-67.



- Jossi, F. (2011, April 18). Q&A with CEO Michael Martin of Effect Partners. *Finance and Commerce*. Retrieved from <http://www.lommen.com/pdf/michael-martin-finance-commerce-4-18-11.aspx>.
- Jorgensen, E.R. (2010). Music, myth, and education: The case of the Lord of the Rings trilogy. *Journal of Aesthetic Education*, 44(1), 44-57. Retrieved from <http://www.jstor.org/stable/10.5406/jaesteduc.44.1.0044>.
- Jurin, R.R., Fortner, R.W. (2002). Symbolic Beliefs as Barriers to Responsible Environmental Behavior. *Environmental Education Research*, 8(4,) 373-394. doi: <http://dx.doi.org/10.1080/1350462022000026791>.
- Kettler, S. (2016). John Williams biography. *The Biography.com website*. Retrieved from <http://www.biography.com/people/john-williams-9532526>.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, New Jersey: Prentice Hall.
- Kollmuss, A., Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behaviour? *Environmental Education Research*, 8(3), 239-260.
- La Belle, T. (1982). Formal, nonformal and informal education: A holistic perspective on lifelong learning. *International Review of Education*, 28(2), p.159-175.
- Lansfield, J. (2015). *Interpreting social engagement strategies of the Jellyfish Project through a social marketing lens: The power of music and lived experiences* (Doctoral dissertation). University of Victoria. Retrieved from UVicSpace: <https://dspace.library.uvic.ca/handle/1828/5988>.
- Lazarus, R.S., Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lenton, T., Held, H., Kriegler, E. (2008). Tipping elements in the earth's climate system. *PNAS*, 105(6), 1786-1793. doi: 10.1073/pnas.0705414105.
- Let's Do It (2016). *About: Let's clean up the world in just one day*. Retrieved from <http://www.letsdoitworld.org/about>.

Levitin, D. (2006). *This is your brain on music: The science of a human obsession*. New York: Plume.

List of songs about the environment (2016). *Wikipedia*. Retrieved from [https://en.wikipedia.org/wiki/List\\_of\\_songs\\_about\\_the\\_environment](https://en.wikipedia.org/wiki/List_of_songs_about_the_environment).

Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. North Carolina: Algonquin Books of Chapel Hill.

Louv, R. (2012). *The Nature Principle*. Chapel Hill, N.C.: Algonquin Books.

Lukacs, J. (2015, August 11). Revealed: The Canadian government spent millions on secret tar sands advocacy. *The Guardian*. Retrieved from <http://www.theguardian.com/environment/true-north/2015/aug/11/canadian-government-spent-millions-on-secret-tar-sands-advocacy>.

Maple Music (2016). *Escarpment Blues DVD*. Retrieved from [http://www.maplemusic.com/product.asp?dept\\_id=4160&pf\\_id=60-51&lang=EN](http://www.maplemusic.com/product.asp?dept_id=4160&pf_id=60-51&lang=EN).

Martinko, K. (2014, July 13). Music festivals are environmental disasters. *Treehugger: Finding a greener future*. Retrieved from <http://www.treehugger.com/culture/why-music-festivals-are-environmental-disaster.html>.

McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: an introduction to community-based social marketing* (3<sup>rd</sup> ed.) Gabriola Island, British Columbia: New Society Publishers.

McKhool, C. (2016). *Chris McKhool*. Retrieved from <http://fiddlefire.com/>.

McKibben, B. (2005). What the world needs now is art, sweet art. *Grist*. Retrieved from <http://grist.org/article/mckibben-imagine/>.

McMillan, D.W., Chavis, D.M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14, 6-23.

- Michel, D. (n.d.). Danny Michel with the Garifuna Collective of Belize. *Danny Michel*. Retrieved from <http://www.dannymichel.com/newsite/garifunacollective.html>.
- Midway Film (2012). *Midway: Trailer*. Retrieved from <http://www.midwayfilm.com/>.
- Millar, M. G., Millar, K. U. (1996). The effects of direct and indirect experience on affective and cognitive responses and the attitude-behavior relation. *Journal of Experimental Social Psychology*, 32, 561-579.
- Mitic, L. (2014, August 18). The environmental impact of music festivals. *The Jellyfish Project*. Retrieved from <http://www.thejellyfishproject.org/home/2014/8/18/k9462no435t52wo24kn2kgqw17wvqn>.
- Mocker, D.W. and Spear, G.E. (1982). *Lifelong learning: Formal, nonformal, informal, and self-directed*. Information Series no. 241. Retrieved from <http://files.eric.ed.gov/fulltext/ED220723.pdf>.
- Moore, A. (2002). Authenticity as authentication. *Popular Music*, 21(2), 209-223. doi:10.1017/S0261143002002131.
- “Music” (2015). *Merriam-Webster Dictionary*. Retrieved from <http://www.merriam-webster.com/dictionary/music>.
- Nursal, K. (2013, August 11). Twenty years later, the “War in the Woods” at Clayoquot Sound still reverberates across B.C. *Global News*. Retrieved from <http://globalnews.ca/news/774070/twenty-years-later-the-war-in-the-woods-at-clayoquot-sound-still-reverberates-across-b-c/>.
- Ocean Academy (2015). *Ocean Academy Homepage*. Retrieved from <http://oaseatide.com/>.
- Oepen, M. (2000). *Communicating the environment: environmental communication for sustainable development*. Frankfurt am Main: Peter Lang.

- Olive, D. (2015, July 20). Derek Olive's Blue Dot music cycling tour. *Blue Dot*. Retrieved from <http://bluedot.ca/stories/derek-olives-blue-dot-music-cycling-tour/>.
- O'Malley, K. (2014, January 13). Neil Young vs. PMO: Oilsands comments spark war of words. *CBC News*. Retrieved from <http://www.cbc.ca/newsblogs/politics/inside-politics-blog/2014/01/neil-young-vs-pmo-oilsands-comments-spark-war-of-words.html>.
- O'Rourke, S., Irwin, D., Straker, J. (2011). Dancing to sustainable tunes: an exploration of music festivals and sustainable practices in Aotearoa. *Annals of Leisure Research*, 14(4), 341-354. doi: 10.1080/11745398.2011.639383.
- Orleans, D. (2009, December 14). Earthsinging in your own backyard, revisited. *Pass It On! The Journal of the Children's Music Network*. Retrieved from <http://www.cmnonline.org/pio-article.aspx?ID=56>.
- Orleans, D., Orleans, S. (1986). *Earthsong assembly programs: A method for introducing environmental concepts at the elementary level through the use of stories and songs* (Masters' thesis). Glassboro State College [Copy obtained from author].
- Ornetzeder, M., Rohracher, H. (2005). Social learning, innovation and sustainable technology. In W.L. Filho (Ed.), *Handbook of Sustainability Research: Environmental Education, Communication and Sustainability vol. 20*. Frankfurt am Main: Peter Lang.
- Orr, D. (1994). *Earth in mind: on education, environment, and the human prospect*. Washington D.C: Island Press.
- Ostroff, J. (2015, September 15). Leap Manifesto calls on Canada to change, well, everything. *Huffington Post Canada*. Retrieved from [http://www.huffingtonpost.ca/2015/09/15/leap-manifesto\\_n\\_8141022.html](http://www.huffingtonpost.ca/2015/09/15/leap-manifesto_n_8141022.html).
- Packalén, S. (2010). Culture and sustainability. *Corporate Social Responsibility and Environmental Management*, 17, 118-121. doi: 10.1002/csr.236.

- Palys, T. (2003). *Research decisions: Quantitative and qualitative perspectives*, 3<sup>rd</sup> ed. Thomson Nelson, 2003.
- Patel, A. (2008). *Music, language, and the brain*. New York: Oxford University Press.
- Pavlova, M. (2013). Towards using transformative education as a benchmark for clarifying differences and similarities between Environmental Education and Education for Sustainable Development. *Environmental Education Research*, 19(5), 656-672. doi: 10.1080/13504622.2012.736476.
- Pedelty, M. (2008) Woody Guthrie and the Columbia River: Propaganda, art, and irony. *Popular Music and Society*, 31(3), 329-355. doi: 10.1080/03007760701219079.
- Pedelty, M. (2009). Musical news: Popular music in political movements. In E. Bird (Ed.), *The anthropology of news and journalism: Global perspectives* (p.215-237). Bloomington: Indiana University Press.
- Pedelty, M. (2012). *Ecomusicology: Rock, folk, and the environment*. Philadelphia: Temple University.
- Pedelty, M., Racheli, D.T. (2009). Is the political troubadour dead? Markets versus politics in local music. *Journal of Popular Music Studies*, 21(3), 266-283. doi:10.1111/j.1533-1598.2009.01196.x
- Penner, J.E., Lister, D.H., Griggs, D.J., Dokken, D.J., McFarland, M. (Eds.) (1999). Special Reports: Aviation and the global atmosphere. *Intergovernmental Panel on Climate Change (IPCC)*. Retrieved from <http://www.ipcc.ch/ipccreports/sres/aviation/index.php?idp=0>.
- perlofburlington (2009, April 16). *Escarpment Blues: The original rough cut video footage*. [Video file.] Retrieved from <https://www.youtube.com/watch?v=WbV1ib7Ybew>.

PlanetAir (2016). Offset. *PlanetAir.ca*. Retrieved from <http://planetair.ca/en/index.sn>.

Pooley, J.A., O'Connor, M. (2000). Environment education and attitudes: emotions and beliefs are what is needed. *Environment and Behaviour* 32(5), 711-723. doi: 10.1177/0013916500325007.

Protecting Escarpment Rural Land – PERL (2012, November 12). The Escarpment: Major campaigns. Retrieved from <http://www.perlofburlington.org/about-per/major-campaigns/>.

Publicover, J., Wright, T., Baur, S., Duinker, P.N. (2016). Engaging with Environmental Issues as a Musician: Career Perspectives from Musicians of the *Playlist for the Planet*. [In preparation.]

Publicover, J., Wright, T., Baur, S., Duinker, P.N. (2016). Music as a Tool for Environmental Education and Advocacy: Artistic Perspectives from Musicians of the *Playlist for the Planet*?. [In preparation.]

Puffin Productions (2014). *Puffin Productions: Where the music lives!* Retrieved from <http://www.puffin.ca/>.

QSR International (2014). *NVivo 10 for Windows: Getting started*. Retrieved from <http://download.qsrinternational.com/Document/NVivo10/NVivo10-Getting-Started-Guide.pdf>.

Raffinews (2016). Beluga grads. *Raffi children's music, books and videos*. Retrieved from <http://www.raffinews.com/beluga-grads/raffis-message#.Vr1EvfkrIgt>.

Ramsey, D. (2002). The role of music in environmental education: Lessons from the cod fishery crisis and the dust bowl days. *Canadian Journal of Environmental Education*, 7(1), 183-198.

- Reno, R.R., Cialdini, R.B., Kallgren, C.A. (1993). The transsituational influence of social norms. *Journal of Personality and Social Psychology*, 64(1), 104-112. doi: 10.1037/0022-3514.64.1.104.
- Reverb (2016). *Music. Environment. Action*. Retrieved from <http://reverb.org/>.
- ReverbNation (2016). *Peter Puffin's Whale Tales*. Retrieved from <https://www.reverbnation.com/rpk/bio/3865261>.
- RIAA (2016). About RIAA. *Recording Industry Association of America*. Retrieved from <http://www.riaa.com/about-riaa/>.
- Riding, R., & Rayner, S. (1998). *Cognitive styles and learning strategies: Understanding style differences in learning and behaviour*. London: David Fulton.
- Rocking the environment. (2011, May). *Alternatives Journal*, 37(4).
- Rockström, J. (2009). A safe operating space for humanity. *Nature*, 461(24), 472-475. doi: 10.1038/461472a.
- Rodden, R. (2016). About. *Remy Rodden*. Retrieved from <http://remyrodden.com/about>.
- Rodden, R. (2016). *Songs for Environmental Education: Home*. Retrieved from <https://songsforee.wordpress.com/>.
- Rodden, R. (2016). *Songs for Environmental Education: Artists/Creators*. Retrieved from <https://songsforee.wordpress.com/artists/>.
- Ruby, M. (2007). Environmental odyssey: Live at the Ottawa Folk Festival. *TNQ (The New Quarterly: Canadian Writers and Writing)*. Retrieved from <http://www.tnq.ca/article/environmental-odyssey-live-ottawa-folk-festival>.
- Sacks, O. W. (2007). *Musicophilia: tales of music and the brain*. London: Picador.

- Scojen Music Productions (2016). Scott Macmillan: Celtic Mass for the Sea. *Scott Macmillan*. Retrieved from <http://www.scott-macmillan.ca/music/composer/celtic-mass-for-the-sea/>.
- Shapiro, A. (2013). 'Imperfect harmony': How singing with others changes your life. *NPR (National Public Radio)*. Radio broadcast interview with Daniel Levitin and Stacy Horn, June 3, 2013. Retrieved from <http://www.npr.org/2013/06/03/188355968/imperfect-harmony-how-chorale-singing-changes-lives>.
- Smithsonian National Museum of Natural History (2016). *Ocean portal: Ocean trash is plaguing our sea*. Retrieved from <http://ocean.si.edu/ocean-news/ocean-trash-plaguing-our-sea>.
- Stapp, W. et al. (1969). The concept of environmental education. *Journal of Environmental Education*, 1(1), 30-31.
- Storr, A. (1993). *Music and the mind*. New York: Ballantine.
- Stravinsky, I. & Craft, R. (1981). *Expositions and developments*. Berkeley & Los Angeles: University of California Press.
- Sutter, G. (2016). Glenn C. Sutter, Curator of Human Ecology. *Royal Saskatchewan Museum*. Retrieved from <http://www.royalsaskmuseum.ca/research-and-collections/sustainability/glenn-sutter>.
- Suzuki, D. (2006). *David Suzuki: The autobiography*. Vancouver: Greystone Books.
- Thomson, G., Hoffman, J. (n.d.) *Measuring success of environmental education programs*. Canadian Parks and Wilderness Society (CPAWS), p. 5-41. Retrieved from [http://macaw.pbworks.com/f/measuring\\_ee\\_outcomes.pdf](http://macaw.pbworks.com/f/measuring_ee_outcomes.pdf)
- Tilbury, D. (1997). Environmental education: A head, heart and hand approach to learning about environmental problems. *New Horizons in Education*, 38, 1-9. Retrieved from <http://www.ln.edu.hk/osl/newhorizon/abstract/v38/1.pdf>.



- Touzeau, J. (2011). *The Green Musicians' Guide: Sound Ideas for a Sound Planet*. Boston: Course Technology, Cengage Learning.
- Turner, K., & Freedman, B. (2004). Music and environmental studies. *Journal of Environmental Education*, 36(1), 45-52. Retrieved from <http://ezproxy.library.dal.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=15372311&site=ehost-live>
- UNEP (1972). *Declaration of the United Nations Conference on the Human Environment*. Retrieved from <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=97&ArticleID=1503&l=en>.
- UNEP (2016a). *Music and Environment Initiative: About*. Retrieved from [http://www.unep.org/music\\_env/about.asp](http://www.unep.org/music_env/about.asp).
- UNEP (2016b). *Music and Environment Initiative: Participants*. Retrieved from [http://www.unep.org/music\\_env/participants.asp](http://www.unep.org/music_env/participants.asp).
- UNEP (2016c). *Green Up! Take the Green Up shower song challenge*. Retrieved from <http://www.greenup-unep.org/greenup-tips/shower-song-challenge.htm?lng=en#.Vr4QMvkrIgt>.
- UNEP (2016d). *United Nations Environment Programme: Environment for development*. Retrieved from <http://www.unep.org/default.asp>.
- UNESCO (1997). *Declaration of Thessaloniki*. Retrieved from <http://unesdoc.unesco.org/images/0011/001177/117772eo.pdf>.
- UNESCO (2014). *Shaping the future we want: UN decade of education for sustainable development (2005-2014) final report*. Retrieved from <http://unesdoc.unesco.org/images/0023/002303/230302e.pdf>.
- UNESCO-UNEP (1978). Intergovernmental conference on environmental education. Tbilisi (USSR). Retrieved from <http://unesdoc.unesco.org/images/0003/000327/032763eo.pdf>.

- United Nations (2015). *Global issues: Environment*. Retrieved from <http://www.un.org/en/globalissues/environment/>.
- Vinland Music (2014). Heather and Eric bio. *Vinland Music: Newfoundland's Music Publisher*. Retrieved from [http://vinlandmusic.ca/?page\\_id=1209](http://vinlandmusic.ca/?page_id=1209).
- Walter, L. F. (2000). Dealing with misconceptions on the concept of sustainability. *International Journal of Sustainability in Higher Education*, 1(1), 9.
- Wearing, A., Jalava, J. (June 2, 2011). Canadian Idols. *Alternatives* 37(4), 29-34.
- Weber, C.L., Koomey, J.G., Matthews, H.S. (2009). *The energy and climate change impacts of different music delivery methods. Final report to Microsoft Corporation and Intel Corporation*. Retrieved from <http://download.intel.com/pressroom/pdf/cdsvsdownloadsrelease.pdf>.
- Winterson, J. (1995). Imagination and Reality. *Art Objects: Essays on Ecstasy and Effrontery*. Toronto: Alfred A. Knopf Canada, 1995, pp. 133-151. Retrieved from <http://treyf.com/icult/wp-content/uploads/2014/10/Winterson-Imagination-and-Reality.pdf>.
- World Forum on Acoustic Ecology (2016). About. Retrieved from <http://wfae.proscenia.net/about/index.html>.
- World Wildlife Fund (2016). *Threats: Deforestation*. Retrieved from <https://www.worldwildlife.org/threats/deforestation>.
- World Wildlife Fund (2016). World Wildlife Fund: Home. Retrieved from <http://www.worldwildlife.org/>.
- Wright, S.L., Thompson, R.C., Galloway, T.S. (2013). The physical impacts of microplastics on marine organisms: A review. *Environmental Pollution*, 178, 483-492. doi:10.1016/j.envpol.2013.02.031.
- Wrightson, K. (2000). An introduction to acoustic ecology. *Soundscape: The Journal of Acoustic Ecology*, 1(1), 10-13. Retrieved from [http://wfae.proscenia.net/journal/scape\\_1.pdf](http://wfae.proscenia.net/journal/scape_1.pdf).

Zadeh, L.A. (1965). Fuzzy sets. *Information and Control*, 8, 338-353.  
[doi:10.1016/S0019-9958\(65\)90241-X](https://doi.org/10.1016/S0019-9958(65)90241-X).

## Appendix A: Preliminary Invitation Template

This is the template of the email sent by Panos Grames, director of the David Suzuki *Playlist for the Planet* program, as an initial contact with the musicians who had donated tracks to the *Playlist for the Planet* outside of the contest format. I also used this template as an initial contact to the musicians who appeared on the *Playlist* as contest winners. In both cases, this template was adapted to each specific recipient – depending on the circumstances, this communication may have been with agents, managers, a group of band members, or a single singer-songwriter.

Dear \_\_\_\_\_,

Do you remember how great it was to be a part of the David Suzuki Playlist for the Planet back in 2011?

I would like to inform you of a fantastic opportunity to further your advocacy work for the environment as a Playlist artist. Dr. Tarah Wright (an expert in the field of education for sustainability) and Jennifer Publicover (a research associate and professional musician) from Dalhousie University in Halifax, Nova Scotia, are conducting a study that focuses on professional musicians' experiences with environmental advocacy and sustainability education. They would like to highlight the performing artists featured on the Suzuki Playlist.

They are looking for one musician for each Playlist track who would be willing to share his/her experiences with writing and performing environmentally-themed music. Each would participate in a one-on-one interview that would take an hour or less (via phone/Skype or in person). If your Playlist track was a collaborative effort with a band, they would invite your group to pick one member who could speak for both the environmental content of the song and the performance experience. Your insights could help other musicians who are also advocating for the environment, as well as environmental educators who would like to use music as one of their teaching tools.

I really encourage you to participate in this study. Please let me know if I can pass your contact information onto the research team so that they may tell you more.

Sincerely,

Panos Grames

## Appendix B: Follow-up Invitation Template

[Date]

Dear \_\_\_\_\_,

Thank you very much for expressing an interest in our study, **“Perspectives on Music, the Environment, and Sustainability Education from Recording Artists Featured on the David Suzuki Foundation Playlist for the Planet, 2011”**. It is being conducted through Dalhousie University in Halifax, NS, under the supervision of Dr. Tarah Wright, an expert in the field of education for sustainability. We are very grateful to have Panos Grames’ support for our project.

We are excited to carry on in the spirit of the Playlist by collecting and analyzing the experiences of Playlist artists in writing and performing environmentally-themed music. We hope that the things we learn might potentially help environmental educators who wish to use music as one of their educational tools, as well as other professional musicians who also wish to advocate on behalf of the environment.

We are looking for one person to interview from each Playlist track. If your track was the result of a collaboration of a band / group, we would be grateful if you could ask your group to select one person to speak for all of you, about the content of the song, the experiences of performing it, and the musical techniques used in it.

Please also find attached a Consent Form. This form includes a general outline of the study, a description of what the participants do, a list of people on the research team, and how to contact someone if you have any questions, etc. If you would like to participate, please fill in, sign, and return the signature page. You may scan and email the signature page back as an attachment or mail it by post to me as the Principal Investigator of the project:

Jennifer Publicover

[jenpublicover@eastlink.ca](mailto:jenpublicover@eastlink.ca)

60 Old Ferry Rd.

c) 902-209-2397

Dartmouth, Nova Scotia B2Y 2E9

h) 902-463-6394

If you have any questions at any time, please do not hesitate to contact me. Thank you very much for your time and consideration.

Best wishes,

Jennifer Publicover, M.Mus, B.Mus  
on behalf of the Research Team

Appendix C:  
Participant Consent Form

**Consent Form**

For participants in the research project entitled:

**“Perspectives on Music, the Environment, and Sustainability Education from  
Recording Artists Featured on the David Suzuki Foundation Playlist for the Planet,  
2011”**

Jennifer Publicover, M.Mus, B.Mus  
Candidate, Masters in Environmental Studies

c) 902-209-2397

h) 902-463-6394

jenpublicover@eastlink.ca

Supervisor: Dr. Tarah Wright, PhD.  
Environmental Science, Dalhousie University

w) 902-494-3683

tarah.wright@dal.ca



## **Introduction**

We invite you to take part in this research study, entitled “**Perspectives on Music, the Environment, and Sustainability Education from Recording Artists Featured on the David Suzuki Foundation Playlist for the Planet**”, being conducted by Jennifer Publicover as part of her Master’s degree in Environmental Studies at Dalhousie University. Your participation in this study is voluntary and you may withdraw from it at any time before the data analysis stage in June 2014. The project description below tells you about any risks, inconvenience, or discomfort that you might experience as a participant. Participating in the study may not benefit you directly, but the insights that you give may benefit others. Please feel free to discuss any questions you have about this study with Jennifer or her supervisor, Dr. Tarah Wright.

## **Purpose of the Study**

We are asking professional musicians who have written environmentally-themed songs for the Suzuki Foundation Playlist, and who have advocated on behalf of the environment through their music, to talk about their experiences in doing so. By collecting the experiences of a number of people like you, we will pull together common ideas and insights that can potentially help other musicians who also wish to advocate for the environment, as well as environmental educators who wish to use music as one of their educational tools.

## **Study Design**

You are being asked to participate in a one-on-one interview that will last about 45 minutes. This interview will take place via phone, Skype, or in person (where practical)

and will be recorded (audio only). It will later be transcribed, and you will have a chance to review the transcript to make sure that it is accurate and properly represents what you wanted to say. The research team will then make use of analysis software to tag the ideas that come up in all of the interviews, and to pool those ideas together to find common themes.

### **The Participants**

We are using the artists who have contributed tracks to the David Suzuki Foundation Playlist for the Planet of 2011 as our data pool. We are looking for one participant for each track. In cases where there is a band or group collaborating on one song, we would like to interview one single person from that group who feels comfortable talking about not only the environmental aspects of the song, but also the experiences of performing it and the musical techniques used in it.

### **Who Will be Conducting the Research**

Jennifer Publicover, a professional musician and a student in the Master's in Environmental Studies program at Dalhousie University, will be conducting all of the research activities and will be the main contact person. She will be conducting, recording, and transcribing all of the interviews. She will also contact you after transcribing your interview so that you can read it and clarify any points if needed. She will analyze the data and in collaboration with her supervisor will develop publications and reports associated with the research. She will also re-contact anyone whom she quotes in these writings, to show them the context in which they are quoted and to get their approval.

Jennifer is working under the guidance of her supervisor, Dr. Tarah Wright, an expert in the field of education for sustainability and a faculty member at Dalhousie University. Dr. Wright will have access to the interview data that is collected, as will the two other members of Jennifer's thesis committee, Dr. Heather Castleden (School for Resource and Environmental Studies, Dalhousie University) and Dr. Steven Baur (Dept. of Music, Dalhousie University). You will likely not encounter these university faculty members, but Jennifer will be discussing all aspects of the project with them. All members of the supervisory committee will adhere to the ethical stipulations of this study.

### **What You Will Be Asked to Do**

Jennifer will arrange an appointment at your convenience to conduct an interview that will last approximately 45 minutes. You can decide how you would like to be interviewed – on the phone, via Skype, or in person. Each of these options is outlined below:

Jennifer is located in Halifax, NS, so for the vast majority of participants, an **in-person** interview will be impractical. However, if you are in the Halifax area and do choose an in-person interview, it will take place at a quiet and comfortable location of your own choosing at the time you agreed upon.

If you have a **Skype** account and a camera hooked up to a computer, you may wish to use Skype so that you can see your interviewer through the video link. This is entirely up to you, however, and using video will not make a difference to the recording of the interview, which is audio only. You will need to choose a quiet comfortable, location for your interview and provide your Skype contact information, plus a phone number in case the Skype connection is lost. Jennifer will dial in at the time you agreed upon.

If you choose to be interviewed by **phone**, you will need to provide a contact phone number at a quiet, comfortable location of your own choosing. Jennifer will dial in at the agreed-upon time from either a Skype-to-phone connection or a conventional phone number. You will want to make sure that you are using a telephone that does NOT charge you for incoming calls – if you wish to use a cell phone, you will want to verify that ahead of time so that you do not incur any unwanted expenses.

Your interview will be recorded on two digital audio recorders at the same time, to ensure back-up if one fails. The interview questions will all be open-ended, meaning that you are free to elaborate on your answers as you see fit. There are no “right” answers, just your own perspectives. You will be asked about the environmentally-related musical material you have written, about related musical and performance techniques and experiences, your thoughts on sustainability and your career as a musician, etc. You are free to skip any questions. You can also withdraw from the entire study at any time before the data analysis stage in June 2014.

NOTE: Jennifer has two music degrees and many years of experience working as an instrumentalist, instructor and arranger. You may feel free to use technical musical terminology in an interview, as your specific musical insights will be of interest to her and to other musicians who may benefit from this study.

At a later date, when your interview has been transcribed, Jennifer will give you the opportunity to review your transcript (you can chose to do this or not, but it is an opportunity for you to clarify your answers should you wish). Also, if direct quotes are taken from your transcript for the purpose of publications, Jennifer will contact you to show you the context in which you are quoted, to make sure you are satisfied with it. This should take a few minutes of your time.

### **Anonymity, Confidentiality, and Privacy**

We cannot offer anonymity to you or any of the other participants. Because your profile as a musician can be highly visible to the public, especially your artistic output, the things that you say in this study could potentially identify you, particularly to your fan base. The information that you provide may be specific to your performing context and your audiences. For this reason, we cannot guarantee that we can separate your comments from your identity. Your insights are very valuable, but we do not seek very private information and would encourage you to say only things that you are comfortable saying publicly. If, in communications with the interviewer, you wish to make a private comment, you will need to explicitly say so, and the comment will be taken out of the record and the study completely.

The audio recordings from the interview will be loaded immediately onto Jennifer's laptop, onto an external hard drive, and onto a computer housing analysis software in the locked laboratory of Dr. Tarah Wright. The original audio files on the two digital recorders will be erased after they are transferred to these devices. The laptop, the external hard drive, and Dr. Wright's lab computer are all password protected and will be locked away when not in use. Under no circumstances will anyone outside of the research group be allowed access to the research files, including the media. Additionally, out of respect for the privacy of the participants, the research group will not call external attention to the interviews or the interviewees during the course of the project, and will only discuss the project in appropriate academic contexts during this time. The results will be made public only after the study is complete.

### **Possible Risks**

There is minimal risk in participating in this study, meaning that there is no greater risk than in your normal daily life. There is a low risk of negative social consequences if you choose to openly criticize a person or an organization in your commentary and that commentary becomes public. You are free to express your thoughts using your own discretion, in the knowledge that your comments are not anonymous. You may have made similar choices in the past when advocating for a particular cause in your public life.

### **Possible Benefits**

This study is not likely to have direct benefits to you or to your career. However, it is hoped that your insights, along with those of other Playlist artists, will help provide ideas and guidance to environmental educators using music as an educational tool and to other musicians who also wish to advocate for environmental issues. It is hoped that this study will be published in academic journals so that many people can access it. Finally, it is hoped that you find it an enjoyable experience to share your ideas in a forum that may be new to you, in the same sort of spirit that originally led you to participate in the Suzuki Playlist for the Planet in 2010-11.

At the end of the project, Jennifer will provide participants with a brief written summary of

results for their own interest. Any participant who expresses a desire to have an electronic copy of any academic papers that result from this study, and/or a photocopy of the final thesis, will receive these items.

### **Compensation / Reimbursement**

No compensation is offered for participating in this study, monetary or otherwise. It is not expected that you will incur any expenses for participating. No reimbursement for expenses can be offered. We very much appreciate the time donated to this project by the Playlist artists.

### **Questions?**

If you have any questions about this study, you may call (collect) or email at any time:

Jennifer Publicover

c) 902-209-2397

h) 902-463-6394

[jenpublicover@eastlink.ca](mailto:jenpublicover@eastlink.ca)

Or

Dr. Tarah Wright

w) 902-494-1286

[Tarah.wright@dal.ca](mailto:Tarah.wright@dal.ca)

You will receive a copy of the signed consent form for your records and information before the beginning of the interview.

### **Problems or Concerns**

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Catherine Connors, Director, Research Ethics, Dalhousie University at (902) 494-1462, [ethics@dal.ca](mailto:ethics@dal.ca) . Collect calls will be accepted.

## Signature Page

For participants in the research project entitled

**“Perspectives on Music, the Environment, and Sustainability Education from  
Recording Artists Featured on the David Suzuki Foundation Playlist for the Planet,  
2011”**

Please read the following statement carefully. If you consent to participant, as the “I” person in this agreement, please print your name in the first blank space, check the boxes, and add your signature and date at the bottom.

“I, \_\_\_\_\_ ,

have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the entire study at any time before the data analysis stage in June 2014.

- I agree to allow the audio recording of my interview.
- I allow myself to be re-contacted to review my transcript and clarify my points.
- I allow myself to be quoted with attribution, after being given the opportunity to see the context of my quote.
- I waive my right to anonymity and confidentiality in this study, with the understanding that my identity forms an important part of the data.”

Signature \_\_\_\_\_ Date \_\_\_\_\_

Signature of Principal Investigator \_\_\_\_\_ Date \_\_\_\_\_



## Appendix D:

### Questions for Playlist Artists

#### **Preamble:**

Thank you for agreeing to participate in my masters' degree research study on the artists of the David Suzuki Foundation *Playlist for the Planet*. I will be asking you a series of open-ended questions about the track that you contributed to the Playlist, and about your experiences and thoughts on music, your profession, the environment, and sustainability. Your insights could help other musicians who wish to make their own statements about the environment, as well environmental educators who wish to incorporate music into their curriculum as one of their educational tools. You may feel free to use technical musical terminology as needed, as I am a professional musician myself and many people who would be interested in your perspectives might also be musicians. The interview should take about 45 minutes. You may skip any questions you do not wish to answer, and you may end the interview at any time. You may also withdraw from the entire study at any time before the data analysis stage in June 2014. I cannot offer you anonymity because of the public nature of your work, but I will provide you with the opportunity to review the transcript of this interview and clarify meanings so that you may feel comfortable that it represents what you wish to say, and that I as the researcher have understood you correctly. If I quote you directly in my report, I will show you the context in which you are quoted as well, to make sure that you are in agreement with it.

Do you feel comfortable in proceeding? [consent to begin] Then I'll open with our first question.

1. Please tell me about this particular song that was included in the Suzuki Playlist for the Planet.
  - 1.1 What inspired you to write it?

- 1.2 In what situations have you performed it? Do you know if others have taken it up?
  - 1.3 How do you present it? Do you have a preamble? Are there particular musical techniques that you feel help to bring it across?
  - 1.4 What do you feel has been the audience reaction to this song? Do you have any sense of its impact?
2. Do you have other environment-related repertoire? Do you have other “protest” or otherwise “motivational” repertoire on other issues besides environmental?
    - 2.1 If yes (to either question), what percentage of your total repertoire do you think is occupied by environment-related songs / other “protest” songs? What themes have inspired you to write this material?
    - 2.2 Please tell me your thoughts about the balance between entertaining your audience and raising awareness on issues that concern you, particularly any environment/sustainability issues.
    - 2.3 Do you tailor your environment-related musical programming / delivery to different types of audiences? If so, how?
    - 2.4 What role, if any, do you feel musicians in general should / could play in tackling environmental issues?
3. Have you found other ways of tackling environmental issues in your professional practice besides in the actual writing and performing experiences (for example, touring practices, compact disc packaging, playing for fundraisers, etc.)? If so, how?
    - 3.1 If you feel comfortable speaking about any ways in which you have tackled environmental issues in other areas of your life, you are welcome to do so as well (for example, if you have made certain pro-environmental lifestyle choices, have engaged in other advocacy work, etc.) but please do not feel obligated to provide personal information if you do not wish to.
4. Have you faced any challenges in the course of incorporating environmental issues into your practice as a musician? If so, what have they been?

- 4.1 Have you experienced any positive outcomes of your actions on environment-related issues as a musician? Have you experienced any negative outcomes?
5. Do you have any thoughts that you would like to share to help other professional musicians who would like to incorporate more environment / sustainability issues into their practices?
  6. Do you have any advice for environmental educators who seek to incorporate music into their educational curriculum? For example, environmental educators might be working within the school system, with nature clubs and environmental clubs, in community group settings, in wilderness settings, and in many other conceivable situations. Some of them may perform themselves; some may use pre-recorded material. Do you feel that there are insights they might gain from your experience?
  7. Are you working on any environmentally-themed material right now? If so, to whom is it directed and what does it address? Do you have any plans for future environmentally-themed material?

Thank you very much for donating your time to participate in this study. As I outlined at the beginning of our session, I will transcribe our interview and give you the opportunity to review it, so that you feel satisfied that it represents what you wished to share and that I have understood it as you intended. Your insights have been very valuable and it has been a pleasure speaking with you.

## Appendix E: Codes

1. Authenticity
  - 1.1 Avoiding preaching
  - 1.2 Do your research
  - 1.3 Marketing and perception
    - 1.3.1 The pitfalls and responsibilities of celebrity
  - 1.4 Taking your own advice, modeling, avoiding hypocrisy
  - 1.5 Using your gifts as an artist
  - 1.6 Writing from the heart
2. Dissemination of environment-related music
  - 2.1 Dissemination of Playlist song specifically
    - 2.1.1 Covers and videos by others of Playlist song
  - 2.2 Other dissemination routes, used and proposed
    - 2.2.1 New, innovative ideas that could be explored
    - 2.2.2 Technological applications
3. Environmental interests, concerns, work, and activities outside writing music
  - 3.1 Advocacy, charity, and other work, misc., incl. non-musical
  - 3.2 Pro-environmental lifestyle choices, incl. related background influences
    - 3.2.1 Raising children
    - 3.2.2 Self-criticism – see also Travel re the problem of flying
  - 3.3 Pro-environmental non-musical businesses, academic life, employment
  - 3.4 Pro-environmental professional practices within music industry, incl. fundraisers
    - 3.4.1 Blogging
    - 3.4.2 CD packaging
    - 3.4.3 Explicit mention of technical rider
    - 3.4.4 Food choices and water bottles
    - 3.4.5 Fundraisers , advocacy, and donating part of income

- 3.4.6 More sustainable energy sources
- 3.4.7 Travel, incl. touring lightly and the problem of flying
- 4. Impacts and experiences of musicians – see also Pro-environmental professional practices within music industry
  - 4.1 General environmental education comments
    - 4.1.1 Children and nature
    - 4.1.2 Relative clout of individuals, groups, countries
    - 4.1.3 Risk-taking
    - 4.1.4 Sharing knowledge, modeling inspirational examples – see also Positivity
  - 4.2 Language issues, text clarity and awareness of text
  - 4.3 Negative experiences, feedback, challenges, missed opportunities
    - 4.3.1 Disagreements with management, sponsors, labels, etc.
    - 4.3.2 Being a big enough artist to exercise clout
    - 4.3.3 Challenges gaining radio and other media play, exposure
    - 4.3.4 Controversial topics and ramifications
    - 4.3.5 Corporate gigs
    - 4.3.6 Part-time vs. full-time musicians, and the issue of making a living
    - 4.3.7 Reality check re effectiveness
  - 4.4 Positive impacts, feedback, and experiences
    - 4.4.1 Assessing any pro-environmental impact of music on audience
  - 4.5 Pro-environmental art vs. business vs. personal life
  - 4.6 Role of musicians in tackling environmental issues
    - 4.6.1 Affective learning and the language of art
      - 4.6.1.1 A variety of different approaches
      - 4.6.1.2 Breaking through numbness, getting in touch with emotions
      - 4.6.1.3 Explicit mention of experiential learning
    - 4.6.2 Observations on other artists
    - 4.6.3 Specific advice for environmental educators
      - 4.6.3.1 Children or youth making music themselves
      - 4.6.3.2 Inviting guest musicians
      - 4.6.3.3 Normalizing the act of caring for the environment

- 4.6.3.4 Picking relevant and quality material
      - 4.6.3.5 Positive messages
      - 4.6.3.6 Song publishing
      - 4.6.3.7 Using technology for education
    - 4.6.4 Specific advice for other musicians – see also Authenticity for overlap
    - 4.6.5 Visions of the future
  - 4.7 Role of venue or festival programmers, agents, staff
5. Inspiration behind Playlist song
- 5.1 Abdicating environmental responsibility
  - 5.2 Climate change specifically
  - 5.3 Consumerism
  - 5.4 David Suzuki Foundation itself
  - 5.5 Determination to act, use your gifts, do your part
  - 5.6 Economic development and resource extraction
  - 5.7 Economic disparity, imbalances of power
  - 5.8 Experience in doing aid or charitable work
  - 5.9 Family, friends, community, interconnectedness
    - 5.9.1 The parenting experience
    - 5.9.2 Unification through music
  - 5.10 First Nations perspectives
  - 5.11 General anxiety over environmental issues
  - 5.12 Influences from other musical sources
    - 5.12.1 The urban soundscape
  - 5.13 Philosophical references
  - 5.14 Politics, government
  - 5.15 The natural world
    - 5.15.1 Growing things in the earth
6. Musical techniques, performance practices, venues, audiences
- 6.1 Balancing entertainment and education, advocacy
    - 6.1.1 How much musical environmental content to include

- 6.2 Communal music-making
- 6.3 Cool vibes
- 6.4 Evolving with time towards more cause-oriented music, not just love songs etc.
- 6.5 Feel-good and not-feel-good songs
- 6.6 Letting listeners decide what they take from a song
- 6.7 Musical craftsmanship and specific techniques
  - 6.7.1 A stylistic departure from the usual in repertoire
  - 6.7.2 Allusions to other music
  - 6.7.3 Catchy songs that stick, brain worms
  - 6.7.4 Good art as the holy grail
  - 6.7.5 Improvisation
  - 6.7.6 Putting a show together
  - 6.7.7 Words first vs. music first
- 6.8 Overtly political and adversarial vs. unifying and inclusive
- 6.9 Preamble and patter
- 6.10 Tailoring for different audiences, incl. children
- 6.11 Using humour
- 7. Other motivational repertoire
  - 7.1 Covering songs by other artists
  - 7.2 Distinguishing protest songs from general motivational repertoire
  - 7.3 Future repertoire plans
  - 7.4 Inspiration for subject matter – see also Inspiration behind Playlist song
  - 7.5 Proportion of environmental or motivational content in repertoire by song
- 8. Outlook, belief systems, philosophies, spirituality, etc.
  - 8.1 A good conscience
  - 8.2 Connections to the rest of humanity
  - 8.3 Feeling connected with nature
    - 8.3.1 Cycles of nature, incl. cycles of food production
    - 8.3.2 Nature and child-rearing
  - 8.4 Indigenous perspectives

- 8.4.1 Critique of Canadian government, colonialism, modern society
- 8.4.2 Critique of own First Nations communities (by an indigenous person)
- 8.4.3 Holistic advocacy or commentary
- 8.4.4 Mother Earth and non-indigenous impacts on her
- 8.5 Influences from artists' upbringing
- 8.6 Positivity
- 8.7 Shining Your Light in whatever way, doing your part, taking a stand
- 8.8 Spirituality
- 8.9 What is ultimately important for human happiness