

The Western Australian New Music Archive: Finding, accessing, remembering and performing a community of practice

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Abstract

In 2009, the music composition department at the Western Australian Academy of Performing Arts (WAAPA) at Edith Cowan University (ECU) and Perth organisation Tura New Music embarked upon a project to develop and establish the Western Australian New Music Archive (WANMA), a digital repository and interface of new music by Western Australian composers from 1970 to the current day. The project seeks to discover, collect, collate, digitise, store and disseminate music recordings, video documentation, scores and other evidence surrounding Western Australian new music. WANMA is now a funded Australian Research Council (ARC) Linkage research project involving collaboration between the State Library of Western Australia, WAAPA, Tura New Music, the National Library of Australia and the Australian Broadcasting Commission.

This paper discusses the background of WANMA, and the relevance of the digitisation agenda to the development of pilot projects which have informed the current approach to the construction of the archive. It uses the concept of a community of practice to locate connections between musicians and other artists involved in new music creation and production, and the artworks they produce. It notes the influence of non-verbal communication in cementing links between participants in a community of practice and includes among such communicative events the roles of audience member and participant in the artistic endeavours of others. The important performative element of the project is also discussed, as a way of projecting and integrating the archive into the present and the future.

Although WANMA is in its early days and is not yet publicly accessible, it has already raised a range of issues around copyright and definitions of relevance beyond the remit of this project. Such matters require active collaboration and communication to establish acceptable parameters for an actively searchable archive which can be interrogated along a range of dimensions: from the locale of the performance to the birthplace of the composer. New music is a complex and evolving artform and WANMA recognises and celebrates this fact.

Introduction and Overview

This paper addresses the important challenge of finding, accessing, remembering and performing new music as part of a community of practice and as one element of a creative culture. It takes as its subject the nascent Western Australian New Music Archive (WANMA), which has been in active development since a 2009 funding application for a pilot project, and which is the only archive of its kind to specialise in Western Australian (WA) new music. The archive seeks to collect and make accessible WA's rich heritage of new music from 1970 to the present day and is created as a joint endeavour between the State Library of WA (SLWA), Tura New Music, the National Library of Australia (NLA), the Australian Research Council (Linkage Projects) and Edith Cowan University (ECU). The authors are all investigators in this research project, which uses practice-led research to create the archive and make it accessible to all interested people in WA and beyond. They also seek to place this collection within the cultural context of a community of practice, encompassing performers, composers and audiences of new music who are or have been associated with the growth of this artform in WA since 1970. This community of practice is embraced by integrating a program of performances that will in turn feed into the archive, promote it and ensure its relevance to the concert going public as well as composers and performers. Critically, and of relevance to communication-based research, they seek to establish the importance of non-verbal communication, such as exposure to key performances, in the development of an artform in a specific locational context over a period of some decades.

Western Australia has had a vibrant new music scene for many years, having long contributed to the wider Australian music scene by producing some of Australia's most important musical figures, from internationally renowned sound artist Alan Lamb to composer and declared National Treasure, Roger Smalley, as well as important contributions

to electronic (Vickery, 2001) and experimental (Burt, 1991) music. However, the wealth of national archival information on new music and its creators is currently based around artists from the eastern seaboard, despite the intense level of activity in the west. While artists from the east regularly visit Western Australia, it is difficult for Western Australian artists to secure performance opportunities in eastern states cities. This is in part due to a lack of awareness of the range of activity in Western Australia, an activity profile that will be made visible and accessible with the future launch of the WA New Music Archive (WANMA).

Western Australia has been host to Tura New Music, an organisation that is unique in the Australian arts landscape. This organisation has supported performances for WA works, new music composition and research, and has been key in organising concerts by interstate and international artists in Western Australia. The impact of this ongoing administrative and curatorial support for new music in WA on the vibrancy of the scene should not be underestimated.

Without documentation, Western Australia's cultural and artistic musical heritage could languish in obscurity due to its relative inaccessibility compared to other states. Without an archive bringing together in one place the diversity and richness of the developmental trajectory of new music in Western Australia, it would be almost impossible to trace the influence of non-verbal communication upon the development of different strands of the new music tradition which so enriches artistic practice in this region. This tradition is an outcome of a vibrant community of practice which continues to grow and have influence within the creative arts scene. As the state of Western Australia grows – and it is experiencing annual and population growth rates not seen since the early 1970s (Australian Bureau of Statistics 2013) – so there is a pressing need that its cultural, artistic and creativity-supporting infrastructure is supported to ensure commensurate growth.

A definition of new music, the community of practice and the digital imperative

WANMA's proof of concept relies upon two prior research projects, both of them based on practice-led research approaches and on a problem-solving methodology. One, funded by an ARC Linkage Infrastructure, Equipment and Facilities (LIEF) Grant, is led by Professor Roger Dean of the University of Western Sydney with Hope as a co-Chief Investigator and the Australian Music Centre (AMC), established in 1974, as the industry partner. This project is termed The Australian Music Navigator and introduced Hope to the challenges around e-technologies and systems for digital collections. It also made Hope aware of the dearth of WA new music accessible by national and international audiences. The second project lay in the 2010 digitisation of Tura New Music's existing archive, which was funded in part by ECU and Tura as a pilot for the larger WANMA project. Together, these forerunner ventures demonstrate the challenges faced in making a diverse body of materials accessible and yet interlinked, protecting the complexity of rich and varied sound-based experiences but also essentialising these to the point where the database is searchable and makes sense to non-expert users.

The key instigator of WANMA is Dr Cat Hope, a composer, performer and academic, who secured funding for both the pilot and current WANMA projects. Arguably Hope's colleague Dr Lindsay Vickery, another WA composer, performer and academic, was the first person to commence digitising WA new music materials, with a small grant in 1991. His strategy at that time was to use Optical Character Recognition software to digitise scores and press articles. This illustrates that the challenges inherent in digitisation are themselves a fast-moving research issue with the further requirement that the WANMA materials and architecture be compatible with national and international archives, as well as making sense as a stand-alone project. Building upon the success of The Australian Music Navigator and the Tura New Music Archive pilot, the State Library of Western Australia's (SLWA) research contribution includes sourcing and developing the hardware to house WANMA

while the National Library of Australia's (NLA) collaboration helps to ensure that it is accessible via the commonly used national and international digital search interfaces.

A current drawback of existing databases is the limited nature of the music genres and artefacts included. Generally, the aforementioned archives cultivate paper scores and, in some cases, recordings of these. Music has moved beyond these paradigms and into areas of improvisation (non-notated music), installation (which has a physical/visual elements as well as sonic aspects) and applied music (for dance, film and on the internet). WANMA includes sound art/installation, film music and a range of digital music, all of which involve challenges around successful, accurate and accessible digitisation. The definition of 'new music' adopted for WANMA was established during the pilot project, and is the same as that used by the AMC, which describes the genres of music archived by their digitisation project as including "*notated composition, electroacoustic music, improvised music (including contemporary jazz), electronica, sound art, installation sound, and multimedia, web and film sound*" (AMC n.d.). The curation of WANMA has been guided, and confronted by the challenges provided by such a broad definition, with a focus on constructing a true canon of Western Australian music history from 1970 to the present day that enables explorations of the rich inter-relationships and communications channels between creators, performers, events, genres, venues and organisations in WA's musical heritage. It is hoped that once established in the State Library, the archive may expand to include other genres of music.

WANMA includes materials that reflect contemporary recognition of improvisation and sound art as composition, and therefore the role of recordings as an alternative score, and video as an important documentation device for sound art. Technologies for archiving that provide these inclusions are being examined, with input from academic and library sources to ensure the employment of the latest formats for digitisation. In the instance of the digitisation of the sound files, the -7 specification (Casey, 2001) has been used in the pilot project. This

ensures that direct access to the digital data comprising the sound file is easily available across different systems. For notated music, computational analysis would be further supported through access to MusicXML (Good, 2002) and Music Encoding Initiative (MEI) (Roland and Downie, 2007) digital representations of music. These are established music recognition software protocols that may be used under Public License and ensure the technological and representational requirements for the archive will be met. Ongoing digitisation is important: both the digitising of notated scores, most of which presently exist on paper, and the digitising of recordings, some of which are only on LP or analogue tape. Even CDs have a limited shelf life and are best stored on hard drives. Since early digitisation in the pilot project, it has been ensured that materials are either received in digital form or digitised using strict quality standards (archival PDF for the scores; high quality 16 bit 44.1kHz sound digital objects for the sound art and recordings of notated pieces).

A music archive such as WANMA needs to be a rich repository of meta-data and digital items relating to composition and sound art, featuring sophisticated bibliographic-based retrieval mechanisms to support users engaging with Australian music in a rich online environment. The meta-data for digital preservation is critical, but complex, and meta-data types include descriptive meta-data for resource discovery, administrative meta-data for the preservation process itself, technical meta-data, and rights meta-data to describe copyright information (Lee et al., 2002, p.93). Digital archives provide users with unparalleled access to musical materials through fast and easy identification and sourcing of digital scores, audio, video music notation and other objects. Additionally, the implementation of data structures which facilitate interrogation from diverse research and user perspectives, coupled with user interfaces which support a heterogeneous user base of different needs, orientations, expectations and levels of expertise, enable a richer engagement with the archive. The scope of WANMA's materials means that musical resources are complemented by research and

contextual data about Australian music spanning not only formal musicological and other scholarly research, but also structured informal annotation.

A core focus of the archive is to enable researchers to uncover and explore the rich inter-relationships between bibliographic and other entities so inherent in musical practice (Craft et al., 2007). To this end, the 'Functional Requirements for Bibliographic Resources' (FRBR) standard for bibliographic documentation will be employed and supported by input from the NLA (IFLA, 1998; Holmes, 2001; Tillett, 2004). FRBR is especially suited for incorporating varied musical resources (Brenne, 2004; Le Boeuf, 2005) in an area dominated by traditionally notated forms of music, and FRBR was also used by the AMC when digitising their collection, proving an effective method for the variety of material in their collection (Chambers, 2007).

Also implicit in such interconnections is the critical importance of the community of practice which frames the composition, performance and consumption patterns of Western Australian new music. Discussing communities of practice (CoPs) in the creative industries in the Turin area of Italy, Bettiol and Sedita (2011: 468) argue that CoPs develop:

a pool of skilled people within which it is feasible to develop projects. CoP improves knowledge sharing and helps the development of a common identity and social relationships. It is not just a matter of knowhow but also of who knows what that is at the heart of a CoP. In our perspective, this role [of knowing about others' work] is necessary to select and further involve qualified people in the project. Projects do not develop in [a] vacuum but within a social structure.

The archive is designed to be sufficiently nuanced to allow for investigation of these features and, to some extent, the establishment of the influence of key events and performances upon the genesis of artworks that follow.

The benefit to musicology, communications and cultural studies offered through the examination of notated scores and related meta-data is well documented (Lee et al., 2002; Tillett, 2004), as is the use of digital sound files to interrogate music information retrieval, as well as users' reactions to these sound files and related cognitive studies, whether out of time, or in real-time. WANMA is catalysing similar research developments and activities in relation to sound art, music and music for film, as well as ensuring digital technologies deliver a more complete picture of Western Australian music and its interconnections. The wide reaching and collaborative nature of WANMA ensures that its benefits can be shared simultaneously by researchers and publics internationally, further promoting national and global appreciation of Australia's musical heritage.

The organisations involved in curating the collection

Tura New Music is the prime body for new music in Western Australia, and the only organisation of its kind in Australia. Its artistic director, Tos Mahoney, has been at the helm of the organisation for over 25 years, and has been involved in new Western Australian music for over forty years, the time period for inclusion of work for WANMA. WANMA fits securely within Tura's strategic objectives as an organisation that supports the full life cycle of New Music – the creation, development, promotion, presentation, conservation and distribution – for its artists, organisations and audiences, locally, nationally and internationally. Tura New Music made their entire collection available to a pilot archival project, along with their extensive database of Western Australian composers and sound artists. In addition, their considerable expertise in regard to managing contact with artists, including very prominent figures in Western Australian new music, decision makers, and government agencies relevant to new music means that Tura offer a lot to this project.

The Western Australian Academy of Performing Arts at Edith Cowan University has a very strong new music department, with over seventy composers enrolled across undergraduate

and postgraduate courses. It has an active performance program, and a vibrant Music Research Group led by Hope that is underpinned by an interest in music in its own community. Along with academic credentials to research the myriad opportunities an archive of this nature creates, the Music Research Group also develops future consumers for the material in the archive, not only musicologists and a music-going audience, but also performers and composers who may take from, as well as input into, the archive.

There is an issue of artistic as well as historical judgment in the determination of the authenticity and reliability of materials archived that make WANMA a curated collection. Hope and Mahoney have a detailed knowledge of Western Australian new music practice, and have led the research since the pilot project was established. Mahoney's interest and ongoing support for regional agendas for new music has also been vital for maintaining WANMA as a truly state-based collection, as opposed to a collection from the city of Perth and its surrounds. Tura New Music will provide industry-grounded advice for WANMA regarding sources, design and industry needs. A critical relationship to the sources, including discerning between them on the basis of authorial intent (and prejudices, if applicable), as well as accounting for the context of publication (distinguishing within the archive between promotional material and personal artist documentation) has been maintained by the curators during the pilot project. Identifying relevant historiography and literature for consultation and reference (e.g. key histories which cite the piece of music in question, etc.) has contributed to the curation process, and is recorded in the supporting documents collected to date.

One challenge has been the definition of 'Western Australian'. In examining Tura New Music's collection, it was discovered this could have a number of meanings when discussing an artefact: Western Australian performers, Western Australian premieres of international works, Western Australian composers, promoters and so on all have important roles to play

in the establishment of new music culture in the state. Whilst the entirety of Tura New Music's collection was digitised, the [Excel](#) lists of the digitised materials can be organised according to these parameters, enabling the sorting of the collection by composer, performer, curator and so on. This element will be refined once the collection finds a place in the Library system, and will align with national bibliographic standards for categorising provenance. Contextual issues (including key dates, artists, funding programs, festivals, political events, etc.), which might be germane to the archived materials, have been noted, and their value enhanced through presenting and following up such issues by linking to additional documentation and recordings where relevant. Such connections establish the multiple communications channels which support the development and performance of new music works. Optimal key terms have been used to file extant material, thus ensuring the archive is of maximum value to researchers, while innovative search processes will identify which references and materials are linked to each other and how.

A community of practice, the problem of copyright and preforming the archive

The collection and long-term preservation of digital content poses challenges to formal intellectual property agreements. Original hardcopy materials will not be gathered by the project, rather the database will point to their location and availability. The pilot project did not release any items to the public, yet the next phase, the implementation of the collection into the library's catalogue, will do so. The integration of an intellectual property framework within the archive to manage the complex rights inherent in musical works and related materials is a vital part of the research, as it is important to achieve an appropriate balance between copyright owners and users. This is a topic of ongoing debate in legal and policy circles that is yet to yield any real concrete outcomes (Basek, 2003: 88). The purpose of an archive (e.g., to ensure preservation or to provide an easy and convenient means of access),

its subject matter, and the manner in which it will acquire copies, as well as who will have access to the archive, from where, and under what conditions, all come with copyright implications that are critical to determine.

During the pilot project, the researchers became aware of an increasingly copyleft (open sharing) and Creative Commons orientation shared by Australian composers and sound artists. The globally relevant work of Professor Brian Fitzgerald and his colleagues from the ARC Centre of Excellence for Creative Industries and Innovation (of which ECU is a founder member), regarding the alignment of Australian Creative Commons legislation with Australian Copyright Law, has had a significant impact on experimental music practice in particular. Fitzgerald's work regarding open access to public sector information and the enabling of Australia's regulatory framework to support a digital economy have served as a starting point for research into copyright and access models (Fitzgerald, 2008). Fitzgerald's recent appointment as a part-time Commissioner to the Queensland Law Reform Commission, alongside his existing responsibilities as a member of the federal government's Advisory Council on Intellectual Property, suggest that this kind of copyleft approach could be becoming more widely accepted. It is interesting to note that only five percent of Australian composers maintain contracts with publishers that limit distribution (Chambers, 2007). A recent development is the approval by a major music publisher, Faber, of the distribution of its publications through the AMC collection.

The pilot study discovered that the primary users of WANMA would be artists, musicology and intermedia researchers, and that there would be accessibility benefits flowing on to a global and general audience. But it also determined that this flow-on would only be possible with knowledge of international bibliographic standards and a requirement that WANMA be interoperable with Australia's national bibliographic infrastructure. Researchers have begun discussions with the National Library of Australia (NLA) and State Library of WA (SLWA)

to discuss ways to enable this. However, even preliminary research into the materials in Tura New Music's collection has provided a focal point for information about, and advocacy for, the new music of Western Australia, with the ARC Linkage-funded project partly resulting from this, and encompassing input from both the state and national libraries, and the ABC as a broadcaster of new and recovered works for and from the archive.

Services that deliver content, such as libraries and the ABC, are keen to keep pace with and anticipate the technological implications of trends such as social media and the public desire for free content. Digitisation also has implications for freely available meta-data and the preservation of disintegrating media (NLA, 2010: 6). Products used by NLA such as the Summon interface, a program that enables a familiar web searching experience connecting multiple sources in one interface, will be integrated within WANMA once the archive is housed at SLWA.

An important element of WANMA has been the close link of archival materials to actual performances that have taken place in Perth, a characteristic reflected in the nature of Tura New Music's collection used in the pilot study. This element will continue to mark part of the WANMA project into the future, by actually fuelling future growth. With the involvement of the Australian Broadcasting Commission's Classic FM team of producers, audio engineers and presenters in the forthcoming phase of the archive's implantation, an ongoing commitment to recording and broadcasting new concerts of Western Australian works – new or newly rediscovered – and feeding them back into the archive, is innovative in conception and serves as a model for future 'living' archives. In addition, Tura New Music's ongoing involvement has ensured public awareness of the project, through their marketing support. This will also apply for the ABC concerts. As public awareness increases, and there are more communications around WANMA and its mission, so there are increased opportunities for holders of collections to learn about the project, use the archive and come forward, thus

expanding the content in WANMA (Marres, 2011).

The Australian Broadcasting Corporation is an important partner for WANMA as the national flagship for the kind of music WANMA represents. According to their 2010-2013 strategic plan, the ABC promotes a diversity of audience experience and delivers innovative programs and services that offer opportunities to interact and connect with all Australians, at local and national levels (Newman, 2010: 3). As the area of the ABC most closely aligned with the project, ABC Classic FM will also be making its own archive of Western Australian recordings available to WANMA for digitisation and inclusion in the archive through a connection with their 'classic/amp' project. In this way, WANMA accesses ABC material, whilst supporting the ABC's goal of getting more archival content recorded and available online. The involvement of the ABC both enhances research into copyright models, and benefits the ABC with new research in the area, as well as increasing Western Australian performance content for their broadcasts. The ABC has a quantity of recordings of Western Australian music, currently not available to the public, which WANMA will digitise and link into the interface through their partnering with the ABC.

Conclusion

WANMA is the product of both practice-led research and a problem-solving approach. It grows out of The Australian Music Navigator project and a pilot scheme to digitise the Tura New Music Archive. It addresses manifest gaps in national and international collections of new music. As these have been developed over the years they have failed to include Western Australian new music at the depth and breadth required to understand and investigate the many interconnections between people, place, artwork and shared experiences.

Multiple challenges are posed by the digitising of diverse media and ephemera from 8-track audio tapes to posters and flyers, collecting these materials and making them accessible in a

digital format while at the same time respecting copyright protocols and responsibilities to rights-owners. One of the responses to this challenge is the use of powerful hardware infrastructure that can support streaming video and sound so that materials are experienced direct from the archive and do not require ‘downloading’ to be enjoyed. This research also contributes to debates around copyright and copyleft, and creative commons approaches to artworks.

The archive is more than a historical repository of new music and its supportive and peripheral elements, however. It is a curated collection which includes the capacity to influence the present and the future through the archive’s commitment to performative research. As a result of this aspect of the project, new compositions and recovered artworks will be produced by research partner ABC Classic FM, informing the future direction of new music while at the same time building WANMA’s collection.

Communication is at the heart of this project. It is core to the existence of a community of practice and to the continuation and development of such a community over time, as is the case in a 1970s-2013 timeframe. Relevant communication extends beyond the spoken and the written to the experiential, shared non-verbal communication arising out of artistic engagement as new music audience-members and participants, as well as composers and musicians. This project has the further benefit of making WA new music visible and according it appropriate importance, creating a dynamic which will attract the interest of people as yet unknown who will be moved to engage with the archive and, possibly, donate materials as yet unidentified.

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