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# Towards a digital land of song

A digital approach to the archival record of Welsh traditional music, its performance and its reception.

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Submitted for examination for the degree of PhD

Department of Music Faculty of Arts

The Open University in partnership with The National Library of Wales

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## **Abstract**

Divided between a prototype digital resource and a written companion, this research implements and examines some of the possibilities and prospects offered to the study of Welsh traditional music by digital humanities methods and approaches.

Built on a relational database, the digital prototype functions as a server-based annotated index of a sample of sources from the collections of the National Library of Wales. The user interface of the prototype uses hyperlinks and geographical mapping to express connections between sources of, figures involved with, and reception information relating to Welsh traditional music.

Its written companion serves as a contextual review and exposition of some of the research interests that have informed the creation of the prototype. Philosophically, these interests include the concepts of cultural geography, national identity, collective memory, archive, and their intersections with music. Musicologically, the research centres around twin axes: the traces of Welsh traditional music in the theoretical and literal archive constituted by the National Library of Wales, and the integration and inter-referencing of these traces in a virtual space in order to consider Welsh traditional music and its material record as a situated cultural activity.

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## **Preface**

This document constitutes part of the final submission of a PhD studentship that involved a collaborative partnership between the Open University (OU) and the National Library of Wales (NLW), and was funded through an Arts and Humanities Research Council (AHRC) Capacity Building Block-Grant.

The structure and content of the studentship and its output relate to the research interests of all three of these sponsoring organisations as well as those of the PhD candidate. Within the OU, the studentship comes under the University's Arts and their Audiences research theme, which emphasises the reception of the arts both historically and currently. Within the NLW, the studentship forms part of the development of a formal research programme hosted by the Library and involving a number of partner universities. The AHRC has an active Digital Transformations programme with which, although the block-grant scheme was not a portion of this programme, the themes of the studentship and its output correlate.

The studentship was advertised with the intention that its methods of study and dissemination should provide an exemplar of innovative digital methods applied to the topic of Welsh traditional music, representing the digital research agendas of the institutions involved, be they digital humanities, digital collections and digital transformations (as referred to by the OU, the NLW and the AHRC respectively).

The OU has created and is continuing to create a number of doctoral studentships in collaboration with archival institutions through the AHRC's collaborative doctoral award scheme. With its wide administrative and academic spread, its reputation for producing high quality but accessible research and teaching materials, and its commitment to the enhancement of both national and local culture, the OU is a seemingly natural companion for heritage institutions, and its partners in this scheme

include, amongst others, the NLW, the British Library, and the National Library of Scotland.

The emergence of these collaborative doctoral awards is evidence of an erosion of the conventional boundaries between academic and archival scholarship, boundaries that elements of this research continue to question. Both the OU and the NLW have embraced this trend with some enthusiasm. Though the Library has no internal means of providing academic qualifications, through partnerships with academic institutions, the creation of a Chair in Digital Collections within the Library's structure enabled the rationalisation and formation of an inter-institutional academic branch within the operations of the Library, the collaborative creation of what might be termed an NLW/[Partner Institution] department of digital research. This widening of the NLW's portfolio to include a programme of digital research might be viewed as a logical extension of its efforts in creating an online presence both for itself and for its collections. As well as allowing the Library to take part ownership of the research that it supports, the department and scheme permits a more experimental approach to the matters of digital collections, digitisation, digital presence, and digital research than might be regarded as acceptable for a provider of access to national memory; as such, the Library is able to benefit from the research experiences and experiments of its new collaborative wing even as the academic institutions and their researchers gain from enhanced access to and exploration of the Library's collections.

Having co-created the University of Wales Chair in Digital Collections in 2011, the NLW has partnered with the University of Wales and Aberystwyth University as well as with the OU in the creation of a group of PhD studentships that are centred around its collections, all sharing to some measure the common theme of digital study. Each studentship focuses on a particular aspect of the NLW's collection, and the areas of study so far include Welsh traditional music, the artworks of Kyffin Williams, the Library's collection of wills, and the early history of the Library itself. Beyond having an unusual level of access to the NLW's collections and infrastructure, the students

benefit from the expertise of the academic tutors from their respective universities, their shared tutor at the NLW, and the staff of the NLW more generally. In the case of this studentship, supervision has been led by Professors Trevor Herbert and David Rowland at the OU, and Professor Lorna Hughes (Chair in Digital Collections) at the NLW.

## Research outputs

As outlined above, this document represents the book component of a bi-partite PhD submission. It is intended to act as the written companion to a digital prototype, with the submission as a whole seeking to demonstrate some of the possibilities offered to the study of Welsh traditional music by digital methods of research and dissemination. As a companion document it aims to set out the philosophical, practical, and scholarly contexts from which the studentship and its output arise, some of the thought processes behind the development of the digital prototype, and an outline of its intended further development.

It is presented as a series of essays through which these aspects of the research process are considered. The essays are not consistently directly related to the topic of Welsh traditional music or to the prototype itself; rather, they gravitate around the various intersections of ideas that form the background to the work of creating the prototype. Though there will be interweaving discussions and some cross-references, it is hoped that the reader should be able, within reason, to read any one of its contextualising discussions as a discrete essay. The essays are not intended to be exhaustive in their scholarship, debate, and conclusions, but to frame the principal issues with which the studentship and its outputs have engaged, providing a rapid induction into and broad discussion of their topics as well as attempting to find in them problematic elements for deeper debate; they address some of the meeting points in the notions of archive, cultural memory and geography, national identity, humanities scholarship and digital

technology, and music and its reception as forms of cultural history.

The greater portion of the submission is a digital prototype, regarded as a non-book element under examination criteria, meaning that it uses a medium that is not reasonably transferrable to the printed page. This part of the submission consists of three elements:

- a database of traditional Welsh music and information about its sources,
   its performance, and its reception;
- an interactive portal, or front end, for this database;
- a collection of case-studies based on the information that the database contains, which are duplicated in the companion text.

#### These elements are intended to:

- provide an annotated index of a portion of the materials relevant to Welsh traditional music held at the National Library of Wales;
- provide a means of navigating parts of the Library's collections and the material record of Welsh traditional music;
- use digital methods in considering Welsh traditional music as a form of cultural and social history, presenting the results in a mixture of visual and narrative forms.

It is important to understand the submission as a piece of humanities research that considers theoretically and practically the influence of digital methods on musicological research rather than an information technology project using humanities data. The digital prototype is not intended to be a finished consumer-

grade product, but a potential point of departure for further study and/or the development of a larger, more wide-ranging digital resource on Welsh traditional music.

For the purposes of submission and examination, the digital prototype will be hosted on two servers:

http://intranet2.open.ac.uk/arts/research/welsh-traditional-music/
This is accessible with an username and password from the Open University,

and

http://andrewcusworth.com/phd-prototype/

The site installation on this server will be accessible without an username or password for the duration examination period. However, the site is unlisted and will not be available via search-engines.

Though hosted at different addresses, the two installations are identical in content and behaviour.

## Introduction

The genesis of this research was rooted in the experience of entering into the study of Welsh traditional music without being raised with any great awareness of it. That initial sense of ingenuousness was heightened, perhaps, by the fact that the research was embedded in the operations of the National Library of Wales, with its high profile digitisation projects and its large collections of musical and contextual materials - materials that a number of scholars have spent the better parts of their lives exploring. It might be argued that this naïve position was advantageous: if the purpose of this research has been to attempt a reimagining of how information about Welsh traditional music, its performance, its reception, and the documentary evidence of these things is presented, then perhaps the experience of approaching these things from a position of minimal foreknowledge, of being uncertain of how and where to start, and of how to judge the materials available for study was a useful one.

From such an unlettered position, it soon became apparent that current methods of indexing musical collections, of expressing and negotiating the musical and extramusical connections between sources are inadequate to the task of guiding a Library user through the archive and that, without guidance, the collections seem all but impenetrable. Impenetrable not because of a fundamental disparateness or disconnection of available information, but because there is so much replication, reiteration, and interconnection that the prospect of deciphering such a dense network of information as an un-entrained observer is a daunting one.

This, then, is the space into which this research inserts itself: into the potentiality of a future digital companion to Welsh traditional music, and into the laying-out of one of many possible foundations for such a project. It does not seek to establish an absolute, authoritative approach to this task; instead, the experience of examining these materials and their contents has led to an informal list of ideas, theories, tools and features that might be useful in approaching the task or may show something

interesting in a digital resource. From this list, a small group of possibilities emerged as potentially very useful or interesting and, through testing over the course of the research, have been consolidated into this document and the prototype website to which it is the companion. Through the whole process, there has been an undertone of avoiding the 'picture gallery' or 'mass transcription' systems employed by so many digital archives; of greater interest has been an attempt to find a means of expressing connections between objects rather than focusing on the objects themselves.

At its heart, the research has been related to the re-organisation of information, to data structures, encoding, decoding, and re-encoding, and to the integration of different types of data in an attempt to reconnect not only musical information, but the extramusical details of performance and reception. It has been about finding some means, however formative, of re-configuring the traces of activity that constitute the archival materials of Welsh traditional music in a way that allows links between them to be understood; it has been about creating a structure in which the skeletal remains of musical activity can be pieced together so as to better understand the life and form that they once possessed.

Over the course of the research period, there have been numerous opportunities for development, diversion and tangential research. A range of skills and a new language, or part of one at least, have been learned; innumerable hours have been spent experimenting with computer codes, database designs and assessing the value of one possible feature over another; reading has varied from the flippant to the philosophical, and music from the iconic to the all but unknown has been examined. At different stages in the research particular items, readings, or conversations have significantly altered either the proposed shape of the digital resource or the topics of discourse for inclusion in this document. As such, it has been an enquiry of experiences and of observations, of objects and the difficulties they pose, of contexts and the potentials they contain, of simplifying complex relationships and of

complicating simple objects.

Embedded at the National Library of Wales, treating a topic with a large complex of diverse sources, and inextricably entwined with the topics of digital study and culture more generally, this has been a research period of many strands. It has encompassed research on the nature of the archive in general and the specific importance of the National Library of Wales to Welsh nationhood and culture, on tranches of the Library's wealth of musical and historical source materials and their contexts and contents, on importance of music in the semiotic field of Welsh identity, and on the impact of digital methods and culture upon the study of music and upon academia and the archive more generally. Out of these diverse enquiries, this submission emerges as an attempt to address a fragmentary and complicated network of intellectual intersections and to open out them for discussion both individually and in combination.

## Research question

How can digital methods be used for organising archival information related to Welsh traditional music, its performance and its reception in a manner that can extend this area of scholarship and access to its sources?

## **Parameters**

The task of defining traditional music has been described by Sally Harper as akin to 'nailing jelly'. Rather than taking a fixed or dogmatic approach to the term 'Welsh traditional music' that would restrict the topic of interest to music handed down through oral tradition, the term is taken to include music that can be considered of

<sup>1.</sup> Harper, S., 'Introduction' to Kinney, P., Welsh Traditional Music, University of Wales Press, 2011, pp. xvii-xviii, p. xvii

relevance to the idea of recognisable national music, with particular interests in national song and in folk song. It might be said that this flexibility allows it to include not only 'traditional music' *per se*, but also music that is traditionally considered to be of Welsh origin or of importance in Welsh culture.

The use of the terms 'performance' and 'reception' is broad, encompassing print and manuscript copies, descriptions, discussions, and collection notes. As well as allowing for a wide range of source materials to be considered, such an approach to these terms provides an opportunity to discuss their inherent instability when used to describe materials such as the notes of folk-song collectors, musicians' tunebooks, and published collections of folk songs.

The period under consideration is bounded by two cultural movements. The first is the invention and ascendence of Welsh national music from the publications of John Parry, Ruabon, and into the long 19th century. The second is the emergence and early activities of the Welsh Folk-Song Society at the beginning of the 20th century, and the establishment of folk music as a cultural heritage of national importance.

The digital prototype indexes and describes in the region of thirty sources, seven of which are provided with digital surrogates; it contains in the region of thirty biographies of varying levels of detail, and over one hundred pieces of reception information drawn from sources such as book reviews, concert descriptions, diary entries, and newspaper articles. Though drawn from a small sample, the prototype website presents a complex network of information across some eight hundred pages that express in the region of three thousand interconnections, all of which are navigable through hyperlinks.

The database and interface have both been coded by the author, specifically for this research output. This has been a substantial undertaking that, as with all executable codes and the repositories they draw upon, is largely hidden from the end user. The

database comprises twenty-eight interlocking tables, some with thousands of entries; the interface runs to several hundred lines of executable code.

The database is encoded and operated in Structured Query Language (SQL) and delivered through a MySQL server. The user interface is written in a combination of HTML, PHP, JavaScript, and CSS. The geographical data visualisations are generated dynamically from the database and make use of MapBox, a commercial mapping system. The site has been tested on a variety of platforms and works with Apple iOS, Apple OS X and Windows with a range of browsers.

#### Literature review

The notion of a pure literature review in the context of this research is an unsatisfactory one: concerned as it is with a range of topics, media, and potential paradigms, it has been necessary to consider different literatures and contextual materials throughout this document. As such, the literature or contextual review for this research is for the most part integrated within the essays themselves. It is, therefore, perhaps most useful to consider a branch of literature not always readily apparent within the essays but still relevant to the discourse and processes of this document: that of Welsh traditional music scholarship.

The most prominent forum for the topic has, for more than a hundred years, been the *Journal of the Welsh Folk-Song Society*, more recently rebranded as *Canu Gwerin*. As well as summarising the activities of the Society itself, the journal has been a point of access both to scholarly articles about Welsh traditional music and its contexts, and to transcriptions of the music itself. As the rebranding would suggest, in recent decades the journal has had an increased emphasis on articles in the medium of Welsh. In itself this is an important development, demonstrating the vivacity of Welsh as a language of cultural and scholarly discourse within Wales; however, it is also arguable that, in the context of such a specialised field, this shift has created a language

boundary around the most recent developments in scholarship, a boundary that can be said on the one hand to have led to an increasing sense of introversion, and on the other to an increasing impenetrability of the topic for those not versed in Welsh. Without in anyway belittling the importance of the discussion of Welsh culture through the medium of Welsh, such introversion may be regarded as being in direct and significant contrast to the earliest activities and publications of the Society, which actively sought to extend knowledge of and engagement with Welsh traditional music beyond the geographical and linguistic borders of Wales, as demonstrated by the contributions made to the Society's journal by such prominent folk music scholars as Frank Kidson and Lucy Broadwood. A new, bilingual forum for the discussion of Welsh music emerged in the late 1990s in the form of Welsh Music History, a biennial publication that had currency from 1996 until 2004. Although casting its net wider than the discussion of Welsh traditional music, the periodical contained a number of articles either focussed on the musical traditions of Wales or were closely related to their study, as well as supplying every article in both Welsh and English.

Perhaps the most significant recent development in the scholarship of Wales' traditional music has been the publication of Phyllis Kinney's Welsh Traditional <usic, the first substantial overview of the subject since the publication W. S. Gwynn Williams' Welsh National Music and Dance in 1932. It might be asserted that Kinney and her late husband Meredydd Evans have become iconic figures in the study of Welsh music, and Welsh culture more generally, a status indicated by the publication of a book in their honour: Bearers of Song: Essays in Honour of Phyllis Kinney and Meredydd Evans, edited by Sally Harper and Wyn Thomas. The varying topics of these essays, like the articles of Welsh Music History, indicate to some extent the range of interests being pursued by scholars involved with Welsh music, amongst which is a rising interest in the rôle of Edward Williams (Iolo Morganwg) as Wales' first collector of folk song. Williams' musical transcriptions have recently provided a source of stimulation for study in the field, with a chapter on his relationship with traditional music by Daniel Huws appearing in Geraint Jenkins' A Rattleskull Genius, and a

sizeable - if controversial - edition of the songs by Leila Salisbury, *Alawon Gwerin Iolo Morganwg* published in 2012.

## Archive, music, nation

On Wednesday se'nnight, the Second Anniversary of this Society commenced at the Old Church, Abergavenny, under the auspices and with a success which must have been delightful to those who have clung with fond fidelity to the hope of reviving the literature and minstrelsy of a nation which once stood pre-eminently forward the land of song and of heroes.<sup>2</sup>

In the early 1800s, the phrase 'the land of song' was most likely to be used to refer to Italy, though it was also in occasional use for Ireland and for Scotland; yet, by the end of the century, the title was firmly attached to Wales, with the nation apparently revelling in a rejuvenated tradition of eisteddfodau, a thriving system of choral training and choirs, a strong interest in the music of the folk, and with the notion of 'a land of poets and singers' (gwlad beirdd a chantorion) enshrined in its de facto national anthem.

The passage above, drawn from a report on a meeting of the *Abergavenny Cymreigyddion* in 1835, contains an early use of the phrase 'land of song' in relation to Wales. Using the search results from *Welsh Newspapers Online* it is possible to trace the ascendance of the term's use in the Welsh press: from 3 appearances (with only one referring to Wales) between 1830 and 1839 to a peak of 221 appearances (mainly referring to Wales) between 1890 and 1899 (see figure 1).<sup>3</sup> The increasing use of the term would seem to reflect the success of a hoped for cultural revival, and a transition of usage from that of a rallying call to that of a - perhaps not entirely unbiassed -

<sup>2. &#</sup>x27;Abergavenny Cymreigyddion Society' in *The Cambrian, or General Weekly Advertiser for the Principality of Wales,* December 5th 1835, p. 4, http://welshnewspapers.llgc.org.uk/en/page/view/3328654/ART18, last accessed 7.3.2016. This extract contains what may be one of the earliest published uses of the phrase 'land of song' in relation to Wales.

<sup>3.</sup> These figures are accurate at the time of writing and reflect the use of the term generally rather than with specific reference to Wales, but do not account for syndication of articles or problems such as inaccuracies in optical character recognition. As such, the frequency of earlier appearances of the term in particular should be treated with caution; however, as the series progresses, the number of references to Italy as a 'land of song' remain approximately stable whilst the number of such references to Wales increases exponentially.

#### description:

Sir, - Wales lays claim, and justly so, to the proud title of being the "land of song." Its singers have a world-wide reputation, whether in solo or chorus singing.<sup>4</sup>

Decade	Appearances
1830-39	3
1840-49	. 6
1850-59	10
1860-69	. 11
1870-79	34
1880-89	74
1890-99	221
1900-09	211
1910-20	153

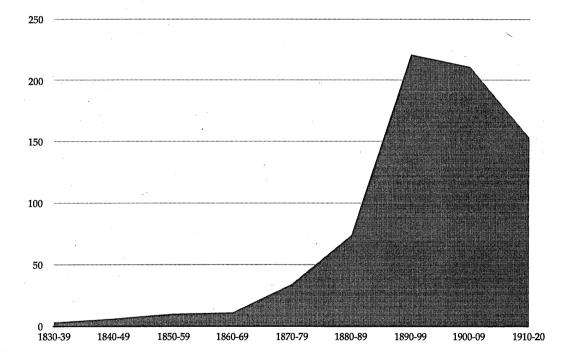


Figure 1: Table and graph charting the use of the term 'land of song' in relation to Wales in Welsh Newspapers Online.

As well as commemorating a cultural blossoming in Wales, the notion of Wales as a land of song suggests that music became a cultural and social marker of Wales itself,

<sup>4.</sup> Norman, H., 'Barry and its Bands' letter in *Barry Dock News*, 29 December 1899, p. 7, http://newspapers.library.wales/view/4599355/4599362/51/, last accessed 7.3.2016.

Likewise, it emphasises the connections, interactions and tensions between Wales as a geographical place and the cultural borders framed by its music. The belief that Wales 'once stood pre-eminently forward the land of song and of heroes' attaches the term to concerns such as nostalgia, cultural and collective memory and to the traces of this memory indicated by the presence and absence of material evidence. These concepts of cultural geography, national identity, collective memory, archive, the trace, nostalgia, and their intersections with one another and with music are amongst the principal interests of this research. Though these themes are treated, to some extent, philosophically, the discussions surrounding them are rooted in the experience of using and attempting to interrelate the collections of materials relating to the traditional music of Wales, its performance, and its reception that are housed at the National Library of Wales.

The National Library of Wales is by its own description 'one of the world's great libraries'. It houses a substantial collection of documentary materials related to Wales and the Welsh as well as being one of the UK's legal deposit libraries - the only one to be located in Wales. The formation and foundation of the National Library and the National Museum of Wales took place during a period of what Kenneth Morgan has described as 'cultural reawakening' in Wales. With the earlier establishment of the University of Wales colleges in Aberystwyth, Bangor, and Cardiff, the foundation of the National Museum and Library were important political symbols for an ascendant Welsh nationalism, serving as tangible recognition of Wales as a culturally distinct entity within Britain and thus entitled to a sense of cultural autonomy. It has been suggested that the foundation of the National Museum and the NLW was 'essentially

<sup>5.</sup> National Library of Wales, 'About', National Library of Wales, <a href="http://www.llgc.org.uk/">http://www.llgc.org.uk/</a> index.php?id=6, last accessed 6.10.2013.

<sup>6.</sup> Morgan, K. O., Rebirth of a Nation: Wales 1880-1980, Oxford University Press, 1982, p.

<sup>7.</sup> Mason, R., 'Representing a Nation' in Myths, Memories and Futures: The National Library and National Museum in the Story of Wales, ed. John Osmond, Institute of Welsh Affairs, 2007, pp. 23-37, p. 27.

[...] anti-British,'8 an opposition to the hegemonic culture of England.9

The Library has been described as 'a mountain of knowledge about Wales and the world,'<sup>10</sup> a description that encapsulates the dualistic purposes assigned to the Library early on in the history of its conception and realisation. The foreshadowings of a movement in favour of a national library for Wales began to appear in the 1850s, and were further outlined by Thomas Gee, editor and printer of the newspaper *Baned ac Amserau Cymru*, in an editorial column of his newspaper in 1860.<sup>11</sup> Andrew Green, formerly Librarian of the NLW, outlined Gee's vision as follows:

... a copy of every book printed in the Welsh language, every book about Wales published in other languages, all manuscripts of Welsh relevance, and books on all subjects irrespective of whether or not they dealt with Wales.<sup>12</sup>

A more concerted effort towards the founding of such cultural institutions as a national library and a national museum grew somewhat later, partly through the activities of the nationalist *Cymru Fydd* movement, beginning in 1886. After the demise of *Cymru Fydd* in 1896, the lobbying was championed by the Liberal politician John Herbert Lewis, husband of the folk song collector Ruth Herbert Lewis. In 1905, after a political shift in favour of granting national institutions to Wales, the motion was officially accepted and Parliament both agreed to and budgeted for the foundation of a library and a museum. The NLW, along with the National Museum, was granted a Royal Charter on 19th March 1907, with the pair representing

<sup>8.</sup> Morgan, P., 'The Creation of the National Museum and Library' in Representing a Nation in Myths, Memories and Futures: The National Library and National Museum in the Story of Wales, ed. John Osmond, Institute of Welsh Affairs, 2007, pp. 13-22, p. 20.

<sup>9.</sup> Green, A., 'The Future of National Libraries and Archives' in *Myths, Memories and Futures: The National Library and National Museum in the Story of Wales*, ed. John Osmond, *Institute of Welsh Affairs*, 2007, pp. 77-91, p. 80.

<sup>10.</sup> National Library of Wales, 'About', National Library of Wales.

<sup>11.</sup> Morgan, P., 'The Creation of the National Museum and Library', p. 14.

<sup>12.</sup> Green, A., 'The Future of National Libraries and Archives', p. 78.

... the most glorious of a large number of institutions created in the 'first age of devolution' from the 1880s to 1914.<sup>13</sup>

As an outcome of a nationalist resistance to sublimation into the major identity of Britain, the granting of the Royal Charters was a significant recognition of Wales as possessing a distinct cultural identity, a *volte face* from the laconically dismissive description of Wales in the ninth edition of *Encyclopaedia Britannica*:

#### WALES. see ENGLAND.14

The siting of the NLW was a source of debate, eventually settled in favour of Aberystwyth partly by the determination of the bibliophile, Sir John Williams, who offered to donate his books to the NLW should it be built in Aberystwyth as opposed to Cardiff, and partly by the existence of a collection of Welsh books at University College, Aberystwyth. The design, by Sidney Greenslade, was chosen by competition in 1909, and the foundation stone was laid by a Royal party at a ceremony on the 15th of July 1911. The building was first occupied in 1916, and contemporary references point to a rapid adoption of the then new facility amongst researchers of Welsh culture. Its nationalistic significance, distinctive architecture and commanding position combine to make the Library an 'iconic building' in the cultural context Wales; set imposingly on a hill above Aberystwyth, the NLW was and is a physical assertion of the presence, consequence, and permanence of Welsh cultural independence. The interval of the presence o

<sup>13.</sup> Morgan, P., The Creation of the National Museum and Library', p. 13.

<sup>14.</sup> Wales', in *Encyclopaedia Britannica*, Ninth Edition, Vol. 24, Charles Scribner's Sons, 1888, p. 324.

<sup>15.</sup> National Library of Wales, 'About', *National Library of Wales*, and Morgan, P., 'The Creation of the National Museum and Library', p. 17.

<sup>16.</sup> National Library of Wales, 'About', National Library of Wales.

<sup>17.</sup> It is worth noting that, with the rapid growth of Aberystwyth and its University over the last century, the Library's current surroundings are less accommodating to this visual statement.

Since it first came into use, the NLW has been substantially extended both physically and organisationally; the former in order to house an ever-increasing mass of materials, and the latter in the creation and incorporation of the National Screen and Sound Archive of Wales (NSSAW). More recently, the Library has sought to establish itself as a formal centre for research with particular interests in digital collections and digital methods of research and dissemination, formalising a department of research in its most recent restructuring process.

The Library as it now stands is a substantial monument to the culture of the nation it represents. Though adorned with the Welsh flag, the mixture of architectural traits visible in and the re-shaping of the approaches to the building betray the compromises made between the visual language of the Library as a national institution and the Library as a functional space: the art-deco/modernist facade of the original building and first extension contrasts starkly with the more utilitarian extensions that sit behind it; changes to facilitate access to the Library for those with mobility difficulties have left the main door, complete with an allegorical ascent through tiers of steps, in limbo between unused and unchangeable - now, its only utility is to be found in providing additional ventilation in hot weather; entry is made via a small portal at the base of the facade, leading into a reception area, shop, canteen and exhibition space rather than directly into the foyer of the Library itself. As well as a number of training rooms and a small theatre, the NSSAW is also located on the ground floor of the Library, distanced somewhat from the access points to the other collections.

What was the Library's main foyer is located on the first floor and incorporates a security point, a café, lockers, and seating. From the foyer the library user must choose between one of two reading rooms, North and South, each of which provides a differing body of materials: printed collections (books and periodicals) and other materials (manuscripts, maps, archives, art, photographs, and other items) respectively. Thus the North reading room functions in much the same manner as a typical reading room, assuming the spatial location of the legal deposit and copyright

aspect of the Library's work; the South reading room, then, is the notional locus of the items of special and unique importance to the understanding of Welsh culture. This reading cannot, of course, be applied consistently, but it serves to illustrate the physical representation of NLW's collections.

As well as its premises in Aberystwyth, the NLW has a significant presence online, providing access to its digital catalogues, its digitised items, and a number of special digital projects. The Library's full catalogue lists the majority of the Library's materials, though some parts of the collection are only digitally catalogued using an older system, ISYS, which requires greater skill on the part of the user to navigate. The recent special projects hosted by the Library are, for the most part, large scale digitisation projects that are interlinked with its programme of digital research. The most notable amongst these are the Welsh Newspapers Online project, the digitised collection of wills, Welsh Journals Online, From Warfare to Welfare, the Digital Mirror and the Library's contributions to the People's Collection, Cymru 1914, and the Welsh Ballads collection. It should not be omitted that the Library also hosts and maintains a wide range of other digital resources such as The Dictionary of Welsh Biography, and the more specialised resource on stained-glass windows in Wales - a joint venture with the Centre for Advanced Welsh and Celtic Studies.

The Library's collections represent an ever-increasing mass of cultural artefacts, expanding both through the accumulation of general published materials and through the Library's policies on the collection of the records of Welsh culture. These aims are enshrined in the Library's Royal Charter (2006), which decrees that the Library is to

to collect, preserve and give access to all kinds and forms of recorded knowledge, especially relating to Wales and the Welsh and other Celtic peoples, for the benefit of the public, including those engaged in research and learning.<sup>18</sup>

It has also been said that 'The National Library exists to collect, preserve and celebrate the heritage and culture of Wales.' These statements point towards a central dilemma in the Library's identity: its uniting of a library dedicated to the preservation of Welsh cultural artefacts with a legal deposit library is, at its core, a paradox. Both the term 'library' and the NLW's status as a legal deposit library suggest an access point to a commonly available body of knowledge material, a suggestion that is in tension with the Library's collection and advancement of specifically Welsh heritage.

It is a tension that can be interpreted in wilfully opposite manners. Antagonistically, it might be seen to subtly and problematically suggest that, whilst the wider discourse of publication represented by the legal deposit system is of interest in Wales, the discourse and evidence of Welsh culture are not only of particular relevance to Wales but are distinct from wider discussions and, to some extent, confined to Wales, its institutions, and its people. Conversely, and perhaps more realistically, it may be seen as an institutional establishment of parity between the macrocosm and the microcosm represented in the dual rôles, a balancing mediation of the relationship between the two. In more concrete terms, this latter understanding encodes an equalisation of the nominal and idealised 'complete picture' represented by the legal deposit function of the Library and its position as the locus of the documentary memory of the Welsh nation.

The co-existence of both general and special collections at the NLW is far from an unusual trait; many libraries, be they national, public, academic, or otherwise, incorporate both a more or less complete portal into published literature and a set of

<sup>18.</sup> National Library of Wales, *Supplemental Royal Charter* 2006, p. 1, http://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/llywodraethiant\_llgc/Siartr\_atodol\_2006/bdd\_str\_SiartrAtodol\_2006S.pdf, last accessed 7.3.2016.

National Library of Wales, 'Llyfrgell Genedlaethol Cymru/National Library of Wales' on Flickr, https://www.flickr.com/people/llgc, last accessed 7.3.2016.

cultural artefacts that are relatively unique to that collection. The important factor is that the special collections of the NLW seek to represent the 'heritage and culture of Wales' and, as such, the physical manifestations of a national collective memory and identity; to use the Library's own terminology,

the collections form the record of the memory of Wales, without which little historical work in any media would be possible.<sup>20</sup>

The importance of recording the 'memory of Wales' in the context of constructing a Welsh identity should not be underestimated. Ernest Renan suggests that

the essence of a nation is that all individuals have many things in common; and also that they have forgotten many things.<sup>21</sup>

This analysis refers to two factors of identity assumption and recognition: a semantic field of common signs and signifiers that are interpretable within a community and thus connect individuals to one another; and, from this, a consensus-led understanding of both history, current events, and future events. Later in his essay, Renan claims a hierarchy for these elements:

More valuable by far than common customs posts and frontiers conforming to strategic ideas is the fact of sharing, in the past, a glorious heritage and regrets, and of having, in the future, [a shared] programme to put into effect.<sup>22</sup>

Through these lenses, the NLW is not only an assertion of Wales' cultural autonomy, but also a concretion of the shared memory and lapse that is Renan's 'essence of a nation', an expression in documentary form of 'glorious heritage and regrets' and, in its collecting activities, 'a shared programme [...] put into effect'.

<sup>20.</sup> National Library of Wales, cited by Priddle, C., 'National Identity and the Digital Library: a Study of the British Library and the Llyfrgell Genedlaethol Cymru' in *Libri*, 2004, Vol. 54, pp. 158-168, p. 164.

<sup>21.</sup> Renan, E., 'What is a Nation?' in Olick, J. K., Seroussi, V. V., Levy, D., *The Collective Memory Reader*, Oxford University Press USA, 2011, pp. 80-83, p. 80.

<sup>22.</sup> Renan, E., 'What is a Nation?', p. 82.

It might be said, therefore, that the Library's processes of collection and, by extension, of acquisition, non-acquisition, inclusion, exclusion and disposal have a direct impact on the creation of a recognisable Welsh cultural corpus, a corpus partly based upon the notion of the Library as a physical manifestation of a collective memory. The collection processes themselves imply a set of institutionally approved cultural boundaries which tacitly confer Welsh national importance to the items that they encompass as well as maintaining the distinction between what is Welsh and what is not Welsh, enacting the commonalities of remembering and forgetting that constitute Renan's 'essence of a nation'. If, as Pierre Nora has suggested,

Modern memory is, above all, archive. It relies entirely on the materiality of the trace, the immediacy of the recording, the visibility of the image,<sup>23</sup>

then Charlotte Priddle's observation, that

National identity can be seen as an invented character, and that character is supported by a set peopled with specific landmarks, landscapes and traditions that can collectively be referred to as artifacts of heritage [...] The preservation of this heritage, which provides the quasi-historical underpinnings for the mythic celebrations of national identity, has fallen to various memory institutions, not least of which are the national libraries of each nation,<sup>24</sup>

can be extended to suggest that not only does a national library become a preserver of heritage and thus a support for identity, but that a dynamic relationship between these memory institutions and the validity of their contents as the shared heritage, the shared archival memory, of a nation comes to exist. In this model, there is a bilateral connection between the 'Welshness' of an artefact and its inclusion in the collections of the NLW: particular objects or documents add to the nationalistic value and character

<sup>23.</sup> Nora, P., 'Between Memory and History: Les Lieux de Mémoire', in *Representations*, No. 26, Spring, 1989, University of California Press, pp. 7-24, p. 13, http://www.jstor.org/stable/2928520, last accessed 7.3.2016.

<sup>24.</sup> Priddle, C., 'National Identity and the Digital Library: a Study of the British Library and the Llyfrgell Genedlaethol Cymru', p. 159.

of the collection; others are, to an extent, lent these qualities by the collection itself.

At the time of writing, the NLW's policies for the collection of Welsh materials are fundamentally inclusive; however, the Library itself recognises that, in the future, a more active rôle may be required:

The Library, naturally, has a special duty towards Wales and its historical and cultural record. We will continue to collect as comprehensively as possible in this area, in all formats, whilst at the same time recognising that we need to select carefully when dealing with unique material such as archives and, increasingly, as printed and electronic publications continue to grow, we will have to be selective in this area as well.<sup>25</sup>

Whatever the extent to which the NLW's selection and collection processes are passive or active, it may still be said that

The archive is formed via acts of consignation through which residence is assigned and deposit made, but, while it is undoubtedly the aim of consignation to produce a coherent corpus in which each artifact or element translates itself in terms of a unified and ideal arrangement, this very same feature of the archive gives it a double economy. Every archive is at once conservative and institutive, wanting to reflect and defend the givenness of that which it inherits while engaging in highly artificial or unnatural processes and acts of selection and gathering in order to do so. Indeed, since it must make its own law, the archive is radically inventive or revolutionary as much as it is conservative,<sup>26</sup>

and thus, the Library is framed as an arbiter of the validity and importance to Wales of an artefact, its topic, its provenance or its creator. It is, perhaps more by nature than by design, engaged in the invention of a Welsh cultural canon.

Though there may seem to be an underlying problem with using 'library' and 'archive' interchangeably, particularly with their differing undertones (the library and

<sup>25.</sup> National Library of Wales, National Library of Wales Collections Development Policy 2010 Principles and Guidelines, p. 9, http://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/dogfennaeth\_gorfforaethol/dog\_gorff\_pol\_dat\_cas\_10S.pdf, last accessed 7.3.2016.

<sup>26.</sup> Morgan Wortham, S., 'Archive Fever' in *The Derrida Dictionary*, Continuum, 2010, pp. 17-18.

its, admittedly modern, association with public information; the archive with its semantic ties to official record-keeping), doing so seems to reflect that the NLW does not comfortably rest beneath either term and to recognise the Foucault-ian view that the 'archive' is all-encompassing. It allows the introduction of an element of uncertainty in the categorisation of the institution:

Nothing is less reliable, nothing is less clear today than the word "archive." 27

The exchangeability of these terms is important in fully allowing the application of theories devoted to 'archive' to the NLW. In particular, Foucault's discussion of the archive and the 'historical a priori' is a useful touchstone in considering the importance of the Library to the scholarship and understanding of the available information about Wales, its people, and its culture. Though Foucault's use of the word 'archive' is almost impossibly conceptual, it is more than able to withstand a tightening of its focus; the broad concept that

the Archive is the first law of what can be said, the system that governs statements as unique events<sup>28</sup>

can be applied as functionally to an authorised system of information about a given field as it can to an holistic system of all things. In direct terms, the archive governs not only what is consigned to the archive, but that which emerges from it. That the collections of the NLW become the Archive of Foucault's law resonates strongly with the previously cited statement that

the collections form the record of the memory of Wales, without which little historical work in any media would be possible.<sup>29</sup>

<sup>27.</sup> Derrida, J., *Archive Fever: a Freudian Impression*, trans. Prenowitz, E., University of Chicago Press, 1998, p. 90.

<sup>28.</sup> Foucault, M., 'The Historical a Priori and the Archive', in Merewether, C., ed., *The Archive*, Whitechapel Gallery and The MIT Press, 2006, pp. 26-30, p. 28.

<sup>29.</sup> National Library of Wales, cited by Priddle, C., 'National Identity and the Digital Library: a Study of the British Library and the Llyfrgell Genedlaethol Cymru', p. 164.

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This echoes a more explicit statement made by Charles Merewether which, having aligned the NLW with the Archive, can now be applied:

One of the defining characteristics of the modern era has been the increasing significance given to the archive as a means by which historical knowledge and forms of remembrance are accumulated, stored and recovered. Created as much by state organizations and institutions as by individuals and groups, the archive, as distinct from a collection or library, constitutes a repository or foundation from which history is written.<sup>30</sup>

These reflections on the importance of the archive in the creation of history, in the establishment of negotiated understandings of societal and cultural events contribute to the view that such archives are, in fact, arbiters of the cultures they represent; that

To understand the legitimacy of a culture we need to investigate its relation to the archive, the site for the accumulation of records.<sup>31</sup>

Observations such as these reinforce the notion that the Library has multifarious rôles as repository, national symbol, arbiter of Welsh culture, and, theoretically, one of the stores out of which the history of Wales, its culture and people is written and understood.

Writing as dispassionately as possible, in considering the NLW as all of these things, it is worth observing that many of the scholars either working within or using the Library have a personal as well as professional interest in Welsh identity, nationhood, and culture. This interest, or investedness, may be as simple as self-identifying as 'Welsh', or it may have more complex origins involving family history, a political position, investment in an aspect of Welsh culture (music, poetry, or art), and so on. Whatever the case, there is in this situation what might be termed a cycle of

<sup>30.</sup> Merewether, C., 'Introduction// Art and the Archive' in Merewether, C., ed., *The Archive*, Whitechapel Gallery and The MIT Press, 2006, pp. 10-17, p. 10.

<sup>31.</sup> Featherstone, M., 'Archiving Cultures', in *The British Journal of Sociology* Vol. No. 51, Issue No. 1, January/March 2000, pp. 161-184, p. 161.

appreciation in the value of the Library's collections as Welsh cultural patrimony.

The operation of this cycle can be considered, simplistically, in much the same manner as the monetary cycle involved in a banking system. The Library's collections represent a store of cultural capital that has been created, more or less, by cultural producers (in a wide sense including academics, archivists, and librarians) and their activities. As such, scholars might be interpreted as shareholders in the capital. The capital can be drawn upon by the public, by other scholars, and by the government under which the Library operates, providing a means of personal development or of professional gain. Such benefits might result in further cultural production, which is added back in the cultural capital of the Library. In producing new cultural material from the capital stored by the Library, the shareholders and public alike affirm the value of the archive, raising its status and visibility in the known corpus of contemporary culture; the absorption of these documents into the capital raises its value through accretion. Combined, an inflationary effect takes place, enabled through and enabling the recognition of the Library as a 'record of the memory of Wales', as an incarnation of the 'large-scale solidarity' that constitutes a nation.<sup>32</sup> As such, it might be said that scholars working with, from, and out of the Library and its collections are exponents of the cultural heritage of Wales and its importance; that they are legates of the culture of Wales and its memorialisation and, therefore, of the nation of Wales itself.

In addition to providing a cultural repository from which the work of remembrancing the Welsh nation is able to draw, the NLW acts as a locus of Welsh culture both actively, through the various collections it houses and events that it presents, and metaphorically, as a physical space of and node in Welsh cultural activity. In addition to accruing cultural materials, the NLW has an active policy and rôle in presenting the nation and its heritage to a wider audience via the internet. In the publicity materials

<sup>32.</sup> Renan., E., 'What is a Nation?', p. 83.

for the Library's ongoing Theatre of Memory project, the stated aim of the programme is

to digitise as much as possible of the printed material published in Wales and about Wales and the Welsh people [...] giving Wales and the Welsh an enhanced online identity on a worldwide stage.<sup>33</sup>

It is arguable that this aim is less about the process of and accessibility offered by digitisation, than it is the increased exhibition of Welsh documentary memory and, more particularly, the reaffirmation of the importance of the cultural heritage of Wales beyond the nation's borders and in the digital world. For now, this urge for the creation of a conceptual space for Wales on the internet is perhaps most easily recognised not in terms of the interactions of websites and the creation of a Welsh web, but in the campaign for dedicated internet domains for the country - the recently phased in cymru and wales internet addresses. In essence, then, it is an act of digital colonisation or pioneering, an act of extending the cultural geography and independence of Wales into a new dimension - that of the network.

In light of this, it may be suggested that the digital portal into the Library's collection represents a virtual locus for the documentary cultural history of Wales that parallels the physical locus provided by the Library's building. Though these physical and digital spaces might at first appear to operate quite differently, the processes discussed thus far continue to operate in the digital sphere - perhaps more visibly than in the Library itself. Particular items are chosen for digitisation and further dissemination over and above other items, not only lending them doubly authorised credence as being of cultural importance, but exponentially increasing their visibility to both the Library's visitors and users, whether on or off line. Against these terms, the work of curating the NLW's online collections is a highly important and meaningful aspect of a stated portion of the Library's agenda: 'to celebrate the heritage and culture of

<sup>33.</sup> National Library of Wales, *Theatre of Memory*, p. 2, https://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/dogfennaeth\_gorfforaethol/dog\_gorff\_dog\_thycS.pdf, last accessed 7.3.2016.

As discussed elsewhere, the recognisability of the Library, its iconicity, is a factor in the creation of this intersection between its activities and their perceived cultural significance. In *Imagined Communities*, Benedict Anderson discusses the importance and interoperation of census, map and museum, referring occasionally to the replication of particular images - of isolated and maps or buildings - in the creation of the logo,

which by its emptiness, contextlessness, visual memorableness, and infinite reproducibility in every direction brought census and map, warp and woof, into an inerasable embrace.<sup>35</sup>

Though Anderson is discussing consolidation and 'logoisation' of nation, a similar concept can be applied to cultural and memory institutions which, through their work of cataloguing and categorisation (census), scholarly or popular publication (map), and preservation and display (museum), themselves begin to serve as avatars and as logos for the cultures they represent. Anderson's discussion centres around the graphical reduction of a space or an object in order to render it instantly recognisable, but there are outwards associations also - the name of the place or building, its flag, its symbol, and so on. In essence, this extends the field of study from the official representation of national symbology to that of brand creation and the institutional branding of cultural memory and activity.

Prominent in the physical spaces and publications of most memory and cultural institutions, branding is especially so in the online presences that these organisations maintain - a rule to which the NLW is no exception. The Library's website, online catalogue, digitised materials, and social media profiles all emphatically declare the digital presence and identity of the institution, pervading their use in a manner far

<sup>34.</sup> National Library of Wales, 'Llyfrgell Genedlaethol Cymru/National Library of Wales' on Flickr.

<sup>35.</sup> Anderson, B., Imagined Communities, revised edition, Verso Books, 2006, p. 185.

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more comprehensive than their physical equivalents. Every image of every digitised object, every search result, and every comment bears the Library's corporate labels, significantly deepening the earlier-discussed dynamic relationship between the archival institution and the objects it provides. As well as pronouncing that these resources are provided by agency of the NLW, pervasive branding is a means of creating the aforementioned virtual locus for the archive's content - it is the metaphorical décor of the digital reading room, a reading room without which, in line with its physical partner, the digital documents cannot be accessed. As such, access to the institution's materials is still all but entirely contingent upon the user visiting, or at least being directed towards, the geographical or virtual locus of the institution.

# Broken records, divided archives

The matter of language aside, perhaps most prominent amongst the challenges facing researchers in the fields of Welsh traditional music and Welsh music more generally is the divided nature of the archives that support their work. It is not a unique situation - many areas of research involve traversing the borders of different archives, whether within or across institutions. At its heart, this is a challenge of accessibility. For the sake of clarity, this use of the term 'accessibility' refers to what could be termed 'material accessibility' or 'access to documentary materials' and is distinct from what might be called 'information accessibility', which constitutes a debate as to the inclusivity or exclusivity of a document's content. In an institutional climate clouded by a conflation of these two interpretations of the word 'accessibility' and in which 'accessibility' is over-valorised by institutions and undervalued by users, it is all too easy to dismiss the importance of such a seemingly simple matter as gaining access either to a document or to a copy of its contents. This importance can be reaffirmed, albeit whimsically, by positing that modern scholarship's nostalgic relationship with the documentary materials lost to fire in the Library of Alexandria is, quintessentially, a matter of accessibility bounded by time as much as by location and socioeconomic factors. Deferring the discussion of access to material that has been completely or

partially lost until such time as retrieving it becomes technologically viable, there are three primary impediments to the material accessibility of the documentary sources of Welsh traditional music: the extra-archival division of materials between institutions, the intra-archival division of materials within institutions, and the navigation of the documentary materials that are contained in the archive.

Extra-archival divisions can be seen as the effects of the differing natures, remits and locations of the institutions that constitute Wales' store of documentary memory, and of the assignment of particular documents to one or another of these institutions. In terms of Welsh traditional music, the NLW can be regarded as the keeping the largest body of paper-based musical documents, whether unique or published, as well as of commerical recordings and of materials relating to reception history. Though the combination of these documents forms a densely populated mass of information about the topic, largely derived from a musically literate or historicising perspective, the Library keeps relatively few field recordings of music and oral history; the majority of such recordings held at the Library are amongst the Casgliad Llyfrgell Ceredigion (Ceredigion Library Collection), which has been deposited at the NLW. The Library and NSSAW have tended towards an emphasis on recorded broadcasts and commercial recordings, perhaps because of the relative newness of NSSAW and the pre-existence of the audio archive of the National Museum of Folk Life at St Ffagan's; this latter collection is the largest of its type in Wales, and owes much to the extensive field collecting efforts of D. Roy Saer and others in the 1960s. Likewise, a substantial collection of materials, including a number of important manuscripts, is maintained in the Welsh Traditional Music Archive of the Centre for Advanced Welsh Music Studies (CAWMS) at Bangor University. As might be expected, this situation has arisen partly arbitrarily, depending on the collecting interests of particular institutions at particular times, and partly through the deposition or donation of collections to specific institutions by their original owners or creators.

A practical example of this type of division can be found in researching the folk song

collecting activities of Ruth Herbert-Lewis. Folk-Songs Collected in Flintshire and the Vale of Clwyd (1914) is a printed collection of songs gathered from the environs of Ruth Herbert Lewis' home in Caerwys. A number of the songs this collection contains are included in a manuscript sent by Ruth Herbert Lewis to the then editor of the Journal of the Welsh Folk-Song Society, John Lloyd Williams for his advice and approval. This manuscript contains a number of songs and details not included in the printed version and is kept with the rest of the J. Lloyd Williams archive, which was deposited with the NLW by his family through several accessions beginning shortly after his death in 1945. Both the printed collection and the manuscript refer to the use of a phonographic recorder in the collection of the songs; a number of the phonographic cylinders that remain from this process are now in the care of the Museum of Welsh Life at St. Ffagan's. Amongst other outward references, connections are made to the work of Lewis Davies Jones (Llew Tegid), a prominent observer and collector of Welsh folk traditions a number of whose manuscripts are housed at Bangor University Library. As such, a full exploration of this single collection of fourteen songs requires research work in at least three of Wales archival institutions. Though the geographical distances between these institutions are not great in global terms, the continued paucity of Wales' travel infrastructure renders the inter-referencing of these archives impractical and expensive.

The intra-archival divisions are more subtle in both their manifestations and their effects; with the work of this research in mind, only those relevant to the NLW will be discussed here. The physical structure of the NLW is such that differing types of materials are viewed by the reader in different spaces of the Library: printed materials are viewed in the North Reading Room; manuscripts, maps, and other unique collections are viewed in the South Reading Room; audio and audiovisual materials are viewed in the NSSAW. Within this structure there are limitations to the speed of access, when documents can be called or viewed, and how many documents of a single type can be viewed concurrently. It is therefore impossible to view the musical documents of even the NLW alone as a united archive without having made very

careful and full arrangements with the Library in advance.

The third impediment refers to the granularity and material accessibility of the catalogues of these institutions. Of the three mentioned (the NLW, the National Museum of Welsh Life, and CAWMS), only the NLW has a searchable catalogue online; though the Museum of Folk Life gives access to a very limited number of its resources online, access to the collection is given with the caveat that only basic archival services are available owing to under-investment in the facility. Even in the case of the NLW's catalogue, it is a catalogue of objects rather than an index of contents which, though not a problem in itself, means that its records rarely reach the granularity of specifying the musical content of a given document, a trait shared with all but the most specialised and highly developed music archives. Given that many of the Library's music-related items (and sometimes whole collections within the wider umbrella of the institution) are entirely dedicated to music and are of interest principally to those in the field of music research, research in which the archive might more ideally be organised according to markers such as composer, melody, performer, performance, or text, this is a problematic situation.<sup>36</sup>

The outcome of these impediments, whether taken individually or in combination, is that the process of entrusting particular forms of physical media to organisations specialised in their preservation and access establishes boundaries - often physical - of inaccessibility between semantically related objects. It seems, therefore, unavoidable that institutions intended to preserve the physical manifestations of Wales' cultural memory from further fragmentation and loss are themselves contributors to its separation, and thereby to the very fragmentation they seek to prevent. In light of this, it might be suggested that, through their institutional, physical and archival divisions, the material records of Welsh traditional music and its experience, with all their physical complexity, represent a divided archive.

<sup>36.</sup> It must be stressed that this situation is typical rather than unique to the NLW.

In order to navigate this divided archive of the material record of Welsh traditional music, it has been necessary for researchers to produce their own aides-memoires. Whether by hand copying, indexing, creating spreadsheets, lists and personal databases, or creating images of materials, researchers must carry their transcribed experience of the archive with them in order to negotiate its boundaries and complexities effectively. Evidence of personal archival maps such as these already exist within the collections of the NLW, including J. Lloyd Williams' notebooks, transcriptions and card indexes, and Meredydd Evans' index.<sup>37</sup> Though some of these documents are kept by the Library and are even available for public access, they remain the physical traces of personal archival investigation and knowledge, the products of complex paper trails of research and, in the cases of J. Lloyd Williams and Meredydd Evans, also of musical experience. Cast in this light, these aids of memory, be they notebooks, transcriptions, photographs, essays or indexes, can be interpreted as hand-crafted, personal archival machines; they are microcosmic systems for circumnavigating 'structures of knowledge imposed after the fact' and guiding their creators through the archive. However, these documents are in essence manuscripts, operating in the paradigm of scribal transcription and re-transcription: as scholars explore these documents as elements of the archive in themselves, their nonreplicability has the potential to lead to a spiralling sequence of re-transcription, reannotation, and re-indexing as successive scholars are forced to laboriously copy out their predecessors' work in order to orientate their own. It is a paradigm in which a cycle of archival scholarship and acummulation is created, tending over time towards the infinite accretion of Jorge Luis Borges' dystopian vision, *The Library of Babel*.<sup>39</sup>

<sup>37.</sup> In many respects, the printed scholarship of the topic, especially the tracing of particular melodies or traditions through varying archival materials, is deeply entwined with these archival journeys.

<sup>38.</sup> Hitchcock, T., 'Digital Searching and the Re-formulation of Historical Knowledge', in Huges, L., Greengrass, M., *The Virtual Representation of the Past*, Ashgate, 2008, pp. 81-90, p. 89.

<sup>39.</sup> Borges, J. L., *The Library of Babel*, ed. Yates, D. A., Irby, J. E., via *Internet Archive*, https://archive.org/details/TheLibraryOfBabel, last accessed 7.3.2016.

Unlike Borges' library, the material record of Welsh traditional music is neither complete, nor restricted to either a single location or a single medium or type; it is by nature incomplete and fractured across locations, media, and information types. Narrowing the focus of this essay to the materials held at the NLW that fall within the period to which this study is dedicated (c. 1750 - c. 1925), the complexity of the material cultures of Wales' music can quickly be grasped. Amongst the parts of the Library's collections that have been explored non-exhaustively for this research are

- printed collections of music such as
  - national music collections by prominent harpists;
  - folk song collections;
  - published musical materials including
  - anthologies of Welsh music;
  - published arrangements for singers and instrumentalists;
  - the published traces of musical activity such as
  - programmes from cymanfaoedd canu;
  - newspaper reports and reviews;
- manuscript transcriptions of music including
  - the tune-books of performing musicians;

- transcriptions by song collectors; manuscript descriptions of musical experience including • diary entries; the contextual notes of song collectors; handlists of repertoires or concert programmes; letters about or including music; audio recordings, including • commercial and broadcast recordings of national song; • commercial, broadcast and field recordings of folk song; audio visual recordings including documentary footage; • entertainment footage;
- photographs including
  - documentary photographs of prominent musicians;
  - photographs of musical groups;
  - photographs of events.

These materials act to create a meshwork of presence and absence; the presence of the documentary traces of musical activity are the impressions of an event, a tradition, or a community that is now absent or, at the very least, is now temporally removed from the archival evidence; others can be interpreted as interpolations of material into these events, traditions, studies, and communities - or even the creation of new ones. The former group is perhaps best represented by manuscript descriptions of a musical encounter - a diary entry referring to a piece of music heard on the street, or the tune book of a practising musician; the latter is associated more with the publication of music for mass consumption - printed collections of melodies, commercial recordings, and the foundation of societies are amongst the more obvious examples to be found.

### Invented traditions, obscured customs

The differing natures of the two categories call to mind the notion of the invented tradition, the deliberate establishment of pseudo-historical, mythological customs and associations - a notion which conjures the spectre of national music and its importance in the semiotic field of national identity. In his contribution to *The invention of tradition*, 'From a Death to a View: the Hunt for a Welsh Past in the Romantic Period', Prys Morgan drew attention to some of the reinventions of Wales' musical life that took place during the eighteenth and nineteenth centuries. Two of these reinventions associate historically contemporary musical practice with a mythologised version of Wales' history and cultural heritage - the combination of the *eisteddfod* with Edward Williams' (*Iolo Morganwg*) invented *Gorsedd*, and the concretion of a body of national music by a group of prominent Welsh musicians; the third discusses the creation of a new set of musical activities that are related to the spread of radical politics and nonconformity and particularly include the flourishing of choral music and hymn singing.

In Wales the movement of revival and myth-making grew out of a crisis in Welsh life, when the very lifeblood of the nation seemed to be ebbing away. [...] It required a superhuman effort by a small number of patriots to force their fellow-countrymen to appreciate their heritage, to value what was their own. They felt that the only

way to bring this about was to ransack the past and transform it with imagination.<sup>40</sup>

These inventions and traditional-isations of new materials as well as reinterpretations of historical information can be interpreted as having been strongly associated with historical anxiety,

Wales in the eighteenth century did not have an unbroken or a fortunate historical tradition; it did not have a glorious or heroic past. Hence the rediscovery of the remote past, the Druids and the Celts and the others, had an astounding effect on the Welsh.<sup>41</sup>

This concept is neatly addressed in the second chapter of Svetlana Boym's *The future of nostalgia*:

Preoccupation with tradition and interpretation of tradition as an age-old ritual is a distinctly modern preoccupation, born out of anxiety about the vanishing past.<sup>42</sup>

Such historical anxiety, then, is a stimulus to nostalgia - 'stimulus to' rather than 'source of' because the latter would indicate that nostalgia is a passive quality rather than an active impetus. Every revolution, every increase in distance from the past is a new opportunity for the customs of the past to be venerated without being sullied by actual experience. This phenomenon can be observed, somewhat coarsely, even within the present research: the computer both threatens to replace and creates the tactile experiences of perusing printed books, manuscripts and listening to music; likewise, the print both deprived us of and perfected the aura of the manuscript; before that, the manuscript confined to fixity the communality, the imagination (and,

<sup>40.</sup> Morgan, P., 'From a Death to a View: the Hunt for a Welsh Past in the Romantic Period' in Hobsbawm, E., Ranger, T., eds., *The invention of tradition*, Canto Classics, 2012, pp. 43-100, p. 99.

<sup>41.</sup> Ibid.

<sup>42.</sup> Boym, S., The Future of Nostalgia, Basic Books, 2001, p. 19.

perhaps, the inaccuracy) of the oral tradition.<sup>43</sup> If the reinventions of musical traditions in Wales are to be considered as symptoms of a nationalistic nostalgia, Boym proposes that two concurrent forms of research are required:

To unearth the fragments of nostalgia one needs a dual archaeology of memory and of place, and a dual history of illusions and actual practices.<sup>44</sup>

In this statement we are returned to the categorisation of the NLW's archival materials discussed above, the duality of which would suggest that these materials are comfortably suited to 'unearth[ing] the fragments of nostalgia'. The dual archaeology and history suggested refer to the notion of invented tradition and its relationship with common practice, a relationship that can be seen distinctly in the documentary materials of Welsh national musics: the invented tradition emerges through a classicised, published canon of 'national song' which is purported to be of great antiquity; beneath this flood of publications, there is evidence of a set of musical practices that either relate to or differ from the published record, including documents left by early collectors of what is frequently termed 'folk song'. Writing in the introduction to *The National Songs of Wales*, its editors make a note of this duality

Few will deny that a revised edition of Songs of Wales is long overdue. This is not to disparage the work of Brinley Richards which, in its day, assuredly won the warm affection of his countrymen. So much so, that up to the outbreak of the First World War, two of the most treasured books in numerous Welsh households were, characteristically enough, the Bible and Songs of Wales.

With the founding of the Welsh Folk Song Society in 1906-8, investigation into the sources of Welsh folk melody gained a clearer perspective and far wider scope. The diligent and disciplined research of the Society, together with the skill and enthusiasm of several individuals, brought to light a most valuable store of material, very little of which was known to Richards and his contemporaries. The availability of this material enables us to present a more balanced anthology of Welsh song than was

<sup>43.</sup> Though it is outside the interests of this research, it would be interesting in the future to consider the impact of the increasing popularity of keyboard instruments in the home as a factor in the solidification of the harp as the traditional instrument of Wales.

<sup>44.</sup> Boym, S., The Future of Nostalgia, p. XVIII.

possible eighty years ago. Our personal tribute to two of the greatest figures in the field of Welsh folk song is implicit in the dedication of this book [Maria Jane Williams & Dr J. Lloyd Williams]. Of the many others to whom Wales is indebted, we should also name Dr. Mary Davies, Lady Herbert Lewis and Mrs. Grace Gwyneddon Davies.

This is not a folk song collection in the accepted sense of the term. [...] What is offered here is a representative selection of Welsh song which we hope will be found valuable for use in Welsh homes, schools and communities at home and abroad.<sup>45</sup>

The invented tradition of a Welsh national music owes much to the London Welsh society (the *Cymmrodorion*) and, in particular, to three individual figures: John Parry, Ruabon (*Parry Ddall*), Edward Jones (*Bardd y Brenin*), and Edward Williams (*Iolo Morganwg*). John Parry, the blind harper of Ruabon, was the domestic harper of the Wynn family, in which rôle he played at concerts in Cambridge, Dublin, Leeds, London, and Oxford. His playing was clearly of great quality, for after a concert in Cambridge, the poet Thomas Gray noted that it had reignited his inspiration, leading to the completion of his poem *The Bard*. John Parry, Ruabon, was the first musician to produce, with the help of his amanuensis Evan Williams, a volume dedicated to the traditional melodies of Wales, *Antient British Music*.

With Antient British Music, John Parry, Ruabon, established not only an invented tradition, but a convention followed by many prominent Welsh musicians: the publication of books of national music. The first to follow this convention was Edward Jones (Bardd y Brenin), a medal-winning harpist and a respected figure amongst the London Welsh who published a number of collections based on the supposed traditions of the Welsh Bards. His first collection, Musical and Poetical Relicks of the Welsh Bards: preserved, by tradition and authentic manuscripts, from very remote antiquity, 47 is notable for a number of reasons, not least for the luxurious etching of a

<sup>45.</sup> Davies, E. T., Northcote, S., Prys-Jones, A. G., eds., *Caneuon Cenedlaethol Cymru = The National Songs of Wales*, Boosey & Hawkes, 1959, Preface.

<sup>46.</sup> Kinney, P., Welsh Traditional Music, University of Wales Press, 2011, p. 41.

<sup>47.</sup> Jones, E., ed., Musical and Poetical Relicks of the Welsh Bards, 1784, title page.

scene from Gray's *The Bard* (figure 2). The third, expanded edition was published in 1808 with the addition of a yet more glorious claim

Likewise, a general History of the Bards, and Druids, from the earliest period to the present time: with an account of their music, and poetry. To which is prefixed, a copious dissertation on the Musical Instruments of the Aboriginal Britons.<sup>48</sup>



Figure 2: 'The Last Bard' from Edward Jones' Musical and poetical relicks of the Welsh bards.

<sup>48.</sup> Jones, E., ed., *Musical and Poetical Relicks of the Welsh Bards*, third edition, 1808, title page.

Here, then, is the creation of the longed-for 'unbroken tradition' of Prys Morgan's essay: not only were the Bards and Druids figures of history, but they were a present, living tradition represented in culture by words, music, and - physically - instruments. The use of the term 'Aboriginal Britons' is of particular interest, for it relates directly to the London Welsh society of the *Cymmrodorion*, which translated means 'aborigines'.

During the period from 1784 to 1808, a further piece of remarkable Welsh cultural reinvention had taken place, also in London, which would have powerful effect in binding this new national music into a wider cultural field. First convened by Edward Williams (*Iolo Morganwg*) on Primrose Hill in 1792, the then newly invented *Gorsedd* probably did little in cementing the idea of a Welsh musical heritage in and of itself; rather, its force as a symbol of Welsh culture grew to full strength through its elision with the eisteddfodic tradition (beginning in Carmarthen in 1819), and in its correspondence to the already present romantic imagery of druidism and bardism. Through the nineteenth century, and even into the twentieth, its growing symbolism provided a living correspondent to the invented musical tradition of the 'Aboriginal Britons', and not least to the enduring image of 'The Last Bard'. As such, the actuality and the imagery of the *Gorsedd* forged a missing link in the chain between the romanticised bards of old and the new bards of an emerging class of Welsh *bourgeois*, the bards of the new London, Cardiff, Liverpool, or American Welsh societies.

Other links in this chain include the titles given to this 'ancient music', pieces of music which are purported to be directly descended from the events they are supposed to represent. The emphasis on place displayed in these titles is obvious: *Gwyr Harlech, Gwyr Dyfi, Clychau Aberdyfi, Dyffryn Clwyd, Morfa Rhuddlan* and so on. In many senses, these are musical claims upon the geographical space of Wales, and occasionally upon places of particular importance - Rhuddlan and Harlech castles amongst them. Combined with the liberal use of rugged Cambrian scenery in accompanying images ruined castles, crags, and trees - these titles are wedded to the rediscovery of Wales' landscape as one of romantic beauty, as a lure to tourists, and as an archetype of

Welshness. These landscapes are often shown with a symbol of Welsh music such as an harp or a crwth, welding music and landscape, invented tradition and actual place together. The conjoining of an invented music of Wales with a newly-born tourism of Wales based on its scenery and character reached its apex in the publication of *Sixty of the most admired Welsh airs* by William Bingley in 1803, itself an accompaniment to his published descriptions of his travels in the country.

As Prys Morgan notes, the majority of the tunes contained in collections such as these seem very unlikely to be much more than a century older than their dates of publication. Their tonal, binary, dance-derived compositional style is instead of more recent origin. The titles themselves are, therefore, to be regarded as fanciful, and are said by Morgan to sometimes be 'Welsh-ifications' of an older English title. However fanciful, the formula was an effective one. As the nineteenth century progressed, a growing body of texts in both Welsh and English was added to these tunes, creating a spiral of historical and nationalistic romance. It is notable that Walter Scott, an important figure in the reinvention of Scotland, was amongst the poets employed by George Thomson to write new texts for tunes. Thomson was the editor and publisher of a number of volumes of national music who engaged prominent composers including Joseph Haydn and Ludwig van Beethoven - to produce arrangements of national tunes. Amongst those arranged by Haydn was Dafydd y Gareg Wen, or David of the White Rock, a now iconic song that gives some sense of the romance being created in, and not least being attached to, this new body of national music and its preferred instrument - the harp. It recounts the oft repeated tale of a bard upon his death bed composing the tune to which it is sung.

> David the Bard on his bed of death lies, Pale are his features and dim are his eyes, Yet all around him his glance wildly roves Till it alights on the harp that he loves.

Give me my harp, my companion so long, Let it once more add its voice to my song. Though my old fingers are palsied and weak, Still my good harp for its master will speak.

Often the hearts of our chiefs it has stirred,

When its loud summons to battle was heard; Harp of my country, dear harp of the brave, Let thy last notes hover over my grave.<sup>49</sup>

Here, it is clear that the harp takes on a more than personal importance, becoming a symbol of national spirit as well as personal expression. This version of the tale, by John Oxenford, is drawn from Brinley Richards' *Songs of Wales*, fourth edition, 1879, some seventy years after the air appeared arranged by Haydn. This points to the fact that a convention that drew prominent Welsh musicians to respond to this created corpus of national music resulted in a continuity of publication of a subset of musical items through the nineteenth century, with particular pieces included in almost every collection published. This would suggest that a dynamic relationship emerged between particular tunes and the concept of a Welsh music, and that their use conferred 'Welshness' upon both the collections that carried them and the other musical items that these collections contained.

To the inventions of a national music and a supporting symbology can be appended the recreation of the oral traditions commonly referred to as 'folk song', not only as a form of rustic entertainment for the elusive demographic of 'the folk', but as suitable material for purposes as diverse as academic study and the instillation of national spirit in school children. This manner of revival is mentioned in relation to the English 'folk carol' by Eric Hobsbawm in his introduction to *The invention of tradition* and, in the case of Wales, has a surprisingly long period of gestation. Edward Williams (*Iolo Morganwg*) himself appears to have been amongst the earliest collectors of music from the oral tradition in Wales; he was an avid note-taker, and wrote somewhat idiosyncratic notations of tunes he heard whilst travelling through his native region of Morganwg. These tunes have long been neglected, but were recently published in an edition entitled *Alawon Gwerin Iolo Morganwg* by Leila Salisbury. A further collector of music from the oral tradition was John Jenkins (*Ifor Ceri*), whose manuscript collections *Melus Seiniau Cymru* and *Melus Geingciau Deheubarth Cymru*,

<sup>49.</sup> Richards, H. B., ed., *The Songs of Wales*, Boosey & Co., 1879, pp. 58-9.

amongst others, are held at the NLW. These manuscripts contain, amidst many hymn and psalm tunes, a number of folk songs given with both melody and, in some cases, a text. Perhaps the most famous collector of songs in the nineteenth century was Maria Jane Williams (*Llinos*), who was herself a friend of John Jenkins (*Ifor Ceri*) and who published the first printed collection of songs from the oral tradition of Wales, *The Ancient National Airs of Gwent and Morganwg*, in 1844. The collection had previously received a prize 'for the best collection of original unpublished Welsh airs, with the words as sung by the peasantry of Wales' at the 1837 Abergavenny Eisteddfod.<sup>50</sup>

On the one hand, these musical items collected from oral tradition represent the 'actual practices' that the 'history of illusions' woven into collections of national music threatened to obscure. On the other, some of the items they contained - particularly those in Maria Jane Williams' published collection - were rapidly absorbed into the growing canon of Welsh national music. Of the seventy tunes published by Brinley Richards in his *Songs of Wales*, seven are drawn from *The Ancient National Airs of Gwent and Morganwg*, and Richards introduces them thus

Many tunes are by permission, taken from Miss Jane Williams' (Aberpergwm) valuable collection of national airs.<sup>51</sup>

The interest in preserving a fading folk tradition reached a new apex with the establishment of the Welsh Folk-Song Society in 1906, just one year before the foundation of the NLW. Once its foundations were finalised, the Society quickly established a network of collectors and informants, not least owing to the efforts of its musical editor, John Lloyd Williams, and other founding members, including Ruth Herbert Lewis, and Mary Davies. The early years of the Society have been historicised in retrospective issues of its journal (originally known as *The Journal of the Welsh Folksong Society*, and later rebranded *Canu Gwerin*) prepared for its seventy-fifth and hundredth anniversaries. However, it is worth mentioning that the efforts of the

<sup>50.</sup> Kinney, P., Welsh Traditional Music, p. 165-6.

<sup>51.</sup> Richards, H. B., ed., The Songs of Wales, p. iii.

Society and its proponents were far from restricted to the collection of materials; its members were active in informing new audiences of the music of the Welsh folk (*y werin*) through the Journal, lectures, publications, and concert performances.

In the collection of a declining music of the folk, John Jenkins, Maria Jane Williams and, later, the members of the Welsh Folk-Song Society were responding to an 'anxiety about the vanishing past'. The eventual result of their response was a new form of national music, a music not of bards or patriotic romance, but of *y werin*, apparently more rustic in nature and ideally drawn from singers of old songs unspoiled by popular repertoires. This half-realised, half-created folk tradition not only took its place beside the already extant national music but, as intimated by the editors of *The National Songs of Wales*, was rapidly supplanting it - in print at least - as a popular idiom. Once apparently threatened with extinction in the face of advancing modernity, Welsh folk songs became a national cause and, once collected, were soon being arranged for singers, printed for schools under the auspices of *The Educational Publishing Company* with the Welsh Folk-Song Society's stamp of approval, <sup>52</sup> sung by choirs at meetings of the *Cymmrodorion* in London, <sup>53</sup> and becoming staples of college song books. <sup>54</sup>

It might be suggested, then, that the 'actual practices' and the 'illusions' of Boym's proposed history are not always stable and fixed in their position. It could thus be said that an invented, illusory tradition has the capacity to lead to an actual practice, but also that an actual practice might be extended to become a history of illusions. These contrary processes can be observed in two discrete, though perhaps contentious, examples. Edward Williams (*Iolo Morganwg*)'s invented *Gorsedd* has become a fixed custom in the *Eisteddfod Genedlaethol*, a practice that is understood to be of modern and

<sup>52.</sup> Williams, J. Ll., Jones, L. D., eds., *Welsh Folk Songs Arranged for Schools*, The Educational Publishing Company, Cardiff, date unknown, circa 1910-20.

<sup>53.</sup> Letter, Mary Davies to John Lloyd Williams, 2.12.1908, NLW GB 0210 JLLW AL1/4 19.

<sup>54.</sup> University College of Wales Aberystwyth, Chorus Songs for College Concerts, 1923.

imaginative origin and is nonetheless valued as a pageant and as a nostalgic symbol of an imagined Wales. On the other, folk-songs drawn from oral tradition have been transcribed and re-purposed as competition songs in *Eisteddfodau*, a reinvention of a communal custom as a canonical tradition, preserved through mass media and decontextualised performance. In light of these thoughts, it might be argued that the traces of musical activity, out of which ideas about the music of a given period or demographic emerge, can become published, interpolated music - and equally that published, interpolated music can become the music of a given period or demographic that will leave its own traces. Practice can become illusion, and illusion can become practice.

# Echoes and amplifications: Towards a new language of the trace

This situation seems to require a new language of categorisation and discussion. It might be said that elements of the material record of Welsh traditional music contain or, indeed, are 'echoes' of musical activity. These materials are the traces that remain of events, performances, hearings, people and personal repertoires that exist within the archive. They are not restricted to any particular media - the newspaper article description of the hearing of a piece of music and the published note in a folk song collection are as much 'echoes' of an experience as are more intimate media such as diaries entries and references made to music in letters. Other elements might be termed 'amplifications', materials that seek to disseminate, to amplify the importance of a given piece or body of music. Again, there are no immediate restrictions in media for these materials, other than that they are more clearly intended to be received by a wide audience.

Further than providing an aural metaphor for the theoretical concepts of the trace and the mechanical reproduction, the terms 'echo' and 'amplification' allow for the inevitable interchange between these two positions: a piece that has been amplified through various media will leave echoes of that process; likewise an echo may be

amplified through introduction into mass media. The fluidity of the terms' uses and their application in both verb and noun forms - an echo, an amplification; to echo, to amplify - allows them to act exchangeably as terms of process as well as terms of definition, a quality that can be used helpfully in discussing the various musical transfers recorded or involved in a set of a archival documents.

Grace Gwyneddon Davies introduces her first collection of *Folk Songs Collected in Anglesey* thus

All the songs in this collection were, with one exception, noted by the collector from the singing of the late Mr. Owen Parry, of Dwyran, Anglesey, who very kindly and readily placed at her disposal the store of delightful songs which he himself as a youth had sung or heard sung by the old people in Anglesey. The tunes are faithfully presented just as they were sung into the phonograph by Mr. Parry, and the words are also reproduced with no material alteration. The song entitled "One of my brothers" was learnt by the collector when a child in Liverpool from the late Mr. William Rowland, a native of Gwalchmai.<sup>55</sup>

This simple set of statements contains a surprising quantity of information. The folk songs, as presented, represent a material trace of the musical practices of an unspecified number of people: they are the echoes of a repertoire that was known to at least a small community on the island of Anglesey. Further, these echoes were preserved on phonographic cylinders (which may or may not survive). The printed collection itself amplified these echoes through publication, making them available to an audience interested in traditional song that extended and continues to extend far beyond the community who received them aurally. These amplifications were carried further still by the inclusion of many of these songs in the *Journal of the Welsh Folk-Song Society*. Echoes of the impact of these publications and their new audiences include a newspaper article reporting on the activities of Y Gymdeithas Genedlaethol in Liverpool. The society was clearly strongly interested in the traditional music of Wales, for at the opening event for one term,

<sup>55.</sup> Davies, G. G., Alawon Gwerin Môn, Hughes & Son, 1913, Forword.

canwyd llu o ganeuon gwerin ymhlith eraill, gan barti cyfansoddedig o Miss Alice Parry, Miss Marie Owen, Mrs. R. J. Hughes, Misses Taylor, Miss Annie Hughes, Mri. R. Vaughan Jones, John James, Edgar Barri, R. Wynne Jones, ac Arthur Thomas, dan arweiniad Mr. J. T. Jones, arweinydd medrus a phoblogaidd Cor Meibion y Cymric.

a flood of folk songs, amongst other things, was sung by a party comprised of Miss Alice Parry, Miss Marie Owen, Mrs. R. J. Hughes, Misses Taylor, Miss Annie Hughes, Messrs. R. Vaughan Jones, John James, Edgar Barri, R. Wynne Jones, and Arthur Thomas, under the direction of Mr. J. T. Jones, the accomplished and popular director of The Cymric Male Voice Choir.<sup>56</sup>

Later in the article, the programme of a forthcoming concert is announced, including the song Cwyn Mam yng Nghyfraith (The Mother-in-law's Complaint) to be sung by Miss Gwen Taylor (perhaps one of 'Misses Taylor' of the party mentioned above). This song is amongst those included in Grace Gwyneddon Davies' aforementioned Alawon Gwerin Môn; thus, the amplified personal repertoire of Owen Parry, of Dwyran Anglesey, is recaptured in the echo of a society concert from Liverpool. Later, during the 1930s, the composer Gustav Holst arranged the same song, with a melodic version identical to that transmitted by Grace Gwyneddon Davies, for three-part choir, thereby re-amplifying it for a new type of audience and a new category of performance and repertoire: choral music.<sup>57</sup>

The discovery of such transactions and sequences of transactions, of echoes, amplifications, and so on, is not uncommon, whether in the field of Welsh traditional music or in the study of music more widely. They are amongst the processes that lead to the creation of canon, the memorialisation in or dismissal from general awareness of a given musical item. The formation of canon, the corpus of accepted music in a given repertoire, has a special significance in relation to national musics, in situations in which the body of music forms a part of the semiotic field of national identity and in which entrained knowledge of that repertoire and, more potently, the act of joining in

<sup>56. &#</sup>x27;Dau Tu'r Afon' in Y Brython, 17 October 1918, http://welshnewspapers.llgc.org.uk/en/page/view/4019117/ART38, last accessed 7.11.2014, my translation.

<sup>57.</sup> Holst, G., Two Welsh Folk Songs, Curwen Edition, 1933.

its performance can be taken as symbols of 'the large scale solidarity' of Renan's nation. In such situations, music is an expression of the criteria,

the possession in common of a rich legacy of memories; the other is present-day consent, the desire to live together, the will to perpetuate the value of the heritage that one has received in an undivided form,

that he proposes form the 'soul' or 'spirit' of a nation.<sup>58</sup> This reference to a national spirit, and to the potential importance of music in its display, calls to mind the frontispiece of Nicholas Bennett's *Alawon fy Ngwlad* which, amongst various national symbols, includes a small image of a harp and harpist. On a scroll beneath, written in Edward Williams (*Iolo Morganwg*)'s coelbren runes, are the words '*Iaith enaid ar ei thannau*' or 'The language of the soul is on its strings' (figure 3).<sup>59</sup> In context, it might be suggested that the soul in question might not be the soul of an individual but the soul of the Welsh nation, the putative 'land of song'.

Though a small, flippant, and statistically controversial exercise far from rigorous in its approach, the observations made at the beginning of this chapter about ascendance of the term 'the land of song' in relation to Wales would have been all but unachievable without the aid of *Welsh Newspapers Online*. With the rapid rise of pervasive computing, it has been argued that humans' relationship with knowledge is changing and that the internet is becoming a form of transactive social memory, an external repository of knowledge that can be easily accessed without the requirement for subsequent committal to long term memory.<sup>60</sup> In this climate of increasing digital mediation, in which the internet represents a readily accessible store of collective

<sup>58.</sup> Renan, E., 'What is a Nation?', p. 82.

<sup>59.</sup> Bennett, N., Alawon fy Ngwlad, Phillips & Son, 1896, title page.

<sup>60.</sup> Sparrow, B., Liu, J., Wegner, D., M., 'Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips' in *Science*, Vol. 333 no. 6043, Vol. 333 no. 6043, p. 671, http://www.sciencemag.org/content/333/6043/671.6.full.pdf, last accessed 7.3.2016, and Wegner, D., M., Ward, A., F., 'The Internet Has Become the External Hard Drive for Our Memories' in *Scientific American*, Vol. 309 No. 6, http://www.scientificamerican.com/article/the-internet-has-become-the-external-hard-drive-for-our-memories/?page=1, last accessed 7.3.2016

memory, and of culture and its artefacts, it follows that absence from the internet tends evermore definitely towards absence from collective memory.

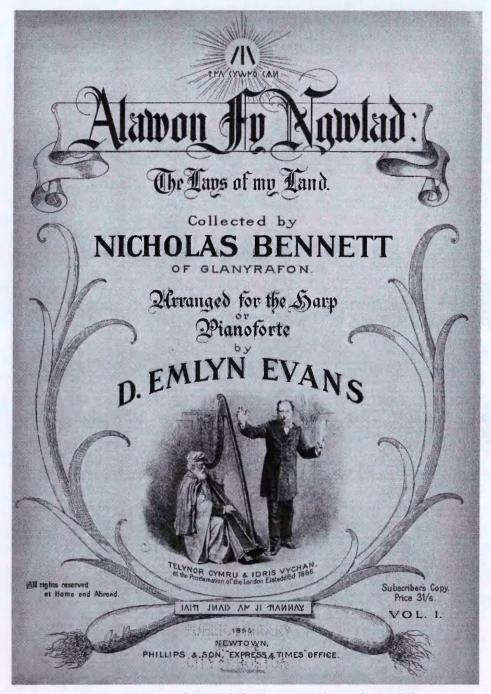


Figure 3: Title page from Nicholas Bennett's Alawon fy Ngwlad.

Given the high value attached to music as a factor in Welsh identity, it is perhaps surprising that there is a dearth of material relating to Welsh traditional music online, and especially of material provided by Wales' major cultural institutions and the societies dedicated to its musical traditions. Much of what exists has an emphasis on furnishing melodies to play or sing, on giving a flavour of Welsh music, or, in the case

of Wales' memory institutions, on providing a sample of their most important collections, partly in order to attract visitors and new users. However, in their physical state, these collections are bound by the nature of the physical archive: they are static in nature, divided into categories and subcategories, and require intimate archival knowledge to be used to their full extent.

The first call for the serious involvement of computing in the study of Welsh traditional music was made in the late 1960s by Peter Crossley-Holland. His aims at the time, specifically the codification of the tonal properties of Welsh traditional melody, were analytical in nature;<sup>61</sup> however, the advent of the internet and other dramatic advances in computing and digital technologies have extended the possible uses of computing far beyond statistical analysis, potentially widening access to archival material and allowing for the reconfiguration of archival relationships. It is with the possibilities offered by the creation of an information framework within which links between different melodies, sources, people, places and events can be expressed and pursued that this research is essentially concerned. Of particular interest is the manner in which a computer-driven approach to the structuring and reconfiguration of data allows the navigation of dense networks of interconnected pieces of information. Digital indexes, hyperlinks, maps, and surrogate materials can be used to navigate between a list of sources that contain a given melody and a corpus of sources that mention that melody, or contain a description of a performance of it. These possibilities are enhanced by the fact that a digital output is not necessarily a closed system in the manner of a printed book or a manuscript; by nature, it is open to extension and modification in the future, becoming a template for re-use rather than replication. In the production of a prototype digital resource on the topic of Welsh traditional music, its sources, its performance, and its reception, it is hoped that a foundation for further research into the creation of an online repository of and

<sup>61.</sup> Crossley-Holland, P., 'The Tonal Limits of Welsh Folk Song' in *The Journal of the Welsh Folk-Song Society*, 1968, No. 2, Vol. 5 Pt. II., pp.46-67.

resource on Welsh music can be laid.

# Divergence and convergence: A digital approach

Digital humanities: a discipline or an approaching state?

Digital humanities, humanities computing, and digital scholarship are amongst the most prominent terms dedicated to a current *cause célèbre* in humanities scholarship, scholarly publications, and academic institutions of all kinds: the use of computers and their attendant technologies in the scholarly arena. It has been noted that 'digital humanities [...] has been exhaustively defined in the literature'. However, despite or perhaps because - of their ubiquity, the definition, meanings and use of these terms are somewhat unstable and inconsistent, a point of disagreement amongst both practitioners and commentators.

"What is digital humanities?" essays like this one are already genre pieces. 63

Taken from an essay on digital humanities by Matt Kirschenbaum, this statement points to a number of issues that are prevalent in the field. Ignoring, temporarily, the other possible terminologies, the most obvious of these issues is a certain ambiguousness about what 'digital humanities' is (or are), in both categorical and representational senses. Using polar extremes, these ambiguities can be phrased as

<sup>62.</sup> Bowman, T. D., Demarest, B., Weingart, S. B., Simpson, G. L., Lariviere, V., Thelwall, M., Sugimoto, C. R., *Mapping DH Through Heterogenous Communicative Practice*, conference paper delivered 18.7.2013 at *DH 2013*, p. 1., http://did.ils.indiana.edu/dh/pdf/DH2013.MappingDH.pdf, last accessed 7.3.2016.

<sup>63.</sup> Kirschenbaum, M., 'What is Digital humanities and What's it doing in English Departments?' in *Debates in Digital humanities*, ed. Gold, Matthew K., University of Minnesota Press, 2012, pp. 3-11, p. 3.

simple questions: 'Should digital humanities be categorised as a new and serious discipline or as a passing fad?' and 'What portion of the spectrum from the use of word-processing, email, and blogging platforms to the building of a database to the coding of a complex text-mining application does the term digital humanities represent?'

More subtle than these questions of depth and breadth is the intimation of the statement itself. That so many words are expended on rationalising digital humanities perhaps indicates not only that is there no satisfactory consensus as to what the term should mean, but also that there is a growing community of scholars who are trying to rationalise how the use of computers affects their own work and their own field of study, a community of people who are effectively either waiting for a satisfactory definition or paradigm to arise or presenting their own.

The dimensional definition of digital humanities is made problematic by its mercuriality, its constant shifting to accommodate both new developments in the field and as wide a base of implementation as possible. Thus, it is complicated by the extensive range of its intentions and applications: in libraries and archives as a support tool, an approach to and vehicle for knowledge transfer; in academic research, as an aid to the answering and creation of research questions; in the application of executable code to corpora of information in order to provide distantly read analyses; in the collation of human input, using the computer or network as an extensible and collaborative workspace.

In the aforementioned essay, Kirschenbaum used the then active definition of digital humanities given by Wikipedia, writing 'As a working definition, it serves as well as any I've seen'.<sup>64</sup> However, comparing that version of the definition with a more recent one reveals discrepancies not only in the use of terminology but in the description of

<sup>64.</sup> Kirschenbaum, M., 'What is Digital Humanities and What's it Doing in English Departments?', p. 4.

15 Bis.

the scope and nature of the subject as a whole. The version used by Kirschenbaum reads

The digital humanities is a synthetic field of study concerned with the presentation of Humanities knowledge using new media. An example would be the use of GIS; commons-based peer collaboration; interactive games and multimedia in the research and teaching of history, philosophy, literature, religious studies or sociology. It is defined by the belief that means of knowledge dispersal and collection are common among the different disciplines that make up the liberal arts.<sup>65</sup>

#### A more recent version reads

The Digital humanities are an area of research, teaching, and creation concerned with the intersection of computing and the disciplines of the humanities, developing from the fields of humanities computing, humanistic computing, and digital humanities praxis (digital humanities praxis) digital humanities embrace a variety of topics, from curating online collections to data mining large cultural data sets. Digital humanities (often abbreviated digital humanities) currently incorporate digitized and born-digital materials and combine methodologies from traditional humanities disciplines (such as history, philosophy, linguistics, literature, art, archaeology, music, and cultural studies) and social sciences with tools provided by computing (such as data visualisation, information retrieval, data mining, statistics, text mining) and digital publishing. As well, related subfields of digital humanities have emerged like software studies, platform studies, and critical code studies.

In spite of their differences, these definitions are not incompatible and they represent a field of enquiry that is, in essence, a field of activity - of creating digital resources, encoding materials, and using computers for analysis and presentation. Rather than a definite structure, they suggest a constellatory group of practices that use computers and digital technologies to intersect with humanities studies and their objects in a manner that is applied and methodological. Such a definition, though not converse to, is in tension with the definition offered, for example, by the *Digital Humanities at the* 

<sup>65.</sup> Wikipedia contributors, 'Digital Humanities', Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/w/index.php? title=Digital\_humanities&oldid=37427111, last accessed 7.3.2016.

<sup>66.</sup> Wikipedia contributors, 'Digital Humanities', Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/w/index.php?title=Digital\_humanities&oldid=618801008, last accessed 7.3.2016.

*Open University* website, which places greater emphasis on critical enquiry into and theorisation of the effects of computing on humanities discourse:

Digital humanities is the critical study of how digital technologies and methods intersect with humanities scholarship and scholarly communication. It investigates the use of digital tools and software for interpretation and analysis of humanities research questions and how digital methodologies can be used to enhance disciplines such as Art History, Classical Studies, History, Literature, Music and many others.

Digital humanities allows scholars to approach old problems with new means, or to ask new questions that could not have been asked with the traditional means of humanistic enquiry. Whatever the approach chosen, Digital humanities remains grounded in humanities research and interests.<sup>67</sup>

The difference in emphasis, although not prominent, is an important one: under the former definitions, a website presenting digital copies of materials for viewing is an example of digital humanities; under the last, it is the explicit awareness and self-conscious discussion of the differences between this digital presentation and 'traditional means of enquiry' that moves a digital project into the field of digital humanities; without such discussion it remains simply a digital project. The extremes of these positions might characterised by two commentators, Stephen Ramsey and Alan Liu. In a now (in)famous presentation made in 2011, Ramsey stated that 'if you are not making anything, you are not [...] a digital humanist' and later described Digital humanities as 'moving away from reading and critiquing to building and making'. Conversely, Liu has called for a greater engagement with cultural critique and theory within the digital humanities, positing that

Only by creating a methodological infrastructure in which culturally aware technology complements technologically aware cultural criticism can the Digital humanities more effectively serve

<sup>67.</sup> Digital Humanities at the Open University, http://www.open.ac.uk/arts/research/digital-humanities/, last accessed 7.3.2016.

<sup>68.</sup> Ramsay, S. 'Who's in and who's out?', presentation delivered at MLA 2011, http://stephenramsay.us/text/2011/01/08/whos-in-and-whos-out/, last accessed 7.3.2016.

humanists by augmenting their ability to engage today's global-scale issues.<sup>69</sup>

Such concerns with the purpose and future of digital humanities are a common theme in the topic's rapidly expanding body of polemical, introspective literature. There are a number of possible reasons for this sudden proliferation of literature, some of which are mentioned above, but its seems that at least part of its impetus emerges from concerns about the purpose of digital humanities, fears that

an emerging transdisciplinary domain without a name runs the risk of finding itself defined less by advocates than by critics and opponents,<sup>70</sup>

and that

as far as the digital humanities are concerned, interdisciplinarity is just a cover for the lack of a distinctive intellectual agenda.<sup>71</sup>

As well as pointing out a certain defensive stance in digital humanities discourse, both of these statements reveal tacit assumptions about the relationship that digital humanities has with other disciplines and with humanities scholarship as a whole. The first of these assumptions is that digital humanities is adjunct to the work of and, in a sense, subjugated to other disciplines; that it is, in effect, a paradiscipline. The second assumption is that digital humanities is something distinct from 'the humanities'; that there is a dichotomy between digital humanities and humanities with a silent 'traditional'.

<sup>69.</sup> Liu, A., 'Where's the Cultural Criticism in the Digital Humanities?', in *Debates in the digital humanities*, ed. Gold, Matthew K., University of Minnesota Press, 2012, pp. 490-509, p. 502.

<sup>70.</sup> The Digital Humanities Manifesto 2.0, p. 13, http://www.humanitiesblast.com/manifesto/Manifesto\_V2.pdf, last accessed 7.3.2016.

<sup>71.</sup> Prescott, A., 'Making the Digital Human: Anxieties, Possibilities and Challenges', lecture delivered at *Digital Humanities Oxford Summer School* 2012, 6.7.2012, Merton College Oxford. Online transcript http://digitalriffs.blogspot.co.uk/2012/07/making-digital-human-anxieties.html, last accessed 7.3.2016.

The statements also raise the spectre of interdisciplinarity, a concept dwelt upon so much in digital humanities projects and polemic that it seems all but impossible to engage with digital humanities without engaging with interdisciplinarity, with terms such interdisciplinary, transdisciplinary, as transgressive disciplinarity, multidisciplinarity and crossdisciplinarity providing appropriate semantic seasoning according to the tastes of a given author. The interdisciplinarity of digital humanities is derived from two principal sources: in mechanical terms, it is an effect of the arbitrary application of a more or less consistent range of research methods and models to a set of materials regardless of the normal disciplinary limits set upon those materials; in human terms, this mechanical disciplinary ignorance holds an appeal for scholars whose interests lie in interdisciplinary research - Timothy Hitchcock, for example, has called for a 'bonfire of the disciplines' fuelled by examples of disciplinarily transgressive research projects.<sup>72</sup>

Though Andrew Prescott has dismissed the preoccupation with disciplinarity as a 'cover' (see above), his argument seems partly rooted in an urgent search for the 'new possibilities' offered by digital humanities, in a quest to justify the energy and capital being expended on it. In a blog post entitled 'Where's the Beef? Does Digital Humanities Have to Answer Questions?' Tom Scheinfeld made a case for reducing the pressure on digital humanities to produce quantifiable and distinctively new research results, drawing an analogy between digital humanities and the beginnings of the study of electricity. He pointed out that 'the eighteenth-century electrical machine was a parlor trick - until it wasn't', and that the rise of the use and study of the machine from 'whiz-bang' to 'theoretical and mathematical' understanding took well over a century; in doing so he implicates an incremental process of imagination,

<sup>72.</sup> Hitchcock, T., presentation delivered at *Welsh Initiative for Digital Arts and Humanities* at the National Library of Wales, 11.5.2012.

The treatment of digital humanities as an emergent phenomenon, or a group of emerging phenomena, is an useful approach to the problem of addressing its nature and possible use. It can be observed that civilisation is either at or is nearing a recognisable crux in the history of communication. With the increasing prevalence of computing, it is logical to suggest that at some point in the future all but a small minority of scholarly activities will take place in close contact with digital technologies and methods of one sort or another. Under such circumstances, a point at which the 'humanities with a silent traditional' will merge with 'digital humanities' seems all but certain. It does not seem unreasonable to imagine that at or shortly after this juncture any debate about the rôle and potential of digital humanities will be subsumed into the discourse of the humanities in general.

With this future conjugation in mind, it might be argued that much of the discussion surrounding digital humanities in recent literature is symptomatic of and encouragement to a widening of the humanities field to include a relatively new but already ubiquitous set of digital research paradigms. The strongest evidence for this seems to exist in the polemical, often provocative tone of much of digital humanities' self-defining literature. The most political, even radical of these introspective documents is *The Digital Humanities Manifesto 2.0* which first appeared in 2009. Written in a revolutionary, inflammatory tone, replete with deliberately kitsch or counter-culture imagery, the *Manifesto* at once celebrates an outlined potential future of scholarly endeavour influenced by the ethos of digital humanities and denigrates many of the institutional structures that currently support scholarship. Its narrative voice is echoed by the more recent publication *Digital\_Humanities*, the authors of

<sup>73.</sup> Scheinfeldt, T., 'Where's the Beef? Does Digital Humanities Have to Answer Questions?' in *Debates in the digital humanities* ed. Gold, Matthew K., University of Minnesota Press, 2012, pp. 56-8, pp. 57-8.

which have sought to present 'an encompassing yet polemical voice' for the field.<sup>74</sup> In abstract terms, these polemics can be interpreted as the propaganda of the most radicalised activists of a nascent movement trying both to establish itself within and to alter the academic establishments it inhabits.

Against this foreground of revolutionary rhetoric, it is perhaps useful to reconsider the nature, definition, and eventual purpose of digital humanities in more measured terms and over a longer time-frame. In the early 1990s, much column-space was dedicated to the rapidly onsetting digital revolution, the extraordinary things that it would make possible, and what might be expected of life in the early twenty-first century - mainly in terms of thus far narrowly adopted technologies such as virtual reality, but with occasional insights into the growth of technological infrastructure. Likewise, there is a duality in digital humanities work - the 'whiz-bang' visualisation versus the more sober preparation of standards and architectures; in both areas it is interesting to think about what the state of digital - or post-digital - scholarship in 2050 might be, not in terms of the extraordinary, perhaps unimaginable things that scholars will be doing, but in terms of how those activities will relate to scholarship in general.

Already, much as the news columns of the 1990s predicted, digital technology is reaching saturation point within the academy. Not in terms of output, for digital creation lags far behind digital consumption, but certainly in terms of presence: amongst demographics for whom it is financially viable, the iPad is, at the time of writing, overtaking the notebook and pen; email has long since superceded the letter and phonecall, and Skype the necessity of physical presence. Such use is unlikely to diminish barring a cataclysm that prevents it, and, if anything, it will continue to increase until saturation point is fully achieved. It seems banal to point out that scholars will have to be fully versed with digital technology, production and

<sup>74.</sup> Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., Schnapp, J., *Digital Humanities*, MIT Press, 2012, p. ix.

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dissemination, and that they are likely to need some skills in 'building things'.

Set before this technologically saturated future, digital humanities cannot be considered as a new discipline, nor as a subject; instead, it is a foreshadowing of the coming academy. It is both a herald and a warning: it is a movement that is calling for the academy and the information institution to take an active rôle in shaping an inevitably digital future and that is also discovering the problems with the new medium it preaches. Part of its rôle is the finding out of what competencies and skills are needed to deal effectively with technology, and, in turn, campaigning for the proper provision of opportunities to gain those competencies early enough in education for them to be useful. Digital humanities therefore is part of the standard discourse of the humanities, both as they stand and in the future. As such, the movement should seek to drop its digital nomenclature with all possible haste. If digital humanities, its methods and its proponents have a purpose, it is to vanish, fully integrated into the normal procedures of scholarship.

## The archival machine

OSWALD (in a loud American accent): OK you guys, let's start firing!

ANDERSON: Firing? What do you mean? Nobody's firing anybody.

[...]

OSWALD is standing in the middle of one of the aisles, surrounded by shelves, staring back at ANDERSON like a gunfighter down the length of the room. MARILYN is standing next to ANDERSON. VERONICA, SPIG and NICK are following at a safe distance.

OSWALD: No, no fire away! At me. I'll find anything you want - within seven seconds...

ANDERSON: Seven seconds?

OSWALD: Too long? Seven seconds is quite long you're right, we'll make it five.

GARNETT: I take it you're computerised.

OSWALD (his voice rising in astonishment): You think we have computers in here! - it'll take years to catalogue all this and get it on line ... of course we have no computers, it's all in here. (He taps his forehead.)

OK, shoot - since the word fire makes you nervous. Shoot now ... What do you want? (*Before they can reply.*) The giant squid? - always goes down well! ... It is widely believed nobody has ever photographed the giant squid alive and under water - but we have a picture here, taken fifty years ago - of precisely that! Want to see the giant squid?

ANDERSON: I think we'll pass on the giant squid.

OSWALD (*ignoring this*): Some people think it's a fake, just a run-of the-mill calamari held close to the camera, that's why it's not world-famous - but I personally feel it's the real giant, caught in all its glorious murkiness. Want me to find it?

ANDERSON: I think it would be a better test, wouldn't it - if we nominated the subject.

OSWALD: Yes. Of course! That's what I meant. (*He smiles*.) I was just a little overeager to show the squid. Shoot.

ANDERSON: You probably wouldn't have a picture ... but my home town Emporia in Virginia.

OSWALD: That's too easy.

ANDERSON: It's not that easy - it's not a very big town.

OSWALD: I tell you it's too easy.

ANDERSON: OK ... our street then ... Limone Avenue ... you won't have that.

Before ANDERSON has finished the sentence, OSWALD's bulky shape has launched off amongst the shelves moving with surprising speed. He gives a great leap to get a box down from a high shelf, a few other boxes tumble down as well, as he dislodges them with his leap, but he comes powering back, with a box open, a whirl of photographs inside. And there is the town.

OSWALD: Here it is, Emporia.

ANDERSON: Jesus ... there it is, yes.

OSWALD: And then ... (He makes a special effects sort of noise.) we get closer, just like a computer blow-up ... we zoom, we zoom closer ... the main street of Emporia (He produces another photo.) and then ... (He produces the next picture with a triumphant flourish.)

The corner of Chestnut Tree Avenue and Limone Avenue.

ANDERSON is genuinely impressed.

ANDERSON (soft whistle): Just look at that...!75

Stephen Poliakoff's Shooting the Past is a screenplay drama situated around the imminent closure of a large photographic archive following the purchase of its premises by an American business school. Faced with the dispersal of the archive's contents, the staff undertake a twofold effort, seeking either to convince the incoming corporation that it should preserve the archive, or to find an external organisation willing to take on the archive as a whole. It is steeped in the tension, conflict even, between what might be considered traditional notions and values of the archive, individual knowledge, scholarship and knowledge media, and an encroaching system of computerisation, international communication, globalisation, money, and data and its accelerating transmission. In capturing this conflict, Poliakoff's play serves well in reflecting the tensive relationship between the component terms of the phrase 'digital archive', expressing the unease that exists between the electronic, even quantum restlessness of computer-driven data services and the romance of the gathering dust in the stillness of the physical archive. Oswald, a stock eccentric genius who surrounds himself with nominally 'legacy' technologies such as tape recorders and analogue cameras, at once embodies the 'traditional' values discussed above and has the strongest awareness of the possibilities offered by digitisation. His knowledge allows him to be more efficient than a database, his presence being more useful than a

<sup>75.</sup> Poliakoff, S., Shooting the Past, Methuen Drama, 1998, pp. 25-7.

computer-rendered image or navigation system, he even refers to 'a computer blow-up' and enacts a process that is now common through the all but inescapable *Google Maps* service; he implicitly poses the question 'What can a computer do that I cannot?', from which we might extrapolate a further question 'What, if any, is the difference between a digital archive and a physical archive?'

In simplistic and literal terms, a physical archive is most often a collection of objects housed in a physical space, the nature of which tends to reflect the status accorded to the archive by the community that surrounds it. In the case of curated archives such as libraries and museums, the objects and space are normally organised by human archivists according a series of systems, the most fundamental of which are physical storage and the creation of catalogues that act as both stock-list and index, relating cognate information such as the creators, titles, media, subjects, and physical locations of archival objects. The contents of the archive are accessed through human agency, through the physical searching for, collection, presentation, and perusal of a given object or range of objects. The physical archive is, quintessentially, a system of objects in which knowledge and its vessels become artefacts of archaeological importance and value. It is also, to some degree, an enclosed system from which objects and events outside of the archive, though connected by reference or inference, are remote, and which requires detailed knowledge of the archive itself or the wisdom of experience of archives more generally to navigate and negotiate effectively. This is the stereotypical archive of Shooting the Past which, although catalogued and physically accessible, requires the accumulated knowledge of its agents, its archivists, in order to be fully connected with the outside world.

It is against this precedent, then, that the digital archive must be considered. In a digital archive the computer programmatically takes on the rôle of much of the archival system, encompassing storage location, catalogue, and retrieval, defining relevance, and displaying representations of the objects it contains. Thus the machinic acts of archival management, selection, retrieval and transmission previously assigned

to humans are transferred to the computer; discrimination between the range of sources presented is left to a user reliant upon similar experiential knowledge to that required in using a physical archive.

Insofar as this, the physical and the digital archive are comparable, being machinic operations that respond to the stimulus of the user. However, in appearance at least, a digital archive is more open in nature than is a physical archive: it allows the objects it contains to be accessed from any location attached to its network; it allows the infinite repetition and reassembly of its objects through access, hyperlinking and embedding; it unsettles the spatial and physical limitations that are necessarily traits of the traditional archive; and, as such, it is engaged inextricably with the rhetorics of participation and accessibility. Further, a digital archive has the capacity to escape Poliakoff's paradigm, in which the user is dependent directly upon the knowledge of the archive's custodians, producing instead a reliance upon the efficient decoding and re-encoding of such knowledge as archival custodians possess into digital indexes and other machine-readable formats. In this new paradigm, the physical and cognate, or intellectual, systems of the archive are collapsed into a single apparatus of organisation and access; thus, within its own frame of reference, the parallel that exists between the traditional and the digital archival machine recalls Alan Turing's 'hope that machines will eventually compete with men in all purely intellectual fields'.76

Describing the archive in terms of a machine or device draws the discussion to the parallel suggested by Mike Featherstone between the archive and Jorge Luis Borges' *The Aleph.* His description of the device echoes Oswald's 'computer blow-up':

Borges says nothing about our ability to control the Aleph and direct what we see, but seems to imply its agenda is out of control,

<sup>76.</sup> Turing, A., 'Computing Machinery and Intelligence' in *Mind*, New Series, Vol. 59, No. 236, Oct. 1950, pp. 433-460, p. 460, <a href="http://www.jstor.org/stable/2251299">http://www.jstor.org/stable/2251299</a>, last accessed 7.3.2016.

or at least beyond our control, that it effortlessly and seamlessly pulls out and zooms in to minutiae.<sup>77</sup>

Excepting, for now, the lack of user interaction, Featherstone suggests this 'vision machine' behaves in a manner similar to an archive, perhaps especially to a digital archive, in offering the possibility of shifting between the general awareness of material that a catalogue provides - location, mass, topic, description - to specific, close analysis of items, their materiality, and the content.<sup>78</sup>

As a vision machine, The Aleph hints at the notion of the panopticon, a term derived from an architectural design allowing a central column of authoritarian space visual access to the whole building but also applicable to an apparatus for viewing everything and recently played upon in the titling of *The Digital Panopticon* project.<sup>79</sup> It is an instrument of neither close nor distant reading, rather a reminder of the relationship between the two. Its element of uncontrollableness, though, unsettles the authority of the viewer who by nature, even if able to see, is not able to hold in awareness all things at one time. In many respects it is the visual parallel of Borges' Library of Babel, a library in which every conceivable pattern of characters is iterated and re-iterated with infinitesimal differences in an inconceivable number of documents spread through the unending network of rooms of a seemingly infinite tower. It is a library in which the acquisition of knowledge has ceased to be a task and has become a religion, in which the readers spend their lives searching for meaningful utterances, driven to depression and even suicide by the improbability of their efforts.80 More prosaically, the library's users are unable to comprehend, control, influence, or rationally explore the documents that surround them.

As a librarian, Borges was perhaps well placed to comment on the growth of

<sup>77.</sup> Featherstone, M., 'Archiving Cultures', p. 164.

<sup>78.</sup> Featherstone, M., 'Archiving Cultures', p. 165.

<sup>79.</sup> The Digital Panopticon, http://www.digitalpanopticon.org, last accessed 7.3.2016.

<sup>80.</sup> Borges, J. L., The Library of Babel.

documentary information, a growth fuelled by the transcription and incremental discussion of evidence and experience, a growth which is reaching an exponential rate of increase in our data-driven culture. About his library readers hangs the air of the scholar confronted with and overwhelmed by the scale of a vast and ever-growing archive. As the body of born-digital and digitised material grows, whether within an archive or in the wider archive of the internet, it tends towards infinity, evermore resembling the fictional dystopia of *The Library of Babel*.

In taking on aspects of archival curation, the promise of such tools as the interactive computer catalogue, the free-text search, and the digital reproduction of archival materials is an efficient, machinic means of navigating this vast body of material, of sifting quickly through the archive for relevant information, enabled by the apparent integration of content and content delivery systems. It is the promise of a controllable *Aleph*, a means of shifting between the distant and the close reading and of navigating unrestricted through the infinite detail of the archive.

In his essay 'Digital Searching and the Re-formulation of Historical Knowledge' Timothy Hitchcock writes that the free-text search allows digital scholarship to transcend 'structures of knowledge imposed after the fact', and that it can 'free us from the habit of mind implied by the structures of archives'. Although he was referring particularly to the 'Google-isation' of scholarship and the inter-disciplinary possibilities offered by free-text searching in traversing the *post facto* topical boundaries employed by many archival systems, it must be remembered that these searches are enabled by machinic systems, by networks of hardware, data and software, all of which are hidden behind the user interface. More importantly, it should be noted that these systems have affordances and limitations embodied in their own structures of knowledge organisation and delivery, just as do their physical equivalents. It must therefore be said that the impression that the digital archive can

<sup>81.</sup> Hitchcock, T., 'Digital Searching and the Re-formulation of Historical Knowledge', p. 89.

enable an escape from 'structures of knowledge imposed after the fact' is an illusory one; rather, it should be said that one system of cognitive organisation is exchanged for another, that the scholars who are the advocates of the archive are replaced by scholars who are exponents the new, digital systems of cognitive organisation.

It is not surprising that these new systems carry with them apparently new challenges; however, the extent to which these challenges are entirely new or to which they are parallel to the challenges of the traditional archive is a matter for further discussion. There are two distinct areas of similarity that can easily be observed between the new, digital framework of archival operation and its physical equivalent: the first area is that of catalogue coverage and granularity; the second is a development of the previously addressed theme of archival mass and its negotiation.

Cataloguing is matter of great importance in all but the most disorganised of archival institutions, for it is the means by which the content of the archive is recorded. If an object has entered the archive but is not yet recorded in the catalogue, to all intents and purposes it exists in a state not entirely dissimilar to that of Schrödinger's cat, at once present and absent, and entirely dependent on human observation in settling that undecidability. In the archive of Shooting the Past, the lack of a catalogue entry may represent no problem: the presence of an informed archivist answers the enquiries of the researcher, locating the appropriate object and returning it. In an institution with a digitised, online catalogue, it is a more serious problem: in this situation, there is no archivist to whom to turn and absence from the digital catalogue can be equated to absence from the functional operations of the archive. If the next stage of digitisation is the provision of a digital surrogate for a particular archival object, then it might be said that it is possible for an archival gap or black hole to emerge: through accessibility and increased versatility, research interest can be focused on the digitised materials supplied by an archive, while undigitised materials receive proportionally less attention, their availability becoming relevant only to those who choose to attend the archive. This gap can be said to be at its most extreme in the interstice between digitised material available through a common search engine, such as *Google*, and entirely uncatalogued material.

Of equal concern is the extreme quantity of available information that has and will continue to come to exist as the digital archive approaches complete representation of its physical counterpart. As with the risk of invisibility posed to undigitised material by the ease of access to digitised objects, the exponential increase of potentially relevant material and its dangers are already visible: the tendency for only the first few results to be explored has led to the race for the top spot in *Google*'s search results. Further, as the mass of searchable material grows and its relevance is better estimated by the archival machine, so it is possible for the unapproachability of the *Library of Babylon* to be inverted; in an efficient digital archival system it becomes possible for the mass of potentially relevant material to become unbearable in a manner comparable to the mass of the apparently irrelevant material that depressed Borges' fictional scholars.

It does not seem unreasonable to question, at this point, the integrity of the nominal divide between the digital and the traditional archive. Though there is an exponential rate of growth of born-digital materials, the digital archive (be it internet or other) intersects at all points with the physical world, with the collective social, cultural, and physical archive of human knowledge and experience. It is thus important to ask: at what point does a traditional archive begin its transition to digital archive? Is the creation of digital surrogate materials required for the archive to be considered digitised, or is an element of hybridity introduced by the creation of a computer catalogue a form of digitisation in itself? The former view would favour a revolutionary reading of the growth of digital culture; the latter a more evolutionary one that draws the 'digital revolution' into the long history of systems and machines of information transfer. The latter interpretation, then, questions the very authenticity and robustness of the digital / non-digital dialectic that is normally regarded as *de facto* in both popular and specialist discourse. In this light and as intimated in the

discussion of machinic systems of archive, rather than being a new and distinct phenomenon *ex nihilo*, the process of digitisation involves the transference of certain sequences of activity from the hands of human machine networks into the programmes of digital machine networks. As such, the introduction of any computer apparatus into the workings of an archive marks the beginning of its digitisation, after which all of the archive's dependent systems must be regarded as hybridised.

The hybridised archive is no new phenomenon; indeed, with the permeation of digital technology that can be observed in all areas of scholarship, it is perhaps a rarer occurrence that an archive should have no digital element, particularly when the advantages of accessibility, speed, and efficiency of computerised catalogues and document retrieval systems are so apparent. However, as individual archives have entered the digital arena, they have brought with them new requirements and new specifications, often with new data and metadata standards; as these have appeared, been contested, customised, superceded or updated in a never-ending patchwork, the problems created by a lack of universal standards for digital cataloguing and surrogation have become increasingly obvious. Inevitably, this presents challenges to the interoperability of the archives across virtual space, meaning that the archival divisions visible in the physical world are to some extent replicated in their new media.

Projects such as *The European Holocaust Research Infrastructure* (EHRI) and *Europeana* represent attempts to unite archival materials by digital means. While both projects are enabled by European Union funding, their intended audiences, the materials that they seek to draw together, and their methods of doing so are distinctly divergent; in spite of these differences, both are reliant on the collation of digital records from a wide range of institutions.

Owing to a number of historical factors, the material records of the Holocaust and its impact are widely dispersed amongst archival instutions and private collections around the globe. In very broad terms, EHRI aims to facilitate access to an aggregated body of information about Holocaust-relevant sources by drawing together catalogue records from a large number institutions and collections. This has been achieved by the harvest and ingest of structured catalogue records from archival institutions and the storage of these metadata in EHRI's own Neo4J database. This indexed graphdatabase allows full-text searching of the archival records from within EHRI's user interface; as well as providing information about the contents of a document or archival series, EHRI's records also direct the user to the relevant archive for further access to the materials. As well as the technical work involved in creating an interoperable structured data set for the navigation of records spread across numerous archives, considerable effort has been expended in the identification of collections, user groups and user requirements, and despite the fact that the project commenced in 2010, its aims are ambitious and, at the time of writing, its outcomes are only partly visible.<sup>82</sup>

While the emphasis of EHRI is placed upon providing Holocaust researchers with a manageable means of tracing relevant materials, *Europeana Collections* provides a unified point of access to a large number of digitised items from archival institutions around Europe. *Europeana* behaves in a similar manner to EHRI in aggregating archival metadata to enable the user to search for items across more than 2,000 institutions; as with EHRI, though the search results and catalogue records are accessible through the *Europeana* interface, the user is referred to the home institution of an item for further access. Whilst EHRI includes non-digitised resources, providing a framework for navigation, *Europeana* is more strictly focussed on materials that can be accessed digitally, effectively forming a virtual archive, or rather a virtual metaarchive. The matter of the terminology applied to these projects is, perhaps, worthy of consideration, for though EHRI and *Europeana* are referred to as digital infrastructures, they might more properly be regarded as meta-structures, as machinic suprasystems

<sup>82.</sup> European Holocaust Research Infrastructure, http://www.ehri-project.eu, last accessed 7.3.2016.

for the navigation of pre-existing metadata structures.

Musicology might stand to gain much from the development of substantial research meta-structures. Owing to the ever-present outward linking of objects and documents that is the foundation of the semantic web, the 'whiz-bang' effect of virtual access to documents that contain music, such as provided by Harvard's Loeb Music Library Digital Scores and Libretti interface, is now somewhat muted; though fundamental to musical research, the importance of such access is perhaps overshadowed by the increasing expectation that digital documents should be resting points rather than end points in a system of objects.83 These expectations depend, to a great extent, on the technological underpinnings of the semantic web, with which projects such as the AHRC-funded Tranforming Musicology are greatly concerned. As well as extending research into music image recognition (often known as MIR), audio pattern matching, and network analysis, perhaps the project's most important aim is to contribute to the development of machine and human readable ontologies for the semantic mark-up of musical data on the internet.84 The semantic structuring of data in machine readable formats, such as RDF and OWL, is of critical importance in the creation of research meta-structures like EHRI and Europeana; these graph and ontology based formats allow the interrelation of data across differently organised archival records by the semantic correlation of related terms in structured datasets. As well as allowing the aggregation of existing data through data mapping, formats such as RDF allow the publication of data into the semantic web; this means that new research data have the potential to be drawn into wide use and easily correlated with other datasets. Further, because of their machine-readability and self-documentation, it is not uncommon for data in these formats to be made available for download and re-use. This is the case with both the Open University's Listening Experience Database and the Bodleian Library's Broadside Ballads Online project. The former crowd-sources information on

<sup>83.</sup> Loeb Music Library Digital Scores and Libretti, http://hcl.harvard.edu/libraries/loebmusic/collections/digital.cfm#overview, last accesed 7.3.2016.

<sup>84.</sup> *Transforming Musicology*, http://www.transforming-musicology.org, last accessed 7.3.2016.

the personal experience of listening to music, subsequently providing RDF outputs for re-use. So As well as providing RDF output for re-use, the latter aggregates and provides links to the contents of a number of ballad databases and indexes, including the Bodleian's collection of ballads, *The English Broadside Ballad Archive* of the University of California, Santa Barbara, and the *Roud Broadside Index* of the Vaughan Williams Memorial Library; in aggregating these sources, the *Broadside Ballads Online* project forms a similarly machinic meta-structure to that of the EHRI and *Europeana* projects. So

<sup>85.</sup> The Listening Experience Database, http://led.kmi.open.ac.uk, last accessed 7.3.2016.

<sup>86.</sup> The Bodleian Library, *Broadside Ballads Online*, http://ballads.bodleian.ox.ac.uk, last accessed 7.3.2016, and University of California, Santa Barbara, *The English Broadside Archive*, http://ebba.english.ucsb.edu, last accessed 7.3.2016.

87.

# Towards a digital resource

One of the central aims of this research has been the production of a prototype digital resource for the study and navigation of the archival material of Welsh traditional music. It was decided in the early stages of the research that this prototype should begin to address a prominent issue in the scholarship of this repertoire - the lack of a publicly accessible database of the music and its sources. It is a gap that has long been noted, if only irregularly decried, by scholars of the subject. The first reference to the importance of introducing computing into the field was made by Peter Crossley-Holland in his article for an edition of *The Journal of the Welsh Folk-Song Society* in 1968: 'The tonal limits of Welsh folk song' closed with the comment that

we offer this paper as a small beginning; we can go little further without a team of workers and a computer.<sup>87</sup>

As the research progressed, it was decided that a browser-based front-end to the database would be provided in order to allow access in a manner that might, at some point after its submission for examination purposes, be adaptable to public use. In order to assess the context into which a prototype online resource for Welsh traditional music might emerge, there follows a brief overview of some existing websites dedicated to traditional music from both Wales and further afield. Though essentially descriptive in nature, this overview acts both as a contextual review for the digital environment in which the digital prototype might exist if it were publicly available, and as an initial foundation for the notion that many existing traditional music websites are to some measure analogous to physical institutions, archives, and exponents of traditional music, and their complexities.

Crossley-Holland, P., 'The Tonal Limits of Welsh Folk Song', p. 67.

### Welsh music online

The presence of Welsh traditional music online is a scattered one and, as with all forms of information on the internet, is subject to rapid fluctuation. Many of the institutions and societies concerned with Welsh traditional music and its material record have websites, but very few of these go further than presenting a digital prospectus for the organisation itself or an introduction to their work or the traditional music of Wales. Beyond the websites of such organisations, there is a large number of community or personal websites either dedicated to Welsh traditional music or with an interest in it. Whoever provides them and however rich, poor, accurate or inaccurate these online artefacts are, it must be observed that, like the publications of the Eighteenth and Nineteenth Century harpists and the later exponents of the oral tradition, these sites help to shape and inform public awareness of the musical traditions of Wales, supporting the formation of arbitrary musical canons and repertoires through the simple means of making available particular pieces of music and information about the repertoire. Further, whereas printed materials have a limited and, frequently, an invested and informed readership, online sources have a potentially unlimited and naïve audience.

As discussed in greater depth in *Archive, music, nation,* one of the most prominent difficulties facing someone interested in the topic of Welsh traditional music is its archival complexity. Put briefly, it is a complexity of varying levels: of sources, their problems, the information that they carry, and the tensive presence-absence field that they create; of archival institutions and their internal structures, workflows and agendas; of individuals and organisations working towards different aims within the field; and of the fragmentation of information between different institutions and collections. These complicating factors are all highly visible in the currently available online materials relating to Welsh traditional music. As such, a system (the internet) through which there is potential to unite the divided archival materials of Welsh

traditional music, their study, and the ongoing cultural practices that they represent fares better in demonstrating the fragmented state of the field than it does in unifying it. Such complications can be interpreted as symptoms of a need for a considered system that seeks to integrate the different forms of information that are relevant to the understanding of Welsh traditional music as a culturally embedded social practice, the type of information system for which this research hopes to make a case.

Given the underlying complexities described above, it is perhaps unsurprising that the online representation of Welsh traditional music and its sources is somewhat haphazard; however, a brief introduction to a number of the principal online sources or presences of organisations that deal with relevant sources will help to establish more thoroughly the state of the online representation of Welsh traditional music at the time of writing. Though there are many sites that might be suitable for such a discussion, ranging from news sites for the folk music community to academic outputs such as the *Cronfa Baledi*, a narrow selection will demonstrate a non-exhaustive but representative set of categories and activity types and highlight the absence of resources that provide an integrative approach to the archival traces of the Welsh musical tradition. These examples have been divided, somewhat approximately, into four categories:

- general purpose and internationally recognisable sites that might be called upon to give a general introduction to Welsh music:
  - The BBC
  - Wikipedia
  - Oxford Music Online
- sites representing the major memory institutions of Wales:

11.00

- The National Library of Wales
- The National Museum of Wales
- sites representing organisations dedicated to Welsh traditional music and its preservation:
  - Canu Gwerin
  - Clera
  - Trac Cymru
- sites belonging to traditional music communities in Wales
  - Folk Wales
  - Pembrokeshire Folk Society
- private sites of traditional music that include Welsh musics.

A number of broad introductions to the topic of Welsh music as a whole exist online. The most accessible are perhaps those provided by the *BBC* and *Wikipedia*, both of which have sections referring more specifically to the traditional music of Wales. The emphasis of the *BBC*'s Welsh music website, so including its *Folk and Traditional Music in Wales* page, so is quite firmly placed upon twentieth century and contemporary musical cultures. Though referring to traditional instruments and their background, the collection of songs, and the folk revivals, the 'Folk and Traditional Music' elements

<sup>88.</sup> BBC - Wales Music, http://www.bbc.co.uk/wales/music/, last accessed 7.3.2016.

<sup>89.</sup> BBC Wales - Music - Folk and Traditional, http://www.bbc.co.uk/wales/music/sites/folk-traditional/, last accessed 7.3.2016.

are mainly concerned contemporary performers, with dedicated pages for particularly prominent figures and groups in that culture, such as Fernhill, Meic Stevens and Cerys Matthews. 90 The only melody or piece of music to have its own featured space is the Welsh national anthem, to which a number of pages are devoted, giving the user the opportunity to hear it, read about its background, and to learn the words phonetically.91 As such, rather than introducing a history of Welsh music through its archival culture, it is a website dedicated to things that are either current or currently prominent in Welsh musical life. Though archival materials can be found on the BBC's website more widely,92 these pages generally fall under the heading of 'This page has been archived and is no longer updated'. The entry for Welsh music on Wikipedia provides a similarly slender portion on the traditional music of Wales, citing a number of instruments, performers, practices and tunes in rapid succession without providing any substantial grounding in the topic, an approach which may be useful for a cursory introduction, but does little to encourage deeper study on the part of the reader. Though the page for Welsh music gives no link to it, Wikipedia has a category titled 'Welsh folk songs' that currently contains entries of varying detail on a small group of songs that range from harp airs to eighties Welsh rock, rendering the category somewhat looser than might initially be imagined. introduction is offered through the relevant entries in the incrementally expanding Oxford Music Online, access to which is restricted by subscription, a factor which renders it an enthusiast, professional or specialist resource rather than public one.

The NLW and the National Museum both provide a certain amount of information

<sup>90.</sup> http://www.bbc.co.uk/wales/music/sites/folk-traditional/pages/about\_traditional\_02.shtml and http://www.bbc.co.uk/wales/music/sites/folk-traditional/pages/about\_traditional.shtml, last accessed 7.3.2016.

<sup>91.</sup> BBC Wales - Music - National Anthem, http://www.bbc.co.uk/wales/music/sites/anthem/index.shtml and outward links, last accessed 7.3.2016.

<sup>92.</sup> Such as the archival footage of the tradition of *canu pwnc* in Pembrokeshire, *BBC* - *Traditional Sung Verse in Pembrokeshire*, http://news.bbc.co.uk/local/southwestwales/hi/people\_and\_places/history/newsid\_8455000/8455329.stm, last accessed 7.3.2016.

<sup>93.</sup> Such as an audio recording of a Welsh miners' choir: *Archive - Coal Mining in Britain - Street Musicians* | *Welsh Miners' Choir*, http://www.bbc.co.uk/archive/mining/6920.shtml, last accessed 7.3.2016.

about the musical life of Wales as evidenced by their collections. The National Museum hosts a number of introductory articles about musical practice and tradition as well as the folk song collecting activities of D. Roy Saer and Ruth Herbert Lewis, which are presented alongside digitised selections from the recordings that they made. With these latter inclusions, relevant pages include a 'History of the Welsh Eisteddfodau', articles on the tradition of carolau plygain, 'The wandering balladeers of Wales', and the crwth; and the 'Aur Dan y Rhedyn' selection from the 'Oral Archives of St. Fagan's: National History Museum'. Though not interconnected by hyperlinks and occasionally showing signs of having been left behind in technological terms, these pages from the National Museum's website form perhaps the most illuminating free resources on music as a cultural practice in Wales, shedding light on both the practices themselves and the activities of collection and preservation. It is of some concern then, that under-investment threaten the operations of this archive and that so little of it is available via a digital archival system, a situation that makes a

<sup>94.</sup> National Museum of Wales, 'Archives', https://www.museumwales.ac.uk/curatorial/social-cultural-history/archives/, last accessed 7.3.2016.

<sup>95.</sup> National Museum of Wales, 'Roy Saer and Folk Song Collecting at St. Fagans', https://www.museumwales.ac.uk/collections/folksongs/?action=background, last accessed 7.3.2016.

<sup>96.</sup> National Museum of Wales, Phonograph cylinders collected by Lady Ruth Herbert Lewis, https://www.museumwales.ac.uk/233/, last accessed 7.3.2016.

<sup>97.</sup> National Museum of Wales, 'Folk Songs', https://www.museumwales.ac.uk/collections/folksongs/, last accessed 7.3.2016.

<sup>98.</sup> *National Museum of Wales*, History for the Welsh Eisteddfodau, https://www.museumwales.ac.uk/290/, last accessed 7.3.2016.

<sup>99.</sup> *National Museum of Wales*, Plygain singing - a Christmas custom, https://www.museumwales.ac.uk/rhagor/article/plygain/, last accessed 7.3.2016.

<sup>100.</sup> National Museum of Wales, 'The Wandering Ballad Singers of Wales' https://www.museumwales.ac.uk/rhagor/article/1917/, last accessed 7.3.2016.

<sup>101.</sup> *National Museum of Wales,* 'A New Discovery Within an Old Instrument: was the Welsh Crwth Unique in Possessing Two Soundboxes?' https://www.museumwales.ac.uk/rhagor/article/crwth/, last accessed 7.3.2016.

<sup>102.</sup> *National Museum of Wales*, 'Aur Dan y Rhedyn', https://www.museumwales.ac.uk/Aur\_dan\_y\_Rhedyn/, last accessed 24.10.2013.

<sup>103.</sup> The use of the proprietary and now unpopular 'RealPlayer', a once ubiquitous piece of software versions of which achieved notoriety as malware, to stream the phonographic cylinder recordings illuminates the pitfalls of digitisation and digital dissemination and its potential for obsolescence and inaccessibility.

compelling case for the creation of an inter-institutional digital archive of and resource on Welsh traditional music.

Where the online system of the National Museum lacks the facility for searching, the systems of the NLW are pervaded by it, a reflection of their different approaches to curation and user interaction. The pages that the Library dedicates to the music of Wales include a page about the national anthem from which it is possible to view the earliest manuscript containing the anthem and, until recently, it was possible to listen to its earliest recording.<sup>104</sup> The archived website of an exhibition held at the NLW in 2005 presents selections from a number of the Library's most recognisable musical documents alongside contextualising descriptions. 105 Nine years on, encore! Music in Wales remains one of very few digital presentations to marry musical sources, music, and contextual information. It offers fifteen briefly introduced themes, each with a set of example source materials, thus providing a miniaturised introduction to the history of music in Wales and some of its social and cultural connections. Though these pages create a similar impression to those of the National Museum as curatorial exhibitions, there is an underlying sense that objects assigned national importance have been deliberately selected in order to underline the importance of the archive itself, a miniaturised example of both the bi-directional flow of cultural importance and the tendency of institutions to reproduce and reiterate their most celebrated items in new configurations and media, revisiting and reinforcing cultural canon for a new audience.

The NLW also hosts the Welsh Ballads Website, 106 a large collection of digital images of

<sup>104.</sup> National Library of Wales, 'The National Anthem' http://www.llgc.org.uk/index.php?id=thenationalanthem, last accessed 7.3.2016.

<sup>105.</sup> National Library of Wales, 'Encore! Music in Wales', http://digidol.llgc.org.uk/METS/XCD00001/ardd?locale=en, last accessed 24.10.2013.

<sup>106.</sup> National Library of Wales, 'Welsh Ballads Online', http://cat.llgc.org.uk/cgi-bin/gw/chameleon?skin=baledi&lng=en, last accessed 24.10.2013.

ballad sheets, and the bilingual successor of *Cronfa Baledi*, <sup>107</sup> a Welsh medium digital index of Welsh ballads. Both projects were collaborative and partly led by E. Wyn James. *Cronfa Baledi* is the result of a collaboration between Bangor and Cardiff universities and provides a database of ballad titles, first lines, tunes, and sources on the internet. Jointly hosted by Cardiff University and the NLW, the *Welsh Ballads Website* attempts to bridge the gap between the fields of the *Cronfa Baledi*, displaying digital surrogates of the ballad sheets and giving access to a greater quantity of contextual information: the NLW provides a portal to the database and the digitised images, while Cardiff University's accompanying website contains a number of digital articles, background information on the project, and a set of audio performances of the ballads. The project has some limitations, including a lack of full-text digitisation, meaning that searches can only be made against the specific details contained in the database rather than by subject or 'free-text'.

Canu Gwerin, Clera and Trac are amongst the most prominent traditional music organisations in Wales. Canu Gwerin, or Cymdeithas Alawon Gwerin Cymru (Welsh Folk-Song Society), maintains a modest online presence including details about the society's officers, history and work; little information is given about the music and musical practices to which the society is devoted. At time of writing, the website promises a future digitisation project for the society's journal; however, until this aspect of the site emerges, its purpose rests at being an online referring agent for the Society and a placeholder for future developments.<sup>108</sup>

The parameters for the activities of *Clera* and *Trac* are quite different to those of *Canu Gwerin*; while *Canu Gwerin* has focused on the preservation and study of Welsh folksong and traditional music through its publications, these organisations are dedicated to the rejuvenation of interest in the performance of traditional music

<sup>107.</sup> Ysgol y Gymraeg, Prifysgol Bangor ac Ysgol y Gymraeg, Prifysgol Caerdydd, *Cronfa Baledi*, http://www.e-gymraeg.org/cronfabaledi/, last accessed 24.10.2013.

<sup>108.</sup> Cymdeithas Alawon Gwerin Cymru, *Canu Gwerin*, http://www.canugwerin.com/, last accessed 7.3.2016

through educational and outreach programmes. The purpose of *Clera*, otherwise known as *Cymdeithas Offerynau Tradoddiadol Cymru*, is to preserve and revive interest in the traditional instruments of Wales, particularly the harp, crwth, fiddle, pibgorn, pibgod and whistle, and their music, with the aim of restoring 'the true Welsh instrumental tradition in the life of the nation'. Though there are potted histories of the instruments and a photographic archive of the activities of the society, like the website of *Canu Gwerin* there are no musical scores or recordings incorporated into the site, nor direct links to archival material; instead, links are given to the websites of performers and events, emphasising current practice rather than historical tradition. Most surprisingly, *Clera* appears to have created and to maintain an online corpus of traditional music, *Alawon Cymru*, but no longer refers to its existence; *Alawon Cymru* itself presents a substantial number of tunes, with additions made monthly via a 'tunes of the month' system.<sup>110</sup>

Trac: folk development for Wales has an active and high-profile rôle in promoting interest in Welsh traditional arts, particularly music and dance particularly, a prominence that is reflected in its website. Beyond the pages about its aims and work, there is a group of articles written by well-known scholars of Welsh music, each describing a particular tradition, figure, or body of information. Though brief, these articles encompass the Robert ap Huw manuscript, *Iolo Morganwg*'s collecting activities, *Mari Lwyd, plygain* and May carols, shanties, instruments and their music, and the impact of John Playford's *The dancing master* upon Welsh traditional music. Some of these articles include audiovisual examples or links to transcribed scores, making this the first site in this category to provide near-direct access to musical and music-historical content.<sup>111</sup>

<sup>109.</sup> *Clera*, 'Constitution', http://www.clera.org/constitution%20clera.pdf, last accessed 24.10.2014.

<sup>110.</sup> Clera, http://clera.org, last accessed 7.3.2016.

<sup>111.</sup> Trac: Folk Development for Wales, http://www.trac-cymru.org/en/traditions, last accessed 7.3.2016.

Beyond the websites of organisations, there is a large number of community or personal websites either dedicated to Welsh traditional music or with an interest in it. Unsurprisingly, these sites are more idiosyncratic than their institutional equivalents, generally reflecting the personal interests of their makers at the same time as sharply denoting the gap that exists between the professional and non-professional web presences. These sites circle mainly around the contemporary 'folk' practices of 'sessions' and performances, but do not, for the most part, specifically attempt to create a source for Welsh traditional music; they instead support community approach to the music based on oral transmission. The notable exception to this is provided by *Folkwales*, the website of *Llantrisant Folk Club* which, as well as details of regular and special activities and related groups, includes notes on the *Mari Lwyd* tradition and the first stages of a simple digital archive of Gower traditions.<sup>112</sup>

It is arguable that the richest veins of Welsh music online are found in folk and traditional tune websites. Some of these sites, such as *Contemplator*<sup>113</sup> and *Musicanet*,<sup>114</sup> have been in existence for a substantial period of time (in internet terms), and have become go-to references for musicians and casual readers alike. Others have a shorter history but arguably more credibility, such as the simple collection of music presented by Chris Grooms' website, *Corff y Gainc*.<sup>115</sup> Though only the last of these three examples regularly contains details of a tune or song's provenance - even so far as detailing its source - the simplicity, strict adherence to purpose and longevity of such sites makes them formidable tools for the dissemination of Welsh traditional music. *Corff y Gaingc* is drawn, for the most part, from materials held at the NLW, transcribed by the owner of the site into a number of music formats and compiled into a flat

<sup>112.</sup> Llantrisant Folk Club, Folkwales, http://www.folkwales.org.uk/, last accessed 7.3.2016.

<sup>113.</sup> Folk music of England, Scotland, Ireland, Wales and America, http://www.contemplator.com/wales/, last accessed 7.3.2016.

<sup>114.</sup> *Welsh Folksongs*, http://www.musicanet.org/robokopp/welsh.html, last accessed 7.3.2016.

<sup>115.</sup> Grooms, C., Corff y Gainc, http://www.docgrooms.com/corff.htm, last accessed 7.3.2016.

archive. The most 'official' of the sites in this category is the aforementioned *Alawon Cymru*.<sup>116</sup> Maintained by *Clera* and supported with grants from the National Lottery and the Welsh Arts Council, this site hosts a number of tunes running to hundreds which are available as scores and MIDI files. Despite its affiliations and obvious usefulness as a reference for tunes, it shares a basic level of web design, functionality, and referencing with most of the other sites in its category.

### The music of other nations online

Wales is not alone in having an inconsistent representation of its national musics online. Widening the field of interest to folk and traditional music websites in other English-speaking regions (Canada, The USA, Australia, New Zealand, Ireland, Scotland, and England) returns a broad array of results. As with the sites dedicated to Welsh music, these results include a mixture of privately owned and managed sites, commercial enterprises, national or institutional projects, and presentations or descriptions of material held in traditional collections. The organisation, states of development, content, scale, scope and appearance of these sites are as diverse as their origins, a state of affairs which creates a divided and incoherent diaspora of folksong material on the internet.

The prominence of the 'living tradition', particularly that of contemporary and recent 'folk culture', is again much in evidence. In this culture, folk performers, whether individuals or groups, play dual, and arguably incompatible, rôles, acting at the same time as preservers of oral traditions and the often non-professional origins of these traditions, and as merchants of a brand of 'traditional' music in an increasingly popularised music market.

As with sites dedicated to Welsh music, the varied approaches to these digital sources reflect the rapidly changing environment of the internet and its attendant technologies

<sup>116.</sup> http://www.sesiwn.com/sesiwn/Tunes/Tunesal.html, last accessed 7.3.2016.

and, taken as a whole, these sites approach a concise history of music on the web. In such an history and in the treatment of the internet as an archive, there is in this body of materials something akin to the romance and nostalgic appeal of the traditional archive, for amongst them are visible numerous elements of internet culture that have not survived the transitions from Web 1.0 to Web 3.0 and beyond, stark reminders of the experimental and unstable nature of this recent, network-powered shift towards online culture. There are echoes of web rings, once ubiquitous and important tools in the navigation and curation of internet materials and communities. Many sites retain chaotic mixtures of colours and fonts 'individualising' an 'off-the-shelf' page, or demonstrating the then cutting-edge technical skill of the 'Web Master'. Aurally, too, there have been vast changes, with the online dominance of the compact, computer-driven MIDI sequence ceding to the MP3. Likewise, static web-design and text-linked flat archives have given way to social media, database-driven websites, and multimedia platforms such as YouTube and SoundCloud and their extended reach through embedded media.

From these mixed results, it is possible to posit a number of factors affecting the production and effectiveness of online resources dedicated to traditional music: the existence of institutions dedicated to traditional music and their state of organisation, the availability of suitable and sustained funding, and the emphasis placed on cultural heritage by respective governments. Timing has also played a significant part in the frequent dominance of privately managed curated collections of music: the seemingly inevitable slowness of institutions to respond to the rapid growth and incursion of the internet created cultural vacuums that have been filled, temporarily or otherwise, by enterprising individuals and groups.

Of the numerous sites available, five seem particularly relevant for discussion: the

English Folk Song and Dance Society's Full English database,<sup>117</sup> Tobar an Dualchais, <sup>118</sup> The Irish Traditional Music Archive Digital Library,<sup>119</sup> the Lomax Geo Archive<sup>120</sup> and Holy Names University Kodály Center's American Folk Song Collection.<sup>121</sup> With varying scopes and functionalities each of these sites offers access to archival material representing different cultural repertoires; each has a different emphasis on how that repertoire is displayed, and therefore how it is considered. A brief description of each and précis of its principal features follows.

### The Full English

The project describes itself as 'the world's biggest free digital archive of English traditional folk music and dance tunes', drawing together the digitised manuscript collections of a number of prominent song collectors in a searchable form with a further view to adding transcriptions and MIDI renditions of these digital records. The quantity of digitised material available through the site is enormous within the sphere of traditional music, with the site laying claim to in excess of 57,000 items.

The project's stated aims are to improve access to materials that are fundamental to the field of English folk music and, in doing so, to stimulate new interest in them: the project encompasses new music, performances, workshops, and lectures, linking the online functionality of the project with creative and educational activities offline.

At its root, The Full English behaves as a digital library, with a catalogue reaching

<sup>117.</sup> English Folk Dance and Song Society, *The Full English Digital Archive*, http://www.efdss.org/efdss-the-full-english, last accessed 7.3.2016.

<sup>118.</sup> *Tobar an Dualchais: Kist o Riches,* http://www.tobarandualchais.co.uk/, last accessed 7.3.2016.

<sup>119.</sup> Irish Traditional Music Archive, http://www.itma.ie/, 7.3.2016.

<sup>120.</sup> The Association for Cultural Equity, *Lomax Geo Archive*, http://www.culturalequity.org/lomaxgeo/, last accessed 7.3.2016.

<sup>121.</sup> Holy Names University Kodály Centre, American Folk Song Collection, http://kodaly.hnu.edu/, last accessed 7.3.2016.

deeper than most library catalogues - to the level of individual songs. The records can be searched or browsed by the user, each eventually yielding a digital image of the relevant manuscript. These two means of accessing the materials create entirely different hierarchies of understanding: searching reveals items according to content, revealing but not describing connections between separate archival items according to the search terms; whereas browsing maintains archival and source structure in relation to the collector who created the document.

#### Tobar an Dualchais

With a large group of sponsors, project partners and contributors, as well as a funding store of circa £3.2 million, *Tobar an Dualchais* or *Kist o Riches* is a large-scale digital collection of '... over 34,000 oral recordings made in Scotland and further afield, from the 1930s onwards'. As an oral histories collection it has no particular focus on music, instead gathering audio recordings of folk-lore, personal histories, music, poetry, songs, and other materials into a single digital archive. The site is fundamentally aimed at collating and making available a corpus of Scottish aural and oral history - a historical bricolage constructed of audio sources and a user's pathways through those sources.

Matching its nature as a resource of people's history, the site's design promotes accessibility, providing several potential and informal routes into its materials. The most prominent is a regional map of Scotland which, if clicked, leads the user to a list of the available materials for the relevant region; with the size of the collection, these lists can be overwhelmingly large. On a much smaller scale, a list of 'most popular items' creates a sense of social or community interest, constructing a sense of value through popularity. The provision of a 'lucky dip' to select from the collections allows an element of chance in interacting with the archive, making it immediate and accessible to the complete newcomer. Though it is hidden in the details of the project, a small curated selection from the collections introduces some recordings of a figure of

particular interest amongst biographical information.

#### Further features of the site include:

- the option of creating a personal playlist from the audio files on the site;
- a guide detailing how to search the site;
- an advanced search of language, duration, date, genre, collection, track title, alternate title, summary in English, summary in Gaelic, place, reporter, contributor, item notes, classification, tape ID, and track ID;
- information about the project, including its staffing, funding bodies, and details of its collaborators;
- social network integration in the form of email, twitter, and facebook.

## Irish Traditional Music Archive Digital Library

Like *The Full English*, the *ITMA Digital Library* is founded on detailed catalogue records already held by ITMA. Though benefitting from similarly detailed foundations, *ITMA Digital Library* is in some senses more advanced than *The Full English*, already presenting a multimodal range of sources in a manner that is more immediately accessible than its English Folk Dance and Song Society equivalent. As well as an online catalogue and index, digitised materials from the collections are available online, including scanned items, sound recordings, video recordings, images, interactive scores (using Sibelius Scorch), and groupings of these items as playlists, galleries, or collections. Each item is presented with catalogue information, often including the item's contents, and many of the printed items are downloadable in PDF format.

#### Its features include:

- information about the project, and its funding;
- the ability to use and search existing playlists and collections;
- a basic advanced search allowing the user to specify media type, whether to search in title and entry or only in title, and whether an exact phrase match is needed.

### The American Folk Song Collection

Albeit the smallest of these sites, *The American Folk Song Collection* is in some respects the most user-friendly, offering a genuinely multimedia presentation of folksongs wherever possible. This is perhaps owing to its roots as an online resource for a Kodály centre.

#### Its features include:

- a detailed initial search either by title or by region, state, origin, school grade level, song type, subject, form type, scale, melodic range, tonal centre, melodic element, rhythmic element, metre, formal analysis, and tone set;
- the ability to browse all items in the collection in one table with a visual guide as to sources;
- the displaying of a range of media and analytical information on a single page, including digital score, catalogue details, audio recording if available, and analytical details of the score from the list given above.

The ability to both browse the whole collection or to search in a very detailed manner is one of its greatest strengths. A further appealing feature is the detailing of the games in which many of the songs available on the site were sung by children, a definite link to the concept of folksong as cultural history. Significantly, the site presents both scores (Sibelius Scorch renditions of Lomax transcriptions) and source material (audio field recordings) together, creating what is effectively a hybrid digital edition.

#### The Lomax Geo Archive

As its title would suggest, this project re-establishes a connection between archival audio material and the location at which it was collected, effecting a form of digital repatriation of cultural material. The site is minimal in appearance, offering the user a small map with markers representing collecting locations; when a user clicks these markers, relevant details of recordings to which the user can listen are brought up in response. No specific search is possible within this access point; though there are other, searchable portals to the contents of the archive, they are not directly connected to the geographical presentation. The site is provided by *The Association for Cultural Equity*, an organisation founded by Alan Lomax. As well as being heavily involved in the collection, dissemination and anthropological study of folk music, Lomax was interested in the potentially transformative effect of and involved in the creation of a multimedia database of folk music, which he titled *The Global Jukebox*. *The Lomax Geo Archive* constitutes an online portal to a part of that database. 122

<sup>122.</sup> Crutchfield, R., I Saw America Changed Through Music: An Examination of the American Collecting Tradition, PhD thesis, University of Glasgow, 2012, p. 191, http://theses.gla.ac.uk/3392/1/2012crutchfieldphd.pdf, last accessed 7.3.2016, and The Association for Cultural Equity, 'Alan Lomax', http://www.culturalequity.org/alanlomax/ce alanlomax\_bio.php, last accessed 7.3.2016.

# Beyond digital analogy

Examining the materials discussed above, it might be extrapolated that, where institutionalised digital archives of traditional music exist, these online resources tend towards analogising the physical archives and materials that they represent, a phenomenon mentioned in Divergence and convergence. They often present digital catalogues that function similarly to written or printed catalogues and indexes; they sometimes give access to materials according to that cataloguing information; they frequently inherit the physical structures, limitations of cross-referencing, and impartiality or partiality of curation that their parent physical archives contain. Where a substantial body of materials has been digitised and made available online, it is arguable that these digital archives offer significant advantages in terms of accessibility, navigation and efficiency of use; however, only a few of the examples discussed above significantly extend widely accepted notions of how a digital archive might operate - most noticeably The American Folk Song Collection and The Lomax Geoarchive. Through the integration of different media, forms of archival and contextual materials, and its educational emphasis, The American Folk Song Collection offers an example of the possibilities of an highly-curated approach, remediating, connecting, and restructuring archival materials according to their musical and contextual contents. Through the introduction of geographical mapping, The Lomax Geo Archive re-negotiates connections between archival materials and their geographical and social places of origin; in doing so, it claims for the archive a spatial relevance and importance that is in some measure reminiscent of the notion of the extension of cultural and geographical delineations through and into virtual space discussed in Archive, music, nation. By emphasising semantic connections other than institutional affiliation and archival structure, these resources escape the sense of creating a virtual parallel to a physical archive, instead demonstrating the capacity for digital methods of presentation, mediation and negotiation to reconfigure the content and systematic operations of the archive.

Alongside the wish to make progress towards a digital means of navigating a small portion of the archival materials of Welsh traditional music, the desire to exceed the creation of a digital analogy to the physical materials of the archive has been one of the most prominent impetuses in the research. These impetuses and the potential solutions offered to them have been heavily influenced by the experience of investigating the materials themselves. Negotiating the archival sources effectively in an effort to construct an understanding of the repertoire, its material cultures, and the cultural practices that they represent requires extensive cross-referencing. In terms of musical indexing, public access to cross-referenced indexes is not currently available outside of the Library building and the indexes of Meredydd Evans and John Lloyd Williams; a very useful bibliography is in print, but it only rarely reaches sufficient granularity to deal with specific musical items, and its cross-referencing is limited. Also, there has, to date, been no integrated system that goes further than crossreferencing musical sources in order to include references to music, to performance, and to reception - all materials essential to the understanding of music as a culturally embedded practice. The value of creating such a store of experiential information is, at the time of writing, being demonstrated by the OU's Listening Experience Database.

The desire to make some progress towards integrating these different types of information in a digital resource has, from the outset, been an important consideration in this research. However, it has also been clear that any digital resource on the topic of Welsh traditional music would, ideally, serve multiple purposes, attempting to fulfil the needs of a range of potential users. Whilst its principal workings have been shaped by the need for the digital element to act as a proposed means of navigating through source materials, its status as a prototype website on the topic of Welsh traditional music has made the provision of information about aspects of the repertoire, its history, its sources and the kinds of activities with which it is associated a necessity. In order to satisfy this need, as well as to demonstrate some of the

research potential offered by the prototype as a means of navigating archival materials, a group of case studies have been drawn up, each of which outlines a sequence of relationships contained within the database and sets them out in a narrative form.

### From source to data

The most pressing concern in the design and production of the resource has been the elucidation and navigation of connections between different sources and the information that they contain. A small example of these types of connections can be seen in Archive, music, nation, in which a version of Cwyn Mam yng Nghyfraith sung by Owen Parry, Dwyran, Anglesey, was collected and published in Alawon Gwerin Môn by Grace Gwyneddon Davies; it was, as a result of publication, subsequently sung in a concert for the Liverpool Cymdeithas Genedlaethol by Miss Gwen Taylor, and a melodically identical version was arranged for choir by Gustav Holst. The aim, then, has been to produce a system with which it is possible to follow and to store research pathways through the materials that provide this sort of information: to produce a system in which a reference to a book of music in a newspaper article or a magazine advertisement can be shown in relation to or accessed from information about that book; or in which a person is connected by hyperlink to the materials they produced or the songs they contributed to the repertoire; or in which a song is considered not only by its inclusion in print, manuscript or recording, but also by all of the sources in which it was mentioned. Inevitably, such completion is a mere illusion; the database itself is small in comparison to the corpus of information that could eventually be expressed through it, but combined with the front end, it is hoped that it provides a model - a proof that the theoretical possibility of completion is an interesting one.

Amongst the most useful exercises in the process of creating this model was an attempt to address a small set of sources in terms of data and data relationships. Doing so revealed the most stable types of data across different materials and how

these might be used to create connections; it helped also in establishing the quality and quantity of information that can be drawn from sometimes surprisingly simple sources. As has been discussed elsewhere, the materials that have informed this research are various in both medium and type; however, they are alike in that every source must be considered as carrying an encoded set of data and as being surrounded by metadata. In decoding this information, fracturing it into fragments of data and re-encoding these fragments, it is possible to restructure relationships between materials according to different criteria. Aside from literally describing this activity in computer-friendly terms, considering the process in the light of Stuart Hall's theory of encoding/decoding is helpful. 123 Through the re-encoding of musical data and metadata, it is possible to change how this information is accessed by a user and thereby to alter the emphasis and meaning given to particular aspects of the data encoded in source materials: incidental references to a place might be emphasised through visualisation on a map; likewise a reference to a particular folk singer might inform an index of their personal repertoire rather than being relegated to the critical apparatus of a published folk song collection. These theoretical situations, both of which have informed the creation of the resource, demonstrate the possibility of returning a sense of situation and personal ownership to musical exchanges via a digital system.

Further particulars on this process of decoding are perhaps best given through a series of examples that discuss the information encoded in a range of materials, and how this might be re-organised in terms of data. Each of the following examples is drawn from the experience of considering a given source for inclusion in the database; each of the sources can be regarded as representing a general type of source, and therefore being applicable more widely.

<sup>123.</sup> Hall, S., Encoding and Decoding in the Television Discourse, Centre for Contemporary Cultural Studies, 1973.

### A collection of folk songs

The first source considered in the research process was Ruth Herbert Lewis' Folk-Songs Collected in Flintshire and the Vale of Clwyd, published in 1914. It is a small, but not unrepresentative, publication of twelve songs that were collected by Ruth Herbert Lewis from a small number of singers who lived within an easy distance of her home in Caerwys. The collection is dedicated to Jane Williams, who was Ruth Herbert Lewis' main source of songs. Each song contained in the collection was recorded onto a phonographic cylinder and was then transcribed by Ruth Herbert Lewis, sometimes with the assistance of Morfydd Owen, who also provided the songs with piano accompaniments. Each song in the collection is given a title, whether that is the first line of its text or a title proper, each is accompanied by a song text and each is furnished with a collection note. These collection notes give some information as to the singer of the song and their location, sometimes the approximate date that the song was collected, and sometimes information about how the singer had come to learn it. For example, one of the songs in the collection, Robin Goch, is provided with the following note

Well known penillion sung by Mrs. Williams, Berthengam, Flintshire. It was sung to her mother by an old man and his daughter as a duet, and had a fiddle accompaniment. The daughter danced round to the refrain "Ding y ling". 124

Through these notes and the other information contained in the publication, it is possible to extract a range of data that situates the collection and its contents. Having decoded them from narrative and re-encoded them in a flexible data structure, information categories such as place, person, and song title offer the potential for an internal re-organisation of the content to occur; therefore, amongst a range of possibilities, it becomes feasible to consider the collection in terms of the people

<sup>124.</sup> Herbert Lewis, R. Folk-Songs Collected in Flintshire and the Vale of Clwyd, Hughes & Son., 1914, p. xii.

connected to each song. Under such a structure, Ruth Herbert Lewis and Morfydd Owen become nodes connected to every song in the collection; likewise, each song becomes a node leading to Ruth Herbert Lewis and Morfydd Owen; the value of the personal repertoire of the dedicatee of the collection, Jane Williams, becomes more obvious, as seven songs are related to her. Based on the collection notes it is also possible to include geographical information in order to produce a map of the geographical point of collection, itself an expression of the importance of physical space in musical exchange and experience.

### Advertisements, concert reports, and other references.

Following on from Ruth Herbert Lewis' Folk Songs, it is interesting to consider an advertisement that appears for it in Y Drych, an American Welsh newspaper which enjoyed circulation across the United States. Aside from Folk Songs (40c.), Grace Gwyneddon Davies' Alawon Gwerin Môn is also advertised at the slightly lower price of 35c; both are listed as being 'yn y ddau nodiant a'r dwy iaith' ('in both notations and both languages'). This is most easily seen as a reference both to the two publications listed and to their authors. Such references are not dissimilar to the types of reference found in sources such as newspaper reports of concerts, in which, instead of sources, reference is made to places, titles of musical items and their performers. What is particularly important here is the notion of description which, like the notes taken in collecting folk songs, both encodes certain connective data and must also be understood as a narrative.

### Musical and poetical relicks of the Welsh bards

Edward Jones' Musical and poetical relicks of the Welsh bards is an important document for a number of reasons, and in particular for the fact that it contributed to the

<sup>125. &#</sup>x27;Llyfrai [sic] a Cherddoriaeth', in Y Drych, 13 May 1915, p. 7, http://newspapers.library.wales/view/3776042/3776049, last accessed 7.3.2016, my translation.

invention of a bardic tradition of music in Wales and, in doing so, helped to establish the concept and content of a canon of a national music for Wales. In terms of the musical and extramusical information it contains it is notably restrained, with each piece of music given with a title and little more. Perhaps unsurprisingly, the most consistently available piece of data for any musical item or reference is the title of a tune, which frequently acts as the only form of identification. This is the case across a variety of source materials including but not limited to manuscript tune books, newspaper articles and diary entries.

#### NLW MS 1816D 1r.

A further example of the dominance of the title in musical identification can be found in the hand list of forty tunes included in a volume of manuscripts belonging to John Jenkins (*Ifor Ceri*). <sup>126</sup> Titles, then, can be regarded as the simplest common element in terms of musical metadata. As seriously flawed as such an arbitrary means of grouping pieces of music together as a title may seem (particularly in a study of traditional music which includes numerous variants of a given tune under the same title or varying titles given to the same tune), it allows even the most basic, text-only sources to be integrated into a larger system of information; it must therefore be regarded as extremely useful. In order to cope with the range of spellings and variations that exist within the titles, they have been organised into title groups in the database, thereby preserving the given titles of any given piece while connecting them with other similar titles.

# Encoding, decoding, re-encoding

The information drawn from sources such as those described above can, amongst other possibilities, be organised in terms of sources of music, musical items contained

<sup>126.</sup> NLW MS 1816D 1r. Though probably not directly related to them, the list precedes an introduction to a concert held at St Asaph in 1739 and a number of letters about Welsh traditional music.

by those sources, and the people related to them; it is sometimes also possible to find descriptions of and references to these sources, items, and people, and it is sometimes the case that these descriptions and references provide information about events, giving a geographical location for a particular musical activity. Sources, musical items contained in them, people involved with them, the events at which they are heard, the locations of these events, and descriptions of all of these, then, are the principle forms of data that have been included in the database. As has been suggested, the organisation of this information into a relational database creates the potential for each of these data types to be made the central point of interest in a given network of data. Without yet exploring it through the digital resource itself, this is perhaps best demonstrated in a series of simple diagrams, for which Grace Gwyneddon Davies' Alawon Gwerin Môn will provide an appropriate example. The majority of the information that is used to create these diagrams has been taken from the foreword to the collection; the titles of the songs are taken from the content of the collection itself. The foreword reads

All the songs in this collection were, with one exception, noted by the collector from the singing of the late Mr. Owen Parry, of Dwyran, Anglesey, who very kindly and readily placed at her disposal the store of delightful songs which he himself as a youth had sung or heard sung by the old people in Anglesey. The tunes are faithfully presented just as they were sung into the phonograph by Mr. Parry, and the words are also reproduced with no material alteration. The song entitled "One of my brothers" was learnt by the collector when a child in Liverpool from the late Mr. William Rowland, a native of Gwalchmai.

The accompaniments are merely what the collector, herself a singer of folk songs, has found helpful. She hopes that these songs may, in some measure, be the means of arousing greater interest in the folk-song movement in Wales which is now stimulated and directed by the Welsh Folk-song society.<sup>127</sup>

The first diagram (figure 4) displays some of the information given in this introduction in relation to the source. The diagram establishes a simple hierarchy for this information that leads from the source to its content, to the people involved in its

<sup>127.</sup> Davies, G. G., Alawon Gwerin Môn, Hughes & Son, 1913, Foreword.

creation, and to further details about the source itself. This structure and type of information is perhaps the simplest requirement for the creation of an index of the sources, following the basic principles of source description and content listing that are required in the creation of detailed source catalogues.

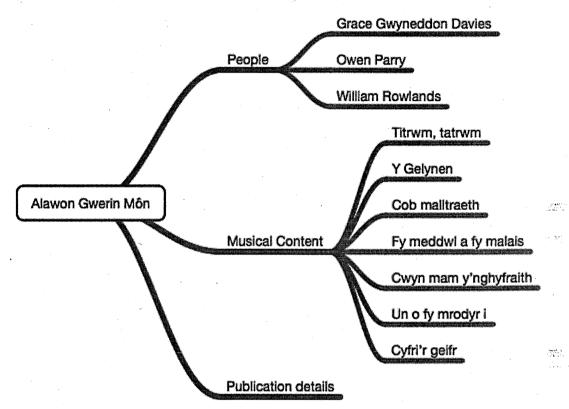


Figure 4: Diagram showing information drawn from Grace Gwyneddon Davies' 'Alawon Gwerin Môn' arranged by content type.

A similar set of information may be structured in order to establish the group of people involved in the creation of the source as the leading element of the hierarchy (figure 5). As in the structure denoted in figure 4, the ability to trace sources and items by person is an existing function in many cataloguing systems; however, it is frequently the case that only the people listed in publication details are included in catalogue records, meaning that the inclusion of the singers from whom songs are obtained is an unusual feature. The data structure shown in figure 5 is a little more complicated than that of figure 4, but it begins to account for personal influence on the songs included in the collection as well as for the importance of location in the transmission of these songs.

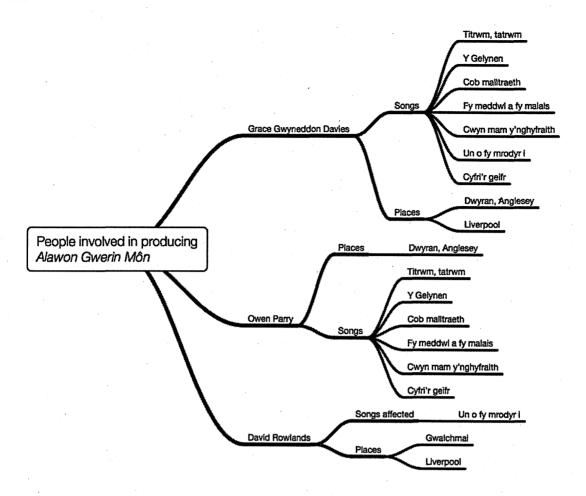


Figure 5: Diagram showing structure of information drawn from 'Alawon Gwerin Môn' arranged according to the people involved in the transmission of the musical materials.

As the collector, editor and arranger of the songs, Grace Gwyneddon Davies is connected to the largest number of songs; the collection notes reveal that she received the songs in two separate locations, which are also indicated in the diagram. Owen Parry of Dwyran, Anglesey, is related to seven songs and to his location; William Rowland leads to only one song, *One of my Brothers*, but to two locations - to Liverpool, where Grace Gwyneddon Davies learnt the song from him, and to Gwalchmai, where we might be intended to think that he himself learnt the song. As has been suggested, this particular data structure is important in emphasising the personal nature of this repertoire and the situated nature of experiencing the songs.

Songs themselves can provide a route through this information, and figure 6 shows the result of placing a single song at the centre of the structure. In this hierarchy, the song *Y Gelynen* leads to the source (*Alawon Gwerin Môn*), to the people to whose

repertoire it belongs (Owen Parry and Grace Gwyneddon Davies), and to the place of its collection (Dwyran, Anglesey). Each song in the publication can be approached in the same manner to produce, owing to the narrow nature of the collection, a similarly shaped diagram.

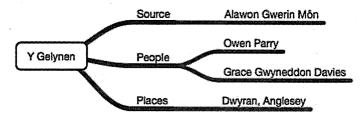


Figure 6: Diagram showing structure of information drawn from 'Alawon Gwerin Môn' that relates to the song 'Y Gelynen'.

This homogeneity can be broken by the introduction of external information. To draw once more on the example of *Cwyn Mam yng Nghyfraith*, by setting that song as the starting point for a trail of information a diagram such as figure 7 might be created. This last diagram shows the publications, people, events, and places that become associated with the song *Cwyn Mam yng Nhyfraith* as it is traced through a small number of sources: its appearance in *Alawon Gwerin Môn*, an arrangement of the tune by Gustav Holst, and a newspaper advertisement for a concert. The duplication of information across the different lines of inquiry that can be pursued from the song demonstrates both the interconnectedness of the data and the value of organising it in a format, such as a relational database, which allows it to be indexed and restructured upon request according to the needs of the user. Finally, this diagram includes for the first time the category of information described as 'references to' a given publication, musical item, person, or event - a category for narrative information relevant to any of these things.

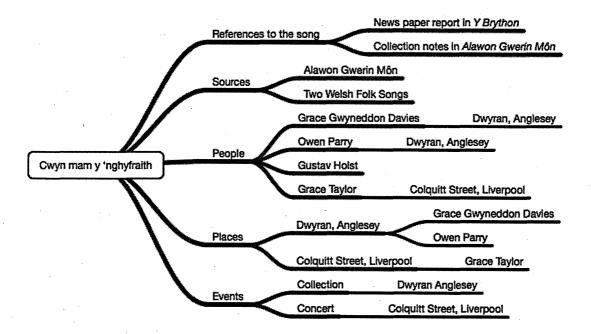


Figure 7: Diagram showing structure of information drawn from 'Alawon Gwerin Môn' and other sources that relates to the song 'Cwyn Mam yng Nghyfraith'.

Re-organisations of information such as those shown in figures 4 to 7, then, offer the prospect not only of re-structuring the information within a source for a new audience and purpose but of using these data as a means of traversing sources and source types in a manner that is more conducive to considering their contents as the documentary evidence of situated cultural activity. These possibilities represent a move towards the potential for exploring musical, social, and cultural histories through particular items of music, through the particular people related to them, through the particular sources that carry them, and through the particular events at which this music is heard.

The possibility of such explorations was discussed in relation to free-text searching by Timothy Hitchcock in 'Digital Searching and the Reformulation of Historical Knowledge', in which he poses the potentially appealing question

What happens when we examine the world through the collected fragments of knowledge that we can recover about a single person [...]?<sup>128</sup>

If we regard the data collected from sources through the processes of decoding and reencoding as Hitchcock's 'fragments of knowledge', it becomes possible to modify this question, making it more flexible in order to suit better the purposes of the current research: What happens when we examine the world through the collected fragments of knowledge that we can recover about a single person, source, song, or event?

Hitchcock's question goes a little further, ending '... re-organised as biographical narrative, rather than as part of an archival system?' Here, his purpose parts ways not with the possibilities of the database but with the possibilities offered by its ability to provide multiple routes through non-linear networks of information such as those shown in figures 4-7. In Hitchock's full question, the desire to create narrative overshadows the opportunity to develop more constellatory structures; however, constellatory structures are arguably well suited both to the purposes of navigating the archive, and to the study of a cultural practice such as Welsh traditional music, a practice that can be considered in terms of interlocking networks of information and activity. The reconfigurability of information in the database format led Jacques le Goff to the following observation:

The documentary revolution tends to promote a new unit of information. Instead of the fact that leads to the event and to a linear history, to a progressive memory, the privileged position passes to the datum, which leads to a series and a discontinuous history. Collective memory reevaluates itself, organising itself into a cultural patrimony. 129

Found in a footnote to an essay by Paul Ricoeur, this comment neatly summarises the idea that the database has the potential to re-create historical understanding from data

<sup>128.</sup> Hitchcock, T., 'Digital Searching and the Re-formulation of Historical Knowledge', p. 90.

<sup>129.</sup> Le Goff, J., quoted by Ricoeur, P., 'Archives, Documents, Traces', in *The Archive*, ed. Merewether, C., Whitechapel Gallery and MIT Press, 2006, pp.66-69, p. 69.

fragments; that, in the breaking of the linearity and concreteness associated with documents and narratives into reconfigurable blocks of data, new forms of 'history' and 'memory' are created. Returning to the purpose of this research, it implies that, through the prototype database and front-end, the documentary memory of Welsh traditional music can be expressed, extended, escaped, and navigated as a tightly interwoven network of hyperlinked cultural material.

# Building the resource

Whilst the objective of producing a database with a web-based front-end has remained stable since the earliest phases of the project, the precise details of how these elements should operate and what should be achieved through them was, for the majority of the period, rather less definite. Early designs for the prototype were highly ambitious, with leanings towards substantial amounts of digitisation, a rigorous searching facility, and interoperability with external data sources; however, these ideas were tempered by the reality of the project's available resources. While many of the digital projects discussed earlier in this document show evidence of substantial funding, teams of staff, and long periods allowed for the outputs to reach maturity, the work in hand is a piece of PhD research, with the standard requisites that the work should be the candidate's own, completed in a fairly limited period, and without extensive funding beyond the bounds of a PhD studentship.

With these limitations in mind, pragmatic decisions were required regarding some of the technical aspects of the project, and the words 'prototype' and 'proof of concept' became firmly attached to any discussion of the digital output. Ideally, in order that its information might be machine readable and easily related to other datasets, the database would have been developed with linked open data or graph technologies similar to those of the EHRI and *Europeana* projects, which were discussed in *Divergence and convergence*; however, without the necessary expertise or budget to provide for this, the decision was taken to use a relational database that, though

extensible and efficient, is not easily reconciled with external databases without the use of intermediary software. Similarly, while there were strong arguments in favour of creating a multimedia website including sound and moving images, inexperience in and limits to the available time for coding meant that only a small range of media could be included. Inevitably, the coding work behind the website and database took far longer than it might have taken a professional and was undertaken in correspondence with archival research and writing; these facts had an inevitable impact on the time available for audience analysis, prototyping, and user-testing, all of which became informal thought processes or experiments rather than carefully documented research activities.

The decision to work with MySQL (a free and widely used database programme) and PHP (a server-side scripting language used to mediate between the database and the information sent to the users web-browser) was taken as the most accessible route to producing a prototype data-driven dynamic website: these technologies were practical both in terms of cost and in terms of ready access to documentation for the creation of the resource. Work on the database began early in the research period, though none of the earliest data models are reflected in the final resource. The earliest iteration of the database to contribute to the final output emerged almost precisely halfway through the research period. It contained tables relating to sources, their contributors, the musical items they contained, and the titles that these items were given, interlinked by a set of index tables. From this position, it was possible to add further tables in relation to the existing ones according to the needs of the front-end.

The first problem to be addressed was that of what might be called 'title proliferation'. In simple terms, many items of music are given at least two titles - one English and one Welsh - and many are given more. Once a large number of titles had been accumulated, it was possible to search the list of titles for similar titles, and to reference this against the index that related musical items to their titles. Through this process, a set of 'title families' began to emerge, which were subsequently added to a

new table in the database and indexed in relation to the original list of titles. Though this might at first seem an unwieldy and time consuming process, it allowed for two things that were previously problematic. It enabled the navigation of musical items that did not necessarily share a title but that were related through another musical item that shared a title with both. It also accounted for the uncertainty created when a document referred to a piece by its title without giving a definite version of the music being discussed. For example, a diary entry might have mentioned a piece of music with a mis-spelled title, and, in such a case, it would have been problematic to link that reference to only the precise version of the title given; if it could instead be said to refer to a broad family of titles, the information could be used and the uncertainty taken into account as a feature of the data. The ability to absorb such uncertainties allowed the addition of what might be called a table of 'references to things' in the database, whether those things were sources, musical items, people, or events. Frequently, these references mentioned a musical activity (an event) in a place, which gave rise to two further tables (events and places). Using index tables to combine all of these information types, it was possible to relate a song family to a place, a musical source to an advertisement for its sale, or a group of disparate newspaper articles to an event.

Each page of the website operates by running a series of queries on the database in order to present the relevant information. For example, the page on Henry Hulse's *The Beauties of Cambrian Melodies* runs four queries: the first extracts the title, date, and description of the source from a table of musical sources; the second extracts information about the people involved in the source's creation, listing the primary contributor under the title of the source and any other contributors separately; the third query searches for all of the titles given to musical items in the source, and matches these to families of titles, returning the latter as an index of the source's contents that leads to pages detailing other appearances of these title family; the final query ascertains whether the source is mentioned in the 'references to' table of the database, providing a link to access this information if it is available. As a result of

this dynamic approach, the website consists of a small number of template pages whose contents are updated according to the queries made on the database.

Home Studies Events Maps Melodies People Sources Back

## The Beauties of Cambrian Melodies

#### Henry Hulse. 1800

Published by H. Humphreys of Carnarvon, this collection presents a selection of fifteen Welsh melodies arranged, unusually, for voice with piano accompaniment without suitability for the harp being explicitly stated. The collection appears to have been manufactured with affordability in mind, being block printed rather than engraved, and demonstrating a particularly unusual typeface for the period.

The arrangements are not inaccessible in terms of difficulty and the texts are in English only, with romantic poetry provided by J. P. Douglas.

No map available for this source

#### People involved

Henry Hulse

#### Song families contained

Llwyn Onn or Ash Grove Ar hyd y nos or All through the Y Gadlys or Of a noble race was Shenkin Malltraeth or Maltraeth Y bais wen or The white mantle Caniad Clych or Chiming of the bells Merch Megan or Megan's daughter Morfa Rhuddlan or Rhydlan Marsh Rhyfelgyrch Cadpen Morgan or Captain Morgan's March Nos Galan or New Year's Night Dewch i'r frwydr or Come to battle Mentra Gwen or Venture Gwen Croeso gwraig y ty or The housewife's welcome Maldod Arglwyddes Owen or Lady Owen's Fancy Llandovery or Llandovery

# References to the source

Find it in the NLW's collection

Figure 8: A screenshot of the page of the digital prototype relating to Henry Hulse's 'Beauties of Cambrian Melodies'.

The mapping of certain elements of the database relies upon the programmatic transfer of location information stored in a database to the digital mapping system *MapBox*. *MapBox* is the only software element of the prototype that is not freely available, but was chosen because of its relative simplicity in terms of coding, its cost effectiveness, and its appealing visual customisation options; these latter allowed the creation of a map that was less definite in its visualisation of geography than many alternative options such as *Google Maps*. In dealing with historical sources that discussed places in indefinite terms, or sometimes places that no longer existed, this lack of visual specificity seemed appropriate. Like many elements of the database (biographical information, the description of sources, and of events), the inclusion of

places required its own tangential research. Sometimes this research was undertaken in order to establish the location of a now demolished building, and sometimes it was in order to provide a plausible geographical position for an event mentioned in a source that gave too few details for precision to be possible. The process of geographic research and representation described here is, in some respects, a microcosmic example of the negotiation between the desire for an ideal output and the restraints of time, resources, and available knowledge that characterised the development of the digital element of the project.

Further examples of the use of the website and database follow in the section *Case studies*.

# Case studies

The purpose of this section is to introduce the features and functions of the digital prototype. Consisting of four case studies, provides discussions of the sources of Welsh traditional music and their cognate information, drawing on source material from the database and describing how this material is organised on the prototype website. The studies are intended both to give an indication of how the site might be understood and navigated, and to provide examples of narratives that can be assembled using its content. As such, reference is made to materials not included on the website, including philosophical and historical materials, for the purpose of engaging the prototypes musical and extramusical content with broader narratives such as national identity, cultural geography, and literary criticism. Re-encoded and hyperlinked versions of the case studies are included as part of the prototype resource, accessible using the link to 'Studies'.

The first case study introduces and discusses a collection of folk songs published by Ruth Herbert Lewis in 1914 with particular reference to cultural geography and source reception. The second traces materials relevant to the melody *Ar Hyd y Nos*, with reference to the ideas of cultural canon, musical identity, and the use of music as a thread through which history can be explored. The third study discusses sources relating to a drunken fight that took place in Llangollen in the early 1860s, exploring the idea of revivifying historical events through the interconnection of musical and extramusical source materials. The final case study discusses some of the diary entries about music made by J. Lloyd Williams as a source of information on Welsh traditional music as a situated musical experience.

# Case study 1: Folk-Songs Collected in Flintshire and the Vale of Clwyd

Many of these old songs are in danger of perishing, and it is of great importance that they should be noted from the old people while they can still sing [...] The publication of these songs has meant some time and trouble, but I hope they may bring back memories in the homes of Wales of old songs heard in childhood, and if they give any pleasure, I shall feel amply repaid. 130

Published in 1914, Folk-Songs Collected in Flintshire and the Vale of Clwyd was the first of two collections of songs by Ruth Herbert Lewis. The above passages are taken from the preface to the collection, and recall Svetlana Boym's observation that

Preoccupation with tradition [...] is a distinctly modern preoccupation, born out of anxiety about the vanishing past.<sup>131</sup>

While Ruth Herbert Lewis' hope for the collection to 'bring back memories' seems a modest one, the fact that members of the Welsh Folk-Song Society were active not only in collecting and preserving but in promoting Welsh folk music cannot easily be ignored. It is perhaps revealing that some of the impetus for the publication came from Mary Davies, who was energetic in her promotion of Welsh traditional music, and the Welsh Folk-Song Society and its work in England as well as in Wales. With this in mind, and however humble Ruth Herbert Lewis' aims, it is worth noting that the editors of *Caneuon Cenedlaethol Cymru* = *The National Songs of Wales* (1951) observed that

Of the many others to whom Wales is indebted, we should also name Dr. Mary Davies, Lady Herbert Lewis and Mrs. Grace Gwyneddon Davies. 132

<sup>130.</sup> Herbert Lewis, R. Folk-Songs Collected in Flintshire and the Vale of Clwyd, p. viii.

<sup>131.</sup> Boym, S., The Future of Nostalgia, p. 19.

<sup>132.</sup> Davies, E. T., Northcote, S., Prys-Jones, A. G., eds., *Caneuon Cenedlaethol Cymru = The National Songs of Wales*, Preface.

The collection itself is a modest one, containing twelve songs presented in staff notation (often referred to as *hen nodiant* in Wales) with a text, arranged for voice and piano by Morfydd Owen. Alongside the songs, the collection contains a number of cartoons provided by *Pen Twadl* (William Caine, Ruth Herbert Lewis's brother) and prefatory material comprised of an introduction by Ruth Herbert Lewis and a short note on the provenance of each of the songs. These notes provide contextual information about the songs, giving details of the circumstances of their collection, and sometimes describing either how the singer came to know them or their relationship with songs in other collections.

The database records several distinct forms of data derived from the collection itself. The most fundamental of these is the metadata that describes the collection, including its title, the people involved in its creation, its publication details, its tune contents, and a general description of the collection. All of this information is displayed on the 'source' page of the prototype (figure 9). As well as gathering and ordering these different pieces of data, the 'source page' offers four sets of hyperlinks that can lead the user to further details, including:

- biographical information about the people involved in the collection, in this case, Ruth Herbert Lewis (editor), Morfydd Owen (arranger), and the six informants - Jane Williams, David Roberts, Ifan Edwards, Mrs Mark Owen, Mrs Williams, and Thomas Roberts;
- song pages that give details of the names tunes are known by, access to references to the tunes, and include links to other collections in which the tunes or similarly-named tunes can be found, in this case twelve groups are accessible Gwenni aeth i Ffair Pwllheli, Y Blotyn Du, Lliw Gwyn Rhosyn yr Haf, Mynwent Eglwys, Robin Goch, Can y Bachgen Main, Angau, Torth o Fara, Chwech o Eifr, Gwn Dafydd Ifan, The Little Gipsy Girl, and Lovely Nancy;

- detailed contents, which includes digitised versions of the tunes contained in the collection;
- references to the source, which indexes and displays quotations from sources in which the collection has been mentioned.

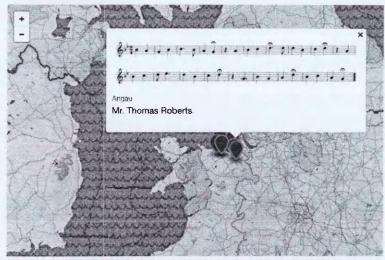
# Folk-songs collected in Flintshire and the Vale of Clwyd

#### Ruth Herbert Lewis, née Caine 1914

A collection of songs drawn from a small area centred on the Herbert Lewis' household, Penucha, Caerwys. In the introduction to the publication, Ruth Herbert Lewis described this as being of critical importance to her decision to undertake folk song collection and publishing; she also acknowledged the importance of a single singer, Jane Williams, in both the decision to collect and the collection process.

Ruth Herbert Lewis was helped by a number of friends in the enterprises of collection, transcription and arrangement. The songs presented in this volume were arranged by the composer Morfydd Owen.

#### Map of collection area



# People involved

Ruth Herbert Lewis Mr David Roberts Mr Ifan Edwards Mr Thomas Roberts Mrs Williams Mrs. Jane Williams Mrs. Mark Owen Morfydd Owen

#### Song families contained

Gwenni aeth i Ffair Pwllheli or Gwenni went to Pwllheli Fair Y blotyn du or The black spot Lliw Gwyn Rhosyn yr Haf or Lliw Gwim rose of summer Mynwent Eglwys or Churchyard Robin Goch or Red Robin Can y Bachgen Main or Song of the lad from Main Angau or Death Torth o Fara or Loaf of bread Chwech o Eifr or Six goats Gwn Dafydd Ifan or Dafydd Ifan's Gun Little Gipsy Girl or The Little Gipsy Lovely Nancy or Lovely Nancy

#### Details of contents

References to the source

Find it in the NLW's collection

Figure 9: The 'source page' for 'Folk Songs Collected in Flintshire and the Vale of Clwyd', displaying places of collection as pins on the map, one of which has been selected to show the melody 'Angau'.

Amongst the details most consistently proffered by the collection notes is that of place, most often identifying the place of residence of the singer. As with Grace Gwyneddon Davies' *Alawon Gwerin Môn*, the collection draws on a corpus of songs from a restricted geographical area, an important consideration for Ruth Herbert Lewis:

To Mrs. Mary Davies, F.R.A.M., who first introduced me to the folk-song, and to whose encouragement this collection is due, and to Mrs. Jane Williams of Holywell, whose store of songs convinced me that a collection could be made within easy distance of my home.

On the 'source page' for the collection, the places where each song was collected are marked by a point on a map below the source description. Though rudimentary, it might be suggested that this map display of the singers' locations helps to relate the collection to a sense of musical geography. In *Cultural Geography*, Mike Crang writes that

The geography of music may [...] be traced through the spaces of listening and performance, the creation of what might be called sonoric landscapes.<sup>133</sup>

If Ruth Herbert Lewis' collection can be interpreted as preserving echoes of a sonoric landscape such as that posited by Mike Crang, the geographical mapping of its contents offers an opportunity to represent the relationships between those echoes and places to which they at some point belonged. The sonoric landscape from which these echoes have been distilled might be regarded as a network of musical transactions, transactions involving 'listening and performance', but also of teaching and learning, and of performing and recording. Many of the details given in the collection notes refer particularly to the last of these transaction types, to a situation engineered for the purpose of collecting the song; therefore, it is only this deliberate instance of collection that is reflected on the map displayed on the source page.<sup>134</sup>

Using the links to the song-specific pages allows the user to see a wider range of geographically relevant data about songs for which the information is available; this information is taken from a variety of sources, including the collection notes. Though less specific about the version heard in a given place, following the link from the 'source page' to Y Blotyn Du leads the user to a page about the song, which includes a map displaying places at which the song has been heard or mentioned (figure 10). Although imperfect in allowing different versions of a song known under the same

<sup>133.</sup> Crang, M., Cultural Geography, Routledge, 1998, p. 92.

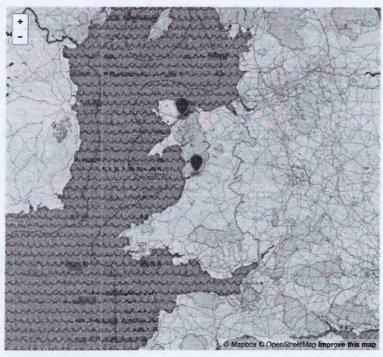
<sup>134.</sup> There is an inherent ambiguity in many references to a tune or to a song, in that the most commonly available piece of identifying information is only a title; as such, the database and its interface have been structured to distinguish between the definite details of song collectors' notes and less definite namings or descriptions of a tune.

family of titles to be considered on the same geographical plane as one another, this map represents a step towards acknowledging the kinds of musical transactions that led towards to the inclusion of the song in the collection.

## Y blotyn du or The black spot

#### Known as

Y Blotyn Du.



## Appears in the following sources:

Folk-songs collected in Flintshire and the Vale of Clwyd (1914) Ruth Lewis papers in J. Lloyd Williams Archive AH2/1 (191x)

Versions of the tune

References to the song

Figure 10: The 'song page' for 'Y Blotyn Du', which includes a map of places where the song has been heard or mentioned.

In another instance, more detailed collection information is displayed, referring to Jane Williams singing of *Mynwent Eglyws*:

It is her favourite song, and the one she admires most in her collection. She used to sing it to each of her twelve babies "to cheer them up!" She had all her songs from her mother, who had used this song for the same purpose.

Through the indexing and compilation of similar descriptions, perhaps especially through their display on a map, the contexts in which the songs were heard become more readily accessible.

As well as re-encoding information from the collection itself into the hyperlinked and

geographically mapped format described above, the 'source page' offers the prospect of exploring reactions to the source itself. Using the 'References to the source' link leads to an assemblage of sources in which the collection of songs has been mentioned or discussed, allowing the inter-connection of the source with more diverse items from the archive. In the case of *Folk Songs Collected in Flintshire and the Vale of Clwyd*, the database includes two reviews of the collection, an advert for it, a reference to its then forthcoming publication in a lecture by Mary Davies, and a brief report of a performance that included some songs from the collection. Taken together, these materials are helpful in considering the success of the collection with reference to Ruth Herbert Lewis' aims, as earlier discussed.

Rumour of the collection's appearance first appears in print in December 1913, after a popular lecture on Welsh folk songs given by Mary Davies in London. Lectures on Welsh music were amongst the Welsh Folk-Song Society's means of promoting knowledge of their work and its subject, providing opportunity both to discuss and to demonstrate Welsh traditional music. Mary Davies, herself a noted singer, was among the more prominent of the Society's speakers in London. In discussing the state of Welsh folk song scholarship, Mary Davies is reported to have observed that

The number of melodies now was so large that an editor was quite unable to compile a census of them. The number of collectors had also increased. Mrs Herbert Lewis had been very successful in her own county, and her collection was sufficient to justify her in publishing a volume.<sup>135</sup>

The collection was first reviewed in *Seren Cymru* on the 2nd of October 1914, shortly after publication; however, perhaps the most interesting review appeared in *Y Goleuad* on the 23rd of October 1914:

<sup>135. &#</sup>x27;Welsh Folk Songs' in *The Carmarthen Weekly Reporter*, p. 6, http://newspapers.library.wales/view/3584777/3584783/101/, last accessed 7.3.2016.

#### Can Gwerin.

Y mae Mrs. Herbert Lewis wedi casglu nifer o hen ganeuon gwerin Cymru "siroedd Fflint a Dinbych gan mwyaf" ac wedi eu cyhoeddi, gyda'r gerddoriaeth "hen nodiant" a'r geiriau. Y mae'r geiriau a'r miwsig yn ddyddorol iawn, ac y mae'r darluniau gan Pen Twadl yn ddigrif dros ben. Cyhoeddir y casgliad gan y Mri. Hughes a'i Fab, Wrecsam, a'i bris ydyw swllt - y casgliad rhataf a welais. A yr holl elw oddiwrtho i gronfa Tywysog Cymru. Saeson, wrth gwrs, ydyw Mrs. Herbert Lewis a'i chwaer, Lady Herbert Roberts, ond y mae'r ddwy yn well Cymry o ran teimlad ac iaith nag aml i Gymro o waed.

# [Folk Song

Mrs. Herbert Lewis has collected a number of old Welsh folk songs "of Flintshire and Denby for the most part" and has published them with the music in the "old notation" and the words. The words and the music are very interesting, and the illustrations by Pen Twadl are highly amusing. The collection is published by Messrs. Hughes & Son, Wrexham, and the price is a shilling - the cheapest collection I've seen. All profits go to the Prince of Wales' fund. Mrs. Herbert Lewis is, of course, English like her sister, Lady Herbert Roberts, but the two of them are more Welsh in feeling and language than many a Welshman by blood.]<sup>136</sup>

The last sentence of this review neatly encapsulates the enduring perception of Ruth Herbert Lewis as 'An "English" Lady among the Welsh Folk', as it has been framed by E. Wyn James, 137 though it is, perhaps, tinged with some degree of frustration at the 'Welshman by blood' ('Cymro o waed'). The other review of the collection is similarly positive, describing it as

gasgliad swynol a difyr iawn o'r hen alawon gwerin.

[a very fascinating and jolly collection of old folk tunes.] 138

By 1915, it was possible to purchase the collection in America, courtesy of W.

<sup>136. &#</sup>x27;Can Gwerin' in Y Goleuad, 23 October 1914, p. 10, http://newspapers.library.wales/view/3492933/3492937/7/, last accessed 7.3.2016, my translation.

<sup>137.</sup> James, E., W., 'An "English" Lady Among Welsh Folk: Ruth Herbert Lewis and the Welsh Folk-Song Society', in Russell, I. and Atkinson, D., eds., Folk Song: Tradition, Revival, and Re-Creation, Elphinstone Institute, 2003, pp. 266-283.

<sup>138. &#</sup>x27;Ar y Bwrdd' in *Seren Cymru*, 2 October 1914, p. 9, http://newspapers.library.wales/view/4126986/4126995/26/, last accessed 7.3.2016, my translation.

Gaerwenydd Thomas, who advertised the collection in *Y Drych* at the price of \$0.40,<sup>139</sup> and evidence begins to suggest that the collection had become established:

#### CYMRU FYDD UP. PARLIAMENT STREET.

Nos Sadwrn ddiweddaf, cawsom gyngerdd hwyliog dan lywyddiaeth Dr. T. J. Williams. Y doniau canlynol yn canu pedrodau, deuawdau, unawdau a chaneuon gwerin o gasgliad Mrs. Herbert Lewis, gydag eneiniad: Mri. Fred. George., O. R. Hughes, David Williams, J. T. Jones, John Williams, James Nicholas, George Nicholas, J. R. Morris, a Mr. Joseph Williams yn canu'r berdoneg; Mri. J. J. Thomas a J. E. Owens yn diolch.

## [CYMRU FYDD UP[PER] PARLIAMENT STREET.

Last Saturday night, we had a fun concert under the auspices of Dr. T. J. Williams. The following talents sang quartets, duets, solos and folk songs from Mrs. Herbert Lewis' collection, with conviction. Messrs. Fred. George., O. R. Hughes, David Williams, J. T. Jones, John Williams, James Nicholas, George Nicholas, J. R. Morris, and Mr. Joseph Williams playing the piano; Messrs J. J. Thomas and J. E. Owens giving the thanks.]<sup>140</sup>

Within a year of its publication it seems that the collection had exceeded its intention of preserving a disappearing tradition for nostalgic purposes and had become a stimulant to new musical activity; a distillation of a network of musical transactions had itself become a node in that same network.

<sup>139. &#</sup>x27;Llyfrai [sic] a Cherddoriaeth', in Y Drych, 13 May 1915, p.7.

<sup>140. &#</sup>x27;Cymru Fydd Up. Parliament Street' in *Y Brython*, 25 November, 1915, p. 8, http://newspapers.library.wales/view/4018055/4018063/37/, last accessed 7.3.2016, my translation.

# Case study 2: Ar hyd y nos

In an episode of *The Two Ronnies* first broadcast in 1977, the eponymous stars of the show appear as members of the fictional *Nant Garw Co-operative Male Choir*. Like the frontispiece of Nicholas Bennett's *Alawon fy Ngwlad*, the sketch relies upon a semantic field of Welsh identity, though with aural aspects of music-making taking a prominent position. In the course of a six minute musical item, a choir of 'Welsh' miners led by Evan (Ronnie Barker) and Dai (Ronnie Corbett) sing comic lyrics to a series of Welsh tunes; accompaniment is provided by the 'Welsh' timbres of a brass band and a harp, and the lyrics treat topics ranging from local gossip to rugby. <sup>141</sup> The visual elements might have been equally applicable to any mining area in the world, and it is the tunes chosen that offer the most potent form of legitimation for the 'Welshness' of the sketch, and it is clear that an unambiguous association with Wales was one of the criteria for their selection. <sup>142</sup>

Perhaps the most successful of the parodies contained in the sketch is that of *Ar Hyd y Nos*, a tune arguably amongst the most popular and readily identifiable with Wales. Since its first publication in Edward Jones' *Musical and Poetical Relicks of the Welsh Bards* of 1784, it has appeared regularly in collections of Welsh national music, and its recognisability as a Welsh tune has made it a staple of the repertoires of Welsh musicians and groups. As demonstrated by *The Two Ronnies'* sketch, and like the nationally important collections of the NLW and the institution itself, such tunes as *Ar hyd y nos* and their exponents share in a cyclical authorisation of Welsh identity, each affirming the other. The inclusion of this particular tune on discs by prominent performers from Wales such as Bryn Terfel, Aled Jones and Catrin Finch, in the

<sup>141.</sup> Like much televised comic material of its period, the portrayal of this stereotype of the Welsh now sits a little uncomfortably; in many respects, though, the sketch is not disproportionately problematic, partly owing to the existence of an equivalent parody of an English all-female choir, known as *The Plumstead Ladies Choir*.

<sup>142.</sup> The Two Ronnies, Series 6, episode 2, first broadcast on BBC 1, November 17th 1977.

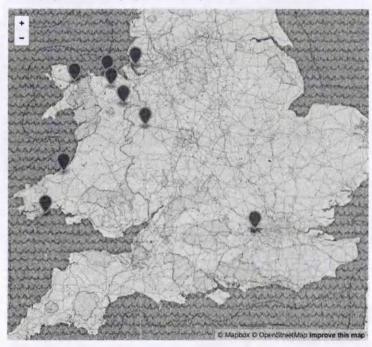
programmes of male voice choirs (which, in Britain at least, have come to be strongly associated with Wales and its industrial heritage), and in so many books of national music is clearly intended as a reference to the Welsh backgrounds of these groups and figures; at the same time, the use of the tune in these contexts reinforces its position as an authorising signifier of a Welsh national music.

The early appearance and unbroken popularity of *Ar Hyd y Nos* make it a versatile candidate for exploring the possibilities offered by restructuring information in the database according to a given tune. Using the song page of the database's front-end, it is possible to access a range of details about the melody's appearances, both in terms of sources that contain versions of it, and in terms of evidence of its use and performance in a wider cultural context (figure 11).

# Ar hyd y nos or All through the night

#### Known as

I've been weeping. A Dirge. All Night long. All the live long night reclining. All through the night. Ar hyd y nos. Poor Mary Anne. Sweet the tale of minstrel merry. The live long night. The live-long night. The sea-song of Gavran. The widow's lament.



#### Appears in the following sources:

Musical and Poetical Relicks of the Welsh Bards (1784) Six Welch Airs (1796) The Beauties of Cambrian Melodies (1800)Sixty of the most admired Welsh Airs (1803) A select collection of original Welsh Airs (1809) A selection of Welsh melodies (1809) A Collection of Welch Airs (1810) A Selection of British Melodies (1817)A Selection of Welsh Melodies, 1st Number (1822) A collection of the most Popular Welsh Airs (1834) A choice collection of Welsh Airs The Songs of Wales (1874) The Songs of Wales | Caneuon Cymru (1879) Gem Selection Songs of Wales (1907)

#### Versions of the tune

References to the song

Figure 11: The 'song page' for 'Ar Hyd y Nos', displaying the names the song is known by, sources in which it appears, and a map of locations at which the song has been heard or mentioned. It also displays links to digitised versions of the song and to references to it in other sources.

The song page provides a list of some of the titles under which the melody appears in

sources included in the database. Though simple, this list is important to the process of interlinking various sources, and of finding references to the tune in other materials. Inevitably, some of the titles that appear here are more commonly occurring than others. Unsurprisingly, *Ar Hyd y Nos* and *All Through the Night* are the most frequently found; however, the name *Poor Mary Ann* enjoyed a period of popularity in the nineteenth century after the publication of Edward Smith Biggs' *Six Welch Airs* of 1796, which included the tune with a text beginning 'Here beneath the willow sleepeth Poor Mary Ann'; rather rarer is its appearance as *The Sea Song of Gavran*, a version of the song which first appeared in John Parry's *Welsh Melodies* in 1809 with words by Felicia Hemans and was performed at the prize-giving ceremony of Christchurch Boys' High School in Christchurch, New Zealand, in 1887.<sup>143</sup>

To the right of the page is a set of hyperlinks leading the user to further details about references to the melody in the database:

- a list of sources in which the melody itself appears, which is, in this case, quite extensive and includes Edward Jones' Musical and Poetical Relicks of the Welsh Bards (1784), William Smith Biggs' Six Welch Airs (1796), Henry Hulse's The Beauties of Cambrian Melodies (1800), William Bingley's Sixty of the Most Admired Welsh Airs (1803), George Thomson's A Selection of Original Welsh Airs (1809), John Parry's A Selection of Welsh melodies (1809), and later publications such as John Thomas (Pencerdd Gwalia)'s Songs of Wales (1874) and the popular Gem Selection Songs of Wales edited by A. W. Tomlyn and D. Emlyn Evans. Each item of the list is hyperlinked to information about the relevant source.
- a link (where applicable) to digitised versions of the tune for comparative purposes, which in this case range between its first appearance as a harp-

<sup>&#</sup>x27;Boys' High School' in *The Press*, Volume XLIV, Issue 6941, 22 December 1887, p. 6, http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&d=CHP18871222.1.6&e=22-12-1887-22-12-1887, last accessed 3.7.2016.

song with five variations in Edward Jones' *Musical and Poetical Relicks of the Welsh Bards* to the accompanied part-song arrangement published by William Smith Biggs.

a link to references to the melody, which indexes and displays quotations
 from sources in which the melody has been mentioned.

Like the source pages for folk-song collections, the song page includes a geographical map; however, whereas the map produced for those sources set images of the musical score in relation to its place of collection, the map that appears on the song page presents descriptions of hearings and performances of the tune in question according to where they were heard, accentuating the melody's existence in situated musical events, maintaining an interest in the 'sonoric landscape'. The sheer range of musical activities and situations to which the tune *Ar Hyd y Nos* is related by these descriptions calls to mind the following observation made by Michael Pickering in his paper *Song and social context*:

The message or meanings of songs are never immutably sealed, but shift and vary according to a range of social variables characterising particular performers and audiences (gender, for example, or socio-economic status) and according to the historical and cultural contexts, occasions, and social settings, in which they are conceived, and received, as the performance weaves the weft of words and tune in time together across the warp of situated consciousness.<sup>144</sup>

Though words are not necessarily consistent - or even present - in the different experiences of the melody, exploration of the evidence of its performance in different settings reveals a remarkable flexibility in its use, and the extent to which its 'message or meanings' shift according to its context. The descriptions located on the map see the melody in use in contexts as varied as a royal entertainment in Windsor Castle and a St David's Day celebration at Denbigh Asylum - both of which are described with

<sup>144.</sup> Pickering, M., 'Song and Social Context' in Russell, I., ed., *Singer, Song and Scholar*, pp. 73-93, Sheffield Academic Press, 1987, p.74.

some degree of enthusiasm:

#### Welsh Choir at Windsor

During an interval between this number and the next, which was also an old Welsh favourite, "Ar Hyd y Nos," the King and Queen Alexandra and everybody seemed much more at ease, and, breaking all rules of conventionality, chatted gaily. In this rendering the choir simply excelled itself, and at the end there was the heartiest applause. 145

## St. Davids Day at the Asylum

The festival of the Patron Saint of Wales was not forgotten at the Asylum. As the first of March fell this year on a Wednesday, it was decided to turn the usual Wednesday Night's entertainment into a St. David's entertainment. In addition to the usual dances, a programme of Welsh National Music had been arranged by Mr. J. Ll. Williams, the organist of the Institution. The lady members of the Asylum choir were appropriately dressed in Welsh costumes, and the platform had been tastefully decorated with leeks and other Welsh emblems, the dresses and the decorations being under the efficient superintendence of Mrs. Nevin, the Matron. 146

Though such a juxtaposition seems extreme, it demonstrates the capacity for the structuring of data according to musical content in the creation of new constellations of events, information, and recorded experiences - constellations that, by concentrating on a single melody, reflect music as a fluid form of social currency. In this model, the geographical map serves in a number of rôles. Most obviously, in remediating the geographical situation of given experiences, it provides an easily identifiable visual access point to the information about them. More subtly, it serves as a space within which the hierarchies of contrasting events such as those above are destabilised, each being represented by an identical marker, each being accessed in the same manner, and each being shown only in relation to melody and geography.

However disparate their situations and audiences, the events described above were

<sup>145. &#</sup>x27;Welsh Choir at Windsor' in *The Weekly Mail*, 16 November 1907, p. 3, http://newspapers.library.wales/view/3444206/3444209/60/, last accessed 7.3.2016.

<sup>146. &#</sup>x27;St. David's Day at the Asylum' in *The North Wales Times*, 4 March 1899, p. 4-5, http://newspapers.library.wales/view/3817255/3817259/40/, last accessed 7.3.2016.

essentially music-oriented, concerts with choirs, soloists, and audience members; both might also be interpreted as formalised celebrations of Welsh musical identity. There are many such references available, particularly in newspaper reports of concerts, eisteddfodau and other musical events, but there is also evidence of music as a byproduct of other activities, music as a social rather than a performative activity.

For example, a more personal description of hearing the tune arises in John Lloyd Williams' diaries, recounting a visit to his friend, the poet, J. Morris Jones:

Called w. J. Morris Jones in returning - conversed for 3 hrs. -

Harp tried to tune - He tried slowly & with consideration & with painful deliberation "Ar Hyd y Nos" V. Beautiful chamber instrument. It is clear that the chief disadvantage is the difficulty of tuning v. especially for unmusical people. 147

Just as the geographical map alters the hierarchies between types of events, so including references to a melody from different types of sources in the same visual space (that of the references page) acts to equalise the prominence of public and hitherto private records of musical activity. Here, recorded in the personal notes of J. Lloyd Williams and far from a proudly reported performance, the playing of the tune has arisen in a private conversation between two friends.

The press too carries references to *Ar Hyd y Nos* being heard outside of strictly musical confines, providing, for example, this colourful account of its singing at a tithe sale in Cardiganshire in 1888:

## MORE TITHE SALES IN CARDIGANSHIRE

#### TWO DAYS' ROUGH WORK

Proceeding, then, to the rickyard, the way was found to be stopped by tarred wires. This having been broken down by one of the police, Mr Piggott, who accompanied Mr Stevens, valued the rick at £3. Captain Davies protested against its being sold under £5,

<sup>147.</sup> Lloyd Williams, J., Journal, NLW GB 0210 JLLW MB1/15ii.

and remarked that if it was offered for sale someone was prepared to bid, whereupon Mr Stevens knocked the rick down to Mr Jones, Nantpele, for 15s. Mr Stevens, with Mr Supt. Lloyd, went into the house to settle up; and when this had been finished they found that they had been made prisoners, someone having locked all the doors of the house. Meanwhile the crowd outside sang, "Poor Mary Ann," an air known in Wales as "Ar hyd y nos," which Punch says should be translated by "Ah! heed your nose." 148

References such as this provide a point of intersection between the micro-history of the tune and recognisable cultural and historical events - in this case an episode of history known as the tithe wars, during which tensions over the payment of tithes to land owners and the forced sale of the possessions of non-paying tenants led to a number of violent protests. By way of such intersections, the melody itself becomes a connecting thread between otherwise seemingly unconnected historical events - a situation which recalls Hitchcock's question,

What happens when we examine the world through the collected fragments of knowledge that we can recover about a single person?<sup>149</sup>

revised such that 'a single person' is replaced by 'a single melody'.

In this vein, it is worth remembering that *Ar Hyd y Nos* was an highly popular tune for ballad writing, another means through which it intersected with historical events of all scales. A number of ballads appear on the references page, including one from 1915 encouraging young men to join the war effort. A more humorous example refers to the problems posed by the people's budget by the House of Lords:

## RHYFEL-GAN GWERIN

Clywais weiddi mawr yn Llunden, Ar hyd y nos; Yn dychrynu pob hen chwanen, Ar hyd y nos;

<sup>148. &#</sup>x27;More Tithe Sales in Cardiganshire' in *The Cambrian News*, 28 December 1888, p. 6, http://newspapers.library.wales/view/3345204/3345210/67/, last accessed 7.3.2016.

<sup>149.</sup> Hitchcock, T., 'Digital Searching and the Re-formulation of Historical knowledge', p. 90.

Gofyn wnes beth oedd y gweiddi, Ateb ges gan Dori teidi Mai mewn ffit oedd Ty'r Arglwyddi, Ar hyd y nos.

"Beth yw'r achos?" meddwn inau, Ar hyd y nos, Wrth bolisman yn ei lifrau, Ar hyd y nos; Ateb wnaeth y dyn yn deidi, "Budget Lloyd yn ngwddf'r Arglwyddi, Ac yn wir yn siwr o'u tagu," Ar hyd y nos.

Gofyn wnes i'r gwr yn union, Ar hyd y nos, "What is your kind opinion?" Ar hyd y nos; "Let them choke,unless they'll swallow," "Thank you kindly dear fellow, Come with me to Bow & Arrow," Ar hyd y nos.

Gofyn eto wnes i'r bobby, Ar hyd y nos, Beth oedd teimlad 'boys' y lobby, Ar hyd y nos; Meddai'r gwr gan gwrdd a'i helmet, "All I hear is of the Budget And Lloyd George the heavenly prophet," Ar hyd y nos.

#### WAR-SONG OF THE FOLK

I heard a great crying in London All through the night Disturbing every old flea, All through the night I asked what the shouting was A proper Tory answered The House of Lords is in a fit All through the night.

"What's the reason?" I asked,
All through the night
A policeman in his livery
All through the night
The man answered promptly
"Lloyd George's budget in the throat of the Lords
And it's truly sure to choke them
All through the night.

I asked the man directly All through the night

150.

"What is your kind opinion?"
All through the night
"Let them choke, unless they'll swallow,"
"Thank you kindly my dear fellow,
Come with me to Bow & Arrow,"
All through the night.

I asked the bobby again, All through the night What was the feeling of the lobby boys, All through the night; He said as he touched his helmet "All I hear is of the Budget And Lloyd George the heavenly prophet," All through the night.<sup>150</sup>

Though the wittiest element of the song - its title - loses some of its playfulness in translation, the tone of the text is far from unrelated to the tone adopted by *The Two Ronnies* in the aforementioned *Nant Garw Co-operative Male Choir* sketch. In their jovial contrafaction of *Ar Hyd y Nos*, these comic icons were engaging with and contributing to a long and varied tradition of engaging the melody in the creation of readily accessible political and social commentary.

# Case study 3: A drunken brawl

The 'events' page of the resource fills a logical gap between other aspects of the website: music is frequently heard at, refers to or is referred to in relation to events situated in time and in place. Organising information, and especially descriptions of or references to music, in relation to these events has the potential to allow the construction of micro-histories of both the events themselves and the relationship of music to them.

The specific 'event' page provides an editorially supplied title, date range, and description of the event in question. Beneath this information, these elements are translated onto a geographical map, reinforcing the notion that the event as presented here is an echo of a situated unfolding in which place was an essential element. The page provides hyperlinks to associated tunes, people, and 'references to the event'. Using the last of these hyperlinks, quotations from sources describing the event are displayed. As well as producing a richer sense of context and of cultural history, as the index of the relationships between events and their descriptions becomes more populous, multiple perspectives begin to emerge, potentially introducing parallax errors between sources. As such, it might be said that the echoes and traces of musical happenings found in the archive interact with one another, producing impressions of the ephemeralities that they describe.

On the 13th August 1864, *Punch*, or *The London Charivari* published a brief item extracted from an unnamed 'Welsh paper'. The item reported a fight in the streets of Llangollen between a group of drunken visitors and some of the local townspeople,

A large party of excursionists was discharged into this peaceful locality the other day. They had drunk freely, and commenced to be insulting and outrageous, for which some of them were rather roughly handled by the inhabitants, and took away some bruises

and black eyes as hints for future good behaviour to unoffending people. 151

The report was accompanied by a humorous ballad entitled *Lay from Llangollen* to be sung to the tune *The Maid of Llangollen*. The text is written from the perspective of a disgruntled excursionist who, having over-imbibed on 'jolly Welsh ale' and irritated the locals, is nursing bruises as souvenirs of his trip across the border:

The Vale of Llangollen is all very well, But a trip to Llangollen's no end of a sell: Bad luck to the day on the banks of the Dee, When the Man of Llangollen he pitched into me.

I'd heard a good many romantic sweet tales Of the Passes sublime in the mountains of Wales, Things came to a pass I did not hope to see, When the Man of Llangollen he pitched into me.

I climbed to Crow Castle as brisk as a cat, And I've just brought away a memorial of that; For my eyes are as black as a crow's back can be, Since the Man of Llangollen he pitched into me.

The jolly Welsh ale was uncommonly strong, And through the small streets we came bawling along. I thought on excursions, all larking went free, Till the Man of Llangollen he pitched into me.

While my nose was a bleeding, to add to my woes, A Welsh harp played something called, "Ah, heed your nose!" I knows what I'll heed, which is larks by the Dee, Where the Man of Llangollen he pitched into me. 152

Though appropriate to the location of the event described, the chosen melody, *The Maid of Llangollen*, perhaps paradoxically, is not Welsh in origin. The melody belongs to a song that enjoyed some popularity as a ballad tune, and was seemingly composed in the early nineteenth century by James Clarke. The setting of the words in the ballad printed in *Punch* acts as a direct parody of the familiar *The Maid of Llangollen* text,

<sup>151. &#</sup>x27;Lay from Llangollen', in *Punch, or the London Charivari*, 13 August 1864, Vol. XLVII, pp. 61-70, p. 61.

<sup>152.</sup> Ibid.

which has a rather more delicate refrain: 'For the Maid of Llangollen smiles sweetly on me.' 153

A week later, the quoted description and the song were reprinted by *The Usk Observer* and *Monmouthshire Central Advertiser*, suggesting that the story - and its ballad - had at least some currency in Wales. It has not been possible to locate the *'Welsh paper'* referred to in *Punch*; however, in 1909, the then Bishop of St Asaph, Alfred George Edwards, later the first Archbishop of Wales, <sup>154</sup> referred to the occasion when making an introductory speech at the inaugural meeting of the *Rhyl School of Temperance and Hygiene*:

When he was a boy he lived in a very beautiful part of Wales, where they had a large number of summer excursionists from various parts of England. The majority of those excursionists, when the time came for the train to take them home, were in a sad state of intoxication. But they did not see anything like that now (applause). They saw hundreds and thousands of excursionists coming into Rhyl, and pouring over into St. Asaph, and it was a most rare thing indeed to see any of them under the influence of drink (applause). He well remembered a train load of excursionists from Staffordshire who ended the day with a free fight. The excursionists attacked the natives, and he was afraid the natives replied (laughter). An amusing description of that fracas appeared in "Punch," where it was very humorously represented that insult was added to injury by the raising of the strains of "Ar Hyd y Nos," which was interpreted by some as "Ah! heed your nose" (loud laughter). <sup>155</sup>

Born in 1848, Bishop Alfred Edwards was the son of a clergyman, William Edwards, who was incumbent in Llangollen during the 1860s.<sup>156</sup> As such, it does not seem unreasonable to suggest that Bishop Edwards' happenstance recollections of the event

<sup>153.</sup> Clarke, J., The Maid of Llangollen, Firth & Hall, New York, c. 1820.

<sup>154.</sup> Ellis, T. I., 'Edwards, Alfred George', *Dictionary of Welsh Biography Online*, http://yba.llgc.org.uk/cy/c-EDWA-GEO-1848.html?query=alfred+george+edwards&field=name, 7.3.2016 last accessed 7.3.2016.

<sup>155. &#</sup>x27;Rhyl School of Temperance and Hygiene' in *The Rhyl Journal*, 7 August 1909, p. 4, http://newspapers.library.wales/view/3630315/3630319/21/, last accessed 6.3.2016.

<sup>156.</sup> Jenkins, R. T., 'Edwards, Henry Thomas', *Dictionary of Welsh Biography Online*, http://yba.llgc.org.uk/en/s-EDWA-THO-1837.html, last accessed 7.3.2016.

are more substantial than the poetic licence employed in the ballad itself. The opening of the School of Temperance was also attended by John Herbert Lewis, the politician and husband of Ruth Herbert Lewis. As such, a comic ballad recollecting a fight in Llangollen and a reference to both the fight and its song serve to draw us into a small, densely connected system of two events, the people present at them, their responses to them, and music as a political and identifying symbol for Wales.

# Case study 4: The J. Lloyd Williams diaries

The database includes information about a number of people who were particularly significant to Welsh traditional music and its history, or who were important in the production of sources described in the database. Each has a 'person page', which, where known, provides details about them, such as their name, pseudonyms and bardic names, dates of birth and death, and sometimes a more detailed biography. In keeping with the song and source pages, a series of hyperlinks provide access to details of publications produced by the person and references to them in other sources. More specifically, there is also a link to 'references by' the person, which contains transcriptions of references that they might have made to music or the experience of music.

John Lloyd Williams, now known almost exclusively as J. Lloyd Williams, was born in 1854 in Llanrwst. He had a multifarious career gravitating around the fields of botany, education, and music, earning the degree of D.Sc. and later D.Mus. honoris causa. He was at points a school master and headmaster, a schools examiner, a university lecturer and holder of a professorial chair in botany. As a musician, he is remembered for what is sometimes regarded as his near scientific work on Welsh traditional music while editor of the Journal of the Welsh Folk-Song Society, and for his publications of Welsh folk songs for schools, which combined his interests in the Welsh folk tradition and education. He was also composer, conductor, critic, frequent Eisteddfod adjudicator, and for a time the editor of the Welsh music journal, Y Cerddor. Beyond his editorial work and writing for the the aforementioned journals, he published a body of arrangements of Welsh folk songs, and toured the country giving lectures on Welsh music. By the time of his death in 1945, he had amassed a substantial personal collection of musicians' tune-books and folk-song collectors' notes, occasionally at the expense of their owners who had loaned their manuscripts to him.

His work in the field of Welsh traditional music was twofold: on the one hand he was a collector, interested in the music of a declining generation, and in music in general; on the other, he was a prominent musician and exponent of the materials he collected, raising awareness of Welsh music, demonstrating it, lecturing on it, and supplying it into the education system. In a sense he was both receiver and transmitter, both a describer of and someone who came to hold significant influence on musical experience in Wales.

After J. Lloyd Williams' death a large collection of his manuscript materials and personalia were deposited by his family at the NLW. This corpus and later additions to it have been arranged and catalogued at the NLW and are available to the public. The J. Lloyd Williams Archive consists of three main bodies of material: scientific papers, musical papers and personal papers. J. Lloyd Williams was a keen record keeper, and kept diaries, journals, and notebooks with varying degrees of enthusiasm and completeness from 1880 until shortly before his death in 1945, thereby leaving nearly a full life-time's worth of historical evidence. Though the diaries would suggest that he was far from a compulsive personal note-taker, the span of the journals means that they touch on most aspects of his life and work, encompassing his professional and private interests, thoughts and personal life. The entries themselves range from laconic notes to lyrical pen-portraits, giving a compelling and often entertaining insight into his very active life and its context. He used portions of the diaries in the writing of his autobiography, *Atgofion Tri Chwarter Ganrif*.

Inevitably, very many of his diary entries are outside of the interests of Welsh traditional music; however, some contain transcriptions of music either seen or heard, or refer to occasions on which he heard music whilst travelling, to concerts of Welsh music, and, perhaps most frequently, to the quality of the music he heard at eisteddfodau and in chapel each Sunday. While, like many of the materials included in the database, the musical entries can easily be related to ideas of cultural geography and musical soundscapes, they also offer an insight into J. Lloyd Williams'

relationship with music on a more personal level, thereby offering a different mode of discussion. It might be suggested that the musical entries fall into six broad categories: occasions on which J. Lloyd Williams is involved in the music-making; abstract observations about music; transcriptions from manuscripts; folk-song collecting; chapel music; occasional music; and music heard unexpectedly. The last four of these are considered below.

# Chapel music

The diaries reveal that J. Lloyd Williams was a regular attendee at chapel, though he frequently visited different chapels around Wales whilst on inspecting and examining tours. His descriptions are sometimes curt, and sometimes lavish more words on the clergyman than upon the music; however, they offer a sense of the varying quality of the music heard in different places, and record fascinating details about the specifics of certain performances, as seen in the examples below.

April 17th 1881,

8. To Cwmystradlyn with E. B. Williams & friend. Talk of music in S. Wales, choral conductors, the little attention paid to reading and theory & great deal to voices and musical expression. Tiresome walk up the Cwm - deserted works &c.

10. Small Chapel - not larger than a common cottage - coarse featured large boned people. Execrable singing - the conductor making a portamento of a third at the accent. Fair speechifying.<sup>157</sup>

Undated, c. October 1907

The singing [...] most irritating and still worse when Hugh Robat is playing, for the latter has a most obj[ectiona]ble method of playing left hand before right hand.<sup>158</sup>

<sup>157.</sup> Lloyd Williams, J., Journals, NLW GB 0210 JLLW MB 1/1.

<sup>158.</sup> Lloyd Williams, J., Journals, NLW GB 0210 JLLW MB1/15 ii.

#### Occasional events

Occasional events such as concerts, opera attendances, *cymanfaoedd canu*, and other formal musical experiences sometimes receive more substantial critiques, though these are often no less biting. Of particular interest to research set in the NLW, is his description of the laying of the Library's Foundation Stone by a Royal Party in 1911.

July 15, Sat 1911

Up 3.40 a.m. station 4.25 [...] to Aberystwyth arrived 9.30 [...] How prettily trippingly neatly these Aber people speak Welsh! - Toiled up the dusty road to the Lib's site - dull showery - Interminable wait - Moelwyn Choir sing piano intros to everything. - Cadwaladr with his white hair & white moustache looks fierce, conducts with energy and style as if this were the chief part of the show. The choir sing with great vigour and show but with little effect. Their singing of Machynlleth was ridiculous - too quick and without proper attention to the words. The ceremony was unimpressive in the extreme and the Royal party moved out while the choir were singing Hob y Deri - words in praise of King George. <sup>159</sup>

As well as providing a dissenting voice with regards to the success of the ceremony, the diary entry emphasises the musical aspect of the event in a manner not matched in other media. *The Times* merely recorded that 'the singing of a rather long Welsh hymn by the Moelwyn Male Voice Choir brought the ceremony to an end', revealing a misinterpretation of both the genre of the melody and the nature of the text.<sup>160</sup>

Moelwyn Choir and its conductor, Cadwaladr, make a second appearance in the diaries almost precisely a year later:

<sup>159.</sup> Lloyd Williams, J., Journals, NLW GB 0210 JLLW MB1/18.

<sup>160. &#</sup>x27;The Royal Tour in Wales', The Times, 17th July 1911, The Times Digital Archive, http://find.galegroup.com.libezproxy.open.ac.uk/ttda/infomark.do?&source=gale&prodId=TTDA&userGroupName=tou&tabID=T003&doc Page=article&searchType=&docId=CS151715057&type=multipage&contentSet=LTO&version=1.0, last accessed 22.11.2014.

July 4th Thurs. 1912

Festiniog is full of heated jealousy between the choirs of I.J.O. and Cadwaladr, this prevented them taking part in Harlech festival. Though Moelwyn has been deteriorating and Cad. is getting too old to conduct they managed to beat the others at Newtown by 4 marks! And now the air is full of challenge - £20 challenge to compete at Corwen. Oh the folly of it.<sup>161</sup>

Here, J. Lloyd Williams provides a rare glimpse into the tensions and competitive spirit that surrounded Welsh choral competitions and *eisteddfodau*. Such extramusical details help to contextualise these events not only as musical and cultural, but as social events that had a measurable impact on the communities engaged in them.

#### Folk-song collecting

For the most part, J. Lloyd Williams kept his collecting notes separate from his diaries, and perhaps the most detailed account of a folk-song collecting expedition given in J. Lloyd Williams' diaries ends in frustration:

Sept '18, Llyn Dinas

To see Catherine Williams [...] view to get folk songs - Catherine Williams a young looking, active old lady of 77 still with dark hair. [...] After a little desultory talk wherein I am given to understand that the family at one time constituted a choir and a half I ultimately persuade the old lady to sing. To my disappointment her song is "Mi waeth gen i am y byd" &c. She sings it very well she was given a prize at Lampeter for those over 40 though her antagonists were men & sang with a companiment!

The little girl insisted in singing school songs - they were elaborate things without merit & she knew no folk songs. The son & mother and a grownup daughter who had been 4 times in a lunatic asylum sang a partsong of Dr. Parry's with great spirit. The son accused his mother of mistakes.

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She turned on him - "And you were bellowing in my ear like a bull - turn 'round" then they tried again. It was very good indeed, but not what I had come for! 162

Having made the effort to visit a well-known singer, Williams found that she was known more for 'national song' than for the 'traditional song' that he hoped to find. The entry is unusually indicative of Williams' efforts to find songs that he considered to be genuinely of the folk, and it is strongly reminiscent of observations by other figures such as Ruth Herbert Lewis and Mary Davies, both of whom expressed frustration at the growing ubiquity of composed national songs. This ubiquity, it might be suggested, was in some senses a demonstration of the success of the revival of Welsh musical culture, and neatly mirrors the notion that a newly invented traditional music of Wales was beginning to obscure more organically received customs.

### Unexpected music

Perhaps the most captivating of the diary entries are the rare descriptions and transcriptions of music that Williams heard unexpectedly. Three entries in particular preserve echoes of music at its most elusive and ephemeral, outside of its commonly recorded contexts and in use as a form of social currency. The following entry describes a group of men from south Wales (*shonnis*) singing the hymn *Llef* on the Promenade in Aberystwyth,

Bank Holiday Aberystwyth 1919

A lot of young Shonnis in good cloth but most with mufflers instead of collars and ungainly caps coming low on their heads behind. 8 in a file on Prom singing splendidly.

| l,:l,.l, | d:-.r | d:t, | l, Mi lyna'n dawel ld:r.rlm:-.mlm:rlm mi ganaf

|m:r.r|d:-.r|d:t,|l,

The "Mi garia'r groes" sounded as triumphant as if they really felt the force of the sentiment as well as the music. 163

As well as providing evidence for the singing of the hymn in a non-religious context, the entry provides an example of Williams' idiosyncratic habit of partially noting melody and words in his diaries. On another occasion, Williams describes hearing Joseph Parry's hymn, *Aberystwyth*, from the street whilst eating in his hotel

Feb. 2 1910

The Grosvenor where I stay full of eaters until 10.30. While at supper heard an old body sing something minor in the street - went out but lost her - met one of our students who gave me information about Swansea Chap[el]s & singing - the singer comes past again but it is Aberystwyth she sings - with the top notes in completely diff[eren]t & weak register so that from the hotel I only hear snatches of the lower region of the tune. 164

In all of these examples, it is the coincidence of music with other aspects of J. Lloyd Williams' life and surroundings - the place, the event, his expectations as a listener, other sounds, other events - that render the diaries an interesting document. As such, they begin to correspond to Maurice Blanchot's comment that

the truth of the journal lies not in the interesting, literary remarks to be found there, but in the insignificant details which attach it to daily reality. 165

Transposing 'musical' for 'literary', this passage affirms the value of recovering observed fragments of extramusical detail, even where it is highly coloured by the

<sup>163.</sup> Lloyd Williams, J., Journals, NLW GB 0210 JLLW MB1/24.

<sup>164.</sup> Lloyd Williams, J., Journals, NLW GB 0210 JLLW MB1/17.

<sup>165.</sup> Blanchot, M., *The Space of Literature*, trans. Smock, A., University of Nebraska Press, 1982, p. 28.

interests of the observer. It also supports a possibility suggested by the first and last groups of entries discussed above - that sometimes 'interesting, literary [or musical] remarks' exchange positions with 'daily reality', that sometimes music is a quotidian social event, or the background to some far weightier happening:

Jan 8th (Weds) 1936

About 7 o'clock Id. suddenly got up. I went with him to the bedside & and saw poor B. breathing her last & sleeping herself out of trouble. I went down to call nurse & although I had prided myself on my philosophy I utterly broke down & sobbed out my grief - my first cry since I was a child. [...]

Jan 9th (Thurs) 1936

Storm, rain & wind outside: fog & misery within. There is nothing more I can do for dear B!

Jan 11th (Sat) 1936

Poor Mam's funeral

Jan 12th (Sun) 1936

Lonely, Lonely!

[...]

Ev. went to 'Iesu'. A strange time - Rev. Williams Penmorfa... Heavy, stodgy, big coarse, painfully strenuous voice which gradually crescendoed into a painful continuous shout.

In the seat he spoke for 4 minutes quietly & far more effectively than the whole of the sermon.

The singing good but, organ too strong. Starting note given & the precentor's voice a little to 'previous' at beginning of each verse.

Sequence starting

Organ note

Precentor hitting the first note

Congregation stand

Absolutely no reason for 1 & 2.

Jan 13th (Mon) 1936

The start of a new life without my faithful, thoughtful, indomitable partner - how shall I be able to meet its affairs?<sup>166</sup>

## Conclusion

The outputs of this research period can be considered in two distinct lights. They can, of course, be thought of as finished, closed documents, locked in stasis both for examination and as evidence of that process. However, they - and the digital element in particular - can also be regarded as the beginning of a less definite process, as open documents for extension, reconsideration, revision, and repurposing. Under such an understanding, these concluding notes attempt to evaluate the outputs in both their definite and indefinite aspects.

Through a series of essays and the production of a prototype website, this research has aimed to explore some of the points of intersection between the study of Welsh traditional music, its sources, the transition of scholarly activity to digital media and methods, and the theory of the archive. In the course of this document, it has been argued that 'digital humanities' is a movement within arts and humanities scholarship, a movement that will reach a natural conclusion in the integration of computing into the general narratives and processes of humanities research and production.

In a similarly integrative approach, the traditional opposition between digital and physical archives has been questioned by the introduction of the concept of a physical-digital hybrid archive, an archive in which all forms of navigation and document engagement can be perceived as machinic functions within an archival system, functions distributed between human and non-human repositories and processes of access. It has been suggested that this hybridity, with its potential for the widening of access to and understanding of archival materials, has a particular importance in the case of a national archive such as the National Library of Wales, an institution which has an additional rôle as an arbiter of the nation's cultural canon - a rôle which, by digital transmission, is extended throughout, and far beyond, the Library's normal geographical limits. It has been suggested that as cultural engagement is increasingly

mediated through digital means, materials absent from the digital archive are placed at risk of being regarded as inaccessible; in the case of the NLW, in its position as a cultural arbiter, presence in and absence from the digital archive have the potential to alter the status of a given document in cultural consciousness and collective memory of the Welsh nation. In Wales, with its reputation as a 'land of song', the general absence from the internet of archival materials related to Welsh traditional music does not reflect the status nominally accorded to that music in Welsh culture, a fact that is particularly surprising given that digital methods of information processing and delivery have the potential to be especially useful in navigating the complex network of archival traces that make up the material record of Welsh traditional music, its performance, its reception, and their contexts.

An attempt has been made to demonstrate this potential through the creation of a prototype website that allows the user to navigate through a sample annotated index of sources of Welsh traditional music. As it stands at the time of writing, the prototype is a small one, indexing some thirty sources together with cognate information; however, despite its small scale, by the use of hyperlinking and the partial integration of form (archive) and content (musical and extramusical sources and information), it operates as an highly interconnected field of information, with links between sources, their contents, their reception, and the people involved in their creation and use all becoming the routes by which the materials themselves can be explored. The notion of the hybrid archive plays an important part, with some sources furnished with digital surrogates while others are linked to the NLW's catalogue, providing a point of access into the physical as well as a digital archive. As such, the prototype provides an example of how a larger hybrid archival machine for the navigation and exploration of the material record of Welsh traditional music and its reception might operate.

In *Divergence and convergence*, the character of Oswald Bates from Stephen Poliakoff's screenplay, *Shooting the Past*, was introduced as a metaphor for the values associated

with what might be termed 'traditional scholarship'. Of particular importance in his characterisation was the ability to perceive and recall connections between particular images, a trait that enabled him to navigate a fictional photographic archive with ease, constructing histories from a vast and disparate collection of photographs. Oswald's movements through the archive might be construed as a processes of research, the reasonings behind which are known only to him; as a result of this, his knowledge and all of the processes behind it are lost in his attempted suicide and subsequent brain damage.

At their most fundamental level, processes of archival research such as Oswald's involve the connection of one item of information to another, one document to another - a process that might be described by the statement that 'this document is related to that document by this factor'.

Through the creation of indexes, transcriptions, and other *aides-mémoire*, scholars and archivists frequently create physical representations of their archival activities, as references either for themselves or for others and in an effort to surpass the limits of human physiology. Using a digital repository for statements such as the one above, it is possible to combine the advantages of humanly-interpreted connections between materials with those of computer-driven reconfiguration and navigation of those connections. In this instance, such statements of interconnection have provided the foundation for the prototype archival machine that the digital component represents, creating a reconfigurable system of information relationships concerning documents relating to Welsh traditional music.

In Poliakoff's screenplay, the 'computerised' and the 'traditional' are contrasted to the extent of opposition; however, in the creation of a prototype system for the computerised expression of humanly-rationalised connections between different forms of information, the digital component of this project deliberately challenges the assumed opposition between digital and non-digital methods, suggesting instead that

research processes, like archival systems, are increasingly hybrid in nature, itself a reflection of our increasingly transactive relationship with digital repositories of information:

As advances in computation and data transfer blur the lines between mind and machine, we may transcend some of the limits on memory and thought imposed by the shortcomings of human cognition. But this shift does not mean that we are in danger of losing our own identity. We are simply merging the self with something greater, forming a transactive partnership not just with other humans but with an information source more powerful than any the world has ever seen.<sup>167</sup>

### Uncertain present, unpredictable future

In its less definite form, the digital prototype element of the research output can be considered as an initial step towards a more substantial online resource on Welsh traditional music and the evidence of its performance and reception. As a digital system, as an experimental model, it is, in a sense, a proof of concept, an open document for extension, improvement and development, the creation of which was bounded by the technical knowledge of the author, and by the financial, personel and time restraints associated with doctoral research. As a prototype, and to echo Peter Crossley-Holland's call for the use of computing in the study of Welsh folk songs, it can go little further without a team of workers with computers.

Ideally, the future might present opportunities for the development of a resource, either based upon or implementing some of the ideas behind the prototype. This imagined resource would provide digital access to musical and music-related materials of as many types and from as many of Wales' memory institutions as possible; it would be bilingual in order to properly serve the needs of its host nation; it would draw upon existing knowledge to interconnect the archival materials it contained. Such a resource would help to foster new knowledge and encourage

<sup>167.</sup> Wegner, D. M., Ward, A. F., 'The Internet Has Become the External Hard Drive for Our Memories'.

engagement with an often overlooked aspect of Wales' archival culture; it would provide a means for musicians, musicologists, and the public to relate their musical knowledge, experiences and activities to the archival materials upon which these are based, thus contributing to the cyclical growth of the archive in a self-organising system; and, built using linked open data technologies, it would contribute to the semantic web, potentially providing a model for the presentation of and interacting with information about the music of other nations online.

In *Archive, music, nation,* mention was made of the importance of creating a locus in the virtual geography of the internet for Wales and its cultural heritage. Wales has long been considered - and considered itself - a land of song, a point that was demonstrated using this remark:

On Wednesday se'nnight, the Second Anniversary of this Society commenced at the Old Church, Abergavenny, under the auspices and with a success which must have been delightful to those who have clung with fond fidelity to the hope of reviving the literature and minstrelsy of a nation which once stood pre-eminently forward the land of song [...]<sup>168</sup>

Now that culture and its media are so deeply entwined with computers, it does not seem unreasonable to refine the statement above for a much-changed period of history: it is the hope of this research and its subsequent work to stimulate a revival for a computer-mediated age of the knowledge and study of the music of a nation which considers itself a land of song.

<sup>&#</sup>x27;Abergavenny Cymreigyddion Society', The Cambrian.

# Bibliography

'Abergavenny Cymreigyddion Society' in *The Cambrian, or general weekly advertiser for the principality of Wales,* December 5th 1835, p. 4, http://welshnewspapers.llgc.org.uk/en/page/view/3328654/ART18, last accessed 7.3.2016.

Amgueddfa Cymru | National Museum Wales, https://www.museumwales.ac.uk/, last accessed 7.3.2016.

Anderson, B., Imagined Communities, revised edition, Verso Books, 2006.

'Ar y bwrdd' in *Seren Cymru*, 2 October 1914, p. 9, http://newspapers.library.wales/view/4126986/4126995/26/, last accessed 7.3.2016.

The Association for Cultural Equity, *The Association for Cultural Equity*, http://www.culturalequity.org. last accessed 7.3.2016.

The Association for Cultural Equity, *Lomax Geo Archive*, http://www.culturalequity.org/lomaxgeo/, last accessed 7.3.2016.

Bashford, C., Langley, L., eds., *Music and British Culture: Essays in Honour of Cyril Ehrlich*, Oxford University Press, 2000.

BBC, BBC Wales Music, http://www.bbc.co.uk/wales/music/, last accessed 7.3.2016

BBC, The Open University, *The Story of Wales*, BBC Broadcast, 2012.

BBC, 'Street Musicians | Welsh Miners' Choir', http://www.bbc.co.uk/archive/mining/6920.shtml, last accessed 7.3.2016.

BBC, 'Traditional Sung Verse in Pembrokeshire', http://news.bbc.co.uk/local/southwestwales/hi/people\_and\_places/history/newsid\_8455000/8455329.stm, last accessed 7.3.2016.

Bennett, N., Alawon Fy Ngwlad, Phillips & Son, 1896.

Blanchot, M., *The Space of Literature*, trans. Smock, A., University of Nebraska Press, 1982.

The Bodleian Library, *Broadside Ballads Online*, http://ballads.bodleian.ox.ac.uk, last accessed 7.3.2016.

Borges, J. L., *The Library of Babel*, ed. Yates, D. A., Irby, J. E., via *Internet Archive*, https://archive.org/details/TheLibraryOfBabel, last accessed 7.3.2016.

Borges, J. L., *The Aleph*, trans. Di Giovanni, N. T. in collaboration with the author, 1945, via http://web.mit.edu/allanmc/www/borgesaleph.pdf, last accessed 7.3.2016.

Bowman, T. D., Demarest, B., Weingart, S. B., Simpson, G. L., Lariviere, V., Thelwall, M., Sugimoto, C. R., 'Mapping DH Through Heterogenous Communicative Practice', delivered 18.7.2013 at DH 2013, http://did.ils.indiana.edu/dh/pdf/DH2013.MappingDH.pdf, last accessed 7.3.2016.

Boym, S., The Future of Nostalgia, Basic Books, 2002.

'Boys' High School' in *The Press*, Volume XLIV, Issue 6941, 22 December 1887, p. 6, *Papers Past*, http://paperspast.natlib.govt.nz/cgi-bin/paperspast?a=d&d=CHP18871222.1.6&e=22-12-1887-22-12-1887, last accessed 7.3.2016.

Bradley, H., 'The Seductions of the Archive: Voices Lost and Found' in *History of the Human Sciences* Vol. 12, No. 107, 1999, http://hhs.sagepub.com/content/12/2/107, last accessed 7.3.2016.

Burdick, A., Drucker, J., Lunenfeld, P., Presner, T., Schnapp, J., *Digital\_Humanities*, MIT Press, 2012.

'Can Gwerin' in Y Goleuad, 23 October 1914, p. 10, http://newspapers.library.wales/view/3492933/3492937/7/, last accessed 7.3.2016.

Clarke, J., *The Maid of Llangollen*, Firth & Hall, c. 1820.

Centre for Advanced Welsh Music Studies, Welsh Music History (Hanes Cerddoriaeth Cymru), University of Wales Press, 1998-2004.

Clayton, M., Herbert, T., Middleton, R., eds., *The Cultural Study of Music: A Critical Introduction*, second edition, Routledge, 2012.

Clera, Clera, http://clera.org, last accessed 7.3.2016.

Coverley, M., Psychogeography, second edition, Pocket Essentials, 2010.

Crang, M., Cultural Geography, Routledge, 1998.

Crossley-Holland, P., 'The tonal limits of Welsh folk song' in *The Journal of the Welsh Folk-Song Society*, 1968, No. 2, Vol. 5 Pt. II., pp.46-67.

Crutchfield, R., I Saw America Changed Through Music: An Examination of the American Collecting Tradition, PhD thesis, University of Glasgow, 2012, p. 191, http://theses.gla.ac.uk/3392/1/2012crutchfieldphd.pdf, last accessed 7.3.2016.

Cymdeithas Alawon Gwerin Cymru | Welsh Folk-Song Society, *Journal*, 1909 - 1974, later, *Canu Gwerin*.

Cymdeithas Alawon Gwerin Cymru, Canu Gwerin, http://www.canugwerin.com/, last accessed 7.3.2016.

Cymru Fydd Up. Parliament Street' in *Y Brython*, 25 November, 1915, p. 8, http://newspapers.library.wales/view/4018055/4018063/37/, last accessed 7.3.2016.

'Dau tu'r afon' in *Y Brython*, 17 October 1918, http://welshnewspapers.llgc.org.uk/en/page/view/4019117/ART38, last accessed 7.11.2014.

Davies, E. T., Northcote, S., Prys-Jones, A. G., eds., *The National Songs of Wales*, Boosey & Hawkes, 1959.

Davies, G. G., Alawon Gwerin Môn, Hughes & Son, 1913.

Davies, G. G., Ail Gasgliad o Alawon Gwerin Môn, Hughes & Son, 1933.

Davies, J., A History of Wales, revised edition, Penguin, 2007.

Derrida, J., *Archive Fever: a Freudian Impression*, trans. Prenowitz, E., University of Chicago Press, 1998.

Deyrup, M. M., ed., Digital Scholarship, Routledge, 2008.

The Digital Humanities Manifesto 2.0, http://www.humanitiesblast.com/manifesto/Manifesto\_V2.pdf, last accessed 7.3.2016.

The Digital Panopticon, http://www.digitalpanopticon.org, last accessed 7.3.2016.

Ellis, T., 'Jones, Edward (Bardd y Brenin)', *Dictionary of Welsh Biography Online*, http://yba.llgc.org.uk/en/s-JONE-EDW-1752.html?query=edward+jones&field=name, last accessed 7.3.2016.

Ellis, T. I., 'Edwards, Alfred George', Dictionary of Welsh Biography Online, http://yba.llgc.org.uk/cy/c-EDWA-GEO-1848.html?query=alfred+george+edwards&field=name, last accessed 7.3.2016.

English Folk Dance and Song Society, *The Full English Digital Archive*, http://www.efdss.org/efdss-the-full-english, last accessed 7.3.2016.

European Holocaust Research Infrastructure, http://www.ehri-project.eu, last accessed 7.3.2016.

Featherstone, M., 'Archiving Cultures', in *The British Journal of Sociology* Vol. No. 51, Issue No. 1, January/March 2000, pp. 161-184.

Folk Music of England, Scotland, Ireland, Wales & America, Songs of Wales, http://www.contemplator.com/wales/, last accessed 7.3.2016.

Gold, M. K., ed., Debates in the Digital Humanities, University of Minnesota Press, 2012.

Grooms, C., *Corff y Gainc* http://www.docgrooms.com/corff.htm, last accessed 7.3.2016.

Hall, S., *Encoding and Decoding in the Television Discourse*, Centre for Contemporary Cultural Studies, 1973.

Herbert Lewis, R. Folk-Songs Collected in Flintshire and the Vale of Clwyd, Hughes & Son, 1914.

Herbert, T., Jones, G. E., Wales 1880-1914, University of Wales Press, 1988.

Hepburn, J., A Book of Scattered Leaves: Poetry of Poverty in Broadside Ballads of Nineteenth-Century England, Bucknell University Press, 2000.

Hitchcock, T., presentation at Welsh Initiative for Digital Arts and Humanities at the National Library of Wales, 11.5.2012.

Hobsbawm, E., Ranger, T., eds., The Invention of Tradition, Canto Classics, 2012.

Hobsbawm, E., Nations and Nationalism since 1780, second edition, Canto, 1992.

Holst, G., Two Welsh Folk Songs, Curwen Edition, 1933.

Holy Names University Kodály Centre, *American Folk Song Collection*, http://kodaly.hnu.edu/, last accessed 7.3.2016.

Hughes, L., Greengrass, M., The Virtual Representation of the Past, Ashgate, 2008.

*Irish Traditional Music Archive, Digital Library,* http://www.itma.ie/, last accessed 7.3.2016.

Jenkins, G. H., A Concise History of Wales, Cambridge University Press, 2007.

Jenkins, G. H., *The Foundations of Modern Wales 1642-1780*, New edition, Oxford University Press, 1993.

Jenkins, G. H., ed., A Rattleskull Genius: The Many Faces of Iolo Morganwa, University of Wales Press, 2009.

Jenkins, J., John Jenkins (Ifor Ceri) Music, NLW MS 1816D.

Jenkins, R. T., 'Edwards, Henry Thomas', *Dictionary of Welsh Biography Online*, http://yba.llgc.org.uk/en/s-EDWA-THO-1837.html, last accessed 7.3.2016.

Jones, E., ed., Musical and Poetical Relicks of the Welsh Bards, editions published in 1784, 1796, and 1808.

Jones, T., The Holywell Workhouses, Tim Jones, 1995.

Kinney, P., Welsh Traditional Music, University of Wales Press, 2011.

'Lay from Llangollen', in *Punch, or the London Charivari*, 13 August 1864, Vol. XLVII, pp. 61-70.

Llantrisant Folk Club, *Folk Wales*, http://www.folkwales.org.uk/, last accessed 7.3.2016.

Lloyd Williams, J., John Lloyd Williams Collection, NLW GB 0210 JLLW.

'Llyfrai [sic] a Cherddoriaeth', in Y Drych, 13 May 1915, p. 7, http://newspapers.library.wales/view/3776042/3776049, last accessed 7.3.2016.

Loeb Music Library, *Loeb Music Library Digital Scores and Libretti*, http://hcl.harvard.edu/libraries/loebmusic/collections/digital.cfm#overview, last accesed 7.3.2016.

Mays, S., 'Literary Digital Humanities and the Politics of the Infinite' in *New Formations*, 78, Summer 2013, pp. 7-21.

McCarthy, W., 'What does Turing have to do with Busa?' paper at ACRG-3, Sofia, Bulgaria, 12.12.2013, http://www.mccarty.org.uk/essays/McCarty,%20Turing%20and%20Busa.pdf, last accessed 13.9.2014.

Merewether, C., ed., *The Archive*, Whitechapel Gallery and The MIT Press, 2006.

'More tithe sales in Cardiganshire' in *The Cambrian News*, 28 December 1888, p. 6, http://newspapers.library.wales/view/3345204/3345210/67/, last accessed 7.3.2016.

Morgan, K. O., Rebirth of a Nation: A History of Modern Wales 1880-1980, Oxford University Press, 1982.

Morgan, P., Thomas, D., Wales: The Shaping of a Nation, David & Charles, 1984.

Morgan Wortham, S., 'Archive Fever' in *The Derrida Dictionary*, Continuum, 2010.

National Library of Wales, *Llyfrgell Genedlaethol Cymru | National Library of Wales*, http://www.llgc.org.uk, last accessed 7.3.2016.

National Library of Wales, *National Library of Wales Collections Development Policy* 2010 *Principles and Guidelines*, http://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/dogfennaeth\_gorfforaethol/dog\_gorff\_pol\_dat\_cas\_10S.pdf, last accessed 7.3.2016.

National Library of Wales 'Llyfrgell Genedlaethol Cymru/National Library of Wales' on *Flickr*, https://www.flickr.com/people/llgc, last accessed 7.3.2016.

National Library of Wales, *Supplemental Royal Charter* 2006, http://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/llywodraethiant\_llgc/Siartr\_atodol\_2006/bdd\_str\_SiartrAtodol\_2006S.pdf, last accessed 7.3.2016.

National Library of Wales, *Theatre of Memory*, https://www.llgc.org.uk/fileadmin/fileadmin/docs\_gwefan/amdanom\_ni/dogfennaeth\_gorfforaethol/dog\_gorff\_dog\_thycS.pdf, last accessed 7.3.2016.

National Library of Wales, *Welsh Newspapers Online*, http://newspapers.library.wales, last accessed 7.3.2016.

National Library of Wales, Cardiff University, Welsh Ballads Online, http://cat.llgc.org.uk/ballads, last accessed 24.10.2013.

Nora, P., Between Memory and History: Les Lieux de Mémoire, in Representations No. 26, Spring, 1989, University of California Press, pp. 7-24, http://www.jstor.org/stable/2928520, last accessed 7.3.2016.

Olick, J. K., Seroussi, V. V., Levy, D., *The Collective Memory Reader*, Oxford University Press USA, 2011.

The Open University, *Humanities at the Open University*, http://www.open.ac.uk/arts/research/digital-humanities/, last accessed 7.3.2016.

The Open University, The Royal College of Music, *The Listening Experience Database*, http://led.kmi.open.ac.uk, last accessed 7.3.2016.

Osmond, J., ed., Myths, Memories and Futures: The National Library and National Museum in the Story of Wales, Institute for Welsh Affairs, 2007.

Parry Williams, D. E., *Early Welsh Music*, Centre for Advanced Welsh Music Studies, Bangor, 1999.

Poliakoff, S., Shooting the Past, Methuen Drama, 1998.

Prescott, A., 'Making the Digital Human: Anxieties, Possibilities and Challenges', lecture delivered at Digital Humanities Oxford Summer School 2012, 6.7.2012, Merton College Oxford. Online transcript http://digitalriffs.blogspot.co.uk/2012/07/making-digital-human-anxieties.html, last accessed 7.3.2016.

Priddle, C., 'National Identity and the Digital Library: a Study of the British Library and the Llyfrgell Genedlaethol Cymru' in *Libri*, 2004, Vol. 54, pp. 158-168.

Ramsay, S., 'Who's In and Who's Out?', delivered at MLA 2011, http://stephenramsay.us/text/2011/01/08/whos-in-and-whos-out/, last accessed 7.3.2016.

'Rhyfel-Gan Gwerin' in *Seren Cymru*, 7 January 1910, p. 10, http://newspapers.library.wales/view/3298048/3298058/29/, last accessed 7.3.2016.

Richards, H. B., ed. The Songs of Wales, Boosey & Co., 1879.

Ross, D., Wales: History of a Nation, Geddes & Grosset, 2005.

Roud, S., Bishop, J., The New Penguin Book of English Folk Songs, Penguin Classics, 2012.

'The Royal Tour in Wales', The Times, 17th July 1911, The Times Digital Archive, http:/

/find.galegroup.com.libezproxy.open.ac.uk/ttda/infomark.do?&source=gale&prodId=TTDA&userGroupName=tou&tabID=T003&doc Page=article&searchType=&docId=CS151715057&type=multipage&contentSet=LTO&version=1.0, last accessed 22.11.2014.

Russell, I. and Atkinson, D., eds., Folk Song: Tradition, Revival, and Re-Creation, Elphinstone Institute, 2003.

Russell, I., ed., Singer, Song and Scholar, Sheffield Academic Press, 1987.

Saer, D. R., *The Welsh Folk Song Society: A Whole Century*, Cymdeithas Alawon Gwerin Cymru, 2006.

Samuel, R., Theatres of Memory: Present and Past in Contemporary Culture, Vol. 1, Verso Books, 1994.

Small, C., Musicking: The Meanings of Performing and Listening, Wesleyan University Press, 1998.

Sparrow, B., Liu, J., Wegner, D., M., 'Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips' in *Science*, Vol. 333 no. 6043, http://www.sciencemag.org/content/333/6043/671.6.full.pdf, last accessed 7.3.2016.

'St. David's Day at the Asylum' in *The North Wales Times*, 4 March 1899, pp. 4-5, http://newspapers.library.wales/view/3817255/3817259/40/, last accessed 7.3.2016.

Stumpfel, J., Tchou, C., Yun, N., Martinez, P., Hawkins, T., Jones, A., Emerson, B., Debevec, P., 'Digital Reunification of the Parthenon and its Sculptures' delivered at 4th International Symposium on Virtual Reality, Archaeology and Intelligent Cultural Heritage, 2003, http://gl.ict.usc.edu/Data/parthenongallery/vast2003\_parthenon\_sculptures\_final.pdf, last accessed 7.3.2016.

Sula, C. A., 'Digital Humanities and Libraries: A Conceptual Model' in *Journal of Library Administration*, Vol. 53 No. 1, 2013, pp. 10-26.

Thomas, W., *Traditional Music in Wales: Bibliography*, third edition, Gwasg Carreg Gwalch, 2006.

Tobar an Dualchais Kist o Riches, http://www.tobarandualchais.co.uk/, last accessed 7.3.2016.

Tolbeek, J., 'Review: "Turn'd to Dust and Tears:": Revisiting the Archive' in *History and Theory* 43, No. 2, May 2004, pp. 237-248.

Trac, *Trac: Folk development for Wales*, http://www.trac-cymru.org, last accessed 7.3.2016.

*Transforming Musicology*, http://www.transforming-musicology.org, last accessed 7.3.2016.

Turing, A., 'Computing Machinery and Intelligence' in Mind, New Series, Vol. 59, No. 236, Oct. 1950, pp. 433-460, http://www.jstor.org/stable/2251299, last accessed 7.3.2016.

University of California, Santa Barbara, *The English Broadside Archive*, http://ebba.english.ucsb.edu, last accessed 7.3.2016.

University College of Wales Aberystwyth, Chorus Songs for College Concerts, 1923.

Vershwbow, B., 'NYPL Labs: Hacking the Library' in *Journal of Library Administration*, Vol. 53, No. 1, 2013, pp. 79-96.

'Wales', in *Encyclopaedia Britannica*, Ninth Edition, Vol. 24, Charles Scribner's Sons, 1888, p. 324.

Wegner, D., M., Ward, A., F., 'The Internet Has Become the External Hard Drive for Our Memories' in *Scientific American*, Vol. 309 No. 6, http://www.scientificamerican.com/article/the-internet-has-become-the-external-hard-drive-for-our-memories/?page=1, last accessed 7.3.2016.

'Welsh Choir at Windsor' in *The Weekly Mail*, 16 November 1907, p. 3, http://newspapers.library.wales/view/3444206/3444209/60/, last accessed 7.3.2016.

'Welsh Folk Songs' in *The Carmarthen Weekly Report*, p. 6, http://newspapers.library.wales/view/3584777/3584783/101/, last accessed 7.3.2016.

Welsh Folk Songs, http://www.musicanet.org/robokopp/welsh.html, last accessed 7.3.2016.

Wikipedia contributors, 'Digital Humanities', Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/w/index.php? title=Digital\_humanities&oldid=37427111, last accessed 7.3.2016.

Wikipedia contributors, 'Digital Humanities', Wikipedia, The Free Encyclopedia, http://en.wikipedia.org/w/index.php?title=Digital\_humanities&oldid=618801008, last accessed 7.3.2016.

Williams, G. A., When Was Wales?, Penguin Books, 1985.

Williams, G., Valleys of Song: Music and Society in Wales 1840-1914, University of Wales Press, 2003.

Williams, J. Ll., Jones, L. D., eds., Welsh Folk Songs Arranged for Schools, The Educational Publishing Company.

Ysgol y Gymraeg Prifysgol Bangor, Ysgol y Gymraeg Prifysgol Caerdydd, *Cronfa Baledi*, http://www.e-gymraeg.org/cronfabaledi/, last accessed 24.10.2013.

