

Heritage and Sustainability in Early Music

Peter Petocz

A thesis submitted in partial fulfilment
of requirements for the degree of
Master of Music (Performance)
Sydney Conservatorium of Music
The University of Sydney
2019

I declare that the research presented here is my own original work and has not been submitted to any other institution for the award of a degree.

Signed:.....

Date: 27 November 2018

Table of Contents

Abstract	1
Introduction	2
Sustainability and heritage	4
The methodology of phenomenography	11
Conceptions of sustainability	16
Sustainability in music – what the academic literature says	21
Conceptions of early music	29
Heritage and sustainability in early music	36
Summary, discussion and conclusions	44
References	48
Appendix: Critical notes from recital presentation	57

Abstract

This thesis is an investigation of the ways in which musicians, and particularly those in the area of early music, view and interact with the notion of sustainability. Current discussion of sustainability highlights growing environmental problems and their related social and economic dimensions, but a fourth aspect – the cultural – is particularly relevant in music. Every discipline, including music, has a responsibility to contribute towards solutions to such problems.

Previous work carried out by the author and colleagues in a variety of academic disciplines resulted in the identification of a three-level model of conceptions of sustainability. An examination of the literature that conjoins music and sustainability reveals that the model is applicable in the field of music and that the great majority of the writings are based in ethnomusicology and the related developing field of ecomusicology. There is to date no explicit consideration of sustainability in the area of early music, an absence that is redressed in this thesis.

Examples are given to illustrate engagement with sustainability in early music at each level of the model of conceptions of sustainability. In these examples, the link between early music and sustainability is identified and brought to the foreground. The research thus provides a basis for discussion of the possible role of music, and particularly early music, in engaging with problems of sustainability in all their variety.

Introduction

In this thesis, I investigate the ways in which musicians, and particularly those in the area of early music, view and interact with the notion of sustainability. The important aspect is not what I as researcher and author understand by sustainability, nor standard and official definitions of the term, but what musicians in general, and ‘early musicians’ in particular, understand sustainability to be. Such understanding can form the basis for discussion of the possible role of early music, and music generally, in addressing problems of sustainability in all their variety.

Current discussion of sustainability highlights contemporary environmental problems, such as climate change and plastics pollution, their basis in exponential growth in human population and the resultant increase in destructive economic activity. The ‘three pillar model’ sees sustainability as dependent on the three aspects of environment, society and economics. This model is widely used and is a key aspect of the most recent global discussion at the United Nations level, the *Transforming our World* agenda (United Nations, 2015).

A fourth pillar or dimension of sustainability is the one of culture (Duxbury & Jeannotte, 2013), and this is particularly applicable to the discipline of music. In this context, the notion of ‘heritage and sustainability’ can be seen as two interlinked concepts – heritage representing a view looking backwards and sustainability a view looking forwards (Petocz, Reid & Bennett, 2014). In other contexts, heritage is most often connected with physical aspects of landscape or built environment. The idea of ‘intangible cultural heritage’ is more relevant to musical activity and provides a basis for discussion of sustainability in the context of music.

The research commences with a survey of the recent literature on sustainability and heritage, beginning with the report of the Brundtland Commission, *Our Common Future* (United Nations, 1987). Contemporary discussions of the notion of sustainable development, of various models of sustainability, and of the cultural dimension of sustainability and intangible cultural heritage form the basis of this section.

A discussion of appropriate methodology is then given. As the aim is to explore the ways that musicians understand sustainability, a suitable research approach is the methodology of phenomenography, developed by a group of Swedish researchers headed by Ference Marton in the 1970s. Phenomenography investigates the range of ways in which a group of people view a particular phenomenon – in this case, the notion of sustainability. Since the group in

this case consists of musicians in the area of early music, the phenomenographic approach is also used later to explore the ways in which they understand the notion of early music itself. Following this is a summary of previous work into academics' and students' conceptions of sustainability and related notions such as environment that I and fellow researchers have carried out over a period of more than a decade. This work is available in a series of publications from 2002 to 2016, and includes empirical investigations in general, such as university lecturers' understanding of sustainability (Reid & Petocz, 2006) and in particular disciplines, such as business students' conceptions of sustainability (Reid, Petocz & Taylor, 2009), as well as speculative investigations in areas such as mathematics (Petocz & Reid, 2003) and the arts (Reid & Petocz, 2005). One particular outcome of this research is a general model of 'conceptions of sustainability' based on phenomenographic principles, that identifies three increasingly broad views of the notion of sustainability. Taken as a whole, this body of research forms the basis of the current investigation.

The next section presents a survey, based on a reading of the literature from 2000 to 2018, of the diverse ways in which academic musicians have engaged with the notion of sustainability. Much of this literature is from the area of ethnomusicology and its extensions, including the developing field of ecomusicology. The published research suggests that our previous model of conceptions of sustainability is applicable in the music discipline, maybe with some extensions. It also indicates an almost-complete absence of any discussion of sustainability in early music, an omission that is redressed by the current thesis. The gap is filled by a speculative and hypothetical application of the model to the sub-field of early music. Several examples, some of them from non-European early music, are put forward and described, to illustrate the proposed three-level hierarchy of conceptions of sustainability in early music. Other examples were presented in the lecture/recital component of this thesis.

A final section presents a general discussion of the investigations, addresses the potential utility of the findings and summarises the overall conclusions of the research.

Sustainability and heritage

In the second half of the twentieth century, an increasing awareness of environmental problems caused for the most part by unchecked economic growth and a growing recognition of the finite nature of the world's resources led to the (re-)formulation of the notion of sustainability. Initially, the warnings were sounded by concerned individuals and groups, but soon the challenge was taken up by world bodies such as the United Nations. The most important early example of such a global initiative was the World Commission on Environment and Development. This three-year global investigation chaired by Gro Harlem Brundtland, often referred to under her name as the Brundtland Commission, produced the report *Our Common Future* (United Nations, 1987). This wide-ranging report put forward an idea of sustainability as a general worldview in which people should try to meet their needs in such a way that it did not have a negative impact on the ability of future generations to meet their needs. The actual statement, repeated with small variations at other points in the document, was:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.
(2.1, p.41)

At this stage, the focus was squarely on the environmental aspects of sustainability, though naturally the definition included the dimension of human behaviour, as a means of looking after the environment to prevent degradation. A particular aspect of human behaviour was the over-exploitation of environmental resources in the 'developed' world and the corresponding problems of poverty and lack of development in the 'undeveloped' world. The report noted that:

The concept of sustainable development provides a framework for the integration of environment policies and development strategies – the term 'development' being used here in its broadest sense. The word is often taken to refer to the processes of economic and social change in the Third World. But the integration of environment and development is required in all countries, rich and poor. (1.48, p.38)

This seems to be an explicit acknowledgement of the fact that sustainability involves environmental, economic and social aspects – often referred to in later discussions as the ‘three pillars of sustainability’.

One particular point is interesting: the report of the Brundtland Commission uses the term ‘sustainability’ often but in each case as if its meaning were obvious and uncontested – it is only ‘sustainable development’ that is defined, and the definition of ‘sustainability’ is assumed to follow from that. Here are a few instances from the report: “No single blueprint of sustainability will be found, as economic and social systems, and ecological conditions differ widely among countries” (1.51, p.39). “Living standards that go beyond the basic minimum are sustainable only if consumption standards everywhere have regard for long-term sustainability” (2.5, p.42). “Sustainability requires a clear focus on conserving and efficiently using energy” (2.61, p.53). “Sustainability requires the enforcement of wider responsibilities for the impacts of decisions” (2.76, p.56). In this, the Commission was following the political lead of previous United Nations statements (such as the Stockholm Declaration of 1972) to link sustainability and development in order to ensure participation from developing as well as developed countries.

The Brundtland approach of ignoring any difference between ‘sustainability’ and ‘sustainable development’ seems common in the literature. Some sources distinguish a role for each term: for instance, “the organising principle of sustainability is sustainable development” (from the Wikipedia page on ‘Sustainability’ <https://en.wikipedia.org/wiki/Sustainability>); and “... ‘sustainability’ is a term with a more reaching set of objectives and values [than ‘sustainable development’], one that can support de-growth and no growth agendas as well as growth” (Dessein, Soini, Fairclough & Hurlings, 2015, p.23). Others are more esoteric; an ‘Art and Sustainability’ website stated that “Sustainable development is a sensitizing concept: impossible to define but it creates certain sensibilities and specific characteristics of the problems at hand” (quoted in Reid & Petocz, 2005, p.349, the original website is no longer active).

At the other extreme, the concepts of sustainability and development are seen as incompatible, and the concept of ‘sustainable development’ as flawed and misleading, even oxymoronic. This is the case at the Thwink website (Thwink.org, 2014) where an explicit definition of sustainability is given as “sustainability is the ability to continue a defined behaviour indefinitely”. The discussion then continues by pointing out that for more practical

detail the specific behaviour must be specified, and gives the following three components of the widely accepted ‘three pillars of sustainability’ model:

Environmental sustainability is the ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely.

Economic sustainability is the ability to support a defined level of economic production indefinitely.

Social sustainability is the ability of a social system, such as a country, to function at a defined level of social well being indefinitely.

(<http://www.thwink.org/sustain/glossary/Sustainability.htm>)

These three aspects of sustainability – environmental, economic and social – have been extended to include a fourth component, that of culture. The history of this expanded view of ‘four pillars of sustainability’ is traced by Duxbury and Jeannotte (2013). Cultural sustainability focuses on ideas of cultural capital, culture as creative expression, and culture as a way of life and a vehicle for sustainable values. Including cultural sustainability in the discussion opens the door to intersections between ideas of sustainability and the field of music, which will be developed later.

Of course, culture itself is also a concept that can be viewed in various ways. Dessein *et al.* (2015, p.21) discuss a tripartite view of “culture as the general process of intellectual, spiritual or aesthetic development, culture as a particular way of life, whether of people, period or group, and culture as works and intellectual artistic activity.” They also consider a two-level view as “a broad, life-style-based concept referring to all domains of human life” or “a narrow, art-based culture referring to both the general processes of intellectual and spiritual or aesthetic development and its results.” To this they consider adding “culture as semiotic, drawing on symbols as vehicles, arguably the broadest view of all, including as it does both intentional and unconscious behaviour.”

The particular question of “how cultural policy/ies can contribute to sustainable development trajectories” is the focus of a recent special issue of the *International Journal of Cultural Policy* (Kangas, Duxbury & De Beukelaer, 2017, p.129). In this special issue, Throsby (2017) proposes ‘culturally sustainable development (CSD)’ as a concept that parallels the better-known notion of ecologically sustainable development (ESD) that has been used to combine environmental, economic and social aspects of the sustainable development agenda. He

argues that the theoretical basis of CSD is the notion of cultural capital, the “tangible and intangible assets which embody or give rise to cultural value in addition to whatever economic value they possess”, forming “a valued resource that has somehow to be managed, and it is this management function that can be interpreted within a sustainability framework” (p.136). Throsby lists a series of operational principles of CSD – intergenerational equity, intragenerational equity, importance of diversity, the precautionary principle, and interconnectedness – against which achievement in CSD can be assessed. He gives several examples of current issues, such as the development of indices for human well-being (for example, the Gross National Happiness index used in Bhutan). He concludes that “CSD is indeed a concept that has *both* theoretical substance *and* a potential application to real policy problems” (p.144).

An opposing, ‘contrarian’ view is presented by Isar (2017), who argues that the notion of sustainability, including its many derivatives – environmental, economic, social and cultural, but also terms such as ‘sustainable tourism’, ‘sustainable consumption’, ‘sustainable human settlements’ and even ‘sustainable development’ itself – has been widened to such an extent that it is essentially meaningless, and can (and is) applied to almost any situation as a ‘politically correct’ qualifier. In the process, it has “become a commonly shared vulgate in the contemporary *zeitgeist*” (p.151). The strange concept of ‘debt sustainability’ (as discussed in the UN Sustainable Development Goals, United Nations, 2015, e.g., point 69) would seem to support this view of the degraded nature of the term.

In the same volume, Duxbury, Kangas and De Beukelaer (2017) critique the ‘four pillars of sustainability (or sustainable development)’ model by identifying different roles and inter-relationships for the components of sustainability, and particularly for the cultural component. The standard model has each component (or pillar) of sustainability – environment, economy, society and culture – playing an equal role to support the whole. While useful as a metaphor, this is somewhat unrealistic as a model in assuming the independence of the components, and has the effect of reinforcing the separation in administration and policy, necessitating value judgement about the relative importance of each component. A model with interlocking circles is often used, and has the advantage of highlighting the dependence between the components (see Fig. 1).

An alternative model for three components shows *nested* circles representing economy (inner circle), society and environment (outer circle), indicating that environmental forces constrain society and hence economy, and highlighting the primacy of environmental sustainability.

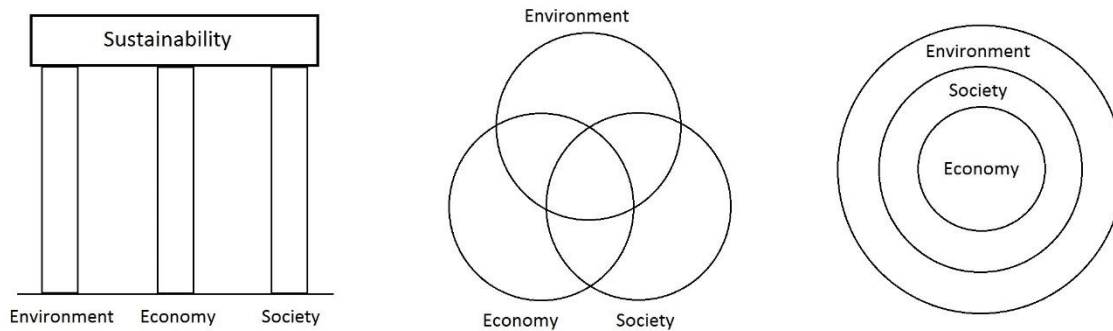


Figure 1. Three common models of sustainability

When culture is included as an aspect of sustainability, a fourth circle representing culture could be added to the last of these three-component models, nested inside environment as the second circle. Dessein and colleagues (2015) proposed three four-component models (see Fig.2), and they were investigated further by Soini and Dessein (2016): ‘culture *in* sustainability’ (shown as four interlocking circles, essentially the ‘four pillars’ model but allowing overlap between the components), ‘culture *for* sustainability’ (with a central circle representing culture, intersecting with separate circles for each of the other components) and ‘culture *as* sustainability’ (showing culture as a large circle surrounding the three intersecting circles for the other components). These models suggest different roles for culture: as a disparate component of sustainability, as a context to mediate between the other components, or as the overall foundation for achieving the aims of sustainability. The authors write about their models: “We suggest that this framework can work as a first systematic attempt to analyse the role of culture in sustainable development ... used both in research and policy concerning culture and sustainability” (Dessein *et al.*, 2015 p.33).

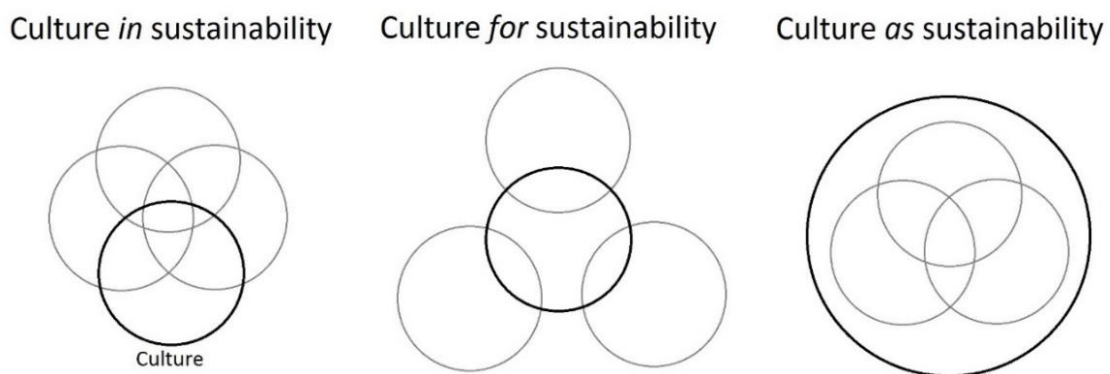


Figure 2. Three models of the relationship between cultural and other aspects of sustainability
(after Dessein *et al.*, 2015)

The imprecision about the definition and role of culture may explain why the 2015 Sustainable Development Goals (SDGs, United Nations, 2015) made little explicit mention of cultural aspects. The SDGs were developed by the United Nations to succeed their earlier Millennium Development Goals as a framework for action. They represent the latest major statement from the world body concerning the problems of sustainability – again undefined, except implicitly as a set of visions, and for the most part discussed from the viewpoint of sustainable development. The notion of culture as a fourth pillar or component of sustainability is not evident, with the three-pillar model explicitly mentioned:

We are committed to achieving sustainable development in its three dimensions – economic, social and environmental – in a balanced and integrated manner. (para. 2)

Cultural aspects are mentioned only generally, with a specific reference to only one aspect of culture:

We acknowledge the natural and cultural diversity of the world, and recognize that all cultures and civilizations can contribute to, and are critical enablers of, sustainable development (para. 36)

We recognize the growing contribution of sport to the realization of development and peace in its promotion of tolerance and respect ... (para. 37)

It seems that the writers of the document subscribed to the ‘culture *as* sustainability’ view, of culture as a background, foundation and enabler of all aspects of sustainable development.

Although cultural (and hence musical) aspects are absent from the 2015 Sustainable Development Goals, there is one context in which they do make an important appearance, and that is to do with the notion of Intangible Cultural Heritage. The concept of heritage is occasionally addressed in discussions of sustainability, though for the most part the focus is on the physical aspects of heritage – historic buildings and other structures of the built environment, and key landscapes and geographical features of the natural environment. However, the 2003 Convention for the Safeguarding of the Intangible Cultural Heritage (UNESCO, 2003) defines ‘intangible cultural heritage’ as “the practices, representations,

expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that communities, groups, and, in some cases, individuals recognize as part of their cultural heritage” (Article 2.1), and points out that it includes “performing arts” (Article 2.2) such as music. The UNESCO lists of the Intangible Cultural Heritage of humanity (<https://ich.unesco.org/en/lists>) include a number of musical practices; for instance, in the 2017 list, Zaouli popular music and dance of the Guro communities in Côte d’Ivoire, the multipart singing of Horehronie, Slovakia, the khaen music of the Lao people, and organ craftsmanship and music in Germany. Such examples broaden the long-held view of heritage as focusing purely on the physical manifestations of culture. The UNESCO page on World Heritage and Sustainable Development (UNESCO, 2018a) claims that “World Heritage may provide a platform to develop and test new approaches that demonstrate the relevance of heritage for sustainable development”, though the examples given focus on the role of World Heritage properties rather than any aspects of intangible cultural heritage.

The methodology of phenomenography

The aim of this study is to investigate the various ways in which academics in the discipline of music in general, and early music in particular, view, understand and engage with the notion of sustainability. As such, it was important to uncover their own definitions of and ideas about sustainability, rather than utilising a definition from the literature or from the point of view of the author. The focus was on exploring their thinking about sustainability in the context of their musical activity, including researching, performing and teaching. An appropriate research approach, therefore, is one that enables investigation of musicians' ideas in order to find emerging differences among various views. Since the aim was specifically to investigate notions of sustainability in early music, not just music in general, one of the steps in the research process was to consider the various ways in which musicians understand the notion of 'early music'. Again, it is the views of musicians in general that are of interest, rather than a particular definition from the literature, or from the author's viewpoint. In both these instances, an appropriate research approach was to use the methods of phenomenography; this section, therefore, provides a brief introduction, illustrated with some examples from the history of the approach.

Phenomenography was developed as a research approach in the 1970s by Ferenc Marton and colleagues in Sweden, particularly Gothenburg University. The approach was initially aimed at describing the processes and outcomes of learning from the learner's own viewpoint (Marton & Säljö, 1976; Marton, 1981). The initial question posed was 'What does it *mean*, that some people are better at learning than others?' This led immediately to the question 'Why are some people better at learning than others?' (Marton, 1994). These questions were initially investigated empirically by asking a number of students to read a text and then interviewing them about their understanding of what they had read. Some students focused on the text itself and aimed to be able to recall as much of it as they could – they were using a 'surface approach' to learning. Others focused on what the text referred to and aimed to understand what it was about – they were using a 'deep approach' to learning. The latter group showed better learning outcomes in terms of comprehension of the written material. As well as providing answers, at least partial answers, to the basic questions, an important aspect of the findings was the qualitative difference between the learning approaches of the two groups; the 'deep approach' was not simply a better version of the 'surface approach', but rather it made use of a completely different learning method. This research approach was

extended to further contexts of learning, and then to investigation of people's experience and understanding of a wide range of situations, and given the name 'phenomenography'.

Phenomenography looks at how people experience, understand and ascribe meaning to a specific situation or aspect of reality or phenomenon (Marton & Booth, 1997; Bowden & Green, 2005). Marton and Booth point out that there is a relation between the way that people experience a particular situation and the way that they act in the situation:

To make sense of how people handle problems, situations, the world, we have to understand the way in which they experience the problems, the situations, the world, that they are handling or in relation to the way they are acting. Accordingly, a capability for acting in a certain way reflects a capability of experiencing something in a certain way. The latter does not cause the former, but they are logically intertwined. You cannot act other than in relation to the world as you experience it. (Marton & Booth, 1997, p.111)

This implies that finding out the different ways that people understand or experience a phenomenon such as sustainability in music is essential, as it is related to the various ways in which they could enact sustainability in music.

In terms of qualitative research theory, phenomenography is called a 'grounded' empirical approach, as theories are built from data. Its initial use was to describe, analyse and understand the experience of learning and teaching, an experience that is viewed as a relation between the person who is learning or teaching and the situation in which they are experiencing the learning or teaching. This is referred to as a 'non-dualistic' perspective, based on the view that experience is neither psychological, located in the mind, nor physical, located in the world, but a relationship between the person and the world. The methodology was soon applied to other aspects of experience; an early example was people's ideas about economics, particularly the notion of 'price'. Dahlgren (1975) asked schoolchildren, in individual interviews, why a bun cost about a crown (in Swedish currency). One group of children explained that the cost of the bun is made up of the cost of the ingredients and the time spent in making it; another (smaller) group talked also about the relationship between supply and demand for the ingredients of the bun and its effect on the cost. The latter group showed a qualitatively different understanding from the former group, in which the price was conceptualised in terms of the economic system rather than being a specific property of the bun.

There were many further examples of experience to which the method of phenomenography could be applied, leading to interesting and practically usable insights into the nature of people's understanding of the experience. Some were concerned with conceptions of a specific discipline and/or learning in that discipline, such as computer programming (Booth, 1992), accounting (Lucas, 2000), music (Reid, 1999), law (Reid, Nagarajan & Dortins, 2006) and statistics (Reid & Petocz, 2002). Others focused on dispositions such as the notion of internationalisation in nursing education (Wihlborg, 2004), ethics in business education (Reid, Taylor & Petocz, 2011), or the classic study of competence in car engine optimisation at the Volvo plant in Sweden (Sandberg, 1994).

In many studies of this type, data have been collected using 'semi-structured' interviews, investigating people's particular experience by starting with a small number of specific questions and then posing follow-up questions based on respondents' answers. Alternatively, analysis can be based on written artefacts, collected for the specific purpose, such as an analysis of responses to an open-ended survey question to investigate school children's ideas of environment (Loughland, Reid & Petocz, 2002), or maybe collected for another purpose entirely, for instance, another classic study using the acceptance speeches of Nobel prize winners to explore their conceptions of scientific intuition (Marton, Fensham & Chaiklin, 1994).

Irrespective of these variants, phenomenography always focuses on those aspects that are *different* within a group of people involved in the particular situation. More than thirty years of experience of many groups of researchers (including ones with which I have been involved) has repeatedly demonstrated an interesting fact: when a group of people experience a particular phenomenon they will view it in ways that are qualitatively different – and usually a small number of such ways – rather than in a continuum of views. This could be summarised as saying that 'experience is discrete rather than continuous'. In any particular group, some people will share a way of experiencing a certain phenomenon in the world around them, while others will experience the same phenomenon in quite distinct and different ways. This key finding seems quite counter-intuitive, and has been maybe the most significant overall contribution of the phenomenographic approach.

From my point of view as a statistician, there is an interesting parallel: both statistics and phenomenography focus on variation, but the former looks at quantitative variation, as opposed to the latter, which deals with qualitative variation. Such variation makes one way of seeing a phenomenon, such as the discipline of music and the nature of learning in music,

qualitatively different from another. Phenomenography focuses on describing these qualitatively different categories, and aims to explicate the underlying structure of the variation across the group of participants.

The outcome of a phenomenographic study is a set of logically related categories, referred to as ‘conceptions’ of the phenomenon. These conceptions are delineated by the qualitative differences between the categories. The conceptions and the relationships between them form the ‘outcome space’ for the research – a sort of map or picture of how different people understand the phenomenon, hence the term ‘phenomenography’. The outcome space of a phenomenographic study provides a rich description of the object of study by its emphasis on describing the variation in the meaning that is found in the experience of the phenomenon by different members of the group. The experience of each participant is a relation between the subject and the object, in other words, between the participant and the phenomenon. However, it is the structure of the variation across the group as a whole that emerges from individuals’ descriptions of their own experience.

The conceptions forming the outcome space can usually be displayed in a relationship that shows their hierarchical and inclusive nature, sometimes in terms of the logical definition of the categories and their inter-relationships, at other times due to the empirical evidence for the categories, and occasionally both. Empirical evidence indicates that those categories of experiencing a phenomenon that show more profound understanding seem to consider a larger number of aspects and a richer network of relationships between them. People who seem to hold the ‘broadest’ conceptions usually show an awareness of the ‘narrower’ conceptions, while people who seem to hold the narrowest conceptions are usually unaware of any broader ones. Hence, the broadest conceptions are often referred to as ‘most inclusive’ and the narrowest conceptions as ‘most limiting’. In neither of these pairs of descriptors, broad or narrow, and inclusive or limited, is there any implied value judgment of the person identified with the conception. Indeed, the aim is not to classify or categorise individual participants but rather to report on the variation in the whole group’s understanding of the phenomenon.

This is particularly important in phenomenographic studies in learning and teaching – historically a very fruitful area of application of the methodology. A particular student may give evidence of a narrow or limited conception (of music, for instance), while another may exemplify a broad or inclusive conception. But both of these students in another context may show broader or narrower understanding (of music), and even in the same context could show different conceptions of a related phenomenon (learning music, for instance). Nor are the

conceptions developmental, in terms of representing a process of stages through which each student must pass. However, this description shows why we as educators favour the broader and more inclusive conceptions over the narrower and more limited conceptions. As educators, we can conceptualise learning as the process of qualitative change from narrower, more limited conceptions to broader, more inclusive ones. Corresponding to this, teaching can be conceptualised as a process of helping students to broaden their conceptions; and education can be conceptualised as an invitation to change in this way.

A final point is that phenomenography is not phenomenology – the two qualitative research approaches have sometimes been confused. While the two words phenomenography and phenomenology share the same root in reference to the phenomenon being considered, they are different (as are, for example, the words geography and geology). Phenomenology is a philosophical method that studies the nature of experience from the first-person point of view: “it aims to capture the richness of experience, the fullness of all the ways in which a person experiences and describes the phenomenon of interest” (Marton & Booth, 1997, p.117). Phenomenography, by contrast, is an empirical method to investigate and understand the various ways in which people experience a particular phenomenon in the world. In essence, phenomenology aims to describe the richness of an individual’s experience while phenomenography aims to describe the variation in the way that a group of people experiences a particular phenomenon. Both methods share a focus on the nature of human experience.

Conceptions of sustainability

In this section, I will describe and summarise the program of research that I have carried out with various colleagues into the ways that people think about sustainability. These investigations have been for the most part focused on university lecturers and students, in the context of university education in a variety of disciplines. They were carried out initially in response to calls from international bodies to recognise the importance of education in the process of sustainable development and to integrate issues of sustainability into curricula for all disciplines in order to prepare students to engage with current global problems. For instance, the report of the Johannesburg Earth Summit (United Nations, 2002) included the statement that “education is critical for promoting sustainable development” and the recommendation to “integrate sustainable development into educational systems at all levels of education in order to promote education as a key agent for change” (articles 116 and 121, United Nations, 2002). This research covers a time period of more than a decade, starting prior to the declaration of the UN Decade of Education for Sustainable Development (2005–2014), and includes investigations in disciplines as diverse as art and design (Reid & Petocz, 2005), mathematics and statistics (Petocz & Reid, 2003), environmental studies (Loughland, Reid & Petocz, 2002) and business (Reid, Petocz & Taylor, 2009) – but only recently and speculatively in the discipline of music (Petocz, Reid & Bennett, 2014).

An early and key component of our research programme was an analysis of a series of interviews undertaken at Macquarie University, Sydney, with academics involved in teaching postgraduate students in a variety of disciplines. The study sought to discover the ways in which university lecturers understood sustainability, teaching and the relations between them (Reid & Petocz, 2006, although the research on which this publication was based was commenced in 2002). The data comprised a series of interviews with 14 volunteer academics asking them a series of questions about their understanding of sustainability and their use of sustainability in their teaching. The participants were predominantly early-career academics from a range of disciplines – business, management and psychology; philosophy, music and literature; geology, geography and marine science, but not disciplines traditionally involved with ecological or environmental sustainability. The transcripts of these interviews (over 57,000 words) were analysed using a phenomenographic approach (Marton & Booth, 1997), exploring the range and variation in academics’ understanding of the phenomenon of sustainability in the context of university teaching.

We found that views of sustainability could be classified into three hierarchical conceptions. The narrowest conception ('distance') focused on a definitional view of sustainability as 'keeping something going'; such definitions seemed to be aimed at avoiding any further engagement with the concept. A broader conception ('resources') focused on the notion of sustainability of mineral and animal, and sometimes human, resources; it represents the more classic view of sustainability that has wide parlance in common usage. The broadest conception ('justice') focused on the idea of fairness from one generation to the next, or even fairness between groups within one generation, as an essential aspect of sustainability. Here are some brief quotations (from the original publication, using the participants' pseudonyms) that encapsulate the three conceptions:

Distance: Sustainability just means that something can continue, that is literally all it means. Well, it just means is something going to last or not. That's all sustainability means, and everything is either going to last or it's not going to last. Whether it is a relationship, or you know, literally it could just be a social dimension, fifty percent of marriages are sustainable in Australia. (Ron)

Resources: I suppose in broad terms by sustainability I understand the idea that an awareness of resources and how one continues to produce something without using up the resources for the future. I suppose again in broad terms, things like water, energy, coal, and fuel. I suppose that's the first things that I think in terms of sustainability, natural resources which are finite, life, where you just can't keep making them. (Anita)

Justice: I suppose I tend to think of it more on the environment side, so I think about environmental sustainability, in keeping the earth in a state that we can hand it down to future generations, so that it is still liveable and that there are resources that are there for future generations to use. (Kenneth)

As is commonly seen in phenomenographic outcome spaces, the broader conceptions include the narrower ones, so a person who holds the 'justice' view of sustainability is also aware of the 'resources' view, and can use it where necessary, as well as being able to discuss the 'distance' view. However, the inclusion does not work in the other direction: a person who holds the 'distance' view may resist discussion using the 'resources' view, and may not understand at all the ethical dimension implied in the 'justice' view.

In the context of university teaching, respondents discussed three corresponding modes of action: the narrowest approach ('disparate') encapsulated the simple idea that sustainability and teaching were completely separate activities; a broader approach ('overlapping') utilised the fact that sustainability could provide useful examples at various points of the teaching process; the broadest approach ('integrated') viewed sustainability as an essential, inseparable aspect of the teaching process. These modes of action generally, though not exclusively, occurred with the corresponding conception of sustainability – 'disparate' with 'distance', 'overlapping' with 'resources', and 'integrated' with 'justice'.

This model of 'conceptions of sustainability' has proved to be very fertile. We applied it empirically to the analysis of a further set of data obtained from interviews carried out with a group of 44 students from a business faculty (Reid, Petocz & Taylor, 2009) as part of an investigation of higher-level graduate 'dispositions'. Our thinking was that for most students sustainability is not a disciplinary topic of study, nor a generic skill to be learned. Rather, it represents a professional component, a core competency, that will play an increasingly important role in their working (and maybe even their personal) lives. In this investigation, sustainability joined three other such graduate dispositions – ethics, creativity and cross-cultural sensitivity – as objects of study. The approach was to ask each student about their understanding of each disposition in turn, and how it might be used in their future professional life, and then ask them to make more general connections between the dispositions. While we were prepared to identify a different range of conceptions of sustainability in this student group, as opposed to the previous group of academics, it turned out that the same model could be applied to the new group. Here are three representative quotes from the student interviews, situated in the context of their business studies or more generally; more quotes are given in the original report.

Distance: Sustainability? Well, if I use the literal translation of the word, sustainability for, to me would mean, yeah, just longevity or something like being able to, sustainability, just being able to, you know, hang in there. (Liz)

Resources: Basically in a business/commercial sense they are referring to probably acting in the best interest of society and reflecting environmental concerns about pollution, waste disposal and scarce resources in their bottom line ... In an economic sense sustainability might touch on the concept of scarce

resources and the interaction between demand and supply for certain resources.

(Kitty)

Justice: I guess my first thoughts are towards ecological sustainability, the environment, the greenhouse effects, yeah. Just, I guess that's linking directly to, in a sense of the world that we leave behind for our children, future generations, and yeah. I think it's an important concept. (Dan)

It is interesting to see how similar are the ideas, and sometimes even the quotes, of the undergraduate students and the academics. We noted this feature in earlier studies of people's conceptions of environment, a possible component of sustainability. Primary and secondary school children and adults showed a remarkably similar range of conceptions, though the adults tended to express them in more expansive language (Loughland, Reid & Petocz, 2002, and Petocz, Reid & Loughland, 2003).

The model of conceptions of sustainability was also applied speculatively to investigations of the nature of sustainability in specific disciplines, such as mathematics (Petocz & Reid, 2003), and to other dispositions, such as internationalisation (Reid & Petocz, 2007). These applications relied on first linking a model of conceptions of a discipline or disposition, also obtained phenomenographically, with the model of conceptions of sustainability, and secondly noting the tendency for the narrowest (and broadest) views of each to coexist. So students or lecturers who viewed mathematics in terms of atomistic components (calculations, rules, techniques) would most likely hold a 'distance' view of sustainability, those who viewed mathematics in terms of building and using models would tend to hold a 'resources' view of sustainability, and those who viewed mathematics as an approach to life and a way of thinking would be likely to hold a 'justice' view of sustainability. Pedagogy that helped students develop a broader view of mathematics could also encourage them towards a broader view of sustainability.

Our most recent use of the model was in the development of the 'Arts-Sustainability-Heritage' (ASH) model to "understand the values and actions of creative workers [including musicians] in relation to cultural heritage and sustainability" (Bennett, Reid & Petocz, 2014). The ASH model postulated views of heritage and sustainability in the context of artistic work in three levels: 'distance', where it was seen as irrelevant, 'artifacts', where it was used as a resource or inspiration, and 'justice', where it was an essential aspect of artistic work. These were paralleled by views of artistic work in the context of heritage and sustainability:

‘disparate’, ‘overlapping’ or ‘integrated’, using the same terms as in the teaching context. The model was then checked and validated using empirical data in the form of responses to open-ended survey questions from a sample of creative workers from the Perth region, Australia. In the following section, the model will be applied to an investigation of the various ways in which sustainability is used in the musicological literature and the academic discourse of music.

The model of conceptions of sustainability could apply in the same way specifically to cultural aspects, and this may be particularly relevant in the field of music. We introduced the notion of ‘cultural heritage and sustainability’ (Petocz, Reid & Bennett, 2014) as an approach to the cultural aspects of sustainability (as opposed to environmental, economic or social aspects). In the context of music, we view cultural heritage and cultural sustainability as two sides of the same coin, the former looking backwards, referring to the preservation of non-tangible aspects of past society, the latter looking forwards, referring to the continuation of these non-tangible aspects into future society. We noted that

Cultural sustainability is based on cultural heritage, as the future is based on the past, but it in turn influences the (re-)assessment of cultural heritage, as the past is re-interpreted in terms of the future. (Petocz, Reid & Bennett, 2014, p.7)

In music in particular, heritage includes the musical legacy – forms, styles and compositions – of previous times re-interpreted, sometimes including a combination of diverse elements from different styles – a process of ‘creolisation’ – and presented for contemporary audiences and sometimes in the form of recordings that will survive into the future. The connection with the notion of ‘early music’ is immediate, and will be explored at greater length in a later section of this thesis.

Sustainability in music – what the academic literature says

As the next step in the research, I will explore the academic literature of music to investigate what it says about musicians' ideas about music and sustainability. These understandings are organised according to the previously developed conceptions of sustainability, keeping a keen eye open for the possibility that an author might present a view of sustainability that is qualitatively different from those in our previous schema. The overall conclusion is that the model of conceptions of sustainability is a valid and useful way of presenting musicians' views about the notion of sustainability, and there are only a minority of writings that suggest a view that does not fit with the model.

First, a brief description of the method utilised for this investigation. Google Scholar was searched in order to find academic intersections between music and sustainability. A commencing date of 2000 was arbitrarily selected, based on the recent history of the concept of sustainability (however, a search was also carried out for 1970 to 1999, yielding no results). Using separate keywords produced a large number of writings; most often the two words appeared with no obvious connection, so instead the phrase “music and sustainability” was used, and a check revealed that this picked up those articles of interest from the search with separate keywords. An initial search (in early 2015) uncovered 25 articles (in addition to those which I and colleagues had written), and some of these led to further relevant articles (nine more from special issues of two journals, *The World of Music* and *Musicology Australia*, on the topic of music and sustainability). An updated search (in early 2018) found a further 15 articles that were relevant. At this later search, the number of ‘hits’ was noted down as 0 (before 2000), 1 (2000–2004), 7 (2005–2009), 62 (2010–2014), and 83 (2015–2018 March); of course, not all of these ‘hits’ represented actual papers. The phrase “music and sustainable development” was also investigated in publications since 2000, though it yielded only six references, four of them irrelevant and two papers uncovered in the previous search. Each of the identified articles was read to come to an understanding of what the author(s) understood by the notion of sustainability.

Novo (2013) represents a good example of the narrowest conception of the hierarchy, the ‘distance’ conception. Essentially, his view is that music is sustainable as it re-uses a fixed body of material, the pitches and rhythms from which music is constructed. He states that “Music is the sustainable transfer of emotions from one person to another and allows for the migration of creative emotional ideas from one generation to the next” (p.52), and that “Recycling of musical material is one of the best examples of practicing sustainability. It

involves creating something new from old with a healthy dose of imagination, novelty, and discipline” (p.51). He quotes Stravinsky’s statement that “I know that the 12 notes in each octave and the variety of rhythm offer me opportunities that all of human genius will never exhaust” (p.51). He summarises his position as:

Ultimately, creating something new out of existing material is the basic concept of music and evolution. That’s also how I would define progress in sustainable development. You have to find a way of doing something new with what you have. And music has a lot to offer in that regard. (Novo, 2013, p.53)

His short piece appears in a book entitled *Practicing Sustainability*, possibly as an invited chapter. Despite the almost-persuasive writing, the notion of sustainability that is presented is based on a trivial idea that seems designed to keep the problems of sustainability at a distance.

Many papers exemplified the intermediate conception of sustainability in terms of ‘resources’; in the musical context, the resources were predominantly cultural resources, such as the particular musical heritage of specific groups of people. These include Australian Indigenous groups: for instance, Barwick, Laughren and Turpin (2013) and Campbell (2013), discussing sustainability of women’s country-based rituals in Central Australia and Tiwi *kulama* ceremonies in the Tiwi Islands north of Darwin. In the former, “sustainability was interpreted as intergenerational transmission of the *yawulyu/awelye* ceremonies” (p.215). The authors write: “we found grave concerns that the words and music of songs are not being learned, and, without singers for the songs, dances and painters cannot be animated” (p.217). In the latter, improvisatory practice is being kept viable by a group of ‘Strong Women’ drawing on historic recordings of songs:

Elders are using repatriated ethnographic recordings as a teaching tool; not only to preserve the cultural and spiritual knowledge held in the old song texts, but also as linguistic and melodic source material for new ways of composing. (Barwick, Laughren & Turpin, 2013, p.237)

Other indigenous cultures feature in Boyu (2012), Briain (2014), Grant (2014) and Diettrich (2015), who investigate the sustainability of ethnic musical practices in Yunnan province in China, Northwestern Vietnam, Cambodia and the Federated States of Micronesia, respectively. A recent interesting example is that of Chan and Saidon (2017), who advocate for the traditional indigenous music known as Sewang of the Semai people in peninsular

Malaysia. They identify a threat to this music from the changing lifestyle of Semai youth, and in particular their growing interest in local and international popular music. The authors' suggested solution is the development of a contemporary version of Sewang that merges traditional elements and popular styles. This they propose to enact using a participatory action research approach, increasing the interest of local youth and providing practical benefits in the form of improved tourism opportunities.

Such studies seem to be relatively traditional investigations in ethnography or ethnomusicology, focusing on groups of people who are outside the common familiarity of Western experience. Other investigations move the focus closer to contemporary Australian or US experience. For instance, Iroanya (2013) looks at the contribution of gospel music to the sustainability of Christian ministry in Nigeria, and DeWitt (2009) considers the role of zydeco house music concerts in the lives of Cajun and Creole immigrant families in California. In less-common forays into urban culture, Wilson (2013) looks at the ways in which urban popular music of a New Guinea band helps to sustain local culture, while Margolies (2011) discusses the teaching of *conjunto* music in south Texas as a model of sustainability for intangible cultural heritage.

Some of the previous papers contain an implicit acknowledgement of the broadest conception of sustainability, the 'justice' conception. This is not surprising, given a widespread definition of the field:

Applied ethnomusicology is the approach, guided by principles of social responsibility, which extends the usual academic goal of broadening and deepening knowledge and understanding toward solving concrete problems and toward working both inside and beyond typical academic contexts. (International Council for Traditional Music, 2018)

This definition is quoted by Bendrups, Barney and Grant (2013) in their editorial for the *Musicology Australia* special issue on music and sustainability. In one of the papers in this volume, Gillespie (2013) discusses the preparation of a cultural heritage plan for the Lihir people of Papua New Guinea, whose island is the site of a large gold mine. She states explicitly that "The ethnomusicologist is in a unique position to contribute to corporate social responsibility in mining, especially in the realm of intangible cultural heritage" (p.185).

In the earlier *The World of Music* special issue on the same topic, Titon's (2009) editorial talks about music as a sustainable biocultural resource, including "the ethical argument that

all peoples and their cultures have a right to survive, even to flourish” (p.6). This makes an explicit statement of the ‘justice’ view of sustainability. Indeed, Titon has for many years maintained an academic debate on music and sustainability, culminating most recently in his editorship and chapter in *The Oxford Handbook of Applied Ethnomusicology* (Pettan & Titon, 2015). In the introduction to the chapters, Section 3, the editors write: “Advocacy for social justice underpins most of the contributions to this volume” (p.54).

Another study sharing this position is Stefano and Muphy’s (2016) examination of the ‘Singing and Praying Bands’ living tradition. Set in the Chesapeake region of the US, this tradition developed from covert religious observances of enslaved African-American people before the US Civil War. Their study is set up using a ‘resources’ view of sustainability, but soon becomes explicit about the ‘justice’ view:

Bringing these social justice considerations [addressing inequalities, racism, etc.] into the ICH [intangible cultural heritage] discourse spotlights the need to prioritise a sharing of authority and expertise between cultural community and heritage professional during all steps of the safeguarding process – from identification of community needs to subsequent promotional efforts. (Stefano & Muphy, 2016, p.611)

In a much broader geographic and social context, Rees’s (2016) article on Chinese ‘original ecology folksong’ investigates the intersection of sustainability of traditional folksongs of diverse Chinese ethnic groups and concerns for ecological sustainability and conservation in a nation that contains almost one-fifth of the world’s population. The term ‘original ecology folksong’ (*yuanshengtai min’ge*) references a natural, authentic style of singing, often in local dialect, as opposed to the standardised, conservatory-trained singing used in most staged folk performances. Concerns for rapid culture loss and significant environmental degradation form an explicit part of the ‘original ecology’ ethos. Rees writes:

There are obvious points of intersection with the nascent Western subfield of ecomusicology, not least in a sense of impending environmental crisis. (Rees, 2016, p.75)

The concept of the original ecology folksongs sums up the *Zeitgeist* of a nation that has only recently begun to value its myriad local cultures and take seriously

the frightening degradation of its natural environment, and indeed to connect the two. (Rees, 2016, p.76)

The articles on ‘music and sustainability’ that were uncovered in this search could all be allocated to one of the three conceptions, ‘distance’, ‘resources’ or ‘justice’. All of these articles would be described as coming from the area of ethnomusicology; this was obvious for the ‘resources’ papers, that investigated the sustainability of musical practice of particular groups of people, ethnic groups from various parts of the world, or social subgroups of (mostly) US or Australian society.

There were very few articles that demonstrated the ‘distance’ conception, but this is likely to be due to the process of identifying and selecting the papers. Musicians and music academics who hold a ‘distance’ conception of sustainability and a ‘disparate’ view of its relevance to music are not likely to mention sustainability in their writing; most articles from mainstream musicology just did not mention ‘music and sustainability’ and hence were not identified by the search. This is, in itself, an illustration of the other dimension of our original study – the conception of teaching (and now music) in the context of sustainability. At the other extreme, the articles that clearly articulated the ‘justice’ conception of sustainability seemed also to be presenting an ‘integrated’ view, that music was an essential component of cultural sustainability. As an example, consider Titon’s (2013) discussion, in another special issue on the music and sustainability theme, of the emerging field of ‘ecomusicology’ that “combines ecocriticism with (ethno)musicology. It is the study of music, culture, sound and nature in a period of environmental crisis” (p.8) and states clearly that “sustainability is one of the main concerns of ecomusicologists” (p.9). Allen and Dawe’s (2015) ‘current directions in ecomusicology’ collection includes chapters showing a variety of views of ecomusicology, predominantly based on a ‘justice’ conception of sustainability in an ‘integrated’ setting.

Writings on ecomusicology commonly position music as a tool towards achieving ecological sustainability, a view of ‘music for sustainability’. This does not represent a different conception of sustainability itself, but rather a change in focus from the discussion of musical aspects of (usually cultural) sustainability. A broad-ranging review of music as a way of achieving (environmental) sustainability is presented by Kagan and Kirchberg (2016), in essence following the approach of the first author (Kagan, 2011) in his comprehensive book on ‘art and sustainability’. The paper “offers the first broad transdisciplinary review of research at the intersection of music and sustainability” (p.1487), the latter interpreted using a

‘justice’ conception. The authors acknowledge four dimensions of sustainability (ecological, social, economic and cultural) but focus on music as a path to achieving cultural sustainability:

A rich and evolving cultural life is as important to sustainable development of human societies as a rich and evolving biosphere, an economy that meets human needs, and a society that is just and equitable for diverse social groups. Cultural sustainability has value for its own sake and not only as a means towards other dimensions of sustainability. (Kagan & Kirchberg, 2016, p.1490).

The thesis is essentially analogic: music involves creativity and group collaboration, hence the practice of music develops these abilities for application to problems of sustainability; the musical aesthetics of complexity opens people to all the ambiguities and contradictions of sustainability; music does not represent anything precise and exact, and so encourages multiple, fluid and complex forms of representation. The work is an important study of the links between music and sustainability, and highlights key areas where the social experience and practice of music, especially participatory music, can contribute to sustainability, in particular to its cultural aspects.

Wolcott (2016) follows a similar approach in investigating the role of music, particularly participatory music, in developing a culture of sustainability. Again, this is ‘music for sustainability’, using the ability of the arts to provoke reactions, examine values and develop practices towards a sustainable future in ways that scientific and technical approaches have been unable to do. Based on her experiences with a communal project in North India, the author encourages practitioners of sustainability to experiment with participatory music. A similar approach and argument is utilised by Publicover, Wright, Baur and Duinker (2017). They focus on the affective components of environmental education, provoked by appropriate musical input, to achieve change:

The arts can help provide some of the affective components of environmental education – emotions, values, and motivations driving pro-environmental behaviour. As one of the arts, music can captivate, entertain, and create a sense of community. (Publicover *et al.*, 2017, Abstract)

One particular idea that seems to be orthogonal to the model of conceptions was the notion of ‘sustainability as a metaphor’, investigated in the same context of ‘music for sustainability’.

For instance, Grant (2015) investigated the global threat to music as intangible cultural heritage. She pointed out that much ethnomusicological literature “features rhetoric that draws on metaphors from ecology, including, for example, the ideas of music ‘ecosystems’, ‘endangerment’ and ‘sustainability’” (p.1). Similarly, Keogh (2013) referred to “ecological metaphors in the context of sustaining diverse musical traditions” (p.10). However, talking of sustainability as a metaphor from ecology could suggest an idea of ‘survival of the fittest’ musical traditions, seemingly in the opposite direction from a ‘justice’ view that “all peoples and their cultures have a right to survive, even to flourish” (Titon, 2009, p.6). Does this maybe represent a more sophisticated ‘distance’ conception of sustainability in the musical context? Schippers and Grant (2016) challenge this idea that the best music will always survive based on its intrinsic quality. The project on which they report identified a large number of possible forces beyond the music itself that can influence the survival of a particular musical practice. Applying these ideas to the urban context, Schippers notes that:

Deep awareness of these main factors in musical ecosystems and their interrelationships can be a powerful tool to ensure the cultural diversity of our planet for decades to come. (Schippers, 2016, p.17)

An unusual and thought-provoking paper, Angeler’s (2016) exploration of the links between heavy metal music, complexity theory and sustainability science utilises analogy rather than metaphor. He claims that the artistic component of the heavy metal genre, particularly its transgressive style, can be used as a qualitative critical thinking tool to increase awareness of environmental sustainability.

In conclusion, the model of conceptions of sustainability developed from interviews with lecturers in various disciplines over a decade ago, and confirmed with students of business and related areas, seems to be still applicable and useful in the area of music and sustainability. Although the search was carried out from 2000 onwards, it became obvious that ‘music and sustainability’ only attracted attention from the late 2000s, with the majority of articles published since 2009. Hence, the UN Decade of Education for Sustainable Development (UNESCO, 2018b) and its call for the inclusion of sustainability in all disciplines only had an appreciable effect in music in its latter half. Yet the sudden increase in articles on the topic, and the several special issues of journals and book collections published since then, indicate that the combination is now firmly established as an area of musicological

research and discourse. As editors of a volume on sustainability in the arts, Kagan and Kirchberg (2008) write:

Besides explicit contents and processes, sustainability in the arts relates to an ensemble of *values*, an ethical enquiry into the meanings and implications of justice or rather justices in the contemporary world. (Kagan & Kirchberg, 2008, p.18)

It is a welcome sign that music is taking its place amongst other arts in this endeavour.

Conceptions of early music

Before applying the model of conceptions of sustainability to early music specifically, it is necessary to examine what the term ‘early music’ means to musicians in the area.

The whole idea of early music is a relatively recent phenomenon – maybe only a century or so old. Generally, in earlier ages musicians played the music of their time and place, whether it was folk music, church music or art music. One of the earliest exceptions was the original *Academy of Ancient Music* (initially the *Academy of Vocal Music*), founded in London in 1726 for the purposes of studying and performing ‘ancient’ music, defined as “music composed more than 20 years earlier” (according to the website of its modern revival, at www.aam.co.uk). The Academy, under the directorship of Agostino Steffani (1654–1728) and later Johann Pepusch (1667–1752), included many of the famous composers of early 18th century London and spent much of their time performing music written by them, in addition to madrigals and sacred music from the Italian Renaissance. Despite this and other isolated exceptions, the development of early music is usually dated back to the pioneering efforts in the early 20th century of musicians such as Arnold Dolmetsch (1858–1940) and Wanda Landowska (1879–1959).

Initially, the question ‘What is early music?’ seems to be the obvious one to consider, though the purpose is not to investigate the philosophical basis of the term or the movement. Rather than discuss the essentially modernist nature of early music, as Taruskin does in *Text and Act* (1995), or the various philosophical aspects of its authenticity, as Kivy does in *Authenticities* (1995), the aim here is to explore the meaning of early music to the musicians involved.

However, it quickly becomes apparent that early music has a range of meanings, with various connotations for different groups of people at different times. It seems more fruitful (and novel) for the current investigation to ask ‘In what different ways is early music viewed by musicians?’ and to utilise the methodology of phenomenography to investigate the range of conceptions of the phenomenon of early music.

The standard phenomenographic approach would then be to delineate a relevant group of people, maybe musicians involved in some way in the playing, performance or study of early music, to select a number of such people who are in some way representative of the group, and to carry out semi-structured interviews to elucidate their ideas about early music.

However, such collections of interviews have already been carried out, analysed and written about; for example, the study described by Shelemay (2001), or the volume of conversations

by Sherman (1997). While it would be interesting to repeat such a project in a different place (Sydney, Australia rather than Boston, USA), at a different time (2018 rather than 1996) and with a different methodology (phenomenographic rather than ethnographic), this would constitute another study entirely.

However, there is a wide range of writing on the subject of early music that can be used as a basis for investigation, and there are precedents for using such materials phenomenographically (Marton, Fensham & Chaiklin, 1994, and Loughland, Reid & Petocz, 2002, have already been mentioned). Focusing on the more academic and scholarly writing, a search for “early music” in Google Scholar results in about 50K (thousand) references; by decades from the 1970s to the period 2010+ there are around 3K, 5K, 7K, 11K and 15K references, attesting to a substantial growth in scholarly publications that mention the topic. As a practical way of narrowing this body of work, it was decided to focus on articles in the journal *Early Music*, published quarterly by Oxford University Press. This journal is described (albeit by the publisher, at <https://academic.oup.com/em>) as “the leading journal for anyone interested in early music and how it is being interpreted today.” Although the journal has been published since 1973, the volumes from 2000 to 2017 inclusive were taken as the corpus for investigation; this represents 72 volumes containing a total of over 700 articles (including editorials, but not book or music reviews) by a diverse and international group of authors.

The abstracts for each of these articles were inspected, looking for those that might include discussions and statements about the nature, idea or definition of ‘early music’; articles so identified were read in full. Relevant statements were collected and read multiple times; they were then grouped into conceptions, each representing a different way of viewing or thinking about the phenomenon of early music. These conceptions will be described next, and illustrated with quotations from articles in *Early Music*, augmented occasionally by some further statements taken from other classic sources as a way of ensuring the absence of bias that could arise from utilisation of this one corpus alone.

Conception A – time based, old music. In this view, early music is old music, defined by the (musical) time period in which it was composed, often – though not exclusively – the music of the Baroque and Renaissance periods. The following quotations give some examples.

The interest in repertoires of music previously considered mere footnotes in history books ... Explorations of Baroque music ... offered performers,

audiences and critics the possibility of refreshing a nearly static repertoire ...
(Zaslaw, 2001, p.6)

When this journal was founded, it was very clear that the term [early music] related to music that predated the 'standard' classical canon ... (Butt, 2008, p.304)

Bent (2013, p.7) discusses Johannes Tinctoris's statement, from the Prologue of his *Liber de arte contrapuncti* of 1477, that "there does not exist a single piece of music, not composed within the last 40 years, that is regarded by the learned as worth hearing"; this implicitly illustrates the time-based conception A of early music, though with a distinctly negative connotation.

Not surprisingly in "the leading journal", such a view is often presented as a prelude to a broader conception of early music, and it is more usual to find a purer version in older sources, hinted at by Moran (1999) and particularly clearly stated by Donnington (1974).

The term early music refers to the movement's original focus on music that predated what was then in the repertoire, particularly medieval, Renaissance and early baroque music. (Moran, 1999, p.211)

There are many glances before and after, many intrusive comparisons with adjacent periods, ... but the hundred and fifty years or so of baroque music are the main objective. (Donnington, 1974, p.28, from the Introduction to *The Interpretation of Early Music*)

As interests change, different musical periods may be included; for example, the inclusion of the Mediaeval period in Moran's statement, and the more recent inclusion of music of the Romantic period (see, for example, Peres Da Costa, 2012). Kelly (2011), making implicit use of this conception A, writes

Indeed, the nineteenth century, as it recedes into the past, is rapidly becoming the subject of early-music revivals. ... All music can be early music given enough time. (Kelly, 2011, p.12)

Such broadening of musical periods can be seen as a prelude to the next conception of early music.

Conception B – context based, music of specific settings. In this view, early music is the music of an identifiable previous setting, genre, place or context. This incorporates conception A but extends it beyond specific musical periods. The common term ‘historically informed performance’ (or HIP) is particularly appropriate for this view of early music. Here are some examples.

... the historicization of familiar works from the canon of Western classical music proceeded apace, advancing to encompass first Haydn and Mozart, then Beethoven, and more recently Schubert, ... and now Stravinsky and Bartok are being discussed as well. (Zaslaw, 2001, p.9)

No doubt the notion of Chopin as ‘early music’ will raise many an eyebrow. (Rink, 2001a, p.339)

Of course, now historical performance can stretch well into the 20th century and – given that the classical canon is, honestly speaking, only secondary to the truly ‘authentic’ music of our age, rock and pop – virtually any of it can be seen as ‘early’ to some degree. (Butt, 2008, p.304)

Many examples of specific research projects whose results are published in *Early Music* (and elsewhere) could be seen as exemplifying a conception B view of early music, particularly if they fall outside the traditional Renaissance and Baroque musical periods (though this is not necessary for the conception). For instance, Hu (2015) explicates the modal basis for late-Renaissance chromaticism as shown in the madrigals and motets of Carlo Gesualdo. Banks and Lefeber (2018) investigate the repertory of ‘exotic’ Ottoman music available in late 18th-century London, as exemplified by the tunes built into a mechanical organ-clock of the day, “possibly the earliest example of non-Western music to survive in sounding rather than notated form” (p. 299). Haines (2008) discusses an eighth-century neume fragment found in a manuscript in Durham, maybe the oldest instance of notated music, almost two centuries earlier than previously believed. And Rink (2001b) follows his editorial on ‘Chopin as early music’ with an investigation of multiple recordings of Chopin’s E-minor Prelude in order to “try to discover the unique logic, or line of argument, that lies at the heart of each interpretation” (p.434). In each of these examples, the focus is on music of a specific setting, context or composer, and hence suggests a conception B view of early music.

Conception C – concept based, an approach to music generally. In this view, early music is a way of thinking about music, beyond particular musical periods (conception A), and even beyond a particular setting, genre, place or context (conception B). Early music is an approach to music and a state of mind; it can apply to any music or musician. It contains the notion that the historical and social context is an essential component for understanding the music itself, and for presenting a convincing contemporary performance of it. The HIP acronym has more recently been recast as ‘historically informed practice’ (an early example is Norrington, 2004), broadening the idea beyond the performance of the music. Further, the term ‘informed practice’ (IP) is beginning to gain some usage in the discourse around research-led musical practice (for instance, in the forthcoming edited book, Reid, Carrigan & Peres Da Costa). Both terms seem to be consistent with a conception C view of early music. Here are some quotations that demonstrate this conception.

They [pioneers in the investigation of early music] were doing what historians always do: attempting to assemble as much relevant information as possible into lucidly imagined narratives of past places and events ... So let us fight unthinking routine by reinvigorating our historical research and our instrument building, our practising and performing, our listening and our passionate debates, knowing that even if we can never find definitive answers to the questions that interest us, the search for answers will continue to enliven us and our performances. (Zaslaw, 2001, pp.5,9)

We will all agree that ‘early music’ is more a frame of mind – a set of core beliefs – than a repertory. We will mostly agree that historically informed performance is an essential part of the mix, that content and meaning are contingent upon time and place, and that before we can sing or play the notes, we need to know what lies within and behind them – what they contain and what they do not. (Carter, 2013, p.81)

These quotes are supported by a statement from one of Shelemay’s (2001) interviewees, Joel Cohen, director of the *Boston Camerata*:

I would rather not use the word ‘early music’ now. I think it’s more a question of how you approach performance and I try, when I perform ... to place it in a historical context. You know ... to find out what the surrounding values are. And

in that sense, it's – as Taruskin correctly points out, it's a ... modernist approach, 'cause nobody ever did that before – [they] just played. (Shelemay, 2001, p.9)

The outcome space obtained showed the hierarchy and inclusivity that seems to be characteristic of phenomenographic investigations. Conception A (time based) is the narrowest, conception B (context based) is broader and includes the views in conception A, while conception C (concept based) is the broadest and most inclusive. The quotes from Zaslaw (2001), the first example in each conception, show the inclusive nature of the outcome space – how an author who is aware of the broadest conception is also able to refer to and utilise the narrower conceptions when needed. Another example of this inclusivity is provided by the following statements from David Irving (2013, pp.83–85):

I would ... describe the early music movement as an entire culture, a mode of being, a veritable Republic of Early Music where freedom of interpretation is enshrined in a set of aesthetic values that privilege innovation, the exploration of new sounds, and a constant debate over interpretation [Conception C]...
Something that I have personally railed against in my own practical experience as a performer is the notion of an idealized, standardized way of performing music from the 17th and 18th centuries ... [Conception A, negatively presented]... Think, for example, of how a rediscovered Renaissance Mass setting newly exhibited in public performance after being missing for centuries will likely not be performed in full liturgical context before a congregation of believers, but in a concert setting for a paying public [Conception B].

While there is some notion of historical development of conceptions of early music as shown in the references given earlier, it is not the case that the narrowest conception A was held exclusively at (say) the beginning of the 20th century, and then this was replaced by the broader conception B, and finally and more recently by the broadest conception C. One of the pioneers of the 20th century early music revival, Arnold Dolmetsch (1915), in his introduction to *The Interpretation of the Music of the XVIIth and XVIIIth Centuries* (a title that implicitly defines early music as music of the 1600s and 1700s, a conception A view), refers to 'Old Music' and points out that:

A hundred years ago people wrote their music still less accurately than we do now, so that if we want to play in the original style a composition of Beethoven,

for example, we find the text incomplete and imitative interpretation perplexing, for the leading players of our time do not agree in their readings. (Dolmetsch, 1915, p.v–vi)

(This is evidence of a conception B view). He concludes by stating (*italics in the original*):

But the student should first try and prepare his mind by thoroughly understanding what the Old Masters *felt* about their own music, what impressions they wished to convey, and generally, what was the *Spirit of their Art*, for on these points the ideas of modern musicians are by no means clear ... It is advisable, however, before beginning this study, to clear our mind of prejudice and preconceived ideas, and put aside intolerant modernity ... (Dolmetsch, 1915, pp.vii–viii)

This quote seems to describe a way of thinking about music, specifically, ‘old music’, and hence could be evidence of conception C as far back as the early 20th century.

The previous discussion has been presented in the specific context of European or Western early music. However, we should not forget that other cultures have long musical traditions that could also be considered under the label of early music. I am thinking here less about traditional ‘folk music’ that exists in most cultures around the world, including Europe, and more about the ‘classical music’ of various groups. For instance, India, Persia and China – amongst others – have well-developed and documented practices of classical music that could include those described as early music. Despite a long involvement with (European) early music, my knowledge of such music is limited to instances where it intersects with the European tradition. An example is the processional hymn *Hanacpachap cussicuinin* published in Lima in 1631 in the Quechua language, combining the European polyphonic sacred music style with elements of Inca culture. Another example is the research on Balinese gamelan and vocal music from the early 20th century, and almost surely from a much older tradition, based on surviving recordings from the 1920s (Herbst, n.d.). While the current study engages very little with non-European early music, the possibilities of a broader and more inclusive cultural investigation should not be ignored.

Heritage and sustainability in early music

The various strands of this research can now be combined into a discussion of heritage and sustainability in early music, the central topic of this thesis. It is important to note that the previous survey of sustainability in music highlights a notable omission – there seems to be no reference to sustainability in the context of early music, nor from the viewpoint of writers on early music. This is an unexpected gap in the literature, but one that provides me with the central opportunity of this research project and this thesis.

The approach that I will take is to apply the model of conceptions of sustainability, developed initially in the general context of higher education, and applied empirically and hypothetically in several specific disciplines. The results of the previous section, the survey of sustainability in the literature of music generally – though mostly in ethnomusicology and developments such as ecomusicology – can be used to guide the speculative application to the field of early music. This parallels the approach used by myself and colleagues in other disciplines such as mathematics and statistics (Petocz & Reid, 2003; Petocz, 2009).

We start with the narrowest view of sustainability, the ‘distance’ conception that sustainability and early music are two completely separate ideas, best treated using a ‘disparate’ mode of working in early music, wherein ideas of sustainability are irrelevant or even a distraction. As in other disciplines, there are undoubtedly people who follow this view. They would most likely define sustainability in some way – as simply keeping something going, maybe their own job or career, or the musical group they are running – and avoid any distraction of thinking or talking about sustainability in the context of their music making. They may focus on early music as, for example, playing chamber works for classical orchestra, or more specifically as the study and performance of the madrigals of Gesualdo, or the deciphering of 10th century neumes. They may even follow Novo (2013) in claiming that early music is a most sustainable field as it constantly re-uses the same music elements, and indeed the same musical pieces. They would be unlikely to discuss or write about early music and sustainability (though articles along the lines of Novo’s could be constructed).

It is not at all my intention to sound negative about such a viewpoint. The people concerned may be outstanding musicians, making significant contributions to some aspect of early music, and leading important developments in the field. It is simply that they do not see sustainability as having any useful intersection with their musicking. Possibly they have never considered early music and sustainability in the same context. If they were prompted to

combine the ideas, in the way that the business students we interviewed were asked to think about business and sustainability (Reid, Petocz & Taylor, 2009), some of them might well expound broader understandings about the relationship between early music and sustainability.

Many early musicians would subscribe to the broader ‘resources’ conception of sustainability, viewing their work in early music as a way of keeping alive the musical heritage of past ages, places or contexts. Cultural heritage and sustainability may not be constantly at the forefront of their musical work, but they would be aware of the role that they play in their music. This ‘integrated’ approach to sustainability and early music is shown most often in the ‘historically informed practice’ or HIP approach. The basic principle of HIP is that the historical, social and cultural background of music provides some essential information to inform a convincing contemporary presentation that aims to be as true as possible to the composer’s expectations – while recognising that complete authenticity is impossible.

An example may highlight the most important characteristics of this conception. Angelo Poliziano’s *Fabula di Orfeo* was written sometime between 1472 and 1483 as a commission for Cardinal Francesco Gonzaga of Mantova. Its musical telling of the story of Orpheo, and its strong links between poetry and declamation, drama and dance, represent a first in the history of opera. Unfortunately, all that survives of the *Fabula* is its text, including notes on the musical insertions that accompanied the performance. From this minimal material, Francis Biggi and *La Compagnia dell’Orpheo* have constructed, presented and recorded a modern performance (Biggi, 2007). Their investigation was built on study of contemporary written sources about the performance style of entertainments at the Italian courts, the relationship between poetry, music and declamation in the monophonic repertory of the time, and the emerging humanistic philosophy of Renaissance Italy. It also made use of the living tradition of improvisatory poetic declamation that still flourishes in central Italy, and can trace its roots back to the 15th century. The performers trained for an extended period – over a year – to develop their abilities to combine music, poetry and drama. The result is a fascinating re-imagining, or as Biggi puts it, a ‘clothing’ of *Fabula di Orpheo* in music and gesture. He writes:

Our aim was never to aspire to a pseudo-historical reconstruction of its staging, in any case impossible to imagine nowadays. But we wanted to give a ‘modern’

audience a sense of the total fusion between the *spoken* and the *sung*, between music, poetry and stage action. (Biggi, 2007, p.10)

Biggi's critical notes reveal an explicit aim to "restore a work to the sphere of interpretation" (p.10), to reclaim a historically and musically important work of cultural heritage. This can be read as a desire to contribute to the sustainability of this musical and cultural resource – the idea seems to be present, though the term 'sustainability' is not mentioned in the critical documentation of the project.

Another example can also throw light on the characteristics of the 'resources' conception of sustainability in early music. In 2016, I was privileged to be part of a team from the Historical Performance Division of the Sydney Conservatorium of Music (SCM) working with Sydney Living Museums (SLM) on the 'Dowling Songbook' project. This project was inspired by the discovery of the Dowling Songbook, a collection of sheet music published in Britain for voice and piano that had been bound together in 1840 in Sydney. The songbook was the property of a wealthy colonial couple, Lilius and Willoughby Dowling, and had obviously been much used by them – many of the pieces included penciled annotations relating to performance style and ornamentation, giving a fascinating insight into music making of the time.

Working with Neal Peres Da Costa (SCM) and Matthew Stephens (SLM), our team of musicians researched the background of the songbook, prepared playing versions of scores (in some cases making arrangements and transpositions of the original music), and performed a selection of pieces at three concerts in October 2016. The concerts were held in the drawing room of Elizabeth Bay House, a heritage property of SLM originally constructed in the late 1830s, with authentic furniture and furnishings of the time. An 1840s Collard and Collard square piano was specially acquired by SCM for the purposes of the project and the performances.

The aim was to re-imagine a forgotten musical world – the musical soundscape of early colonial Sydney – and to investigate colonial Australian music making practices of the early 1800s. The notion of music as cultural heritage was an explicit aspect of this project, and while sustainability was not explicitly mentioned in the written reports (National Trust, 2018; University of Southampton, n.d.) the 'resources' view of sustainability was clearly present in this early music project.

Both these examples represent fairly substantial projects in early music. However, the 'resources' view of sustainability in early music can be seen in many situations where early

musicians prepare and perform particular works. Such is the case for several of the pieces that I presented in the recital performance component of this project, particularly Jacob van Eyck's Psalm 140 'ofte tien Geboden' from *Der Fluyten Lust-hof* (1654), Johannes Ockeghem's motet *Ut heremita solus* (published 1504), and Georg Philipp Telemann's *Sonata Methodica No. 2* (1728). In each case, the performance of the piece was informed by background research on the social and musical context – the musical culture of Protestant Holland in the 17th century, the courtly and ecclesiastical musical world of 15th-century France, and the nascent democracy of 18th-century Hamburg – and by contemporary performance practice as described in sources of the time. In each case, there was an explicit idea of sustainability as keeping alive the musical heritage of a past age, place or context.

The broadest conception of sustainability is the 'justice' conception, and in early music this may be seen in situations where musical cultural heritage is safeguarded or reconstructed in some context where there seems to be an ethical imperative for the process. In early music there seems to be nothing written that makes such a position explicit. However, there are some projects in early music that could make a strong claim to being part of this conception. The three examples that follow give some idea of the characteristics of such an approach.

The first example concerns the Bolivian project (Florilegium, 2016), in which Ashley Solomon and Florilegium, a period instrument ensemble worked with local Bolivian musicians to bring back to life the Baroque music taken to South America by the Jesuits in the mid-17th century for music making on their missions. The European music taken to Bolivia was augmented by many other compositions by the local populace. When the Jesuits were expelled from Bolivia in 1767, the missions were closed and their music libraries of many thousands of pieces were placed in storage. In 2002, Florilegium accepted an invitation to participate in a Bolivian music festival and to include some of this Bolivian Baroque music in their program. A fruitful collaboration developed between Ashley Solomon, artistic director of Florilegium, and Father Piotr Nawrot, a Polish researcher who had lived and worked with the Bolivian people.

The collaboration resulted in further exploration of the repertoire, preparation and performance of various pieces in concerts in Bolivia and internationally, and the recording of three compact discs of the repertoire. At each stage in the process, local musicians were first supported in their training, and then included in concerts and tours both as singers and instrumentalists and ultimately also as composers. These musicians were, of course, descendents of the original participants, who gave, and still give, an indigenous component to

this originally European music. Their inclusion in the project results in performances of a particular style, arguably more authentic recreations of the original 17th- century music making. Solomon states:

They [the local Bolivians] took this music and made it their own – it's more upbeat, more positive. The music lifts the soul, rather than self-flagellates, which is what you see in a lot of Western Classical music of the same time. (Casy, 2018)

The Jesuits aimed to protect Bolivian culture while at the same time trying to convert indigenous Bolivian people to Christianity. Florilegium's Bolivia project has revived and rebalanced the cultural heritage of a body of European and Bolivian music that was thought to have been lost. The vital collaboration between musicians of different cultural backgrounds presents a fascinating example of sustainability and early music at the broadest, 'justice' level.

The second example concerns early music based in a non-European context. The recent history of Cambodia's suffering under the notorious Khmer Rouge regime in the late 1970s was the impetus for the symphonic composition *Bangsokol: A Requiem for Cambodia*. Composer Him Sophy and filmmaker and stage director Rithy Panh were both survivors of the traumatic events, in which an estimated two million Cambodians, including the majority of Cambodian artists, lost their lives. Their composition fuses Buddhist rites and Western requiem, incorporating *bangsokol*, a ceremony of Cambodian funeral rites. The *bangsokol* is also the white cloth placed over the body of the deceased and the act of removing it, which signifies moving into the next life, where the spirit finds rest.

An important aspect of the work is the incorporation of traditional Khmer instrumentalists and ancient Khmer chants (called *smot*) with a Western chamber orchestra and vocal chorus. The Cambodian 'early music' becomes an essential component of the whole work, and one that signals the aim of transmission and renewal of cultural heritage at a time when there is a strong social need to return the arts to their central role in Cambodian culture.

Him Sophy writes:

When I composed the requiem I relived the feelings I had during the Khmer Rouge times. It was hell on earth. It is important for the requiem to be shown around the world so that everyone can see that tragedy is a shared experience.

There is hope in creation. I always tell people, ‘Remember, never forget. Protect the future from repeating the past.’ (Cambodian Living Arts, 2018)

And Rithy Panh follows with:

Some have said that poetry after atrocity is not possible anymore, yet we need to have it. We must continue to create. We can’t start mourning without knowing how, and part of knowing how is to accept something very painful, something unexplainable. This art may bring us answers, help us accept our pain and loss. Yet it is more than an act of remembrance, it’s an act of transmission and brings humanization. Something which the Khmer Rouge attempted to take away from us. (Cambodian Living Arts, 2018)

This creative project, and particularly the utilisation of traditional and ancient musical elements, seems to represent a clear example of the ‘justice’ conception of cultural sustainability in the context of Cambodian early music.

The final example concerns Australian early music, and specifically, the music of the Eora nation, the Aboriginal inhabitants of the Sydney region. A few years after the British arrived in the late 1700s and began their interaction with the local people, two Wangal men, Woollarawarre Bennelong and his kinsman Yemmerawanne travelled to England with Governor Phillip. While they were in London, at one of the gatherings they attended in 1793 they sang a chant, *Barrabul-la*, accompanied by clapsticks, ‘in praise of their lovers’. This Aboriginal early music is at least two centuries old, but it is likely to be significantly older than that – Aboriginal people have lived in the Sydney area for over 47,000 years.

One of the audience present, Edward Jones, notated the music and words of the song and published it almost 20 years later in a book entitled *Musical Curiosities* (1811, a copy is given in Hunt, 2016, p.228). This document was rediscovered in the British Library in 2009 by historian Keith Smith, researching for an exhibition in the State Library of New South Wales in the following year. Aboriginal people in Sydney had known about the chant for a long time, and contemporary colonists had recorded the words. However, the rediscovery of the published version in 2009 created a written link to the past history of the song.

During his doctoral studies, jazz pianist and composer Kevin Hunt used the rediscovered publication to bring the chant back to life. His overall research focused on investigating the specific tonal qualities of the Stuart & Sons piano, an Australian instrument with an extended

range and musical features, and a distinctly different ‘Australian’ sound. The *Barrabul-la* chant was used as a basis of making connection with place, in an indigenous approach to music. With the assistance of Smith and singer Clarence Slockee, a Bungalong man and Indigenous culture educator, Hunt began a collaboration with a group of Australian Aboriginal musicians that resulted in performances of *Barrabul-la* and further improvisations and re-compositions inspired by the piece. The music was played with appropriate permission by groups of Aboriginal people in a variety of social contexts and is now re-established as a living part of the Dharug heritage. Various versions of these pieces are available as sound and video files in Hunt (2016).

Hunt describes the musical experience of working with *Barrubul-la* and several other contemporary pieces:

These chants are important to Sydney Aboriginal culture. Mostly, the singers had not previously heard or sung these chants, though it was common knowledge to each of them that the chant manuscripts existed ... As we played the chants over a period of several months each of the singers connected their musical and cultural associations into their musical interpretations of the chants. ... As [Boorooberongal song man] Richard Green [one of the singers] improvised the chant in Sydney language I realized we were making contemporary music, not examining as historians the music of the past. The energy of this music was being experienced ‘in the now’ as we interacted musically together, today, Yaguna [now, in Sydney language]. (Hunt, 2016, p.231)

The chant *Barrabul-la*, a piece of Australian early music, formed the basis for a philosophical approach to contemporary Australian music making. The importance of the Aboriginal musical cultural heritage contained in the Sydney chant led to the development of a rich connection between a white Australian research project and black Australian musicians primarily because of the interest and willingness of the Aboriginal musicians to collaborate. The opportunity of cross- and inter-cultural collaboration therefore enabled a research model to be created where *white* Australian research could be led artistically and culturally by *black* Australia. In this practice, a continued social and musical collaboration with Aboriginal musicians is integral to establishing an understanding and experiencing an Australian music that combines aspects of Indigenous and European culture. For all these reasons, this is

another clear example of the 'justice' conception of sustainability in the context of Australian Indigenous early music.

All three of these examples share some common features. In each case, there is a combination of local indigenous early music with some aspect of Western music. In each case, the process involves working cross-culturally with musicians from both cultural groups. And in each case, there is an appreciable ethical imperative for the process. These are all characteristics of the 'justice' view of sustainability in early music.

Summary, discussion and conclusions

This study has investigated the ways in which musicians, particularly those in early music, view and engage with notions of sustainability. Previous work I have carried out with various colleagues, mostly with tertiary lecturers and students as part of a coherent research program, has explored people's views of sustainability in the academic context generally and in various specific disciplines. One outcome of that research program was a three-level model of conceptions of sustainability, and this model was used as the starting point in the current study. The published literature in music shows views of sustainability that are generally consistent with this model, most commonly in the field of ethnomusicology or the related new area of ecomusicology. For the most part they focus on cultural sustainability, though there is a small group of writings that talk about environmental sustainability and how music can contribute to this. Most of the examples found seem to use the intermediate 'resources' view, and there are fewer examples at the broadest 'justice' level. Examples at the narrowest 'distance' level are not so easy to find (though one is given); for the most part, musicians with this view would not usually write about music and sustainability.

There seems to be nothing written about sustainability in early music specifically. A search of the two terms conjoined did not reveal anything, and the articles investigated to determine what early music means to musicians made no specific mention of sustainability. This omission in the literature presented a useful opening for the current research. However, it may well be that early musicians have simply not made explicit use of the concept of sustainability. A colleague who asked at one stage about the topic of this thesis responded to my explanation by suggesting that all early musicians are inevitably engaged with sustainability! This may be so, but there seems to be no written evidence for it. Nevertheless, the model that described the situation in music generally can be applied speculatively and hypothetically in early music. Doing so identifies a range of interesting examples that can be interpreted as expressions of sustainability in early music.

At the most basic level, this research has a purely academic outcome. When I started the investigation, I had little idea of what I would find in terms of early musicians' ideas about sustainability. When I was asked about it, I would often quote a variant of a line attributed to Einstein: "If we knew the answers, it wouldn't be called research." I discovered the recent identification of the idea of cultural heritage and sustainability and the role that music plays in this fourth component of sustainability. The investigation has given me a much better idea of the relationship between music and sustainability, the fact that most intersections are located

in ethnomusicology and ecomusicology, and the surprising result that there seems to have been no published writing relating to sustainability in the area of early music. I believe that my speculative discussion and examples in the previous section have changed this.

In terms of education, affective or dispositional education can be as important, or more important than cognitive education in changing people's views about and attitudes towards a phenomenon such as sustainability. An early study in which I participated concluded (amongst other points) that children's knowledge about environmental matters had no connection with whether they viewed environment in a narrow way as a place, or in a broad way as a relationship between people and place (Loughland, Reid, Walker & Petocz, 2003). Music has a role to play in shaping people's views about environmental problems and other aspects of sustainability, a point that is made by some articles that take the position of writing about 'music for sustainability' (such as Kagan & Kirchberg, 2016, and Publicover *et al.*, 2017). This is supported by research on the affective dimension of education; Shephard writes "a central element of education for sustainability is a quest for affective learning outcomes of values, attitudes and behaviours" (Shephard, 2008, p.95). Indeed, consideration of sustainability has been positioned as a 'professional disposition' in many tertiary institutions, and its development studied in the context of professional formation in a broader range of disciplines than solely music (Reid, Abrandt Dahlgren, Dahlgren & Petocz, 2011).

However, there are other reasons why this investigation could be important. First, the particular aspect of cultural sustainability has an intrinsic importance, as one dimension of the overall notion of sustainability – one that is often neglected in official discussions (such as the UN statement of sustainability goals of 2015). Kagan and Kirchberg suggest that "cultural sustainability has a value for its own sake and not only as a means towards other dimensions of sustainability" (Kagan & Kirchberg, 2016, p.1490). Of greatest importance, they claim, is that a rich cultural life is an essential component of the resilience that helps communities to face up to unexpected problems. From the affective viewpoint, if people have never considered the cultural aspects of sustainability, then they have limited opportunities to imagine the role that music might play in the values, attitudes and behaviours related to the traditional environmental, social and economic aspects of sustainability, particularly in times of crisis.

It is one feature of phenomenographic outcome spaces, noted in many previous studies, that people who view a phenomenon – such as sustainability – at the narrowest level are unable to understand the ideas at a broader level, while those who view the phenomenon at the broadest

level are still aware of and able to use aspects of the narrower levels. This was illustrated in the investigation of conceptions of early music, where references were given from some authors who were clearly able to discuss early music at the whole range of levels, from time-based to context-based to concept-based viewpoints. Further, I and co-researchers have direct evidence that simply interviewing people about their conception of a phenomenon (Reid & Petocz, 2002) or presenting people in a lecture/discussion with the whole range of conceptions (Reid & Petocz, 2003) starts them on the process of broadening their viewpoint and gaining access to the broadest ways of working with the phenomenon.

The speculative examples of sustainability and early music at the broader levels, as given in the previous section, are likely to encourage early musicians towards broader views of cultural sustainability, and indeed to sustainability generally. The interpretations of projects in early music as showing broader conceptions of heritage and sustainability can initiate thinking from people who would otherwise consider sustainability to be a topic that had no intersection, or only a trivial intersection, with music. Examples at the 'justice' level can provoke those early musicians working at the 'resources' level to investigate and incorporate the ethical dimension into their work. The overall change could be considerable. A decade and a half ago there were no written discussions of music and sustainability in any forum, and by now there are many articles, special issues of journals, and book collections devoted entirely to the topic, starting in the area of ethnomusicology and then leading to the development of the new field of ecomusicology. Another decade may see a similar growth in early music and sustainability, or even the development of new fields of music combining the two ideas. What about ecomusicology and early music? Will there be perhaps some contributions towards solving the environmental, social and economic problems of sustainability that developed from early music in particular?

Problems of sustainability are receiving increasing attention as we move towards the third decade of the 21st century. Stories of increasingly extreme weather events caused by climate change, plastic pollution in the oceans and thence in the whole food chain, deteriorating air quality in cities growing ever larger, and the removal of trees from large swathes of previously forested lands give indications of frightening environmental degradation. Related events such as wars and famines, large scale movement of refugees, and the rise of authoritarian governments indicate the social dimensions of the problems, while unchecked commercial development ensures the continuation of current economic inequalities on a large scale. I have been involved in academic work in the area of sustainability for almost two

decades, and have lived through the UN Decade of Education for Sustainable Development (2005–2014) and its calls for sustainability to be integrated into educational systems at every level. However, very little seems to have improved; indeed, the current situation seems worse than it was two decades ago.

What is the role of music and musicians in this context? Do we ‘fiddle while Rome burns’, or is there something that music (and the arts in general) can contribute to a solution, even a partial solution? The implicit contract between artists and society is that by their creations they should provoke people to think more deeply about social problems, about the human condition, in return for the material sustenance that society provides them. And one context where this has the best chance of occurring is education, particularly the education of young people – although the process of learning is certainly a lifelong activity. Theodor Adorno (1903–1969), the German sociologist and educator, wrote a famous essay (Adorno, 1971) which opened with the statement: “The premier demand upon all education is that Auschwitz not happen again.” The reference to Nazi genocide can be replaced by any social or environmental calamity, and the responsibility directed to any and every discipline. Educator and ethnomathematician Ubiratan D’Ambrosio (1988) started an article with the words:

This paper deals basically with the global responsibility of mathematicians and mathematics educators. The guiding question is: How do we, as mathematicians and mathematics educators, fulfill our commitments to mankind? (D’Ambrosio, 1988, p.67)

Music, too, has a responsibility to humanity, to critique society and to provoke people to engage with and strive towards solutions to social and environmental problems.

References

(All web links checked 10/11/2018)

- Adorno, T. (1971). Erziehung nach Auschwitz (Education after Auschwitz). In *Erziehung zur Mündigkeit. Vorträge und Gespräche mit Hellmut Becker 1959–1969 (Education to Maturity: Lectures and talks with Hellmut Becker 1959–1969)*, pp. 88–104. Suhrkamp, Frankfurt a.M., Germany. English translation online at <https://signale.cornell.edu/text/education-after-auschwitz> , Cornell University.
- Allen, A. & Dawe, K. (eds.) (2015). *Current Directions in Ecomusicology*. Routledge.
- Angeler, D. (2016). Heavy metal music meets complexity and sustainability science. *SpringerPlus*, 5:1637. Online at <https://springerplus.springeropen.com/articles/10.1186/s40064-016-3288-9> .
- Banks, J. & Lefeber, M. (2018). A mechanical source of Turkish music from 18th-century London. *Early Music*, 46(2), 299–317.
- Barwick, L., Laughren, M. & Turpin, M. (2013). Sustaining women’s Yawulyu/Awelye: some practitioners’ and learners’ perspectives. *Musicology Australia*, 35(2), 191–220.
- Bendrup, D., Barney, K. & Grant, C. (2013). An introduction to sustainability and ethnomusicology in the Australasian context. *Musicology Australia*, 35(2), 153–158.
- Bennett, D., Reid, A. & Petocz, P. (2014). Creative workers’ views on cultural heritage and sustainability. *Journal of Aesthetics and Culture*, 6, 1–13. Online at <http://dx.doi.org/10.3402/jac.v6.24476> .
- Bent, M. (2013). 40 years on. *Early Music*, 41(1). 7–8.
- Biggi, F. (2007). *La Fabula di Orpheo*. Compact disc recording, with critical notes, K617-200, France.
- Booth, S. (1992). *Learning to Program. A phenomenographic perspective*. Göteborg: Acta Universitatis Gothoburgensis.
- Bowden, J. & Green, P. (eds.), (2005). *Doing Developmental Phenomenography*. Melbourne, Australia: RMIT University Press.
- Boyu, Z. (2012). Playing for people or the gods? Sustainability of local religious music popular in Yunnan province. *Asian Musicology*, 19, 97–115.

- Briain, L. (2014). Minorities onstage: cultural tourism, cosmopolitanism and social harmony in Northwestern Vietnam. *Asian Music*, 45(2), 32–57.
- Butt, J. (2008). From ‘early’ to ‘modern’ music. *Early Music*, 36(2), 304–306.
- Campbell, G. (2013). Sustaining Tiwi song practice through Kulama. *Musicology Australia*, 35(2), 237–252.
- Cambodian Living Arts (2018). *Bangsokol*. Online at <https://bangsokol.cambodianlivingarts.org/bangsokol/> .
- Carter, T. (2013) It’s all in the notes? *Early Music*, 41(1), 81–82.
- Casy, N. (2018). Jesuit legacy in the Bolivian jungle: a love of Baroque music. *The New York Times*, May 8. Online at <https://www.nytimes.com/2018/05/08/world/americas/bolivia-baroque-music.html> .
- Chan, C. & Saidon, Z. (2017). Advocating contemporary traditional indigenous Semai music through an exploration of youth interest. *International Journal of Academic Research in Business and Social Sciences*, 7(7). Online at <http://dx.doi.org/10.6007/IJARBS/v7-i7/3114> .
- D’Ambrosio, U. (1998) Mathematics and peace: our responsibilities, *Zentralblatt fur Didaktik der Mathematik*, 30(3), 67–73. Online at <https://www.emis.de/journals/ZDM/zdm983a2.pdf> .
- Dahlgren, L.O. (1975). *Qualitative Differences in Learning as a Function of Content-oriented Guidance*. Göteborg: Acta Universitatis Gothoburgensis.
- Dessein, J., Soini, K., Fairclough, G. & Horlings, L. (eds.) (2015). *Culture in, for and as Sustainable Development: Conclusions from the COST Action IS1007 Investigating Cultural Sustainability*. University of Jyväskylä. Online at <http://www.culturalsustainability.eu/conclusions.pdf> .
- DeWitt, M. (2009). Louisiana creole *Bals de maison* in California and the accumulation of social capital. *The World of Music*, 51(1), 17–34.
- Diettrich, B. (2015). Performing arts as intangible cultural heritage in the Federated States of Micronesia. *International Journal of Heritage Studies*, 21(7), 660–673.
- Dolmetsch, A. (1915). *The Interpretation of the Music of the XVIIth and XVIIIth Centuries revealed by Contemporary Evidence*. Novello, London. Online at

[http://imslp.org/wiki/The_Interpretation_of_the_Music_of_the_17th_and_18th_Centuries_\(Dolmetsch%2C_Arnold\)](http://imslp.org/wiki/The_Interpretation_of_the_Music_of_the_17th_and_18th_Centuries_(Dolmetsch%2C_Arnold)) .

- Donnington, R. (1974). *The Interpretation of Early Music (New version)*, Faber & Faber, London.
- Duxbury, N. & Jeannotte, M.S. (2013). The role of cultural resources in community sustainability: linking concepts to practice and planning. *The International Journal of Sustainability Policy and Practice*, 8(4), 133–144.
- Duxbury, N., Kangas, A. & De Beukelaer, C. (2017). Cultural policies for sustainable development: four strategic paths. *International Journal of Cultural Policy*, 23(2), 214–230.
- Florilegium (2016). Bolivian diary. Online at <http://www.florilegium.org.uk/bolivian-diary> .
- Gillespie, K. (2013). Ethnomusicology and the mining industry: a case study from Lihir, Papua New Guinea. *Musicology Australia*, 35(2), 178–190.
- Grant, C. (2014). Perspectives of culture-bearers on the vitality, viability and value of traditional Khmer music genres in contemporary Cambodia. *The Asia Pacific Journal of Anthropology*, 15(1), 26–46.
- Grant, C. (2015). Endangered musical heritage as a wicked problem. *International Journal of Heritage Studies*, 21(7), 629–641.
- Haines, J. (2008). A musical fragment from Anglo-Saxon England. *Early Music*, 36(2), 219–230.
- Herbst, E. (n.d.). Bali 1928 – Repatriating Bali’s earliest music recordings, 1930s films and photographs. Online at www.edwardherbst.net .
- Hu, Z.L. (2015). Towards modal coherence: mode and chromaticism in Carlo Gesualdo’s two settings of *O vos omnes*. *Early Music*, 43(1), 63–78.
- Hunt, K. (2016). *Perceptions of the Stuart & Sons Piano Sound: Realising a creative, active vision*. PhD Thesis, The University of Sydney. Online at <http://kevinhunt.com.au/thesis/> .
- International Council for Traditional Music (2018). Definition of applied musicology. Online at <https://ictmusic.org/group/applied-ethnomusicology> .
- Iroanya, A. (2013). Gospel music and sustainability of Christian ministry in the third millennium. *International Journal of Theology and Reformed Tradition*, 5, 160–177.

- Irving, D. (2013). Historicizing performance practice: early music through time and space. *Early Music*, 41(1), 83–85.
- Isar, Y.R. (2017). ‘Culture’, ‘sustainable development’ and cultural policy: a contrarian view. *International Journal of Cultural Policy*, 23(2), 148–158.
- Kagan, S. (2011). *Art and Sustainability: Connecting patterns for a culture of complexity*. Transcript-Verlag, Bielefeld, Germany.
- Kagan, S. & Kirchberg, V. (Eds.) (2008). *Sustainability: A new frontier for the arts and cultures*. VAS – Verlag für Akademische Schriften, Waldkirchen, Germany.
- Kagan, S. & Kirchberg, V. (2016), Music and sustainability: organizational cultures towards creative resilience – a review. *Journal of Cleaner Production*, 135, 1487–1502.
- Kangas, A., Duxbury, N. & De Beukelaer, C. (2017) Introduction: cultural policies for sustainable development. *International Journal of Cultural Policy*, 23(2), 129–132.
- Kelly, T.F. (2011). *Early Music: A very short introduction*. Oxford University Press, Oxford.
- Keogh, B. (2013). On the limitations of music ecology. *Journal of Music Research Online*, 4. Online at <http://www.jmro.org.au/index.php/mca2/article/view/83> .
- Kivy, P (1995). *Authenticities – Philosophical Reflections on Musical Performance*. Cornell University Press, Ithaca NY.
- Loughland, T., Reid, A. & Petocz, P. (2002). Young people’s conceptions of environment: a phenomenographic analysis. *Environmental Education Research*, 8(2), 187–197.
- Loughland, T., Reid, A., Walker, K. & Petocz, P. (2003). Factors influencing young people’s conceptions of environment. *Environmental Education Research*, 9(1), 3–19.
- Lucas, U. (2000). Worlds apart: students’ experiences of learning introductory accounting. *Critical Perspectives in Accounting*, 11(4), 479–504.
- Margolies, D. (2011). Voz de pueblo Chicano: sustainability, teaching, and intangible cultural transfer in conjunto music. *The Journal of American Culture*, 34(1), 36–48.
- Marton, F. (1981). Phenomenography – describing conceptions of the world around us. *Instructional Science*, 10, 177–200.
- Marton, F. (1994). Phenomenography. In Husen, T. & Postlethwaite, T. (eds), *The International Encyclopedia of Education*, 2nd edition, Volume 8, Pergamon Press, London, pp. 4424–4429. Online at

https://edisciplinas.usp.br/pluginfile.php/2591670/mod_resource/content/0/Marton%20%281994%29.pdf .

Marton, F. & Booth, S. (1997). *Learning and Awareness*. Lawrence Erlbaum: Mahwah, New Jersey.

Marton, F., Fensham, P. & Chaiklin, S. (1994). A Nobel's eye view of scientific intuition: discussions with Nobel prize-winners in physics, chemistry and medicine (1970–1986). *International Journal of Science Education*, 16, 457–473.

Marton, F. & Säljö, R. (1976). On qualitative differences in learning: I. outcome and process. *British Journal of Educational Psychology*, 46, 4–11.

Moran, J. (1999). Early Music movement. In Steib, M. (ed.), *Reader's Guide to Music: History, theory and criticism*, Routledge, London, pp. 211–212.

National Trust (2018). Education and interpretation – Dowling Songbook. Online at <https://www.nationaltrust.org.au/education-and-interpretation-dowling-songbook/> .

Norrington, R. (2004). The sound orchestras make. *Early Music*, 32(1), 2–5.

Novo, J.L. (2013). Recycling reinvented: music and sustainability. In Madhavan, G., Oakley, B., Green, D., Koon, D. & Low, P. (2013), *Practicing Sustainability*. Springer, Ch. 10, pp. 51–53.

Peres Da Costa, N. (2012). *Off the Record: Performing practices in Romantic piano playing*. Oxford University Press, Oxford.

Petocz, P. (2009). Thinking about sustainability in statistics. In *Sustainability in the Curriculum Project*, Macquarie University Learning and Teaching Centre, 15–19.

Petocz, P. & Reid, A. (2003). What on earth is sustainability in mathematics? *New Zealand Journal of Mathematics*, 32 *Supplementary Issue*, 135–144.

Petocz, P., Reid, A. & Bennett, D. (2014). The music workforce, cultural heritage and sustainability. *International Journal of Culture and Creative Industries*, 1(2), 4–16.

Petocz, P., Reid, A. & Loughland, T. (2003). The importance of adults' conceptions of the environment for education. *Australian Association for Research in Education 2003 Conference Papers*. Compiled by Jeffery, P. L., AARE, Melbourne. Online at <https://www.aare.edu.au/data/publications/2003/pet03250.pdf> .

- Pettan, S., & Titon, J. (eds.) (2015). *The Oxford Handbook of Applied Ethnomusicology*. Oxford University Press.
- Publicover, J., Wright, T., Baur, S. & Duinker, P. (2017). Music as a tool for environmental education: artistic perspectives from musicians of the Playlist for the Planet. *Environmental Education Research*. Online at <https://doi.org/10.1080/13504622.2017.1365356> .
- Rees, H. (2016). Environmental crisis, culture loss, and a new musical aesthetic: China's 'Original Ecology Folksongs' in theory and practice. *Ethnomusicology*, 60(1), 53–88.
- Reid, A. (1999). *Conceptions of Teaching and Learning Instrumental and Vocal Music*. PhD Thesis, University of Technology, Sydney.
- Reid, A., Abrandt Dahlgren, M., Dahlgren, L.O. & Petocz, P. (2011). *From Expert Student to Novice Professional*. Springer Science+Business Media, Dordrecht, Netherlands.
- Reid, A., Carrigan, J. & Peres Da Costa, N. (eds.) (forthcoming). *Informed Practice, Innovation and Transcendence: Creative research in music extending boundaries*. ISME Global Perspectives in Music Education Series, Routledge, London and New York.
- Reid, A., Nagarajan, V. & Dortins, E. (2006). The experience of becoming a legal professional. *Higher Education Research and Development*, 25 (1), 85–99.
- Reid, A. & Petocz, P. (2002). Students' conceptions of statistics: a phenomenographic study. *Journal of Statistics Education*, 10(2).
- Reid, A. & Petocz, P. (2003). Completing the circle: researchers of practice in statistics education. *Mathematics Education Research Journal*, 15(3), 288–300.
- Reid, A. & Petocz, P. (2005). What is sustainability in the arts? In *Enhancing the Curricula: Towards the scholarship of teaching in art, design and communication in Higher Education*, Centre for Learning and Teaching in Art & Design, University of the Arts London, London, 345–361.
- Reid, A. & Petocz, P. (2006). University lecturers' understanding of sustainability. *Higher Education*, 51(1), 105–123.
- Reid, A. & Petocz, P. (2007). Internationalisation as an orientation for learning in mathematics. In Atweh, B., Calabrese Barton, A., Borba, M., Gough, N., Keitel, C., Vistro-

- Yu, C. & Vithal, R. eds., *Internationalisation and Globalisation in Mathematics and Science Education*, Springer, Dordrecht, The Netherlands, 247–267.
- Reid, A., Petocz, P. & Taylor, P. (2009). Business students' conceptions of sustainability. *Sustainability*, 1(3), 662–673. Online at <http://www.mdpi.com/2071-1050/1/3/662> .
- Reid, A., Taylor, P. & Petocz, P. (2011). Business as usual: business students' conceptions of ethics. *International Journal for the Scholarship of Teaching and Learning*, 5(1). Online at <https://digitalcommons.georgiasouthern.edu/cgi/viewcontent.cgi?article=1265&context=ij-sotl> .
- Rink, J. (2001a). Guest editorial: Chopin as early music. *Early Music*, 29(3), 339–340.
- Rink, J. (2001b). The line of argument in Chopin's E-minor Prelude. *Early Music*, 24(3), 434–446.
- Sandberg, J. (1994). *Human Competence at Work: An interpretive approach*. BAS: Göteborg.
- Schippers, H. (2016). Cities as cultural ecosystems: researching and understanding music sustainability in urban settings. *Journal of Urban Culture Research*, 12, 10–19.
- Schippers, H. & Grant, C. (eds.) (2016). *Sustainable Futures for Music Cultures: An ecological perspective*. Oxford University Press, Oxford UK.
- Shelemay, K. (2001). Towards an ethnomusicology of the early music movement: thoughts on bridging disciplines and musical worlds. *Ethnomusicology*, 45(1), 1–29.
- Shephard, K. (2008). Higher education for sustainability: seeking affective learning outcomes. *International Journal of Sustainability in Higher Education*, 9(1), 87–98.
- Sherman, B. (1997). *Inside Early Music – Conversations with Performers*. Oxford University Press, Oxford.
- Soini, K. & Dessen, J. (2016). Culture-sustainability relation: towards a conceptual framework. *Sustainability*, 8(2), 167. Online at <http://www.mdpi.com/2071-1050/8/2/167> (journal at <http://www.mdpi.com/journal/sustainability>)
- Stefano, M. & Murphy, C. (2016). 'We can always go back home': critical lessons in helping to safeguard and promote the Singing and Praying Bands living tradition. *International Journal of Heritage Studies*, 22(8), 607–621. Online at <http://www.tandfonline.com/doi/abs/10.1080/13527258.2016.1186104> .

- Taruskin, R. (1995). *Text and Act: Essays on music and performance*. Oxford University Press, Oxford.
- Throsby, D. (2017). Culturally sustainable development: theoretical concept or practical policy instrument? *International Journal of Cultural Policy*, 23(2), 133–147.
- Thwink.org (2014). Sustainability. Online at <http://www.thwink.org/sustain/glossary/Sustainability.htm> .
- Titon, J. (2009). Music and sustainability: an ecological viewpoint. *The World of Music*, 51(1), 119–137.
- Titon, J. (2013). The nature of ecomusicology. *Música e Cultura: revista da ABET*, 8(1), 8–18.
- UNESCO (2003). Text of the Convention for the Safeguarding of the Intangible Cultural Heritage. Online at <https://ich.unesco.org/en/convention> .
- UNESCO (2018a). Sustainable Development: World Heritage and Sustainable Development. Online at <http://whc.unesco.org/en/sustainabledevelopment/> .
- UNESCO (2018b). UN Decade of ESD (Education for Sustainable Development). Online at <https://en.unesco.org/themes/education-sustainable-development/what-is-esd/un-decade-of-esd> .
- United Nations (1987). *Report of the World Commission on Environment and Development: Our Common Future*. Online at <http://www.un-documents.net/our-common-future.pdf> .
- United Nations (2002). *Report of the World Summit on Sustainable Development*. Online at <http://www.un-documents.net/aconf199-20.pdf> .
- United Nations (2015). *Transforming our World: the 2030 Agenda for Sustainable Development*. Online at <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication> .
- University of Southampton (n.d.). The Dowling Songbook project at Elizabeth Bay House. Online at <https://sound-heritage.soton.ac.uk/projects/dowling-songbook-project-elizabeth-bay-house> .
- Wihlborg, M. (2004). Student nurses' conceptions of internationalisation in general and as an essential part of Swedish nurses' education. *Higher Education Research and Development*, 23 (4), 433–453.

- Wilson, O. (2013). Popular music as local culture: an ethnographic study of the album *Matha Wa!* by the band Paramana Strangers from Papua New Guinea. *Musicology Australia*, 35(2), 253–267.
- Wolcott, S. (2016). The role of music in the transition towards a culture of sustainability. *Empowering Sustainability International Journal*, 3(1). Online at <https://escholarship.org/uc/item/4vx624mc> .
- Zaslaw, N. (2001). Reflections on 50 years of early music. *Early Music*, 29(1), 5–14.

Appendix: Critical notes from recital presentation

[1] In this presentation and recital I summarise my research on musicians' ideas about and engagement with sustainability, with a particular focus on the area of 'early music'. In my thesis I spend some time investigating various preliminaries, including the methodology of phenomenography that I utilise throughout the research, background concepts and earlier work on heritage and sustainability, and the notion of 'early music' and its historical development. Here I pass over these points straight to the central ideas.

Very briefly, the contemporary view of sustainability can be traced back (at least) to the report *Our Common Future* of the Brundtland Commission (United Nations, 1987).

Sustainability has often been discussed from three complementary aspects: the environmental, the economic and the social. These combine to form the widely used 'three pillars' model. There is also another aspect – the cultural – sometimes referred to as the fourth pillar of sustainability (Duxbury & Jeannotte, 2013). This is a particularly relevant and useful aspect of sustainability in a discipline such as music. Most importantly, though, in this project I have not specified a definition of sustainability *a priori*. Rather, I have based my investigation on what musicians themselves, particularly those in early music, think about sustainability.

My presentation is illustrated with performances of several works, each connected in some way with the notion of sustainability and early music. Together, the pieces illustrate the various ways in which early musicians engage with ideas of sustainability.

[2] Previously, I and various colleagues have carried out a program of research into the ways that people think about sustainability. These investigations have been focused on university lecturers and students, in the context of tertiary education in a variety of disciplines; for example, mathematics and statistics (Petocz & Reid, 2003), art and design (Reid & Petocz, 2005), and business (Reid, Petocz & Taylor, 2009), and most recently and speculatively in music (Petocz, Reid & Bennett, 2014). On the basis of this research, we developed a model of 'conceptions of sustainability' that identified three levels of thinking about sustainability. For the current project, I investigated academic publications in music, searching through scholarly articles published between 2000 and 2017 that contained the phrase 'music and sustainability'; there were about 80 such articles or chapters, though none was specifically in the field of early music. Although I was open to the possibility of finding a different model in

music, the earlier model was adequate to show the different ways in which musicians viewed and engaged with the notion of sustainability.

[3] Distance: the first conception, the simplest and most limited, seems designed to keep the concept of sustainability at bay, essentially as a way of avoiding any deeper engagement with it. It can be illustrated by Novo's (2013) notion that music is the most sustainable of all disciplines as it involves the constant re-use of the same musical material! The viewpoint could be applied immediately to early music, as there we also constantly re-use the same notes and musical ideas. This conception doesn't seem to need any illustration – it just represents the simplest view. In playing any (early) music we are automatically participating in sustainability from this viewpoint by simply re-using the notes, rhythms and musical phrases that we have!

[4] Resources: the second conception of sustainability refers to the utilisation of various resources – mineral, vegetable or animal resources in many disciplines, but most often cultural resources in music. As a conception, it is shown explicitly most often in the area of ethnomusicology, investigating the sustainability of musical practices of groups of people – maybe indigenous groups (such as Australian Aboriginal women's rituals, Barwick, Laughren & Turpin, 2013) or special interest groups in other contexts (e.g., gospel music in Christian ministry in Nigeria, Iroanya, 2013).

Although there were no writings in early music that explicitly discussed the notion of sustainability, this particular viewpoint could be applied to many examples in early music. The HIP (Historically Informed Practice) notion of investigating the historical and social background of a particular piece of music, or more generally, any specific style or context of music, and trying to re-create a 'historically informed' performance for contemporary audience can be seen as an example of the resources conception of (cultural) sustainability.

The first three musical illustrations – pieces by Jacob van Eyck (1590-1657), Johannes Ockeghem (1410?-1497) and Georg Philipp Telemann (1681-1767) – can be seen in this light. The musical life and culture of Protestant Holland in the 17th century can be encapsulated in the work of van Eyck, and specifically in his variations on Psalm 140 'ofte tien Geboden'. The courtly and ecclesiastical musical world of 15th-century France can be represented by one of its most famous exponents, Ockeghem, and in particular by his motet *Ut heremita solus*.

The nascent democracy of 18th-century Hamburg, with its rise of a wealthy and leisured middle class – some of whom wished to spend their free time developing musical skills – is the background to the writing and publication of Telemann’s Methodical Sonatas. By preparing and playing them here and now, we contribute to the sustainability of the musical culture of those times.

[5] Justice: the third and broadest conception of sustainability adds the ethical dimension, essentially acknowledging the classic definition of sustainability as leaving the world in at least as good a state as we found it (a view that is given explicitly in the Brundtland Report, United Nations, 1987, “meet[ing] the needs of the present without compromising the ability of future generations to meet their own needs”). In musical articles, this position can be seen in some writings in ethnomusicology, in which there is an implicit or explicit statement of the ethical imperative to keep alive the musical culture of some specific group. It is also an essential component of the emerging field of ‘ecomusicology’ that “combines ecocriticism with (ethno)musicology [in] the study of music, culture, sound and nature in a period of environmental crisis” (Titon, 2013).

In early music, there is nothing written making such a view explicit. However, there are some projects in early music that could make a strong claim to being part of this third conception. One of these is the example of the Bolivian project (Florilegium, 2016), in which Ashley Solomon and the Florilegium ensemble brought back to life the baroque music taken to South America by the Jesuits for music making on their missions. The project has consistently included an essential contribution from local Bolivian musicians, descendants of the original participants, who gave – and still give – an indigenous flavour to this originally European music.

[6] Examples such as this, illustrating the ‘justice’ conception of sustainability, are usually whole programs of musical activity, rather than a single piece of music that would fit into a presentation such as this one. Instead, I move on to my penultimate example, one that illustrates the cultural sustainability of the recorder ensemble, a specific grouping of instruments that stretches back to the Renaissance period. By asking contemporary composers to write music specifically for a recorder ensemble, the cultural phenomenon of the ‘recorder consort’ is ensured of a future that is linked to its historical origins.

Not every writing about ‘music and sustainability’ can be included in the three-level model of conceptions of sustainability. In particular, the literature contained several discussions that could be described as ‘music for sustainability’, in which music was written and/or performed to highlight problems of sustainability, particularly environmental sustainability. The views of sustainability shown in such writings were more akin to those from other discipline areas, and the three-level model was still applicable to them. An example is the writing of Sacha Kagan and colleagues on ‘music and sustainability’, particularly the book-length investigation of ‘art and sustainability’ that grew out of his doctoral thesis (Kagan, 2011) and a more recent discussion focusing on music (Kagan & Kirchberg, 2016).

The final work in my program could also be viewed in this sense – of music for sustainability, at least in the metaphorical sense – while at the same time it contains the notion of resources, in this case, the musical practices of Korean traditional music (early music), and of Zen Buddhist wind music.

Notes on the individual pieces

[A] Jacob van Eyck – Psalm 140 ‘ofte tien Geboden’ from *Der Fluyten Lust-hof* (1654/1656)

Jacob van Eyck (c.1590–1657) was a Dutch nobleman and musician – carillonist, organist, recorder player and composer. He was best known for his expertise in casting and tuning bells and is credited with developing the modern carillon (Wind, 2006). Born into a noble family in Heusden, he was blind from birth. In his mid-30s he left home to become carillon player and then director (‘Musicyn en Directeur van de Klok-wercken’) at the Dom Church, the city cathedral, in Utrecht. Though he lived there for the rest of his life, he was internationally respected as the greatest campanologist of his time.

Van Eyck was one of the outstanding figures in Dutch artistic and intellectual life of the ‘Golden Age’. He was a contemporary of the artist Rembrandt, the philosopher Descartes, the scientist Huygens and the polymath Mersenne, all of whom thought highly of his musical and scientific work. Van Eyck discovered the nature of the overtone structure of a bell and how its shape influences its sound – this allowed him to tune bells, an important accomplishment for a carillonist. He demonstrated to Huygens his method of whistling pitches close to the bell’s rim to find its resonant frequencies, and from there his discoveries were spread in intellectual circles across Europe.

He composed *Der Fluyten Lust-hof* (*The Flute's Garden of Delight*) over a number of years, with various editions printed in Amsterdam by Paulus Matthijsz, culminating in the editions of 1654 and 1656, just before his death. The work is an extensive collection of over 140 melodies of the day – folk songs, dance tunes, famous compositions, psalm tunes – all with variations arranged in increasing complexity. It is the largest work for a solo wind instrument in European musical history, and the only such collection specifically for recorder.

In 1694 van Eyck was given a 25% raise in salary as carillonist to the Janskerk (St John's Church) "provided that he occasionally in the evening entertain the people strolling in the churchyard with the sound of his little flute." This merely formalised his practice of many years, much to the delight of the locals, for whom the recorder (or 'hand-flute') was a popular instrument for music making in every context and level.

The compositions in *Der Fluyten Lust-hof* are based on the technique of diminution (or 'breaking'), in which the notes of the original melody are progressively replaced by groups of notes of shorter value. An original melody is thus transformed into increasingly complex ornamental figurations. While the technique was the same as the earlier Italian *passagi*, van Eyck's works went further by seeing variation as an end in itself, making him an important figure in the development of the variation form.

Psalm 140 'ofte tien Geboden' (or Ten Commandments) has this structure, of tune followed by three variations of progressively shorter notes and increasing virtuosity, to be displayed with the careless ease described by the Italian term *sprezzatura*. The tune and first variation is shown (Figure 1) from the original print.



Figure 1. Psalm 140, theme and first variation. Matthijsz, Amsterdam, 1654.

In the Reformed Church, psalms dominated the musical aspects, and the Dutch Calvinists sang these psalms unaccompanied to the words of the Geneva Psalter of 1562, in which the Ten Commandments were set to the tune of Psalm 140. By all accounts, the musical results were poor (Wind, 2006), and there were repeated calls for the inclusion of organ accompaniment. This particular tune was ‘daily bread’ for church musicians such as van Eyck, and he must have played it often on organ as well as bells – the first variations have a bell-like structure that seems to focus on harmony rather than melody.

[B] Johannes Ockeghem – *Ut heremita solus*

Johannes Ockeghem (1410–1497) was one of the most famous and influential composers of the Franco-Flemish school in the early Renaissance, of stature equal to Guillaume Dufay (1397-1474) before him and Josquin des Prez (1450-1521) after him. His life spans almost the whole of the 15th century (from his presumed birth in 1410 to his death in 1497). He was born in the small town of Saint-Ghislain and spent his life working at various churches and courts in the Netherlands and France. He was famous throughout Europe for both the expressive qualities and the technical aspects of his music. As well as composing a number of masses, chansons and motets, he was also the most renowned bass singer of his time.

Ut heremita solus is believed to be one of his surviving motets, though some sources dispute its authorship. Very little is known about the work, not even whether it was originally vocal or instrumental – only the three words of the *incipit* text survive – and if the latter, whether any specific instrument was intended. The piece survives in only one source, Ottaviano Petrucci’s *Motetti C* of 1504; here, the three decorated parts (cantus, altus, bassus) are given in the standard notation of the day, but the tenor is given as a string of notes and syllables on a musical staff, supported by a Biblical text and some Latin instructions for how to construct the whole voice. Luckily, Petrucci includes a ‘*resolutio*’ of this rebus (as shown in Figure 2)!

One possible alternative reading of the notation is as a prayer for forgiveness, possibly to St Anthony Abbot (the ‘*heremita*’ of the title). This highlights a possible relationship to Antoine Busnois (or Busnoys), whose patron saint was St. Anthony, and whose earlier motet *In hydraulis* praised his former teacher and highlighted his name in the form of numerological principles of *gematria*. Ockeghem’s motet returns the complements using the same methods – for instance, the 108 semibreves of the full tenor voice spell out Busnoys’ name according to standard numerological principles. A detailed examination of this relationship is given by van

Bentham (1999), showing the numerical and symbolic dimensions of music at this time, at least as written by the most skilled composers. Although much of musical life was proscribed by the Church, there was room for intellectual virtuosity in the process of composition.



Figure 2. Tenor and its resolution, *Ut heremita solus*. Petrucci, *Motetti C*, Venice, 1504

It is not likely that an audience would hear such numerical features in the music, but other aspects are more immediate. The long, flowing melodic lines with a construction that brings to mind the Gothic cathedrals in which Ockeghem worked, and the contrasting detailed rhythmic ornamentation, a sort of 15th-century jazz, with which the whole piece is infused. Today, we are playing the work on a quartet of Renaissance recorders that together can produce the organ-like sound that might have been heard in the religious settings of the times.

[C] Georg Philipp Telemann – *Sonate Methodiche* No. 2

Georg Philipp Telemann (1681–1767) was one of the best known composers of his time, and after a period during which his musical *oeuvre* was dismissed as not serious enough, possibly because he wrote so much music, he is now once again one of the best known and favoured composers of the late Baroque and Galant period. Dorwick’s (2017) recent thesis traces the changes in people’s views of Telemann and his music from his day to ours, illustrating it in particular with the views of a representative group of Australian musicians involved with the early music movement.

Telemann went to Hamburg in 1721 at a time of great economic and cultural changes.

Hamburg was a flourishing city with an increasing middle class, wealthy and leisured enough

to indulge their interest in music both as amateur players and as listeners. Art music was broadening its scope from being seen as exclusively for courts and wealthy patrons to becoming the entertainment of a much wider group of people – the beginnings of a democratic musical culture. Composers were increasingly writing in the lighter *galant* style, focused more on melody than on the more intellectual polyphony of sacred music. The earlier distinction between *Kenner* (professionally-trained musicians) and *Liebhaber* (connoisseurs and amateur players) was breaking down to include those who took pleasure in listening to music – to being audience members.

Telemann had a strong entrepreneurial streak. Less than a year after he arrived in Hamburg at the age of 40 to take up the position of Kantor and Music Director of the city's five major churches, he started a series of chamber concerts in his own home. They proved so popular that the venue was soon changed to a local hall with a capacity of several hundred. He also took up publishing music and tutors for the growing amateur market, starting with *Der getreue Musik-Meister* (1728).

His collection of *Sonate Methodiche* was published in 1728 for solo violin or (transverse) flute, and aimed very much at the burgeoning market of Hamburg's keen and skilled amateurs. The first six sonatas are in the Italian style with four movements, slow-fast-slow-fast. A particular feature of the works is that Telemann has written the music of the initial slow movements in two ways, first as a simple melody, and then in a highly ornamented version "very useful to those who wish to learn about cantabile ornaments" (as a contemporary advertisement stated). Professional musicians of the time had no need for the ornamented version, as they were trained and experienced in the practice of constructing them *ex tempore*. For musicians of today, nearly three centuries later, these examples of high-Baroque ornamentation practices are both instructive and delightful.

Sonata number 2 in A major is in the standard four movements, played here using a voice flute, or tenor recorder in D, the closest recorder to the baroque flute of the original. The initial adagio presents a beautiful singing melody made more delightful with Telemann's original ornamentation. The opening, from Telemann's original print, is shown in Figure 3.



Figure 3. Methodic Sonata No. 2, *Adagio* with ornamentation. Telemann, Hamburg, 1728

It is followed by an energetic vivace full of leaping arpeggiated motifs. The third movement is labelled ‘cortesemente’, and seems to gently mock the courtly world that Telemann had recently left behind, with its stilted, stiff-legged movement, broken occasionally by showy flourishes. The final vivace is a spirited summary containing many of Telemann’s characteristic fast passagework that shows off the agility of the wind instruments (flute or recorder).

[D] Ella Macens – *In the autumn wind we sway*

Ella Macens (born 1991) is a composer and singer-songwriter currently undertaking a Master of Music (Composition) degree at the Sydney Conservatorium, so she is a colleague and fellow student. She has an impressive list of musical credits to her name, including positions as composer-in-residence with the Sydney Youth Orchestra, a member of the inaugural National Women Composers’ Development Program at the Sydney Conservatorium, and a string of national and international commissions for a variety of ensembles small and large. She is currently participating in the TSO Australian Composers’ School, a two-year program of compositional work in the orchestral field. A couple of years ago she accepted a commission to write a piece for our recorder quartet, *The Judgment of Paris*.

In the Autumn Wind we Sway was inspired by the the setting of the village of Mount Wilson in the Blue Mountains. Mount Wilson itself is the remains of a former volcanic peak, whose basalt rock has weathered into an extremely rich soil. The well-off colonists of the late 19th century who settled the village brought with them a range of European trees that flourished in the mountain climate. Macens has written a short introduction to the piece:

“In the Blue Mountains region of New South Wales you will find a magical place called Mount Wilson. Mount Wilson is particularly magnificent in the autumn time when leaves of a

million different colours whirl in the wind and settle to the ground as nature prepares for winter. This piece was inspired by fond childhood memories of exploring this beautiful area.”

Mysteriously ♩ = 58

Figure 4. *In the Autumn Wind We Sway*, bars 1-6. © Macens, 2016 (unpublished)

The work shows Macens’ characteristic melodic and harmonic inventiveness, and displays a gentle emotive and spiritual sound, and a connection to the natural environment (see the opening bars in Figure 4). It is included in my program to illustrate another aspect of ‘sustainability and early music’ – the cultural sustainability of a specific instrumental grouping, that of a recorder ensemble. The recorder consort has a history that stretches back to the Renaissance, when families of instruments were played in a range of social settings (from private homes to grand courts), both as a ‘whole consort’ of the same type of instrument and as a ‘broken consort’ of a mixture of different types of instruments, such as winds and strings. The particular term ‘consort’ was first documented in mid 16th-century England, but the idea of playing instruments in such groups is surely much older.

With the decline of the recorder at the end of the Baroque period, the recorder consort fell out of use, at least until the early music revival in the 20th century. Commissioning and composing works such as *In the autumn wind we sway* ensures that the recorder consort has a continuing future as well as a rich past.

[E] Isang Yun – ‘The hermit at the water’ from *Chinesische Bilder*

Isang Yun (1917–1995) was a Korean composer who spent the first half of his life in Korea and the second half in Germany, with a short period in a Japanese prison for protesting against Japan’s occupation of his country and a longer one in a South Korean prison, kidnapped by the government on account of his pro-unification activities. Although most of his compositional life was spent in Germany, his music retained a strong connection with

traditional Korean techniques, and indeed played an important part in the transmission of Korean traditional music to the next generation of composers (Schmid, 2017).

Chinesische Bilder (Chinese Pictures) was written in 1993 for the recorder virtuoso Walter van Hauwe. Apparently, the Chinese pictures of the titles were displayed in Yun's parents' home during his growing years – though they are not traceable now. 'The hermit at the water' is the second picture of four. It is a contemplative work, showing Yun's characteristically sparse musical motifs, elaborated using contrasting variations, based on idioms of East Asian flute music; the opening is shown in Figure 5.



Figure 5. *The Hermit at the Water*, bars 1-3, Yun, 1993 © Bote & Bock, Berlin.

The Buddhist parable on which the first two pieces are based concerns a farmer who leads his ox to water (referring to a human being guiding his 'inner child'). As they get there, a hermit has just arrived and is washing out his ears. He explains that he was offered a well-paid job as a court official, but when he asked what his duties would be, he was horrified and left immediately! The farmer believes that this has polluted the water and walks on without letting his animal stop and drink.

It seems important in playing this work to be mindful of Zen Buddhist flute tradition (and for a non-Asian and non-Buddhist this can only be based on listening and reading). Some specific elements seem important, and can be illustrated using the Japanese shakuhachi tradition (Lee, 1992). Each musical piece – particularly the traditional *honkyoku* or 'original pieces' – is a meditative and spiritual activity, linked to the essential human activity of breathing that sustains life itself. The inhalation of breath is as much part of the music as the exhalation that forms the actual notes, and should not be hurried or crowded between the pulses, as in other musical traditions. There is no concept of a single 'valid' performance nor that of a 'mistake', and every piece is at the same time completely free but each phrase has to be executed with

‘absolute timing’, a concept that is difficult to describe and even more difficult to achieve. While not all these aspects are relevant here, they are able to inform a performance of *Chinese Pictures*, and of ‘The hermit at the water’ in particular.

Additional references

- Dorwick, D. (2017). *Telemann, The Faithful Music-Master: Telemann performance and reception in Australian music culture since 1981*. DMA Thesis, The University of Sydney. Online at https://ses.library.usyd.edu.au/bitstream/2123/16965/2/dorwick_dm_thesis.pdf .
- Lee, R. (1992). *Breath-Sight*. Audio CD P015, booklet notes, Tall Poppies Records, Sydney.
- Schmid, R. (2017). Concerts celebrate Isang Yun, a musical bridge between Asia and Europe. *New York Times* (18 April). Online at <https://www.nytimes.com/2017/04/18/arts/music/concerts-isang-yun-asia-europe.html> .
- Van Benthem, J. (1999). Text, tone, and symbol: regarding Busnoys’s conception of *In hydraulis* and its presumed relationship to Ockeghem’s *Ut heremita solus*. In Higgins, P. (ed.), *Antoine Busnoys: Method, meaning, and context in late medieval music*, Clarendon Press, Oxford, pp. 215–253 (ch. 9).
- Wind, T. (2006). *Jacob van Eyck and his Der Fluyten Lust-hof*. (Audio CD, Brilliant Classics, B000WC38AA). Online at <https://www.brilliantclassics.com/media/492361/93391-Van-Eyck-Der-Fluyten-Lusthof-Booklet-English-Download.pdf> .