Archiving of ABC Local Radio Programs

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Table of Contents

Abstract:	5
Acknowledgements	5
Declaration of Authorship	
Chapter One – Introduction:	6
1.1 Motivation	6
1.2 Area of Study	7
1.2a Archives	7
1.2b ABC Radio	9
1.3 Summary of Previous Findings	
1.4 Hypotheses	
1.5 Limits of the Research	
1.6 Audience	
1.7 Method	
1.8 Significance of the Research	
1.9 Structure	. 18
Chapter Two Literature Deviews	22
Chapter Two – Literature Review:	
2.1 Archiving	. 22
2.1a The Value of Archives	
2.1b The Spoken Word as Evidence	
2.1c Paper to Disk	
2.1d Digitisation of Archives	
2.1e Metadata	
2.1f Archives and the Internet.	
2.2 Audio Recording	. 42
2.3 Radio in Australia – A Brief History	
2.3a Initial Technology 2.3b Radio Station Development	
2.30 Radio Station Development	
2.3d Golden Age to Steam Radio	
2.3e Community Radio	
2.3f Radio in the Digital Age	
2.3g Durable Radio	
Chapter Three – Focus of the Study:	57
3.1 The Australian Broadcasting Corporation (ABC)	57
3.1a Relevance and Value	57
3.1b Establishment	
3.1c From Company to Commission	
3.1d From Commission to Corporation	
3.2 The Independence of the Public Broadcaster	
3.2a Independence from Government	

3.2b Independence from the Commercial Sector	
3.2c Bias	
3.2d Editorial Autonomy	
3.3 The Relevance of the ABC	
3.3a Battle of the Brows	
3.3b Ratings 3.3c Diversity	
3.4 ABC Local Radio	
3.4a Local Radio History	
3.4b Local Radio Post 2000	
3.4c Emergency and Identity	
3.5 Archiving of ABC Radio	
3.5a Local Radio Archives in the Digital Age	
Chapter Four – Method:	95
4.1 Ontology and Epistemology	
4.1 Ontology and Epistemology	
4.3 Surveys	
4.4 The Research Process	
4.4a The Research Instrument	
4.5 Administration of the Research	
4.6 Triangulation	114
	445
4.7 Error	115
4.7 Error Chapter Five – Results:	
Chapter Five – Results:	118
Chapter Five – Results:	118 118
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants.	118 118 118
Chapter Five – Results:	118 118 118 120
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs	118 118 118 120 121 123
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use.	118 118 120 121 123 124
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use. 5.1f Attitudes to Audio Archiving.	118 118 118 120 121 123 124 124
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use. 5.1f Attitudes to Audio Archiving. 5.1g General Comments Regarding Local Radio Archiving.	118
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use. 5.1f Attitudes to Audio Archiving. 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data.	118 118 118 120 121 123 123 124 126 127 128
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters	118
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 	118 118 120 121 123 124 126 126 127 128 133
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters	118 118 118 120 121 123 124 126 127 128 133 133 135
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3c British Broadcasting Corporation 	118 118 118 120 121 123 124 124 126 127 128 133 133 135 136
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use. 5.1f Attitudes to Audio Archiving. 5.1g General Comments Regarding Local Radio Archiving . 5.2 Interview Derived Data. 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3b Danmarks Radio (Denmark). 5.3c British Broadcasting Corporation 	118 118 118 120 121 123 124 124 126 127 128 133 133 135 136 138
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3b Danmarks Radio (Denmark) 5.3c British Broadcasting Corporation 	118 118 118 118 120 121 123 124 124 126 127 128 133 133 135 136 138 138
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3b Danmarks Radio (Denmark) 5.3c British Broadcasting Corporation 	118 118 118 118 120 121 123 124 126 127 128 133 133 135 136 138 141
 Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants 5.1b Relationship with ABC Archives and Library Services 5.1c Personal Audio Archives 5.1d Burning CDs 5.1e The Archiving Function of <i>Netia</i> – Awareness and Use 5.1f Attitudes to Audio Archiving 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3b Danmarks Radio (Denmark) 5.3c British Broadcasting Corporation 	118 118 118 118 120 121 123 124 124 126 127 128 133 133 135 135 136 138 141 143
Chapter Five – Results: 5.1 Data from Surveys 5.1a Participants. 5.1b Relationship with ABC Archives and Library Services. 5.1c Personal Audio Archives. 5.1d Burning CDs. 5.1e The Archiving Function of Netia – Awareness and Use. 5.1g General Comments Regarding Local Radio Archiving 5.2 Interview Derived Data 5.3 Practices of Other National Broadcasters 5.3a Radio Salzburg (Austria) 5.3c British Broadcasting Corporation Chaper Six – Conclusions: 6.1 Hypotheses and Results 6.2 Responsibility and Opportunity 6.3 Recommendations	118 118 118 118 120 121 123 124 126 127 128 133 133 135 136 138 141 143 147

References:	151
Books Journals Internet Interviews	. 153 . 154
Appendices:	163
Appendix I: General Comments Regarding Archiving Appendix II: Survey Information Sheet Appendix III: Participant Release Form Appendix IV: Letter of Permission from Head Local Radio (ABC) Appendix V: Questionnaire Results (spreadsheet)	. 172 . 173 . 175
Endnotes	176

Abstract:

In Australia, hundreds of Australian Broadcasting Corporation (ABC) Local Radio Program Makers produce thousands of hours of radio each month that contain the voices of people in their region speaking about what is important to them. This study examines what proportion of these voices are being recorded and archived for future reuse, how it is being done, what Program Makers think about such a task, and how well equipped they are to increase this proportion in the near future. Starting from the assumption that very little is being archived and the belief that more should be, it concludes with recommendations how best to increase the amount of archiving undertaken by ABC Local Radio.

Acknowledgements

I would like to thank my principle supervisor Karl Neuenfeldt, the staff of ABC Local Radio and other relevant divisions of the ABC, Central Queensland University, Radio Salzburg, Danmarks Radio, and all other people who have donated their time to the study.

Declaration of Authorship

I declare that this thesis is my own and has been generated by me as the result of my own original research. Where I have consulted the published work of others, this is always clearly attributed. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.

.....

Jake Krausmann

Date

Chapter One – Introduction:

This chapter introduces the origins of the study, what it hopes to achieve, and the structure it has adopted.

1.1 Motivation

From 2002 to 2004 the author was working as Media and Communications Manager for Balkanu Cape York Development Corporation – an Indigenous development organisation in Cairns, Australia (<u>www.balkanu.com.au</u>). One of the projects administered by the corporation is the Traditional Knowledge Recording Project (<u>www.tkrp.com.au</u>). It uses video cameras to record the knowledge of Indigenous elders in order to preserve this knowledge for the future.

Historically, Indigenous Australian cultures were oral, having never developed literacy. European derived Australian culture is literate, and since its inception the written word has been the basis upon which the preservation of its heritage has been built.

Working with the Traditional Knowledge Recording Project led the author to reflect upon his own culture, and to come to the conclusion that – although it is considered by some to be inferior to the literary component – European Australian culture does also have an oral component. Furthermore, the author realised that the Australian Broadcasting Corporation (ABC) Local Radio – with whom the author worked from 1998 to 2001, and from 2004 to 2006 – comprised an important component of this oral culture.

From his work with ABC Local Radio, the author was aware that no comprehensive system of audio archiving existed. Therefore, a potentially valuable cultural asset that could feasibly be preserved and redistributed, was being disregarded. The recent developments in information technology (IT) and bit-based distribution networks are dramatically changing the nature of audio archiving. This motivated the author to focus his study on the current dynamics of ABC Local Radio archiving, with a view to understanding why it operates as it currently does. The aim of the research is to improve the quantity and quality of audio archiving in ABC Local Radio.

1.2 Area of Study

1.2a Archives

In 1912, noted historian and archivist Waldo G. Leland described archives as the chief monument of the history of a nation.¹ Certainly the archives of a people have symbolic attributes, but their value extends into several realms.

One does not have to be a historian to appreciate that the present is the accumulated result of the events of the past. History remains relevant. It can inform our views, answer questions, and provide direction. Archives are vital to our ability to accurately examine the past.²

Greene makes reference to Dearstyne's suggestion that archives are created and maintained "from a fundamental human need to create and store information, to retrieve and transmit it, and to establish tangible connections with the past." He goes on to note the importance of archives in ensuring public accountability for government and other institutions.³

The ability of publicly available records of previous events to hold the people and institutions that exercise power in society to account for their actions is, the author argues, a key attribute that justifies the existence of archives. Archives support democratic systems of government to operate effectively. Access to public records has been described as a core component of our value of democracy.⁴

Much of the argument around records supporting a well-functioning democracy and making public figures accountable refers, understandably, to the maintenance of documents that relate to the business of government. In both the government and the non-government sphere an archive is often comprised primarily of transactional records. Yet to limit the account of history to these aspects of what has occurred ignores the value of other elements of the events as they were experienced. Cunningham argues that elevation by archivists of transactional records "above other sources of memory, evidence and storytelling impoverishes us all and makes us look plain silly in the eyes of the wider community".⁵

An important element of these other sources of memory is oral history. The discipline of archiving, based as it has been on the unchanging written word, has traditionally been wary and even dismissive of oral history, dependent as it often is on memory, which can be unreliable. Indeed a component of Jamison's argument for the value of records is that that they "provide a corrective for human memory, a surrogate that remains unchanged while memory constantly shifts and refocuses its vision of the past".⁶

Despite the potential fallibility of oral history – particularly when referring to events in the distant past – it does, the author argues, have archival value. Libraries in the United States of America (USA) began to use oral sources to supplement historical records in the early 1950s. By the late 1960s articles proclaiming the documentary value of oral sources began to appear in the library and archival literature.⁷ A decade later a survey of the Society of American Archivists revealed 73% believed oral history should be viewed as a regular archival activity.⁸

The term 'oral history' is generally used to refer to the practice of individuals speaking about their experience of past events, with this dialogue recorded for the purpose of it being stored in an archive or library. By way of example, several such items featuring the late Australian poet Judith Wright exist in the National Library of Australia. Yet there is, the author argues, another important source of oral history – radio.

Since its invention in the late 19th century, radio has experienced remarkable growth. Technological developments continue to make the production of radio easier and cheaper in real terms. The number of radio stations (when one combines both terrestrial stations and those broadcast via the internet) continues to grow.

A key feature of radio is its ability to inform. News is a regular feature of radio stations. Stations that adopt a 'talk' format broadcast the spoken word the majority of the time. In order to maintain an audience, it is important that the information provided is accurate, interesting and entertaining. A variety of sources are required, addressing issues that are relevant to a significant proportion of contemporary society. These characteristics, the author argues, make radio a valuable source of oral history.

1.2b ABC Radio

In Australia, one of the most recognisable radio networks is the Australian Broadcasting Corporation (ABC). Established in 1932 as the Australian Broadcasting Commission, it is unlike other Australian radio networks in that it is entirely funded by the Federal Government.

Owing, as it does, its existence to successive pieces of Australian Federal Government legislation, the ABC is subject to a significant degree of public scrutiny. Its production can be ultimately considered a public asset. Editorial guidelines are in place and influence the manner in which content is produced.

As will be detailed in subsequent chapters, these guidelines aim to ensure accuracy, honesty, and an alignment of the content broadcast with the values and cultural diversity of the Australian community. The characteristics of public ownership, heritage and reputation, and the ABC editorial guidelines make, the author argues, ABC Radio a particularly suitable source of Australian oral history.

ABC Local Radio

Local Radio is one of several of the ABC's terrestrially broadcast radio networks (as distinct from the DIG networks which are only broadcast online). The other domestic ABC radio networks are Triple J, Classic FM, Radio National and NewsRadio (formerly the Parliamentary News Network). Whereas the other ABC networks are national networks (broadcasting the same program across the entire country with some minor differences due to time zones), as the name suggests, Local Radio includes programming that is created in a particular region, and only broadcast in that region.

The Local Radio network broadcasts a mixture of national, state, and regionally distributed programs. The duration of each Local Radio program (also referred to as a 'show') is typically between two and three hours in duration, and created by one

Presenter and one Producer. Both of these people are classified as Program Makers.

Locally produced programs are positioned to coincide with peak audience times in the early morning (Breakfast), mid-morning (Mornings) and late afternoon (Drive or Late Afternoons). Local Radio is the first network that will be broadcast to any location. The higher the population within a particular Local Radio region, the more hours of programming that region's station is likely to generate each week.

Local Radio is 'live', meaning that the majority of the words spoken by the presenter during a program will have been spoken moments before they are broadcast. If the presenter is operating in 'delay' to safeguard against accidental broadcast of libellous statements, the words will typically be spoken seven seconds before they are broadcast. It is also 'talk' radio, with more time devoted to interviews or reports than music.

The geographical area of each Local Radio region varies greatly, as does the population. ABC Territory Radio originates from Alice Springs, and covers an area of approximately 1.5 million square kilometres and a potential audience approaching 100,000 people. ABC South East is generated in Bega NSW, covers approximately 40,000 square kilometres and a potential audience of approximately 45,000 people. A map of the local radio stations can be found at http://www.abc.net.au/radio/localradio/.

There are 60 Local Radio stations, each covering a defined region. The nine of these covering Australia's capital cities are referred to as Metro stations and the remainder as Regional stations.

Regional radio stations typically are located in a large town or small city. The station would usually generate a Breakfast program from 5.30 am to 7.45 am that would include local news bulletins, and be followed by the state or territory-based news and national current affairs program called *AM*. Local programming would then continue with a Mornings program from 8.30 am to 11.00 am, and possibly a Late Afternoon or Drive program from 4.00 pm to 6.00 pm.

Typically the late morning, early afternoon, and early evening programs are generated in the Metro station, and will be networked to both the capital city and the Regional stations of a particular state or territory. Programs are usually networked nationally from 10 pm to 6 am. The exact networking design does change. A Brisbane based program, *The Conversation Hour*, has been nationally networked from 11.00 am to midday in recent years.

The *Country Hour* is a state-based program from 12.00 noon to 1.00 pm produced by the Rural division. 15 minute Rural Reports also contribute to the Breakfast program. News is predominately state or territory based with the majority of bulletins being produced in the relevant capital city. The current affairs programs *AM*, *The World Today* and *PM* are nationally networked from Sydney and also broadcast on the Radio National network of the ABC.

ABC Local Radio Programs

As with most radio broadcasters, there is a division in ABC radio between News and Programs. News is broadcast every hour, on the hour, and usually lasts for 5 minutes. The remainder of the hour is Programs. This management structure has important implications in terms of equipment use as the two divisions share a building, production equipment, and audio material. This study does not include News or Rural staff but is confined to Program staff.

1.3 Summary of Previous Findings

There has been, to the author's knowledge, no previous research in the specific area of audio archiving in ABC Local Radio. Therefore, no data exists with which comparisons can be made in order to draw conclusions regarding how the current practices compare with previous years. Further, the author has been unable to locate studies that address the situation in comparable broadcasters in other countries. The hypotheses for the study are therefore drawn primarily from the author's personal experience as an employee of ABC Local Radio, and a limited amount of anecdotal evidence.

The literature examined for the study (excluding that relating to method) falls into three

broad categories: archiving, audio recording and radio. All contribute to an understanding of the issue of radio archiving. The literature to be discussed in Chapter Two reveals that all three categories are being significantly affected by the development of Information Technology (IT). Digital Asset Management (DAM) refers to the management of digital items including text, audio, video and still images. It is becoming an increasingly important feature of many organisations, and encompasses radio archiving.

Identifying these individual digital items is essential, and therefore a set of standards that define the format of each item's metadata is crucial if the use of each item is to be maximised. Standardised metadata is required to allow searches within and between institutions. Currently, standards for metadata are being developed but remain fragmented and immature.

For broadcasting organisations, realising the opportunities offered by the developing IT is often difficult, and the relevant literature indicates that many are failing to do so. This study strives to establish the degree to which ABC Local Radio is succeeding in this regard.

1.4 Hypotheses

The expected results of the research were that:

- The majority of staff do not access or contribute material to ABC Archives and Library Services
- 2. There is no comprehensive system of audio archiving in ABC Local Radio
- 3. Little or no audio is being archived in ABC Local Radio stations
- The majority of staff are not aware of *Netia*'s archiving function (*Netia* is the computer-based broadcasting platform used by ABC Local Radio. See glossary p. 149)
- 5. The majority of staff are not aware of how to access remotely items from *Netia's* archives database

- 6. The majority of staff have a minimal amount of material in a personal audio archive
- 7. The majority of staff are not collecting metadata in a database that would allow their personal archive to be searched using computer-based technology
- 8. Staff do not consider archiving to be important, and believe that less than 10% of their interviews should be archived
- 9. Staff are unwilling to devote the amount of time required to implement audio archiving
- 10. The majority of staff do not currently possess the skills required to implement and operate an audio archive.

As noted previously, due to the lack of previous studies on ABC Local Radio archiving, these hypotheses were derived primarily from the author's experience as an ABC Program Maker.

1.5 Limits of the Research

Whilst the research does not expect to produce findings that will have a dramatic impact on communications theory, it does expect to have a positive influence on the process and potential of knowledge preservation. It hopes to compile accurate and relevant data relating to a specific activity within an organisation at a particularly point in time, and to be in a position to offer useful recommendations in relation to how that organisation can improve the workings of this activity.

The study is exclusively focused on ABC Local Radio. It is constrained by the fact that it is dependent on a single individual to complete the study in its entirety. This limited the sample size and scope of the study. There are also differences across the survey population in the different states and territories of Australia, and the respondents to the survey have not been drawn equally from these differing locations.

Further, the researcher is part of the survey population. At the time the surveys were conducted, the author was working as a Program Maker for ABC Local Radio in Cairns (Queensland), and had previously worked in Alice Springs (Northern Territory), Broken

Hill and Newcastle (New South Wales). Therefore, the author was not an independent observer but one who was influenced by his embedded position.

While this is advantageous in terms of knowledge of the workings of ABC Local Radio and the practicalities of access, it also deprived the author of the perspective of an outsider. He has, it can be assumed, been influenced by the working culture of ABC Local Radio in terms of his awareness of what is relevant and feasible.

It is also worth noting that the author initiated this study with a pre-existing opinion that archived material is of significant value and not enough of Local Radio's daily content is being effectively archived. He had an agenda to expose this and affect the situation in a manner that increases the amount of material archived.

An argument is presented that seeks to establish that ABC Local Radio audio archives are valuable. Clearly this contention is critical to the argument that ABC Local Radio should be making more of an effort to archive its output. However, a comprehensive case detailing the extent to which, if preserved, this archived material could realistically be expected to be utilised is beyond the scope of this study.

Finally, the relevance of the study is limited by the impact of digital technology which is improving rapidly. Conclusions in terms of cost and benefits that were once accurate can become irrelevant when new technology with increased function and decreased cost is introduced. It is feasible that during the time taken to complete the study, changes in technology may have had a significant impact on the situation.

1.6 Audience

The findings of this study are primarily directed at the management and staff of ABC Local Radio. They are also relevant to the broader audience of those involved in radio broadcasting and the management of digital assets, and others who wish to pursue a scholarly examination of the subject at hand.

The message to this audience is that archiving of Local Radio is both desirable and viable with the existing technology. However, an examination of the current situation indicates that this is not occurring. This is a failure of practice that could be addressed with appropriate management.

The initial findings of the surveys which are presented in section 5.1a - 5.1g were delivered to ABC Local Radio management (as noted above) and the staff who participated in the surveys.

1.7 Method

This study utilised a combination of quantitative and qualitative research. The majority of the data was quantitative, gathered via surveys conducted with 62 ABC Local Radio Program Makers from 33 different stations across Australia.

The questions were primarily closed questions that resulted in data that could be quantified. Open questions were also included to allow respondents to contribute their opinions regarding why the current situation had arisen in its present form. This provided qualitative data. The surveys were administered via telephone. The author conducted all the surveys.

Other qualitative elements of the study came in the form of unscripted interviews with key staff in positions of management or archiving. These included staff from ABC Local Radio, ABC Archives and Library Services, Salzburg Radio, the BBC, and Danmarks Radio.

1.8 Significance of the Research

ABC local radio produces a vast quantity of material that, the author contends, is of significance and value in both the short and long term. It is created at considerable expense within a framework of editorial guidelines that are designed to maximise accuracy, minimise bias, and avoid the influence of the commercial sector via a ban on

commercial advertising. Like all media, it is a representation of history and a local community that reflects dominant cultural values. It is publicly owned and therefore its assets are ultimately public assets.

The thesis argues that ABC Local Radio would provide an enhanced service to the people of Australia if it gave a greater priority to the preservation of its output. This contention is based on the assumption that people get value out of listening to audio that was recorded in previous months and years. The widespread use of archives in other divisions of ABC Radio such as Current Affairs indicates that archived audio has contemporary value.

Therefore, the audience at which Local Radio is targeted would benefit from improved archiving, which would accordingly contribute to future programs. An understanding of the current situation and the factors that influence that situation – such as the attitudes, practices and skills of staff – is required in order to optimise archiving practices. This is important when one considers the changing roles of archives that are currently occurring within the operations of a broadcaster such as the ABC, influenced as they are by the development of digital audio storage, data management and internet distribution technology.

As noted in the 2003 European Broadcasting Union report into Archives in Digital Broadcasting, the digital age is blurring the demarcation between the archive and production divisions of broadcasters.⁹ ABC Local Radio moved largely to a computer based audio production platform around the year 2000, when it installed the radio broadcasting system called *Netia*. During this initial 'rollout,' the digital storage space (the hours of audio that could be recorded onto the *Netia* hard disk) in regional ABC Local Radio stations was typically 300 hours. This was insufficient to store the daily radio production which would be hundreds or even thousands of hours per year. However, Hans and de Kosta state that:

By 2020, storing 1.4 million hours of audio content online should cost less than 100 Euros. One petabyte – a thousand terabytes – will hold 165 years

worth of continuous broadcast encoded in 16 bits at 48 KHz.¹⁰

This storage, combined with data management and 'broadband' distribution infrastructure, means the future is one where a broadcaster, and potentially a listener, will be able to access quickly the archives as 'audio on demand'. This ability increases dramatically the number of re-uses of material, and therefore increases its utility to the community. That environment is not currently all pervasive, but is gradually being created as more listeners acquire broadband internet connections and more audio material is posted on Local Radio web sites.

The issue that precipitated this study was the observation that the current output of ABC Local Radio is largely being deleted, and a system of archiving is required in order to capture this audio asset. This system must include the gathering of reliable and easily accessed metadata, and be done in a manner that requires minimal time on the part of Local Radio Program Makers. Simply collecting audio files without knowing what audio they contain is of little value. The technical quality of the audio must also be suitable for rebroadcast.

The sooner the broadcaster begins to archive their material, the greater the size and therefore the value of their archive in both cultural and financial terms. Every day that valuable material is not archived in a cost effective method, an opportunity to realise a potential ABC and community asset has been lost.

This study seeks to understand and document the current practices with a view to drawing conclusions that will assist ABC management in the implementation of practices that increase the amount of material being archived, and the quality of the metadata being gathered. It is significant to this extent.

ABC Archives and Library Services supported the study. The Manager of ABC Archives and Library Service Collection Strategy, Trish Hoyne, indicated that virtually no material was being collected from Regional stations, and little from Metro stations. In this context, ABC Archives were interested in having access to data relating to the current practices of Program Makers, with a view to taking steps to increase the amount of material being gathered.

In addition, the Australian National Archives recently conducted a review of the material gathered from ABC Archives and Library Services, which includes a determination of what Local Radio material is to be archived with the Australian National Archives.

The author also contends that the process of conducting the survey had the effect of improving the archiving practices of ABC Local Radio by offering respondents instructions on how to use the archiving function of Local Radio's Digital Audio Workstation (DAW) software *Netia*, and how to submit material to and extract material from ABC Archives and Library Services.

A 'rollout' of an upgrade of the *Netia* platform for ABC Local Radio was initiated in late 2007. The initial results from the study were presented to ABC Local Radio Management in mid 2006, in order that they could be considered in the context of the upgrade. ABC Local Radio management expressed their gratitude for a report that gave details of the initial results of the research.

This upgrade significantly increased the number of CD burners available to Local Radio staff, and the amount of online storage space. It also introduced several new functions that are relevant to archiving. The simple act of talking to people about archiving their programs had the effect of increasing awareness of the value of such activity. This increased awareness may ultimately combine with the expanded technical capacity to improve archiving practices within ABC Local Radio.

1.9 Structure

Chapter Two – Literature Review:

This chapter provides an examination of the three primary areas relevant to the study: archiving, audio recording and radio. The objective is to provide some background to the key components that now combine to create the practice of audio archiving within a radio network.

For example, section 2.1 looks at the discipline of archiving, starting with its historical position and focussing particularly on how recent moves to digitisation are changing the practice of archiving. These changes are allowing archives to grow significantly in size and scope, as well as dramatically enhancing the opportunities for distribution.

Metadata – defined simply as data about data – that allows individual digital items to be identified and located, is essential when managing increasing volumes of data. The desirability of sharing archived information between institutions has led to moves towards creating a standard metadata set.

The remainder of this chapter examines briefly the development of audio recording and, with more detail, that of the medium of radio. Audio recording has already moved almost entirely from analogue to digital within the context of the subject at hand. Radio is at the early stages of its anticipated migration. This development within both disciplines is relevant to the topic of audio archiving with ABC Local Radio.

Chapter Three – Focus of the Study:

Moving from the more generic topics of the previous chapter, Chapter Three explores the institution of the ABC, and its role within the context of the Australian community.

The existence of a public broadcasting organisation – and its enduring position – is remarkable in the context of the primarily capitalist economy that exists in Australia, particularly given the extensive privatisation of government assets in recent decades.

The position of Local Radio within the ABC is considered, and an attempt made to understand the factors that have led to the status quo in relation to audio archiving within this division of the ABC. It finishes with a description of the recent implementation of digital workstations and how their expected upgrades will affect the opportunities for audio archiving.

Chapter Four – Method:

Having outlined the ontology and epistemology of the study, this chapter examines briefly relevant quantitative and qualitative research methods and to justifies the mix of methods utilised by the study.

The research instrument – a telephone administered survey – is presented and a detailed examination made of the questions selected. The sample frame is described and an attempt made to identify the areas where error is most likely to have occurred.

The ethical issues, which are considered to be relatively unproblematic, are also presented.

Chapter Five – Results:

This chapter details the results of surveying 62 Local Radio Program Makers from 33 stations around Australia, and interviews with several key staff in ABC Local Radio, Salzburg Radio, the BBC, and Danmarks Radio. The data has been quantified where possible and converted into percentages. Graphs have been utilised. The responses to the more open questions of the survey are also detailed.

Discussion of the more qualitative elements of the study occurs in the latter section of Chapter Five, with more of a focus on understanding some of the dynamics that have led to the current situation.

Chapter Six – Conclusion:

The final chapter compares the initial hypothesis with the results of the study. It has been the author's intention to undertake a relatively practical study, with the data being of immediate value to ABC Local Radio management as they consider how to improve archiving practices.

Recommendations are made as to how the organisation can increase audio archiving in a manner that is practical within the context of limited resources, and will maximise future use of the archive. This is done with as much detail as possible, and attempts to anticipate the potential problems that will be faced when implementing such a system.

The chapter finishes with recommendations for further areas of study.

Chapter Two – Literature Review:

As noted previously, as far as the author has been able to establish, no previous studies have focused on the specific topic of audio archiving in ABC Local Radio. This chapter examines literature drawn from three principal areas that are relevant to the study. These areas are archiving as a discipline with a specific focus on metadata, the development of audio recording technology and the medium of radio.

2.1 Archiving

2.1a The Value of Archives

A primary feature that separates humans from other animals is the sophistication of our language. Throughout human history, the cornerstone of communication has been oral. All cultures are originally oral cultures, and thousands of languages and dialects have emerged on the various continents. Relatively recently in terms of human history (within the last 9000 years¹¹), writing has developed.

Whilst the spoken word can only be ingested by those within hearing distance, the written word is enduring. It enables people to communicate through both time and space. A written word (or symbol) will not change when transported. This feature is central to the strength of the written word as evidence.

In the broadest terms, any written word is evidence of history. It creates immediately a record of a past event – if only that this word was written at some point in history. The ability of words to convey meaning and describe events gives them the power to inform people in detailed and specific terms about the events of the past. They are able to describe history.

A literate culture necessarily creates documents that reflect the history of that culture. The collection, in an organised way, of documents of historical significance is an archive. One definition of an 'archive' is "a place where public records or other historical documents are kept".¹² The term 'record' has been defined as "anything providing permanent evidence of or information about past events".¹³ James Gregory Bradsher's more comprehensive definition states:

...archives are the official or organized records of governments, public and private institutions and organizations, groups of people and individuals, whatever their date, form and material and appearance, which are no longer needed to conduct current business, but are preserved, either as evidence of origins, structures, functions, and activities or because of the value of the information they contain, whether or not they have been transferred to an archival institution.¹⁴

Records – be they in archival institutions or not – serve as an extension of memory. They carry information that documents transactions and communicates thoughts. Records are able to substantiate claims, provide explanations and justifications, and serve as lasting evidence of events that have occurred in both the recent and distant past.¹⁵ Robin G. Collingwood has declared the value of history to be that it teaches us what man has done, and thus what man is.¹⁶ Archives are, it has been argued, synonymous with history.¹⁷

Far from simply providing dry facts such as the date a certain event occurred or the exact wording used, archives are able to bring history to life. Given the appropriate source, interaction with archived material can create the sense of communicating with someone who has lived centuries before, yet was contemplating similar issues, facing similar dilemmas and perhaps reaching the same conclusions as a person living in the present day.¹⁸ From the practical to the philosophical, there are a broad range of valuable experiences and functions that can extracted from the records of the past.

An important component of the value of archives that has been given significant attention relates to the role they play in keeping the powerful people and institutions in our society accountable. Duranti describes the mission of archives as being the protection of reliable evidence of action and decision.¹⁹ The nature of society is that the decisions of certain individuals affect many people due to the positions of authority these individuals hold. A well functioning society requires checks and balances to temper this power.

23

Although often unnoticed, archives play an important role in protecting the rights of citizens in democratic societies. There are numerous examples of public officials, religious leaders and managers of large corporations being held accountable for their actions via the use of archival records.²⁰ These exercises in accountability can range from providing evidence of leaders making contradictory statements in the short term, to, by way of example, banks being in possession of gold stolen from European Jews some decades after the event.²¹ Records, therefore, are capable of acting both as a glue that holds together and as an agent that unravels institutions, regimes and the careers of individual people.²²

The strength of an archive stems from the information it contains. This evidence can reveal the misconduct of individuals, governments and corporate leaders, giving archives tangible power.²³ Access to this information is critical if societies are to function efficiently and in a manner that is responsive to the needs of the population. Transparency and accountability cannot occur if a free flow of information is not available.²⁴ An example of this is the proliferation of law suits against the tobacco industry that has occurred since potential litigants have gained access to the information relating to the health implication of smoking that were long hidden by tobacco corporations.²⁵

As political leaders are arguably the most powerful people in our society, documents relating to their actions and decisions are extremely important. In democratic societies the ability of the general population to remove individuals from these positions of power via the electoral process enhances the power of archived information, as demonstrations of misconduct will usually result in a reduction of popular support. The Society of American archivists has stated in a letter to the Congressional leader:

As do all citizens, we believe, archivists have a vested interest in protecting the fundamental tenet of democracy that holds leaders accountable not solely to history in the long term, but to the electorate in the short term as well. Access to the records of office – to the people's office – is an essential part of that accountability.²⁶

The availability of the historical record – be it in relation to distant or recent history – facilitates the maintenance of a just society where the rights of citizens are protected, tyrannical government is held in check, and history is owned by the community and the people who comprise it.²⁷ Accessible records can serve to minimise corruption and the abuse of power. This is true regardless of the size of the community and the level of government. In all areas of the community, archives are an important resource in the search for truth. They are capable, as Bradsher has argued with reference to Stuart Eizenstat, of turning history in justice.²⁸

The value of archives can be measured in many ways. For many, their ability to deliver accountability to citizens and justice to victims is their principle strength. Others recognise their worth based on other considerations. Some studies indicate that most people appreciate and rely on archives for the preservation of history and culture.²⁹ Whatever the motivation, this dynamic translates into monetary value.

Hirtle indicates that the library of Cornell University is its single largest asset, and suggests that archives and manuscript repositories manage items worth hundreds of billions, if not trillions, of dollars.³⁰ He also notes that the Zapruder film of the Kennedy assassination sold for US\$16 million, and some of Winston Churchill's papers for US\$18.4 million.³¹ Recently the singer and activist Harry Belafonte attempted to auction three documents belonging to the late Dr. Martin Luther King Jr. They were expected to be sold for between US\$750,000 and US\$1.3 million.³² These examples indicate that the appreciation society has for archival material is reflected in its monetary worth.

Another aspect of the value of archives is their emotional power. O'Toole notes in reference to the papers of Dr Martin Luther King Jr. that even the most mundane item has the ability to transport people back into the world and presence of this man – to invoke the drama of that era of historical change.³³ Beyond the facts and figures of past events, connections can be made with the depth and richness, complexity and subtly of human experience. The lives of those who have departed this world are able to resonate through to the present via the words, images and artefacts of their time.³⁴

These links with the past bring with them the culture of the people who, in a particular place, have gone before. Archives maintain a social memory. This memory brings with it national identity.³⁵ In reference to the Australian experience, Sue Natrass suggests that our collections are central to our understanding of ourselves, helping to shape our place and strengthen our communities. In a changing world, collections are the heart and soul of a nation.³⁶ This is true not only for nations as a whole but also for regions within nations. As will be argued in subsequent chapters, there is a need to preserve documents that represent not only the national or state sphere of activities, but also the local sphere. Further, these documents should not be restricted to the written word, but also include other forms of human expression.

2.1b The Spoken Word as Evidence

While a written word does not alter over time, aural information, passed from one person to another – from one generation to another – is not perfectly reproduced. Literate cultures have generally considered the written word to be a superior form of evidence, judging aural testimony to be unreliable.

This is illustrated by the attempts of Indigenous Australians to establish that they have traditionally owned specific areas of land. Historically, large numbers of oral transactions would have occurred that verified the existence of this title. But the oral reproduction of this evidence was not considered to be valid in a contemporary Australian court of law. A single written record relating to one of these pre-1770 transactions may have made the process of establishing the existence of Native Title in Australia a very quick and simple process. Oral evidence, reproduced through a living, oral culture, was given minimal value as evidence in Australia. It is the written word that has been deemed capable of determining the truth of history. This preference for the written word over the spoken is reflected in the development of archive-related legislation.

The preservation of much of Australia's written material has occurred due to the existence of instruments such as Legal Deposit. These laws, which were enacted in France as early as the 17th Century and in the United Kingdom (UK) in the 18th Century,

mandate that copies of published material be submitted to an appropriate government institution.³⁷ Under the *Copyright Act 1968*, a copy of any work published in Australia must be deposited with the National Library of Australia and the appropriate state library.³⁸ This, and previous legislation mandating that published material be given to the relevant libraries, has ensured that the majority of Australia's significant written material has been, and is being, preserved.

Importantly, whilst requiring that written material that has been published be preserved in this manner, the relevant legislation has not subjected broadcast media to the same demands. Therefore, radio programs have not been preserved in the same comprehensive manner as books, magazines and newspapers. This is a crucial feature in the creation of the current situation where the vast majority of the aural material produced and broadcast by ABC Local Radio has not been preserved.

Although dominated by text, libraries and archives have also included other forms of documentation such as photographs, audio recordings and film footage. However, the increase in the production of these more recent forms of documentation has been so rapid that copies of significant amounts of material have not been preserved. The question of whether or not to extend the Legal Deposit requirements to include audiovisual and electronic material is repeatedly examined. In 2007 the federal Department of Broadband, Communications, and the Digital Economy issued a discussion paper calling for submissions in relation to this topic.³⁹ At this point in time, amendments to the *Copyright Act 1968* have not been made.

2.1c Paper to Disk

For millennia the primary form of storage for the written word has been paper. The 20th Century saw the creation of several new mediums of storage. By the turn of the 21st Century, dominant amongst these new forms were optical and magnetic disks. Although arguably primitive in their dependence on a binary number system, the combination of these disks with computer processing power is transforming the world of preservation.

Archives and libraries have always been full of books and paper files, stacked on

shelves and filed in cabinets. In order to locate items, paper-based cataloguing systems have been created. Accessing an item required one to locate it in the catalogue, and then physically find it on the appropriate shelf.

Information Technology (IT) converts documents into a series of zeros and ones – into digital items. This allows one to use a computer to search a database to locate an item, and then to access it immediately via that same computer. The advantages in terms of efficiency are obvious. The primary form of storage utilised by IT is the hard disk.

Hard Disks

It is a little over half a century since the first hard disks were created. The development of these information storage devices over that time period has been remarkable. The IBM 305 RAMAC was the first computer disk storage system.⁴⁰ It appeared in 1956, held five megabytes (MB) of information, and cost roughly US\$50,000, or US\$10,000 per megabyte.⁴¹

In 1973 International Business Systems (IBM) introduced the 3340 disk drive.⁴² It more than doubled the information density on disk surfaces, and set the direction of the technology.⁴³ In the early 1980s the cost per megabyte had dropped to be in the low hundreds-of-dollars. By the end of the decade it was being measured in the tens-of-dollars. The 1990s saw the price drop below ten dollars per megabyte, and then below one dollar per megabyte.⁴⁴ Hard drives for personal computers can now be purchased for the equivalent of less than one dollar per gigabyte (GB), or less than one-tenth of a cent per megabyte.

Writing in 2006, Hans and Ali indicated that raw storage prices have declined 50% to 60% per year, and that hard disk capacity doubles every year.⁴⁵ This rate of advancement has been noted as outpacing Moore's Law. In the 1960s, Gordon Moore predicted that the number of transistors on a computer chip would double approximately every two years. This has come to be known as Moore's Law.⁴⁶ It has been noted that transistor density has, at times, been doubling every 18 months. Storage density has been even faster, doubling every 12 months.⁴⁷

Finding a 'permanent' storage system has long been a primary concern of archivists. Ironically the rapid rate of technological advancement makes the realisation of a permanent storage medium even more elusive. As preservationists are now acknowledging that there is no permanent format, regular reformatting is required for all media.⁴⁸

Accepting this change has been difficult as archivists have been distrustful of digital media, due to their unstable nature when compared to the now traditional audio tape. Hans and Ali referred to the move to digital media as turning archives into 'liquid assets' that can be easily repurposed.⁴⁹ This 'liquid' characteristic of digital archives allows them to be moved and copied with relative ease, and with minimal and ever-declining cost.

This phenomenal rate of development in computer storage and the resulting decline in cost obviously has significant implications for the discipline of archiving, including audio archiving. The author argues that it has reached the point where, despite the organisation's financial constraints, hard disk storage can enable all ABC Local Radio stations to archive all of their audio output.

2.1d Digitisation of Archives

The development of digital information technology began to eliminate the previous divisions in libraries and archives between the text, image, audio and audio-visual sections, by converting them all into digital items. Thus began the long and ongoing process of digitising existing archives – converting each individual item into a digital format.

The challenges associated with this process are enormous and a significant amount of the resources of the world's libraries and archives are devoted to this undertaking. Issues such as obsolete formats and how to prioritise what should be digitised (given the labour intensive nature of digitisation and the vast volumes contained in existing archives) are the focus of many record keeping professionals. It is worth noting that, despite the cost, the process of digitising existing archives can produce a return on investment as digitisation tends to increase the reuse of archived material due to the increase in ease of access. The Italian television network RAI reported an 85% increase in archive use in three years following a concerted effort at digitisation. ⁵⁰ Public broadcasters in The Netherlands commissioned a report which concluded that moving to a fully digital production and preservation process would result in a profit in seven years. ⁵¹ This illustrates the advantages of a digital archive, and suggests that having such a resource may prompt an increase in the use of archived material.

The fact that individual ABC Local Radio stations have historically not archived their output (with the exception of a very few items being submitted to ABC Archives and Library Services or its predecessor) means that the many questions relating to digitising analogue material are not relevant to this study, as significant quantities of analogue audio recordings do not exist to digitise.

ABC Local Radio stations may have a few quarter-inch tapes in their cupboards with old recordings, but there has never been a system of comprehensive archiving and no staff members exist in the individual stations with sufficient time to audition and digitise these random collections of tapes. Therefore, this study is focused on how to start archiving material within the context of current technological and resource constraints, and does not consider the question of digitising analogue radio recordings.

2.1e Metadata

No archive can be efficiently accessed without a system of cataloguing its contents. This requires metadata. The definition of 'metadata' is simply "data about data,"⁵² or more precisely, "structured data about data."⁵³ In the context of an archive, metadata is the data that allows a user to seek for and locate items that have particular characteristics within the archive.

The definition of metadata has changed in the last half century. It previously referred to the types of data relating to an item in an archive. Metadata was therefore an

abstraction rather than the numbers and letters that identified a particular item in the archive.⁵⁴

For example, the metadata about an item would tell you that the name and date of birth of the author were recorded, but the actual numbers and letters telling you what that name and date of birth were, would be referred to as data. This narrower and more conceptual definition is the original definition of metadata, but is not the definition used in relation to audio or other multi-media archives.

In the context of the above example, the current established practice is to refer to the actual name and the date of birth of the author as 'metadata'. The distinction now between data and metadata is that the actual archived item is the data (for example, the audio itself which is referred to as the signal) and the identifying information about the signal (what the audio is about and who produced it) is the metadata.⁵⁵ The latter definition of metadata has been used throughout the last two decades, and is the one utilised for this study.

In a digital archive, there are several primary categories of metadata. The European Broadcasting Union divides metadata into only two categories: technical and descriptive.⁵⁶ However, the Preservation Technologies for European Broadcast Archives (PRESTO) Guide to Metadata in Preservation adds the categories of administrative, preservation, and use.⁵⁷ This study will consider three categories of metadata: structural, administrative, and descriptive.

Structural metadata contains information about the manner in which the individual files (referred to as 'intermediate objects') that make up a digital item are organised. ⁵⁸ It is essential information for digital items, and represents a requirement not present in an archive of traditional printed works. If a library fails to record structural metadata, a book in its collection will not dissolve into a series of unconnected pages. The same cannot be said for a digital archive.⁵⁹

Administrative metadata details exactly how the item was preserved, and may include

reference to the hardware, settings, and compression rate used at the time of preservation. Copyright information is also included in administrative metadata.⁶⁰

Descriptive metadata refers to the content of the item. It is this category of metadata that is most relevant to this study as it via descriptive metadata that a Program Maker is able to locate a relevant item. In an ABC Local Radio archive, the descriptive metadata may include elements such as the subject being discussed, the name of the person being interviewed, the geographical location and period of time in question, and the duration of the interview.

Defining the elements of descriptive metadata (which in a database may be referred to as 'fields') is crucial as these elements determine the ease with which items within the archive can be identified. Further, a concise and appropriate set of fields is essential in order to limit the time required to create descriptive metadata.

Without the ability to seek quickly for and locate items with particular characteristics, an archive is effectively useless. There is no point in recording the audio of a radio program if no metadata is also created that describes to a user the content of each audio item. Without the metadata, an archive is simply a pile of unidentified CDs or a collection of audio files that would need to be listened to in real time in order to determine if they contained material worthy of reuse. The International Association of Sound and Audiovisual Archives' (IASA) Guidelines on the Production and Preservation of Digital Audio Objects states simply that an item cannot be considered preserved if it cannot be located and linked to its metadata.⁶¹ The importance of metadata to an archive cannot be underestimated.

Organisations such as Time Warner manage a vast number of digital items using Digital Asset Management (DAM) systems. The Senior Vice President and Chief Information Officer, Paul Zazzara, has noted that:

Without sound metadata management, your DAM system can't consistently identify the thousands of digital assets you've itemized and stored. We've learned that it's not about the asset management system you're using; it's about the

metadata that you're creating to describe the assets.⁶²

Zazzara also indicates that the minimum number of descriptive elements that all Time Warner businesses create for each digital item is between 20 and 50 pieces of information, with each individual section then also creating additional metadata unique to their specific industry. This illustrates the key challenge to metadata creation: the time, and therefore the expense, required to create it.

In the traditional radio-archiving model, an item would be listened to and catalogued by a member of staff dedicated to creating metadata. This is a very time consuming – and therefore expensive – method, as one minute of radio can take three minutes to catalogue. Therefore it can take longer to catalogue than to produce. The required response is to capture metadata at its source – at the point when the item is created. As time passes, the cost of collecting metadata increases due to the fact that the relevant information has to be gathered via a process of reviewing the relevant item.⁶³ This process necessarily takes time and therefore incurs an expense.

This fact is illustrated when one considers an ABC Program Maker who has just completed an interview or a daily program. The descriptive metadata of who was interviewed and the subject discussed is in the short-term memory of the Program Maker, and can be quickly and easily recorded. By the next day or the end of the week, much of this information would require a reference to program rundown notes or written interview introductions, and may require the interview to be listened to again in order to be ascertained. If a third party is engaged to gather and record this metadata, the process is even longer and potentially more inaccurate and incomplete.

According to Hans and De Koster, the required response is for archive professionals to move out of the basement and into the production space.⁶⁴ It is now the often repeated refrain in the field of digital asset management that an 'end to end workflow' is the appropriate model.⁶⁵ In other words, metadata being collected as part of the production process rather than having a completed item delivered to the archives department for archiving as a separate and autonomous process.

In the ABC Local Radio context, this effectively means recruiting Program Makers to take responsibility for creating appropriate metadata for the material they are producing. This leads to the next question of how exactly the metadata elements should be designed.

While in the short term the primary users of archived ABC Local Radio material will only be ABC Program Makers, in the longer term obvious advantages exist in having the associated metadata comply with international standards, to facilitate the ease of searching the archive and therefore maximising future reuse. An archive is an asset that can generate revenue when utilised by users outside the organisation in possession of the archive. Making an ABC Local Radio archive easy to search by people around the world will increase the potential for reuse and therefore revenue generation in the future. It will also make accessing the archive easier for members of the Australian public.

At this point in time an undisputed international standard of consistent metadata elements has not emerged. The PREMIS Working Group survey found that the community of organisations surveyed (predominately libraries and archives) currently lack a common vocabulary, conceptual framework, and are not at the point of settling on dominant standards.⁶⁶ However efforts are being made to develop international standards and these developments are relevant to this study.

Dublin Core

In March 1995, a group of around 50 people met in Dublin, Ohio, USA, to address the recognised need for a core set of semantics to facilitate the search and retrieval of information resources. Thus the Dublin Core Metadata Initiative was born.⁶⁷ It is generally acknowledged as the most common metadata standard.⁶⁸

The set is designed to be as broad as possible and to be applicable to anything that has an identity.⁶⁹ The Dublin Core drew interest from around the world from those institutions who wish to share information, and has gone some way to creating a standard set of metadata elements. Organisations who are designing metadata sets

often refer to the Dublin Core as their starting point to maximise access to their resources.⁷⁰ These more complex versions of the basic Dublin Core Elements set is referred to as 'qualified Dublin Core'.⁷¹

Many expanded versions of the set have been created, but the primary 15 elements of the Dublin Core Metadata Elements with their definitions are:

Title: A name given to the resource.

Creator: An entity primarily responsible for making the content of the resource. Subject: A topic of the content of the resource.

Description: An account of the content of the resource.

Publisher: An entity responsible for making the resource available.

Contributor: An entity responsible for making contributions to the content.

Date: A date of an event in the lifecycle of the resource (usually creation date).

Type: The nature or genre of the content of the resource.

Format: The physical or digital manifestation. e.g. size and duration.

Identifier: An unambiguous reference to the resource within a given context.

Source: A reference to a resource from which the present resource is derived.

Language: A language of the intellectual content of the resource.

Relation: A reference to a related resource.

Coverage: The extent or scope of the content of the resource.

Rights: Information about rights held in and over the resource.⁷²

EBU Radio Archives Metadata

The European Broadcasting Union (EBU) has developed a Core Metadata Set for Radio Archives. Based on the Dublin Core, it includes the following refinements:

Title – Alternative: Any form of the title used as a substitute or alternative to the formal title of the resource.

Creator – Role: The content of the qualifier role must be taken from a controlled list of authorized roles.

Description – Table of Contents: A list of subunits of the content of the resource.

Description – Abstract: A summary of the content of the resource.

Contributor - Role: The content of the qualifier role must be taken from a

controlled list of authorized roles.

Date – Issued: The date the content was issued. e.g. the broadcasting date of a radio program.

Date – Created: It is recommended to use this element to show the date the content was created.

Date – Digitised: The date an analogue recording is digitized is placed here. Format – Extent: The size or duration of the resource. The duration should be written in the form HHMMSS.

Format – Medium: The material or physical carrier of the resource. Relation: The 12 refinements suggested are IsVersionOf, HasVersion, IsReplacedBy, Replaces, IsRequiredBy, Requires, IsPartOf, HasPart, IsReferencedBy, References, IsFormatOf, HasFormat.

Coverage – Spatial: Spatial characteristics of the content of the resource. Coverage – Temporal: Temporal characteristics of the content of the resource.⁷³

SOMA

By way of comparison, initiatives such as the Shared Online Media Archive (SOMA) have also used the Dublin Core Metadata Set as a base and then added refinements considered appropriate for multi-media files. As the name suggests, it is designed for online distribution, but applicable to internal distribution in an organisation such as ABC Local Radio.

The refinements include:

Title.Alternative: Any form of the title used as a substitute or alternative to the formal title of the resource.

Creator.Role: Role the creator played in creating the resource. e.g. producer, writer or editor.

Publisher.URI: Uniform Resource Identifier (URI) of the Publisher. e.g. Links to publisher's homepage.

Publisher.Logo: URI of a logo of the publisher.

Contributor.Role: Role the contributor played in creating the resource. e.g. producer, writer or editor.

Date.Created: Date of creation of the content of the resource.

Date.Available: Date (often a range) that the resource will become or did become available.

Date.Issued: Date made available by original publisher. For example, the broadcasting date of a radio program.

Date.Modified: Date on which the resource or metadata was last changed. Format.Extent: The size or duration of the resource. e.g. length of interview. Format.Medium: The material or physical carrier of the resource. e.g. Online/Offline.

Relation.IsVersionOf: The described resource is a version, edition, or adaptation of the referenced resource. Changes in version imply substantive changes in content rather than differences in format.

Relation.IsReplacedBy: The described resource is supplanted, displaced, or superseded by the referenced resource.

Relation.IsPartOf/Relation.HasPart: The described resource is a physical or logical part of the referenced resource/the described resource includes the referenced resource either physically or logically.

Relation.IsFormatOf/Relation.HasFormat: The described resource is the same intellectual content of the referenced resource, but presented in another format/the described resource pre-existed the referenced resource, which is essentially the same intellectual content presented in another format. Coverage.Spatial: Spatial characteristics of the intellectual content of the resource. e.g. the geographic location, such as a particular town or region referred to.

Coverage.Temportal: Time period(s) to which the intellectual content of the resource pertains. e.g. historical periods discussed in a history program.

SOMA have removed the Source element from the Dublin Core, and added: ExtendedInformation: Additional data concerning the resource. May be used to store proprietary or application or organization specific information. ExtendedInformation.Scheme: The encoding scheme for the extended information element. This is a string that uniquely identifies the scheme of the extended information data.74

As these refinements illustrate, particular media require specialised metadata elements. The challenge is to minimise the number of elements in order to avoid placing too much of a burden on those required to create the metadata. Every refinement makes an item easier to locate, but creates another element to be defined by the person creating the metadata. As will be discussed in later chapters, as Program Makers need to be recruited to gather metadata, it is essential that this process requires minimal time or it is unlikely to be consistently completed.

XMBF

The Exchange Broadcast Binary and Metadata Format (XMBF) is based on the Dublin Core set, and includes many of the refinements of the EBU and SOMA sets detailed above. It was created specifically for broadcasting organisations, and is in response to what was considered the unwieldy nature of the European Broadcasting Union's format for broadcasts.

It includes refinements:

Title – Episode Title/Episode Sequence: The episode title is the name by which a specific episode of a series is known. This may be unused if the broadcasts are only differentiated by date or sequence number. e.g. episode 1/the episode sequence is an alphanumerical field to indicate a sortable sequence number e.g. 1, 2, 3 or 2002-09-12 in the case of broadcasts differentiated by date. Subject – Subject Encoding Scheme: The subject encoding scheme should be expressed as a text naming the scheme or a URI pointing to a full definition. Rights – Right Controlled Parts: Information about material where the creator does not hold the rights (typically music) i.e. parts of the audio stream that are not solely owned by the institution or creator. These parts should be identified with time (start and end in seconds into the programme), title, artist and label/publisher.⁷⁵

XMBF also proposes a set of Person Encoding elements:

LastName/OrganizationName: Last name (surname/family name) of person/if the record is for an organization, the name of the organization in the primary language.

Alias/OrganizationAlias: Alias of a person, or the name by which he/she is also known as/if the record is for an organization, the name of the organization in other languages.

FirstName/OrganizationAcronym: First name (given name) of person/if the record is for an organization, the acronym of the organization if Applicable.

Role: Role the creator played in creating the resource. For example: producer, writer or editor.

Email: Email contact address.

Address: Postal address of the organization or person.

URI: URI of the publishing organization.

Logo: URI of a logo of the publisher organization.⁷⁶

The slight variations between the elements, refinements and structure of the EBU, SOMA and XMBF metadata sets illustrate the difficulties associated with creating an international standard for radio archives. There is always a temptation to create additional elements. Various organisations have differing priorities and will choose one refinement over another, and may choose differing elements to define the same piece of information, therefore effectively placing it in a different location to another organisation.

Broadcasters, museums and archives are increasingly dealing with a wider variety of material, which creates the need for more complex metadata. For example, ABC Local Radio items will now occasionally have visual images associated with them. The move to digital radio – where images and text can also be broadcast – means this tendency can be expected to increase. Therefore, the metadata design of an ABC Local Radio archive needs to be capable of dealing with this complexity, and to do so in a manner that complies to the greatest degree possible with the emerging – and often conflicting – international metadata sets. This will allow any future archive to maximise the distribution opportunities made available via the ABC intranet and the internet.

2.1f Archives and the Internet

The renowned archivist Theodore Schellenberg declared that "use is the end of all archival effort".⁷⁷ Whilst it may be reasonable to argue that some sections of the community – although never actually accessing material in the conventional sense – can be said to 'use' archives by simply feeling secure that they exist,⁷⁸ the primary indicator of the utility of an archived item is the degree to which it is retrieved and made use of.

The advent of the internet and other advances in technology are revolutionising the opportunities to expand access to archives. Suddenly every provider of content is able to distribute to a global audience. This is true for text, images, audio and video. The development of online databases, text-searching capabilities, the integration of archival and oral history material with library catalogues and the posting of audio on the web are ensuring greater use of archived materials.⁷⁹

There are also financial impacts that flow from these technological developments. The University of California San Francisco Archives has utilised the internet as a partial solution to budgetary limitations. Distributing material online is faster and more efficient, has minimal staffing requirements and provides access at all times of the day, every day of the week. It therefore promotes wider distribution.⁸⁰

As the size of the internet grows, so too do the opportunities for distribution. Speed is critical. There are indications that speed is the single most influential factor in determining online activity and intensity of internet use. The impact of the ongoing growth in 'broadband' connections over recent years should not be underestimated by content providers.⁸¹

This growth is particularly relevant to providers of audio content such as radio and oral history. Robert Perks has argued that oral history on the web will play a pivotal role in democratising and popularising archives, particularly amongst younger generations. The ability of the internet, not only to distribute content but also to provide the opportunity for

interactivity with users, opens archived material to people who are not inclined to physically visit archives and libraries. Further, it enhances the ability of archives and libraries to provide appropriate material to those who are more comfortable with oral and visual, rather than written, forms of memory and narrative.⁸² This is a welcome development for oral historians who have been criticised for having concentrated too much on recording practices and not enough on access.⁸³ These opportunities are, the author argues, are equally relevant to creators of radio.

The potential for the distribution of ABC Local Radio via the internet has already been demonstrated by radio podcasting. Radio podcasts in Australia increased 500% in the year to June 2007, and as a whole ABC Radio delivers around 3.5 million audio podcasts per month, as well as 350,000 live streams.⁸⁴ ABC Radio National podcasts the vast majority of its output, but unfortunately the same cannot currently be said for ABC Local Radio.

The BBC possesses the world's largest broadcasting archive and, in recent years, has utilised the internet to make significant amounts of its radio archive available to the public. The Creative Archives Project made material available to the (UK) public and also encouraged members of the community to use this material to create something new. This has been done using the Creative Archives Licence which requires attribution and prohibits commercial use.⁸⁵ This was a trial project which ended in September 2006 and is now being assessed by way of a Public Value Test.

Public broadcasters, such as the ABC and BBC, are in a unique position to make such material available without charge to the public. As Lord Puttnam noted in his address to the Creative Archive Licence Group, the public pays for the preservation and upkeep of this (BBC) archive, and therefore the public should be able to access this archive.⁸⁶ The same argument can be made in relation to ABC Local Radio, which already has a significant online presence. However, it will not be able to share these archives via the internet if they do not exist. ABC Local Radio has not, at this point in its history, embraced archiving and the potential value it creates. The point of this study is to encourage it to do so in the future.

41

2.2 Audio Recording

At noted previously, the written word has historically been granted a position of authority when presenting evidence of past events. Its durability over time is the significant characteristic. When, in 1878, Thomas Edison first heard his words "Mary had a little lamb" returned to him from the cylinder of a phonograph built by his assistants, this superior position began to be eroded. The human voice had now gained a measure of immortality.⁸⁷ It too could now be transported over time and space in an unaltered form.

Stern argues that many factors contributed to the development of audio recording technology, from changing understanding of human hearing, to the focus on the preservation of food and corpse technologies stemming from the American Civil War, to the role of hearing in medical diagnoses.⁸⁸ The decades following the invention of Edison's phonograph saw a variety of mediums used to store recorded sound: wax cylinders, disks, wire, and magnetic tape. All sound recording technologies use transducers which turn the sound into something else, and then that something else back into sound.⁸⁹-

The electrification of recording technology in the 1920s saw the creation of microphones, amplifiers and speakers. This ended the age of the recording process requiring one to shout into the horn of a phonograph.⁹⁰ The progress in this field over the decades produced a continual improvement in sound quality and decrease in real costs.

The latter half of the 20th century moved the recording process into the digital age. This had significant implications for the process of making copies of recordings. Analogue copies will never be an exact reproduction of the original, meaning sound quality is gradually lost as each version is an additional generation removed from the 'master'. The 'noise' that is inherent in any recording system becomes part of the signal, and any reproduction adds its own noise to that of the previous generation.⁹¹ However, as digital recording technology converts sound waves into numbers, exact copies can be made because numbers never change.

The process of technological advancement in the field of audio recording – particularly computer-based digital recording – has an obvious relationship to the question of audio archives in an ABC Local Radio context. It has made recording and storage relatively simple and affordable. For more than a century since Edison heard his recorded voice, sound recording has been reasonably cumbersome and expensive – critical factors behind ABC Local Radio's failure to record its vast output. However, sound recording technology has now reached the point where such an activity can realistically be undertaken.

2.3 Radio in Australia – A Brief History

2.3a Initial Technology

The 19th century saw a change in the way people communicate. The development of literacy created the first form of mass communication, but writing is a fundamentally different medium to the historically dominant form of human communication – the spoken word. A written word represents a spoken word, but reading a word is a distinctly different experience to hearing it spoken.

A written word is a spoken word stripped of much of its contextual meaning. A spoken word conveys not only the strict definition of the word, but can also reveal much more. The emotions of the person speaking the word are also communicated. The subtleties of the intended meaning of the person speaking the word can be understood when the listener considers the particular stress it contains, and the content and environment in which it is spoken. Elements such as the accent of the speaker can also provide information and meaning that a written word cannot. This illustrates some of the communicative limitations of the written word.

As noted previously, the key advantage of the written word is its durability over time and space. A spoken word is limited by its ability to be heard by those within range of its production – generally a matter of only a few metres. This limited feature of the (unrecorded) spoken word has been consistent through human history.

Technological developments in the 19th century changed this situation. The first element of this change, and the pre-cursor to the development of radio, was the telegraph. This allowed sounds to be transported along a wire at great speed over great distances.

The first demonstration in the UK of the telegraph occurred in 1837. By 1853, Australia had also seen a demonstration of the technology. Empowered by the fruits of the Industrial Revolution and motivated by the benefits of being able to communicate over such enormous distances at such high speed, a telegraph linking Australia and the UK was completed in 1872. It had dozens of relay points where the message was retransmitted to the next relay station.

Across the Pacific Ocean a few years later in 1876, Alexander Graham Bell patented the telephone. The technology moved quickly to Australia, with the first telephone exchange opening in Melbourne in 1880 with 17 subscribers.⁹² The telephone system was to play an important role in the operation of radio stations into the 21st century. The next development was wireless communication.

In 1887 a German physicist by the name of Heinrich Hertz demonstrated the existence of radio waves, effectively proving the predictions made by Cambridge Professor James Clerk Maxwell some three decades earlier.⁹³ Later in the century a young Italian physicist called Guglielmo Marconi – aware of Hertz's discovery – worked towards the development of wireless telegraphy. Following experiments in his garden, he demonstrated at the General Post Office in London transmissions of approximately 1.5 miles in 1896.⁹⁴

Having obtained patents for wireless telegraphy in the following year, Marconi went on to conduct tests over water. Significant publicity was generated when a ship in the North Sea was able to use the wireless system to signal that it was in distress.⁹⁵ On the 12th of December 1901, Marconi is credited with the first successful trans-Atlantic radio transmission, from Poldhu in southwest Cornwall (UK), to St. John's in Newfoundland (Canada).⁹⁶

44

Again Australia was quick to adopt the emerging technology, with the first public demonstration of wireless communication taking place at Adelaide University on the 21st of September, 1897. Enthusiasm for the new medium was high. Despite the Wireless Telegraphy Act of 1905 giving the Postmaster General exclusive rights to erect, operate and licence wireless telegraphy, many experimenters risked the 500 Australian pound fine and operated unlicensed radio broadcasts. There were also hundreds of licensed experimenters.⁹⁷ Initially only simple tone – suitable for Morse code – could be transmitted. But this then developed into voice transmissions or 'wireless telephony'.

2.3b Radio Station Development

Radio in Australia – particularly commercial radio – has followed the lead of the USA. The early 1920s saw rapid growth in the number of radio stations in that country. In June 1921, there were 31 authorised stations. By the end of 1922 the number had risen to 571. 1922 also saw a radio station in New York become the first to broadcast an advertisement. The cost was US\$50, which provided the client with 10 minutes to promote co-operative apartments. This reportedly led to US\$27,000 worth of sales. The growth of radio advertising was soon mirrored in Australia.

One of the significant characters of the early years of radio in Australia was Ernest Fisk. He had arrived in Australia in 1911 representing the Marconi company, and on the 13th of August 1919 transmitted *God Save the Queen* from one building to another using point to point wireless following an address to the Royal Society of NSW.⁹⁸ As the Managing Director of Amalgamated Wireless, he sought to influence government policy. In 1923 he successfully convinced the Postmaster General, William Gibson, to instigate a 'sealed set' system. This meant that a listener would purchase a receiver that was only able to receive one radio station. However, there was a high degree of public dissatisfaction with this system, and it was abandoned in July of the following year.⁹⁹

What replaced it was a listener's licence fee that was collected by the government, and the creation of A Class and B Class radio stations. B Class stations were commercial, and derived their revenue from advertising. A Class stations were funded by a component of the licence fee. Two A Class stations were permitted in NSW and Victoria, and one each in all the other states and territories.

Despite 63,874 listener licences being bought in 1924 and 1925, most stations remained unprofitable and by the middle of 1927, growth in the industry had largely stalled. Irrespective of the profitability issues of the stations, more and more people were listening to radio. By 1928 there over 270,000 licensed listeners, and many thousands more listened illegally with crystal sets.¹⁰⁰

Radio at this stage of its development was noticeably different from what it is today. Broadcasts were not continuous and would have breaks that could be several hours long. It was seen to some extent as 'stay-at-home theatre', and the first ABC broadcast occurred at 8.00 pm – the time the theatre usual started. Plays were often heard, and music was a staple with much of it performed live. Minutes of static could be heard while the musicians decided what to play next.¹⁰¹ Silent prayers could on occasion be mistaken for technical malfunctions.

At this point in time the media was the 'press'. In comparison to newspapers, radio brought not only the intimacy of oral communication, but immediacy. This was particularly important for sport where, for example, the results of horse races could be immediately known.

This feature was particularly valued by country people, for whom newspapers would often arrive late. It reduced the isolation felt by those living outside the cities.¹⁰² Radio could use the present tense while newspapers used the past tense. "Now and Then, that's the difference" said an ABC advertisement. Events such as the live broadcast of the opening of the Sydney harbour bridge on the 19th of March 1932 – that included the unscripted event of de Groot cutting the ribbon – demonstrated this feature of radio.¹⁰³

To many people of the time radio must have appeared almost miraculous. Although the medium had emerged from the development of science, that did not stop some people associating it with more mystical elements. Ernest Fisk – who one might have imagined

was intimately familiar with rational explanations of how radio managed to operate – spent much of his later years attempting to make electronic contact with the dead. In the 1930s some church leaders who were convinced that Jesus Christ was set to return within the next decade, considered radio to be the perfect medium to support His mission.¹⁰⁴

Despite the depression of the 1930s, radio continued to grow. In 1929 Australia had 20 stations and 301,199 licensed listeners – 47% of whom were in Victoria. Ten years later there were six times the number of stations and ten times the number of listeners. Networking between stations also started, with the first formal network of commercial stations occurring in 1930.

Following a Royal Commission in 1927, Prime Minister Bruce announced in 1928 that all A Class stations would be taken over by a single company as their licences expired in 1929-30. The licence for this national network was awarded to the Australian Broadcasting Company who operated until the 30th of June 1932. This was the precursor to the Australian Broadcasting Commission, as will be discussed in detail in the subsequent chapter.¹⁰⁵

Radio was a worldwide phenomenon. By 1935 the USA had 617 radio stations, the UK 16, Germany 26, Russia 52, Japan 27, Canada 72, Sweden 28, Czechoslovakia 6, Argentina 38, Denmark 2, The Netherlands 2, Austria 9, Belgium 15, New Zealand 32 and Australia 68.¹⁰⁶ As the Great Depression lifted in the late 1930s many regional centres such as Orange, Cairns, Armidale, Deniliquin, Katoomba and Renmark saw the establishment of commercial (B class) radio stations. The ABC also expanded to regional areas.¹⁰⁷

The 30th of November 1937 saw the issuing of the one millionth listener licence. 62% of Australian households now had radio licences, although city dwellers were over-represented with 80% in comparison to 44% for those living in the country. Many people attempted to avoid paying their licence fee, and around 2000 people were charged with this offence every year.¹⁰⁸

47

The growing power of the radio industry prompted the federal government to introduce laws limiting the concentration of ownership. Proprietors were forbidden from operating more than one metropolitan station and four in total in each state. Nationally, ownership was restricted to four metropolitan stations and eight in total across the continent.¹⁰⁹ This action was in response to concerns that media proprietors who already had significant newspaper holdings were also dominating radio. It is an issue that continues to the present day.

2.3c Radio Starts a War

On the 3rd of September 1939, UK Prime Minister Chamberlain's announcement that the country was at war with Germany was transmitted via short wave. The Menzies coalition government accepted this transmission as evidence and declared Australia also at war prior to receiving the official telegram from the UK government.¹¹⁰ In the context of the value of radio as evidence, it was a significant event.

The PostMaster General had always had the power to censor material that it considered 'offensive', but the commencement of the Second World War led to a dramatic increase in the control of what was broadcast over the radio. Almost every piece of work had to be scripted. The Department of information worked together with the ABC which became the primary source of news as it was provided free to the commercial stations during the war. This cooperation led, to some degree, to the news service becoming an agent of propaganda for the government to heighten the war effort. An item entitled *The Jap as he Really Is* vilified the Japanese. It was considered extreme by some and an ABC annual report expressed concern that it threatened the public's confidence in the ABC's impartiality and integrity.¹¹¹

From its inception, news on the radio had simply been read from the newspapers. In May of 1939 Warren Denning became the first staff correspondent for ABC news.¹¹² The war led to more news and a strengthening of the independence of the news service from the material that was supplied by the newspapers. Again the immediacy of radio was its great strength in attracting an audience. Another point of difference came with creation

of field correspondents who, empowered by portable recording devices, could bring the sounds of the battlefield to the audience. Radio was no longer simply an oral newspaper report.¹¹³

By the end of 1942 the ABC was declared a protected undertaking, meaning those men who were deemed essential could be kept out of the armed forces. As with other industries, the war allowed many more women to be recruited into the radio industry, taking up positions as announcers, journalists, and technicians.¹¹⁴

Apart from precipitating the building of reinforced underground studios in Darlinghurst, the entry of Japan into the war had another significant impact. News relays were being taken directly from the BBC, which understandably focused on the war in Europe. This led External Affairs Minister Evatt to pressure the ABC to counter the propaganda of the BBC that was putting the European war first. ABC Chairman Cleary directed all news and features producers to adopt an approach of 'Australia first' in its coverage of the war.¹¹⁵ This dynamic ultimately led to an amendment being made on the 9th of August 1946, which made an independent ABC news gathering service mandatory. This change was officially announced on the 1st of July 1947. At the time, it made the ABC the only broadcasting organisation in the world to collect all its own domestic news.¹¹⁶

The war demonstrated the power of radio. Its ability to communicate efficiently and effectively with a huge percentage of the population courtesy of the one-to-many characteristic of mass communication gave its audience an unprecedented understanding of world events as they unfolded. Long-term ABC Chairman Boyer described radio as more revolutionary than the internal combustion engine, Goebbels as Hitler's most significant lieutenant, and asserted that, in democracies, radio had a still under-utilised power to do good.¹¹⁷

2.3d Golden Age to Steam Radio

By 1955 only 3% of Australian households in the principle capital cities did not have a radio. This compared to 24% not having a refrigerator, and 61% not having a washing machine.¹¹⁸ The radio was a standard part of the furniture. It brought not only

information and entertainment for adults. At a time when having your children attend kindergarten was beyond the means of all but the financially well-off, kindergarten of the air (which started in 1943) provided a similar service to anyone with a radio.

A program could affect social change. Philip Crosbie Morrison's long running show about the natural world arguably influenced a generation of conservationists and played a role in the creation of a system of National Parks.¹¹⁹ In regional centres the radio station provided not only a vital source of information at times of crisis, but also a focal point for the community. Commercial radio has traditionally dominated the local sphere as they generally service a smaller area than an ABC station, and therefore have been able to provide a higher degree of specifically local content. However, networking of programs has always occurred.¹²⁰

On the 5th of November 1956, television was first broadcast in Australia. This led people to coin the phrase 'steam radio' – the inference being that the advent of television would soon mean that radio would follow steam into virtual extinction. It was a prediction that would prove incorrect.

Television did precipitate change in the radio industry. The larger advertisers moved to the new medium, which meant that commercial radio pursued local advertisers to replace the lost revenue. Radio offered a price advantage that remains today. Although evening audiences were largely lost to 'the box', breakfast radio remained popular. A decrease in networking of programs also occurred, meaning more locally produced content.

Technological developments supported the growth of radio. In 1956 the 45 rpm record appeared, which was longer-playing and more durable than the 78 rpm record. As a medium well suited to the distribution of music, radio benefited. The 'Top 40' charts also emerged, and rock and roll was born. Such was the demand for the latest songs that records that had been carried by Qantas stewards who had arrived from the USA would be taken immediately from the airport to stations such as 2UE.¹²¹

50

1956 also saw Bell Telephone awarded the Nobel Prize for developing the transistor. This innovation allowed radios to become cheaper, smaller and more portable.¹²² Radios were moving into cars, kitchens, bedrooms, and being taken to the beach. The average number of radios per-capita continued steadily to increase. In the early 1960s there were two and half million radio sets in Australia. By 1977, 47% of all Australian households would have four radios.¹²³

The 1960s saw the emergence of 'talkback' radio. Like many things in commercial radio, it followed the success of this form of radio in the USA. John Laws – a prominent figure in the world of Australian talkback radio for several decades until his retirement in 2007 – started a relayed form of talkback in 1965. When he started being what some would describe as rude to his callers, his ratings soared. Soon his program was being networked by 21 stations. Again the telephone network was to play an essential role in the operations of radio.

The popularity of talkback radio has built not only the prosperous careers of personalities such as John Laws and Alan Jones, it has underpinned the success of stations such as 2GB and 2UE in Sydney, and 3AW in Melbourne. However, it is worth noting the comment attributed to Max Harris that 'talkback radio is a device by which the stupid are allowed to reinforce the stupid in their stupidity".¹²⁴

2.3e Community Radio

While on the one hand radio personalities such as John Laws were being networked around the country, on the other hand more small radio stations were being established. Queenstown, in rural Tasmania, had no supermarket, car-yard or newspaper, but it had 7QT. Many applications were being made to the Broadcasting Control Board for new station licences. They were regularly rejected on the basis that there were no frequencies available, although a retired member of the engineering staff later admitted that reallocation could have created a number of new stations.¹²⁵

The 1970s saw the creation of community or 'public' radio – one of the pioneers being 5UV located at the University of Adelaide, which started on the 28th of June 1972. The

Whitlam Labor government was able to utilise the Wireless Telegraphy Act to fast-track the issuing of licences, which often went to universities and musical broadcast societies.¹²⁶

It was a policy championed by Whitlam's minister Moss Cass, who declared in late 1975 that "we will open up the airwaves for the people's use."¹²⁷ Advertising or 'sponsorship' was restricted and a public station was expected to encourage members of the community to participate.

The law had hindered broadcasts in languages other than English. There had been Italian language programs as far back as the 1950s, but each broadcast had to be followed by an English translation. These restrictions were lifted in 1963, and further relaxation of the laws surrounding foreign language broadcasts occurred in 1972.¹²⁸

Financed by the federal government, the Special Broadcasting Service (SBS) went to air in 1978, with a television service to follow two years later. By 1990, SBS radio was broadcasting in 57 languages in Sydney and 55 languages in Melbourne. The number of community stations grew to 66 by 1987, and had reached 100 by 1991. ¹²⁹ By the end of the century, 154 permanent and 100 temporary community licences had been issued.¹³⁰

Meanwhile the commercial sector had been enjoying the benefits of FM broadcasting, the higher quality of which was suitable for the broadcast of music. Between 1974 and 1980, ownership of FM receivers rose from 17% to 70% of the population. The 1980s and 1990s saw other changes in the industry. Rock stations such as 2MMM and 2Day emerged and quickly grabbed market share, although it was more difficult to hold onto it.¹³¹ Sony Walkmans and video players were eroding particularly the younger radio audience, but the number of stations and receivers per capita continued to grow.

As the number of broadcasters increased, commercial stations tended to tailor their programming to appeal to an increasingly specific part of the audience. This became know as 'narrowcasting'.¹³² The number of radio receivers continued its upward climb. By 1994 there were reportedly 126.4 receivers for every 100 people.¹³³

As the 20th century came to a close, one could look back on the remarkable development of a form of communication that would have seemed almost incomprehensible a century before. Radio brought mass-media into the realm of the auditory, and created an expectation that news, information and music could be conveyed across the world almost instantaneously. Its next chapter is being strongly influenced by what is often referred to as the 'digital age'.

2.3f Radio in the Digital Age

There are a range of recently developed technologies which are relevant to radio. They include digital recording devices, computer based editing and broadcasting platforms, and Digital Audio Broadcasts (DAB). In other words, the recording, editing, broadcast and transmission of radio are all moving (or have moved) from analogue to digital based technologies. Other significant events have been digital storage and the growth of the internet.

The development of the tape recorder in the mid 20th century revolutionised talk radio, allowing program makers to make radio outside the confines of the studio.¹³⁴ However, editing audio tape is laborious and therefore expensive, as it has to be physically cut or copied onto another tape (minus the unwanted sections). Computer based editing of audio has dramatically increased both the accuracy and speed of editing, and allowed for a richer tapestry of sound to be created relatively easily via multi-tracking and other audio effects.

Some digital recording devices are able not only to reduce recording 'noise' due to an absence of moving parts, but to decrease the time required to transfer them onto a computer for editing with direct data transfers. This is faster than copying audio in 'real time' – a significant constraint, particularly in the context of the time-pressure of daily current affairs radio.

Digital transmission of radio is currently at a relatively early stage of development. It reportedly offers greater sound quality and Program Associated Data (PAD).¹³⁵ This

data brings the potential for text and images to be broadcast as well as audio. It might include a biography of the musician whose song is being played and where they are next due to perform, or background information on the topic being discussed. It may also include images or even short video sequences. Such developments reflect the tendency of modern media to diversify the manner in which they report the news. For example, the web sites of newspapers now regularly include video and audio clips.

As with so many professions, computers are having an impact on the radio industry. Apart from improving the productivity of program makers, they have allowed stations to automate.¹³⁶ Software schedules songs, and pre-recorded voice-links mean that a station can broadcast without a 'live' presenter. These developments have reduced the real cost of operating such stations.

Perhaps most significant has been the phenomenal growth of the internet. Leaving aside its ability to assist individuals to communicate and search for information, it is providing a new avenue of audio distribution. Audio can be streamed or posted as files available for download. With a minimal amount of equipment – a personal computer, broadcast software and an internet connection of a reasonable speed – an online radio station can be established. Audio can be both streamed and posted for download. The nature of the internet is such that it is capable of reaching a global audience. There has been an explosion in the number of radio stations – assuming one expands the definition of a radio station to include such suppliers of audio.

The ongoing development of the technology of radio production and distribution has seemingly accelerated in the digital age. The result is a steady decrease in the real cost of producing radio. It is changing the landscape of the mass media as more audio is produced and the audience is able to access an ever-increasing number of sources.

2.3g Durable Radio

Having perused a brief history of radio it is worth contemplating why it has not gone the way of steam, but has remained a resilient and ever-growing form of media. It was the advent of television that led people to think that radio would soon become obsolete, as

television is arguably a more powerful form of media – including as it does, the visual component which enriches its ability to communicate.

Certainly humans are visual creatures, so the popularity of television is understandable. However, it is precisely the purely aural characteristic of radio that is its strength. The fact that the audience is only required to listen allows other tasks to be simultaneously performed. One can listen to the radio whilst driving, doing the washing up, working in the garden or on a building site, or when lying down with your eyes closed. This characteristic suggests that there may always be an audience for radio.

It is also worth noting that although visual images can convey information that cannot adequately be described in words, much of the images (vision) broadcast on television do not add significantly to the informative value of the content. This is perhaps most obvious in a television news story where images are shown of the interviewee walking into their office, sitting at their desk, reading documents and working at their computer. At this time it is the commentary of the reporter that is providing the actual information. While an interviewee's appearance may be of some interest, often it is what they say that is relevant. The words spoken contain the core information, and radio is just as capable as television of communicating these words.

Another critical element is cost. Radio is significantly less expensive to produce and distribute that television. The *Australian Broadcasting Corporation Annual Report 2001-02* defines the cost of producing an hour of ABC radio at \$1,125, compared to \$29,507 for an hour of ABC television.¹³⁷ The consequence of this differential is that a radio station is still viable when servicing a much smaller audience than required by a television broadcaster. Therefore, it is able to provide a community with programming that is of local relevance and includes the voices of local people. This has been demonstrated by the growth of radio stations in small towns as real costs continue to decrease.

In addition, radio is quicker and cheaper to produce, requiring less time and equipment to record, edit and broadcast. This also adds to the immediacy of radio, which is

55

particularly relevant in the production of news and current affairs. Combined with a comprehensive telephone system, news can be reported as it unfolds in a manner which is far simpler and easier than if images have to be captured.

Finally, radio receivers are not only cheaper and more portable that televisions, they require less electricity to operate. At times of emergency when power supplies fail – such as the when cyclone Larry hit the coast of north Queensland in March of 2006 – battery powered radios provide a potentially life-saving source of information.

For these reasons, the author argues, the term 'steam radio' will never actually be applicable – radio will endure. Certainly the 'golden age' of radio where single programs were listened to by large sections of the Australian population has gone forever. The diversity of media sources has created too much fragmentation of the audience for such a situation to be repeated. However, radio will remain an important form of media, capable of informing and entertaining, and providing a point of focus and distribution for communities.

Throughout the history of radio in Australia the ABC has played a unique role. Its distinct features make its output a valuable resource that is worth preserving.

Chapter Three – Focus of the Study:

This chapter examines the institution that is the Australian Broadcasting Corporation – its history and features. The chapter establishes the value of the institution with specific reference to ABC Local Radio. Demonstrating that the material produced by ABC Local Radio is of a consistently high quality and has a high degree of relevance to the Australian community is necessary to justify the effort required to preserve this material.

3.1 The Australian Broadcasting Corporation (ABC)

3.1a Relevance and Value

As previously noted in section 2.1, archives are able to provide evidence of what has occurred in the past. They have the potential to communicate the richness of human experience, and support the process of accountability in our society.

It is not practical to preserve everything from history that conveys information about what has previously occurred. Therefore, decisions must be made regarding whether or not something is worth archiving based on an evaluation of its properties. The ability of any piece of archival material to achieve its potential as evidence of past events depends on its individual attributes. A record that is inaccurate, heavily biased, or excludes significant sections of the community may be considered of less value than a record that is accurate and balanced. The qualities of the material preserved relate directly to their archival value.

Wallot suggests that all types of media need to be documented in order for researchers to have access to a 'total archives'.¹³⁸ Section 2.3 presented evidence supporting the argument that the medium of radio has become an important form of media, and that it represents and reflects our community. It is, the author argues, a form of oral history and therefore worthy of consideration as archival material – an important resource both for future Program Makers and historians.

In order to evaluate whether or not ABC Local Radio is worth archiving, it is important to assess the history of the ABC, its relevance to the Australian community, and the mechanisms the ABC utilises to maximise accuracy, minimise bias, and ensure that it represents the diversity of the society it seeks to inform and reflect.

3.1b Establishment

Since its establishment, the ABC has consistently played an important role in the broadcast media of Australia. Over the years the 'C' of ABC has stood for Company, Commission, and now Corporation.

The initial decades of the 20th century saw a period of radio experimentation as people started to come to grips with the new medium. As noted previously, in the mid-1920s the Australian federal government initiated a listener's licence fee and a system of A Class and B Class stations. A Class stations were funded by listener licence fees via the government and B Class were commercial stations whose revenue came from advertising.

By 1927 the government had decided to offer all the A Class licences to one company. The three year contract that expired on the 30th of June 1932 was awarded to the Australian Broadcasting Company. The company received half of the 24 shillings paid each year for a listener licence.

The ABC was a private company, making the operation effectively a mix of public and private enterprise. The company's Chairman reportedly stated that it would endeavour to emulate the very high standard set by the BBC.¹³⁹ The government's wish was that the ABC would broadcast programs that would 'elevate the mind' and that were in 'good taste'.¹⁴⁰

The British Broadcasting Corporation had been formed in 1927, preceded by the British Broadcasting Company.¹⁴¹ Since Australia was a former British colony, many Australians looked to the 'mother-country' as a point of reference, and broadcasting was to be no exception. This dynamic has been a constant through the history of the ABC

and has significantly shaped its character.

Those who tend to associate the ABC with a degree of snobbery can look back to the original company which took a condescending view of B Class stations not only for their lower-powered transmitters but also for practices such as using more recorded music than live musicians. Unlike the BBC which long enjoyed a broadcasting monopoly, the ABC always had to compete with commercial stations. History shows that the private sector has always dominated audience share.¹⁴²

3.1c From Company to Commission

By 1932 the ABC was broadcasting in all capital cities as well as Newcastle, Rockhampton, Albury and Port Pirie.¹⁴³ However, shareholders were not happy with the return on their investment and the company decided not to seek a renewal of the contract. This suited the recently elected Labor government who wanted complete public control. The Australian Broadcasting Commission Act was passed on the 17th of May 1932.¹⁴⁴ In the next century, ABC Chairman Donald McDonald would describe it as an act of 'deprivatisation'.¹⁴⁵ On the 1st of July 1932, the Australian Broadcasting Commission commenced with the words: "This is the Australian Broadcasting Commission".¹⁴⁶

Through the 1930s revenue increased and staff numbers grew, doubling to around 500 between 1935 and 1939. During this period the number of schools taking educational broadcasts also increased by a factor of two. All announcers were male and there was no trace of an Australian accent. Sounding like you were a product of the local community was not associated with the delivery of accurate information or a persuasive opinion. One in three announcers were English, as compared to one in nine of the general population.¹⁴⁷ For ABC management, who saw radio as a means of promoting union with the British Empire, this situation was entirely appropriate.

Budget cuts have been a recurring experience for ABC management. The Second World War led the government to reduce the licence fee which saw the ABC's revenue decline. As was to characterise the organisation's subsequent response to fiscal tightening, the employment of artists was reduced and more programs were networked.

The war had dramatically increased the production of news. This growth continued following the end of hostilities, as did the increase of staff in ABC stations, the broadcasting of sport, and what was to become an enduringly popular feature of radio – Breakfast programs.¹⁴⁸

The staff of 900 in 1946 had almost doubled by 1955. By that time the ABC employed more journalists than any newspaper. A bill of 1948 meant funding no longer came simply from licence fees but also from the government's general revenue.¹⁴⁹ This feature continues to distinguish it from the BBC. Listeners to the news on New Year's Day 1952 heard bulletins introduced by the now iconic piece of music 'Majestic Fanfare'.¹⁵⁰

The middle of the 20th century saw the beginnings of a change in the style of the ABC. Presenters were encouraged to sound more natural and to bring some warmth to a presentation that had previously been extremely formal. In the evenings, announcers had even been required to wear dinner suits while they broadcast despite the obvious fact that none of the audience could see them. Until 1949 all the bird sounds in the sound library were birds from the UK.¹⁵¹ While commercial radio and popular Australian culture was being increasingly influenced by the USA after the end of the Second World War, the ABC continued to pay homage to London.

The late 1950s saw another period of expansion. Spending doubled and staff increased from 2000 to around 3000. The coming of television in the decade relegated radio to forever being the poorer of the Commission's two mediums. By 1964 staff numbers had reached 5000. The ABC's longest service General Manager, Charles Moses, was replaced by Talbot Duckmanton – both eventually knighted. The following year the operations of television and radio were partially separated.¹⁵²

News and current affairs was becoming the ABC's greatest strength. In April 1967 the television current affairs program *This Day Tonight (TDT)* made its debut, and the following year it went from three to five nights a week. Its presenter, Bill Peach, became

something of a celebrity. Caroline Jones was the program's first female reporter. The success of *TDT* led the commercial Nine Network to start their equivalent – *A Current Affair.* It was hosted by Mike Willesee who himself had worked for *TDT* and the ABC's *Four Corners* program.¹⁵³

On radio the flagship of current affairs was *AM*. Initially it did not rate particularly well, and had it been on a commercial station it may well not have continued to be broadcast. Free from the pressure of having to maximise continually the size of the audience for the benefit of advertisers, Duckmanton was able to simply tell the ABC commissioners that he did not believe *AM* had reached its full potential and it was able to continue. Ratings did improve.

Despite the ongoing homage to the BBC, an independent Australian identity was gradually building. After the 30th of October 1971, the rebroadcast of BBC bulletins was stopped with the accompanying rationale that it was wrong in principle for the ABC to broadcast a news bulletin over which it had no control.

That did not mean however that the ABC stopped following the BBC's lead in regard to other matters. In 1969 the BBC created four distinct radio networks. In 1972 the ABC's First, Second and Third networks were renamed Radio One, Two and Three, and each charged with establishing a distinct identity.¹⁵⁴ One and Two were the 'light' and 'serious' metropolitan stations, while Radio Three was regional and included programs from the other two networks. In 1973 the Whitlam Labor government abolished the listener's licence fee. None of the proceeds of the licenses had actually been going directly to the ABC since 1948.¹⁵⁵

A new youth-focused station – 2JJ – opened in Sydney on the 19th of January 1975. In 1990 it was to become another of the ABC's national networks, and renamed Triple J. Boosted by the Whitlam government, overall staff numbers peaked at around 7300 in 1975, but the cuts in real funding by the subsequent Fraser coalition government dropped this figure to 6400.¹⁵⁶ By 1993 staff numbers were around 5500, and in 2003 less than 4400.¹⁵⁷ Many ABC employees were attracted by the higher salaries offered

by commercial broadcasters – particularly television – although a remarkably high proportion eventually returned to the ABC.

By 1980 the newest radio network – ABC FM – which featured primarily European classical music, had been extended to all capital cities as well as Newcastle, Wollongong, Ballarat and Launceston.¹⁵⁸ From 1986 a domestic satellite (Aussat) simplified the process of networking programs. This also affected local commercial stations as the ease of networking metropolitan programs such as John Laws offered them a cheaper alternative to employing local staff.¹⁵⁹

3.1d From Commission to Corporation

The decade of the 1980s saw the end of the Australian Broadcasting Commission. Following a report by a committee headed by Alex Dix, the Australian Broadcasting Corporation came into being on the 1st of July 1983.¹⁶⁰ The Commission had lasted 51 years. Among the changes to come were the thorough separation of radio and television, and the creation of a second regional network that carried Radio Two programs. In 1985 Radio Two became Radio National.¹⁶¹

Soon after his appointment as Managing Director on the 29th of October 1986, David Hill announced that all ABC radio and television programs would broadcast 24 hours a day. Hill's time at the helm included the 'eight cents a day' campaign where he used ABC radio and television to broadcast a campaign against government funding cuts, claiming that the Corporation was only costing each Australian eights cents per day and therefore did not deserve to have its revenue reduced.¹⁶²

The compulsory broadcasting of the federal Parliament had long been a headache for the ABC since it had started in 1946. From its inception until 1963 it had been carried in the cities on the 'serious' network, until Clement Semmler moved it to the 'light' network during a confusing period of rescheduling known as 'NEWRAD'.¹⁶³ Regional listeners of the third network or Radio Three, were always stuck with listening to Parliament when it was sitting. It was not popular and the irregular nature of Parliament played havoc with program scheduling. Repeated attempts over the decades to have the government

either fund a separate network or remove the mandatory nature of the broadcasts had all be unsuccessful.

In 1987 Hill moved Parliament to Radio National. Within the first hour the Sydney switchboard took over 1000 complaints and the network lost at least 100,000 of its audience. Hills response was to suggest that backup transmitters be used to broadcast Parliament, which was accepted.¹⁶⁴ This was the beginnings of the Parliamentary News Network that would continue to broadcast when Parliament was not in session. It was later renamed NewsRadio.

Although radio networks continued to expand and 1993 saw the launch of Australia Television International, the period from the mid-1980s to the mid-1990s was one of financial constriction for the ABC. Russell Balding (General Manager of Finance) calculated that funding for the decade up to 1996 has fallen by 25% in real terms.¹⁶⁵ This was then followed by deeper cuts by the Howard coalition government which led staff numbers to fall from 5343 (full-time equivalent) in 1995-96 to 4177 in 1997-98.¹⁶⁶

Following David Hill's resignation on the 3rd of November 1994, Brian Johns was appointed Managing Director on the 8th of February 1995. An advocate of multi-media technology, Johns unveiled ABC Online six months later.¹⁶⁷ It has since become an increasingly important platform for ABC content.

In November 2002 a new ABC radio station - *dig* - was launched. Music based, it was only streamed over the internet.¹⁶⁸ It was joined by *digJAZZ* in October 2004 and *digCOUNTRY* in April 2005.¹⁶⁹ When Triple J's *Hack* program started offering podcasts of its program in December of 2004, the ABC became the first radio service in Australia to do so.¹⁷⁰ By the end of June of 2006, 1.5 million podcasts of ABC Radio programs were downloaded from ABC Online, and 400 000 plays of live radio streams had occurred. Video or 'vodcasts' and extended online editions of programs have also been added to the site. The *Australian Broadcasting Corporation Annual Report 2005-06* boasts that ABC Online had 2.2 million unique Australian users in May 2006, and a monthly reach of 19% of Australia's active internet population.¹⁷¹

The history of the ABC reveals an expanding broadcasting service that has continued to improve its efficiency as technology and the skills of staff have improved. It is one amongst many media outlets in Australia, and yet it is unique in that it is the only one that is completely funded by the government and is prohibited from carrying private advertising. This not only puts the ABC under an increased degree of scrutiny, but also obliges it to maintain its independence and maximise its objectivity. This task has not always been a simple one.

3.2 The Independence of the Public Broadcaster

Every media outlet provides a record that can be interpreted as a version of history as it unfolds. The value of this version of history is affected by the accuracy and the impartiality of the media institution that produces it. When considering the question of archiving, establishing the value of the material itself is a relevant undertaking.

The battle to maintain its independence has been a constant one in the history of the ABC – independence from government and independence from the pressures of the commercial sector. The Editorial Policies of the ABC – that all staff are required to adhere to – endeavour to maintain this independence and to minimise the opportunity for bias, whilst also giving expression to Australia's cultural and regional diversity. These features of its operations, the author argues, add to the value of the ABC's output and make it worthy of preservation.

3.2a Independence from Government

Although funded by the government, the ABC is a Statutory Authority which gives it independence. The members of the board are appointed by the government of the day, the Managing Director is appointed by the board, and the operations of the ABC are not directly determined by members of the government.

Statutory Authorities are popular in Australia – more so than in the UK from where much of our constitutional law is derived.¹⁷² The social philosopher John Passmore is reported

to have observed that our fondness for this constitutional form has emerged from our suspicion of government.¹⁷³

When the Australian Broadcasting Commission came into existence in 1932, the Act stipulated that the relevant federal minister had the power to order the transmission of matters determined to be in the public interest, but was required to give the ABC notice in writing.¹⁷⁴ However, in its early years the government had little to fear from the ABC. In the 1930s the commission's Chief Executive, Major Condor, sacked speakers for referring to politicians as a 'class', and reportedly said that it was "scarcely the commission's place to criticise the actions of the constituted government." During this period issues such as the living conditions of Aborigines were not broadcast for fear they would attract controversy and on the grounds they were a matter of government policy.¹⁷⁵ Sensitivities even extended to governments of other countries. In 1937 a talk entitled 'Machiavelli and the Modern Dictators' was banned as it was critical of Hitler and Mussolini.¹⁷⁶

In the realm of domestic politics the ABC was careful to ensure that government and the official opposition were treated equally – a requirement that remains in the current Editorial Policies.¹⁷⁷ New legislation in 1942 meant that any ministerial directives to broadcast certain items had to be mentioned in the Annual Report, and gave the ABC more autonomy in regard to the extent and manner of political material broadcast.¹⁷⁸ However, the Commission did later submit to government pressure by altering the rules regarding minor party broadcasts which effectively took the Communist Party candidates off the air.

From 1946 any controversial opinions aired did not have to be immediately followed by an opposing opinion on the relevant topic, as long as alternative views were also broadcast over a reasonable period of time. By the 1950s speakers critical of government policy could be regularly heard. The number of actual politicians being interviewed was limited due to a policy that required the prior approval of the ABC's General Manager.¹⁷⁹

It has been a familiar refrain from politicians from all sides to claim that the ABC is 'out of control'.¹⁸⁰ Despite the legislated independence of the ABC, politicians have regularly attempted to informally 'browbeat' the organisation into following their wishes. Success in these endeavours has been mixed due to strong resistance from ABC management, staff and commissioners. The Menzies coalition government refused funding for ABC television to travel to Canada to make a program. This action was effectively treating the Commission like a department rather than as an independent body. Had he not died first, Chairman Richard Boyer may have resigned in protest.¹⁸¹

The late 1960s saw the establishment of an approach to government policy and current affairs that is more familiar to us today. The new General Manager, Talbot Duckmanton, allowed politicians to be interviewed without his prior approval – a practice that was made official in 1970. Programs like *This Day Tonight* took full advantage of this development, confronting not only political leaders but dishonest car-salesmen and the makers of faulty products. A more adversarial style of interviewing was adopted and this proved popular with the audience.¹⁸²

Such a willingness by program makers to be critical did lead to confrontation with the government, and accordingly to difficulties for ABC management. The commissioners expressed concern about staff 'editorialising' – expressing opinions rather than presenting objective facts. Following a *TDT* report that alleged (against ABC management instructions) that the Post Master General was over-charging for services, the program's Executive Producer, Tony Ferguson, was put on seven weeks of recreation leave. This led to staff petitions expressing concern that management was failing to resist political pressure.¹⁸³

A more blatant attempt to reduce the ability of the ABC to scrutinise the workings of government came in 1970 under the Fraser coalition government when Post Master General, Alan Hulme, recommended a cut to the ABC budget of \$500,000 (from a total of \$50 million) and that \$250,000 be specifically cut from television current affairs.¹⁸⁴ This was leaked to the press and such was the outcry that Hulme had to capitulate.

The ABC commissioners stated subsequently that such a directive would have been completely unacceptable as it would have infringed on the independence of the ABC to spend its money as it saw fit. This episode allowed Duckmanton to assert to a BBC audience that direct government funding (unlike the BBC whose funds come from the licence fee) did not necessarily mean direct government control.¹⁸⁵

Although it did not hold direct control over program content, apart from being able to appoint commissioners the government could also determine the level of the ABC's funding. Cuts, at least in real terms, have been a regular occurrence since the 1970s. The desire for additional revenue has produced a pressure that regularly reasserts itself – the pressure to accept funds from the private sector.

3.2b Independence from the Commercial Sector

The ABC has always been prohibited from broadcasting advertisements. Section 31(1) of the Australian Broadcasting Corporation Act 1983 states simply: "The Corporation shall not broadcast advertisements."¹⁸⁶

When the original Australian Broadcasting Commission Act was being devised in the early 1930s, some politicians wanted it to be permitted to accept private sponsorship of programs in order to reduce the demand on government funds. Ironically – in light of the later tendency for calls to remove this provision to come for the other side of the political spectrum – it was the Labor party who was calling for this provision. However, the newspapers of the day mounted a strong campaign against private sponsorship, concerned that it would divert money from their own advertising revenue.¹⁸⁷ This hostility by Australia's commercial media to the ABC accepting funds from private sources has remained an important factor in maintaining the status quo.

The rationale for having a ban on advertising is simply that if the ABC is dependent on advertisers for funds, then those advertisers will potentially be able to affect program content. In terms of news and current affairs, criticism of a company or organisation that is a significant source of funds may be discouraged by management for fear of losing that revenue. Further, a blurring of the lines between news and advertising can occur,

where what is effectively an advertisement for a certain product is presented as a news story. This practice is not uncommon in Australia's commercial media and is regularly exposed by the ABC's television program *Media Watch*.

When it comes to other programming such as entertainment, an advertiser may wish for a certain type of program to appeal to a certain demographic or simply to maximise the size of the audience, and therefore affect what is broadcast. Scheduling becomes very much a question of ratings. As noted above, when the radio current affairs show *AM* started, it did not rate well. As the ABC was not under pressure from advertisers to constantly maximise audience share, it was able to simply persevere on the basis that it was a program with a public good that had not yet achieved its potential. A survey by the McKinsey organisation concluded in 1999 that the higher the advertising figure as a proportion of total revenues, the less distinctive and the more 'populist' a public broadcaster is likely to be.¹⁸⁸

While there have always been calls for the ABC to accept advertising, they have arguably increased in recent decades due to financial restraints and an increasing tendency for governments to privatise public assets. The *Dix Report* that preceded the move from commission to corporation recommended corporate underwriting. However, the Communications Minister in the Fraser coalition government, Neil Brown, rejected this, considering it a threat to the ABC's editorial independence and programming integrity.¹⁸⁹

The then recently elected Hawke Labor government was also pushing for sponsorship during negotiations for the 1984-5 budget, but the ABC board and management rejected this proposal. They stated that it was incompatible with the charter of a public broadcaster, would be the first step towards full advertising, would draw revenue away from commercial operators, and would not actually raise a great deal of money.¹⁹⁰

The ABC has managed to resist repeated calls to abandon its complete reliance on government funds that have emerged from subsequent developments such as the introduction of subscription (pay) television. Howard coalition government appointed board member Michael Kroger pushed for the sale of 49% of ABC Online, but this was rejected at a board meeting on the 3rd of February 1999.

It must be noted that the ABC does not by any means have a perfect record when it comes to immunity from influence by the commercial sector. In the early 1960s the *Four Corners* program's budget constraints meant they would only travel overseas when an airline would give them four free seats. In exchange, the program aired otherwise irrelevant images of the company's aircraft taking off and landing.¹⁹¹ Mild perhaps, but nonetheless in contravention of the principle that no commercial entity will influence what goes to air.

More serious was what came to be known as 'backdoor sponsorship'. So called 'infotainment' programs such as *Great Ideas*, *The Home Show* and *Holiday* were coproduced – and co-financed – with non-ABC entities. It was alleged that through this mechanism corporate entities such as Alcan and Telecom had put in money with the implied expectation that they would receive favourable treatment. Reporter Eric Campbell stated that when he worked on *Holiday*, reporters had been told that their continuing employment depended on sponsors being happy with the final product.¹⁹²

Exposed by a commercial media outlet, the subsequent investigation by George Palmer QC led him to conclude that the presence of a commercial investor in such a program gives rise to an irreconcilable conflict between preserving the absolute independence and integrity of the ABC from even the suggestion of commercial influence on the one hand, and the valid expectation of a commercial investor for a satisfactory return on their investment. ABC managers soon let it be known that the age of co-produced 'infotainment' was over.¹⁹³

The ABC Editorial Policies make it clear that there must be no conflict of interest between the private interests of staff and their official duties. Any outside work must be approved by management, and program makers should not work on stories related to the outside activity.¹⁹⁴ For example, when the author was employed as a Program Maker with ABC Radio in Cairns he requested (and was granted) approval to work as a

consultant preparing media-releases for the author's former employer, Balkanu Cape York Development Corporation. These media-releases were sent to ABC Radio Far North, but the author was not permitted to be involved with the appraisal of the newsworthiness of the story or to prepare the items for air. To do so would have breached the editorial policies.

When the Program Manager of ABC Wide Bay in Bundaburg, Ross Peddlesden, put to air an interview with the head distiller at the Bundaburg Rum Distillery, Kevin Gott, on the 5th of January 2007, he appeared to be breaching the editorial policies. Peddlesden reportedly had been paid by Bundaberg Rum to record oral history interviews for the company as part of work outside of his employment with ABC Local Radio. When this situation was exposed by *Media Watch*, the Head of Local Radio, Michael Mason, stated that such allegations were taken extremely seriously, and that they would be rigorously investigated.¹⁹⁵

In 1999 it was revealed that the presenter of Radio National's *Breakfast* program, Peter Thompson, had presented an item regarding mining in Kakadu, but had also provided private media training to the managing director of the company that owned the mine. He had failed to disclose the fact that he had conducted this training to the ABC. The ABC's investigation found this to be a breach of editorial policies, although it did not find that he has spoken favourably about his client's activities.

It is worth considering, by way of comparison, that Peter Thompson's activities were made public soon after the exposition of the 'cash for comment' affair. It was revealed that Australia's most popular commercial broadcaster, John Laws, had stopped publicly attacking banks after securing a \$1.2 million deal with the Australian Bankers' Association. In other words, he was changing his editorial position in exchange for a financial reward. There was also evidence that another high-profile commercial radio presenter, Alan Jones, was being paid for his opinions by Optus.¹⁹⁶ The 'cash for comment' situation was exposed by the ABC's *Media Watch* program – an act Ken Inglis described as a service "only a public broadcaster could offer."¹⁹⁷

Stemming from the legislative prohibition against accepting commercial advertising and the editorial policies restricting the activities of ABC Program Makers, there exists a culture of resisting the influence of commercial entities into ABC content. As a Local Radio Program Maker who has worked for several years and in several locations, the author's experience has been that staff hold a general suspicion of any information that is generated by a commercial body. Media releases from private companies (and government bodies) arrive every day. Generally they endeavour to project information about their activities that is favourable. Understandably, they wish to generate positive publicity for themselves, aware that what is communicated in an ABC news bulletin or current affairs program will be considered more believable than that which is delivered in an advertisement.

The question immediately asked by the author and his colleagues when considering such media releases is 'does this have genuine news-worthy value to the public, or is it predominately delivering a message that the organisation would otherwise present in a paid advertisement?' One must consider if the presentation of the content could be perceived as advertising or promotion of a product, service or facility.

Media Watch (which appears to relish any opportunity to find fault with its own organisation) drew attention to an item on ABC Television's *Inside Business* program broadcast on the 11th of February 2007 that profiled a florist. *Media Watch* criticised the item for failing to avoid shots of the florist's signage and for not providing an objective critique of the company. They gave an estimate that broadcasting such a message via commercial television would have cost \$34,580. As noted by one of the florist's competitors, such coverage is more valuable than paid advertising.¹⁹⁸ The ABC's editorial policies state: "Publicity for individuals, organisations or products should not be given, and the presentation of identifiable or clearly labelled brand products or services should be avoided."

This practice of minimising any perception of the ABC endorsing a particular commercial entity extends to the choice or words. For example, rather than say "a Mars bar and a can of Coke", an ABC presenter would be expected to say 'a chocolate bar and can of

71

soft-drink'. Product placement is not acceptable in ABC content.¹⁹⁹

The acceptance of any gifts must be referred upwards and recorded in the Gift Register which contains the details of all gifts offered, whether accepted or rejected.²⁰⁰ The author hastens to add that, in his experience working for ABC Local Radio, this requirement is not assiduously adhered to and minor gifts such as food and tickets to performances are not always entered in the Gift Register – particularly if the gifts come from individual listeners and not private companies. Nonetheless, there is a culture of vigilance against endorsing commercial entities or broadcasting anything that could be perceived by the audience as such.

Another area of difference between the ABC and Australia's commercial media is in the arena of ownership and the impact this may have on programming. In Australia the concentration of media ownership has for many years been most easily identified by the proprietors Rupert Murdoch, Kerry Stokes, and the late Kerry Packer. A potential limitation of a privately owned media outlet is that it may be unwilling to broadcast material that is critical of those who possess it.

In 1984 a television series conducted by Geoffrey Robertson entitled *Hypotheticals* was recorded for the Nine Network. In one program an imaginary media proprietor named Kerry Murfax was described as being suspected of involvement in the heroin trade, although later revealed to be innocent. This program never went to air as advertised.²⁰¹ This event arguably illustrates that even implied criticism of their owners is something that commercial media – unlike a public broadcaster – assiduously avoid. This places certain people and activities beyond the reach of journalistic scrutiny.

Given the history of repeated attempts to have the ABC accept funds from private sources, it is perhaps remarkable that, to date, it has not occurred. Certainly at times of budget cuts, resisting the temptation of commercial sources of revenue has led to the difficult task of reducing staff and the quantity of Australian-made programs.

It is worth noting that despite SBS television carrying advertising since 1992, former

executives have stated they cannot recall a case of a program being censored or abandoned due to pressure from advertisers, although the Public Broadcasting Service in the USA could not make the same claim.²⁰² That said, Lawe Davies has argued that there is a contradiction between SBS's charter obligations and its operation as a commercial broadcaster. He has reportedly suggested that the introduction of advertising into SBS television has led the broadcaster to move away from its traditional constituents of the 'ethnic' community.²⁰³ A complete absence of advertising allows a public broadcaster – unlike commercial entities – to be able to address their audience as citizens rather than as consumers.²⁰⁴

ABC Enterprises

A discussion of the commercial world as it relates to the ABC requires some reference to ABC Enterprises which markets ABC produced products. Its activities include working with commercial entities that are licensed to produce ABC related material. The products include books, music and video disks, magazines and other merchandise. The first ABC shop was opened in 1981.²⁰⁵ The 2005-06 ABC Annual Report indicates the existence of 41 ABC shops and 90 ABC Centres throughout Australia. ABC Enterprises generated \$11.6 million of net profit for the 05-06 financial year, which contributed approximately 1.2% of total ABC revenue for ordinary activities.²⁰⁶

Certainly the ABC audience are well aware of the impact of ABC Enterprises due to the fact that so much material is advertised on the various platforms. Radio and television programs regularly broadcast these advertisements. The only thing that distinguishes them from advertisements on commercial broadcasters is that that are only for ABC related products. However, this is a key distinction. One can argue that the desire for ABC Enterprises to maximise their profit has the potential to impact on what programs are made. A program that has the potential to be sold overseas may be chosen over one that is more specific to Australian culture. However, the activities of ABC Enterprises have, the author argues, a negligible ability to affect what is recognised as the ABC's greatest strength – news and current affairs.

3.2c Bias

From a position of initially reading all news directly from the newspapers in the first half of the 20th century, the ABC has grown its news and current affairs operations into what is now arguably one of the most comprehensive and respected of any media organisation in Australia. It is in this area that the question of bias is critical.

The first paragraph of the ABC's editorial policies notes that the ABC Board has emphasised the requirement for the Corporation to demonstrate its impartiality in news and information content.²⁰⁷ This is no coincidence. It is arguably the ABC's most important responsibility and its greatest challenge.

Of course in the post-modern age it is widely recognised that absolute objectivity is beyond the capacity of a human being. Every account of an event will necessarily rest on a raft of assumptions, and ultimately preference one interpretation over the multitude of other possibilities. The best one can strive for is to minimise bias.

In practical terms this means that the ABC gives both sides of politics – the government and the opposition – an equal opportunity to argue their point. During an election campaign, records are kept of the exact amount of time each candidate is given on air. This is the case for federal, state and territory, and local elections.

As noted above, ABC program makers are prohibited from expressing personal opinions or 'editorialising'. Participants in ABC programs are able to express personal opinions, but at the platform level the ABC must be able to demonstrate that it has provided the audience with a range of perspectives on each subject considered. This diversity needs to offer the various sides of the argument relatively equivalent weight over an appropriate time-frame.²⁰⁸

Clearly this is a difficult task, and allegations of bias have been levelled at the ABC ever since its news and current affairs capacity emerged. Most often it is the government of the day that expresses their opinion that they have been unfairly treated. It is perhaps comforting for the ABC to consider that this appears to occur regardless of which party

is in power. The author considers the primary role of the media to be one of scrutinising the government and holding it accountable. In this context, hostility from the government could indicate a degree of effectiveness in this role.

In May of 2003 the then federal Minister for Communications in the Howard coalition government, Richard Alston, lodged a complaint with the ABC alleging 68 examples of anti-American language in the coverage of the war in Iraq. They were all part of the morning radio current affairs program *AM*. The complaints review executive of the ABC, Murray Green, worked through the 68 items and concluded that two had some justification, but did not see them as signs of systematic bias.

Subsequently the Independent Complaints Review Panel considered the items and found seventeen merited some criticism – one for not identifying sources, four for using 'emotional language or editorialisation' (a breach of the editorial policies), and twelve for reporters or presenters displaying serious bias. However, the panel found no evidence of the alleged systematic bias and concluded their findings with a tribute to the makers of AM.²⁰⁹

History suggests that allegations of bias will inevitably come from governments. As discussed, the ABC has in place mechanisms designed to minimise the opportunity for serious and systematic bias to be projected, and overall, the author argues, these mechanisms are successful. The trust that the Australian public has in the ABC rests largely on the understanding that the Corporation strenuously maintains its independence and asserts complete control over its content.

3.2d Editorial Autonomy

The ABC Act is designed to guarantee the Corporation's independence, and gives the ABC the power to make decisions on its contents and services on behalf of the Australian people.

Occasionally people being interviewed in relation to news and current affairs topics request a list of what questions will be asked, or for a reassurance that a specific topic will not be addressed in an interview. This is particularly likely when there are controversial elements to the subject area or individual involved. The Editorial Policies state that interviewees should not be given questions in advance, and that program makers may not place caveats on particular subject areas. This means an interviewee cannot enter an interview secure in the knowledge that difficult or potentially embarrassing questions will not be asked.

Further, people without editorial responsibility are not permitted to view or hear content before it is broadcast or published. Therefore an interviewee cannot record an interview and then subsequently direct the broadcaster to remove certain sections. These editorial decisions must remain entirely in the hands of ABC editorial staff.²¹⁰ It is important that the audience can remain secure in the knowledge that what is being broadcast has not been vetted by the subject under scrutiny. If reporters are restricted in their ability to freely cover an issue or are subject to any censorship, the Editorial Policies require that this be declared.²¹¹

Certainly no journalist is able to operate without making some mistakes. Time pressures, misunderstandings and inaccurate information all contribute to false information being broadcast. The ABC editorial policies require that any significant error should be admitted and corrected as soon as reasonably possible.²¹²

This range of editorial policies do, in the author's experience with ABC Local Radio, translate directly into the operational culture of the organisation, and have the impact of making the output of the ABC relatively objective, accurate, and free from the direct influence of government and the commercial sector. These features set a standard that influences commercial news and current affairs production, and add to the value of the material broadcast as a reliable reflection of the history and culture of Australia.

3.3 The Relevance of the ABC

Whilst the ABC must strive to determine programming not purely on the basis of ratings, it is clearly important that ABC output is reasonably popular. Producing and

broadcasting a well balanced, independent, and accurate program is of little use if there is no audience. Determining the exact role of the public broadcaster in the landscape of Australian mass-media has always been a dilemma for its board and management.

3.3a Battle of the Brows

Put simply, there tends to be an inverse relationship between programming that is popular and that which might be given the contentious label of 'quality'. This translates into 'high-brow' and 'low-brow' programs. Where exactly the ABC should aim on this scale is very much a matter of opinion.

Evidence of this battle emerged in the 1930s soon after the ABC was formed. Chairman Clearly, as a higher-brow, saw the ABC's role as one of providing programs that enlighten the pubic and elevate taste rather than indulge it. General Manager Condor felt that those who were paying their listener's licence fee should be given the programs they wanted to hear.²¹³

Generally speaking the ABC has tended to come down more on the side of the highbrow. The majority of Australians have always preferred commercial media, which needs to be popular in order to survive financially. There has long been an argument that the ABC has a responsibility to provide material that commercial media will not. This is referred to as 'complementary' rather than 'competitive' programming.

For obvious reasons commercial media has always see complementary programming as the preferred role for the public broadcaster. This is part of the dilemma. ABC output must be reasonably popular to justify its expense to the tax-payer, but if it is too popular, commercial media complain that the ABC should be producing more alternative programs.²¹⁴

The tendency towards complimentary programming is illustrated by the fact that the ABC did not attempt to produce material like the sentimental comedy series *Dad and Dave* that proved very popular in the early years of commercial radio, preferring more serious plays and classical music.²¹⁵

In the current century the ABC has not, for example, followed the commercial networks into the genre of 'reality television' programs epitomised by *Big Brother*. Whilst talkback radio does occur – particularly on ABC Local Radio – presenters avoid the often abusive approach taken by many commercial talkback hosts. In news and current affairs, as well as entertainment, the ABC has largely managed to avoid the sensationalised material that appears regularly on commercial networks.

The absence of pressure from advertisers gives the ABC a unique freedom to attempt and persevere with programs that commercial media would be unable to risk or sustain. The author believes that the ABC has a responsibility to utilise this freedom to push the boundaries of broadcast media. The ABC's willingness to do this has allowed it effectively to be a leader in the media industry.

Apart from setting standards of objectivity and producing innovative programming, the ABC has also provided a training ground for many people who have gone on to careers in the commercial sector. Then Chief Executive of the Nine Network, Sam Chisholm, reportedly said: "We don't train 'em, we buy 'em".²¹⁶ Although some lament the loss of talented individuals from the ABC, and perhaps criticise them personally for 'selling out', the author argues that cultivating media professionals is an appropriate role for the public broadcaster. The values and work culture of the ABC are then transferred via these people to the commercial sector, enabling it to influence the industry as a whole.

3.3b Ratings

The market share of the ABC varies across time, regions and networks, but it has remained at approximately fifteen to twenty percent throughout its history. A radio advertising survey in 1937 quantified ABC radio's share as being 20%, although many in the ABC were convinced it was higher.²¹⁷ (Note that statistics generally referred to metropolitan listeners as surveys were rarely conducted in regional areas.)

In 1944 the ABC established its first Listener Research Section. Initial results dismayed the ABC as they revealed the audience was smaller than believed. A 1950 survey

showed 84.2% of all-time listening was to commercial stations. Researchers had to carefully disguise their connection to the ABC, as there was a well recognised tendency for people to inflate the amount of time they said they spent listening to the ABC, believing it would make them appear to be of a higher social class.²¹⁸ This perception is supported by statistics which indicate a higher percentage of those categorised as upper-middle class make up the ABC audience.²¹⁹ The assertion that the ABC is elitist is not without merit.

However, the majority of Australians do have some exposure to the ABC. Surveys taken as part of the *Dix Report* in the early 1980s indicated that 93% of households made use of ABC radio or television once a week.²²⁰ The *Australian Broadcasting Corporation Annual Report 2005-06* claims a weekly reach of 73% of all Australians for radio, television and online combined. ABC Radio's overall five city share was 20.1% (all networks).²²¹ ABC Television's free-to-air household share was 15.6% in metropolitan areas and 17.8% in the regional market.²²²

While television and radio audiences have tended to be on the decline as the market fragments and people make more use of their computers, ABC Online is growing. It reached 2.3 million pages of content and, as detailed previously, has a significant share of Australia's internet traffic with 4.7 million unique users and a reach of 33% recorded in the six months to May 2006.²²³ It is through this platform that more and more content will be delivered. It is well suited to making assets such as radio archives available to a much wider audience.

3.3c Diversity

An important factor when considering the archival value of ABC Local Radio is the degree to which the output reflects the diversity of the Australian community. Zinn has noted that archival collections tend to be biased towards those in society who are powerful and important, and have ignored the impotent and obscure.²²⁴ Accordingly, historians and other people who wish to study the underrepresented social aspects of history often find a dearth of relevant documentation in the archives.²²⁵ Jimerson suggests that archivists must be committed to ensuring that the lives and experiences of

all groups in society – not only the political, social, economic and intellectual elite – are documented.²²⁶

Section 6 of the ABC Act defines the function of the Corporation as broadcasting programs that contribute to a sense of national identity and inform and entertain, and reflect the cultural diversity of the Australian community.²²⁷ As a public broadcaster, it should provide programs for everyone. Given the range of people, cultures, and tastes across the population, in practice this task is effectively impossible. Given a limited amount of time, certain preferences will always become manifest in what is ultimately selected for broadcast.

By way of illustration, the Director of Rural Broadcasts in the mid-20th century, John Douglas, reportedly cared most for vegetables, gave sheep and cattle a fair go, but drew the line at horticulture, saying that flower growers were 'poofters'.²²⁸ Efforts are made to represent minorities but not everyone can be given a voice by one broadcaster, particularly when there must be some continuity of programming style in order to satisfy the core audience. The creation of SBS was, to some degree, a recognition that the ABC was unable to also adequately service the needs of more recently arrived immigrants (post-1950) from non-English speaking backgrounds.

Part of the solution the ABC has adopted is multiple networks. Triple J is designed for a younger audience – a segment of the community that has historically not been attracted to the ABC. Online material and radio streams – as well as more television channels – are allowing the ABC to provide a more comprehensive service.

Despite the fact that the vast majority of the Australian audience is usually not tuned to the ABC, it is fair to say that appreciation for the public broadcaster exists even amongst those who rarely use it. A poll taken in 1952 indicated that two thirds of respondents would rather pay a licence fee than only have commercial radio.²²⁹ In the mid 1980s a survey revealed that the ABC was valued ahead of all other institutions, with 85% saying it had a good influence on Australia, compared to 8% saying it had a bad influence. A study by Glenn Withers with the Australian National University in 1999-2000 found 46%

of respondents wanted funding to the ABC increased, compared to 25% wanting increases for universities and health care, and 10% for roads.²³⁰ In 2005, nine out of ten Australians indicated they believed the ABC provides a valuable service, with five in ten considering it to be 'very valuable'.²³¹ The ABC's 2006/07 Annual Report declared that the Corporation had a combined reach of 72% across television, radio and online.²³²

Leaving aside polls and percentages, many people attest to having been positively influenced by the ABC. Thousands of children were participants in the *Argonauts Club* that ran from 1941 to 1972. Apart from being radio broadcast, listeners became club members and were allocated a ship name and number. Members had the opportunity to submit work that would be considered for broadcast on the program. It directed many towards careers as writers, artists and composers.²³³ Listeners like Corin Fairbairn declared that the ABC had educated her in a way no amount of travelling or schooling could have ever done.²³⁴

The ABC has, in its many forms over the decades, played an important role in Australian society. It provides accurate and independent information, educates, and gives voice to many segments of the community, as well as entertaining people. Its focus is on maximising Australian content. With an increasingly fragmenting media industry, this role may become even more important in the future.

3.4 ABC Local Radio

The focus of this study is a component of the programming for one of the ABC's radio networks – Local Radio. In 2006 it comprised 51 regional and nine metropolitan stations in all capital cities and Newcastle.²³⁵ Its growth has been gradual and characterised by delays in promised expansion – particularly in regional areas. Yet it has consistently been the ABC's most popular radio network and arguably the most Australian in its character.

3.4a Local Radio History

The Local Radio network was officially created in 2000 out of what was previously

known as 'metropolitan' and 'regional' radio.²³⁶ The foundation of the network emerged in the late 1930s when a second ABC metropolitan station was created in the state capital cities. The two stations were characterised by 'serious' and 'light' programming, with the serious station being nationally networked and eventually becoming Radio National, and the light station being unique to each state and ultimately becoming Local Radio. They were initially referred to as the First and Second networks.

Regional radio was the Third network and broadcast a mixture of programs from the two metropolitan networks. The tendency to disappoint regional audiences by failing to provide services as promised started early, with the Post Master General only constructing four of a planned sixteen regional stations in the days of the Australian Broadcasting Company.²³⁷ ABC broadcasts have always been in demand by regional audiences as the service has reduced the feeling of isolation, bringing news to rural people as quickly as to those who dwell in the cities.

By 1939 the number of regional stations had increased to fourteen.²³⁸ There tended to be a policy of putting light and serious programs next to each other, perhaps in the belief that the taste of those who preferred light programs could be surreptitiously elevated. However, following research indicating that this did not encourage people into new listening areas, a strict division between the national and interstate networks was established on the 1st of September 1946.²³⁹

Nine short-wave transmitters were installed, bringing the radio signal to more remote areas. By 1946 there were 40 regional stations. Many were not simply transmitters but also included studios which allowed a degree of genuinely local programming. Although commercial stations dominated audience in the regional towns, rural listeners displayed a preference for the ABC. They were serviced by programs such as *The Country Hour*, which started in December of 1945.²⁴⁰ It is now the ABC's longest running program.²⁴¹ ABC stations opened in Darwin in 1947, Taree in 1948, and the Gold Coast in 1952.²⁴²

The regional stations received a rather disjointed mix of the two city based networks, made worse by the fact that they also received Parliamentary broadcasts. It was often

referred to as a 'dog's breakfast'.243

The regional network continued to grow, with ten more stations being opened between 1956 and 1965. In the cities, as noted previously, the director of Program Policy, Clement Semmler, instigated NEWRAD which effectively swapped the lighter programming from the Second network to the First, which successfully created confusion amongst listeners. It also put Parliamentary broadcasts on the stations that would ultimately become Local Radio, such as 2BL in Sydney and 3LO in Melbourne.²⁴⁴

In 1972 the First, Second and Third networks were renamed Radio One, Two and Three. Following the lead of the BBC, more of an effort was made to create a distinct identity for each network.²⁴⁵ This process has continued into the present day, where Radio National and Local Radio largely address a different audience – the former being high-brow and the latter noticeably lower.

The re-election of the Whitlam Labor government in 1974 led to the announcement that fourteen new stations outside metropolitan areas would be established. At this point twenty four regional stations were broadcasting their own local *Breakfast* program, but the majority of programs were still coming from Radio One and Radio Two. Regions themselves were poorly defined, often being designed to fit the reach of a transmitter rather than a homogenous community. ²⁴⁶

Alex Dix's report into the ABC that was delivered to Parliament in May 1981 recommended that a second regional network be given the highest priority.²⁴⁷ After many equivalent recommendations from reports in previous decades, regional listeners would finally not have long to wait.

Geoffrey Whitehead was appointed Managing Director on the 28th of October, 1983. The restructure he instigated – announced in the 1983-84 Annual Report as the 'third age of radio' (the coming of television precipitating the second) – led Radio One and Radio Three to become 'metropolitan' and 'regional' radio respectively. They were to be co-ordinated by each state's radio manager, which was a significant step toward the

83

creation of the distinct network that was to become Local Radio in 2000.

Supporting this refinement of the network's identity was the creation of the second regional network that would carry Radio Two's programs. This meant that regional radio would stop being a mix of the two networks, as Radio Two's programs could not be broadcast on both regional stations. In 1985, Radio Two was renamed Radio National.²⁴⁸

The merging of metropolitan and regional radio into one network was accelerated following budget cuts in the late 1980s which led to more programs being shared in order to save money. Staff reductions also changed the nature of work in many regional stations, after the positions of many technicians disappeared. This 'multiskilling' meant that everyone in a regional station became either a Broadcaster (since renamed Program Maker) or a Journalist/Reporter.²⁴⁹ In the studio, presenters were now required to operate the panel (playing songs and promotions, connecting telephone lines to air, adjusting faders on the mixing desk) where previously they had another staff member do it for them.

The second regional network was officially inaugurated in 1987, although the expansion of transmitters carrying Radio National into areas where it was previously unavailable has been gradual. More regional stations were built, such as in Karratha in Western Australia which opened on the 25th of June 1987. State/territory Managers have been created for each state and territory in order to focus on the growing number of regional stations and the local programs they were increasingly producing.²⁵⁰

Interestingly, the traditional dynamic that had existed since the establishment of radio in Australia – of private stations dominating local radio and the public broadcaster being more national or state based – has gradually been reversed in recent decades. The ABC has steadily increased the number of regional stations and the hours of locally produced programming, while commercial radio stations have been networking more material from the larger cities or automating programs to save money. The trend towards commercial broadcasters reducing regionally based production has also been

84

observed in the UK.²⁵¹

3.4b Local Radio Post 2000

The severe budget cuts introduced by the Howard coalition government after coming to power in 1996 did lead to longer on-air shifts for regional broadcasters.²⁵² However, the federal budget in 2001 provided an additional \$71.2 million dollars over four years – the majority of which went into regional and rural programming. This National Interest Initiatives funding meant some *Breakfast* programs that had been abandoned in the previous decade due to limited funds were restored.²⁵³ Fifty additional Program Makers were placed in 32 ABC stations across the continent. Local Radio's projection into cyber-space was dramatically improved with 18 of these being cross-media or Online Reporter positions that started to produce content for the web pages of Local Radio stations – known as *The Backyard*.²⁵⁴

The new millennium has seen a steady expansion of ABC Local Radio. A new office was opened in Katherine in the Northern Territory in February 2002.²⁵⁵ New program shifts were created in Dubbo, Kempsey, Nowra, Horsham, Cairns, Townsville, Towoomba, Rockhamption, Port Pirie, Bunbury and Geraldton, leading to approximately an additional 6000 hours of Local Radio programming each year.²⁵⁶

For ABC Far North in Cairns, this meant the creation of a Late Afternoon program from 4pm to 6pm, where previously the audience received the networked regional program generated in Rockhampton. From the author's experience working at ABC Far North from 2004 to 2006, locally produced material is highly valued by the audience. This fact was illustrated by the number of complaints that would be received if there was a period when the local Late Afternoon program was unable to be produced (due to staff being unavailable), and requests to know when the program would return.

New ABC Local Radio stations were built in Wagin in Western Australia and in Ballarat in Victoria, opening in May and June 2003 respectively. This brought the total number of stations to 59. The *Australian Broadcasting Corporation Annual Report 2002-03* indicated that the number of Local Radio online stories had increased to an average of 670 per month, up from just 13 per month during the previous financial year.²⁵⁷ The 60th Local Radio station started operating at Erina (N.S.W. Central Coast) in November of 2003, producing 780 hours of programming each year.²⁵⁸ New *Breakfast* programs were created in Port Lincoln (South Australia) and Shepparton (Victoria) in September and October 2005 respectively, leading to approximately 1000 hours of additional programming each year.²⁵⁹

Although lagging behind the more comprehensive online presence of other ABC networks such as Radio National, Local Radio's *The Backyard* is the ABC's third most visited site.²⁶⁰ In the 2005-06 period, streaming of Local Radio's 774 Melbourne joined the existing services in 702 Sydney and the Gold and Tweed Coasts station.²⁶¹ When comparing Local Radio's online relatively meagre service with that of Radio National which has virtually all programs available for podcast and many with transcripts, it is worth considering that Local Radio produces more than ten times as many hours of programming each week and has a far smaller staff to program hours ratio than the national network.

3.4c Emergency and Identity

In the context of the larger institution that is the ABC, the strength of Local Radio is primarily its ability to offer specialised services to a relatively small community. It is able to provide everyday information related to social events and local political developments, and allow people who may otherwise never be given the opportunity to have their story broadcast to be heard by their community. The ability to be specific, to provide information that is only relevant to a small group of people, and to be able to do so with local knowledge is always valuable. Perhaps it is of most value at times of crisis.

From its inception, radio has been recognised and appreciated for its ability to save lives. It is able to transfer information almost instantly over impassable terrain and in the most difficult weather conditions. People are able to receive it with minimal equipment. These characteristics make it irreplaceable during an emergency. The ABC is designated as the primary carrier of public information by the federal body, Emergency Management Australia.²⁶² As the first ABC radio network to be delivered to any area –

and the one with the greatest amount of local knowledge and ability to address small population catchments – Local Radio is the primary platform for delivering emergency service information.

The author considers himself fortunate to have been working at ABC Far North in Cairns in March of 2006 when the category four cyclone Larry hit the coast of Far North Queensland. For several days the author and his colleagues broadcast well above the regular number of locally produced program hours, providing information that covered many relevant subjects including road closures, emergency relief contact points, weather conditions and forecasts, power and water supply repair schedules, adjusted arrangements for school events, and all manner of other pieces of information. Some information was relevant to tens of thousands of people, some to perhaps only a dozen.

Apart from relaying information that assisted people to avoid danger, follow official directives (such as evacuation), and prepare, endure and recover from such a natural disaster, the broadcast also provided a degree of psychological support. For example, one family was sheltering under their Toyota Hilux which was parked in their shed, listening to ABC Far North while they endured the storm. They called the station from a mobile phone and were put to air where they described their situation as it was unfolding.

As Larry approached the coast, the author's colleague Richard Dinnen broadcast the words, "we'll get through this together." A caller later told the author that she found these words dramatically reduced her anxiety. More than simple information, in such a crisis many people find listening to the radio also provides company and comfort. In the days and weeks afterwards, ABC Far North was overwhelmed by messages of gratitude for the broadcast. The author found the entire experience to be a remarkable illustration of the value of ABC Local Radio to a community.

As well as describing events as they unfold, it is also possible to convey what has occurred before. One of the particularly rewarding aspects of the author's work as an ABC Local Radio Program Maker was producing material that related to local history and culture. Each small city, suburb, small town or regional area has its history – a history that has shaped it into its present form.

Many people who know and are part of that history still live in the area. The strength of radio is the ease of production and distribution. Simply sitting down with an experienced and knowledgeable person with an audio recording device, hearing their story, and then conducting some simple editing is all that is required to create an item that can help inform a community about its history.

From a knowledge of local history comes a greater appreciation of identity, and the richness of one's own surroundings. Broadcasting this knowledge distributes it, giving it a degree of strength as it becomes more general. Local Radio allows some of the people of a community to talk for themselves, to give their opinions and convey their view of the world. Due to the oral nature of radio, their own words are conveyed to the audience.

Local Radio has consistently been the most popular of the ABC Radio Networks. Figures in the *Australian Broadcasting Corporation Annual Report 2005-6* indicate that Local Radio had a 10.2% share, compared to 2.4% for Classic FM, 2.1% for Radio National, 3.9% for Triple J, and 1.4% for NewsRadio.

Surveys from regional centres can show even greater disparities with Horsham in Victoria revealing Local Radio had 25.9% share, Triple J 3.3%, Classic FM 1.4%, and Radio National 2.7% (NewsRadio not available). In Alice Springs the figures were Local Radio 10.1%, Triple J 6.3%, Classic FM 2.7%, and Radio National 6.2%. Local Radio is the most listened to ABC network, and particularly in regional areas – such as Renmark in South Australia – can have more than five times the share of all other ABC networks combined.²⁶³

As noted, the ABC has traditionally prevented people with Australian accents from being given positions as announcers. This has gradually changed over the decades with a more distinctly Australian sound being found even amongst the announcers on Radio

National. Certainly the lower-brow Local Radio has led the ABC when it comes to bringing more colloquial expression to programs. This arguably has been a factor in its popularity, and allowed it to both connect with and represent a significant proportion of the community it has been created to serve.

Swain's discussion of the value of oral history refers to its ability to capture history from the 'bottom up', and to uncover the often forgotten history of minorities and ordinary life.²⁶⁴ The fact that ABC Local Radio programs are focused on a small, defined geographic area means they are able to provide a voice for people and issues that do not feature in national or state-wide media. Local Radio Program Makers have the time to engage with small communities and discuss the subjects that are relevant to them. The programs capture the dynamics of ordinary life. These features mean that the output of Local Radio constitutes an important part of the oral history of the community and thus, the author argues, is an asset worth preserving for the future.

3.5 Archiving of ABC Radio

ABC Archives and Library Services is the department responsible for the archives of the Corporation. The primary means of digital storage is currently a Media Archive System (MAS) that consists of 750 tapes with each tape holding 200 gigabytes of data – a total of 150 terabytes. It holds approximately 30,000 hours of television and 30,000 hours or radio archives, with a considerable majority of the data being television material.²⁶⁵ There are also thousands of tapes and disks in various formats holding analogue information.

Unlike the BBC, which had an archive department from its inception, the ABC did not officially establish its radio archives until 1970 following questions in the late 1960s in federal Parliament regarding the absence of such a facility.²⁶⁶ Almost all archived material is located in the ABC headquarters in Sydney, with lesser amounts in some capital cities. There are no archives located in regional ABC stations. Effectively the service is centralised, and has always been so. Local Radio does not have a specific archiving department.

It is true that all Local Radio stations record their output for legal purposes. Clause 5 of Schedule 2 of the *Broadcasting Services Act 1992* states that a recording must be maintained for six weeks from the date of broadcast.²⁶⁷ These 'logs' are required in the event that a charge of defamation or contempt of court is made against the station for the material broadcast. However, these recordings are generally not of broadcast quality and only kept for the required period of six weeks and then erased. Therefore the practice does not lead to the creation of an archive of the stations' output.

Historically the vast majority of the programs produced by the stations that are now part of ABC Local Radio have not been archived. No figures are available, but it is reasonably safe to estimate that less than one percent has been archived, perhaps less than point-one of a percent. The process of gathering material from regional and metropolitan station has always relied on the staff in these stations actively selecting items from their programs and submitting them to the department that is now known as ABC Archives and Library Services.

Efforts have been made to encourage this process. For example, in previous decades tapes (when quarter-inch tape was the primary medium of audio transfer) were sent to regional stations with the appropriate paperwork in the hope that they would return with a selection of locally produced material suitable for archiving. These initiatives were reportedly not particularly successful.²⁶⁸

A principle reason for this lack of success is that staff have not been required to contribute a minimum amount of material to be archived. The archiving process, in essence, has been voluntary. It has relied on staff recognising the value of archives and on them being prepared to devote time to ensure that worthy material is not lost. Staff dedicated to archiving program output have never been employed in regional stations. Considering the work-load and time pressures inherent in daily radio production, it is perhaps not surprising that relatively little material has been archived.

Anecdotal evidence (detailed in Chapter Five) indicates that in previous decades regional radio management placed more emphasis on the need to archive, but that this

has steadily declined. Brylowski states that post-1960 radio broadcasts are represented more sparsely in archives than any other contemporary mass medium.²⁶⁹ Although not referring specifically to the situation in Australia, it is a conclusion that appears to apply to ABC Local Radio. The author's investigation of the ABC radio archives for audio relating to the Far North region revealed considerably more material from the decade of the 1950s than in subsequent decades. In more recent decades virtually no material has been submitted to the ABC's radio archives from this region.

Arguably part of the explanation for the insignificant contribution of material to the archives is that the reuse of archived material is virtually absent from the daily production process in many regional stations. Archived material is not available on-site, and searching for and acquiring it is usually quite time consuming. Most items broadcast in Local Radio programs are prepared on the day they are broadcast. Given these time constraints, it has always been difficult for regional staff to access archived material quickly so that it can be incorporated into their program.

In previous decades if (the equivalent of) a Program Maker in a regional station wished to search the radio archives, he or she would generally call a member of the radio archives staff in Sydney who would either examine the catalogue or utilise their knowledge of the contents of the archive to recommend an appropriate item. The audio then had to be transferred to the regional station. This would be done by a tape or CD copy being posted, or in more recent years by the audio being played via an Integrated Services Digital Network (ISDN) line directly to the station. Both processes require considerable time and effort. For a Program Maker who is required to prepare several items each day for broadcast, such a commitment of time is a disincentive. This situation has, the author argues, led to a working culture that is largely oblivious to the opportunity to incorporate archived material into daily radio production.

3.5a Local Radio Archives in the Digital Age

It is understandable that very little material has been archived given the lack of dedicated archiving staff and the limited technology available to ABC regional and metropolitan radio stations. This has combined with the low priority ABC management has given to the archiving of audio. Quarter inch tape was, for many decades, the medium used to record, edit, and play audio to air. In 1991 a new digital editing system known as D-Cart was introduced, but only made available in some metropolitan stations.²⁷⁰ In the 1990s the Minidisc format was widely used in regional stations, which allowed linear digital editing, made more efficient by the use of a computer keyboard connected to the Minidisc unit.

This situation meant archiving material on-site was not feasible due to elements such as a lack of appropriate storage for tapes in each station. Minidisc is a highly compressed format and the disks are not particularly durable, making it far from ideal as a format for archived material. As noted previously, any archive requires a catalogue or database. Program Makers have historically not had the time or the expertise to compile an archive catalogue. These factors have all contributed to the lack of archived material in regional stations.

The turn of the last century marked a significant change in the broadcast technology available to metropolitan and regional ABC stations – now known as ABC Local Radio. In 2000 the computer based radio broadcasting platform *Netia* was rolled out to Program Makers in Local Radio stations in all states and territories except Western Australia. This provided each station with a central server and several networked Digital Audio Workstations (DAW) located in the studios and on the desks of Program Makers throughout the office. This brought the benefits of computer-based digital audio editing and multi-tracking to Program Makers. It was a dramatic change.

Once installed, a typical regional station had 300 hours of recordable time available on the server. Stations such as Alice Springs – where the author was working when *Netia* was installed in late 2000 – produce over 40 hours of programs each week. To produce an item of approximately five minutes duration, twenty minutes of pre-edited or 'raw' material may be recorded, and then a master of the edited version made. In this working environment, 300 hours of available time is quickly utilised. Since it was installed, local managers or *Netia* administrators in ABC stations have had to regularly send urgent messages to all staff instructing them to delete obsolete audio immediately as the 300

hours has almost been entirely occupied, leaving no space for new recordings.

The relatively small amount of recordable time available to ABC regional stations meant that *Netia* could not be used as an audio archive, as this would consume approximately 2000 hours each year in stations such as Alice Springs or Cairns. However, the software does have an archiving function that allows audio in Broadcast Wave Format (BWF) to be burnt onto a CD, allowing approximately five hours of audio to be contained on a 700 megabyte disk. Each disk is then allocated a code to identify it, and the audio can be deleted from the server which frees up space for more recording. Importantly, the entries for each item archived to disk remain in the *Netia* database after the audio has been deleted. This allows items to be searched for and the audio to be reloaded from the disks.

The other significant function that became available with the 'rollout' of *Netia* was the establishment of a network capable of transferring audio between stations. This allows staff not only to search the database and access the audio on their own station's server, but also on the *Netia* servers of other ABC stations around Australia. Once an item of interest has been located in the *Netia* database of another station, it can be transferred over the network onto the staff member's local server.

The speed of this transfer is limited by the speed on the network. Initially regional stations typically had one 64 kilobytes per second (kbps) line for all network traffic, meaning that an item of four minutes in length might take 30 minutes to transfer. However the speed of the network has been steadily increased with many regional stations now having 512 kbps.²⁷¹ Transfer times have correspondingly decreased dramatically.

This function has greatly increased the ability of Program Makers to share program material, and allowed items such as promotions (advertisements usually 30 seconds in length for programs and products from ABC Enterprises) to be simply transferred onto the *Netia* servers of regional stations. Previously these promotions would be fed via ISDN or satellite to a regional station, where they would have to be edited into individual

items and labelled to be ready for broadcast.

The computer network has also enabled regional staff to search autonomously the ABC radio archives via the ABC's intranet. Keywords can be entered into the Radio Archives Database (RADA). When an item is located, the Program Maker is able to contact a member of the Archives and Library Services staff who can transfer it directly to the *Netia* server where the staff member is located. The emergence of an intranet and an audio network over recent years has given Local Radio Program Makers an increased capacity to utilise and contribute to the ABC's existing audio archive. A component of this study endeavoured to establish if this had actually occurred. The installation of the *Netia* broadcasting platform – and particularly its archiving function – has also placed ABC Local Radio in a position where it can, the author argues, archive all or a significant percentage of its program output without any prohibitive additional expense or burden on the workload of staff.

The author's experience as a Local Radio Program Maker indicated that no management directed system of comprehensively archiving program output existed, and that very little material was being submitted to ABC Archives and Library Services in Sydney. Despite being trained to instruct other staff members in the use of *Netia* when it was initially installed, the author had not been made aware of the archiving function of the platform. From the author's experience, few other staff member were aware it existed.

It was from this point that this study was initiated with the intention of quantifying such elements as the current interaction between Local Radio staff and ABC Archives and Library Services, awareness of *Netia's* archiving function, private archiving activities, computer and database skills relevant to retrieval of archived items, and general attitudes to the value of audio archives.

Chapter Four – Method:

This chapter describes the methodology and research techniques adopted by the study. It moves from establishing a theoretical basis to the specifics of the research instrument.

4.1 Ontology and Epistemology

Any act of research is based on a collection of assumptions about the nature of existence and the manner in which it may be interrogated. Identifying these assumptions and their impact upon the process of research is difficult, as the starting point for such analysis necessarily entails having a set of assumptions. As one cannot start from an assumption-free position, one is inescapably placed within a circle where every conclusion stems from a previous set of assumptions. This is the hermeneutic circle.²⁷² None the less, it is important to attempt to identify the beliefs upon which an act of research is based.

Ontology refers to the nature of reality. Stemming from the natural sciences, for several centuries the positivists paradigm (also referred to as the conventional or the scientific paradigm) has been dominant. It takes the view that the nature of reality is fixed, consistent, and independent of the influence of an observer. It concludes that certain laws defining the nature of existence exist, and infers that it is possible to identify these laws.

At the other end of the ontology continuum is the relativist or constructivist paradigm. It contends that rather than a single, fixed reality, multiple realities exist and they are socially constructed. Therefore, unchangeable laws of nature cannot be revealed as they do not ultimately exist. Truth is considered to consist of the most sophisticated construction upon which there is consensus.²⁷³

The positivist approach – a belief in the existence of a world independent of the influence of observers – leads to what is termed a 'realist' philosophy. Weber refers to Bunge's identification of three forms of realism:

- 1. *Naïve realism* asserts that it is possible to obtain complete and accurate knowledge that will ultimately be a mirror of the world.
- 2. *Critical realism* asserts that one can know the world only through our perceptions that tend to be biased by beliefs, knowledge and expectations. Therefore knowledge is fallible.
- 3. *Scientific realists* are critical realists who also subscribe to scientism. They assert that the best way to knowledge is through scientific research.²⁷⁴

These definitions of realism lead us from the question of the ultimate nature of reality, to the question of how we go about understanding reality. This is epistemology – how we obtain knowledge. Making a clear distinction between ontology and epistemology can be difficult as they tend influence each other.

Firstly, epistemology depends on how the ontological question has been answered. If one has adopted a constructivist ontology, it is illogical to then assert that one intends to pursue a positivist epistemology, for how can one seek to uncover a fixed truth if such a truth does not ultimately exist? In this sense, a constructivist approach eliminates the distinctions of ontology and epistemology.²⁷⁵

As noted above, there are distinct forms of realism. As the name suggests, naïve realism is not a form that many researchers would claim to ascribe to. Indeed Weber notes that he has never encountered a colleague who is a naïve realist.²⁷⁶ However, if one is a critical realist and considers knowledge to be fallible as its collection has been influenced by the inherently biased assumptions and perceptions of researchers, then one may ask how relevant it is to adopt a positivist ontology if ultimate truth cannot actually be obtained. Claiming there is a fixed, external reality is perhaps rather pointless if a subjective, constructed interpretation of it can only be realised. In this sense, epistemology influences ontology.

Denzin cites MacIver who has noted that sociology – to which the communications discipline is closely related – has been plagued throughout its history by its tendency to model itself on the natural sciences.²⁷⁷ This arguably occurred due to sociology's

founding fathers' – Comte and Durkheim – belief that the laws of society could be scientifically determined. It was they who enshrined positivism.²⁷⁸ It is worth asking why the positivist approach, that has so dominated the natural sciences, failed to firmly establish itself in the field of sociology, and why naïve realism has been almost universally rejected.²⁷⁹

The answer simply is people. Atoms, molecules and non-animate materials tend to act in highly consistent and predictable ways. This consistency has led to the laws of science being established. The behaviour of plants and animals is also largely consistent, allowing generic statements to be made that will usually be applicable to the subjects in question.

But sociology deals with a unique animal – the human being. Denzin cites Park who notes that it is the wide ranging subjective life of mental and imaginative behaviour that intervenes between stimulus and response, which makes human behaviour fundamentally different from that of lower animals.²⁸⁰ The author has heard this distinction expressed in another way by an Indigenous Australian who said simply that we humans are the only animal that creates stories about the other animals. The complexity of human behaviour, interpreted as it is by other humans, prevents studies in the communications discipline from adopting a categorically positivist ontology and epistemology.

With these definitions in mind, let us consider the study at hand. At first glace this study lies closer to the positivist than the relativist end of the spectrum of ontology. It seeks to quantify audio documents and their related metadata which are inanimate, with identifiable characteristics that can be measured. This component places the research closer to the traditional sciences in that it is dealing with digital objects that have consistent mathematical and physical properties.

The study works from the assumption that archived copies of previous ABC Local Radio programs either exist or they do not; they either have associated metadata stored in a database or they do not; they can be found in a particular physical location and can be

listened to or they can not; they are in a durable and accessible digital format that has low re-use costs or they are not. The study assumes that these documents exist in a world of time and space that is consistent, external to the interpretation of individual people, and whose qualities are insignificantly affected by the process of measurement. Therefore, a highly relativist ontology is inappropriate for this study.

It is important to remember that ontology and epistemology exist on a continuum. As Tashakkori and Teddlie state in their advocacy for the paradigm of pragmatism, it is not a question of either/or. Further, a researcher can adopt a more or less subjective orientation over the course of their research.²⁸¹

The epistemology of this study adopts a significant degree of positivism as it seeks to quantify and express numerically as many aspects of the situation as possible. Numbers are a distinctly positivist element as they are clearly objective and unaffected by observers. Further, the study will utilise a process of deduction in order to reach conclusions about the current realities of ABC Local Radio archiving.²⁸² However, the process of gathering the data that will be ultimately expressed numerically draws the study dramatically towards the relativist end of the epistemological continuum. This is because the process of data collection involves the interaction of people in the form of surveys conducted over the telephone, and interviews conducted over the telephone or in-person.

Although some of the information gathered regards inanimate objects, it is done via the subjective filter of surveys conducted with individuals, and therefore brings with it the potential for the misinterpretation, manipulation and distortion of data that is inherent in the dynamic between the inquirer and the respondent. When one person gathers information from another, and then interprets that information, the particular assumptions, knowledge, and decisions of the people involved influence the outcome. The process of compiling and asking questions, and then interpreting answers, is consistently determined by the characteristics of a specific human culture. It is considerably different from a pure-science study that is not conducted primarily through language.

It is also worth noting that the author, as the sole researcher, was a part of the sampled group (ABC Local Radio Program Makers) and therefore he had certain established beliefs that had been formed by his experience. The interaction between the author and the respondents may have been influenced by the existence of a pervasive working culture with an organisation such as ABC Local Radio, which could arguably limit the scope of the inquiry and distort the results.

Ultimately the study does not expect to reveal universal and consistent social laws as may have been envisaged by the founders of the sociological discipline. It focuses on a small group of people at a particular point in time. It operates from an assumption that it is probable the conclusions drawn will accurately reflect the current dynamics of ABC Local Radio archiving to a sufficient degree that knowledge of these conclusions will be useful in optimising the archiving practices of ABC Local Radio in the short to medium term.

This last point is worth emphasising. Although the inherent subjectivity of the process of the research means that ultimate and unquestionable truth cannot be established, the contention is that by adopting the conventions of research practice and endeavouring to minimise bias and maximise accuracy, it is sufficiently likely that the study will produce conclusions that lead to a better understanding of the situation. The author endeavours to comply with the approach of the pragmatist paradigm that advocates a study of that which is interesting to the researcher in a way that appears appropriate, in order to bring about positive consequences.²⁸³

This study attempts to take a 'snapshot' of current ABC Local Radio archiving practices. By way of analogy, the photograph was initially hailed as depicting reality. It was subsequently recognised as sufficiently subjective and open to interpretation that it could not be considered a representation of complete and objective truth. The belief that a photograph can only convey the truth to the observer was discredited. However, despite a degree of consensus that viewing a photograph is a subjective experience that can distort reality to the point of misinforming the viewer, photographs remain a very rich and effective means of distributing information regarding the reality of life as lived by people. Although imperfect, they are very useful and in many situations are informative and constitute evidence that contributes positively to the pursuit of knowledge.

The fact that results of this study are influenced by the beliefs and the existence of the researcher, does not mean they are without value. The question is to what extent these factors affect the results. If the impact is relatively insignificant then the data and subsequent conclusions will still be reasonably accurate. Although the results will be fallible and the product of a subjective process, they may assist ABC Local Radio to understand better and therefore improve their audio archiving practices.

4.2 Quantitative and Qualitative Research

As the ontological position affects the epistemological position, so too does the epistemology influence the methodology of the study.²⁸⁴ Methodology can be divided into quantitative and qualitative forms of research. Put simply, quantitative research expresses information in the form of numbers, while qualitative research expresses information in the form of words.²⁸⁵ Whatever the form of methodology, the goal of the research is to be able to make sense of the phenomenon studied so that events in the future can be predicted.²⁸⁶

The natural sciences have traditionally adopted a positivist ontology and epistemology, leading them generally to utilise more quantitative techniques. Their primary technique is the experiment, which is characterised by the manipulation of an independent variable and the control of extraneous variables. The researcher endeavours to keep all factors constant and then expose respondents to the independent variable in order to assess its impact. The impact should be observed in a manner that can be measured. This measurement is the dependent variable.

Another feature that is generally present in an experiment is a control group. These respondents are not exposed to the independent variable and provide data that can be compared to that which comes from the experimental group.²⁸⁷ The purpose is to increase the probability of being able to identify the impact of the independent variable

upon the respondents. Two sets of measurements of the dependent variable are taken: one before and one after exposure to the independent variable. A final feature of experimental design is the random selection of respondents. Research without all these characteristics can be classified as non-experimental.²⁸⁸

Stemming from the traditions of anthropology, qualitative research is characterised by conducting observations of the subject at hand. These observations can be overt or covert. While an experiment would have a large number of respondents in a controlled setting, qualitative research might examine case studies in a natural environment.²⁸⁹ Results are unlikely to be expressed in statistical form, but rather in words that will attempt to unveil the character of events and give thick descriptions to the development of meaning. Where quantitative studies are often focused on the macro situations, qualitative work tends to examine the micro structures.²⁹⁰

Accordingly, the epistemology of qualitative study lies closer to the relativist end of the spectrum, where it is acknowledged that each researcher is inescapably subjective and that the act of research influences the subject and the results. Therefore the aim is not to uncover universal truths as that is considered unachievable, but to understand to the greatest extent possible the dynamics of a particular situation, and how the actors involved generate and realise meaning. Where a quantitative researcher may utilise statistical tables, mathematical models and graphs, a qualitative researcher might use first person accounts, ethnographic prose, life histories and photographs.²⁹¹

Triangulation refers to the use of more than one method to research a phenomenon, in order to overcome the weaknesses, bias, and other limitations of that particular method. Apart from adopting multiple methodologies, a study may utilise a variety of data, investigators, or theories in order to achieve triangulation.²⁹² If one approaches a subject from different points of view and comes to the same conclusion, it is more likely that this conclusion is correct. That is the logic underpining triangulation.

Denzin notes that triangulation which utilises dissimilar methods is more likely to produce satisfactory results. He goes on to assert that no piece of information should be

101

given serious consideration unless it can be triangulated, and that single method studies are no longer defensible in the social sciences.²⁹³

4.3 Surveys

A principle tool of the researcher is the survey. If one is not involved in qualitative observational research, and is not conducting an experiment, chances are high that surveys will make a significant contribution to the process of gathering data. Surveys are appropriate when a researcher wishes to examine a large population and establish the extent of a phenomenon in order to generate conclusions that can be generalised. Standardising the questions asked makes it easier to compare and contrast the responses. Chin refers to the survey as the best manner of determining information about large populations.²⁹⁴ The author has used surveys in the form of questionnaires in this study.

The questionnaire is a survey that utilises that favoured digging-tool of the sociological researcher – the interview.²⁹⁵ It is what is termed a contrived form of data gathering – as opposed to a naturalistic form – as the interviewer elicits a response from the person studied instead of simply observing behaviour.

Although questionnaires tend to be associated with quantitative research due to their ability to generate numerically expressible data, they are not inherently a quantitative research tool. The determining factor is the type of questions used. Closed questions prompt a limited range of responses – such as 'yes' or 'no' – which can produces quantitative data. However, open questions – such as 'how does this make you feel' or 'do you have any more thoughts on this situation' – produce more qualitative data. As a questionnaire can include both forms of questioning, they are able to generate a variety of data.²⁹⁶

A questionnaire should translate the research objectives of the study into questions, with the answers being directly able to test the hypotheses. Its value as a research tool rests on the assumption that respondents share a sufficiently common vocabulary to ensure that they each derive substantially the same meaning from the questions when they are asked. Denzin has identified three categories of interview:

- The Schedule Standardised Interview is the most structured form, with the wording and sequence of all questions being exactly the same for every respondent;
- 2. The Unstructured Schedule Interview administers the same questions to all respondents, but allows for variations in order and phrasing; and
- 3. The Non-standard Interview has no pre-specified format or set of questions. It allows the interviewer to probe as they deem appropriate.²⁹⁷

There are a variety of survey designs that can be incorporated into a study. They include: multiple data gathering events over a period to time to the same group or different but comparable groups; pre-testing and post-testing following exposure to a particular event; testing of two groups, one of which is not exposed to a particular event (control group). The majority of modern survey research involves a random sample of one group that is exposed to a particular event. It is referred to as a one-shot case study.²⁹⁸ It is this form of survey that the author has utilised to research the archiving practices of ABC Local Radio.

Scales

When collecting data from multiple sources it is convenient to make use of scales. They allow measurements to be compared and manipulated in such a way that aggregates can be calculated. There are four principle categories of scales:

- 1. Nominal scales are 'either/or'. For example, yes or no, male or female;
- Ordinal scales rank order but the distance between positions cannot be measured;
- 3. Interval scales are ordinal scales that can be measured, as numerical values are attached to each position; and
- Ratio scales have a numerical values and a zero point. For example, weight, income, time. They are considered the most sophisticated and therefore the most desirable scale.²⁹⁹

Whilst scales are useful and allow researchers to create statistical representations for

phenomena that in reality exist in a more abstract continuum, there is a danger that by restricting the available responses to a question – such as in a nominal scale – that respondents will 'force-fit' their answer into one of these categories when it is not entirely appropriate. This has the potential to distort the findings of the survey.³⁰⁰

Sampling

If a researcher wishes to study a phenomenon that involves a large number of people, it is usually impractical to examine every person involved. The solution is to take a sample – to survey a relatively small proportion of those affected by the phenomena in order to obtain data that is representative of the entire target population. The advantages of sampling are that it makes conducting a study less resource intensive, reduces the time required, and can produce equally valid results.³⁰¹ The rules that are associated with sampling are designed to increase the generalisability of the findings of the study.³⁰²

The overall group to which the conclusions of the study are applied is called the survey population. From the survey population is drawn a smaller group that includes all those who could potentially be surveyed. This is the sampling frame. From this smaller group the actual sample is taken. Having a sample that resembles and is representative of the sampling frame and survey population is crucial to the accuracy of the results.³⁰³ Therefore, the researcher must consider if a particular sub-group is being effectively excluded from the sample. For example, a survey that contacts people via a telephone excludes all people who do not have a telephone.

It is important that samples are chosen in a systematic and objective manner, are easily identifiable, independent, uniform, and only appear once in the population. Further, individual samples once taken cannot be discarded as this would distort the findings. There are two broad categories of sampling: probability and non-probability. Of the two, probability sampling is considered to generate a higher degree of representativeness.

There are multiple forms of probability sampling that include simple random, systematic, stratified random, cluster, multi-stage, area, multi-phase, panel and spatial sampling.³⁰⁴ The key characteristic is that individual respondents are chosen at random from within

the sampling frame rather than being selected. This is designed to maximise the probability that the sample will be representative of the larger population, and will not be distorted by having respondents belong effectively to a sub-group within the population due to a particular shared characteristic. For example, if one wished to study skin cancer rates in Australia and only selected people with red hair, the results would be questionable.

Probability sampling requires the researcher to follow strict rules and have a reasonably large sample size. Non-probability sampling is simpler and often used for exploratory or qualitative research. Forms of non-probability sampling include accidental, purposive, quota, dimensional, and snowball sampling.³⁰⁵

Reliability and Validity

The extent to which an act of research can be reproduced or replicated with consistent results determines its reliability. One of the strengths of an instrument such as a questionnaire is that it offers relatively high reliability as its administration follows a predefined pattern. Interobserver reliability is the degree to which results are consistent when two people administer the same questionnaire or interview. Internal or split-half reliability indicates how consistent are the answers given by a respondent to similar answers.

Validity refers to the degree to which a research instrument measures that which it sets out to measure. An instrument may have a high reliability – meaning it gets consistent and reproducible results – but in fact be measuring the wrong thing.³⁰⁶

External validity is the extent to which the conclusions that stem from the study can be generalised to other populations. It is affected by factors such as the uniqueness of the respondents' characteristics, and instabilities in the population over time or from geographic differences.³⁰⁷

Internal validity is the extent to which the researcher is able to rule out other explanations for the results; it tests the proposed hypotheses.³⁰⁸ It can be influenced by

the length of the study, changes in respondents' behaviour (maturation) or loss of respondents over time (experimental mortality), the effect of taking a second measurement, changes in the calibration of the research instrument, and the biases of respondents being from different groups.³⁰⁹

If the impact of two or more variables combine in such as way that it is impossible to separate their effects on the results, this is referred to as a confounding. It is often impossible to eliminate all forms of confounding, and a degree of confounding does not necessarily render a study entirely invalid. It is worth noting that an inverse relationship can exist between internal and external validity. As one strives to increase internal validity – by for example designing a restricted and tightly controlled experiment – the result may be to decrease the generalisability of the results to other settings, thereby reducing external validity.

4.4 The Research Process

Having established some familiarity with the relevant terms, the author will turn now to the research conducted by this study. As noted previously, the author worked for several years as a Program Maker with ABC Local Radio. During this period the author became aware of the dynamics of audio archiving as practiced in the stations he worked for or came into contact with. This period can be interpreted as constituting a degree of exploratory qualitative research of a case study that constituted the topic at hand.

It must be defined as observational and covert – indeed so covert that the author as researcher was not consciously aware that he was in the early stages of a study. Nonetheless, the knowledge that was derived from this period played a significant role in the development of the hypotheses that the study ultimately wished to test.

The author continued to work with ABC radio after the initiation of the study. Although no longer covert, as the author's colleagues were now aware of his simultaneous status as a researcher, this situation allowed him to continue to observe the practices of audio archiving as conducted by a small number of ABC Local Radio Program Makers. In this process he moved gradually from full participant to participant as observer.³¹¹

A mixture of quantitative and qualitative research has been utilised. In addition to the observations noted above, the qualitative research also included unstructured in-depth interviews with specific individuals who were selected for their specialist knowledge. These interviews were preceded by an explanation of the research. Verbal consent to conduct the interview and use the information provided in the study was obtained prior to the interview proceeding.

The individuals interviewed included: Trish Hoyne, Deborah Findlay, Katin Hickey and John Spence from ABC Archives and Library Services; James O'Brien, Manager of 702 Local Radio Sydney; Mark Bowry, Manager of ABC Technical Services; Tim Sadler, Manager of ABC Application Development; Tim Holt, *Morning Show* Presenter with ABC Local Radio in Bega; Anna Lise Murch, Manager of ABC Local Radio in the Northern Territory; Per Holst, Philip Trier, and Mogens Brauer from Danmarks Radio Archives; Alex Emery-Swindon, Presenter with BBC Radio Wiltshire; Karin Graf, Radio Salzburg Archives; Reinhardt Pirnbacher, Presenter with Radio Salzburg; George Wimmer, Program Manager with Radiofabrik Salzburg.

In addition to these scheduled interviews, the author continued to discuss the topic with his colleagues and to examine the challenges faced when wishing both to understand and improve the archiving practices of ABC Local Radio. This involved testing possible solutions, firstly as an individual Program Maker, and secondly by way of providing information to the author's colleagues regarding how to improve archiving. The author then observed how reception of this information translated into action within the workplace.

4.4a The Research Instrument

The principle research instrument utilised in this study is a questionnaire that consisted of 41 questions (excluding personal details). The design of the research instrument emerges from an ontology that maintains a substantial belief in an external reality, and an epistemology that, although acknowledging the impossibility of determining an ultimate truth, sees value in endeavouring to maximise objectivity and utilising quantitative research techniques to allow general conclusions to be drawn that can be extended from the sample to the population.

Therefore the questionnaire has substantially incorporated quantitative elements. This can be seen in the extensive use of nominal and ratio scales to allow results to be expressed numerically and manipulated accordingly.

The following questions utilised nominal scales:

- Have you sent material to ABC Archives?
- Do you know how to send material to ABC Archives?
- Have you accessed material from ABC Archives?
- Are you aware of the existence of RADA (archives database)?
- Have you used RADA?
- Do you have a personal radio archive?
- Do you burn audio CDs at work?
- Do you burn CD Roms (Netia archiving) at work?
- Does the availability of CD burners affect your burning activity?
- Can you access the Archives remote database? Do you do this?
- Do you search the Netia database, sorting by fields/program/keywords?
- Does your station save program rundowns on a shared drive?
- Do you know how to search rundowns for text? Do you do this?

The following questions utilised ratio scales:

- How many years have you work for ABC Local Radio?
- How many items have you sent to archive in the last 12 months?
- How many items have you retrieved from archives in the last 12 months?
- How many hours of audio do you have in your personal archive?
- At what rate is your personal audio archiving growing?
- How often do you burn CDs at work?
- What percentage of your interviews do you think should be archived?
- How many minutes per day would you be prepared to spend archiving?

Other questions such as those that specified the format in which personal audio archives were recorded, or the manner in which they were catalogued, produced a limited range of responses which allowed the results to be expressed in percentage terms (see results below). The majority of questions asked produced quantitative data that could be expressed numerically.

Whilst this form of questionnaire does produce useful data that gives a reasonably concrete description of the phenomenon studied, it is worth noting that such an approach does have its limitations and opportunities for error. Nominal scale questions that demand a 'yes' or 'no' answer eliminate the variations that, in reality, exist.

For example, the question asking if a Program Maker was aware of how to access material from ABC Archives produced responses that ranged from people being sure of the process, to those who had some idea but were not entirely confident. The use of a nominal scale meant that both responses were considered to be equivalent. This ignores the subtle but relevant differences between the respondents' ability – an ability that the study is endeavouring to measure and express.

There is an argument that the author should have adopted an ordinal or interval scale to measure some of these variations, rather than adopting the simple dichotomy dictated by the nominal scale. However, he determined that the disadvantages of the added complexity outweighed the benefits, as specifying such subtle distinctions did not, in the author's opinion, significantly add to the substance of the findings. He tended to opt for simplicity where possible in order to produce more succinct results.

Although the questionnaire was dominated by closed questions that produced relatively quantitative data, it also included more open questions such as:

- What factors have influenced the degree to which to you contribute to ABC Archives?
- What comments would you have regarding the subject of Local Radio archiving?

These questions produced more qualitative data, which is more appropriately presented in the form of words rather than statistics. This can add meaning and provide some deeper explanation regarding the dynamics of the phenomenon examined. However, expressing this data is typically more imprecise and arguably more verbose.

4.5 Administration of the Research

Although accompanied by non-standard in-depth interviews with specialists, the primary research instrument was the questionnaire. This was completed via a telephone interview that the author conducted with each respondent. The author conducted all interviews.

Consistent with Schedule Standardised Interviews, all respondents were asked the same questions in the same order. However, the wording of each question was not exactly identical for each respondent, although the differences were minor and arguably insignificant. Further, when the more open questions were asked, unscripted questions occasionally followed in order to clarify meaning or to obtain a thicker description of the actions and motivations of the respondent. Although the vast majority of the questionnaires were administered in a manner that largely complied with the definition of a Schedule Standardised Interview, they did not strictly adhere to the rules that such a definition would require.

Testing

Prior to finalising the composition and administration method of the research instrument, it was tested on a small number of people in the sampling frame.³¹² Initially the author intended to email the questionnaire to ABC Program Makers to allow them to complete it at a time convenient to them and then return it. This method would have allowed the author to send easily the questionnaire to all Local Radio staff regardless of where and on which program they worked. The test group consisted of Program Makers in ABC North Queensland (Townsville) and ABC Far North (Cairns).

It has been noted that one of the limitations of self-administered questionnaires is the low response rate.³¹³ This was consistent with the author's experience, with many

people failing to return the questionnaire despite repeated requests and reminders. Further, many questions were incomplete in the questionnaires that were returned. This led the author to change the method of administration to telephone interviews.

The testing phase also resulted in some refinements of the questions asked. For example, the author had observed in the ABC Local Radio station in Cairns that one staff member's audio occupied a disproportionate amount of the limited time available on the *Netia* server. This staff member was, in the author's estimation, effectively using the server as a surrogate archive by keeping much of his material there rather than archiving it to disk.

This observation led the author to include a question that asked the respondents if they used the *Netia* server as surrogate archive. This staff member took part in the testing phase and, to the author's surprise, answered "no" to this question. This led the author to conclude that staff members may have been reluctant to recognise and admit that they were utilising a disproportionate amount of the server space, meaning any conclusions drawn from this question may contain significant error.

Having decided to conduct telephone interviews, more testing was done which led to a refinement of the order of questions to enhance continuity, and a removal of the question relating to the Program Maker's approximate age as it was found that this immediately led to the respondent becoming evasive. The author did not consider age to be a highly significant factor in the relevance of the findings. As Bouma suggests, the author endeavoured to ensure that all questions related directly to the hypotheses and to eliminate any non-essential questions in order not to waste time.³¹⁴ No data gathered in the testing phase was included in the final results.

Ethical Issues

In compliance with Central Queensland University policy, ethical clearance was sought and given prior to conducting the surveys. As stipulated by the Human Research Ethics Committee, prior written permission to survey ABC Local Radio staff was obtained from the Head Local Radio, Michael Mason (Appendix IV). Identifying the sample group (ABC Local Radio Program Makers) and their contact telephone numbers was done via the websites of the individual stations. These sites state the names and positions of staff in the station, and their contact numbers. Although the author did, as an ABC employee, have access to the ABC's internal personnel directory, the method adopted ensured there was no breach of the National Privacy Principles.

Informed consent is a basic tenet of research on human populations.³¹⁵ In order to ensure that all participants were well informed, an information sheet (Appendix II) was provided. As recommended, the language of this information sheet was selected with the intention of it being clear and easily understood.³¹⁶ It explained the principle motivation for the study, stated that participation was voluntary and that participants' personal details would not be distributed or linked to specific results. This maintenance of confidentially was strictly adhered to in order to ensure that people felt free to be critical of ABC management without fear of negative consequences. Individual identities were masked by the removal of all names or references to location from the results that were passed on to ABC management.³¹⁷

Accompanying the information sheet was a consent form (Appendix III). It lists the conditions of the survey and requires the participant to provide a signature to verify that they have understood these conditions and agree to take part. The form makes clear that respondents can withdraw at any time from the study, are not required to answer all questions, and are able to receive a copy of the results. In keeping with the university's requirements and general principles of ethical human research, the signed consent forms have been collected and will be securely stored.³¹⁸

Conducting the Surveys

Having completed the testing phase of the research the author proceeded to conduct the surveys via telephone interview. Having identified an appropriate person from the sample population, the author would call them at a time of the day when they were most likely to have time to participate. For Program Makers with programs early in the day this would mean the afternoon, for those on afternoon shifts the author would call in the morning. Establishing rapport is an important element in conducting interviews.³¹⁹ In this regard, the author's position as a part of the sample population was of great assistance. As an ABC Local Radio Program Maker, one is regularly being called by people who are wishing to sell products, update media contact lists, complain, convince one of the necessity to cover a certain issue on your program, or simply to make conversation because the caller is a bit lonely. Time is precious and one rarely has time to indulge researchers with a long list of questions. For the author, being able to introduce himself as an ABC colleague meant an immediate rapport was established by virtue of sharing a profession.

Having given a brief explanation of the research and established their willingness to continue, the author emailed them the information sheet and consent form. When they had read this information the survey was conducted. The author asked the questions in order and typed their responses into the spreadsheet (Appendix V).

This method led to a relatively high response rate. It was, on occasion, difficult to contact people at an appropriate time. For example, the author made several attempts to survey a Program Maker from Tasmania, but despite repeatedly calling he was never able to catch someone when they were not immediately engaged in some other task. Once the author was able to speak to a Program Maker and explain the research, only one person refused to take part.

Given that the author was calling people during work hours, it was important that he ensured the survey was relatively brief. Each interview took approximately 20 minutes, although they could be less than 15 minutes. Other interviews took up to 30 minutes, particularly if people gave longer responses to the more open questions. This allowed the author to ask unstructured questions that produced more qualitative data.

Another element of the surveying process was an attempt on the author's part to provide information to Program Makers regarding how to archive their programs, and how to contribute to and retrieve material from ABC Archives and Library Services. The author described the process and then sent a follow-up email detailing the required steps. As noted in the results below, many people were unaware of these processes and expressed an interest in having the information. To a degree, conducting the surveys served not only to gather data regarding the current situation, but also to raise awareness about the relative ease with which archives could be generated.

4.6 Triangulation

As noted earlier, the term 'triangulation' refers to the use of multiple approaches when investigating the same phenomenon. The logic that underlies triangulation is that each single approach has certain inherent limitations that bring with them the potential for error. If differing approaches produce the same conclusions in regard to the phenomenon, it is significantly more likely that the conclusions are correct. As also noted previously, Denzin defines four types triangulation as involving the utilisation of a variety of data, theories, investigators and methodologies.³²⁰

As the author was the person who conducted all the research, there was no variety in the investigators. This eliminated any possibility of different investigators administering the surveys in different ways or of the 'reverse demand-characteristic' effect where interviewers develop their own interpretation of the research instrument.³²¹ However, it meant that no triangulation from the use of multiple investigators took place.

Theoretical triangulation requires both a body of empirical material and a working knowledge of a number of theoretical frameworks.³²² No theoretical triangulation was undertaken in this study.

A degree of triangulation did occur in relation to verification of some data. The previously referred to networked nature of *Netia* allowed the author to access the *Netia* databases of other stations and see directly if Program Makers in a particular location had been using the archiving function, how often they had used it, and how recently. Each item in the database that has been archived is flagged with a particular symbol, and contains information regarding date of creation and the name of the user. Therefore if a Program Maker had falsely claimed that they had been archiving material in *Netia*, the author

would have detected the incorrect information through this form of triangulation.

As noted above, the study utilised a mix of methods – quantitative and qualitative – which provided a degree of triangulation. The qualitative work involved the author's experience as a Program Maker and interviews with specialised staff. The quantitative research was undertaken via the surveys. Both methods indicated that audio archiving in ABC Local Radio was neither occurring in a systematic manner nor to any significant degree.

4.7 Error

As with any research, this study was susceptible to error. The design of the research and the questions selected were determined by a single researcher who is not only subjective but prone to making mistakes. Answers could have been incorrectly understood during the interview process, and data could have been incorrectly entered or processed. It is also worth considering which questions were not asked and why. The author conducted the research from a particular perspective that is necessarily subjective. The author selected questions based upon his limited knowledge and his wish to confirm his belief that the current archiving regime of ABC Local Radio was deficient.

Further, although the results of the surveys contain many statistics, there is some question about the accuracy of these figures. As noted previously, questions that adopted a nominal scale forced participants into a simple dichotomy of response, when in reality the situation is arguably more varied. This represents an opportunity for the results to be distorted.

Many of the questions that adopted a ratio scale required the respondents to quantify elements such as the size of their personal audio archive, the rate of growth of their archive, and the frequency with which they burned CDs at work. Given that respondents had not actually kept detailed records of such activities, the responses were an estimate generated within a few seconds. Therefore they are not precise figures, but only approximations. This represents a degree of error in the results. Denzin notes that interviews often convey implicit demands and respondents often attempt to meet those demands. In other words, they may tell interviewers what they think the interviewer wants to hear.³²³ This study was certainly not immune from such tendencies.

As someone who is conducting a study regarding the extent of audio archiving, it is obvious that the author is someone who values archives. Questions that asked Program Makers what percentage of their programs they believe should be archived, or how many minutes a day they would be prepared to spend archiving, carry with them an assumption that the author believes such activities are valuable and, one can assume, the author would like others to express an opinion that agrees with his.

This tendency may have inflated the figures that relate to these questions as it is possible that respondents felt uncomfortable stating that they put no value on archiving and would not be prepared to commit any time to such a task. It is worth noting that no respondent gave an answer of zero to either of these questions, although four respondents did respond they would only be prepared to devote two minutes or less a day to archiving.

Another factor that is likely to have had some influence on the results is the tendency for people to be reluctant to admit to being ignorant of something, particularly if it relates to their professional capacity. This is known as 'response error'.³²⁴ This dynamic was certainly relevant to this study as it sought to quantify an activity (archiving) that was given little attention by ABC Local Radio management and therefore staff had often given little thought to the topic. Thus the majority of respondents had never submitted material to the archives; nor were they aware of the archiving function in *Netia*. Although it is clearly not a core requirement for a Program Maker, people generally prefer not to have the fact they are oblivious of something they should arguable be aware of recorded in a survey.

When the author asked potential respondents if they would be willing to participate in a

survey relating to archiving of their program, their reaction was often that they were unsuitable as it was something they did not do and knew nothing about. The author had to immediately reassure them that he was aware that it was an area that had been relatively neglected and therefore they were "in good company" in their ignorance. The author went on to explain that his primary objective was to quantify just how neglected it was within ABC Local Radio. With this reassurance they usually participated, however it is conceivable that some respondents claimed a degree of awareness that in reality they did not possess. This is another potential source of error.

As with all acts of research, this study has contained several potential sources of error. Although they are likely to have had some impact on the results, the author has endeavoured to maintain an awareness of their influence in order to minimise the degree to which they distort the data. At no point in the study did the author come to the conclusion that the degree of potential error was so great that the data collected was effectively worthless. The author contends that the results of the study substantially reflected the realities of audio archived in ABC Local Radio Programs.

Chapter Five – Results:

This chapter displays the results of the study in a manner that is clear and easily understood. Graphs and statistical representations have been utilised wherever it has been deemed appropriate.

5.1 Data from Surveys

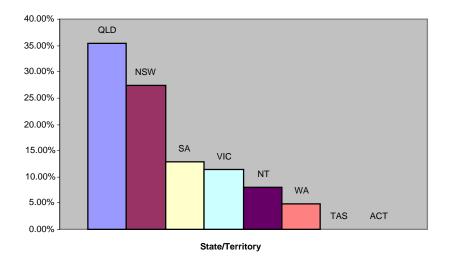
5.1a Participants

Sixty two (62) ABC Local Radio Program Makers were surveyed between the 1st of January and the 16th of March 2006. This constitutes just over 10% of the Local Radio staff which number approximately 580, not all of whom are Program Makers.

The respondents were located in 33 different Local Radio stations. The majority (63%) were from NSW and QLD. All surveys were conducted orally by myself via telephone. All but three of the participants were located in regional stations, one being in Perth and two in Darwin.

ABC Local Radio consists of nine metropolitan and 51 regional stations. It broadcasts approximately 2000 hours of unduplicated radio each week.³²⁵

Breakdown of Participants by State or Territory



* Y axis of all graphs refers to the percentage of respondents.

Positions Held by the Participants

56.5% (35) – Presenter 43.5% (27) – Producer.

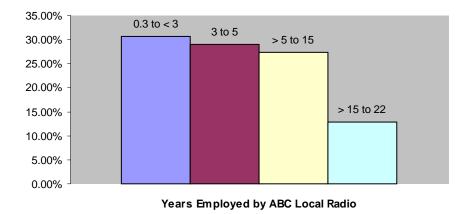
21% (13) of participants also held the position of Regional Program Manager.

Programs

45% (28) – Breakfast 39% (24) – Mornings 11% (7) – Late Afternoons 5% (3) – Online.

Length of Employment

The average length of employment of participants was 6.3 years. The period ranges from 4 months to 22 years. The breakdown of the length of employment is:





Sending Material to ABC Archives and Library Services

21% (13) - have at some stage sent material to ABC Archives

79% (49) – have never sent material to ABC Archives.

Of the 13 who have, only one has sent material in the last 12 months and one within the last 18 months. Considering that each item would have been approximately ten minutes in length, and the network produces approximately 2000 hours of unduplicated radio a week, the conclusion is that virtually no material is currently being sent from ABC Local Radio to ABC Archives.

76% (47) – were unaware of the process of submitting material to ABC Archives.

When asked what factors affected their level of contribution of material to ABC Archives, 50% (31) said that it had never been mentioned as a possible course of action by management or other staff.

Accessing Material from ABC Archives and Library Services

66% (41) - have at some stage accessed material from ABC Archives

34% (21) - have never accessed material from ABC Archives

47% (29) - were not aware of the existence of RADA*

53% (33) – were aware of the existence of RADA25% (16) – have at some point made use of RADA.

*RADA is the intranet's online database for searching the radio archives.

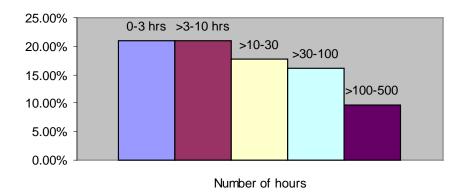
46% (29) were able to define the frequency at which they accessed material from ABC Archives. The average for those who did was six times a year, or once every two months. However, 13 of those 29 accessed material less than three times a year. Therefore 26% (16) of participants accessed material from ABC Archives at a rate of three times a year or more.

5.1c Personal Audio Archives

When asked if they had a personal audio archive the response was:

6.5% (4) – do not have a personal audio archive
85.5% (53) – have some form of personal audio archive
8% (5) – record all their programs.

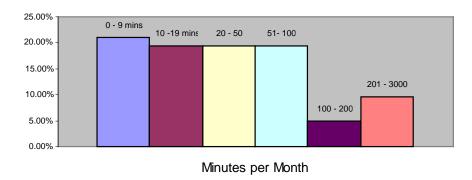
Excluding those five who record all their programs, the average size of each personal archive is 60 hours.



Size of Personal Audio Archive

The average rate of growth of an individual's audio archive is 5.3 hours per month.

However, this average is affected by those who are recording all or large amounts of their program. If we exclude the top 10% (6), the average rate of growth for the remaining 90 % (52) is a rate of growth of 36 minutes per month.



Grow th Rate of Personal Archives

Recording Format of Personal Audio Archives

80.5% (50) – CD audio
6.5% (4) – CD-ROM using the archiving function of *Netia*.
5% (3) – minidisk
1.5% (1) – Real Audio
6.5% (4) – have no personal audio archive.

Cataloguing of Personal Audio Archives

69% (43) - create a list of items written on each individual CD cover

8% (5) – use a printed rundown in paper form.

Therefore 77% (48) of people (or 83% of those who have personal archives) have no ability to search their archive using computer software.

The remaining people use a variety of software to catalogue their archives:

5% (3) – Word 3% (2) – Excel 1.5% (1) – itunes 6.5% (4) – the archiving function of Netia.

Reasons for Having a Personal Audio Archive

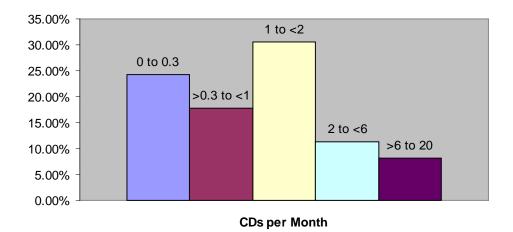
Asked if the primary reason for archiving audio was for their curriculum vitae (CV), for reuse in their program, or for the long term reuse by the station, the response was:

27% (17) – their CV
10% (6) – reuse in their program
10% (6) – the station
19% (12) – their CV and their program
27.5% (17) – their CV and their program and the station
6.5% (4) – have no personal archive.

Therefore 37.5% (23) of people considered the long term use by the station in their collation of a personal archive.

5.1d Burning CDs

92% (57) of people burn CDs at work. On average people burn 2.4 CDs a month. This average is influenced by a few people who burn many CDs, so if we exclude the top 8% (6), the average drops to 1 CD per month.



Number of CDs Burnt

Impact of CD Burner Availability

When asked if the availability of CD burners affected the amount people archived audio the response was:

26% (16) – yes 74% (46) – no.

5.1e The Archiving Function of Netia – Awareness and Use

19% (12) of people used the archiving function of *Netia* to burn CD-ROMs on a regular or semi-regular basis.

55% (34) – were not aware of the existence of the archiving function of *Netia*.
43.5% (27) – were aware of it, but of these 18% (11) have never used it.
1.5% (1) – not applicable (only worked in WA regional station without *Netia*).

Awareness of Access to Archive's Remote Audio Database

The Connect to Remote Database function of *Netia* allows staff to search the *Netia* databases of other stations and then to 'drag' audio directly from that database to their own. Since the increases in bandwidth (usually from 64kbps to 128kbps) to regional stations in late 2005, and then a further increase (usually from 128kbps to 512kbps) in 2007, more use has been made of this function to share audio.

In the NSW folder on the network is an icon that allows the user to connect to the Archives database. It contains only a small fraction of the total archives, but includes music and interviews that often relate to celebrities for use to coincide with anniversaries.

When asked if they were aware of the availability of this material via connection through this icon the response was:

21% (13) – yes 63% (39) – no 16% (10) – NA as it is not available from WA or SA.

Staff in SA reported that they could only access the Netia databases of other stations

within their state.

Of the 21% who were aware of this data base, 10% (6) made use of it.

Searching the Netia Database

100% of users of *Netia* were aware of how to search the *Netia* database by arranging items by field (clicking on the top of a particular field to order the list of items in the database by that field), limiting the search by selecting a program or user, and limiting the search by entering a key word in the title field.

Sharing and Searching of Rundowns

Being able to locate easily items within an audio archive is essential for the archive to be of any use. This requires a computer database.

Currently most program rundowns are complied in Microsoft Word. Although not ideal, if all rundowns are systematically saved in a shared folder on the local server, this collection of rundowns can act as an archive database (assuming the audio of each program is also archived).

Folders containing several Microsoft Word documents can be searched for a particular key word, which allows staff to establish on what day and at what time a person was interviewed, or a particular subject raised.

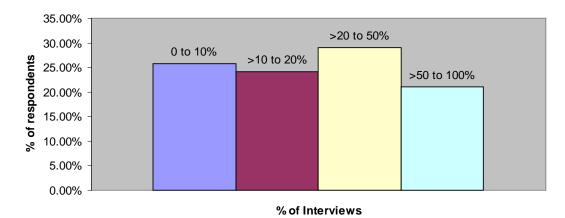
68% (42) of respondents indicated that program rundowns were saved in a shared folder on the local server in their station. The remaining 32% (20) said this did not happen at their station.

76% (47) of respondents were aware of how to search a rundown or folder full of rundowns for a key word, and are in the practice of doing so. 24% (15) were not aware of how to do this.

5.1f Attitudes to Audio Archiving

Percentage of Interviews that should be Archived

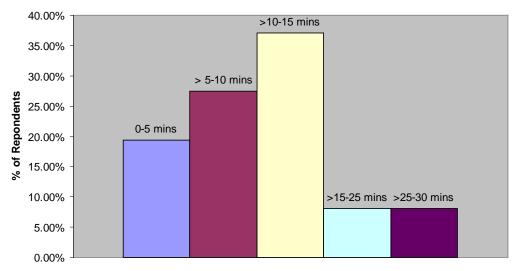
When asked what percentage of the interviews conducted on their program they thought should be archived, the average response was 38%. The breakdown of responses is as follows:



% of Interviews that should be Archived

Time Archiving Deserves

When asked what they considered to be a reasonable investment of time in the process of audio archiving, the average response was 12.4 minutes per day. The breakdown of responses is as follows:



Time Archiving Deserves

Minutes Per Day

5.1g General Comments Regarding Local Radio Archiving

The final question of the survey gave respondents the opportunity to provide general comments relating to the archiving of ABC Local Radio Programs. 60 of the 62 interviewees provided a response to this question. Analysis of these 60 responses led the author to summarise them into nine categories, as defined by the primary point made in the response.

22 of the 60 responses (37%) indicated that they believed ABC Local Radio management should provide greater support for the process of archiving. The specific area where the respondent believed greater support was required varied.

13 of the 22 (59%) believed more awareness and training in relation to the issue of archiving and the process involved is required. Five of the 22 (23%) felt more technical support was required, be it in the form of having *Netia* function correctly, increasing *Netia*'s hard disk capacity, having a searchable database of all archived material, or having an automated archiving function. Four respondents (18%) suggested that support in the form of a system of archiving programs was required, with one wanting that to be in place in order to know what material had already been broadcast.

Nine of the 60 respondents (15%) said that the subject of archiving material had never been mentioned by ABC Local Radio management, or that they had never given any thought to the subject.

A further nine respondents (15%) stated that they archived some or all of the material they produced. This was usually accompanied by a positive comment indicating that they found their archives useful in their day-to-day work and felt reassured knowing that these archives were available to them.

Six of the 60 respondents (10%) suggested that they believed that the task of archiving had been neglected and under-resourced by the ABC. An additional three of the 60 respondents (5%) expressed the opinion that support for archiving within ABC Local Radio had declined from the situation in previous years.

Five of the 60 respondents (13%) indicated that they did not believe that they have time to comprehensively archive their programs. This was often accompanied by a statement suggesting that more archive-specific resources should be allocated by ABC Local Radio management to address this situation.

Two of the 60 respondents (3%) suggested that the web be used more to archive and distribute program material. The final respondent (2%) stated simply that they intend to incorporate more archiving of their program into their daily work.

A full list of the responses in provided in Appendix I.

5.2 Interview Derived Data

The research process involved several unstructured interviews with members of ABC Local Radio management and ABC Archives and Library Services staff. These interviews gathered significant qualitative data.

Although the results of the survey indicate a low level of audio archiving amongst ABC Local Radio staff, there are some locations where significant amounts of material are being preserved and reused.

702 Local Radio Sydney

702 Local Radio Sydney services the largest audience of any Local Radio station. Since 2002 the station has been using the archiving function of *Netia* to burn all locally produced programs to CD-ROM. This has resulted in several shelves of CD-ROMs which are located in the offices of 702. All program rundowns are written in Microsoft Word and saved on the local server which gives all staff access to these documents.

Using the Microsoft Windows search function that allows one to search for a word or phrase within a folder of Microsoft Word documents, staff are able to enter a keyword and recover all documents that contain this word. The name of the interviewee, the location, or the subject discussed, is typically entered as keywords. The documents are opened and when the appropriate interview has been found, the audio is located by means of the date and program in the *Netia* database of archived items. The audio is then reloaded into *Netia* for use. Although not a perfectly efficient system, 702 has a comprehensive audio archive and the ability to conduct a computer-based search in order to locate and reuse items.

702 is making use of their archive. Statements of interviewees are verified, small pieces of audio are rebroadcast, and complete programs are rebroadcast over the internet on occasion such as during the cricket where ABC Local Radio does not have the rights to stream the cricket commentary.³²⁶ It is a valuable resource and demonstrates that ABC Local Radio stations could have been archiving their material over recent years.

128

South East Morning Program

In the town of Bega on the far south coast of NSW, the presenter of *A South East Morning*, Tim Holt, has archived every one of his programs since 2003. Like 702, he has utilised the archiving function of *Netia*, and burns the audio to CD-ROM. He purchases good quality CDs himself and, to date, has not had any fail when retrieving audio.

Daily rundowns are written in Microsoft Word, and interviews located using the keyword search function of Windows. It is worth noting than many ABC Local Radio staff use this search function to retrieve information in their rundowns such as contact numbers. As noted above, 76% of respondents were able to conduct such searches.

Tim Holt indicated that several times a week he would re-broadcast sections of audio (grabs) from previous programs. During summer programming he, on occasions, rebroadcasts entire interviews from his archive. Tim Holt has, for example, rebroadcast an interview with someone soon after that gentleman passed away.

By spending approximately ten minutes each day, Tim Holt is able to maintain his archive. He expressed a preference for having the audio and the metadata contained in the one file, and a relational database to search for items. Nonetheless, the result of his efforts is that a comprehensive audio archive of *A South East Morning* is being created with the ability to search folders of Microsoft Word documents for items using keywords. This example demonstrates that it is possible for individual Local Radio programs to archive their programs with the current resources.

Rundown Software

ABC Local Radio had the corporation's Application Development division create specialised software, designed to be used by all Programs Makers when constructing the rundown (running-order) of their daily programs. This software is called *Rundown* and it is currently in its pilot phase.

As noted previously, the current practice is for Program Makers to use Microsoft Word to document this information. Attempts have been made in the past to create an

application for the various ABC radio networks to use when documenting the contents of their respective programs. These attempts have not been successful, primarily due to the differing requirements of the various networks. *Rundown* has been created specifically for ABC Local Radio.³²⁷

Rundown is a web-based application that will run over the ABC's intranet. It is a database with four fields: *Time, Duration, Description*, and *Notes*. A fifth field, *Genre*, can be activated. The *Genre* field has pre-defined categories and exists in order to satisfy a condition of the ABC Charter which requires it to report to the Australian federal Parliament the proportion of each specific genre (for example, News and Current Affairs, Topical Information, Specialist Information, Arts and Entertainment, Music, Education, Sport) covered each year.

The *Time* field notes the actual time an item starts. The *Duration* field calculates the duration of each scheduled item in relation to the total duration of the program, and notifies the user if too much or too little material has been programmed. *Description* contains the majority of the information, including the name(s) of the interviewee(s), title(s), and the topic of conversation. *Notes* is the appropriate field for any additional information. This information is what would typically be contained in a rundown compiled in Microsoft Word. *Rundown* has been designed to be relatively easy to use, and therefore it is not anticipated that staff will be required to undergo specific training.

Rundown has been designed with a view to being used by all Local Radio stations. The potential benefits of the application include the fact that it would allow Program Makers to view the rundowns of all other Local Radio programs throughout Australia. There are currently no plans to restrict access between stations of programs, meaning all Program Makers could view the rundowns of all other programs.

Knowing what interviews have occurred on other ABC Local Radio programs is a valuable resource for program makers. Currently the mechanism for distributing this information is for individual Program Makers to email a copy of their rundown (in Microsoft Word or as text) to a distribution list that they have created. These lists are

generally not comprehensive and would typically be added to when a Program Maker has a request from another staff member to be added to their distribution list.

There has been a recent move to save rundowns on the station server, rather than on only the workstations of individual Program Makers. This ensures that others within the station are easily able to access these files, and that they are not deleted when a staff member leaves and their profile is deleted or rendered inaccessible. The relevance of this practice – in terms of the preservation of metadata in the form of daily rundowns – is what precipitated the inclusion of a survey question that sought to gather data on the extent of this practice.

Although it is feasible for Program Makers to examine rundowns saved on the servers of other stations, it is a time-consuming task due to bandwidth restrictions and the lack of a standardised system of structuring the folders in which they are saved. Further, 32% of respondents indicated that rundowns were not saved on the server in their station. The existing system restricts severely the ability of Program Makers to examine easily the rundowns of other ABC Local Radio programs.

If adopted nationally, *Rundown* would enable Local Radio staff to view quickly and easily the rundowns of other stations via the intranet. Slow data speeds have historically restricted the use of networked applications in regional stations. Most regional stations now have at least 512kbs which, it is anticipated, will be sufficient to use *Rundown* without frustrating delays.

One potential disadvantage of having all rundowns be available to all ABC Local Radio Program Makers is that some relevant information – such as private contact numbers – is confidential. This would mean that Program Makers would have to keep this confidential information in another location. A solution may be to have a field that can be viewed only by the creator of the individual rundown.

Apart from enabling Program Makers to view the rundowns of other programs, *Rundown* would also provide a searchable database of the contents of ABC Local Radio output.

131

Therefore, assuming the audio was preserved, it could be used as an archive database. It allows keyword searches, and for searches to be limited by station and program. It does not currently allow searches to be limited by date, but this function could be added.³²⁸

One of the limitations of *Rundown*, as it is currently configured, is that it does not allow a user to print an individual item from the *Description* field, only the entire rundown. This means that a Program Maker could not easily use *Rundown* to write an introduction and questions for a particular interview, and then print it out ready for use on-air. Assuming that this characteristic does not change, a Program Maker could be expected to continue to write interview introductions in Microsoft Word, rather then using *Rundown*.

The inability to write individual interview introductions in *Rundown* and print them out means that this information would have to be either rewritten or copied and pasted into *Rundown* in order to have it effectively saved in what would serve as the archive database. A more efficient method would be to have one application to compose both interview introductions and the program rundown. That would require *Rundown* to be comparable to Microsoft Word as a word-processor.

If *Rundown* is to serve effectively as a database for ABC Local Radio archives in the future, it is desirable that it be capable of interfacing with other databases internationally. There was no specific reference to the Dublin Core in the design of *Rundown*. Therefore the database structure does not match that of other Dublin Core databases. Further, there is currently no plan to create an identifier that would link the relevant information in *Rundown* directly to the appropriate *Netia* audio file.³²⁹

Rundown underwent a nine month trial in the ABC Newcastle station in 2007, and feedback from that trial is being used to produce certain enhancements, such as content flagging. The Manager of Application Development, Tim Sadler, indicated that the Content Services division of the ABC would play a role in the development of these enhancements, and that this division would be responsible for overseeing metadata standards.³³⁰

Despite its limitations, if adopted nationally, *Rundown* potentially satisfies a key requirement of an ABC Local Radio archive by creating a comprehensive database detailing all program contents that can be accessed, searched, and will be preserved into the future.

5.3 Practices of Other National Broadcasters

In order to be able to make some comparison with the situation in other countries, a brief investigation was done of public radio broadcasters in Austria, Denmark and the UK. This research involved unstructured interviews with archives staff and broadcasters. It did not constitute a comprehensive study of the radio archiving practices of these public broadcasters, but was undertaken in order to provide some opportunity for comparison with comparable organisations in other countries. These comparisons reveal that a significant degree of archiving is occurring in the regional radio stations of other national broadcasters, suggesting that it may be feasible and desirable for ABC Local Radio to preserve more of their output.

5.3a Radio Salzburg (Austria)

Radio Salzburg is part of the public broadcaster in Austria, ORF (Österreichischer Rundfunk). It services the province of Salzburg (Land Salzburg) which has a population of approximately 500,000 people. It is therefore, to some degree, equivalent to the regional ABC Local Radio stations that were the focus of the study.

The most obvious difference between ABC Local Radio stations and Radio Salzburg is that the latter has dedicated archives staff, where ABC Local Radio stations do not. These staff members spend their time archiving old radio material and gathering significant metadata in the process. This is a labour-intensive activity. As noted previously, one minute of radio can take three minutes to catalogue.

Radio Salzburg also archives audio that is 'flagged' by the program makers and journalists on the computer system for archiving. A copy of the audio is retained on the server of the computer system as a .bwf (Broadcast Wave Format) file, and two copies

are burnt to optical disk. The digitised radio archives were moved onto the server in 2006. There are over 1500 disks in the archive. Approximately 10% of interviews are being archived through the flagging method. Programs are also archived in their entirety once a week.

Although comprehensive metadata is compiled by the archives staff when cataloguing older material, it is the responsibility of program makers to create metadata for the current items that they have flagged as suitable for archiving. From the author's discussions with relevant archives staff and a brief examination of a sample of archived items, it is apparent that inadequate metadata is being created by the program makers. Although the software contains several fields, including some with drop-down boxes with pre-defined categories, it is usually only the 'title' field that is completed by the program maker.³³¹

This indicates that program makers have minimal awareness of the need to provide comprehensive metadata in order to create a usable radio archive. One can speculate that program makers are primarily archiving items for their own future use and reference, and giving little thought to those who may wish to search the archive in the future.

Reinhardt Pirnbacher is an experienced radio presenter with Radio Salzburg. He stated that, as was the case in Australia, legislation regarding archiving in Austria had not included reference to audio and therefore there had been no mandated archiving of radio output.

Radio Salzburg moved to a digital broadcast platform in 1996, and this was followed by the disposal of many tapes with valuable material. Therefore, when a radio presenter by the name of Heinz Conrads passed away, the station had no examples of his program archived, despite him having worked for approximately 30 years. Radio Salzburg was fortunately able to obtain some material from the deceased presenter's wife.

Despite such an example, the audio archives containing locally relevant material available to Radio Salzburg program makers appears to be significantly more

substantial than that which an ABC Local Radio Program Maker has access to. The most obvious advantage is that the Radio Salzburg archive is on-site with dedicated staff to assist in the rapid retrieval of material. Audio located in other sites within Austria are obtained via a file transfer or as a CD in the post.³³²

Radio Salzburg program makers are able to search the archives using keywords via a computer database. The more established practice of audio archiving has meant that there are two databases – one old and one new. A lack of consistency in the fields means they cannot easily be merged.³³³

Although clearly better resourced than ABC Local Radio regional stations when it comes to archiving, Radio Salzburg also demonstrates a lack of awareness amongst staff of the importance of creating comprehensive metadata appears to be compromising the archive. It is also worth noting that the majority of interviews are not being archived.

5.3b Danmarks Radio (Denmark)

Danmarks Radio (DR) is the national public broadcaster and, despite the name, includes television services. There are nine local radio stations spread throughout the country, the last of which was converted to a digital broadcasting platform in 2000. Subsequent to the author's interviews with several archives staff at DR in late 2004, services were centralised in Copenhagen.

Program makers in the regional stations flag items as suitable for archiving. The archiving staff, of which approximately 13 deal with radio output, then determine if each item is to archived, and ensure that comprehensive metadata has been compiled. The national network of DR is archived in its entirety as .bwf files, but without detailed metadata.³³⁴ As the quantity of audio archived is rising, the quantity and quality of the accompanying metadata is in relative decline.³³⁵ Program makers providing insufficient metadata is also an issue, meaning that archives staff have to take the time to re-listen in order to gather the information that has been omitted.³³⁶ It is worth noting that only a minority of flagged items are ultimately archived.

DR's archives department is well resourced and utilising digital storage and computer networks to distribute material. Issues of inadequate metadata appear to be compensated for by a significant number of dedicated archives staff who maintain quality control. DR represents an example of what is possible when an audio archive is well funded. However, the disparity of resources between DR and ABC Local Radio means there are few direct lessons that can be learned from the Danish system.

5.3c British Broadcasting Corporation

Examination of the British Broadcasting Corporation (BBC) took the form of unstructured interviews with Alex Emery, Presenter/Producer of the 4 pm to 7pm program on BBC Wiltshire. As a daily talk-based program created by two staff that services a regional area, it is reasonably equivalent to those of ABC Local radio in regional stations.

The broadcasting software run on the Digital Audio Workstations (DAW) in BBC Wiltshire is called Radio Man. The audio of the previous week's programs is automatically recorded and available to program makers, although material more than a week old is deleted. Information is often verified and small segments of audio occasionally replayed in subsequent programs.

In order to archive a program, the program maker must save a copy of the audio in the archiving folder. A member of the archives staff then archives it by burning copies of it to optical disk. Ms Emery stated that she archived approximately one show every week, but believed that if she decided to archive significantly more, this would not pose any difficulties.

Radio Man only offers one field where metadata for the audio of the program can be inserted. However it accepts a large number of characters meaning significant amounts of information can be inserted. Ms Emery would typically enter her name, the date, and a selection of key words.

An important accompaniment to Radio Man is the Electronic News Production Service (ENPS). This is the software that program makers use to prepare the rundown (running

order) of the program and to write scripts (introductions and questions) for interviews. It has several frames, including a feed of headlines and instant messaging with other BBC employees. Whilst the program is going to air, after an item has been broadcast it is marked as such. Scripts for contentious issues are particularly important as they provide a written record of what was said. The text can be searched using key words and the search restricted to particular stations or time periods.

The text entered into the ENPS is retained and effectively provides a database that can be searched to determine what items have been previously broadcast. It is suitable as an archives database, except to the extent that it does not indicate if the actual audio has also been retained. If all audio was archived, this audio in combination with the ENPS would provide a reasonably comprehensive and accessible archive.

Program Makers are able to search the rundowns of other programs in their own station and other BBC stations, although access is restricted and increases as a staff member is gradually granted higher levels of clearance. Items in the rundown of another program cannot be viewed until they have been approved (ticked green in the ENPS) by the producers of that program.

Alex Emery indicated that archiving of material has been emphasised by BBC management with statements being made in meetings and emails being sent reminding staff to remember to retain audio. This message was usually delivered in the context that material was required to be submitted for radio awards, rather than in order to create a comprehensive archive of daily output. It is worth noting the comparison with many respondents to the survey of ABC Local Radio staff who stated that they could never recall having management encourage them to archive audio from their programs.

Chaper Six – Conclusions:

This chapter provides accurate and considered conclusions, as well as recommendations designed to improve the audio archiving practices of ABC Local Radio.

6.1 Hypotheses and Results

This study began with the formulation of several hypotheses. This section considers each hypothesis and compares it to the relevant results.

1. The majority of staff do not access or contribute material to ABC Archives and Library Services.

This is partially correct. 79% have never contributed material, which constitutes a majority. 34% have never accessed material – a minority.

2. There is no comprehensive system of audio archiving in ABC Local Radio.

This is correct. Although individual stations (702 in Sydney and 92.5 ABC Central Coast) and individual presenters (for example Tim Holt in Bega) are archiving in a comprehensive manner, that is not the case for ABC Local Radio as a whole. The vast majority of output is not archived.

3. Little or no audio is being archived in ABC Local Radio stations.

This is correct. Apart from a few exceptions, little or no audio is being archived in each ABC Local Radio station.

4. The majority of staff are not aware of *Netia's* archiving function.

This is correct. 55% are not aware of *Netia*'s archiving function, which constitutes a majority. Only 19% use *Netia*'s archiving function on a regular or semi-regular basis.

5. The majority of staff are not aware of how to access remotely items from *Netia's* archives database.

This is correct. 63% of respondents indicated that they are not aware of how to complete this task. This question was not applicable to staff from SA and WA (a further 16% of respondents) as their network configuration does not allow access to *Netia's* archives database.

6. The majority of staff have a minimal amount of material in a personal audio archive.

Perhaps a poorly worded hypothesis due to its imprecise nature, the author regards this to be incorrect to the extent that more material has been, and is being, archived than the author had anticipated. Excluding the 8% who archive all their output and the 6.5% who archive nothing, the average archive size of a personal archive for the remaining 85.5% is 60 hours. Although a small minority of the total output, it still constitutes a significant amount of audio material. It is true that the average figure is inflated by the high volumes archived by a few, and one could argue that the majority have personal archives of less that 30 hours – a minimal percentage of their total audio output.

7. The majority of staff are not collecting metadata in a database that would allow their personal archive to be searched using computer-based technology.

This is correct. Only 16% of respondents are entering metadata into software that allows their personal archive to be searched with the assistance of computer-based technology.

8. Staff do not consider archiving to be important, and believe that less than 10% of their interviews should be archived.

This is incorrect. A high proportion of respondents expressed their belief that archiving was important, and that, on average, 38% of their interviews should be archived.

9. Staff are unwilling to devote the amount of time required to implement audio archiving.

This is incorrect. On average, respondents are willing to devote 12.4 minutes per day to the task of archiving. Although no exact figures exist for how much time a comprehensive system of archiving would require due to the fact that it would depend on the efficiency of the system, the author considers 12.4 minutes to be sufficient to complete all tasks associated with archiving output in a comprehensive manner.

10. The majority of staff do not currently possess the skills required to implement and operate an audio archive.

This is incorrect. The primary tasks for Program Makers in relation to implementing and operating an audio archive relate to compiling and accessing metadata, and recording audio. 100% of respondents are able to enter data and search the *Netia* database using various functions to limit the search. 76% of respondents are able to search folders of Microsoft Word documents using keywords. 68% of respondents are saving their rundowns on a shared drive. 92% of respondents are able to burn CDs at work. Therefore, it is possible to conclude that the majority of staff already have the skills required to implement and operate an audio archive.

The hypotheses of this study did not expect that ABC Local radio staff were archiving large amounts of audio, or that they ready or willing to implement a comprehensive system of audio archiving. These hypotheses have been proved correct to the degree that large amounts of audio are not being archived, but incorrect to the degree that staff

have indicated themselves to be both willing and able to implement a regime of comprehensive audio archiving were it to be implemented.

6.2 Responsibility and Opportunity

This study sought to use the techniques of research to establish a clear picture of the current audio archiving practices of ABC Local Radio Programs, and to determine to what extent staff possessed the skills and inclination required to improve its practices in this arena. As demonstrated by the fact that some hypotheses were correct and other proved wrong, the author has had some beliefs confirmed, and also been surprised by what he has learned.

In absolute terms the current picture is bleak. The author was informed that the interim report he delivered to ABC management in mid-2006 did cause some concern and precipitate meetings to discuss the negative conclusions drawn. This was not a surprise considering that the data indicated that virtually no material from the vast output of ABC Local Radio was being submitted to ABC Archives and Library Services, and that a very small percentage was being preserved in a structured way in a few individual stations.

This material is an asset and every day that good material – created at considerable expense – is not preserved, is a lost opportunity for the organisation. To the author's knowledge, these meetings have not yet been followed by action designed to implement rapidly a comprehensive system of archiving, or even to increase current levels. The daily loss of material continues.

The author considers this loss to be tragic, as it is part of the oral history of our culture that is being discarded. It is all the more unfortunate when one considers how many of the factors required to archive effectively ABC Local Radio output, and then to utilise that archive, are already in place. As has been revealed, some individuals and stations are already archiving with the current technology and resources.

The study demonstrated that Program Makers do value archives of their programs. The majority of them already have their own personal archive, and indicated that they would

be willing to devote, on average, 12.5 minutes per day to archiving. This was considerably more than the author had anticipated.

Staff already have the ability, from their experience with *Netia*, to create and search a database of items. The majority are able to burn audio to CDs (although the author would argue keeping audio files on hard disk is a better investment), and many expressed frustration that more emphasis was not given to the practice of audio archiving. On average respondents believed 38% of their interviews should be archived. This figure was also higher than the author had expected.

Although many factors have contributed to the current situation, the author's primary conclusion is that the overwhelming failure of ABC Local Radio to archive its output has been a failure of management. The impact of the relevant legislation, restrictive budgets and the limits of preservation and cataloguing technology have, in the past, provided some justification for this failure. However, the current skills of staff and technological resources already available to the organisation are such that ABC Local Radio should be archiving today's programs.

Arguably, the failure of management to have implemented a comprehensive system of archiving at this point in time is depriving the Australian community of a valuable asset. To this extent, ABC Local Radio management is not fulfilling its obligations to the Australian public, and the author is unable to identify any reasonable justification for this failure. Therefore, the author must conclude that, at best, management has displayed a lack of interest in the task of archiving.

Given that the study has revealed that the existing ABC Local Radio technology is capable of archiving, that staff value archives and are willing to devote a significant amount of time to archiving, that they have the basic skills required to create an archive, and that the most common general comment from respondents was they believed more managerial support was required, at worst the conclusion is that there has been a failure of management. Ultimately, responsibility for the fact that archiving has not occurred during a period when there have been no significant barriers to the introduction of a coordinated system of archiving must lie with ABC Local Radio management.

On many occasions whilst working as an ABC Local Radio Program Maker, the author has spoken to members of the Local Radio audience who have expressed their belief that all ABC Local Radio output from previous decades has been archived. This usually occurs when they are requesting a copy of a previously conducted interview – sometimes from several years ago. When the author has informed them that such archives do not exist, and indeed that copies of yesterday's or last week's program do not exist, their response is usually surprise and disappointment.

Although the author considers it reasonable that little archiving occurred in previous decades, he believes that it is not reasonable that more archiving is not occurring now. Not to do so deprives the audience of the future, both immediate and distant. Furthermore, it deprives Program Makers of a valuable resource in the construction of quality programming. As the demands for higher productivity from Program Makers continue to grow, archives are a resource that would reduce the need for staff to continually work (unpaid) overtime in order to complete their tasks – as is the usual practice.

The value of archived material is illustrated by examples such as Tim Holt's use of his archives to fill programs during the Summer period, and Radio National's *Late Night Live* program which (despite the name) now broadcasts one archived program a week. This constitutes considerable value to the network by creating an additional hour of programming at a much reduced cost.

Radio is a relatively inexpensive medium, and much of what is broadcast on ABC Local Radio has little value in terms of its historical significance. However, much does deserve to be preserved and made available to Program Makers and the Australian public in the future.

6.3 Recommendations

Despite concluding that ABC Local Radio has failed to fulfil its obligations to the public in 143

regard to archiving, the author is optimistic that this omission can, and soon will, be rectified. As noted, the author believes that the staff already possess the skills and inclination necessary to complete such a task. The remaining factors are the technological tools, and for management to have the will to implement an archiving regime.

Storage

The technological tools are arguably imminent. Firstly, as noted previously, *Rundown* has the potential to be used as a database for an audio archive. Secondly, the upgrade of *Netia* that occurred in 2007 has dramatically increased the amount of hard disk space available. Stations such as ABC Far North in Cairns have experienced an increase from 300 hours to 5000 hours of audio storage.

The focus of this study on the ability of staff to burn CDs and the availability of CD burners stemmed from the expectation that it would be some years before regional stations would have sufficient hard disk space to store the annual output of the station, and therefore the audio would have to be burned to CD in the interim. However, the recent dramatic increase in hard disk space – from 300 to 5000 hours in a typical regional station – provides the opportunity to archive material to hard disk rather than burning it to CD. Hans and de Koster concluded in 2004 that, when one considers the labour component, archiving audio to CDs is not cost efficient.³³⁷ The subsequent decline in the real cost of hard disk space strengthens that argument.

Holding the audio on the Netia hard drive would:

- save the time required for staff to burn the CDs
- avoid the need to store the CDs in ABC regional stations which ideally would occur in temperature and humidity controlled environments that do not exist in ABC Local Radio stations
- avoid the danger that the CDs will become damaged or corrode
- avoid the need to engage in the time-consuming process of reloading audio from a CD when archived material is required – instead it can be instantly accessed via a *Netia* workstation within the station, or with some delay (whilst being

transferred) to another ABC station.

A strategy of archiving all ABC Local Radio output to hard drive rather than CDs would require the regular purchase of additional hard drive capacity. As noted, ABC Local Radio produces approximately 2000 hours of unduplicated radio each week, or approximately 100,000 hours a year (the weeks of Summer programming result in a significantly reduced output). The constantly declining cost of hard disk space means it is more efficient to purchase this space as required. This would constitute an additional cost to ABC Local Radio, but one that, the author believes, would constitute a sound investment as it would result in the creation of a more valuable, secure, and easily accessed asset.

Quantity

There is an argument that only a selection of interviews should be archived. Wright and Williams conclude that it is more efficient to preserve the bulk of current content rather than take a piecemeal approach.³³⁸ The author concurs, and recommends that ABC Local Radio simply archive their entire output. The author knows from his experience that removing items from a program and saving them individually is time consuming. This means that staff – who are always under time pressures – will be disinclined to archive if it requires significant additional work. An entire program can be recorded either automatically or with minimal effort.

Further, it is often difficult to know what interviews will be considered valuable in the future. A relatively unknown local person may one day become internationally famous. Given the high cost of labour and the low cost of hard disk space, the author believes that it is preferable to archive the entire program rather than have Program Makers select individual items. It will require less time and ensure the archive is comprehensive. This recommendation has been conveyed to ABC Archives and Library Services.

Metadata

The development of *Rundown* provides a significant cause for optimism for someone such as the author who wishes to see a comprehensive system of ABC Local Radio

archiving implemented in the near future. When the author's interim report was delivered to ABC management it precipitated meetings between ABC Archives and Library Services and ABC Local Radio, where the former suggested that software be implemented that would allow rundowns to serve as metadata for an audio archive. Local Radio's response was that such software was already being developed.

As noted, *Rundown* has been trialled and is in the process of being enhanced. The author recommends fast-tracking the completion of *Rundown's* development, followed by a national 'rollout'.

Further, the author recommends that *Rundown*:

- Make reference to the Dublin Core and ensure that it produces data that corresponds with the Dublin Core Element Set in order that it will be able to interface with other databases – including the databases of ABC Archives and Library Services
- Include a field that has the option of being only viewed by the creator, in order to allow staff to enter confidential information that they do not wish to share with other Program Makers
- Include a feature that will allow items to be tagged for historical significance in order to facilitate future retrieval of items with archival value
- Include advanced search options to allow searches limited by features such as keywords, absence of keywords, program, duration, and date or period broadcast
- Include a feature that would allow introductions to individual stories to be written directly into *Rundown* and printed out as individual pages, whilst still allowing the entire program to be printed in a single page without these introductions in their entirety being included (and therefore confusing the rundown with too much text).

There will always be debate regarding how exactly a piece of software like *Rundown* should be designed. The key recommendation is that it is implemented nationally as soon as possible in order to allow ABC Local Radio to start the process of archiving. Although some stations and Program Makers are archiving material using Microsoft

Word documents to store metadata (and potentially this practice could be expanded), there are significant advantages in having a relational database holding the metadata, and have one source of all metadata rather than two. *Rundown* has the potential to hold this metadata in a secure and accessible manner.

In summary the recommendations of this study are:

- 1. Store audio on Netia's hard disk rather than CDs;
- 2. Record and archive all audio rather than selected interviews; and
- 3. Enhance and implement *Rundown* nationally as soon as possible in order that it may serve as the ABC Local Radio archives database.

6.4 Future Research

As this study was the first, to the author's knowledge, to survey the attitudes and practices in relation to audio archiving of ABC Local Radio staff, future research could potentially repeat this process in order to determine any changes.

If the archiving of audio does increase in the near future, it would be possible to assess how this has impacted on ABC Local Radio programs. It would be interesting to determine if having an audio archive of locally produced material actually led staff to use that archive. The author has detected a belief amongst many Program Makers that all content should be 'fresh' and 'current', and to use archived material is boring and constitutes a lazy approach to producing a radio program. Perhaps this attitude would change when staff had an easily accessible archive and they found it could enhance the quality of their programs, but perhaps such a change would not unless it was driven by management.

An analysis of the costs and benefits of audio archives to ABC Local Radio could be conducted. This would include consideration of the costs of storing and accessing the audio, compiling and accessing metadata, and an estimate of the value of the archived material to the network in terms of the reduced cost of program production that resulted from rebroadcasting material, and an assessment of how the inclusion of archived material enhanced (or otherwise) the quality of ABC Local Radio Programs.

This study has sought to put forward an argument that the output of ABC Local Radio should be archived, but has not specifically investigated the degree to which radio archives are appreciated by the Australian community. Certainly the author enjoys listening to audio that was created in the past, particularly if he originally heard it when it was current. Although perhaps more suited to the field of psychology than communications, an interesting area of study would be to examine how people react to hearing archived audio.

As noted previously, the spoken word has an ability to convey emotions and the personality of an individual in a way that, the author believes, the written word does not. Therefore, re-listening to the voice of someone who has been heard in the past may be capable of producing strong emotional reactions, and precipitating vivid recollections of experiences from decades gone by. Often a smell of something from the past can bring back a memory of a past event and the emotions that surrounded it. Perhaps archived audio is capable of doing the same. Such a study could establish how valuable audio archives are, and to whom.

Finally, if future ABC Local Radio archives are made available to the public, a study could be conducted examining the extent to which these archives were being accessed by the public. The ABC is a public broadcaster and its assets are those of the Australian community. If they are preserved for the future then the public of the future will have the opportunity to make use of them if they wish. It will be interesting to see if they will have that opportunity, and if they will take it.

Glossary:

Archive: refers generally to audio archives, as opposed to text based archives.

Grab: refers to a small section of an interview that is edited out of a complete interview. Radio news journalists would typically read the text relating to a particular story and then play a 'grab' from the relevant person of approximately 20 seconds in length. In the Programs context, a 'grab' of up to two minutes of audio could be taken from a previous interview and re-broadcast in the context of a follow up interview.

Metadata: Data about data. In the context of audio archiving, it is the data associated with the audio files. This can describe both the technical characteristics relating to formats and conversion histories, and content characteristics such as names of people speaking, location, subject and producer. In this study the term is used to define content characteristics unless otherwise specified. For ease of access, metadata is typically contained in a database that can be sorted and searched with keywords in all fields. The design of the metadata database is critical to efficient and effective archiving.

Netia: The name of the Digital Audio Workstation (DAW) platform used by ABC Local Radio in many states of Australia, including NSW, QLD and NT. It allows audio to be recorded, edited and broadcast and is designed to be used by a radio station.

Networked: when a radio program is sent simultaneously to multiple ABC Local Radio stations. When an individual station is not broadcasting a program generated in its own studios, it will broadcast a networked program from another Local Radio station.

News and news: As with Programs and programs, 'News' refers to the division within ABC Radio that generates the news.

Program Maker(s): The staff of ABC Local Radio stations are Program Makers and Journalists. These are official job classifications and therefore it is capitalised. When referring to equivalent positions in other countries, the term 'program maker(s)' will be used but not capitalised.

Programs and programs: As outlined in the Background section, 'Programs' refers to the division of ABC Local Radio that is responsible for the non-news current affairs, and rural component of each day's broadcast. The term 'programs' refers to an individual radio show. Each program is typically between one and three hours in length.

Rundown and *Rundown*: a 'rundown' is also referred to as a 'running order'. It is a list of the items contained in a particular program. Rundowns created for ABC Local Radio programs are typically one page long and written using Microsoft Word. They will include the approximate time of an interview, the name and title of the interview, and a sentence or two describing the subject discussed. *Rundown* is the name of the software being developed to serve as template for the rundowns of all ABC Local Radio Programs. It runs over the ABC intranet and potentially can provide a relational database for an audio archive.

Rural: As with News and Programs, 'Rural' is a division of ABC Radio. Most regional stations will have one Rural Reporter.

State-wide: A program that is networked to all or a majority or Local ABC regions in a state or territory.

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Appendices:

Appendix I: General Comments Regarding Archiving

The following list of comments regarding the subject of archiving in ABC Local Radio was gathered from respondents as part of the survey process. The results are in a random order.

- Maybe it's something that national archives could publicise. I was not really aware that national archives existed for the first year I was here.
- I'm sure that it would be good to save more items from the show but we don't have time to do that.
- There are good things done in every program and I guess they should be kept. I have not really thought about it.
- Years ago there were archives officers in Adelaide and they tended to prompt us to archive. It is ad hoc in the ABC. We've gone away from being a diligent keeper of history to being a bit slack. It is down the list of priorities. We burn things as CD audio and keep them in order of date with items written on the covers. We don't have any list of what we've got that can be searched in digital form.
- I'm surprised that no one has told me about this, but then it's not surprising as training has gone out the window. It is important but a lot of people are not doing it because it's a pain. I have to ask the Regional Program Manager to burn CDs.
- Good to have a lot of material archived for future use and for awards. We like to
 use clips or sound effects or grabs to set up stories. I don't like doing it, but I do
 spend up to two hours a week on archiving. We need a template to archive rather
 than having to reinvent the wheel at every station. I think we underutilise our
 program people who are not working on live programs. Some of these experts

should be working on a national archive system. There is a lack of distribution of information...some simple advice that's not one of the 100 emails I get every day.

- It's obvious it's not being used to its full advantage. We would use the audio archive every week. We would grab audio from the archive disks once every month or two.
- I am not prepared to do things that are not part of my performance review. There
 is a cultural thing missing. Perhaps we should be asking other stations what they
 have been archiving. We need to build a culture of archiving. The 10 inch tape
 was a good start, but it ends up in the drawer. It needs to be driven by middle
 managers (I guess that's me).
- Bring back the news and operations people who could attend to people on the front counter so we don't have to do everything because we're spread too thin. It would be great to have archives but time is the problem – having time to filter out what needs to be archived. It's hard to know what will become important.
- I have been archiving my show for two years, it's a simple procedure and it gives you a resource that would otherwise be lost. Someone will pass away or an issue will come up. I have gone back two years or even longer to get audio. Once a month I would use the archive.
- I am interested in the way other programs such as national programs are being archived. Interesting that people think keeping the whole program is reasonable, even 7 hours of cricket, yet that does not happen in Local Radio.
- I'm aware that we can easily record and that makes it easy to archive, but I'm not sure how it's done here in the ABC. I assume it's reasonably good as there is always material available.

- The problem is that it's informal. One person may take it seriously but no one else does so then it's not an effective archive. The ABC thinks it can just be built into people's jobs but it's not developed, which means a lot of important local material does not exist. It was more efficient when people used to put a tape in the cupboard. The tapes are well preserved and easy to identify it is a more durable system. The directive came down two to three years ago that we needed to archive. We would cut out about 5% of the interviews and archive them on *Netia* CD-ROM, so only the very strong stuff. Initially we were told to archive the whole program but then they changed their mind before the starting date. There needs to be a system so that the next person can use it.
- I will try to incorporate more archiving.
- Especially for a producer, I think if there was a bit more awareness of archiving that would be good – more knowledge of how to retrieve things would mean more things were used.
- The CD-ROM and burning issue is a big one, particularly due to time constraints.
 We need to have someone coordinating archiving. Perhaps there is no need to save all the shows, but we should save occasional items.
- Our CD burner broke some time ago and it has not been replaced so we have to export the audio and then burn using another burning program. So it takes a lot longer than it should.
- It would be good to build that into your normal work profile for each day's work, if it was supported. It is something we should be doing and that I've been wanted to do.
- Ironically, since the improvement in technology, time constraints mean less is being archived. We used to send it on tape. The web was potentially a good place to put audio, but now we are discouraged from putting up audio as only 5 -

7% are looking at audio – plus the lack of space. Some of the Soundbank stuff was obscure and of questionable quality, which led to some concern over the archives. If the ABC is serious about archives, management needs to dedicate a couple of people who could trawl the rundowns. If they called Program Makers, they could check its suitability and then stick it on to *Netia*.

- I think when we all have CD burners that will make it a lot easier. I think the ABC should archive. It needs to adopt a policy on what should be archived, and how to catalogue it. Training would be required. We would be best off archiving locally. I stumbled across the archiving function, and have then made staff aware of it, but CD burning limitations exist.
- A lot of our early stuff was on reel to reel. A lot of that stuff is now almost unplayable and I would like to be able to recover it. There is some valuable stuff. There is a lack of material locally that's been archived. Not enough attention has been paid to it in the past – to archive in local stations. There's nothing from many decades. Even when our previous manager passed away there was virtually nothing.
- If we had a huge Netia hard drive that we could put stuff in layers of importance local interest, national interest, themes, issues, etc. The quality of each interview could be tagged. All of these could be priorities with archiving. It's great to be able to archive at least 20% of our program – to be able to refer back to things is very valuable.
- Good to know about the RADA database. Would be well worth finding someone to be responsible for archiving and cleaning out *Netia*.
- Disappointing to go into the archives and not find much stuff relating to the local area. We've had important events and people will look back and wonder why there was nothing done.

- Maybe there needs to be more awareness of archiving and about accessing things as well. Broadcasters are aware, I think, that things should be kept because once it's gone, it's gone.
- We archive relevant pieces that we think will be useful. We burn them to CD audio with a list of what's on it printed on the cover, but there is no database as such.
- It's an amazing resource that is under resourced. Getting back material does take time, particularly when you have to reload the audio and then find the grab that you want. There's a lot of material that we don't need. *Netia's* archive system does take time to reload. We had a lot of problems with *Netia* when we had upgrades; disks were not burning as they were supposed to.
- I think archiving is handled in an ad hoc manner in regional stations, that the long term record is not really given much value at a managerial level. I've never had a conversation with a manager on archiving and what should be done. It's only really special events. Management can be a bit selfish about what they choose to keep. If they worked hard on an event they will want it to be kept, rather than e.g. archive the first day of a month. I keep the things where I think I've done well, rather than things that are generally representative of the history of the place. I wish I would do it more and in a better way. I had an old guy who I interviewed, who died in a car accident recently. I thought I had archived it but I hadn't, which I was very disappointed about as I wanted to give a copy to his family.
- If we knew what was available it would be good. I use my archives for my reference more than on-air.
- We need to think archiving and we don't then we'd think more of our product.
- I wish I did it more regularly (personal archiving) but it's not something that's pushed. I think it would be good to have a routine.

- We archive the entire program and it's reassuring to know it's all there. I rarely
 delve back into it but one day someone will die who we have spoken to and it will
 be useful. Because it takes so long to reload the CD-ROM, that limits its
 usefulness. Rundowns are most useful to finding talent. Once a month we use
 archived audio but usually it's still in *Netia* rather than taken from the CD-ROM.
 We need to keep visiting Ikea to get more shelves for the CDs. We're lucky that
 we're a new station so we have everything recorded and no changes of staff.
- It would be great to know more about what's available. It would be useful there's a lot of stuff there.
- Having a database would make it easier to find things. Some people keep a lot of stuff and it just sits around and creates a pile, others wipe everything. It's good to have a balance. If *Netia* goes out the window then CDs are more able to be played.
- It's not something I've thought about. It's never been mentioned bottom of the priority list.
- Interesting how much archiving isn't mentioned by managers.
- It would be great if *Netia* had an automatic archive function. I don't use *Netia* archiving as it burns as an MP2, so I can't play it at home, and *Netia* won't be around forever. If it burnt MP3 I would use it.
- I think the archives are very functional. It's a good way of keeping the show fresh (despite some irony) and I have tried to talk to people about doing it.
- We're all doing our own archiving for our own program. It would be good if we could do it on a national scale. There is no consistency with training. People in archives could do more to promote what they have.

- I produce little audio and as the station has never said I should archive stuff for the future, I don't. I would do it if I was asked. Most of my stuff is live-crosses to events, so I don't see much of it as being of archive value. If I had been told that it had value and could be reused, I would. I've never even really thought about reusing audio. It's not that I don't think it's important, but I have not been introduced to the idea that it's important. The stuff on the web is automatically archived which is where I do most of my work.
- Often we don't know what archives have. Some other departments have newsletters and it would be good to have a newsletter once a month to remind people what is available that archives have. The pressure of making a daily program means it's not in the front of my mind, so a reminder would be good. It would remind people it's an active resource.
- I did work for the BBC and it was easy to find things like music. I was wondering if that existed in the ABC. I guessed that it should exist here.
- I have not thought about it. I have only done it for personal use.
- We need to be more consistent about archiving. It's quite easy to send to archives, we have the technology. It needs to be part of the ethos of the corporation, but I include myself in that.
- There is a bit of a problem with training in the regions. I have been here for five years and it's never been brought up. There is no communication when staff change, and staff change often. Not many people are here more than five years. There is little thought given to training new staff.
- The system needs improvement. We tend to spend a lot of time looking for things and any way to make that easier and to allow others to use what we've produced would be a good thing.

- I used to send material to the national archives, but there were too many forms. I would like to see more archiving. I make a lot of use of archives. There can be a lack of archives staff when they are on holidays. Training in *Netia* archiving would be good.
- Getting things off the logger is very time consuming and I wish there was a better way. I would be happy to have a complete system.
- It comes up from time to time but it's never focused on in a way that has described it as essential. Management does not describe its feelings on archiving so it's left to slip, because we're allowed to let it slip. There is a lot of good material that would be worth keeping that is not being kept. We're missing a lot of opportunities for material reuse. Lack of human resources is the reason.
- It would be good to be informed about the *Netia* archiving. It is important to archive to revisit story ideas. Training at a regional level does not have enough focus on archiving, or other training for that matter. There's no time as a program team to think about archiving, so archiving has a low priority – which is a shame.
- We need more reminders from archives, like Soundbank even once a month.
 We're a new station with a 12 month digital logger for all programs. Also there is a fair bit of material in the station from a previous employee who archived a lot of stuff.
- I would like more archiving to happen for research on what's been done before. If you have a lazy announcer they are happy to put anything on air, and then you find it's been done before.
- Things of value do get missed because the program is not being recorded.

- I feel the net has good potential for archiving but don't know about that myself. I would like the ABC to keep more stuff on the web. I would like archiving to be taken more seriously, but that needs resources. Ideally each station would have a librarian, even if only part time. Often we are searching for people and old audio.
- A lot of people don't archive anything which is a shame. Also some people save everything which is going overboard. I have not given it much thought. It would be good to have more contact with archives staff to get more idea of what is wanted and to increase awareness of archives.
- It would be nice to have it all online. I find it easier to get a couple of minutes off audio CD rather than reload a large MP2 file. No one else is using the *Netia* archive function here, although they did at my previous ABC station.
- I would like more *Netia* space to archive more. It's valuable to have past material.
- I have not given a lot of thought to it, but it would be good if there were archiving systems in place.
- Clearly dedicated radio archives people are critical due to the amount of material produced, but all archives staff are in TV, yet most material comes in radio. More staff would make it easier.
- Once a month we get something off the minidisk, and find if very valuable.

Appendix II: Survey Information Sheet

Archiving Practices of ABC Local Radio Program Makers

This survey is being conducted by me, Jake Krausmann, as part of a Masters of Communication with Central Queensland University.

As a Local Radio Program Maker of a few years experience, I have noticed that not a lot of archiving of audio is done, particularly in regional stations.

This is significant when you consider that, with a digital production platform, archiving can be relatively easy. In the not too distant future the technology will allow more ABC audio archives to be available to Program Makers as audio-on-demand.

So I am doing a short survey to obtain a picture of what archiving is going on, how it is being done, and people's attitudes to archiving the stories they produce.

If you have never archived anything and have given little thought to audio archives then I am still very interesting in your response to the questions.

All participation is voluntary. You can decline to answer any questions, and may opt out of the survey at any point. Although your name and contact details will be gathered during the questionnaire, personal details will be removed before the data is distributed to other people so your responses cannot be linked to you as an individual.

Your decision to participate or not will not be conveyed to ABC management. Nonparticipation will not affect your employment standing.

Your time is appreciated.

Jake Krausmann <u>sjake@bigpond.net.au</u> 0427 339 450

Appendix III: Participant Release Form

Central Queensland University Consent Form (Original copy to be retained by the Researcher)

Archiving of ABC Local Radio Program

Iofconfirm that:

- 1. The nature and the purpose of the research have been explained to me and I agree to participate.
- 2. I understand that my participation is voluntary and I may not directly benefit from taking part in the project.
- I understand the information gained during the project may be published or exhibited and that I will not be identified by name in those publications or exhibitions.
- 4. I understand that my decision to participate or not will not be conveyed to ABC management and that non-participation will not affect my employment standing.
- 5. I understand the oral interviews may be recorded.
- 6. I understand I can withdraw from the study at any stage and that this will not affect my status now or in the future.
- 7. I understand that I have the right to refrain from answering any questions.
- 8. I understand that I will not receive any payment for participating in this project.
- 9. I understand that confidentiality is guaranteed and that access to audio recordings will be protected.
- 10. I understand that the information collected for this project is subject to CQU's Code of Conduct and the requirement that all data relating to the research project will be retained for a period of five years, and will be stored in a secure location, in a locked filing cabinet in a secure office of the Principle Supervisor Karl Neuenfeldt in the School of Contemporary Communications at Central Queensland University (Bundaberg).

- 11. I understand that I will be able to receive a plain English version of the findings of the study by emailing the researcher (<u>sjake@bigpond.net.au</u>) and requesting this information.
- 12. I confirm that I am over 18 years of age.

Please contact Central Queensland University's Research Services Office (07-4930-9828) should there be any concerns about the nature and/or conduct of this research project.

Signature of interviewee:

Date:

Appendix IV: Letter of Permission from Head Local Radio (ABC)

17 March 2006



Australian Broadcasting Corporation

ABC Southbank Centre 120 Southbank Boulevard Southbank VIC 3006

GPO Box 9994 Melbourne VIC 3001 Tel. +61 3 9626 1600 abc.net.au

To Whom It May Concern

Jake Krausmann is authorised to survey ABC Local Radio staff where they are willing and available to participate.

It is understood that the results of this research will be utilised for the completion of a Masters of Communication degree, and that it will be conducted in accordance with the ethical standards of Central Queensland University.

Yours sincerely

Michael Mason Head Local Radio

Appendix V: Questionnaire Results (spreadsheet)

(refer to digital version: Final Survey Master Archiving Jake Krausmann.xls)

Endnotes

Chapter One

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