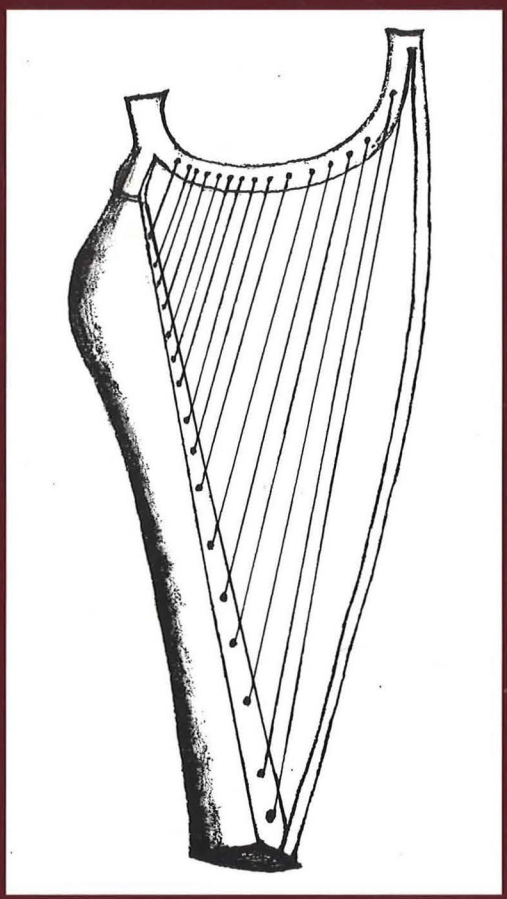
Pekka Toivanen

THE PENCERDD'S TOOLKIT



Cognitive and Musical Hierarchies in Medieval Welsh Harp Music

JYVÄSKYLÄ STUDIES IN THE ARTS

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UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2001

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THIS WORK IS FONDLY DEDICATED TO THE MEMORY OF PETER CROSSLEY-HOLLAND (1916-2001); A GREAT SCHOLAR, BROAD-MINDED HUMAN AND A FRIEND.

ABSTRACT

Toivanen Pekka
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In the scholarship of Western music various non-written processes of learning, adopting, perceiving, making or teaching have generally been more or less ignored. This work is an attempt to introduce some interdisciplinary methodological possibilities, obtained from contemporary ethnomusicology and cognitive musicology, to the research of early music. The reference material and methodology deal to a great extent with the dialectic between the oral and the written in music; different levels and kinds of variation and variable factors within various structural hierarchies of music; adoption and transmission processes of music; processes of change; culture studies. In this study the existence and importance of oral adoption and transmission within medieval Welsh harp music tradition has been one of the main hypotheses. That tradition was based upon highly educated professional musicianship, culminated in the degree of pencerdd, i.e. 'the chief of music or craft'. Medieval Welsh harp music was essentially an oral music culture, of which very little evidence in musical notation has survived. The main piece of musical evidence is the Robert ap Huw manuscript from c. 1613. A piece of music in that manuscript is not necessarily the original creation of its attributed author, but a version comprising numerous rhythmic, melodic or other changes over a period of time. In connection with medieval Welsh harp music we may speak of culturally correct and hierarchically structured referential frameworks for creating, learning and making music. The hierarchical relationship of various elements of musical expression helped the musician to employ his toolkit for composing, performing, ornamenting or improvising. Such hierarchical systems, together with their adoption through systems and rules of education, was the essential foundation which enabled musicians to keep the music alive and in memory for centuries, as suggested in my conclusion. Some reconstruction attempts, based on the research results, together with contemporary musical experiments on medieval Welsh harp music are presented in the joint CD of this study.

Keywords: pencerdd, orality, the Robert ap Huw manuscript, ethnomusicology, interdisciplinarity, harp.

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Opponent Dr Sally Harper

PREFACE

In early February 1989, when studying early music and historical harps at the 'Akademie für alte Musik' in Bremen, one fellow student brought me a facsimile edition of the Robert ap Huw manuscript; music for the harp written in tablature notation. My first impression was that I had come across with an ancient secret code system with obscure signs, strange combination of letters and lines, together with an incomprehensible language. In those days, however, I was thoroughly convinced that the musical contents of that manuscript had a lot in common with the mainstream Renaissance harp and lute music, and that the tablature script could be deciphered with the help of thorough comparable research related to other contemporary tablature systems. That vantage point, however, led to a dead end. Several disappointments I came across let me abandon the study on the manuscript for several years.

It was only January 1995 when my attention was drawn on the Robert ap Huw manuscript again. My friend Robin Gwyndaf, whom I had learned to know three years earlier during the Joensuu Song festival, introduced me to Robert Evans, an instrument maker, musician and committed researcher of early Welsh music. Conversations with him gave me a new 'kick' to get back to work on the manuscript and its music, this time only from a completely different access point than in the late 1980s. I got a chance to present my ideas in July 1995, when a symposium on the Robert ap Huw manuscript was organised by the Centre of Advanced Welsh Music Studies in Bangor. Albeit my study then was at very initiative state, I was given that much encouraging feedback in discussion sessions that I decided to go on further. It took more than six years after the Bangor symposium before this present work was ready to be publicly discussed. In the last six years many ideas and paradigms have come and gone, many changes have occurred both in relation to this study and my private life, all of which have not been very easy to cope with. Since I have been writing this alongside my duties as a music lecturer, and not as a full-time researcher, the process has been relatively slow and, unfortunately, has had its negative side effects as well.

There are many people, both in Wales and Finland, to whom I am deeply indebted for their assistance and encouragement. My foremost gratitude goes to Dr. Sally Harper, who, since the very early stages of my 'Robert ap Huw-project' has been a very special source of encouragement. From her I have got really valuable feedback, and deserved criticism during all these years. Her, and her husband John Harper's support to my project has meant a lot to me. I am in deep gratitude to the late professor Peter Crossley-Holland, whom I learned to know in July 1995. He and his writings, his charming personality, amazing amount of knowledge, together with several discussions we had, have been a very special source of inspiration to me. Without his encouragement this study of mine would probably never have seen the daylight. It is to Peter's memory and work that this study is dedicated, with greatest respect and gratitude to his widow Nicole. I also want to express my sincere thanks to Robert Evans, with whom we have exchanged ideas for several times in last six years, sometimes in rather heated discussions, but always in a spirit of mutual respect and friendship. He is a real contemporary pencerdd. I am also in deep gratitude to Robin Gwyndaf, for his contributions to my work and his very special friendship. He has given me a lot of valuable reference material, related

to my work, and during my frequent visits to Cardiff he and his wife Eleri have given me hospitality beyond limits. I also want to thank D. Roy Saer for helping me at the early stages of this study. Furthermore I want to express my gratitude to Robin Huw Bowen ('Telynor Moreia'), the renowned master of the Welsh triple harp, for getting me access to the manuscript section at the National Library of Wales in Aberystwyth, and for hospitality and inspiring conversations during my stays in Aberystwyth. Very special thanks are due to Phyllis Kinney and Dr. Meredydd Evans for their valuable contributions to my project, and friendship during all these years. I also want to thank Leslie and Tony Conran, Stephen Rees and all the other people in Wales I have had privilege to learn to know.

There are also many people in my native Finland to be thanked for their assistance and contributions. Although I have written this study without an official supervisor, which at least partially explains the apparent flawbacks and misconceptions in this work, I have received valuable help and encouragement from professor Jukka Louhivuori at various stages of my study. As an expert of both cognitive musicology and ethnomusicology, his contributions to the theoretical and methodological part of this work deserve my deepest gratitude. The second reviewer of my work, doctor Hannu Saha from the Folk Music Institute, has given me many valuable comments and suggestions, for which I am very grateful. I also want to thank professor Matti Vainio for accepting this study to be published in the Jyväskylä Studies in the Arts series, and the Department of Music and the Faculty of Human Sciences (both in the University of Jyväskylä) for giving me funds that enabled me to take part in various conferences and symposiums, in which I had opportunities to present my research work. I am also indebted to Ph.D. Michael Coleman for proof-reading the abstract. For the apparently low standard of English in the other parts of this study I am the only one to be blamed.

My very special thanks are due to Sanna Kivinen and Minja Niiranen, two highly accomplished musicians, charming personalities and very dear friends. Their musical contributions on the accompanying CD form a very essential part of the whole study. For many years they have shared my passion for early and traditional music in various line-ups, especially in the group 'Yr Awen' which was formed for performing early Celtic music. I am deeply indebted to Mr. Jarkko Tornberg for recording and editing all the musical material on the above-mentioned CD. Furthermore, I want to thank all my colleagues at the University of Jyväskylä's Department of Music, and my fellow musicians and friends in various musical line-ups and projects I have had a chance to play in all these years (Fiamma Lucente, Celticum, Sinuhe, Pohjantahti). Many long conversations about music and meaning of words with composer Ilpo Saastamoinen during our journeys from Jyväskylä to Lapland, and back, have been very important in relation to this study. My friend, composer Pekka Kostiainen, deserves my deepest gratitude for all those fine moments with music, we have shared during last ten years, and also for his personal friendship and support.

I want to express my gratitude and love to my parents, Kaija and Osmo Toivanen, and my sister Leena for their love, support and sympathy, especially in times when my own life has been in turmoil. I want to express my deep love to my children Janne, Johanna and Tuulia, and also humbly apologise that I have not been that good a father, as I would like to have been.

My very deepest love and gratitude belong to Sirpa. Her love, care and support have been the essential sources of life-energy that have enabled me to complete this work.

Äkäslompolo (Finnish Lapland) 31.8 2001.

Pekka Toivanen

CONTENTS

CONCEPTS USED IN THIS WORK

Here is a short presentation of the most common musical concepts, which appear frequently in connection with medieval Welsh harp music and the Robert ap Huw manuscript. Some of the terms belong to compositional genres; some are descriptions of items of musical expression or playing techniques. Later in the present work many of those terms will be given other connotations to those described in this chapter. Therefore the short descriptions below are to be taken mainly as guidelines, and as such their main function is to give the reader an idea of indigenous terminology and its contents.

The descriptions of terms, as presented here, are largely based on pages 299-307 of 'Welsh Music History, volume 3' (Harper 1999 c), with some additions by the author, and/or some other Robert ap Huw scholars. With the exception of 'swneme' (no. 22), which is a concept made by the author of this work; all the others are indigenous terms. The most common indigenous terms, connected with medieval Welsh harp music, are the following:

1. BARDIC GRAMMARS

'Bardic Grammars' (or 'Grammars') refer to some manuscript sources which contain information about music theory, musical terminology, performance rules and so on. The most important of them are 'Cadwedigaeth Cerdd Dannau' and 'Dosbarth Cerdd Dannau'. The 'Grammars' have, either partially or as complete, survived in various manuscript sources, but not as original, independent works of their own.

2. CADAIR/KADAIR (pl. CADEIRIAU)[1]

Literally 'chair'; also used to indicate a type of composition within cerdd dant. Poetic victors were awarded with a (symbolic) chair already in the early Middle Ages. Chairing of the bard is still one of the most important ceremonies at the present-day Welsh 'eisteddfodd', although that ceremony has otherwise very little, or nothing, to do with medieval customs. As a compositional genre it was regarded as one of the most

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1 In various manuscript sources the letters 'c' and 'k' are used interchangeably. Thus a 'cadair' can be found written either as 'cadair' or 'kadair'; 'caniad' as 'caniad' or 'kaniad', etc.

advanced and demanding. None of the cadeiriau survives in notation, but there are many cadair titles mentioned in various manuscript sources. (Harper 1999 c, 299; Johnston 1990, 8 & 31; Thomas 1968; Miles 1983).

3. CAINC/KAINGK (pl. CEINCIAU)

Literally 'branch'; a melody or a melodic section, often on a prescribed measure ('mesur'); a characteristic variation structure of much of the 'cerdd dant' repertory. (Harper 1999 c, 299). Could also be regarded as a general term for a more or less well known (in space and time) melody/ melodic segment that formed a basis for an extended composition/performance.

4. CANIAD/KANIAD (pl. CANIADAU)

Literally 'song'. One of the most prolific forms in the 'cerdd dant' repertory, based on mesurau, but on different principles from 'gostegion' (see later). Consisting of 12-17 integral sections (each of 'cainc' and 'diwedd' elements in various forms of appearance), with the majority incorporating twelve sections, according to the Robert ap Huw manuscript and lists of tunes in various manuscripts. (Harper 1999 c, 300; Miles 1983)

5. CERDD DAFOD

Literally 'the craft of the tongue'; a concept for the art of poetry. A term from at least the fourteenth century to indicate poetry of an oral nature linked with music. Later, from the sixteenth century, it could denote a vocal performance of music as well. (Harper 1999 c, 300). It was primarily art for the ear, not for the eye. This is quite evident, for example from statements made by the most prominent poets of the 16th century. (Thomas 1968, 13-27).

6. CERDD DANT

Literally 'the craft of the string', the term most commonly referred to in the present work. It denotes the art of playing the harp and the crwth, in other words the art of playing string instruments, and it was closely linked with cerdd dafod. (Harper 1999 c, 300). In this study it is regarded as having been of oral nature, in terms of learning, adoption, perception, composing, performing and transmission.

7. COLOFN/KOLOFN (pl. COLOFNAU)

Literally 'column' or 'pillar'. An indication of a type of composition within 'cerdd dant', within which it was ranked as one of the most demanding genres (more demanding than the 'cadair'). None survives in notation, but some titles are mentioned in the 'Grammars' (Harper 1999 c, 300-301; Miles 1983)

8. CWLWM/KWLWM (pl. CLYMMAU)

Literally 'knot', 'tie' (with the implication of binding or joining together) According to the 'Grammars', 'cwlwm' was the most prolific type of piece in the repertory, but only three pieces survive in tablature notation, in a source of somewhat doubtful authenticity (Lbl Add Ms 14970, also know

as the 'Iolo Morgannwg manuscript'). If these pieces are genuine, they show strong structural parallels with the 'caniad'. The subtitle 'ymryson' ('compete', 'contest') appears sometimes with this genre. In the Robert ap Huw manuscript there are numerous short pieces under the title of 'cwlwm cytgerdd'. They are, most probably, exercises for the harp and the crwth (or the harp alone), either in each of the 24 canonized mesurau, or to try out 24 different playing techniques in one mesur at a time. (Harper 1999 c, 300-301).

9. CYWAIR/KOWER (pl. CYWEIRIAU)

Literally 'adjustment', can also be understood as 'setting'. Some of its implications are tuning and/or scale (mode). There were five basic 'cyweiriau' in medieval Welsh harp music (Harper 1999 c, 302). More about the various meanings of cywair, and their interpretation, in chapters five and six.

10. CYWEIRDANT/CYWAIRDANT/KOWERDANT

A concord element, strong (established) string or pitch. For example, in various tunings/settings of 'cerdd dant', the g-, c- and d-strings were considered as cyweirdant-strings. Used together with 'tyniad'-elements for constructing the mesurau ('mesurau', the plural form of 'mesur'). (Harper 1999 c, 302-303). The term has other connotations as well, as we will notice later.

11. DATGEINIAD

Literally 'a declaimer'. A person who recited or sang poetry, in most cases to musical accompaniment. (Harper 1999 c, 303). A datgeiniad was ranked lower than a professional poet or instrumentalist.

12. DIWEDD (pl. DIWEDDAU)

Literally 'ending'. (Harper 1999 c, 304). A closing passage, which was repeated after a 'cainc' section. Often constant (as in 'gostegion'), sometimes varied (as in some 'caniadau'). A diwedd could also have been a (well) known 'cainc', whether as such or in varied form, in an extended composition/performance. The distinction between cainc and diwedd seems not always have been unambiguous or unified in Welsh cerdd dant.

13. EISTEDDFOD (pl. EISTEDDFODAU)

Traditionally a session or assembly of poets and musicians. The earliest of such gatherings is recorded as having taken place in 1176 in Aberffraw. In relation to this work the most important eisteddfodau were those held in Caerwys, in 1523 and 1567 respectively. The eisteddfodau served for purposes of competition and standardisation among the professionals. (Harper 1999 c, 304; Thomas 1968). It should be noted that the present-day eisteddfodau in Wales are based on the models and aesthetical preferences of some 18th-century Welshmen, the most influential of whom resided then in London. Therefore there is not very much 'ancient' or 'medieval' in modern eisteddfod happenings.

14. GOSTEG (pl. GOSTEGION)

Literally 'a call for silence'. A compositional form and/or generative, hierarchical system for learning, performing and composing music. Also a framework for combining music, poetry and/or vocal improvisation. Structurally based on mesurau, consisting of varied number of 'cainc-diwedd' based sections. (Harper 1999 c, 304-305; Toivanen 1997).

15. MARWNAD (pl. MARWNADAU)

Elegy or lament. A concept used both in music and poetry. In poetry a panegyric for a living person becomes an elegy after the person's death. Poets and musicians, often dependent on the generosity of the 'uchelwyr' (people of the upper classes of the society), were obliged to compose both panegyrics and elegies when required. In music, the 'marwnad' was not an independent genre but belonged, structurally and hierarchically, to the families of 'caniad' or 'cwlwm'. Many titles of the marwnadau, both in music and poetry, bear the names of renowned masters of the harp or the crwth (Caerwyn Williams 1978; Jarman, Rees Hughes and Johnston 1997; Harper 1999a, 159-161; Harper 1999c, 305).

16. MESUR (pl. MESURAU)

Literally 'measure'. Harmonic and metrical pattern, consisting of various combinations of two basic harmonic units, the cyweirdant and tyniad, usually labelled as 1 and 0 respectively. Twenty-four mesurau were [attempted to be] canonised during the sixteenth century. (Harper 1999 c, 305).

17. PENCERDD (pl. PENCERDDIAID)

A master craftsman in the art of either 'cerdd dafod' or 'cerdd dant'. An educated master of either music (the harp or the crwth) or poetry, who received such a title after 12-15 years of intensive oral training. The 'Statute of Gruffudd ap Cynan' lists the requirements of the pencerdd. (Harper 1999 c, 305-306; Klausner 1999, 293; Toivanen 1997). It is the suggestions for ingredients and hierarchies of his cognitive and musical toolkit we are mainly dealing with in the present work.

18. PROFIAD (pl. PROFIADAU)

Literally 'test', 'trial' or 'proof'. A compositional genre in cerdd dant, different to caniad and gosteg. Profiad is not divided into sections in the usual way, and are not overtly based on the mesurau. There is, thus, greater compositional freedom in these pieces, both rhythmically and harmonically. (Harper 1999 c, 306). But, as suggested later, there is a sense of sectionality and tendency to mesur-boundness in some of the survived 'profiadau', and which contain melodic borrowings from pieces belonging to other genres.

19. STATUD GRUFFUDD AP CYNAN/STATUTE OF GRUFFUDD AP CYNAN

A document apparently compiled for the 1523 Caerwys Eisteddfod, but attributed in past to Gruffudd ap Cynan (c.1055-1137), Prince of

Gwynedd. One of the aims of its compilation was the attempt to raise the status of the bardic arts, which were degenerating at that time. The invocation of an ancient authority, prince Gruffudd, held by many as the patron saint of Welsh music, for help was obviously seen as a convincing means. The 'Statute...' is a mix of history, facts and myth, a combination not so unusual in any culture which wants to reflect its own past through certain aesthetical preferences. (Harper 1999 c, 307; Klausner 1999; Baigent & Leigh 1994; Toivanen 1997). More about the 'Statute...' its contents and codes in chapter four.

20. TRI MWCHL (pl. TRI MYCHLAU)

The most advanced type of cwlwm, used as an examination piece for the most proficient of the penceirddiaid on the harp. Possibly a piece with varied and demanding playing techniques (Harper 1999 c, 307; Miles 1983), although other interpretations and suggestions have also been made (Roberts 1966). There are no surviving examples of tri mwhcl in notation. This genre, together with colofn and cadair, is discussed more in chapter six, where some suggestions for their ontology are presented.

21. TYNIAD

A discord element, a non-established pitch or string. There were four tyniad strings within a mode, which could be altered. Used together with cyweirdant-elements for constructing the mesurau. (Harper 1999 c, 307). See chapters five and six for more of their roles in connection with the tunings/settings and the mesurau.

22. SWNEME

The glossary of terms in Harper 1999c contains more than those described above. Most of the terms that I have left out deal with playing techniques. Those terms indicate certain ways of plucking and damping, ways of fingering and ways how these actions are joined together in each case. The last concept, presented below, is not an indigenous one but a modern term (made by the author). I have found, for the cause of the present work, relevant to introduce the concept of 'swneme' to denote the shortest unit of musical expression in medieval Welsh harp music. The name derives from the Welsh word 'swn' (sound) and from the end of the word 'museme'. The latter is a term launched by Philip Tagg (Tagg 1985) for denoting the 'smallest unit of musical expression, particularly in popular music'. Swneme can be taken as a melodic, rhythmic, timbral or technical term, or as a combination of all or some of them. A swneme may include various ways of plucking and damping the harp strings. It may also include various ways of fingering. The best-known examples of swnemes are presented on page 35 of the Robert ap Huw manuscript, under the heading 'Gogwyddor i ddysgu y prikiad' ('An alphabet to learn the pricking'). Swnemes and swneme stacks may be used for creating formulas. A swneme has also cognitive dimensions. More about these topics later in this study. Some examples of swnemes, presented in figure one, hopefully, clarify the text above:

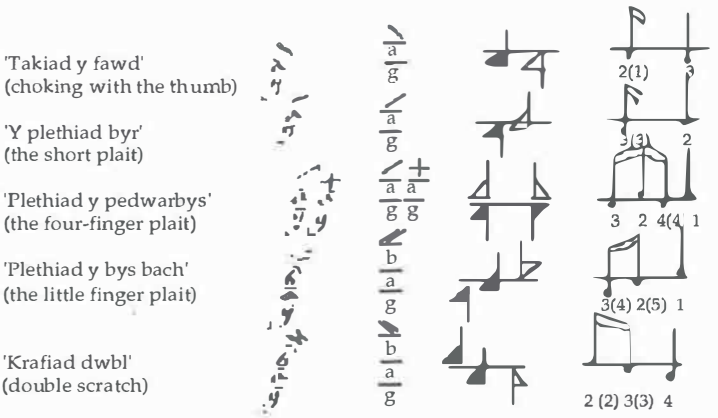

FIGURE 1 The first five swneme-examples from page 35 of the Robert ap Huw manuscript. The indigenous Welsh names and their translations are given on the left, followed by extracts from the original tablature script and their presentations in modern way. The fourth column from the left (with 'black' and 'white' triangular notes) denote the ways of fingering; the different directions of triangulars denote different fingers, 'blacks' refer to strings to be damped and 'whites' to strings to be let ring. On the far right, the fingering of swnemes is given with notes and numbers. (after Taylor 1999). The numbers in brackets refer to damping fingers.

The title of this work includes the word 'cognitive'. In this work it principally refers to ways of being aware and organising different happenings and stimuli within a human being's head; an awareness of timing, order, causalities, placings and so on. In cognitive sciences the research of the human brain has been an object of intensive interest in recent years. It [the functioning of the brain] has been studied using interdisciplinary methods in a large scale. In recent years there has been an increasement in aims to understand human expression, affect and emotion. In music research the interest in the functioning of the human brain and its relationship with musical processes and products has led to emergence of cognitive musicology. The world of cognitive musicology was in its first stages very nature science-oriented what comes to the methodology (possibly due to great interest in artificial intelligence and computational methods), and therefore rather distant from traditional fields of musicology. Recently, however, there has been a growing tendency that in order to understand human cognitive processes, cultural and other softer aspects of human behaviour should be taken into account more seriously. (Louhivuori 1997, 30-31). This has led to the initial stages towards cognitive ethnomusicology, which can be understood as a basic guideline in the theory and methodology of the present work. These matters, together with others dealing with cognition and cognitive sciences, are discussed more in chapter two.

In this work only a few abbreviations are used. The most frequent are the following:

CAWMS Centre of Advanced Welsh Music Studies (in Bangor)
Lbl London, British Library
M.A.W. Myvyrian Archaiology of Wales

Throughout the body of the text, the indigenous Welsh concepts connected to cerdd dant, have been used. It may also be worth mentioning that everything in square brackets in the text of this work is editorial by the author.

1 INTRODUCTION

' Bards of other times! ye on whose souls the blue hosts of our fathers rise, strike the Harp in my halls, and let me hear the song. Pleasant is the joy of grief; it is like the shower of spring when it softens the branch of the oak and the young leaf rears its green head. Raise the song, and strike the Harp! send round the shells of joy! Let some grey bard be near me to tell the deeds of other times, of kings renowned in our land, of chiefs we behold no more. — Such was the song of Fingal in the days of his joy: his thousand bards leaned forward from their seats to hear the voice of the king.'

(James MacPherson: Songs of Ossian)[2]

The above quotation from a late eighteenth century Scottish poem is given here as an example of a (national) romantic view, or vision, of a nation's imagined glorious past. A banquet hall of an old stone castle, where bearded minstrels with their harps recited epic poems about ancient heroes is a scene, which has inspired many literary, and musical works of art. It may be worth mentioning that not only the nineteenth century romantic writers have used the old Celtic world of tales in their art, but earlier and later generations as well.

The varied cultural aspects of medieval Europe have evoked considerable interest across the globe. Recordings of plainchant and Hildegard von Bingen top the charts together with Alanis Morrisette and the Spice Girls. 'Medievalist' societies organise tournaments, banquets and excursions, while King Arthur, Merlin the Magician and other 'ancient' figures featured in computer games and on CD - ROMs. The Middle Ages seem to be 'in', but very selectively. One is forced to ask whether this is yet another form of escapism similar to nineteenth century Romanticism, launched by - and effectively perpetuated by - some faceless marketing mechanism. In many respects it is useless to seek an 'objective' answer as to why so many periodically wish to forget today´s reality by letting themselves sink into the real or fictitious past, while at the same time clinging to the comforts of modern city life. But by choosing only great and glorious things from bygone times, we create a vision of some kind of 'golden heroic era'. We do sometimes attempt, possibly driven by feelings of

2 Bunting 1809, preface[i]

dissatisfaction with the present, to search for ways of escaping into a more structured past we feel to have existed (see paragraph 2.14. of this work for more detailed discussion). That is what we try to find in the past we have created, as, for example, did representatives of the 'Celtic Twilight' movement in nineteenth century Britain and Ireland, and those of the 'Kalevala revival' and Carelianism in Finland. [3]

Meanwhile, research emphasis within medieval music has traditionally focused on vocal music, partly because there is more literal evidence available of vocal music than of instrumental music. Little written information survives from the first millennium concerning instrumental performance context and practice, still less actual music. Most of the extant polyphonic instrumental examples from the Middle Ages are keyboard transcriptions of vocal music.[4] On the other hand, those pieces of music which are known (or assumed) to be of instrumental origin are mostly either monophonic or in two parts; some are dances or hoquets with no specific pre-determined instrumentation. It is generally agreed that medieval instrumental music featured a great deal of improvisation, often based on certain structural and/or harmonic patterns. That music was usually adopted and transmitted orally, and very seldom written down. Much of that medieval soundscape thus lies completely out of our reach, both in terms of research and reconstruction. We are greatly indebted to those medieval clerks, many of whom have remained anonymous, who wrote down *their own* (my italics) versions of 'estampies','saltarellos', 'rotas' and other examples of dance or secular music genres.

The tendency to base conclusions mostly, or entirely, on the written sometimes leads us to forget the actual competence of those who transcribed or described the music, as if a piece of music could not have existed at all without its conversion into notation. In the field of early Western music especially we have underestimated or even ignored various non-written processes (of learning, adopting, perceiving, making, teaching, etc.) so essential to any music culture. This is also true of the Robert ap Huw Manuscript (Lbl. Add MS 14905), the main [literal] piece of evidence and the focusing area of the present study. Of the numerous articles, dissertations and transcriptions that exist about that manuscript, I have come across only a few that note, or sometimes even attempt to address to certain extent, the existence and importance of oral adoption and transmission within the bardic harp music tradition; a tradition that was based upon a system of highly educated professional musicianship, and which once existed not only in Wales, but in Ireland and Scotland as well. Similarities to such systems are to be found even today in Indian classical music. [5]

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3 A cultural phenomenon called Carelianism belongs to the late nineteenth and early twentieth-century Finland, and was popular among practitioners of various fields of arts, both amateurs and professionals. Carelianists thought that the roots of Finnishness were to be found in Carelia, and that the ancient Finnish culture was still alive there.

4 The first English organ tablature, the 'Robertsbridge Codex', of c. 1325, contains mostly intabulations of Philippe de Vitry´s three-part motets. Similarly, the famous 'Faenza Codex' (written in Italy, 1410/1420) consists largely of instrumental transcriptions of madrigals and ballatas by Trecento composers.

5 Crossley-Holland, 1942 & 1998; Dart, 1968; Ellis, 1973 & 1991; Whittaker, 1974 a & b; olin, 1982; Harper 1999a; Toivanen 1997&1999. For more information of Indian art music and its education systems see, for example, Slawek 1993.

This work is an attempt to introduce some interdisciplinary methodological possibilities that can be obtained from contemporary ethnomusicology, together with cognitive musicology, to the research of early music. I have understood my field of study, that of medieval Welsh harp music, essentially as having been an oral culture. Therefore my reference material and methodology deals to a great extent with the dialectic between oral and written, different levels and kinds of variation and variable factors within various structural hierarchies of music, adoption, performance and transmission processes of music, processes of change, culture studies and so on. I am not dealing merely with folk musics in a wide sense, but also with different art music traditions (both European and non-European) as well as popular music traditions of different eras. At the same time I am aware that I am skating on thin ice. The nature of my primary sources (the ambiguity, controversiality and fragmentary nature of manuscripts) and the lack of living informants (preventing ethnographic work completely) in relation to the methodology I am using should make it clear that the results and the conclusions I have come to must be taken as possibilities, at best as probabilities, but not as final or definite facts.

How can ethnomusicology and early music then be brought together? If ethnomusicology is interested in music made by human beings in all ages and cultures, as many ethnomusicologists constantly keep saying, why should early music then be excluded, since early music, whenever and wherever made, is equally music made by humans. Regardless of time and place there has been early music not only in Europe but also in China, India, the Americas, the Middle East and all other places on earth. Should we, then, blame some research paradigms and priorities, preferred in ethnomusicology, for its ignorance, sometimes even neglect, of early European music? In many ways such criticism is justified. The emphasis of ethnomusicological research has been on contemporary music, mostly the twentieth century non-Western art and folk music traditions. Only quite recently has there been growing interest in popular musics of the present age, together with some areas of history of Western music. Are ethnomusicologists themselves to be blamed for erecting barriers to a true discourse, for not having realised that the past, Western or non-Western, is actually the most exotic and distant, and therefore the most 'ethnic' research area? So far, there is very little scholarly research done, where ethnomusicological methods and the world of early music have met. Some ethnographic studies have been carried out recently, but ethnomusicological attempts to get closer to the core of music cultures of the Western past have so far been rare. [6]

The conception of musical activities for Western consumers of art music, at least in the last two centuries, has become deeply entrenched as a scheme within which composers have created musical works and notated them in scores, from which performers have performed for the edification and pleasure of listeners. So much so, that it has taken music historians a long time and vast

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6 The most recent ethnographic work ,known to the author, deals with the Boston early music movement, and was led by Kay Kaufmann Shelemay (Kaufmann Shelemay 2001). Leo Treitler's studies on Plainchant (1974, 1986 and 1991) are probably the best known examples of applying ethnomusicological methods to early music scholarship.

energy first to learn for themselves and then to inform the musical community that at least as far as pre-classical music is concerned, this statement is far from accurate, and in many cases false. The role of musical notation in medieval Europe (from the turn of the ninth century) was preserved for special purposes, such as for attempts to record the essential features of the repertories of liturgical music. Musical notation can be regarded as an invention of early music technology. The production of music, however, was not dependent on that invention. The co-existence and interaction of written and unwritten traditions can be regarded as a premise for the understanding of medieval music culture. This is not to say that there was co-existence of written and unwritten in all music practised in medieval Europe. Out of this scope were not only the various folk and popular genres, but also some 'civilized' forms of art music, which existed in close connection to court and church. Medieval Welsh bardic harp music was one of those unwritten art music cultures, which, most obviously, did not have much time or opportunity to enjoy co-existence with the written, before it, practically, died out.

A very common Western concept of composition refers to completed written products, which circulate in more or less stable form through closed written channels in scores that are replicas of the original composition. They serve as blueprints for performers who must be able to read them in order to produce performances. The written has traditionally served as the main, often the only, criterion for composition, performance and study of music. We seem to have been more interested in musical objects than musical processes. Only quite recently have we learned to think of musical objects as being, and having been, in a continuous transmission process, and as the subjects of individual and communal recreation and reconstruction. In other words, the process of something [in music] becoming an artwork only beginning by its creation. The termination is achieved by being received, perceived and interpreted by individuals and communities, and the definite termination is probably never achieved. An existing piece of music may not be the original creation of its attributed author, but a version comprising numerous rhythmic, melodic or other changes over a period of time, in which case the direct link to the original may no longer be available. We may speak of culturally correct referential frameworks for creating, learning and making music. They could be described as toolkits for musicians, and they enable musicians to create musical works within culture's own musical systems. Understanding (consciously, sub-consciously or intuitively) the hierarchical relationship of various elements of musical expression enables the musician to employ his toolkit for composing, performing, ornamenting or improvising. The elements of musical expression can represent the level of deep, middle or surface structure in musical performance or composition. It looks, as if understanding a composition or a musical performance, as a series of structural and interlocked hierarchies, both cognitive and musical, was essential in the medieval Welsh string instrument music, known also as cerdd dant. I am suggesting that these hierarchical systems, together with their adoption through systems and rules of bardic education, was the essential foundation which enabled musicians to keep the music alive and in memory through oral transmission for centuries. The elements of musical expression can represent the level of deep, middle or surface structure in musical performance or composition. The deep structural

level of a melody consists of skeletal pitches, which can be figured out by step-by-step reduction: at each step less important events are omitted, leaving the structurally more important events as a sort of skeleton of the piece (Lehrdal-Jackendoff 1983, 106; see also Louhivuori 1988,11). The middle structure of a melody may be of the length of half- or one-bar units, whereas the surface structure can be composed of smaller units or time values (Louhivuori 1988, 11). Similar levels are to be found also in harmonic and rhythmic expression (Lehrdal-Jackendoff 1983, 114-128). Figure two is an attempt to present the above-mentioned hierarchical levels, using a fragment from Mozart's variations on a French children's song as example.

This leads to recognition of generative contexts for music making in the music of the Middle Ages. Such contexts can be described both as cognitive and musical. They are cognitive in the sense that they are (hierarchically) structured in the performers' mind (as an awareness of deep, middle or surface structural elements and plans, cognitive reference points and so on). They are musical in the sense that they are hierarchically and substructurally linked to each other in performance and in the compositional process (the two cannot always be distinguished from each other). Such matters have so far been generally ignored in the musicological discourse, since the access point of historical musicology to oral music cultures has mainly been guided by the paradigm of literacy. For some reason we prefer to see the medieval world of music as literally as we see our own.

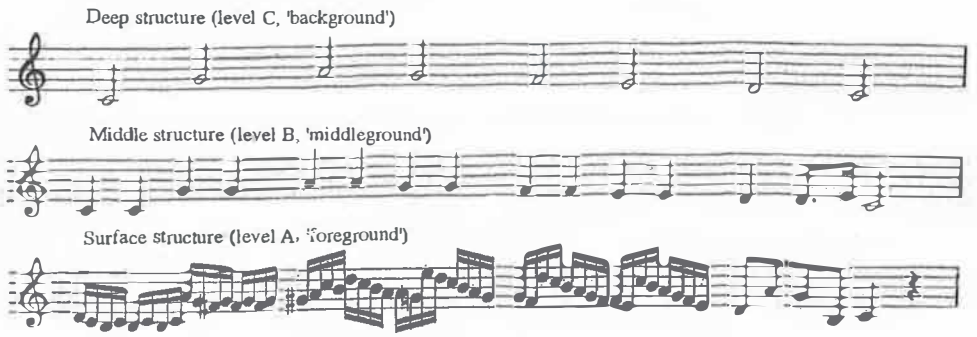

FIGURE 2 A presentation of substructural musical hierarchies, based on Mozart's variations on 'Ah vous dirai je, mamam'. The surface structure, being the most audible, is the actual variation (variation no. 1), and the theme, on which the variations are based, represents the middle structure. The strong notes, or the key points, of the theme (written here as minims) stand for the deep structure.

Whenever an attempt is made to write down something from a fundamentally oral music culture for the first time, what is that 'something' primarily trying to present? It is usually rules and regulations concerning musical performance, music theory, aesthetics of music, perhaps other kind of treatises but it is hardly ever a fixed product (=finished, definitive and established compositions), encoded by one or more writers to be decoded by performers. Instead of such

fixed products there may be something to be read, understood and remembered as mnemonics. In other words, there may be some 'touchstones' for performers, meant to aid them in recognizing some patterns and hierarchies, modes, techniques, procedures and the like. After centuries of aural transmission and adoption, attempts to write down music were not likely to have been based on the same premises as in the case of a composer, whose own tradition and training has been literal. Neither can the reading of such written text be a simple decoding of something fixed.

The oral components in musical documents, or rather the lack of them, has been one of the major problems and hardest strands to capture in attempts to reconstruct the musical world of a period performer or a period listener. The modern scholar has so far viewed music history as consisting primarily and above all of well defined notated musical works. This may be one reason for retention of the still widely accepted myth about the 'development of music' among scholars, listeners, performers and composers of the present age. The ontology of musical works as scores or other kinds of attempted notation systems has misled both scholars and connoisseurs alike towards valuing a musical work as a work on paper. There have been musical works throughout any culture's music history, Western culture included, but not all of them necessarily as printed or written scores. The lack of detailed instructions in written documents may lead to the misconception that medieval music must have been easy to play, but at the same time that it was also boring and simple. In other words, it was 'not developed', since the prevailing notation in many cases is sparse. Lydia Goehr (Goehr 1992) has named this kind of bias as 'romantic regulative work concept', which does not seem to take into account the strong, often central, position of orality in transmitting, learning, adopting and creating musical works in the Middle Ages, the Renaissance, and even later.

Music making in unwritten traditions is often dependent on systems and methods of procedure that entail design in the sense of both praxis and systems. This also emphasises the fact that there is, and there has been, a vast amount of music belonging to unwritten traditions, which is, or was, not improvised, nor produced without a plan. Most jazz or rock improvisations are executed within a more or less rigid pattern or framework shared by those involved within the performance occasion. One could even argue that in order to free oneself from the restrictions of traditional framework systems, one should know the whole tradition in detail, and thus be able to avoid, at least theoretically, anything that has been done before. Therefore free jazz musicians should master the jazz tradition completely prior to composing or performing. Another parallel is to be found in the 12-tone Schoenbergian system. It is based on thorough mastering of the Western Classic-Romantic tradition. Schoenberg himself maintained, on various occasions, that he was not radical in his musical thinking, or an 'enfant terrible'. The following quotations from Schoenberg's own writings should clarify his conceptions:

> 'It is seldom realized that there is a link between the technique of forerunners and that of an innovator and that no new technique in the arts is created that has not had its roots in the past.' (p. 76)

'I was never a revolutionary' (p. 137)

'I am convinced that eventually people will recognize how immediately this 'something new' is linked to the loftiest models that have been granted to us' (p. 174)

'The method of composing with twelve tones grew out of a necessity' (p.216)

Arnold Schoenberg: 'Style and Idea'; ed. Leonard Stein trans. Leo Black (New York 1975)

We need seriously to consider, whether there is any reasonable ground to claim that only the twentieth (or the twenty-first) century musicians have been able to develop such hierarchically based patterns or frameworks for improvisation and variation, as referred to above? Are we entitled to claim that medieval musicians could not have been creative? That they were unable to improvise, unable to create 'music in performance' according to methods and systems they had learned, and for which they did not need any written instructions? To my opinion, it is rather odd to claim that medieval musicians were stupid, unimaginative simpletons, merely because so little documentary evidence of their performances has survived to us, or that their cultural contexts were so different compared to ours. We should not blame medieval musicians for cultural and musical gap between the Middle Ages and the Present.

The concept of 'transhistorical humanness' is defined by Christopher Page, as 'an appreciable continuity of human thought and feeling from age to age'. (Page 1993, 190). This is to remind us that medieval people were flesh and blood human beings with strong opinions and aesthetic preferences, just as we are. It also contains the often ignored fact that the aesthetic preferences of a medieval man were not necessarily the same or even similar to those of a present-day man. Such preferences are, and have always been, relative, culture-tied and temporal. The effectiveness of 'transhistorical humanness' is dependent on the degree to which its past musical expressions are still a living force in our musical and cognitive, and thus aesthetical, life. In our quest for authenticity the only authentic music from the past is such music that has remained and been practised as a living tradition - literally as a part of the present. In that sense most of medieval music is completely out of our reach, because most of it is from an unwritten tradition and because its cognitive world is so different to ours. We may and should enjoy medieval music, but acknowledge that we experience it differently from medieval people. The past is a foreign country to us, and since it is foreign, we invent ways to alter it to our present needs.[7] We do have a continuum of practical music making from roughly the 1830s onwards, encompassing certain musical genres and certain classes of society. One is here reminded of Bach performances stemming from the nineteenth century with legato articulation, sustaining pedal-effects, a full and continuous

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7 There is a book by D. Lowenthal titled 'The past is a foreign country', published by Cambridge University Press in 1985, in which the author explores our attraction to the past and the ways we alter it to our present needs. The original source for the above title is the novel 'The Go-Between' by L.P Hartley. Its opening lines are: 'The past is a foreign country: they do things differently there.' See also Brett (1988) and Morgan (1988).

dynamic spectrum, octave doublings and the like. In the case of Bach we do have nineteenth century performance practice as a living tradition, so present day pianists obviously learn to play Bach as Busoni, Rachmaninoff and others from the Romantic school did, rather than study Bach's music from the Baroque perspective. This can be seen as acceptable, since Bach's music has persisted as a flourishing tradition since the 1830s, and has been altered in order to preserve his place within the tradition and to protect his music. Some romantic enthusiasts went even to claim that the modern piano was actually the 'ideal instrument, which floated in his [Bach's] mind' (Bach's biographer Philipp Spitta, according to Morgan 1988, 68). Thus Bach was so integrally tied to the nineteenth century tradition that he [Bach] was seen to have been able to exploit the properties of instruments not even invented in his lifetime. What would have been his opinion of digital synthesizers and sampling devices then?

In the case of early music in particular, it has been and often still is maintained that if a composition is performed 'authentically' (on period or culture-oriented instruments, wearing period-like costumes, possibly wigs and the like, choosing the location 'authentically'), it will also be listened to 'authentically'. That is, listened to musically (in other words, the extra-musical factors playing the major role) rather than acoustically perceived. Although there is, or at least has been, such a huge anxiousness regarding authenticity in the early music world, the modern practitioners of it have hardly ever weighed the possibility that their interpretations may be far away from the performance practice of the era and culture of the pieces themselves. The reasoned arguments concerning the futility of so-called authentic performance practice have long been heard, but they were not extended to the closely related question of so-called authentic listening practice. The concept of ' medieval listener' has sometimes been invoked as a judge for modern performers, giving him or her the possibility to evaluate the modern attempts, converted to musical interpretations as performances. We should not, however, forget or ignore that a medieval listener from medieval Spain hardly had any cultural or musical ties to medieval Britain, with the exception of some adopted influences amongst some people, and vice versa. In other words, there cannot be such a thing as 'the medieval listener.' Our whole concept of 'the medieval listener' (or 'the listener' of any era or culture) may be based on one chronicler's writings about a specific occasion of a specific musical performance, perceived subjectively by him (or her), whether liked or disliked, or something in between. The chronicler's words on the vellum may have been, on most occasions, more descriptive and emotion-based, than analytical. It is equally futile, in the same sense, to talk about the reaction of modern-day listeners to 'authentic' medieval performances, since there cannot be a unified group of modern-day listeners to medieval music, or any other music either. We, as people of the present age, have paid far too little attention to the fundamental differences between both acoustical and musical-cognitive realities of our times and those of the Middle Ages and other earlier periods in musicological research and performance practice. We tend to forget that a proper conception of music history involves 'historical' listening and perceiving. Listening and perceiving, that is to say, with ears and brains of another age and with all subsequent music banished from the mind. The music, which comes to us from the past, has to pass through the veil of our own experience; and that

experience includes our consciousness of many other kinds of music. All music has once been new music, and we cannot claim (but can, of course, pretend) that we hear all music in the same way and with similar ears as those who once heard it first. The aesthetic response of today's listener, performer or scholar is his response only, and we should not use such aesthetic responses as evidence of the musical perception of our early counterparts.

The main body of musical evidence in my work, the Robert ap Huw manuscript, forms the foundation of this study. The position of the Robert ap Huw-manuscript (Lbl Add. MS 14905) in the present work, plus the general field of studies connected to it, is as follows (see also figure nine in chapter three of this work):

5 The Robert ap Huw-manuscript contains intabulated versions of originally orally adopted and transmitted instrumental music, primarily played on the harp, some possibly meant to be played together with the crwth, in various genres of 'cerdd dant'.

6 This manuscript was [most obviously] copied, and also partly (re)-edited c. 1613, from other musical manuscripts, either contemporary or earlier, by Robert ap Huw of Bodwigan (c. 1580-1665), who seems to have been a poet and a harpist of at least semi-professional level (to the contemporary standards), and possibly also a part time court musician to James I, the king of England.

7 Other, now non-existing, manuscripts containing music could have either been based on other transcriptions of harp music, or could have been direct attempts to write down performances of harp music, or both. At the very beginning of this chain of attempts to write down harp music there has been someone who has, or might have, invented the tablature system in order to be able to encode the essential elements of 'cerdd dant'. There could, as well, have been more than just one single person to whom the invention of tablature system can be credited. Regardless whether there might have been one or more possibilities to be taken into consideration, the identity of author(s), prior to Robert ap Huw, has not been solved so far with the exception that a part of the musical corpus contained in the Robert ap Huw-manuscript (pp. 23-34) has been, according to Lewis Morris (a remark by him on page 22 of the manuscript), copied from the William Penllyn manuscript. That manuscript, named after a 16th century pencerdd (master musician), is one of those lost manuscripts of Welsh harp music. Whether Penllyn can be credited as the inventor of tablature script is completely another matter.

8 The first literal transcription attempts of products of centuries old oral music culture can, most obviously, not stem from a much earlier period than that of the first modern Caerwys eisteddfodd in 1523. Thus my basic hypothesis would place the earliest transcription attempts to 1520s for various reasons. Contemporary to the first Caerwys eisteddfod, the first version of the 'Statute'of Gruffudd ap Cynan', the 'Cadwedigaeth Cerdd

Dannau' and the 'Dosparth Cerdd Dannau' are also generally dated to this period. It is probable, and also assumed here, that these three preceded the first attempts of musical transcription. Until the time of the first Caerwys eisteddfod, and in practice even further, both cerdd dant (completely) and the cerdd dafod (to great extent) were studied, adopted and passed on orally.

9 For various reasons, already during the first half of the sixteenth century, there was a great need to convert as much as possible from the previously orally adopted and transmitted forms of musical and poetical art into the written.

10 This need may have been due to one or more of the following happenings in the 16th century:

the Act of the Union between Wales and England
the breakage of Henry VIII with the Pope, followed by
the introduction of Protestantism (which seems to have been more a matter of politics than that of religion)
the dissolution of monasteries (in order to get the property of monasteries to the Crown)
the emphasis of Humanism on the written (there seems to have been a great tension between Humanists and representatives of the old bardic arts, concerning, for example, what should be put into written form) [8]
the increased interest in book printing
the increased Anglicisation among the Welsh gentry followed by the decreased interest in the Welsh language and the bardic arts
new trends in music adopted from the Tudor court and indirectly from the Continent,
as a result of the above, the existence of many wandering and officially non-qualified practitioners of bardic music (Robert ap Huw himself might have been one of those), who were (or had to become) more open to new trends, and who, sometimes caused unruly riots and faced problems with English authorities

7. In the end there seems to have been an increased uncertainty and worry among the old-style harpers and poets for their living and future together with an expected lack of new generation of tradition bearers.

8. Some representatives of the bardic arts, together with some Celtic Renaissance-spirited representatives of the Welsh (or Anglo-Welsh) gentry who shared the harpers' and poets' concern of possible extinction of the old

8 See Thomas 1968 , 9-17 for the dispute between Edmwnd Prys (representing Humanism) and Wiliam Cynwal (representing the bardic culture). According to Thomas (ibid., 19-30), Humanists complained a lot about the reluctance of bardic poets (and obviously musicians as well) to reveal the secrets of their craft.

culture, wanted to record at least some of their music in written format, possibly primarily hoping to prevent it from dying out completely. There may have been a need to create a system of mnemonics in written for musicians (as can be deducted, for example, from some passages concerning the mesurau in the 'Cadwedigaeth' and 'Dosparth') to use. When and if, there would be a new generation of tradition bearers, this system (as written) could be taught together with music. In order to raise the status of the old culture some members and/or patrons of the bardic order possibly found it best to attempt to create a written culture. This included the invocation of some old authorities. It should be noted, however, that at the same time there were representatives of bardic arts, who refused to convert anything into the written, clinging defiantly to their old habits and ways. See Thomas 1968 for more.

9. Some of the questions in this work deal with writing and notating abilities of the first transcribers, and the generations of copyists following them. All of them had, most obviously, learned their musical skills in an oral culture. One can read from the Grammars, and from the Robert ap Huw manuscript as well, how difficult it was to give instructions in written form about matters dealing with plucking, damping, ornamenting, rhythm and so on. These were previously transmitted and learned in dialogue-based pedagogical situations between the master musician(s) and their disciple(s). This is not to claim that the first attempts at writing and transcribing stopped the oral music culture immediately or completely, especially if the main impetus for the written was of mnemonic nature. The change into a written music culture from oral did not happen overnight.

10. An equally important question is how capable the practitioners of the bardic arts were at perceiving musical information in the written format. Since they were schooled in reading music, how could they turn what they read into practical music making? The explanations, terms and their spellings, as found in the 'Grammars' dealing with some ornaments of the surface structure and their execution processes, are rather confusing and contain a lot of ambiguity. It is, of course, possible that musicians with reading skills did not need written instructions at all but adopted their music-making principles orally, as their predecessors had done, and did not bother themselves with reading. After all, the bards were traditionally paid primarily for their performances, whenever they were needed, and their capability to create music was therefore considered as essential. And, moreover, what was the benefit of the written to those allegedly existed blind harpers and crowders, or even to the non-blind in the lighting circumstances of medieval castles?

11. What were the primary preferences of the transcribers, those representatives of the bardic arts who seemed to have had at least one of their feet in Renaissance Humanism? What did they want to store into the written as foremost? Definitive versions of fixed, canonised compositions? Not in my opinion. Rather we have here various elements of surface structure of the musical (and cognitive) hierarchies, built on different patterns of middle and

deep structure of those hierarchies. We also find some verbal instructions and remarks concerning culturally relevant ways to make musical performances, since the whole bardic music culture was performance-oriented? This, at least to me, seems to be a very likely story.

The source material, used for this dissertation, is broadly divided into two main categories, titled simply as primary and the secondary sources. I have attempted to go through them as thoroughly as it has been possible, and tried to analyse and interpret them critically by using the methodological framework created for this study. That framework can be described as interdisciplinary. On one hand, it has been my goal to form a conceptual and hopefully correct and detailed picture of the contents of medieval Welsh harp music and its cultural context. This conveys, among other things, serious attempts to get into the worldview and thinking of its representatives, the ways of adoption and transmission of that music. On the other hand, a musical reconstruction of some of the pieces has been regarded as equally important here. Acknowledging that it is impossible for a twenty-first century scholar and musician to create the authentic soundscape of medieval Wales, there has simultaneously been an honest intention to make the music of the Robert ap Huw manuscript a part of contemporary living tradition again. Therefore, my colleagues and I have, along with 'traditional' reconstruction attempts, also experimented with various interpretation possibilities based on the musical corpus of the manuscript and other influences. It should be emphasised that the musical versions made by the group 'Yr Awen' (voice, medieval fiddle, medieval harp), and which can be heard in the accompanying CD, present merely one way of doing it. We have attempted to understand the hierarchies mentioned in the title of this work, and then applied them to practical music making.[9]

The main criteria for primary sources have been their authors' or compilers' close, preferably direct, relationship to their contents and the culture they represent. In other words, the writer of a manuscript should have been contemporary with the culture he has written about. In the case of many sources referred to in this study, the situation has not always been so. Since this work does not deal with palaeographical aspects, with the exception of occasional references to them, there has been no preference between an original manuscript and a facsimile.

The primary sources can be divided into following sub-categories:

1. Manuscript sources containing transcriptions or transcription attempts of 'cerdd dant' - harp music.
2. Manuscript sources containing material dealing with theory, aesthetics, performance practice, adoption and transmission, tunings and other aspects of cerdd dant.
3. Printed versions of the above manuscripts, either complete or partial.
4. Other sources (also non-Welsh), which have been regarded as

9 More about the performed versions in the appendix.

relevant material in relation to cerdd dant

The first group consists of survived manuscript documents that contain transcriptions or transcription attempts of 'cerdd dant' music. These include the Robert ap Huw - manuscript (Lbl. Add. MS 14905) and the 'Rhys Jones-manuscript' (Lbl. Add. MS 14970). The latter includes some transcriptions in similar script to that of the Robert ap Huw manuscript. That tablature section, known as the 'Iolo Morganwg-manuscript', is a rather fragmentary document, comprising only a few pieces of music. The authenticity of its origin and contents has been disputed. [10]

The second group of primary sources consists of various Welsh manuscripts (such as Gwysaney 28, Peniarth 62, Havod 3 and 24, Panton 56 etc), which contain information about cerdd dant and the related subjects but no musical notations, and which are more or less contemporary to the first group. Some of these manuscripts include versions of the 'Statute of Gruffudd ap Cynan', passages (longer or shorter) from the 'Cadwedigaeth Cerdd Dannau' and the 'Dosparth Cerdd Dannau', together with extensive lists of pieces in various genres.

The 'Myvyrian Archaiology of Wales' is an example of the third group. The Myvyrian Archaiology (referred to as M.A.W. in this study) is a magnum compilation, containing more than 1200 pages. Printed in the nineteenth century, it includes printed versions [in tablature notation] of both the 'Robert ap Huw' and 'Iolo' manuscripts. It also contains a lot of other material, mostly in Welsh, from several manuscript sources, including those in the group two.

As an example of the primary sources, representing the fourth group, the three-volume 'Ancient Music of Ireland' by Edward Bunting can be mentioned. The volumes were published in 1796, 1809 and 1840, respectively. From the point of the present work Bunting's texts about musical terminology, tunings and playing techniques are important as comparison and reference material.

The secondary sources include, among others, medieval and renaissance treatises on music theory and aesthetics (such as 'Micrologus' by Guido d'Arezzo and 'Plaine and Easie Introduction to Practicall Musicke' by Thomas Morley), and early descriptions about music and its performance practices (the writings of Gerald of Wales as examples). Previous studies on the Robert ap Huw manuscript, together with studies on other aspects of early Welsh, Irish and Scottish music and culture, are also included in this category.

My theoretical and methodological framework is mostly based on ethnomusicological and cognitive studies, and since they do not give direct information about my field of studies, they are not regarded as source material. The choice of this reference material has been affected by understanding my field of studies essentially as an oral culture. Therefore my reference material deals to great extent with dialectic between the oral and the written, different levels and kinds of variation and variable factors within various structural hierarchies of music, adoption, performance and transmission processes of music, processes of change, culture studies and so on. The main emphasis in all those studies is on processes of various kinds. These studies deal not only with

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10 More about the Iolo ms. in Whittaker 1999. See also chapters three and six of the present study.

folk musics in wide respect, but also different art music traditions (both European and non-European) as well as popular music traditions of different eras.

There is only one realistic vantage point available to us as scholars, listeners or performers when encountering the treasures of the past - our own aesthetic experience. This is not to say that that experience should be static. On the contrary, since we can widen our musical world view, if we want to, and gain information from the aesthetic preferences of different music cultures of the world, at least of those of the present-day world. The past is more complicated, because we can never reside in the past as natives in a similar way as we can in any place of the modern world.

When referring to different locations in the tablature script (pages, spots, columns, passages, formulas, etc.) I have used Peter Greenhill's numbering method (e.g. in Greenhill 1998 & 1999) throughout this work (figure 3). Greenhill's system is very clear and self-sufficient. It tells the reader first the page number, then the number of the hand-dividing line on that particular page (the amount of such lines is usually six per page) and then either the number of the vertical column, or the beginning and ending of a passage on that line. The beginning and ending are separated by a dash; otherwise the numbers are separated by a dot. Thus, for example, '71.6.3' denotes page 71, line 6 and column 3.

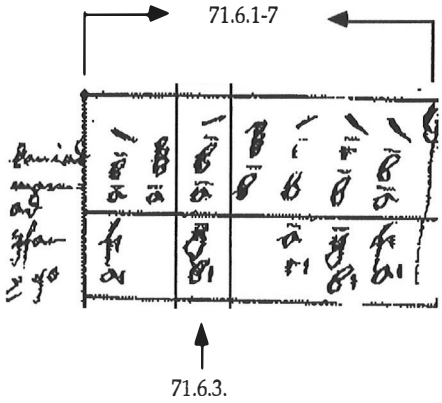

FIGURE 3 Peter Greenhill's system of location applied to the opening of 'Caniad Marwnad Ifan ap y Gof' (p. 71 of the Robert ap Huw manuscript). The piece starts on line six of page 71. The vertical column in rectangle is the third on that line (when read from the left). The whole passage in figure can be numbered as '71.6.1-7'.

My study can roughly be divided into five sub-entities. The theoretical and methodological premises are introduced in chapter two, wherein applications from various sources are made into the world of Robert ap Huw and Welsh cerdd dant. One of my attempts in chapter two is to furnish the reader with a picture of an oral music culture and the research problems that are intimately

connected to it, particularly when the oral culture we are dealing with belongs to a distant past.

In chapters three and four the reader is attempted to be given a picture of cultural and historical circumstance, to which Robert ap Huw with his manuscript and its musical contents belong. Some previous studies on the manuscript are presented and discussed, following the theoretical and methodological premises introduced in chapter two.

Chapter five deals with matters of instruments and tunings, both in medieval Europe in general and more specifically in the world of Robert ap Huw. The limitations and possibilities of an instrument, on which medieval Welsh bards made their music, are essential in understanding both the cognitive and musical hierarchical patterns of cerdd dant, as well as subtleties of the music.

Chapter six forms the analysis section of this study. The main attempt of the analysis is to find supporting proof for the existence of cognitive and musical patterns in cerdd dant, and for the hierarchical character and performance bias of medieval Welsh harp music. Chapter seven is a general discussion of conclusions drawn from this study, as well as the problems of credibility that intimately are connected to them. Some suggestions for further studies are also presented.

As the fifth and the last, but by no means least, part of this study are the musical reconstructions and experiments, recorded in the joint CD. It has been my honest aim to learn at least a fraction from the 'pencerdd's toolkit' in order to be able to give a musician's report from the repertory of medieval Welsh harpists. Equally important I have found to use that toolkit to create something new, which is an inseparable feature of any living tradition. It is my hope that this work arouses wider discussion about early European music cultures, which are still more or less unexplored. And, even better, more research projects on them, together with musicians' reports - reconstructions, performances, concerts and recordings.

As the art historian John Shearman has put it: 'It goes without saying...that we cannot step right outside our time...but such inevitable imperfection ought not to be allowed to discourage the exercise of historical imagination.' (Shearman 1988; 4-5). In spite of the fact that we are not able to listen with the ears, or understand with the 'brains' and aesthetics of another age and with all subsequent music banished from the mind, we may increase our understanding of past music. It is, however, important to remember that the reconstructions we make are our hypothetical versions only. We, as present-day people, stand in an awkward position in our quest for a period ear or a period performer. When we try, no matter how hard and intentiously with the best possible methods available, to experience and see the things from the 'inside', we are doomed to grab the surface only. And yet it is absolutely worth doing.

2 THEORETICAL AND METHODOLOGICAL FRAMEWORK

2.1 Early music and oral transmission processes

As mentioned in the 'Introduction', Western scholars have traditionally approached music from written sources, leading to an emphasis on musical objects rather than processes and events. The status of the written in the history of Western music has been established with general acceptance that music must be conveyed in writing before it may be called a composition. 'Composing' and 'writing' are often regarded as synonymous.[11] Research of various processes leading to a notational system has so far been very rare. Such processes may include learning and composing by ear, and changes implied for that music. The transcription process by a copyist, editor or author who either may, or may not, be aware of the cultural context of the music being written down, should also interest scholars. Leo Treitler argues (Treitler 1986, 39) that in the research of medieval music one should place less emphasis on the traditional study of musical objects. Rather, one should see these objects within the context of the transmission processes, as subjects to change and containing various layers of musical information. Yet, in spite of all this, in traditional Western musicology music has often been studied as if it were stable and unchanged at the same time, when everything else around it has changed.

To what extent can the essential elements of an oral musical culture be stored within the written, and what are they? According to Leo Treitler (Treitler 1986) these can be repeating patterns, sequences, stereotyped modes of expression, and frequently recurring formulas. Formula, in music, may refer to frequently reproduced ways of musical expression, such as frequently occurring melodic and/or rhythmic motives. Albert Lord (in Lord 1960), while researching the repertoire of Yugoslavian ballad singers, noted that: 'Singers

11 See Finnegan 1986.

learn and listen to a lot of different, but nevertheless sufficiently repeated formulas. After having learned enough of them, and rules pertaining to how they are connected, a singer is able to compose in traditional style.'[12] Thus the musician has a variety of musical formulas stored in his memory, as part of a culturally correct musical vocabulary, and when making a melody segment in a performance he picks up some of them and presents them in a more or less different order on different occasions. All of this implies the importance of change within stylistic limits. Change is due to the fact that instead of learning only one melody, the musician learns alternative musical formulas, and ways in which to connect them. It may lead to a situation, where a musician is able to produce hours of music, which is continuously subject to change. In oral cultures, especially those that favour poetry and narrative expression alongside music, one should talk rather of melodic procedures and sequences than of firm, established musical compositions. The role of melody is parallel to the use of textual phrasing when reading or reciting, for example in troubadour and trouvère repertories. (Treitler 1986, 39-43; Page 1987, 14-17).

2.2 Ethnomusicology and cognitive approach

The concepts of 'cognition' and 'cognitive' have been used in scholarly literature in several disciplines: philosophy, psychology, neuroscience, sociology, linguistics, musicology and anthropology, among others. Concepts are used to refer to different kinds of mental and intellectual phenomena and processes on many levels and with varying accuracy (in their broadest sense to allude 'in one's head'). Generally cognition is related to human thinking and memory as well as to processes, which involve perception of information, and processing of knowledge. Howard Gardner, one of the big names in the early stages of cognitive science, has, in his 'The Mind's New Science' (Gardner 1985), set a fundamental introduction to the origin, history and present state of cognitive science. Five central theses (ibid., 38 – 45), two of them more fundamental than the other three, may be regarded as guidelines throughout the book. Firstly, the cognitive analysis, which is projected on the cognitive processes of human thinking (processes 'within the head' of the human being) should take place on the analytical level of representations. In other words, cognitive analysis moves on an abstract level of scientific thought. Mental representations can be introduced as symbols, scenes, images and ideas, among others. Secondly, the central role of computational models in cognitive research should be acknowledged. Information processing by computers is regarded as an ideal model for human thinking. Computers are used to test and reconstruct the identified mental models. Thirdly, in the research settings of cognitive science, "disturbing" factors (such as contextual influences, elements stressing tradition, its conventions, conventions of the past, etc) are eliminated. This is regarded necessary, in order to arrive at 'neat' models which can be processed through computers. Reasons for elimination are practical, not based on attitude.

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12 See also paragraph 2.7 in this study.

Fourthly, there is a necessity of interdisciplinary research. Fifthly, the questions of cognitive science were already set by classical philosophy. They concern fundamental qualities of human thinking and knowing.

There have been, and still are, some elements of contradiction, even opposition, existing between so called cognitive ethnomusicology (including ethnomusicology in general) and so called [Gardnerian] cognitive science, due, for example, to elimination of contextual factors (such as the individual elements of variation on a surface structure of an individual musical performance, individual timbral factors and the like).[13] However, there is not very much disagreement between the two about the very fundamental matters. Both agree about the universal cognitive capacities of human beings, and also that at the fundamental level, human cognitive capacities are not dependant on cultural elements.

Pirkko Moisala, a Finnish ethnomusicologist, quite rightly criticises some of Gardner's theses. (Moisala 1991, 18-19). The elimination of contextual elements in cognitive science indeed deserve some criticism, but one should, however, keep in mind that cognitive sciences are only searching for their fundamental premises [and therefore should be seen as being in a process of change]. The cognitive approach and cognitive sciences are, at least partly, overlapping. Cognitive approach emphasises the mental domain of human beings: the location of the information processing is 'within the head'. The computational theory of human nature, as presented by Gardner, sees humans as computer-like machines whose reasoning is based on structured 'cold' information. Attention is not paid to affective domains of human mind. Affective factors are essential in musical processes. In other words, in research of any music or any music culture we can neither eliminate, nor regard, some factors as 'disturbing'. If we do, we are censors, editors or representatives of 'music police forces', rather than researchers. Computer-modelling, a paradigm very much used in cognitive musicology, is an excellent tool in gaining more understanding of, how a musical brain works, but we have to acknowledge that it is still at an initiary stage. In other words, it can be a 'very good ploughman but a lousy master'. One should not forget and ignore the importance of affectual factors (likes, dislikes,...) connected to music, which play a very important role in a human being's life, and which are temporal and differ from one person to another, even within a superficially homogenous and unified culture, especially as seen and understood by the outsiders.

In her dissertation dealing with cultural cognition in music (a study on a music culture of a Nepalese village) Pirkko Moisala brings forth the concept of cognitive ethnomusicology (Moisala 1991, 6). Development of cognitive ethnomusicology requires an explicate identification of premises particularly tailored to an ethnomusicological study of musical cognition. Traditionally ethnomusicological studies have been characterized either by cultural relativism (music cultures as entities; interpretation from within the cultures) or by attempts to grasp universal features of music with the help of comparative cross-cultural studies. Ethnomusicology can be seen as a mix of musicological

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13 An article about cultural cognition of North-Sami yoiks (Krumhansl et al. 2000) is an example of a team work, in which the participants represented different disciplines and vantage points.

(focused on analysis and constructions of musical sounds) and anthropological (role, function and usages of music in culture) studies presented more or less separately and stressing one or the other; nowadays more converged (Moisala 1991,9). Alan Merriam, one of the main pioneers of modern ethnomusicology, sees ethnomusicology as the study of music in its cultural context. For him the emphasis for research is on anthropology (culture-sensitive perspective), since, according to Merriam, music is an inseparable part of culture. For Merriam ethnomusicology is the 'study of music in culture'. (Merriam 1964). Another traditional 'division' of ethnomusicology could be called the 'study of music as culture' (McLeod 1974, 105-108). This school has borrowed methods from various disciplines, e.g. linguistics, semiotics, folkloristics, musicology, ethnoscience, or anthropology, to be used in research. There is still no unifying theory or methodology for ethnomusicology, or from it, a fact that can be taken as a challenge (Moisala 1991, 10-11). Thus pluralism in methods of approach has become common in ethnomusicological research. The experience has quite clearly shown that theories and methods from other disciplines cannot be directly adopted into research. Tailoring is needed to suit the study of various musics. (Blacking, 1979). In all musics there is a musician called the human being, who makes music, selects and organises sounds. Conceptualisation of music is, and has been, a culture-bound phenomenon, be it a professional ensemble of Chinese Southern style classical string music or an amateur based Finnish brass band. In John Blacking's words, (Blacking 1973,92) music is 'humanly organised sound'.

Moisala sees music ensuing from both the 'givens' (from our biological grounds) as well as from what we have learned and into which we are enculturated in our cultural context. Culture is a result of collective learning, which is accumulated in the course of time in certain geographical and social conditions and circumstances. Culture consists of patterns, explicit and implicit, of and for behaviour acquired and transmitted by symbols, constituting the distinctive achievement of human groups, including their embodiment of artefacts; the essential core of culture consists of traditional, historically derived and selected ideas and especially their attached values. Underlying the formation of cultural behaviour and thinking models are the biological needs of the human species, the effects of natural surroundings and the accumulation of historical influences. Moisala summarizes culture as action and thinking models typical of a group of people (Moisala 1991, 7-8). Wanting to emphasise culture also as a communicative process a bit further, I would like to include the words 'to a group of people' after 'of a group of people'. This is in accord with Kroeber's and Kluckhohn's idea of a culture system (Kroeber and Kluckhohn 1952, 181) both as products of action and as conditioning elements of further action.

As a part of Blacking's concept of music as 'humanly organised sound', forms of music are a result of both social and cultural conventions, as well as idiosyncratic choices of individuals (Blacking 1987, 3). People in a culture (including music-makers) share the cognitive models of their culture, but are [if not prevented from doing so by authorities possessing means of sanctions] creative individuals. Individuals and idiosyncratic inventions are crucial since they are the key to the development of culture (Blacking 1987, 33). Although ethnomusicology moves between humanistic studies and social sciences, the

pluralism used in its methodology, including borrowing from other disciples, has not so far solved the problem of how to analyse human musical creations and activities within the frame of culture (see more in Behague 1984, 7; McLeod and Herndon 1980:iii; Stone 1982, 127). Ethnomusicology is still searching for methods to unite musical analysis and cultural analysis. This can be seen as very crucial, since many scholars seem to acknowledge that '...the cultural background in music – including ways of perceiving music as well as cultural significances – should be included in a synthetic analysis of music' (Blacking 1973, 197). The context-sensitive analysis, for example, although used saliently in ethnomusicology is problematic when dealing with music cultures of the past. This indicates that the results concerning music cultures of the past (in any time or place) can, at their best, be close to the things how they might have been, but never definitive.

In oral cultures, such as folk traditions, the human mind and human need are creative mediums for channels of transmission. Most communities in earlier days were self-supporting, not only in creating their own work and livelihood, but also in creating their own culture and entertaining. Robin Gwyndaf speaks of the importance of non-verbal communication forms in the understanding of a person's world-view. Silent messages, such as gestures and body language, dressing, eating and drinking habits, smiles or frowns at the breakfast table, the placing of people of different ranks at the Kings banquet; all these deserve our consideration. Although they are silent messages, they are very expressive as well. There is also a network of non-verbal and non-gestural but conscious- and culture-tied relationships, known, adopted and accepted by people, and which affect to visible and audible forms of behaviour and communication. (Gwyndaf 1994, 81-82). Music is a very good example of this. A twelve-bar blues pattern is such a network of relationships, which can be expressed in a wild array of practices and results. Due to the bodily existence of humans, every musician has had the experience of muscular memory. The recalling of a forgotten (completely or partially) piece can be transformed from conscious thinking into automatic physical action. Many musicians have, every now and then, remembered and recalled some pieces of their repertory by their finger actions, in other words, with the help of their kinetic memory. Obviously such was the case among the numerous blind professional old-style harpers in Ireland, Scotland and Wales, at least to a certain extent. To cite John Blacking:

> 'The creation of music can be described as a sharing of inner feelings in a social context through extensions of body movement, in which certain species-specific capabilities are modified and extended through social and cultural experience. Music is a metaphor of feelings that draws on man's own nature for many of its forms.'
>
> (Blacking 1979, 6).

2.3 A cognitive study of culture

Pirkko Moisala has emphasised the importance of studying the varieties of human cognitive processes in different cultural contexts, since cognitive

structures develop and are expressed differently in different contexts. (Moisala 1991, 19). She refers to Tyler's concept of cognitive anthropology (Tyler 1969,3), which aims to identify models of human thinking in different cultures, but which also operates on the level of the group, community and society rather than on the individual. The main interest lies in finding essential factors within each culture and in explaining how people organise important elements of their culture. Although it is essential to know as much as possible how a society or community organises its elements of culture, music included, in the end it is still the individual who plays the main role. There may, however, be one or more members of the community, who are allowed to expand the cultural boundaries of that community. Whatever they do, it may more or less be accepted, but if the person of more withdrawing character tries to do something 'innovative', and thus expand the boundaries, she/he might be straightforwardly prevented to carry his/her ideas further. [14]

The fact remains that no culture in its entity is cognitively shared, or internalised, by all members of its society (Wallace 1961, 109). On individual level this goes also to single human being from time to time, if we accept that an individual is capable in forming his or her own music culture within his head. It is, of course, completely another matter whether our thoughts and ideas actually are free and individual, or whether we just imagine the matters being so.

Language is often seen as a guide to social reality, meaning that language is a mould that shapes our thoughts (Cole 1975, 40). The linguistic approach is based on a conception of interdependency of language structures, thinking processes and cultural phenomena, as advocated by Noah Chomsky (1968). In addition to that we should remember that the same (or similar sounding) words may have had a completely different meanings some hundreds of years ago compared to that what they have now. The English word 'artificial', for example, had a totally opposite meaning in early 1600s, when compared to its present meaning. Various ways to understand 'the shooting of the hunters' can also be used here as an example.[15] The view of language as the primary modelling system rejects the other domains of cognitive modelling, for example in musical performance. Doing includes cognitive structures, which may not be found in the structures of language. Some processes are much more difficult to explain with the help of language than by showing them as practical examples.

Fred Lehrdahl and Ray Jackendoff also find problems with linguistic methodology (when applied to music) when attempting literal translation of aspects of linguistic theory into musical terms – for instance, by looking for musical 'parts of the speech', deep structures, transformations and semantics. The musical 'meaning' is not the same as the meaning of the 'language' (Lehrdahl & Jackendoff 1983, 5). Various musical formulas can be expressed in various orders and still be regarded as music, whereas the words cannot if we want them to have a meaning or meanings. One may suggest that meaning and

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14 One may recall the 'master classes of music' held by Stalin to Shostakovitsch and Prokofyev, or those held by Goebbels to some German composers in 1930s, or even those held by Joseph II, the Emperor of Austria, to W.A. Mozart.

15 Of converted and hidden meanings of words in various languages see Ilpo Saastamoinen's concept of 'e-mythology'. (Saastamoinen 1998).

contents of many words are strongly dependant on the fact how they are perceived [= how do they sound in relation to perceiver's own conceptual world], how they are presented [= in a friendly tone and way, in a hostile tone and way, in a neglecting tone and way], and what are the abilities and attitudes of the presenter when he/she passes the information on. So, in other words, we are dealing with the problem of ideology, perception and communication, which combines all participants; informant(s), perceiver(s) and receiver(s). Figure four is an attempt to show that one-time informants may also become one-time perceivers, and therefore afterwards also transmitters of musical information. In relation to one piece of music one may be an original informant (composer, author, first performer,...), but to another piece of music the same person may, simultaneously, be the first (second, third,...) receiver and perceiver. The informant A can simultaneously be a perceiver/receiver and transmitter to all directions, the informant B can simultaneously be a perceiver/receiver and transmitter, and so on.

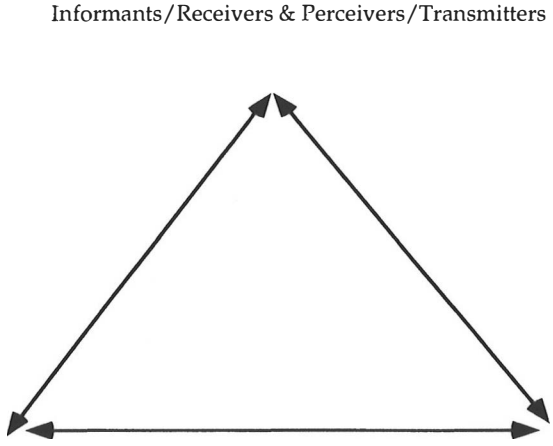

FIGURE 4 Relationships of participants within musical processes.

Lehrdahl and Jackendoff write about musical intuitions of the experienced listener. By these intuitions they refer to the largely unconscious knowledge that the listener brings to his hearing. It is regarded as knowledge that enables the listener to recognize elements of a piece as typical or anomalous, to identify a performer's error as possibly producing an 'ungrammatical' configuration, to recognize various kinds of structural repetitions and variations, and, generally, to comprehend a piece within the idiom. Once he becomes familiar with the idiom, the kind of organization that he attributes to a given piece will not be arbitrary but highly constrained in specific ways. In their [Lehrdahl & Jackendoff] view a theory of musical idiom should characterize such

organization in terms of an explicit formal musical grammar that models the listener's connection between the presented musical surface of a piece and the structure he attributes to the piece. Such a grammar comprises a system of rules that assigns analyses to pieces. The concept of 'experienced listener' is, of course, idealized. Rarely do two people hear the same piece in precisely the same way or with the same degree of richness. To certain extent in depth and details there is normally considerable agreement. A musical idiom of any complexity demands considerable sophistication for its full appreciation, and listeners brought up in one musical culture do not automatically transfer their sophistication to other musical cultures. And because one's knowledge of a musical style is to great extent unconscious, much of it cannot be transmitted by direct instruction. If listener's/performer's memorisation of musical surface of many pieces is good and relatively uncomplicated, there would be little need for a special theory of musical cognitive capacity. But the more the study of listener's/performer's knowledge reveals complexity and abstraction with respect to the musical surface, the more necessary a theory of musical cognitive capacity becomes. Composers and performers must equally be active listeners. Those who do listen [actively] are exercising their cognitive capacity. (Lehrdahl & Jackendoff 1983, 3-7). When listening to music, we hear the sounds not as isolated, disconnected units, but integrated into patterns. Sound elements are heard in context, organised in pitch and time, and are understood in terms of their function within that context. (Krumhansl 1990, 3).

If the ways, in which the human mind takes in, classifies and interprets information, are regarded as the key factors in understanding culture, we may end up with misleading results. There is a danger that this kind of paradigm leads to an overly limited and narrow approach to culture. A componential analysis fits only into the representation of clear categories. It is also questioned, and quite rightly so, whether these formal cognitive models occur only in the head of the researcher. (Spradley 1972, 4). The cultural knowledge, thinking, and cognition are reflected as well in people's behaviour as in their speech. Clifford Geertz (Geertz 1973 & 1983) has claimed that social groups should be studied in their cultural setting in order to understand how they make sense of the world. This is possible in today's world, but cannot be applied as such to the study of past cultures. Even for today's world there is, however, so far no common consensus about the distinctive frame of reference for ethnomusicological cognitive musical research.

When attempting to make a cognitive interpretation of culture, we may, as a starting point, acknowledge that there is universality of music, together with a wild diversity of musical genres, the changing character of music and the acquisition of music. Changes take place in the course of time on the individual, group, community and even culture level. Music is thinking in or with sound, in other words, music is primarily musical thought rather than simply music as such. Cognitive processes of music are both " in the head" of music-makers and "in music", thus, as well in musical perception as in structure of musical sound (Serafine 1988, 1-72). The knowledge of music becomes actualised and concretised in actual sounds arranged into music.

Pirkko Moisala finds music, together with cognitive processes of music and music making, as culture-specific and culture-bound. Human cognitive capacities are universal ('universality of music'), but cognitive models of

thinking are formed differently in different cultural environments ending with different results ('diversity of musical genres'). These models, together with processes joined to them, are in no way static but accumulate in individual's lifetime, and through his/her own and other individuals' activities have their impacts to the surrounding community, big or small. Cultural, ecological, historical and social contexts, among others, formulate the cognitive models shared by a group of people, and implicate the obvious occurrence of changes within a culture from time to time. Those models, and processes joined to them, on their part (due to the resulting products and human behaviour, for example) have their impact on cultural, social and other contexts as well. (Moisala 1991).

Oral transmission depends mostly on memory and the mnemonic devices that facilitate it. A singer may learn a song by recognizing markers that she or he has used previously and the audience expects to encounter markers they have experienced in other songs. These markers may be small – coupling a word with a motif of a few notes – or as extensive as an entire piece (or some underlying elements of musical structure which guide the performance). The density of these markers may be great or small (a detailed accurate repetition or complete new phrase combinations or improvisation), and each repertory and each genre may have some mnemonic devices unique to it and others may be just universal indistribution. Some mnemonic aids require sophisticated specialization, whereas others need no more than repetition. As a whole these memory markers become the units of transmission that make oral tradition possible. Such memory markers exist on every level of cognitive and musical knowledge. Music is one of the most effective mnemonic devices in oral tradition, since music abounds in those parameters that animate oral tradition. The piece of music usually contains internal mnemonic devices, but its total form also serves, or may serve, as a unit in transmission (either on the surface level or deeper), especially in performances. (Bohlmann 1988, 14-15). The essential thing here is to what extent, how, and by which musical and cultural factors/elements the memory (or cognition) is fed on each occasion? Cultural elements are often transmitted after the models they were taught and perceived, and this does not include merely the sonics but other musical, cognitive and cultural aspects as well. The possibilities of change are, of course, numerous.

Any piece of music can, of course, be considered and treated as texts, but I find that kind of approach as merely a fraction of the whole story. One should acknowledge that a piece of music is inseparable from a context of performance and tradition, and the scholar should understand how text, performance and tradition interrelate. If one tends to think of the piece as somehow 'authentic' or even archetypal, one is likely to treat it as a text in the most restricted sense, i.e. as isolated from performance and tradition. At the same time one may ignore the musical, cultural and cognitive processes connected to it. One should keep asking what changes may have occurred to it in the course of time from within the tradition, as well as from the outside influences; the interrelation of product and process. A Finnish folk music scholar and performer Hannu Saha has rightly reminded, referring to Lauri Honko, that there is no 'master-recording' of any folklore piece of music. (Saha 1996, 25). Robin Gwyndaf discusses some fundamental principles of [folk narrative] research, which can well be adapted to research paradigms of music. Gwyndaf says that 'verbatim texts are

important, for example, when studying the oral transmission process of narratives, their morphology, structure, form, style and meaning.'(Gwyndaf 1986, 146-148). This gives us some ideas how a narrative changes by being transmitted orally from one person and district to the other, or to what extent a tradition bearer is also a tradition creator, supplying his own additions and corrections. Also the influence of faulty (or not so faulty) memory must be taken into consideration. Further Gwyndaf discusses the meaning and importance of social context, the study of narrators and narratives within their own community. Who were the narrators, were they active or passive? If one is interested in various narrative genres not as static items of folklore, but as folklore in action, then the emphasis should be on performances and processes. Gwyndaf asks, e.g., 'what is the function of each narrative, what is the reaction of the listeners? Is their role active or passive? What changes occur repetition processes? (ibid., 146-148) It is rather tempting to substitute the word 'narrative' with 'piece of music' or 'musical performance', and the word 'narrator' with 'musician' (harpist, crowder, singer,...), and see what comes out. Remembering simultaneously that even if the scholar gets close to the core of the culture, he or she always remains, to some extent, 'a stranger in the house'.

2.4 Towards the concept of cognitive ethnomusicology

Ethnomusicologists have tried to enter 'people's heads' to investigate musical thinking and cognition in various ways. Steven Feld documents that ethnomusicologists have based many studies on the assumption about the analogy between music and language. (Feld 1974 & 1986). There are formal accounts of musical systems and applications of transformation and generative theory to the study of music (e.g. Pekkilä 1986 & 1988). Many scholars have taken the language as a primary modelling system of culture, and this has led to an assumption about musical vocabulary as a manifestation and interpreter of music culture. Musical vocabulary has sometimes been called as 'verbalised music', 'music texts' or 'musical discourse'. The research based on the priority of language has been twofold. On the one hand there are studies of 'verbalised music' (verbalised knowledge about music as a reflection of culture and culture-bound musical processes), on the other there are numerous analytical studies of music structures employing the methods and models of structural linguistics. (Moisala 1991, 26-29) The study of musical vocabulary has been based on the assumption of early cognitive anthropology that humans tend to classify things into groups, types or other categories. The study of discourse related to music, musical vocabulary as well as terminology increases our knowledge about musical related thinking. According to John Sloboda, behavioural and cognitive analogy between music and language is, whilst compelling, not complete; 'music ... almost certainly employs a distinctive configuration of neural resources' (Sloboda 1988, 265).

Cognitive dimensions, cognition and cognitive processes have been a goal of ethnomusicological research for a long time. Alan Merriam's research model (in Merriam 1964) contains different levels of study – concepts, behaviour,

musical products – as dependent on each other. All these refer to, or are taken as, articulated and conscious, possibly defined, conceptualisation of phenomena (such as verbalized musical vocabulary and knowledge). To this Merriam also adds 'thinking about music': questions what music is or what it should be, where it originates, and what the sources of human musicality are. Merriam emphasises here the importance of the conceptualisation in the process of music making. Concepts concerning music underlie both musical sound and attitudes as well as values related to it. They are also basics to the study of music systems because they underlie the music behaviour of all peoples. Conceptualisation of music, as defined by Merriam, corresponds to some extent to the concept of musical cognition, although they are not analogous. Both do underlie and direct music making, and both inevitably involve similar elements. The concepts of musical cognition, however, include all the cognitive features of music culture. Not only concepts of music, musical knowledge and the contents of musical thinking, but also the ways music and music-related thinking is organised and processed in the "heads" of music-makers. Musical cognition refers to representations of processes, strategies, routes and maps of music making. (Merriam 1964, 32-103).

The concept of musical cognition can be said to include cognitive processes of music making, composing, performing and perceiving music. In other words, the ways music is represented in the mind ((Deutsch 1982; Sloboda 1985, 7). John Blacking regards music as a result of a synthesis of cognitive processes, which are present in culture and in the human body (1973, 89). According to Blacking:

> '...the cognitive systems underlying different styles of music will be better understood if music is not detached from its context and regarded as 'sonic objects' but treated as humanly organised sound whose patterns are related to the social and cognitive processes of a particular society and culture.'
>
> (Blacking 1973, 92)

Thousands of messages and pieces of information are stored in the human brain. A large proportion are buried in the subconscious, and what an informant wishes to remember and wishes to relate to others at particular moment in time reflects his or her world-view. One should remember that there might be matters, which are deeply rooted in informants world-view but which he or she does not (can not, will not,...) express to others due to, for example, cultural, political or religious restrictions. An informant's testimony at a particular moment is of uttermost importance not only because what he says but also what is left unsaid or unpresented. How an informant relates today to one person may differ to how he chooses to relate to another person. The researcher's own personality and behaviour may thus have an effect on the nature of an informant's testimony. In this light it may be easier to understand Hempson's and O'Neill's [two Irish old-style harpers at the 1792 Belfast Harp Festival] reluctance to reveal the secrets of their art to Edward Bunting (Bunting 1840), because '...he would not understand them anyway'.

John Blacking sees music also as a primary modelling system (1979). It follows that musical processes cannot be exposed through studying only speech about music, but that there are musical processes, which can be found only from and within music. These include many aspects of performance actions, which cannot be properly learned from 'musical discourse' but from practical music making. Such aspects may not always be understood properly from speech (or from script), but may be rather easily adopted from musical demonstrations given by an accomplished player. Both musical discourse ('language as a modelling system') and musical processes ('music as a modelling system') are parts of 'music-network', a concept launched by Ellen Koskoff (Koskoff 1982). 'Music-network' can be understood as hierarchically organised structural system, with both horizontal and vertical dimensions, according to which musical information is received, perceived, stored, organised and applied for musical performances. Koskoff sees the concept of 'music-network' applicable as a tool of analysis for models of musical thinking both of an individual and of a group (ibid., 366). Robert Gjerdingen (Gjerdingen 1988, 22) also speaks strongly in favour of networks as applicable and compound systems of musical hierarchies. According to Gjerdingen, a tree-structure, as presented e.g. by Lehrdahl and Jackendoff in connection of their generative theory of music (Lehrdahl & Jackendoff 1983), has a predictable shape. Gjerdingen considers that predictability as having strong influence on how an analysis proceeds, whereas a network is unpredictable and places no initial constraints on an analysis. The problem with the tree-structure, according to Gjerdingen, is the absence of 'horizontal' relationships at various levels (the repeated pitches and their mutual relationships in the melody, for example).

Pirkko Moisala notes that some ethnomusicologists have attempted to discover basic cognitive models and structures typical of a culture in music. In that case the research focuses also on other cultural aspects than music. Her main assumption is that cognitive structures of culture precede and direct cultural behaviour. According to her ethnomusicologists have attempted to grasp musical cognition from within the structure of musical sound and from verbalized information on music, as well as through interpretation of music-related behaviour. She finds many problems in cognitive ethnomusicology at its present state, and calls scholars to define the basic premises of cognitive ethnomusicology and develop models, methods and techniques suitable for the cognitive study of music as a culture. The emphasis in ethnomusicological study of cognition is, according to Moisala, in 'musical cognitive processes'. (Moisala 1991, 28-31).

Experimental music psychology tends to omit the contextual information and impact (perhaps due to the lack of proper methods), although contrary experiments and suggestions have been made as well. (Kippen 1987). The newer psychological studies on musical cognition agree with the above about the universal generic or biological basis of music and musical cognition, which gets style-specific and culture-specific cognitive features. The musical generative capacity is inherent in all human beings, and it is based on the ability to derive sound sequences from higher-order structures or rule systems (Sloboda 1988, xiii).

In oral traditions music exists to great extent, but not entirely, in performance, and therefore oral music and the studies concerning it stress performance. Moisala argues (Moisala 1991, 46-47) that the subject of cognitive analysis of music [of oral culture] as culture is the musical performance as an integrated complete whole. This can be agreed to great extent, but one needs also take the procedural plans and other aspects of music culture, which pave way for performances, into consideration as well. In the study field of the present work such plans and hierarchies together with culture-tied aesthetics, terminology, theory and transmission system have played a considerable role.

Many aspects of musical cognition are not open to conscious or verbal introspection but have to be elucidated by observation and analysis of behaviour (Sloboda 1988, xiii). This is particularly difficult in research of oral cultures of the past, since there are no living informants available. Thus the conclusions are mostly based on interpretation of [preferably] contemporary literal documents, and partly on interpretation of comparison material drawn from oral cultures, which exist today. I agree with Moisala (ibid., 48-49) when she, referring to Herndon and Brunyate (1975), McLeod and Herndon (1980) and Behague (1984), emphasises study of music in performance as study of music as the process of organizing sounds rather than studying music as an organization of sounds. In this sense all the processes that lead to a musical performance should be taken as a vital part of research and observation.

2.5 The concept of hierarchy

The process of grouping is common to many areas of human cognition. If confronted with a series of elements or a sequence of events, a person spontaneously segments or 'chunks' the elements or events into groups of some kind, and in some order. In the medieval world, the structural construction of the Universe extended from the throne of God through all possible grades (Virgin Mary, angels, saints, man, animals, vegetative class down to the meanest of inanimate objects), every part being vital link in the chain. In every class there existed a primate (oak among trees, lion among beasts, emperor among men, sun among stars, etc.).

The most fundamental characteristic of musical groups is that they are heard in a hierarchical fashion; motive as part of theme, theme as part of theme-group, section as part of piece, and so on. Overall structural concepts, according to Lehrdahl and Jackendoff, are:

1) Grouping structure (hierarchical segmentation of the piece into motives, phrases, and sections)
2) Metrical structure (the intuition that the events of the piece are related to a regular alternation of strong and weak beats at a number of hierarchical levels)
3) Time-span reduction (the pitches of a piece contain a hierarchy of 'structural importance' with respect to their position in grouping and metrical structure)

4 Prolongational reduction (the pitches of a piece contain a hierarchy that expresses harmonic and melodic tension and relaxation, continuity and progression)

(Lehrdahl & Jackendoff 1983, 8)

Timbre, dynamics and motivic-thematic process are not considered as hierarchical in nature [in the repertory of tonal music]; yet these make crucial contributions to the principles that establish the hierarchical structure for a piece. Certain musical phenomena, such as elisions, require structures not expressible by the well-formadness rules. Lehrdahl and Jackendoff describe these as transformational rules. (ibid., 8-11). When attempting to define the concept of hierarchy, Lehrdahl and Jackendoff suggest that the hierarchical structure is an organisation composed of discrete elements or regions related in such a way that one element or region subsumes or contain other elements or regions. A subsumed or contained element or region can be said to be subordinate to the element or region that subsumes or contains it; the latter can be said to dominate, or be superordinate to, the former. In principle this process of subordination (or domination) can continue indefinitely. Thus all elements or regions in a hierarchy except those at the very top and bottom of the structure are subordinate in one direction and dominating in the other. Elements or regions that are about equally subordinate within the entire hierarchy can be thought of as being at a particular hierarchical level. A particular level can be spoken of as small-scale or large-scale, depending on the size of its constituent elements or regions. Musical grouping is not strictly hierarchical in the sense that there are overlaps (due to absence of breaks/pauses, for example) and elisions. The overlaps are similar at all levels. The web of motivic associations which reflects to what sort of groupings listener thinks he hears (called 'associational structure') is a highly important dimension in the understanding (and also creating) the piece (Lehrdahl & Jackendoff 1983, 13 - 17)

In musical analysis the concept of reduction is very common and useful. Many elaborated passages can be reduced to a skeleton-like framework of few important notes, the essentials for the passage. More complex is the situation where two or more passages are heard as elaborations of an abstract structure that is never overtly stated. Why is the listener able to recognise, beneath the seemingly infinite variety of its musical surface that the aria and 30 variations (in Bach's Goldberg Variations) are all variations to one another? Because listener relates them, more or less unconsciously, to an abstract simplified structure common to them all [see figure one in the Introduction of this work]. Such relationships are needed not just for the analysis of written-out music. In jazz or raga, for example, the performer must employ knowledge of principles of ornamentation and variations to produce a coherent improvisation and/or performance. In all these cases an [intuitive] understanding of the relative structural importance of pitches is needed. If a pitch is heard as ornamenting another pitch, it is felt as structurally less important than the other pitch – it is subordinate to the other pitch. In other words, the pitch relations involved here are hierarchical. (Lehrdahl & Jackendoff 1983, 105-106).

To display various levels of hierarchy, Lehrdahl and Jackendoff use the 'tree' notation (originally borrowed from linguistics). They find it useful,

efficient and unambiguous for reductions, after it is shaped for musical purposes. Linguistic trees represent 'is-a' relations: a noun phrase followed by a verb phrase is a sentence, and so on. The fundamental hierarchical relationship among pitch-events is that of one pitch-event being an elaboration of another pitch-event; the latter is the structurally more important event of the two. In some tree figures (e.g. the one presented on page 113 in Lehrdahl & Jackendoff 1983) the subordinate event is presented with a shorter branch, which is attached to a longer one (signifying the dominating or superordinate pitch-event). Sometimes the events can be described with neutral branches of equal length, without any concern for which dominates the other. The branches should not overlap or cross each other (when describing two or more successive events of hierarchical nature). The tree-figure is very efficient and accurate, although may be bit difficult to read, since it is relatively new invention and not adopted and accepted by everyone in the musical analysis world. (ibid., 112-115). An application of the tree-figure to the hierarchical relationships within two cerdd dant-swnemes is presented in figure five.

One should, to quote Carol Krumhansl, keep in mind that the nature of each single event [in music] depends on its role in the whole context. The experience of a melody is not simply a consequence of its tones and intervals, but depends also on the function of each tone in the perceptual whole. (Krumhansl 1990, 282-283) To this must be added the timbral factors, cultural whats and whys, and so forth.

A very general feature of music is that one particular pitch is established as a central reference pitch. It is usually called the tonic, or the tonal centre. In most cases the tonic is emphasised both melodically and rhythmically, it is sounded with relative frequency and with longer duration, and it tends to appear near the beginning and end of major phrase boundaries and at points of rhythmic stress. Other mechanisms for establishing the tonal centre may also be used. In Indian music the drone of tambura keeps the tonic audible throughout the raga. (Krumhansl 1990, 16-17). The tonic is not always the most important pitch in a musical performance, as can be noticed, for example, in North Indian classical music. The vadi-note [the pitch, around which improvisations are mostly centred], being the most important, is most often some other pitch in a raga-mode than its tonic (sometimes the second, third or sixth). Its central role is nevertheless evident and adhered to the basic principle of tonality, although not in harmony-oriented 'common' Western terms.

Some perceptual and conceptual objects have a special psychological status. That means that within categories certain members are normative, unique, self-consistent, simple, unambiguous representatives of the domain (called sometimes 'prototypes'). Krumhansl calls them the reference points. These can be found in all fields of human life and beyond: 9 is almost 10, brownish red is almost red and reddish brown is almost brown. The tonal centres can also be taken as reference points to which other 'members' within the category of melody particles are being compared. Which one of the pitches is the tonal centre depends on the particular context. No tone is inherently more 'tonic' than any other. (ibid., 17 - 18, see also Lehrdahl & Jackendoff 1983, 278). In music these reference points may organise themselves hierarchically, i.e. they form stacks or patterns. A reference point of cyweirdant or tyniad can be joined together, and the resulting combinations may be joined together for longer

chains ending up with various mesurau, which can be taken as reference patterns of cerdd dant. The hierarchy, it should be remembered, is extant both horizontally and vertically, within each structure or substructure, layer or layer segment and, of course, in the piece of music as a whole. Suggestions for such interpretations within cerdd dant are to be found in chapter six.

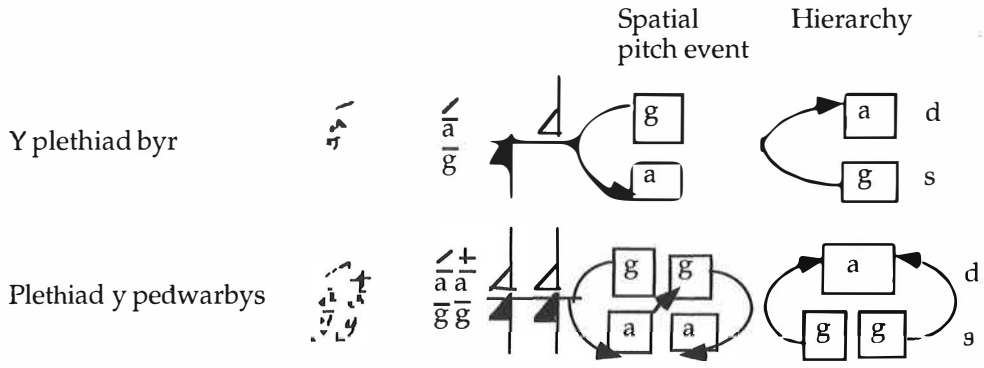

FIGURE 5 Swnemes 'y plethiad byr' and 'plethiad y pedwrbys', according to page 35 of the Robert ap Huw manuscript, with their time-spatial pitch events and inner hierarchies. In 'plethiad byr', which is an ascending figure, the g-string is plucked first, damped after having been followed by the a-string, which is left to ring. Hierarchically the a-string dominates the g-string, although the order of plucking is the reverse. Letters d and s stand for dominating and subordinate ' respectively. Plethiad y pedwarbys' is presented accordingly.

Robert O. Gjerdingen finds the use of diagrams, in representing (mental) structures, somewhat problematic. There is no visual representation of a structure that does not distort or bias the data being represented. One should be aware of all the possibilities before a reasonable choice of representation can be made. Gjerdingen refers to classes of mental structures distinguished by psychologist George Mandler here. First class, co-ordinate structure, is characterised by elements all directly related to one another. If one begins at any one element one can move directly to any of the other elements. Second class, subordinate structure, is the familiar tree-structure. A special feature of this type is that its representation specifies no direct relationship between the subordinate elements; only subordinate 'vertical' relationships are indicated. Thus the subordinate elements may have direct 'horizontal' interrelationships, but they cannot be represented by the tree-structures. The third class is pro-ordinate or serial structure. Here one must move through the elements in a specified order. Pro-ordinate structures are so fundamental to music that they tend to be taken for granted. (Gjerdingen 1988, 11-14)

Gjerdingen criticizes Lehrdahl & Jackendoff-system of formalised tree-type analysis, as mentioned already earlier in this work. To many theorists hierarchy means a tree-structure in which many pitches at the bottom level are successively eliminated at higher and higher structural levels. One way to do reduction is to use the 'strong/weak'-dichotomy of metric accent and tonal importance. In all cases, according to Gjerdingen, the low-level 'surface tones'

are transformed/reduced into higher-level 'structural tones.' But what exactly is a structural tone? There are tones that are considered as more important than some other tones [in a mode], but it is a different matter whether a melody phrase can be reduced to one single tone, which should entail or summarise it. An alternative to tree-structure representation, according to Gjerdingen, is provided by networks. Of course it is still the task of an analyst to decide what features are significant and what are not. (ibid., 20-30).

Many scholars, who have dealt with the concepts of hierarchy in music, have referred to works of Leonard B. Meyer. According to Meyer (Meyer 1956) tonal systems are generally hierarchical. In Western major mode the tonic represents the resting place towards which all the other pitches tend to move and yearn for. At the next higher level the third and the fifth of the scale join the tonic as structural tones towards which all the rest of the tones (whether diatonic or chromatic) tend to move. Within the same major mode, at the next higher level, any of the chromatic deviations may be taken as substantive relatives to the diatonic pitches. Meyer points out that this hierarchy has correlates in the names of the notes in various theoretical systems of describing music. Basic names are given to the normative tones and others are described in relation to these. In Western music the less stable tones have names that reflect their relationship to the most stable ones, the tonic and the dominant. Thus we have the mediant, the leading tone, the supertonic, subdominant and submediant. According to Lehrdahl and Jackendoff, beyond the octave, fifth, and perhaps the major third, it is difficult to make any useful connection between the overtone series and the universality of tonality. Tonality would then not be simply man's response to physical facts about sound. Like language, tonality in music provides evidence for a cognitive organisation with logic of its own. The mind is not simply following the physical path of least resistance, as the overtone hypothesis would have it, but is creating its own way of organizing pitch combinations into coherent patterns. Citating Helmholtz's studies and statements ('...the construction of scales and of harmonic tissue is a product of artistic invention, and by no means furnished by the natural formation or natural function of our ear...) Lehrdahl &Jackendoff believe that a basis for classical western tonality should be developed in part by searching for the underlying features it shares with other tonal systems. Measure of relative stability [measure of relative consonance and dissonance] for various pitch configurations also belongs to a system of tonality and its formations principles. To some traditions the overtone series have dictated these mesurau (at least in theoretical and aesthetical treatises), whereas in others different criteria has been used. Thus many aspects of a measure of stability are, was and will be a matter of convention. (Lehrdahl & Jackendoff 1983, 292-296). A good parallel from the world of cerdd dant, in this sense, is to be found in the names of the crwth strings, presented in figure six. In medieval music we may find a parallel of larger scale hierarchy within the concepts of 'musica recta' and 'musica ficta'. The former, the 'right' or 'true music' consisted of all pitches within eight medieval modes (four authentic and four plagal), which could be learned and memorised, with the help of three hexachords. The latter, the 'fictious or false music', referred to all chromatic deviations from the 'normal' pitches of eight established modes.

Leonard Meyer (Meyer 1956) speaks about musical archetypes. 'Archetypal patterns and traditional schemata are the classes – the "rules of the game" – in terms of which particular musical events are perceived and comprehended. Archetypes establish fundamental frameworks in terms of which culturally competent audiences [including the general public but also creators, performers, scholars etc] perceive, comprehend, and respond to the works of art. It is the relationship between stimuli and general principles that matters as actualised in a specific work of art. Archetypes are embodiments of fundamental stylistic constraints. (Gjerdingen 1988, 46 - 47).

In relation to this work, it may be worth briefly to comment Gjerdingen's new model for histories of musical schemata. He argues that the apparent rise and fall of musical schemata is due to the way in which human intelligence abstracts stable categories from what is usually a continuum of historical change. In other words, musical schemata appear to have similar histories because we who perceive them have similar minds. The historical environment in which a musical schema exists can, according to Gjerdingen, be generalised as an infinitely complex array of events (economic, political, linguistical, artistic, etc.), composers' lives, and various musical and other trends. (Gjerdingen 1988, 99). One must, however, ask the obvious differences in perception, if the schemata are perceived as contemporary, or from distance [e.g. from the present to the past].

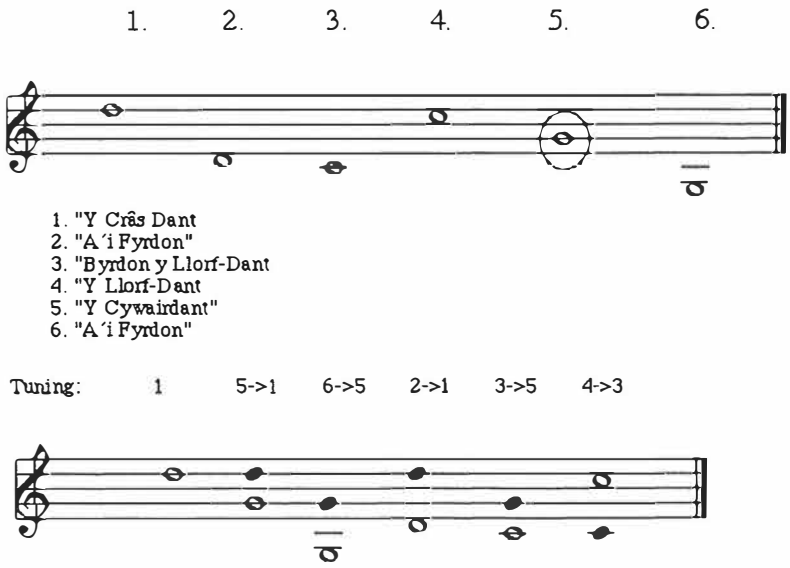

FIGURE 6 The names of the strings of the Welsh crwth, presented with the tuning procedure of the instrument (after Jones 1784). String names indicate the inner hierarchy within tones/pitches in cerdd dant music. The most important string was called 'y cywairdant' ('strong' or 'established string'); a word that frequently occurs in cerdd dant terminology. Here, as in harp music, the main cywairdant is g. The two other principal strings of the crwth, 'y llorf-dant' and 'y crâs dant' refer to other established tones (relatively speaking) in medieval Welsh string music, namely those of c and

d. The word 'byrdon' (and its mutated form 'fyrdon') refers to the octave strings of the principal ones. About the possible provenance of the crwth and its relationship to the Finnish 'jouhikko', see Andersson 1968.

2.6 Tradition and change

As mentioned earlier, most of the musics have often been studied as if they had been stable. Change may have been mentioned but has not been the focus of study. Since, in ethnomusicology, the objects of study deal mostly with music in performance rather than with written documents, change cannot be ignored. Theoretical efforts concerning the study of musical change have been few until now. (Moisala 1991, 11-12). American ethnomusicologist Bruno Nettl states that one of the salient characteristics of ethnomusicological scholarship has always been its interest in processes and cultural changes. At a general level change is reflected within the styles and structures of music, and more specifically within individual pieces and songs. An existing piece of music may therefore not always be the original, unchanged creation of its author. More likely, it is a version comprising numerous rhythmic and melodic changes made over a considerable period of time, where the original version is no longer available. (Nettl 1982, 297).

The tradition encompasses everything that contains the different processes found in the history of a musical repertory. Tradition is a term that combines cultural stability within life and action with the implication that change typically takes place over a lengthy period of time, owing to the basic character of its human creators. Transmission is the way in which a tradition is passed on. Tradition and transmission are sometimes used colloquially to emphasise two sides of a culture (and its music): on the one hand its stability, on the other, its tendency to change. (Nettl 1982, 297).

There are various attempts to lump oral traditions into stereotyped models of behaviour. Leo Treitler maintains that compositions in oral culture lead to many similar, although not identical, results.[16] Stability in oral traditions has been accepted, perhaps unconsciously, as a positive value by many ethnomusicologists, especially as it seems to be the best hope for the extrapolation of history from the evidence that remains in the present day (Nettl 1982, 302). There are (and there have been) cultures where compositions and performances follow certain rules or patterns to maintain or strengthen the identity of their makers and receivers. Materials from outside this basic musical vocabulary may not have been understood or accepted as part of a style and its content.

Nettl refers to the culturally confined (musical) vocabulary as (musical) 'style', while the term 'content' can be used for:

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16 In "Homer and Gregory: The Transmission of Epic Poetry and Plainchant" ("The Musical Quarterly", LX, 333-372, 1974). Treitler bases many of his theories on those presented by Albert Lord in 'The Singer of Tales' (1960). Lord himself owes a great deal to the ideas, theories and work of Milman Parry.

> '..those things that distinguish one composition - a song perhaps - with all of its variants, or relatives, as it were, from other compositions in the same repertory.'
>
> (Nettl 1982, 304)

The North Indian raga (representing 'style'), with its 'pakar'-motives (representing 'content'), may be mentioned as an example of a mechanism, how a music culture produces its information. [17]

Leonard B Meyer has defined the concept of musical style as follows: 'Style is a replication of patterning, whether in human behaviour or in artefacts produced by human behaviour, that results from a series of choices made within some set of constraints.' (Meyer 1979,3). Style is something that '... is learned, even by the composers who invent it.' (Meyer 1967, 116). According to Hannu Saha the stylistic norms are dependent on the contexts, and when the context changes there is also a tendency for the norms to change. When communal norms are flexible or broad – as within folk music communities in general – stylistic individualism is permitted. It is generally assumed that in oral cultures individualism is less controlled than in literal cultures, where lawful norms of [musical] behaviour may be written, published and distributed. Individual styles must be within the limits of community norms and concepts even in oral cultures. Deviations from norms may happen, and often they do happen, and it is of the communal tolerance to set the extent. Learning is a very important cultural and social factor, and its significance for adoption of cultural norms or to deviation from them is essential. Saha criticizes Meyer for emphasizing musical products more than the ways and processes that produce them. (Saha 1996, 38-41).

John Blacking argues that we can no longer study music as a thing in itself. This is because research in ethnomusicology has made it clear that musical things are not strictly musical, and that the expression of tonal relationships in patterns of sound may be secondary to extramusical relationships, which the tones represent. Music is sound that is organised into socially accepted patterns, and musical styles are based on what man has chosen to select from nature as a part of his cultural expression. Blacking notes: 'Musical styles cannot be heard as stages in the evolution of music, as judged in terms of one particular civilization's concepts of music. Each style has its own history, and its present state represents only one stage in its own development. Even though people are sometimes more conservative about music than about other aspects of culture, it is hard to believe that in some parts of the world there has been no musical innovation for thousands of years'. (Blacking 1973, 25-56). It is evidently clear that the factors defining an individual musical style are to be located within an individual's head. These factors can include intentions, models of thought, ideas of structures, aesthetics, sound ideals etc. Verbalizing or writing those factors may sometimes be too demanding for the musician. This implies that many a musician is a music theorist only through

17 'pakar' is a "musical motive of identity " used in North Indian ragas. Each raga has its own characteristic motive (or motives) which distinguish it from other ragas. For an ethnomusicolgical analysis of musical style see, for example, Blum 1993.

his or her own musical processes. (Saha 1996, 44-46). In other words, a musician's conceptual world whichever way adopted and perceived it may be, is also included.

Bruno Nettl´s transmission model for an individual composition is based on the assumption that a piece of music may possess one of at least four types of history:

Type I:	composition, once created, may survive unchanged, more or less intact, during the transmission process.
Type II:	composition may be transmitted and changed in a single direction, thus continuing its life in a different form from the original, but without prolific variants.
Type III:	the transmission process may produce many variants, some of which are abandoned and forgotten, whilst others remain a part of the culture. Some variants remain more or less stable, others change constantly.
Type IV:	in principle the process is similar to the previous, but other materials (motives, structures, patterns etc.) are borrowed from unrelated compositions and/or styles during the transmission process.

(Nettl 1982, 302-303)

Given these various transmission processes for an individual composition, Nettl speculates about whether an entire tradition or repertory could be classified similarly. His view is that every repertory contains material that fits into different patterns. One major problem is that the vocabulary of Western (art) music is very limited when attempting to define musical units that are genetically related to each other (Nettl 1982, 304). This gives us a further good reason for becoming acquainted with indigenous musical terminologies, specific to each music culture, and their various meanings and connotations. Nettl's third and fourth types of transmission deserve some comment. The processes of change in types III and IV are in essence the same. In III it is due to internal alterations, in IV to external borrowing. Which one of them should be considered as demonstrating more similarity? How do society's concepts of similarity and difference affect the oral tradition of music? And how do society's concepts of acceptability and non-acceptability concerning musical performances or construction of composition affect the oral culture and its continuum?

Acculturation and its different forms has been one of the central questions in theoretical considerations of change (List 1964; Wachsman 1961; Nettl 1978; 1982). Acculturation theory has been criticized (by i.e. Margaret Kartomi, 1981) for ethnocentric overtones and emphasis on culture at the cost of (creative) musical processes. She suggests terms such as 'musical transculturation', 'musical synthesis' and 'musical syncretism'; musical processes set in motion by intercultural contact results either in a rejection of an impinging music, a transfer of discrete musical traits, a pluralistic co-existence of musics, musical abandonment or musical impoverishment (ibid., 234-239).

Other factors of musical change (and its quality and quantity) are also of interest to Curt Sachs. He displays three [obviously his own] concepts of musical change: 'culture graft', 'progress' and 'simple change'. He sees no steady or straight evolution from childish beginnings to an ever-more-perfect art (= change is not evolution in progressive steps). The concept of progress

exists only in a limited time span. Change may occur in bewildering sequences of sudden changes by leaps and bounds and as a constant reversal to older, new and foreign ideas. Causes of changes are the impact of tribal interpenetration (which actually may also prevent the change to happen) or spontaneous variation, which is akin to biological mutation (Sachs 1962, 211-217). Alan Merriam makes a distinction between 'internal and external change'. He assumes that there is a difference between internal and external factors surrounding musical change, and that we can begin to posit what some of those factors may be and to test them in actual situations. Change is a complicated phenomenon and cannot be explained by a single model. One should study the whole process of change. Change is constant phenomenon in human experience (Merriam 1964, 307; 1977, 836-844).

Innovation, acculturation and superficial changes in musical performance are neither exceptional nor surprising. Inventions in the musical sound and changes in musical styles brought about by the contact of different cultures are to be expected, given the adaptive nature of humans. One should also try to explain the change while documenting the phenomena, its causes and the essence of its process. The existing models for culture change should not be applied uncritically to the study of musical change; changes, which are characteristic of a musical system, are not simply consequences of changes in social, political, economic or other areas. Musicologists often examine musical change at the level of musical product. Blacking, however, claims that the change process cannot be found in musical products, but that change occurs in non-musical factors preceding music making, on the level of cognition. In other words, in choices which are made before music making, according to Blacking. Processes of music making and the musical products resulting from them are consequences of individual decision-making (Blacking 1977, 3-6). Bruno Nettl has already earlier been on the same line by stating that:

> '...musical changes are not 'caused' by 'contact among people and cultures' or 'the movement of populations. It is result from decisions made by individuals about music making and music on the basis of their experiences of music and attitudes to it in different social contexts.
>
> (Nettl 1964, 232).

This needs some commenting. First, those factors on the level of cognition, which may precede change in music, are not necessarily always preceding the action of music making. They can, and often are, simultaneous with the actual performance processes, as is known from jazz improvisations, for example. Some cognitional factors in connection with jazz improvisation are preceding actual music making, but they can sometimes rather prevent change than cause it. Secondly, contacts among people, influences given and taken through contacts of cultures, have a role in musical change, as can be seen from Afro-American music, or both ancient and modern hybrids of 'world music', for example. At the end of the day, it is, of course, the individual decision-making, which make changes happen, or prevent them from happening. Such decision-making may be preceded by processing all kinds of [musical, cultural, aesthetical, prejudicial and so on] information gained [directly, indirectly,

intuitively or prejudicially] from [real or fictious, conscious or unconscious] contacts with other people and cultures. This is in accord, for example, with Blacking's definition of musical change " as changes of ideas from within musical systems" (Blacking 1986, 11). The concept of musical system should be understood both as individual and communal.

Different musical traditions require varied expectations of either musical retention or renewal. Some have rigid standards of repetition; some permit or even expect variation and/or improvisation. Blacking asserts that cognitive change is an avenue to the study of musical change. A combination of synchronic, diachronic and biological approaches is required (Blacking 1977, 18-21). A crucial factor for decisions is motivation. The hierarchy of needs and drives, ideas and emphases shared by people and patterns of human behaviour is culture-specific. This implies some limitations on change in tradition. Human beings who invent and change tradition are simultaneously enculturated in a particular tradition, and thus imprisoned by the forms and prevailing modes of it. Depending on the forms, and attitudes behind those forms, possible inventions and changes may be limited. Bruno Nettl's concept of 'dynamics of tradition' (Nettl 1982, 306) can be referred to here.

When considering the musical density or sparseness of a repertory, one must simultaneously pay attention to historical density or sparseness, that is, the rate of change over time of a single tune or repertory. Bruno Nettl (Nettl 1982, 306) uses the term 'dynamics of tradition' for this. The rate of change inevitably varies greatly. In some circumstances a tune changes quickly, in others it may require three or more times that period. Reasons for large or small rates of change within a repertory may vary considerably, and may concern very different numbers of people at any given time. This may partially explain why old style harp music survived longer in Ireland than in Wales, since the pressure of change to reject earlier Celtic culture in favour of trends from Tudor England was stronger in Wales, and also took place earlier there.[18]

Ethnomusicological literature presents two rather different arguments regarding the dynamics of oral and written traditions. On the one hand, many scholars maintain quite firmly that written culture survives longer and in a more authentic form than oral culture. In other words, its 'dynamics of change' are weaker, since it is able to retain its quality in a manner impossible for oral culture. On the other hand, however, there are opinions, which argue that the contents of the orally transmitted cultures are subject to change slowly due to the anxiety of preserving the culture as intact and authentic as possible.

On another occasion Nettl notes that some musical components always change while others do not. (Nettl 1983, 186). He hypothesizes that change and continuity are complementary: when something changes, something is going to remain. For example, where improvisation is significant, the basic structure or model tends to remain constant. Or, where performance structure is stable, new pieces are more frequently created. The process of change is dependent on the 'equilibrium' among various factors; the tendency of human cultures to seek a balance between stable and processing elements – continuity and change. Pirkko Moisala (Moisala 1991, 16) adds to this the importance of the

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18 See e.g. the proclamation "By the Queen" (ap Huw-MS, [vi] - [vii]) or Thomas 1968, 35-43.

identification of the factors within the dynamic process of human musical systems seeking balance, because observable changes, most likely, are consequences of changes in this ongoing process.

Early theories [of folk music transmission] have stressed its putative sameness and stability, and even in stable literal form in a writing system, which should stem from ancient times. (Bohlmann 1988, 16-17). A folk singer was thought to perform each song every time exactly as he or she had learned it, the performer's main duty and concern being to replicate and reproduce by minimizing self-expression. This kind of vantage point, which could be called the 'paradigm of literacy and stability', has been emphasised in many studies on the Robert ap Huw manuscript so far. [19]

In folk music, when such theories reckoned with change (multiple variants of pieces existed in archives), imperfect memory was the culprit. Variants resulted not because of intentional creativity, but because nonliterate musicians introduced errors and alterations. (Bohlmann 1988, 18-19). A striking parallel to this in the Robert ap Huw studies is to be found in such arguments that the obvious errors in intabulations of some pieces are to be taken as a result of compositions' corruption, for which their oral transmission processes are to be blamed. (Greenhill 1998, 54). It is, of course, certain that the nature and quality of memory has played a role in changes in musical performances, but it is not the only thing that matters. My opinion is that there is no definitive authority who has made the one and only right version of a particular piece of music, which derives from oral culture. It is likely that there are (and have been) cultures in which extreme replicability is the ultimate value, but there are simultaneously also (and have been) cultures in which some form of change is, and has been, acceptable, even desirable. There are (and have been) cultures in which individual creativity is (or was) highly valued, and society has judged musicians on their ability to render each version of song unique. Medieval Welsh cerdd dant seems to have been one of such cultures, where stability, on the one hand, and change and creativity, on the other, have coexisted.

The musical elements of different oral traditions also lend themselves to stability in multifarious ways. Some may concentrate on small formulaic elements and may simultaneously allow a lot of improvisation and creativity in larger units. In others the transmission processes of certain genres require memorization of larger units (or systems of structural hierarchies).[20] A remarkable range of cultural, musical and psychological factors animates and stems the processes of change in oral tradition. It is likely that a number of factors are combined to forge the direction of change; psychological factors have ramifications in musical structures, cultural factors may lead to specific psychological attitudes toward change. If we think of sixteenth-century Wales in its cultural and political turmoil, and the great anxiety for preserving the tradition, which was (at least by the Romantics) considered and interpreted to stem from 'remote antiquity' and also re-evaluated as such, we have a good

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19 The tendency to stress the central role of stability and repetition in the cerdd dant-scholarship,,as well as its literal character, is most evident in the works of James Travis (1968) and Peter Greenhill (1976, 1995, 1998, 1999)

20 See references to Nettl's 'four models of history through which individual pieces may pass' earlier in this paragraph.

example of psychological factors dictating the scholarly work and preventing the possibility of change.

The positive and negative features of memory in oral tradition can, on a general level, be described as repetition and forgetting. Repetition as a process depends on formulas, but in the light of change it is more complicated. In smaller scale it may mean that a four-line stanza ABBC becomes ABBA, in larger scale related events may occur in same musical setting. The later type of repetition is referred to as 'incremental' imputing to it the dramatic function of leading up to and then heightening the climax of narrative folk song (Barry 1933, 5; Abrahams and Foss 1968, 33). Repetition may strengthen the formulas or, when formulas are repeated to the extensive [amount], they replace other structures necessary for the articulation of more complicated genres. (Bohlmann 1988, 20-21)

Forgetting is the obverse of repetition and reliance on formulas. The imperfection of memory can engender both creativity and degeneration, depending on the cultural attitudes toward change. It should make no one to think of forgetting as simply as lopping off salient members from the body of the piece. Forgetting also results from mishearing and/or a lack of understanding, or even mistakes during performance. Mistakes cause the appearance of new textual and musical phrases which may be equally culturally relevant and acceptable (due to adoption of the deeper structures of knowledge), and possibly start the life of their own afterwards along with the expected one(s). Forgetting may thus be called as a particle causing variations to the originals. Variations and different interpretations do not, of course, take place entirely due to forgetting, and neither are they necessarily a result of it. So the [stabilized] unit of music in oral tradition can be a fusion of several versions rather than being the very first original version ('Urtext') of it. Depending on the rules, aesthetics and ideology of the music culture, the differences between the 'Urtext' and its various versions of existence may vary from few minor details to a considerable amount of changes on various levels. The process of producing the stabilized unit is called consolidation. It may take place in overt ways, such as borrowing from other pieces, or assimilation of similar ways of musical expression (phrases, ornamentations, possibly resulting in various orders of appearance etc.), the degree of presenting them in different order and length varying of course. Consolidation may be a gradual process of change, or it may occur dramatically to precipitate and to [attempt to] stabilize a new style. Consolidation of musical style allows songs, genres or ways/patterns to compose/perform music more or less frequently to pass into the oral traditions of other communities. Musical style thus can combine different musical straits in such a way that its foreignness subsides, or at least becomes inconsequential. (Bohlmann 1988, 20-21).

When it comes to medieval Welsh cerdd dant I dare to suggest that cultural influences from Continental Europe, for example in the form of ideas adopted from troubadour culture and Chivalry romances, played a considerable role and became a new part of Welsh tradition .The exchange of ideas was twofold. It may then be that the similar deep structural elements to those, which were used on the Continent, formed the basic foundations to medieval Welsh cerdd dant. By this I refer to such musical patterns (or

schemata) as the 'sequence' or the 'estampie'.[21] At least they do not come from 'remote antiquity', as suggested by Lewis Morris on the title page of the Robert ap Huw manuscript. Peter Crossley-Holland has suggested (in Crossley-Holland 1942 & 1998) that there was interaction between the Welsh bards and the Church before the advent of Anglicanism, and many titles of pieces of music in the 'Bardic Grammars' imply the same. One should note that the medieval sequence originally belonged to the church music tradition, from which it was adapted to secular music, among others, as a scheme of 'estampie'.

In the process of change, substitution often takes place within the piece, often affecting units smaller than the musical or textual phrase. (Bohlmann 1988, 21). Substitution processes, in connection with cerdd dant, could well have been adopted to swnemes, and to the order how and when to execute them in musical performance. The primary factor may not have been the transposition order but the technical; in other words technically 'easier' swnemes may be executed first in different transpositions, the relative difficulty of playing executions being the guideline. Thus the [swneme called] 'tagiad y fawd', for example, could principally be first played as a sole swneme in a range of two octaves before changing it to another swneme, e.g. to 'plethiad y pedwarbys', and then carry on by playing that figure following the same principles, but not necessarily to the same extent. The creative role of a cerdd dant musician is the keyword here. After having adopted all the necessary ways to make music based on various hierarchical levels, being aware how one thing on one level leads to other on the same or other level of the 'musical network', all being tied up to structural hierarchies of cognitive and musical knowledge. We need to remember that cerdd dant musicians were, most obviously, paid primarily for their performances and not for compositions, which strongly indicates that they had to know and be practically able to execute the details of their culturally musical hierarchies, sometimes even with flavours and spices from outside, if [they found it] necessary.[22] Additions of borrowed or new material to the piece's superstructure (I would add this to the other structures as well) can be taken as an impetus to consolidation, but equally to change as well. Addition could be on any level of a piece/genre/performance practice. I find it very difficult to accept that no changes in the repertory and musical expressions among cerdd dant harpists took place in the course of hundreds of years.

Creativity in oral cultures can be both individual and communal. So far, most theoretical discussions and personalized visions of folk music have stressed the communal underpinnings of change. (Bohlmann 1988, 24-25) In spite of numerous examples of musicians of the 20th century, it seems still rather difficult to consider that an individual musician of former times could possibly have been the creative catalyst per se in his/her community. Conversingly, it could be accepted that the change within a music culture at a certain moment of time might as well result from the activities of a single person, or a small group of people. So the community creates, but not without the [general] acceptance of its individuals, and sometimes a music culture may

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21 Similarities with the musical patterns adopted from the Continent and patterns used in cerdd dant are discussed in chapters four and six.

22 See, for example, Jenkins 1990, or Crossley-Holland 1942 & 1998.

include some individuals whose opinions have more influence than opinions of the rest. One of the basic principles among ethnomusicologists, as noted by Hannu Saha (Saha 1996, 77-78) is that individual variation is limited by the boundaries of communal competent variation. Thus an individual musician is only a fraction of his or her musical or social community. In oral cultures a piece of music does not have an ideal or definite form of appearance (no 'master-recording'). It exists in various parts and shapes to be reconstructed in each performance occasion following certain syntactic rules. And it is not only music, but other phenomena of an oral culture as well, which keep changing. A suitable parallel can be found from the world of folk narratives. According to Robin Gwyndaf no living folk narrative is static. It develops as the mind develops. It changes as the nature of society changes. Folklore, according to Gwyndaf, is dynamic, something in action, something whose existence depends on its social context. (Gwyndaf 1986, 142; Gwyndaf 1994, 77-78).

One locus for the role of the individual is in the act of composition. Composition has widely varying meanings when applied to e.g. folk music, or a piece of music in oral culture. It may refer, for example, to a creation of a new piece, sometimes to the existing printed version/arrangement of a tune, or to the conscious performance of unique variants of a piece more or less known and adopted by the representatives of a music culture. Nettl (1973, 5) suggests that a useful distinction between individual and communal creativity lies in the history of individual songs and versions. The first stage, composition (whether oral or literal), relies predominantly on individual acts. Thereafter it may be communal re-creation that determines the pattern of change. But one must notice that it equally may be of individual re-creation that determines the change, and this may be due to the position of the particular individual in his community and music culture.[23] As a distinguished performer and/or composer he/she may more or less dictate the 'goods' and the 'bads', and thus predestinate the musical practices for a long time to come. From the point of the present work, a similar thing may be caused by the fact that after hundreds of years of orally transmitted music, someone comes and tries, possibly for reasons referred to in the introduction of this work, to write the music down. It is evident that it was not Robert ap Huw who tried to write bardic harp music down first. Before him there, most obviously, were other representatives of cerdd dant, possibly even before William Penllyn, who tried to convert compositions/performances into written form. Someone, possibly more than one, at the beginning of the literal information chain invented a system of writing, attempted to record the events of music. It still remains open to what extent Robert's manuscript is a copy from other manuscripts existing at the time but now extinct, and to what extent his transcriptions can be taken as recordings of musical compositions or performances. There are many points in the manuscript implying that Robert was primarily a copyist, and not necessarily well aware of the music he was copying. [24]

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23 See the music culture model created by Jeff Titon (Titon 1988, 11 ff), or Barry 1933.

24 Occasionally, some of the strings are denoted to be plucked simultaneously by both hands; the swnemes in some places are, rather unlogically, divided to two hands; in some pieces certain swnemes can not be executed as shown on page 35; in case of 'Profiad chwyth' Robert, seemingly, wanted to finish the writing after

One of the essential questions in connection with cerdd dant is to what extent the communal and individual recreation, in the course of time, was tolerant to such musicians, who attempted to expand the cultural and musical boundaries. In other words, which was considered as more important to the medieval Welsh harp music: transmission of fixed compositions in as unchanged state and form as possible, or transmission of culturally correct and accepted ways to compose and perform music, allowing space for individual creativity? This question leads to others. What were the most prominent ways to keep the music and all its culturally relevant features in the memory, and which were those features? How did the representatives of cerdd dant react to the musical and cultural influences from outside? Did they have such musical authorities (a kind of 'music police') in Wales during the fourteenth and fifteenth centuries, which supervised and controlled the 'culturally correct dignity of performances'? Was that the role of the 'athrawon' [the most prominent master musicians and teachers] at eisteddfodau? If so, and if the emphasis was on stability, on what grounds and criteria was the degree of stability [in performances] measured by the athrawon, and how? What kind of stability are we actually talking about, since there are allusions (in the 'Statute of Gruffudd ap Cynan', for example) that in musical performances and compositions something new, something that was never previously performed or composed, was required from musicians at eisteddfodau. One should keep in mind that communal re-creation weighs the role of the individual against that of the community. In the case of cerdd dant, as has been suggested in this work, one may speak of encouraging individual re-creation processes within the generally accepted frameworks, created by some individuals for the community in the course of time. In my opinion, the surviving passages of 'Cadwedigaeth Cerdd Dannu', 'Dosparth Cerdd Dannau' and the 'Statute'of Gruffudd ap Cynan' speak in favour of such a suggestion. There has been space for a great amount of change, based on a basic foundation of stability, which enabled the musicians and poets a safe network of accepted and adopted musical grammar. A grammar, where some elements were to more or less established established, and other more or less subjects to change.

2.7 Schemata and formulas in relation to oral tradition

Cognitive actions/processes refer to happenings/actions within human brain dealing with receiving, processing and producing information. In 1970s the term 'structural knowledge' or 'knowledge structure' was launched. Experimental studies and research projects proved that individual's previous experiences directed the learning and remembering of experimenting material.

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the melodic phrase/formula (61.1.13-19) which finishes the other profiadau. Instead, he draws x over the word 'terfyn' (the end) and carries on. [this, of course, could be completely the other way round; the previous transcriber had made a mistake here, or ignored the 'cadential phrase of the profiadau'; as a matter of fact, there may have been many in the chain of literal transmission who have mistaken]

The inner structures, which affect the processing of information, are often called 'schemata' (sing. 'schema'), a concept launched by Frederic Bartlett. Many other concepts are closely related to schema; inner model, framework, cognitive map, cognitive structure, knowledge structure, semantic map, etc. The common assumption in all those concepts is that previously learned , structurally organised information affects an individual's behaviour. Schema, or knowledge structure is hierarchical, each level of hierarchy related subordinately and/or superordinately to each other. (Louhivuori 1990, 31-32)

In music, we learn to recognise many types of features. Some, such as the tone qualities of instruments, can be identified in or out of context. Other features, such as harmonic relationships, are highly context-sensitive. In such cases a reciprocal relationship exists between features and schemata. Features serve as cues in the selection of schemata and the schemata themselves serve as guides in the detection of features. Schemata can be defined as meaningful sets of features, and features can be defined as meaningful elements in sets of schemata. When a feature is presented, we attempt to try a context for it, or, we take it to be the partial instantiation of one of several possible schemata. As more features are perceived, rival schemata can be eliminated and the most likely schema selected. (Gjerdingen 1988, 6). The general characteristics that all schemata appear to share can be summarised as follows:

1. 'Schemata have variables' (no experience is ever exactly repeated; we must be able to discover intuitively both the dimensions of variation and the range of variation that characterise our generalisations of the world)
2. 'Schemata can embed, one within another' (a particular scheme may be part of larger network of relationships; we may speak of various levels of structure/hierarchy)
3. 'Schemata represent knowledge at all levels of abstraction'
4. Schemata represent knowledge rather than definitions'
5. 'Schemata are active processes' (through them we can make predictions and form expectations)
6. Schemata' are recognition devices whose processing is aimed at the evaluation of their goodness of fit to the data being processed' (they can be chosen and modified depending on situation)

(Gjerdingen 1988, 4-5)

Leo Treitler, in his article dealing with transmission processes of Plainchant, presents some basic questions concerning transmission of music before the age of music writing. How was it possible to invent plainchants, to preserve them, to learn and perform them? What was the manner of transmission prior to the use of musical notation? Was it merely question of memorizing the melodies (as they were primarily impressed upon memories), or did the practitioners of plainchant have something to do with the art of improvisation? Treitler draws the attention on the importance of understanding the mechanisms of oral transmission together with the role of human cognitive processes in all this. The main evidence left for us are the written documents of orally transmitted music, so the transmission to us is written. We need to find the frames and the ways to

question the information in the written documents that contain mostly elements of oral music culture (and its transmission processes) lying behind it. The co-existence of both the oral and the written (not necessarily simultaneously in all fields of culture) and the real-time moments and their reasons or catalysts when the oral is meant or tried to be converted into the written should be taken into consideration. We need to find out, whether the change from oral into written was carried out voluntarily or by force, and was the process shared and/or agreed by everyone, or only a few members of the cultural community? Was the process or the act carried out with or without preparatory stages or the systems? What were the abilities of those who made the first attempts to convert orally transmitted and adopted music into the written? (Treitler 1974, 333-334)

The medium of transmission, in the absence of scores, was performance. Is performance without scores tantamount to performance from memory, or can it be called the same? The traditional way of thinking (based on the paradigm of literacy) refers to the concept of memory as a medium of storage comparable to the score. The singer memorizing the melody is the same as if he had swallowed a score. This kind of thinking is an unrealistic view of the process of remembering. Treitler, in forming his own model of transmission, relies here on Frederic Bartlett, the inventor of modern schema theory, referred to above. According to Treitler, Bartlett has written that remembering is not a process of reproduction but of reconstruction. Memory is a reconstructive faculty and is consequently subject to improvement due to progress in intelligence. (ibid., 344). Treitler lists the following items of Bartlett's theory:

a) Theory of remembering depends on the theory of perception, for the way we recall experiences depends on how we grasp them in the first place.
b) Perceiving is not passive reception, it is active organizing. We strive to assimilate newly presented material into the setting of patterns and schemata left from past experiences. That results in reorganization of those patterns.
c) In perceiving we draw out certain salient features of the presented matter. These serve as signposts for the process of assimilating and reorganizing.
d) Those signposts play a central role in remembering. Perception is not simply a matter of the reception of stimuli later to be reproduced. Rather it is an active process of grouping and construction (reconstruction)
e) In remembering we activate and reorganise the patterns of past experiences. Thus each recall is based, not on some fixed model outside us, but on our own assimilated version of the matter recalled – not (necessary) on the 'original' but on our most recent rendering. Recall must be in conformity with the existing schemata in which our mind is organised. What does not conform will tend to be corrected or eliminated.
f) The latter tendency may lead to stereotyped forms. This is especially important in the conventionalisation of the forms of cultural expression.

g) In the recall of narratives, beginnings and ends especially provide those standout, persistent features that serve as the focal points of the reconstruction. Consequently it is beginning and ends that tend to become most stereotyped in repeated recall.
h) Form, as well as salient detail, is persistent and is therefore an important factor in what makes remembering possible.
i) A salient detail may be common to two or more themes or streams of interest, and it may serve as a crossing point between them. In that way the theme originally presented may be left and another entered.
j) Remembering and imaginative construction are on single continuum. They differ from one another in degree, but not in kind.

(Treitler 1974, 344-345)

Treitler regards performance both as the medium of transmission and as the medium of composition. The need and object of oral transmission is to preserve and carry on traditions. The variations on something called 'Grundgestalt' is in line with the improvisational practice and the preservation of traditions. [25] This Grundgestalt may be a pattern of underlying deep structural elements or it can refer to different ways of formula, motive or theme groupings on the surface and how to string them together. This may be a part of planning process prior to performance, or it may appear within the course of performance, sometimes even spontaneously. The Grundgestalt is not a concept of writing (sketches, melody outlines, check-outs from the written catalogue of formulas) but of cognition. On some structural levels the bias is on the pre-planned (or previously adopted), on some it may be more on the spontaneous activities, which too are based on previously learned features.

A schema represents (and requires) knowledge rather than definitions. When we talk about schemata, or structural knowledge, we are assuming that every new piece of information is joined to structurally organised knowledge that has been previously acquired. In music this embodies performer's/composer's and receiver's cases alike. To emphasise Bartlett's words ('an active organisation of past experiences'), schema theory is a type of structuralism; any consideration of a musical schema must also be a consideration of musical structure. Questions how musical structures are perceived and stored in memory become crucial for a psychologically based analysis of music. (Gjerdingen 1988, 9). That a particular scheme may be a part of larger network of relationships can be seen in the contents of the Robert ap Huw manuscript and other documents dealing with cerdd dant, especially the 'Grammars'. The most apparent examples about the use of such schemata in the Robert ap Huw manuscript are to be found in intabulated versions of all the gostegion and the 'clymmau cytgerdd', as well as in many of the caniadau. As may be noticed from the analysis in chapter six, later in this work, the schemata of these genres allow a lot of choices for practical applications, and can

25 Treitler refers here to the concept of 'Grundgestalt' launched, according to him, by one Peter Wagner. Treitler does not give any further refernces .See Stockmann 1986 for the use of 'Grundgestalt' in connection of German folk music.

therefore be named as belonging to a large network of relationships. This suggestion is supported by the contents of the 'Grammars', referred to in chapter six as well.

The system of constraints of a melody or a phrase is called 'formulaic system' by Treitler, and its (standard) passages or particles are called (standard) 'formulas'. He takes the position that formulas have become stereotyped through practice under control of formulaic systems. Both the formulaic system and the formulas as concepts stand for a kind of knowledge that the singer [of plainchants] had when he knew a melodic type. He held this along with his knowledge of the overall strategy for melodies of that type. This is meant as an alternative to the traditional notion concerning the oral transmission where the singer had 'swallowed the score' and learned each melody individually and as a whole. Formulaic system and formula can be taken both as salient features and as outcome of a process of stereotyping. (Treitler 1974, 352-353). The formulas may be joined to larger networks of musical knowledge. When these networks have dimensions of awareness how and when to use and place the formulas (or other units of musical expression), we may claim that they are also acting as cognitive networks. (Gjerdingen 1988, 9). These I find to be very much in accord with the memory theories presented above. And these fit well to the characteristic features of medieval Welsh harp music.

Treitler, in his study of Plainchant, refers to Milman Parry and Albert Lord and their theory of oral epic, which became the foundation for their formula theory. Their hypothesis was addressed to the Homeric Question, which asked about methods of composition and transmission. The Iliad and The Odyssey had early been regarded as the written literary productions of a single author, handed down from the beginning through written sources. In the seventeenth and eighteenth centuries that tradition came to be questioned, and it was proposed that they were composed and communicated without the aid of letters. Parry's work derived from his insight into the formulaic construction of the poems. He interpreted the formulas as language invented to express particular essential ideas on the model of persistent sound-pattern and meters. Parry understood that when interpreted so the formulas must be regarded as traditional, i.e. that many singers had produced them over several generations. He understood that such a tradition is by nature an oral one, which he could prove through his fieldwork in Yugoslavia. Parry's thesis is that we can understand the poems only if we see them belonging in the domain of oral literature, which is fundamentally different from written literature. (Treitler 1974, 353-355)

Oral composition is composition done in the act of performing. Its basis is a framework consisting of two kinds of elements: themes and formulas. 'Themes' refer to the full hierarchy of subject matters of the narrative. Here the subject of the song is treated as a whole (division and placing of the major episodes and particular scenes) and are traditional. As in the Odyssey, we have a return song from war and the battle to reclaim wife and domain, all of which are very common themes in traditional songs, narratives or ballads. Each scene or episode is developed in verse, with lines that are regulating according to some metrical-syntactical-semantic pattern. The choice of language is under the control of these factors at several levels. Each of the component phrases (in the 'toolkit') can be standard and repeated many times, even in precisely the same

wording ('and X replied'; 'then Y asked' and so on). It is the pattern that counts most heavily for the oral composition. (ibid., 355; see also Page 1987, 92-93 and 104-106).

Treitler, on another occasion, argues that many of the melodic formulas used in practical music making (in his case, singing) were adopted for specific contextually dependent purposes. For example, the end of a text line or passage demanded cadence-like musical execution from the singer(s). Therefore singer(s) could use a kind of melodic formula that indicated musical cadence (in the medieval sense of the word), or choose, according to his will and memory, a passage from the group(s) of cadential formulas. If the melos (music) was servant to the logos (the meaning of the words), then proceeding properly from point A (could be called 'the point of departure') to point B ('the point of arrival') was of uttermost importance. Between points A and B there were many performance possibilities for musicians. And although the musical journey between those points, from both player's or listener's point of view, remained timewise and in the cognitive sense of the word more or less intact, musically there were many ways to choose from. (Treitler 1991, 67-69).

A Finnish folk music scholar and performer Heikki Laitinen, referring to Lord, emphasises the networks of rules in song production. Songs are not, from the singer's point of view, primarily poems and melodies, but results based on rules of production. The singer, however, has to (or is expected to) keep his performances in boundaries accepted or acknowledged by his community/culture. On the other hand, these boundaries dictate his freedom of improvisation and variation. Laitinen, still referring to Lord, divides these rules into three categories:

1. Rules demanding total obedience
2. Rules allowing freedom of choice
3. Rules enabling freedom of choice

(Laitinen 1993)

As suggested in chapter six of this work, rules demanding total obedience, or obedience to a certain extent, in cerdd dant belonged to middle and deep structures. Within certain genres, such as the 'gosteg' and the 'cwlwm cytgerdd', the rules of obedience may have been rather strict. In the case of the 'caniad' same rules seem to have allowed and enabled freedom of choice. On the surface structure, the production of swneme chains contains a considerable amount of freedom, both allowed and enabled.

What is the concept of formula in a scheme of performance? Parry, according to Treitler, defined it first as 'a group of words, which is regularly employed under the same metrical conditions to express a given essential idea'. Later he changed it to be the recurring patterns of words rather than a series/groups of words. This emphasis has been of special importance for the students of medieval epic and music. (see e.g. Page 1987, 92-93). The singer's competence rests on his knowledge of the metrical pattern, the grammatical construction and the semantic content required for the line. If the singer has accumulated a repertory of standard formulas, each serves him when his knowledge of theme and formulaic system calls for a phrase of its

characteristics. Albert Lord has expressed it that 'they emerge like trained reflexes'. The formulaic analysis of an oral poem is a matter of identifying the formulaic systems that regulate the verses of the poem (or the segments of a piece of music). One should, however, remember that the singer/player might be guided more by his accustomed way of developing the themes/patterns than by any uniform idea of the way the theme goes in the song. Themes enter the songs as independent units, and because of this there may be [and often are] inconsistencies between them. Under the pressure of oral composition the singer may lose track and make a wrong turn. If a poem [a song, a piece of music, a narrative] shows such inconsistencies, if its elements of middle and deep structure are under the control of formulaic systems, if it shows recurrent formulas, if it is built of standard themes; these are taken as prima facie evidence that it is the product of an oral composition. (Treitler 1974, 355-357).

Jukka Louhivuori has, in his studies on Finnish folk hymn tradition, discussed how an oral musical tradition is transmitted and how music is perceived, learned and stored in memory. How does the contents of the memory effect the way we perceive music, how music is processed during the retrieval, how music is processed during the time it is being stored in the memory, how music is re-created during recall? He stresses the importance of understanding cognitive processes in connection of studying the products of oral music culture:

> 'Variation, adaptation and performance processes (the changes in music in general) are difficult to understand without understanding the cognitive processes of the human mind. This is particularly true with music based on oral tradition and transmission. Keeping the whole repertory [Finnish folk hymns in this case] in the memory was the only way to guarantee its preservation to later generations of singers. Many different forms of the same song exist simultaneously in the tradition; songs are adopted and heard in different forms in different places and different times and on different performance occasions. Differences in performances concern most aspects of singing (meter, rhythm, melody, contour, intonation, structure, and so on), the repertory (parts of different songs may be transferred from one song to another, or borrowed from almost identical in every part of the area, while others have no fixed form.'
>
> (Louhivuori 1994, 121-122)

Louhivuori has adopted Albert Lord's concept of formula in his scholarly work. Louhivuori refers also to Lehrdal-Jackendoff's generative theory of music, and Sundberg's and Lindholm's use of generative methods in his studies of Swedish children's songs (Sundberg & Lindholm 1976). Louhivuori develops a model aimed to explain learning processes and other aspects of oral tradition. Summarized description of the model is the following:

> During his lifetime a singer perceives melodies in many different forms on various occasions
>
> For many different reasons singer does not hear melodies sharply and does not perceive them 'correctly' or 'completely'

> The singer has in his mind melody formulas that he has heard and learned earlier -> by using these formulas singer fills the gaps that originated when the melodies were perceived 'incorrectly' and as 'incomplete'; pre-existing musical experiences (or schemata) direct the perception and production of melodies
>
> In the process of storing different formulas in his memory, the singer will hear these songs again in many different forms -> as a consequence some forms of melodic formulas become stronger while others become weaker
>
> During the process of recreating the melody, the singer uses new forms of the formulas -> the melody formulas undergo change in the singer's memory because he combines the formulae in different ways during different performances. In oral tradition this kind of constant processing is never-ending.
>
> (Louhivuori 1994, 122-123)

Louhivuori's model raises some questions. In what extent can we define the concepts of 'correct' and 'complete'? If a singer perceives many melodies in many forms in his lifetime (and also the 'same' melody in many forms), which one of those perceived melodies the others are compared to? Is it the very first version the singer hears? Should that one be called the 'mother melody', and all the rest variants to it. If our singer does not perceive some songs 'correctly' or 'completely', it may be because of the informants he gets those songs from. Louhivuori, rightly, says that the mechanism of remembering is a dynamic rather than a static system. The singer does not learn epic songs by heart, but creates [and re-creates] them after previously learned models. The art of these singers is based on mastering the traditional musical components. Albert Lord wrote that the singer's 'task is to adapt and adjust [the form of the theme] to the particular song that he is recreating. It does not have a single 'pure' form either for the individual singer or for the tradition as a whole. Its form is ever changing in the singer's mind, because the theme is in reality protean; in the singer's mind it has many shapes, all the forms in which he has ever sung it, although his latest rendering of it will naturally be freshest in his mind. It is not a static entity, but a living, changing, adaptable artistic creation.' (Lord 1960, 94). It may, however, be possible that the formulas a singer uses for creating and re-creating songs are not based on 'correctly' or 'completely' understood or perceived originals.

Lord, as cited by Treitler (Treitler 1974, 357) has written, 'The singer's mode of composition is dictated by the demands of performance at high speed, and he depends upon incalculated habit and association of sounds, words, phrases and lines'. How these habits and associations are formed, how the singer learns how to make songs is a matter of great importance for the theory of oral composition. What he knows, he has assimilated from an early age on. One suitable parallel from cerdd dant tradition, to be applied here, were the bardic disciples. They were, according to 'Grammars', from the moment they entered their training in touch with swnemes [how to pluck and damp the strings and by which fingers or finger combinations] and the ways to connect

them into larger units [the swneme chains]. They had to get acquainted with patterns of mesurau and how to link them together in order to make pieces in various compositional genres and so forth. All these were very important features of transmission processes. I dare to suggest that it was the culturally valued and accepted ways of creating performances and compositions of music, which were attempted to be canonized in the sixteenth-century in treatises such as 'Cadwedigaeth Cerdd Dannau'.

A formulaic system can be transmitted through melodies, but that does not mean that the singer can assimilate system only as a melody. He learns one melody and he imitates its pattern in inventing another like it. At some point his inventions do not refer back to the models of concrete melodies but are based on his internalised sense of pattern. (Treitler 1974, 360). Treitler's suggestion is fine when applied to the surface structures of pieces of music, or musical performances. But even at this level a formulaic system could equally have been learned and adopted by long-time consistent study of formulaic vocabulary [such as the swnemes in cerdd dant], possibly with no transmission of melodies at all. When we think of formulaic system based on various hierarchically organised levels/structures, and apply it to practical composing/performing, this comes even more evident. In cerdd dant it was the musician's ability to use his 'storehouse' of swnemes, together with his knowledge of mesurau and ways to combine them properly in order to create gostegion, clymmau, caniadau and the like. He was expected to do all this in such a way that the other members of his culture could understand, accept and value them as belonging to their own tradition. Analogous processes in music have been used for example in Indian art music, or Scottish piobaireachd, even up today.[26]

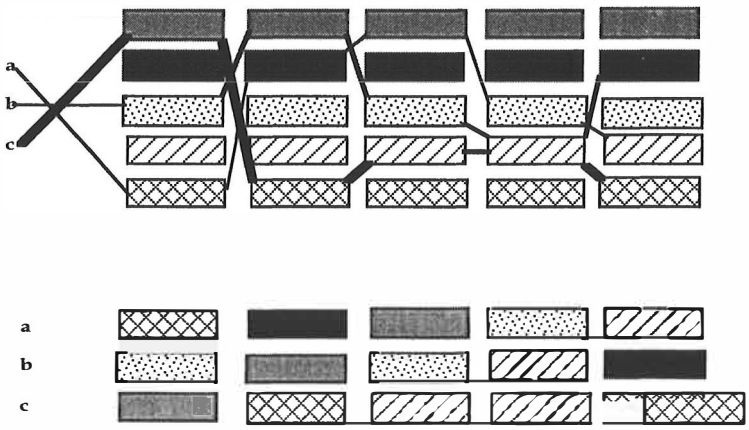

FIGURE 7 Presentation of formula theory (after Louhivuori 1988, 50). A melody segment consists of traditional formulas, which can be presented in different order on different performing occasions.

26 More about 'piobaireachd' see Collinson (1978), or Cooke (1986). Concerning Indian art music and its adoption and transmission processes, see Slawek (1993).

In some genres of folk music the musical and textual markers operate at a much smaller level. General designation for such markers is formula (some other terms, such as motif or phrase have also been used); formulas are of varying sizes. (Bohlmann 1988, 16-17) Each one of the above mentioned is larger than any of the smallest structural units of musical expression (such as swnemes) referred to in this present work. There are, and there have been, such smaller units that are combined to make a formula (in text as well in music; see Page 1987 and Gwyndaf 1988 and 1994, for example). Formulas may appear in different pieces or in the [folk] music of different cultures. Philip Bohlmann claims that they are not performed in isolation outside the context of the larger pieces [but possibly learned and adopted, tried and tested outside that context], of which they are one formulaic component (here Bohlmann refers to Nettl 1983, 111). In essence I suggest such approach to be correct in relation to medieval Welsh cerdd dant as well. The formulas, which were used on the surface structure of compositional genres, were not isolated from the context but taught as essentials features of the music culture.

In some oral traditions formula has acquired a considerable degree of integrity, perhaps more than entire compositions. In Balkan epics (as argued by Parry and Lord) they have been the origin of oral-formulaic theory. This theory recognizes tremendous stability in small formulas, with wide-ranging variation and creativity in the performance of the entire epic; piece is a composite of many performances, and one could not properly speak of the transmission of an entire piece as a discrete entity (Lord 1960, 125). A formula plays the dual role of mnemonic device and a catalyst for creativity.

Hannu Saha (Saha 1996, 81-82) brings forth the concept of idiomatic element as basic constructional unit in music. Saha calls the 'formula', presented in Albert Lord's theory, for such an element. Formula or chains of formula structuralize musical pieces (compositions, performances, etc.). Saha sees the concept of such element as being multidimensional. For him, the element is analytical unit to all significant variables in music (rhythm, harmony, horizontal movements of melody, ornaments, effects, structures, articulation, etc.). Element as an idiomatic structural unit does not have a defined, measured length, because each technical element has its own measure unit. This idea of idiomatic element fits well for the variables executed on the surface structure [such as swnemes in cerdd dant], but less well for the musical and cognitive structures of deeper levels. Latter elements are not dependant on instrument per se, but are important style- and genre- defining components, which dictate performances as well.

Singers, reciters of poetry and cerdd dant harpists as well can be, when performing, regarded as producing something, which is previously (to various degrees) experienced and tried out by them. The result is an interpretation influenced by individual experiences, individual experiments, individual competence and functions together with collective or communal tradition and performing occasions. Due to a great amount of trials and errors, or similar topics, performing occasions, musical genres etc. a formulaic language may become more and more idiosyncratic. (Saha 1996, 90).

Of oral narrative genres one can say that even if they are transmitted as complete versions in performances, as the stories usually are, they do not remain as fixed and stabilized 'word-to-word' versions within the performer's

head. When a story, or a piece of music, is based on subordinate hierarchies and formulas, the awareness of the order and placing of key-points is essential for creation of completeness. This may be applied for adoption and learning as well as for creation and performing. Christopher Page (Page 1987) gives examples of formulaic parallels in three stories: Historia Apollonii Regis Tyri [ca 500 AD, in Latin], Roman de Horn (c1170) and medieval Tristan-legend. All three share at least the following features:

> set to exile-boat-arrival in strange land-the name of the land-concealed identity of the protagonist-distinguished ability to play the harp/stringed instrument-performance at the royal court-instrument is passed hand to hand-the daughter of the king wants him to be her teacher (falls in love with him)
>
> (Page 1987, 104)

These story motifs, according to Page, form the generating cell of every lai/harp passage in Old French fiction, and their history lie more probably with the history of stories and storytelling than with the history of music and performance practice. (Page 1987,104-105). These motifs can be said to represent more or less stable elements of middle or deep structure within the storyteller's mind. They are spatial focal points A - B - C-..., which denote the essential happenings and their order, and the spaces between these points are filled with variables by the storyteller, which may change a little or a lot from one performance to another. Similar parallels to those above are to be found in the stories of the Mabinogion (e.g. the story of Manawyddan in Gantz 1987, 83-96) and the Kalevala.

Two other examples, given by Page, derive from medieval French lai/harp-tradition, and its ways of adoption and performance. A courtly amateur is invariably a protagonist or an important character in the narratives. This person is also a gifted harpist and harps pieces called lais in public. He/she is usually able to compose them, and often sings to his/her own accompaniment. Some technical aspects of the performance are described; most common of them is the tuning procedure. There is a 'Celtic' setting in these tales (Brittany, Cornwall, Wales, Ireland, Scotland; Arthurian Britain is a particular favourite), and the harpist is often in disguise when he performs or travels (usually not applied to a female character). Sometimes the performer is not the protagonist, but his/her messenger, and the lai is the message. (Page 1987, 154 -156). The lais were part of oral tradition, as can be noticed from the first example, given by Page, from the romance of 'Galeran de Bretagne':

> 'Fresne', said Galeran,' I have tried out my skill with a new lai and I am very keen to teach it to you at once'..... 'Begin', said Fresne, 'then I will harp and learn the lai on my instrument.' Then he began to play, and she listened, studying the way he cast his fingers on the strings. When he had listened to the notes he tuned them with his tuning key so that they were perfectly accorded. The words and music were sweet, and he sang and played the lai until she knew both the words and the tune; then she tuned her silver-stringed harp to the lai.
>
> (Page 1987,96)

The second example comes from Guiron le Courtois (a medieval romance in manuscript format), which describes how the first ever lai was composed by the Irish king (of Leonois) Meliadus, father of Tristan. The king has returned home, pines for his love to the queen of Scotland and:

> '...composed a poem about his love...more wondrous and subtle than anyone had ever composed before...set this poem to music...[to] be sung to the harp...there was no man... who knew more of harping than he... Meliadus called this poem ... lays, as a sign that he wished to leave all other music...this was the first lai which was ever sung to the harp...'
>
> (Page 1987, 97-98)

One of the king's knights, also a skilful harper, suggests (after having heard the lai and its background) that he will bring it to King Arthur's court and perform the lai before the queen of Scotland, and advance the king's cause. Among the women at Arthur's court there is also the queen of Scotland, all singing and playing instruments by the riverside. With them there were a few knights harping and singing as well; one knight playing a song composed by a knight from North Wales, a lady named Orgayne sang that song while the knight played it. Then the Irish knight, together with Gauvain (one of Arthur's knight) approach. Orgayne finishes her song and asks the Irish knight to perform. He then tunes the harp ('to the best of his ability, and according to the music that he wished to play') and starts to perform the lai. (Page 1987, 98-99).

The passages above, although telling some details about a performance occasion, do not contain information about the musical contents of the lai (mode, rhythm, ornamentation, playing techniques and so on). This, in a way, shows what was relatively easy to put on paper or vellum, and what was not. With the help of poetical language one could give information dealing with musical practices, which benefit later attempts to reconstruct the performing scheme. It does, though indirectly, indicate that the performer had to be aware of the stylistic and musical grammar of the lai. This implies that there were not in detail predetermined musical contents of any particular piece, and that the performances were more or less different on each occasion. We may quite safely speak of hierarchical structures (and substructures) of musical and poetical knowledge proper to the genre of the lai, and this toolkit was used more or less differently to the requirements of performance occasions and to the skills of musicians.

Page finds [what he calls the High Style] trouvére melodies rhapsodic, not strophic in character. Resemblances between the melody lines exist, but they are not alike in detail. The whole piece is constructed from short-range patterns, in other words it is formulaic. The relationships materialise when the whole piece is heard. We may speak about conscious (learned and adopted) constructive particles of melodic expression, which are applied, to musical performances on various occasions. The same, similar or at least recognisable and acceptable particles/formulas are used, but not necessarily in fixed order each time. The choice of the first formula may dictate the rest of the verse. This kind of performance practice makes the listeners more aware of the voice and the timbral and expressive changes in it together with the story (or poem) and the changes contained in it, rather than the melodic and structural pre-expectations.

For Page, the High Style songs lack choric refrains and are not in strict metre. This should not be understood that they do not have any repetitive melodic material, occasionally even on regular basis. These can be cadential formulas (or functionally similar to them) at the end of the phrases. These formulas may not be identical throughout the whole piece or performance. Neither does it mean that there was no pulse in music, but rather it emphasises the essential role of the performer(s) to find proper ways of expression. In order to be able to do that they had to master all the levels of musical (and poetical) knowledge related to this kind of art. As Page maintains, the poet is presenting himself, is a self-conscious practitioner of the art of poetic composition (Page 1987, 13-16).

2.8 Folk music and oral tradition

Oral tradition fosters both the creativity and the stability of folk music. Correlation is so strong that oral tradition is treated as fundamental to folk music. Its dialectical relation with written tradition has proved equally valuable to understand the failure of folk music to disappear in highly literate societies. Musical elements of oral tradition include form and style, [folk] taxonomies of music and indigenous systems of music theory, and perceptions of the differences and similarities that relate or distinguish individual pieces; in other words, those aspects that lend towards memorisation and those spawning elaboration determine how [folk] music will change or remain stable. Oral tradition is also a measure of a community's sense of itself, its boundaries, and the shared values drawing it together; oral tradition determines the social acceptability and limitations of these values; some values become stylised or vestigial, others enter and exit quickly from tradition. Changes in a community's social structure thus influence not only its [folk] music repertory but also the ways in which this repertory is transmitted. Musical change reflects cultural change. (Bohlmann 1988, 14-15). If the word 'folk' can be turned into, and also understood, as 'community', then the same goes for any group of representatives of any music culture (of any time and place), including each one of the individuals as well. In other words, an individual can be understood as a community, at least in relation what comes to the components and levels of music culture, since, in the end, each individual experiences (and has experienced) music (composition, performance or a fragment of it, etc.) individually.

The dialectic of oral tradition consists of both products and the processes by which these processes are derived. To put it simply, the product is the song, tune, narrative or something else, whereas the process is the continuations of transmission. This process theoretically has beginning and ending points [plus stages in between which also have beginning and ending points], and therefore comprises all renderings of the product. (Bohlmann 1988, 25; Gwyndaf 1993, 220). Product and process are not so simple as creation and inscription of text. The text we have in the Robert ap Huw manuscript is a product of various processes, but not necessarily closely tied to the very first version of the text. Again, at the moment when text was written down for the first time, its

contents were not necessarily the same as the contents of that music as sonics in performances. People are able to make music without written instructions, as well as they are able to speak before they have learned to read (see Saastamoinen, 1990). What comes to music, I am not referring here only to changes in the melodic, rhythmic and timbral elements of the surface structure, i.e. those particles of a performance that are the easiest to be perceived by the listener. It is possible that the elements of deep and middle structures of original musical works, either some or all of them, may also have changed by the time of Robert ap Huw. The changes may have resulted from changes in musical taste (for example, a version performed by a certain master musician may have been regarded better than a version by some other player), or from the cultural contexts, also subjects to change. Musical tastes and aesthetical preferences, and cultural contexts were not the same in the fourteenth century as they were in the sixteenth, and it is perilous to claim that everything remained fixed and static for centuries, or that the Welsh bards did not know or adopt anything from outside their own circles

In every repertory one can identify elements of unity and uniqueness that together define the relation between the musical core and the boundaries of a repertory. These characteristics represent the repertory's capacity for both collective and individual expression. Depending on the cultural expectations, and boundaries, each performance combines elements of unifying style with individualizing content. Thus the elements of style may contain some deep-structural underlying composition/performance principles, and the elements of content can be seen as performer's choices for surface-structure, varying from very small units of musical expression to longer formulas and formula stacks. The order of these may, to some extent, be entirely dependant on the performer and executed by him also unconsciously. At the same time some of them may also be predetermined by the authorities of a particular culture, or on general agreement. The balance between style and content change from one culture to another, yet they are in more or less immediate contact with each other. The contact may be either musical (audible) or cognitive (mental), both of which are together seeking for balance.

Tradition, according to Bohlmann, can be understood as the sum of all individual performances, which is shaped by the processes of change. The unit of transmission (as the performed version of a piece is called by Bohlmann) marks various stages of these processes. (Bohlmann 1988, 26-27). The performances which do have an impact to the tradition are, of course, not necessarily always regarded as individual by general public, although basically any communal performance can be taken as a sum of individual actions and choices during the performance process. Some or all of these actions and choices may include something which is shaped by the process of change at the moment when action takes place. Tradition acquires the dynamism of history, often differently understood by an individual and a community, and thus partly creating various kinds of individual performance actions within a communal performance process. Differences in understanding the dynamism in history, or different attitudes to it, may also cause different individual performance processes. Stability and change exist in both community and individual constructs of tradition and transmission. The fact remains that when it come to a living tradition, which can be either active or passive, only the

active repertoire can be recorded on tape or transcribed on manuscript. In worst cases they are treated merely as products or texts, either narrative, musical. No scholar can claim to have recorded the repertoire which is kept in a human mind as processes, and that is exactly the very essential thing that should be taken into consideration in research, if we want to understand the products.

Just as stability often resides in some form in the pieces constituting a repertory, so too it is evident in the process of transmission. Transmission may be determined not just by what pieces of music are put together but also by how they are put together, and in what circumstances. (Bohlmann 1988, 27; Gwyndaf 1986, 142). Style [to which its substructural hierarchies and awareness of them also belong] is one of the primary determinants of the ways in which new pieces are composed, or existing pieces may acquire new versions. The transmission of style depends in part on culture-based stability, but it may also depend on the stability of structural elements (of various hierarchical levels) in music. The greater the density of repertory, the greater the possibility for stability. Yet if the dynamics of change are very rapid, stability may be a rather insignificant factor in determining the integrity of a tradition. Oral tradition reflects the selectivity of the community. The selectivity shapes and reshapes its canon. Different items may enter the canon and be fitted into it, and thus to tradition. Change and differing attitudes toward change occupy the boundary areas some distance from the core. Performance practices that produce stability have a greater density near the core of the tradition. Change in the canon/tradition results as some pieces [of music] move from the boundary [or from outside the boundary] toward the core. (Nettl 1982,4). The oral tradition of music depends on a canonic core that encapsulates stability and change. Repertories within this core change from one community to another. The core consists of musical and cultural, textual and contextual elements. Among the musical elements serving as the core's infrastructure are the integral units of transmission: pieces, genres, formulas, normative settings of texts, shared musical vocabularies. Cultural context is reflected in the core, formatting its boundaries. (Lomax 1968,6) One should remember that the dialectic between core and boundary accounts for both the stability and the changeability.

2.9 The dialectic between the oral and the written in music

Of various ways of stabilizing change in oral tradition, none is more effective than written or recorded tradition, especially when it is joined to effective manipulation machinery of various kinds. (Bohlmann 1988, 28-29). In the present day's world, in particular, we have many traditions where the products of an oral culture have been stored into stabilized format, other than written.[27] The need for stabilisation can be seen at least from two viewpoints. One is that no, or very few, changes could be made to the stored versions of music. That may be due to the need for stability and safety, and therefore people feel

27 Before the time of the phonograph and other recording equipment, various other ways than merely the written have existed for storing musical products of different cultures. As an example, songwands of the Khanty can be mentioned.

reluctant or even intolerant to changes in music, or changes in general. Sometimes a composition/performance can be experienced or regarded by some people as 'irritating', 'uncomfortable', 'tasteless', 'disgusting', or even as something that 'shakes the foundations of a lawful society'. All these are, of course, very subjective viewpoints, deriving from aesthetical and affectual factors. There is no doubt that many of us, driven by feelings of dissatisfaction for the present, search ways of escaping into often imaginary structured world of yesterday, and music has, throughout history, been used for such nostalgia.

The other, and, when examined only superficially, very different viewpoint is that some representatives of today's world (e.g. those involved in music marketing or music industry) do their best in attempts to create as much changes as possible in manipulating music consuming public, as long as these changes suit to their needs. If the maximum financial profit is regarded as the primary interest, then it is of the utmost importance to create profitable trends for music consuming people. The more they [=the marketing people] have control on minds of the people of different age groups, the more stabilized they feel. What actually are the essential differences between the representatives of the two viewpoints presented here? Both want to have control on the minds of the people; both want to maintain their status as guiding musical authorities. Both want to keep certain matters stable, albeit in different ways and for different reasons.

Contrary to what has been stated earlier in the present study, it has also been argued that the coexistence of oral and written tradition is a blatant paradox. Philip Bohlmann brings forth two fundamental arguments to support his viewpoint. First, oral traditions of [folk] music are no longer immune from some aspect of literacy. Second, written traditions of [folk] music rely on many of the same structures and functions that make possible the oral transmission of music. Literacy has become one of the most consistent contexts for folk music in oral tradition. (Bohlmann 1988, 28-29). This can be understood as having been the case in the nineteenth and the twentieth century and later, since most of the people (at least in Europe) have been literate and thus able to read the words of the songs they wanted to sing. Some of them have been able to read some of the basic chord symbols, and known how to play them on guitar, and, at least, have had enough money to buy a CD-player in order to listen to their favourite music. But what about the situations in the fourteenth or in the fifteenth century? Those were the days, when most people were analphabets or illiterate, and even the learned classes could not necessarily master all forms of literate expression.

What comes for the relationship of written and unwritten today, I, contrary to Bohlmann, dare to suggest that both traditions still coexist. Even if you are able to read music, you need orally transmitted instructions. The concept of secondary-memory-based tradition, launched by a Finnish musicologist Kari Kurkela (Kurkela 1991), may be worth noticing here. This concept is primarily associated with interpretation and rehearsing processes in Western classical art music. Essentially it means that without orally transmitted information (instructions, etc.) from teachers, or conductors, to students and musicians, music making would be impossible.

Written traditions also provide a frequent mode of introduction of new songs into repertory, which may be adopted through oral learning. Literary

representation of music serves as a link between the musical activities. Some pieces of music must first be published before they can enter into repertory of an oral tradition (ballads, theatre and protest songs, etc.). According to Hannu Saha (Saha 1996, 91) oral transmission is, in folk music, closely associated with sensory transmission. They so closely knit together that in many respects they could be held as inseparable. Both of them, together with occasional help from written sources, could be understood as memory-based transmission. In memory-based transmission items of music culture are, through oral and sensory transmission, received and stored in someone's brain system from which they could be brought forth, e.g. as musical performances. Some items of musical information may be stored in, or based on literate sources, from which they could be transmitted further orally.[28] There are, of course, differences in understanding what is written, which in turn leads to different ways and emphasis in transmission process. Moreover, there may be preferential differences between the use of memory-stored information and information that is stored in books. This kind of dichotomy is very interesting from the point of the present work. The literate sources we have about the cerdd dant tradition [the Robert ap Huw manuscript, the 'Cadwedigaeth Cerdd Dannau', the 'Dosbarth Cerdd Dannau', for example] were not products or results of a literate culture, but products of transition period, which, in the end, led to extinction of an oral music culture. One may only wonder, what might have been the relationship of orally learned memory-based information and that stored in the manuscripts in the transmission processes, which took place in the sixteenth century Wales. Paul Whittaker (Whittaker 1974a, 47) has suggested that the canonization attempts of cerdd dant, with the help of theoretical documents and books of rules, are likely to have hastened rather retarded the extinction process.

Comparison of oral and written traditions of [folk] music suggests that they differ more in degree than in kind. Oral relies more on memory and therefore contains more repetitive patterns and the mnemonic role of formula. Oral traditions require somewhat greater density of performance, and rely on the transmission of rather complete versions. In written traditions the density is due to the circulation and availability of the texts. Literate transmission often deletes some component of completeness – for example, the melody of broadside songs, or refrains after the appearance of the first stanza. This difference in the completeness of the unit of transmission often effects major changes in a tradition when literate transmission begins to predominate. (Bohlmann 1988, 30-31). What comes to Bohlmann's arguments about literate transmission and its effects to components of completeness, and changes consequent to a starting domination of literal, there are lot of examples in the Robert ap Huw manuscript which speak for those arguments. If one takes a look at the playing instructions given by Robert ap Huw in various parts of the manuscript, one notices a lot the inadequacies in them, together with inaccuracies in some parts of the tablature. One cannot avoid noticing difficulties in the transmission process from oral to literate. These difficulties can be considered as twofold; as problems caused by many layers of oral transmission before very first transcription attempts, but also as problems

28 Saha calls this kind of relationship between a source and transmission 'booklore'.

caused by several layers of literal transmission from the 1520s (obviously) up to Robert ap Huw. Albert Lord has given an example how the emergence of printed texts in Balkan epic tradition in the early twentieth century not only took the form of abbreviated printed texts but also brought about considerable thematic streamlining and the gradual collapse of formulaic structure in oral performance. (Lord 1960, 130-32). The same can be said of our Kalevala rune songs and singing styles. When the Finnish urban cultured bourgeoisie, inspired by the national awakening and the Carelianism, 'found' their [imagined] past in the rural areas of the nineteenth century Carelia, the songs, rune texts, stories, and jouhikko and kantele melodies of Carelian inhabitants were collected in notebooks and later on wax rolls. This material was then transliterated, published as books and later also as recordings. Professional composers made arrangements of old folk melodies for choirs and orchestras, and many of these arrangements were published, and then performed and broadcasted. The 'original' tradition bearers were thus indirectly demonstrated how their songs should be performed 'properly'. Consequently many of the original informants ceased making songs, music, poetry or narratives completely. They had been robbed of their traditional tools, by which they had created their own culture for ages, and now their own tradition was explained to them in terms and aesthetics which were not their own. As a result of this, many old-style kantele players and rune-singers, for example, got embarrassed of their own musical heritage, and abandoned their music.

2.10 Relationship of improvisation and variation

Leo Treitler sees that the very word 'improvisation' conveys a negative (Latin 'improvisus' means 'unforeseen'). Thus improvisation in music is (as commonly accepted musical concept according to Treitler, after his references to various music dictionaries) something that 'lacks predetermination'. This is not Treitler's opinion, but of those who [Treitler does not mention any by name] think that improvisation does not contain features such as preparation, guidance, planning ahead, proceeding apace or cognitive and/or musical structural frameworks for the process. Thus many are of opinion that the opposite to 'improvisation' is 'composition'. (Treitler 1991, 66-67) 'Composition' is regarded (by the New Harvard Dictionary of Music) as something that is "determined precisely in advance". This is widely accepted in Western art music circles today, but it may also be wise to note that such a definition does neither embrace all cultures nor all ages. In the 'Statute of Gruffudd ap Cynan' 'composition' and 'composer' were defined as follows:

> 'A llawer o wahaniad yssydd Rwng gwnaethvriadwr ac atkeiniad kans gwnaethuriaidr a wyr gwnaethur pob peth ac atkeiniad y ssydd yn kanv peth awnaeth ef or blaen achos yneb a fo yn gwnaethur y peth niwnaethbwyd erioed ac na wypo neb o atgeinid ymvssig beth avo hwnnw piav yglod gwnethur dim val anivail yddydys yni gyfflybu oskanmol vwchder llyverydd yr assen ar yr Eos ai ar llaw yn vwchaf o vwchder llais am hynny nid yr vwchaf a gano a roir yn ddoethineb ar dysg[v]'

> 'And there is a great difference between composers and declaimers, because composers know how to compose everything and declaimers sing something which he made before, because he who composes that which was never composed and which none of the declaimers of music knows what it is, that one deserves the praise and the honour because of it, and he who follows the art and does not know how to compose anything may be compared to an animal, in praising (to the) braying of a donkey compared to the nightingale, or, on the other hand, to the loudest loud voice. Therefore it is not he who sings loudest who is considered wise in learning.'
>
> Lbl MS Add.19711, lines 177-184, translated by David Klausner (in Klausner 1999, 289 &296)

These passages are discussed in more detail in chapter four, but it may be sufficient to note here that a cerdd dant composer was a skilful craftsman, who was able to use his musical toolkit for creating compositions on request, to create something that 'was never made before'. And it was not necessarily 'determined precisely in advance' what was to come. I have not come across to any literal document concerning cerdd dant so far, which distincts composition and improvisation. Is there actually such a big distinction between the two? To quote Bruno Nettl:

> '... it seems most appropriate to reserve the term improvisation for cultures and repertories in which a distinction from non-improvised and precomposed forms can be recognized'
>
> (Nettl 1986: 392)

The wisdom here is in the implicit recognition that the very concept of improvisation is a product of cultures that have valorised its opposite-composition. Obviously there was not such a contrast in medieval Wales. So, after all, how much do we really have proper information about musical realities of bygone centuries in the written? Our anxiety to the core of 'true' authenticity sometimes leads us astray to misconceptions, based on imagination and visionary ideals, rather than anything else.

Leo Treitler, referring to a medieval plainchant singer, asks what the singer has learned and kept in mind as the basis for his performance. Whether the chant as a whole (which may or may not be remembered more or less exactly), or some concatenation of principles of selection and order and melodic formulas to be used according to the needs of the performance situation. This also includes both the awareness and the familiarity of critical turning points (see the cognitive reference points elsewhere in this work) and what and how to do at them. Thus the proper performance was not based only on a good memory but also on a good knowledge of the style or idiom. Treitler calls such a basis for a performance an aural paradigm. He also sees that in a highly regulated oral tradition, in a context where uniformity and consistency of practice are highly valued, the evolutionary pressure is likely to favour the conservation and reduction of means. (Treitler 1991, 66-91). Nettl is in accord with the above, as he generalises that "improvisatory systems...tend to be more compact stylistically than those in which improvisation is absent."(Nettl 1986: 392). When one sees what happened in the bardic music in Wales during the

16th century (attempts to write music down on tablature, the Caerwys eisteddfodau, 'Statud', 'Cadwedigaeth Cerdd Dannau' and 'Dosbarth' among others), one can only agree with Nettl and Treitler. There obviously was a great need and demand for consistency of practice [in cerdd dant], and that may have been one of the key arguments for a regulated improvisatory system. We may perhaps not talk about improvisation in connection of cerdd dant as an art of exercises of a momentary whim in similar way as is the case in some jazz styles. The formulas used for variations [in cerdd dant] on the surface level were pre-rehearsed and pre-adopted, and not results of spontaneous creativity. That there were numerous different possibilities to combine those formulas in performance, with some personal, improvised variations added to them, was, nevertheless, evident.

Treitler sees that the characteristics of improvisation and improvisatory systems in medieval music bring primary attention to performance. Improvisation was not just a medium for the presentation of [prepared and/or pre-written] works, but also a medium for composing by ear (the idea of "aural paradigm"). This could be adopted both monophonic and polyphonic music while moving from 'the point(s) of departure' to 'the point(s) of arrival'. (ibid., 80-83).

In practical music-making the concepts of improvisation, variation and interpretation overlap at least partly. In terms of Western [written] art music interpretation usually refers to reproduction of a [notated] composition. Here freedom of interpretation is usually within the limits of dynamics and agogics; very seldom, if ever, changes are allowed to be made to actual pitches/sonics written by the composer. Restrictions are, to a great deal, dictated by the power of [written] in composition. (Saha 1996, 86)

As a comment to the above passage, one could see Saha's the distinction between improvisation and variation/interpretation being in the fact that in improvisation there are changes also in deep-structural elements. Variation in performance is a new (re)production of something already performed. Thus variation does not concern the deep-structural elements in musical composition and/or performance. Later (ibid., 87) Saha, however, discusses the conventions that limit improvisation. Should this be understood that improvisation [in folk music] is, either consciously or unconsciously, seeking pathways towards variation; that there may be cognitive differences between the two but practically they are close together?

Saha emphasises musical sounds (sonics) as the primary vantage point in research of variation (ibid., 88). He does, however, acknowledge the importance of context and its influence to actual musical information. Even if we take the musical information as the focusing point, it is hardly ever a result of non-contextuality. That goes even to such 'rebellious products of music', as early Baroque monody, bebop or punk rock, for they can be taken as results from conscious counter-movements to existing or dominating musical styles and contextuality, and thus deriving from the contextuality itself.

John Blacking argues (Blacking 1973,100) that man cannot learn how to improvise, in other words, it is not possible to study improvisation. According to Blacking all the levels of human behaviour are subjects to inter-related structural systems. When human beings improvise, they, according to Blacking, interpret or reflect those systems in relation to the reactions/feedback of their

audiences. Where the systems of the audience and performer meet and create desired feedback, there is the most solid base for mutual communication. Such an argument I find rather amazing from Blacking, since he often speaks for the importance of change in processes, the processes of behaviour included. If the solid base for mutual communication is found, they are stabile for a very short moment in time only. Expanding boundaries is natural for human beings, regardless whether he is performing in solitude or communicating with others.

If change and creativity in music did not exist at all, we might sooner or later be dealing with zero-information; a concept launched by a Finnish composer and scholar Ilpo Saastamoinen (Saastamoinen 1990, 28). It means that when a member of community has learned everything from his own tradition (songs, playing techniques, games, riddles, rituals,...), the tradition's informative contribution to him becomes equivalent to zero. If something like that is about to happen, even theoretically, one would expect that at least some members of culture consciously strive for inventing something new. If this kind of situation is allowed, or forced, to take place there is a big need for change or cultural explosion. One should, however, note that concept of zero-information includes a different connotation. That is when a piece of music, for example, is too difficult to be understood or properly perceived. Therefore it may impossible to process it at all, leading to either ignorance or disrespect. Such a situation has sometimes given excuses to call some music 'good' and some 'bad' per se.

On another occasion Ilpo Saastamoinen discusses the role and the core of improvisation. Compositional variation is different to structural variation, or to variations in performances. Saastamoinen does not consider a small variation, or momentary improvisation, during a performance as an improvisation, since both are often ignored by the listener, especially if the listener is not familiar with the repertory or genre. In this case the performed music is equivalent to zero-information to the listener. Saastamoinen has rather strict requirements to what he calls improvisation. Improvisation, according to him, is something spontaneous, unpredictable and unique musical expression, which should not be repeated exactly the same, or it will not be an improvisation anymore. Such interpretation defines improvisation as a sudden deviation from the usual, normal and expected. Being too much repeated, an improvisation becomes, in the course of time, part of tradition with the anxiety to learn and repeat it in more or less same way [as has happened in connection of 'formal' rock, jazz and folk music education]. (Saastamoinen 1994).

Memory-based music is creative music making, where variation and improvisation overlap. (Saha 1996, 123-124) Musician has a storehouse of variation elements within him [in his head] and from there various, always more or less changing elements or combinations are transferred, in case of plucked instruments, to fingers, which take care of creating various timbral worlds on the instrument. Musician's store of knowledge, his toolkit, is flexible and expandable. Definitions to items of variation, within a musician, may be relevant for short period of time only in memory-based music culture. Even the attempts to standardize such elements cannot change the flexible and to-a-moment-tied character of such storehouse.

In his discussion concerning elements of variation and/or improvisation Saha gives a rather minor role to other levels of musical and cognitive

structures than the surface level. He rightly says that variation/improvisation does not include merely changes in melodic and/or rhythmic motives and segments, but includes timbral, dynamic and other changes as well. He criticizes the generative theory, saying that it is an impossible research paradigm for orally transmitted memorised folk music, because (according to him) the generative theory regards the variations at the surface level as of secondary importance, as 'disturbing' elements belonging to a performance. (Saha 1996, 82-129). [29] Another viewpoint can be suggested. The hierarchically organised 'context' of the generative theory, on one hand, gives a very good tantamount for the studies of oral music cultures and their products. Such is the case especially with products where the deeper levels of hierarchy seem to have developed into stable, or relatively stable, formats, and where the idiomatic formula and sound contents for the surface level are dependant or relied on that deeper level context. This kind of interpretation is admittedly close to the synchronic variation paradigm which Saha (ibid., 82-83) sees more suitable for his purposes. Reproduction and variation should not be seen as opposites, but rather simultaneously existing ways of creative expression. Criticism against generative theory (of music) can be understood from Saha's primary interest, which seems to be the variations/variables of the surface structure. Those, however, could not be possible without mastering culturally accepted and adopted levels of deep and middle structures. In case of cerdd dant one cannot ignore any level of hierarchy. Therefore one should not base conclusions only on the variables of the surface structure, even if the emphasis were on most audible items of musical style.

2.11 The dilemma of transcription

Traditional ways of transcription are problematic in analysing memory-based music. The ways to transcribe music into Western notation reveals only those things which are relevant to Western (art) music, which are relevant to the transcriber (how he has perceived the music), and what the notation system itself allows to be put on paper. (Ellingson 1993). Even in the case of the most detailed transcription (composition), performance instructions, usually done orally, are needed. Hannu Saha sees the note and notation as mummifying music [of an oral culture]. According to him, notation is not a means for making music but for archiving, research and education. There are many important matters to be discussed in connection with notation/transcription of orally transmitted and memory-based music. Some basic questions could be the following, as suggested by Saha (Saha 1996, 130-131): Who has done it, from whom the music was taken, when, how, with what skill, with what knowledge of and what attitude to that particular music culture? Fred Lerdahl and Ray Jackendoff argue that a piece of music is a mentally constructed entity, of which scores and performances are partial representations by which the piece is

29 From Saha's argument one cannot conclude, whether the target of his criticism is the generative music theory (e.g. that of Lehrdahl & Jackendoff) as a paradigm of music theory , or whether he confuses it with Gardnerian cognitive sciences.

transmitted. One must ultimately treat them [segmented units of all sizes, patterns of strong and weak beats, thematic relationships, pitches, tension and repose, and so on] as mental products imposed on or inferred from the physical signal. Therefore the central task of music theory should be to explicate this mentally produced organization. (Lehrdahl & Jackendoff 1983,2). Transcription, notation or edition of a recording or a performance reveals how an editor or a scholar wants others to listen or perceive that particular information. A transcription of memory-based music is, even at its best, only a snapshot of music, which is in continuous process of change.

Philip Brett, when discussing editions of early music, finds two principal motives in the early history of editing – exploration and preservation. A very crucial question is how the edition presents its information. There may be a great difference between the notes the composer meant to write and those he meant to be played [and how they were meant to be played]. The distinction between written note and intended sound must be taken into consideration. (Brett 1988, 84 - 91). Brett quotes Thurston Dart, one of the prominent early editors of early music, and who also made scholarly work on the Robert ap Huw manuscript. Dart, according to Brett, has said that: '...performers will want to follow such and such an editorial direction.' (ibid., 96). This attitude is still far too common in [early] music circles.

Very significant is the relation of an editor to the source or sources of the work or works he is editing. Once again a sense of history is important. The editor may decide, as has been the case in one edition of Mozart's 'Requiem', to examine the music to see 'whether its craftsmanship measures up to Mozart's rigorous standards.' Editor's tests showed that in some parts of the work there is no genuine Mozart. The next step is the decision that only genuine Mozart, as interpreted by that editor, will do, so it is out to Süssmayr. This in spite of the fact that Mozart himself wanted to have the 'Requiem' completed by Süssmayr. Here the editor's statements count more than the composer's. (ibid., 99-107).

Whenever something from a fundamentally oral music culture is attempted to be written down for the first time, or times, what is that 'something' primarily trying to present? Fixed products (=finished compositions), coded by one or more writers to be decoded by performers? Something to be read in the sense of mnemonics? Some touchstones for performers, meant to aid them in recognising some patterns and hierarchies, modes, techniques, proceeding orders and the like? After centuries of aural transmission and performances based on the 'aural paradigms', attempts to write music could not have been based on the same premises as in the case of such composer whose own tradition and training has been literal. Neither can reading of such written text be a simple decoding of something fixed.

Let us turn for a while to the ancient musical authorities of cerdd dant. There are allusions to master musicians and their writings on the first pages of 'Cadwedigaeth Cerdd Dannau':

> Llyma Llyfr a elwir Cadwedigaeth Cerdd Dant, nid amgen telyn a chrwth, o fewn tair Talaith Gymru; yr hwn a dynnwyd o'r Miwsig wrth ddymuniad pedwar penkerdd o Delyn a chrwth, a meddwl ac athrylith pob un ohonynt at eu gilydd, i wneuthur Cerdd ac i'w chadw ynghôf, ac i'w chanu yn ei lle, ac i'w dosparthu. A henwau'r Pedwar Pencerdd yw, Allon y Cena, Rhydderch Foel, Alatholwch Wyddel, ac Olaf gerddor. Ac yr

oedd yn gwrando Henri Gyfeurhydd, a Charsi delynior a llawer arall a'u Cyngor ac o'u Celfyddyd gyd â hwynt. A thrwy gynghor yr athrawon hyny .... y gwnaed y pedwar mesur ar hugain ... O dri achaws y gwnaed hwynt: y cyntav, i wneuthur cerdd; yr ail, i adnabod cerdd; a'r trydydd, i ddal cerdd mewn cov, ...

[This is the book for the preservation of string music, namely the harp and the crwth, within the three provinces of Wales compiled by four master musicians of harp and crwth, each one contributing his knowledge and genius in order to compose music, remember it, perform it correctly and classify it. The four masters of the craft were Allon y Cena, Rhydderch Foel, Matholwch Wyddel [the Irishman] and Olaf Gerddor. Present also were Henry Gyfourhydd and Carsi Telynor and many others who shared their counsel and craft. And through the council of these masters.... twenty-four mesurau were made...They were made for three reasons: first, to make music; second, to recognise music; third, to keep music in mind,...]

(an extract copied by Lewis Morris; the Robert ap Huw manuscript, p [v], translations by Meredydd Evans and Pekka Toivanen)

The author of the present work has discussed the above quotation, together with the dilemma of transcription, in more detail on other occasions. (Toivanen 1997 & 1999). It may, however, be sufficient to mention it also here, in relation to the dilemma of transcription. One might ask what those who 'wrote down music' exactly wrote; notation, rules about the 'mesurau', or playing techniques? Had the twenty-four mesurau (cited both in the 'Cadwedigaeth Cerdd Dannau' and 'Dosbarth Cerdd Dannau') been preserved unchanged as stereotypical structural elements, to form a part of an unbroken oral tradition extending to the sixteenth century? Were those twenty-four the only 'officially permitted' combinations of harmonic elements from then on? For what reason exactly these mesurau were chosen to be canonised? Did the students of the harp and the crwth start to learn and memorise the mesurau, and everything else, from the book from that moment on? I have yet to come across any written evidence relating to cerdd dant that emphasised reading or writing at the expense of oral learning, or of memory. The above passage suggests the importance of keeping the music in mind, rather than reading it. Other descriptions of methods of study in bardic poetry and music (as in Thomas 1968; Matthews 1991a; Jarman-Hughes 1997) do not support the alleged importance of written transmission, and neither does the existence of the many blind harpers, at least bin Ireland and in Scotland, who played in the old bardic style. Many Welsh manuscript sources, referred to in this work, do also suggest how difficult and painstaking a process it was to transform elements of an oral music culture into written form. More about this in Miles 1983, or in chapter six of this work.

A parallel to Welsh cerdd dant, concerning transcription problems, comes from Ireland. Edward Bunting, to whom the transcription work of the music performed at the Belfast Harp Festival in 1792 was given, was, prima facie, a representative of Classical school. In recent research (Moloney 1995), problems with credibility and authenticity of terms presented by Bunting (the harping vocabulary) in his books have been discussed. Bunting's primary sources,

according to his own words, were some old style harpers such as Hempson, O'Neill and Higgins, all of whom were contemporaries to Bunting. Moloney says, referring to a letter sent by James MacDonnell to Bunting, that it is possible that also MacDonnell (the chief organiser behind the Belfast Harp Festival in 1792) was actively seeking terms for Bunting even as late as in c. 1840. Another important factor to consider, according to Moloney, is that Bunting did not speak Irish and therefore his notions of Irish words were some kind of phonic equivalents. Later, for the 1840 edition of 'The Ancient Music of Ireland', some native Irish-speaking scholars were given the task to unravel Bunting's notes and rewrite them in correct Irish. The question remains how reliable are the rewritings of phonic representations? What do we know of rewriters' knowledge of old Irish music terminology, or music terminology in general? Were the names of the terms in uniform among all old style harpers present at the Belfast happening? Another source (a letter from MacDonnell to Bunting containing some terms) implies that either there was not a uniformed vocabulary, or there were inaccuracies both from the informants' and receivers' side. Possibly there were individual or regional differences among the harpers in describing things, depending partly on differences in perceptions of students and priorities of teachers. (Moloney 1995, 314)

2.12 A frustrating quest for authenticity

The common lack of oral components in early music documents, or rather our inability to understand or note them, is one of the major problems and hardest strands to capture in our reconstruction work of a period listener or performer. The modern scholar has, until so far, used to view music history as consisting primarily and above all well defined notated musical works. This may be one reason for such myths about 'the development of music', where the peak of that 'development' was reached in the early decades of the twentieth century (possibly already in the nineteenth century), after which the music has not 'developed'. The ontology of musical works in notations and scores and, the more detailed and complex the better, has misguided both scholars and connoisseurs alike towards valuing a musical work as a work on paper. There have been musical works throughout any culture's music history, but not all of them necessarily on paper as scores. Some works that may appear rather plain and bare on the paper may sound plain and bare works when performed by such musicians (or completely literate-oriented music historians) who need detailed driving instructions to everything they do. This may lead to misconception that medieval, and early music in general, is easy to play but boring and simple, in other words 'not developed', since its ontology on paper is, in many cases, sparse. One of the first steps towards a historical reconstruction of the period ear and performance is the realization that early listeners and performers, especially the medieval ones, operated in a musical and cultural environment different from the one in which a modern music historian is steeped.

The modern reader of medieval literature, as well as his contemporary fellow who tries to get into the core of medieval music, may face the problem that their idioms and backgrounds can be relatively foreign to him. As a result he may be more than normally dependant on the guidance of the experts in forming his opinions. There is a very real danger in this, since the philologists or the musicologists are not automatically endowed with sensibility.[30] The reader, or the fellow mentioned above, may then accept as canonical the views and judgements of a handful of influential scholars [of different capabilities] which have become common coinage in academic and pedagogic commentaries. (MacCana 1992, 21). This has been a major problem in traditional Western musicological research, since the tradition has focused nearly entirely on the written versions of musical creativity, and either ignored or neglected the oral processes and traditions. After the introduction of ethnomusicology, the oral aspects and elements of music have got more emphasis, although ethnomusicology is not a 'deus ex machina', which is able to solve all unanswered questions. In the scholarship of Western (art) music, however, the oral aspects have so far played a considerably minor role. As long as the influential scholars value only the written, the oral is also forced to be converted into written before it can be 'scientifically' discussed. (Finnegan 1986, 73-74; Laitinen 1994,11).

The problems connected to the present glorify the past. (Burstyn 1997, 693). Our anxiety for the 'authenticity' [in music] may result, at least partly, from the lack of well-defined sense of musical present. (Morgan 1988, 66-67). The paradox in yearning for the ancient is that simultaneously we want something new. The alternative for the present is sought from the past, when we are unhappy with the new. And the more 'authentic' things we create in relation to the past, the more 'novel' they will be. Another paradox in the quest for authenticity is that the (various groups of) people, time after time, make decisions about authenticity. The more we temporarily move from the time of George Gershwin, the less authentic his versions become. The same can be said about the recordings of Elgar, Stravinsky, Schoenberg and some other 20th century composers of their own works. For example, in case of Elgar many conductors regarded composer's versions of his own compositions improper and not good enough to be presented on record. In other words, they were not 'authentic' from the point of view of the conductors, because composers' recordings of their own works could not possibly have been what they actually has intended. The professional conductors were needed to reveal composers' intentions. (Morgan 1988, 75-79).

In musical societies with a strong sense of self-identity, where the basic aesthetic and technical assumptions are taken for granted, music is played according to the dictates of that society. The only 'authentic' music from the past will be music that has survived as a vital part of living tradition – literally as a part of the present- and the only authentic way of performing it will be according to the requirements of current custom. Of course the performance traditions have changed over the course of time, but even with an 'authentic instrumentation' it is very hard, if not impossible, to 'purify' the present day

30 See Titon's model of music culture (Titon 1992, 11), especially his discussion about the importance of its outermost circle [history/memory].

performers' cognition of everything else they have become acquainted in the course of their life. And even if that would to some extent work with performers, what about audiences then? In case of early music in particular, it has been and often still is that if a composition is performed 'authentically' (on period or culture-oriented instruments, wearing period-like costumes, choosing the location 'authentically'), it will also be listened to 'authentically'. That is, listened to musically [the extra-musical factors playing the major role] rather than acoustically perceived, since the modern ears are more accustomed to the instrumental world of modern symphony orchestra and/or electronics than to the soundscape of medieval or renaissance instruments). What is it what the audience wants to hear, experience or see? Would the situation be even more 'authentic', if the listeners were dressed in 'period' outfits?

The authenticity movement might be described as a cultural identity crisis. More generally it is a crisis of identity characterising modernity as a whole. This crisis has been with us since time immemorial. Dissatisfaction with ourselves is intimately linked with dissatisfaction with the present. Therefore many of us, driven by feelings of dissatisfaction for the present, search ways of escaping into a more structured existence [of yesterday]. We attempt to protect the past from a chaotic present, preserving it as a time-frozen environment. Early music is one of the countless signs of nostalgia. The same can be said about so-called folk music purists. Earlier parallels are be found among nineteenth-century Romantics, some eminent figures in the Age of Enlightment, the representatives of Camerata Fiorentina and Renaissance Humanists, Guido of Arezzo and Odo of Cluny, Boethius in antique Rome and Plato in even more antique Greece. In this sense there is nothing new under the sun.

One of the myths of our scientific age is that people think that science can disprove many of the old [folk] beliefs. At the same time man's innermost desires and fears remain almost the same as they have been through the ages. He is still anxious and doubtful as ever about his future and his place in the Universe, he fears the unknown and is preoccupied with the mysteries of life. Robin Gwyndaf quotes a passage by George Ciford, published already as early as in 1587:

> 'For this is man's nature, that where he is persuaded that there is power to bring prosperity and adversity, there is worship.
>
> (Gwyndaf 1994, 239-240)

The above message is very actual also today. Man's inherent fear of the unknown, and his desire for peace and security is reflected not only in his beliefs, but also in his anxiousness of rebuilding the past as he thinks it must have been. Man still clings to many beliefs of ancient origin, whether once-existed or newly invented, or completely recently created beliefs: ESP, psychokinesis, telepathy, U.F.O.'s, science-fiction, new age, role playing, larping and so on.

It could be argued, as Robin Gwyndaf (Gwyndaf 1993, 230) does, that man's involvement with the fantasies of another world is often a way of defining his [our] world. There are, and there have been various kinds of folk beliefs and concepts of reality. Today many people's '[folk] belief' is that

globalisation and free marketing is thc only solution to the world's problems, and there are many '[folk] tales' to strengthen that belief that are to be picked up from the Internet, the TV, newspapers and periodicals of various kinds, 'jungle drum rumours' at the stock markets, and so on. The fairy world of such beliefs needs its sacrifices, as did the goblins, elves, witches and warlocks decades and centuries ago.

There are many paradoxes to be faced with, when discussing the concepts of 'authentic' and 'authenticity'. Although there is such a huge anxiousness to authenticity in the early music world, the modern practitioners of it have hardly ever weighed the possibility that their interpretations may be far away from the performance practice of the era and culture of the pieces themselves. In other words, we may not be able to hear and play those pieces as they were heard and played by the contemporaries. We have no chance to be better or more authentic 14th century people than the people of the 14th century were.

The reasoned arguments concerning the futility of so-called authentic performance practice have long been heard, but they were not extended to the closely related question of authentic listening practice. Shai Burstyn quotes the late Michael Morrow (one-time leader of the early music group 'Musica Reservata'):

> 'The possibility of reconstructing a performing style containing any element that might be familiar to a medieval listener is so remote as to be, in my opinion, not worth the attempt.'
>
> (Burstyn 1997, 694)

Morrow invokes 'the medieval listener' as a judge for modern performers, giving him the possibility to evaluate the modern attempts, converted to musical interpretations as performances. We should, however, keep in mind that a medieval listener from medieval Spain hardly had any cultural or musical ties to listeners in medieval Britain, and vice versa, so in all probability they knew very little of each other's musical reality. In other words, there cannot be such a thing as 'the medieval listener'. Our whole concept of 'the medieval listener' (or the listener of any other era) may be based on one chronicler's writings about a specific occasion of a specific musical performance, perceived subjectively by him (or her), whether liked or disliked, or something in between. The chronicler's words on the vellum may have been of more descriptive and emotion-based character than analytical. Yet, we may have no idea how good or bad that medieval chronicler [who also was a listener here] was as a musicologist, performer, music analyst, novel writer, poet, clerk, or an official of some kind he might have been. To what extent his employer might have influenced them? How independent and individual, if at all), were his ears?

We may well talk about the reaction of modern-day listeners to 'authentic' medieval performances, but there can not be a unified group of modern-day listeners to medieval, or any other, music either. The question of how so-called modern-day listeners would react if they could listen to an authentic medieval performance never arises. We do have a continuum of practical music making from roughly the 1830s onwards, encompassing certain musical genres and

certain classes of society, but still we have not bothered ourselves with the fact that Europe in the nineteenth century was different to seventeenth- and eighteenth-century Europe, to say nothing about Europe of the present age. Is it so that changes in society are easier to accept than changes that have taken place in music?

Reader is again reminded of the late nineteenth-century versions of Bach's keyboard music with legato articulations, sustaining pedal-effects, a full and continuous dynamic spectrum, octave doublings and the like. Bach and his music were so integrally tied to the nineteenth century tradition that he was able to exploit the properties of instruments not even invented in his lifetime. (Morgan 1985; 99-100). Should this be the didactic guide for the present day performances of the medieval cerdd dant as well? The pedal harp, lushy impressionistic arpeggios and etouffes, full chords and full range of dynamics as well, the whole compass of the pedal harp to be used in order to achieve the desired effects? Since Bach is still commonly taught after the nineteenth century principles, should the same be applied for the early harp music? Is it possible to make the music of the Robert ap Huw manuscript a part of the living tradition merely by transcribing it into modern score, count the percentage ratios between the ornamentations and the 'melodic notes', provide the score with dynamic marks, occasional octave doublings and fermatas and give to the Celtic oriented pedal harp students? I personally doubt it very much. Ironically, as our understanding of the present becomes increasingly obscure, our view of the past appears to clarify.

The whole question of authenticity should be seen from totally new perspective, and acknowledge that we are not able to reconstruct even the fraction of the medieval sound world without serious attempts to get acquainted with culturally tied musical schemata, the cultural environment and its effects, and so forth. To bring the music in the Robert ap Huw manuscript back to living tradition involves the adoption of the music culture from the time prior to Robert ap Huw's times. The main thing here is not to do a sign-to-sign perfunctory reproduction of the manuscript but rather try to see beyond it. In linguistic terms, we have no native language [of the past], and as a consequence we are forced to borrow foreign ones. The foreign can be turned into a new original [as in the case of Bach, when he was made a nineteenth century composer], and used as such, since we are deprived of a means of translation. In the case of medieval cerdd dant, we have no native speakers of that oral culture alive anymore.

We have a tendency to handle the old musical languages as fixed and inviolable entities, impervious to time and historical process. Rather than to try to revive them, and use them for the richness and flexibility of a living tradition, we tend to bring them back as fossils, emblems from the lost world that we may greatly admire, perhaps even prefer to our own, but in which we can never reside as natives. To some of us 'a momentary glimpse of past' may be a nice experience, especially if you can put it away from your mind at the very moment you feel like it, and return to the comforts of modern city life. I have often pondered what would the present 'authentic interpreters' of medieval music do, if they were made to perform in similar lighting circumstances to those of their medieval colleagues. If they were lucky to have candlelight, or a

torch, to what extent would they be able to follow their 'notated driving instructions' flawlessly?

We have paid far too little attention to the fundamental differences between both acoustical and musical-cognitive realities of our times, and those of the Middle Ages and other earlier periods in musicological research and performance practice. The anxiousness to authenticity has coloured modern-day listeners reactions to early music performances they hear. Shai Burstyn refers (Burstyn 1997, 694) to Jack Westrup's statement made in 1955 that 'a proper conception of music history involves "historical" listening - listening, that is to say, with ears of another age and with all subsequent music banished from the mind... the music which comes to us from the past has to pass through the veil of our own experience; and that experience includes our consciousness of many other kinds of music'. [31] All music has once been new music, and we cannot claim that we hear all music in the same way and with similar ears as those who once heard it first.

We hardly can demand a medieval piece of music to sound like a Romantic piece, and value it through Romantic aesthetics. Such an attitude seems, however, often have been taken when music is studied as products and not as processes. Responses, as presented by Peter Greenhill in his dissertation about the Robert ap Huw manuscript (Greenhill 1996; 117), that '...high frequency with which chords are used in the lower part would be *alarmingly wearing to the modern listener if they were arpeggiated*' (my italics) may thus be regarded and understood as coming from such aesthetic thinking. Shai Burstyn, correctly, says (Burstyn 1997, 694) that the aesthetic response of today's listener is his response only, and we should not use such aesthetic responses as evidence of the musical perception of early listeners. The aesthetic preferences of early thirteenth-century Spanish secular vocal music are one thing, the aesthetic preferences of early thirteenth-century Spanish sacred vocal music another. Nobody can objectively argue that the 'generally accepted' aesthetic preferences of Western Classic-Romantic music are the supreme ones in relation to other musics.

Burstyn says that there is only one realistic vantage point available to us as listeners [when encountering the treasures of the past] - our own aesthetic experience. (ibid., 695). This is not to say that that experience should be, or should have been, static. Rather on the contrary, since we may widen our musical world view, if we want to, and gain information from aesthetic preferences of different music cultures of the world, at least of those of the present-day's world. The past is more complicated, because we can never reside in the past as natives in a similar way as we can in any place of the modern world. Nevertheless, we should not abandon our efforts to understand or reconstruct early music the best we can, or to study the historical and cultural environment within which any music has been conceived. We can, as Burstyn suggests, in order to try to understand better the ways past listeners perceived their music, try to construct a hypothetical musical-mental model of a listener or listeners in a given place and time. That requires the combined resources of our historical knowledge and musical sensitivity, knowledge of musical

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31 Westrup: 'An introduction to musical history', pp. 64 and 152. See Apel (1953) for different notation systems of [Western polyphonic] music.

perception, musical cognition and so on. Yet being only hypothetical experiment and exercise in musical-historical imagination, it might still be worth trying, for example by using computer-based modelling. (Burstyn 1997, 695). A mental model of a culture and of a hypothetical contemporary listener describes, according to Johnson-Laird (1983; 397) 'sequences of events and processes that enable individuals to understand phenomena, to decide what action to take... to make inferences and predictions.'

Burstyn, in his attempt to reconstruct the cognitive style of a culture ['cognitive style of a culture' is defined here as 'cultural skills and habits adopted as a result of living in a culture through perceptual training, endowing us with habits and skills of discrimination that affect the way we deal with the new data'], with emphasis on the problemacy of the period ear:

> '...seeks to tap the everyday automatisms of behaviour by scrutinizing social structure and dominant belief and thought systems for relevant clues, paying special attention to that culture's conceptual and perceptual attitudes towards space and especially towards time as revealed in the ways its members create and contemplate their spatial and temporal Gestalts. Cultural conceptions, attitudes and skills of memory, definition of identity/similarity/difference, and reasoning concerning cause and effect, all directly influence the mental equipment with which listeners process musical stimuli... Likewise, an imaginative reconstruction of the soundscape in which past listeners [and performers] lived could provide useful clues about the outer limits of their dynamic world, just as determining their attention span and cultural habits of closure could add important information to what we know about the 'packaging' of their music. The functional uses of music often maintain important links with its style, thus illuminating aspects like the role of improvisation, structural and textual attitudes, tonal systems, consonance and dissonance and performance practices.'
>
> (Burstyn 1997, 695-696)

This may seem as yet another attempt to use methods of ethnomusicology and cognitive musicology in the scholarship of music history. If we accept that all music ever made by human beings is ethnic music [thus the music patronised by the German-speaking aristocracy of the eighteenth century, the music we call Classical music, is merely one ethnic style in the strain of other ethnic styles of Western music], then why should we ignore the other aspects of ethnicity when studying music? The multiplicity of trends, currents and influences at any particular historical point complicates any attempt at generalizing, especially if the 'period ear' is conceived as the total musical cognitions of a hypothetical historical listener, thus covering his/her entire soundscape.

Very good point by Burstyn is to remind the reader that all participants of a contemporary musical transaction (at any time and place) are listeners, but there are differences in perception and tolerance. (ibid., 697). Composers and performers are usually more ready to enlarge their 'horizons of expectations' than their more conservative listeners. Also the analysis of music should be done by using contemporary methods, the same conceptual and perceptual tools that were available for the listener and performer in his/her own time. This is not the only possible way to approach the problem, and to be taken too rigidly, but I think it can be accepted when we try to study music in its own context. One could try to find answers to questions such as:

(1) How did he/she name that particular way of plucking strings?
(2) Was he/she aware of the formal structures of musical genres in favour in his/her time? If yes, how well and to what extent?
(3) Could the listener tell from different players' performances of the same piece that same playing techniques were used?

To use the terminology familiar to a cerdd dant harpist, the indigenous descriptive names for playing techniques, the central role of oral and memory-based transmission, may help us to understand that world better, whereas majors, minors and chords do necessarily not, because they did not belong to the musical world of a cerdd dant harpist.

Is the tradition of cerdd dant then lost? Is the essence of the tradition encoded in the Robert ap Huw manuscript, the 'Statute' and the 'Grammars'? It is, and yet it is not. A portion of it is encoded in transcription attempts of the second hand [if not even the third or the fourth], but cerdd dant in its most authentic state existed prior to the first attempts to convert it into written form. Thus we may consider a great deal of the 'most authentic' cerdd dant be out of our reach.

2.13 Identity and music

In the preceding paragraph the quest of 'authenticity' was linked to a cultural identity crisis within a community or society. Dissatisfaction with the present, has driven people to search ways of escaping into the world of past. We also have noted, in the preceding paragraph, that in musical societies with a strong sense of self-identity, music is played according to the dictates of that society. The only 'authentic' music from the past being therefore music that has survived as a part of the present, the only authentic way of performing it being according to the requirements of current custom. In the following we may further notice, that when attempting to create one's identity, the different viewpoints concerning authenticity play a remarkable role.

What are, then, the main ingredients when attempting to define one's identity, musical or other? Often the efforts are based upon a sense of 'tradition', and there are various ways to understand the tradition. Malcolm Chapman, in his study of Celtic music and its essence, distinguishes two spheres:

1) the area of self-conscious 'Celtic' activity (in various fields, such as language, politics, music)
   -may result from efforts of conscious revivalists and/or scholars (in case of music possibly due some professional musicologists after having listened thousands of hours of field recordings, learned to play the instruments and then introduce the music to present-day people of the same area from which those field recordings were taken decades ago) [it may thus be a result of completely 'etic' people; i.e. outsiders to that tradition]

The sphere one may not necessarily overlap with

2) genuinely popular activity in the 'Celtic' areas of Scotland, Ireland, Wales, Brittany, Cornwall, Galicia etc.
-this may be a result of locally born full-time residents, who possibly are native speakers of some 'Celtic' language [but who may have lost contact to such 'Celtic' music that exists in the field recordings, i.e., it is not 'their' music]
-their music is something that follow the mainstream fashions broadcasted by radio stations, cable and other TV channels, videos, and which are promoted by media
-the majority of local people may be much more familiar with synthesizers, looped dance pop rhythmic patterns and electric guitars than with bagpipes, harps or sean-nós singing

Chapman 1998, 29-30 (with some additions by the author in square brackets)

It may well be that the representatives of the sphere one reflect only a minority interest in today's world. It is not minority in the ethnic sense of the word, but in numbers. Chapman says that in this kind of case a' local identity' is kept alive by some enthusiasts [which may include both insiders or outsiders of that particular culture], but their concept of 'local music' is either more or less disliked by local people, or they simply know nothing or very little about it. (ibid., 31). Direct contacts to their own tradition [of the past] may have got broken, and the result is that their past is an alien culture to them. Chapman points out that there is often a great gulf between the real representatives of an 'ethnicity' [the men and women of the street], and the self-conscious and enthusiastic exponents of the same 'ethnicity' [members of urban bourgeoisie, scholars, etc.].

In order to be able to define one's identity, or roots, one needs to discuss the meanings of 'self' and 'other' to oneself. In the case of music music, one could try to define the music of one's 'self' and reasons for that choice, as well as ask what music is music of 'others', or 'other' music, and why. Who, then, can be counted as belonging to the group of people representing 'self', and who to group representing 'other'. It is reasonable to ask, why the Western Classic-Romantic art music is generally regarded as belonging to the first category ('self'), in spite of the fact that it timewise, historically, culturally and contextually belongs to a different world than that of the present. That music, in its heyday, was music of a small minority of people, socio-culturally thinking. It was mostly the music of the social elite, part of the 'tip of an iceberg', referred to by Nino Pirrotta [meaning the amount written music in relation to all music that has existed in the history of Western music] (Pirrotta 1984). One may suggest that here we have music of the 'other' attempted to be converted to music of the 'self'. It is not only representatives of Western Classical music, who may think and act like that, but there are similarities in the worlds of jazz, folk and popular music as well. Taking Finnish folk music and its history as an

example, one can read in 18th century documents about 'destructive and degenerating effects of the violin to [Eastern Finnish] kantele music tradition'. In the following century the introduction of accordion to Finland was considered by many as a destructive factor to the violin tradition. Accordingly, in the 20th century accordion had gained a profound place in Finnish folk and dance music, and it was an inseparable part of Finnish film soundtracks in the 1940s and 1950s. In recent years there has been an increasing fear that the accordion will be taken over in dance bands by digital synthesizers.

In human cultures there has always been a more or less steady and continuous process of change in fashions and influences. Phenomena that we today regard as being an essential part of our tradition [as a part of the 'self'] have once been new fashions. Fashions that may have been rejected and criticized by people of former times. A living tradition is never static, even if there are differences how cultures react to innovations. Some find new innovations interesting, some regard them as threats. Irish composer and musicologist Micheal O'Suilleabhain (O'Suilleabhain 1996, 16-18) has emphasised that all the 'young heads' become 'old heads', and all the 'old heads' have once been young. Therefore all musical discourse is, principally, tied to one moment only, and if we do not notice that we may easily go astray. [32]

When a person has his or her aesthetical preferences closely tied to certain kind of music, it is not question merely of the sonics but of the whole world where his favourite music is connected. 'World' can here be understood in multitude of ways. It can stand for a certain time era [the eighteenth century, the 1950s,...], time and place (Florence of the Renaissance era, Berlin of 1920s), social and cultural surroundings in time and place (Hungarian peasant village of the late nineteenth century), and so on. Music, therefore, means and contains a lot more than merely musical products. In order to reward the expectations connected to aesthetical preferences, ingredients of musical performances must stay within certain limits. This concerns instrumentation, movements, gestures, clothing and even the sex of the performers, to name but a few. If there are too many deviations from what is expected, the musical performance can be experienced as insulting. A crucial question in any culture is, where lies the maximum permitted amount of change in musical expression, after which something is regarded as insulting, in other words as 'bad', 'disgusting', or 'degenerating'.

Michael O'Suilleabhain takes an American-Irish fiddler Eileen Ivers as an example of a person, who is deeply rooted in [the Irish folk music] tradition and knows so much about it that is able to change it. Her new ideas of Irish traditional music have sometimes been regarded as mocking the 'real tradition'. Eileen is compared to Michael Coleman [an eminent fiddler from the early 20th century] by O'Suilleabhain. For many 'traditionalists' in Ireland Coleman is the nearest equivalent to God, and for them it is difficult, even impossible, to accept that somebody else could be as good or even better, especially if that somebody happens to be a young person of our own age and a woman, for all that.

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32 O'Suilleabhain's remarks about 'old heads' and 'young heads' refer to complaints, presented to him, about his TV-series 'River of Sound'. Some people had complained that the series featured too few 'old beards', that is the old style traditional musicians.

Simultaneously it is completely forgotten that Coleman has also been young once, and has renewed and recreated traditional Irish music. Harking back to 'good old times', and attempts to store it in vacuum, is against principles of any living tradition. Living tradition relies on human creativity and communication. It is part of human nature that, at least to certain extent, there is opposition against changes. One does not need to like changes, but one could accept the fact that changes can happen, for example, in forms of new musical and cultural influences. To quote O'Suilleabhain:

> '... you can plough the field with a horse or with a $ 50 000 tractor, but in both cases you plough the field.'
>
> O'Suilleabhain (1996, 17)

It is of utmost importance to record, documentate and research tradition(s), but it is impossible to go into tradition bearer's head.

Throughout the Western history the Celtic areas, however defined, have been in close contacts with mainstream European events. There is a lot of evidence, for example from Wales, which tell about Continental cultural influences and their adoption. [33] At the same time, however, the Celts have always had, and retain, an aura of mystery on them. This paradox has been strongly evident since the nineteenth-century Romanticism and is, perhaps even more, in today's post-modern world of 'New Age', which, albeit indirectly, owes a lot to the 'Celtic Twilight'. We seem to be fond of celebrating the Celtic world we feel should exist. We also seem to be fond of creating that kind of Celtic world we feel should have existed.

Taking something from the past and making it part of contemporary tradition with contemporary means (instruments, orchestration principles, musical aesthetics and performance practices, using strong vibrato in singing, building instruments such as the late 19th century clarsach which, in form, reminded something of distant and mythical past but in fact was designed on the ideals of Romanticism) is primarily not a creative process but re-evaluative process, as suggested by Chapman. (Chapman 1998, 41). It is a re-evaluation of 'peripheral' features in the 'centre'. The 'centre' could be understood as person-bound ('we', 'I', 'a group of scholars/musicians where members can individually be named'), timewise ('now', 'then', 'contemporary to...') or geographically ('London', 'Paris', 'New York'). The same can be said about the periphery ('then',' in distant past somewhere', 'ancient piece played by some mystical bard', 'in a place and time and by someone that can not be precisely located', 'somewhere outside Europe or America', 'in rural areas of Africa', etc.). A good example, given by Chapman, goes the following way:

> 'If you are an aesthetically minded nineteenth century Edindurgh lady, you can play the Celtic harp [=the clarsach] in your Georgian drawing room, and expect to elicit admiration and nostalgia for the misty and fugitive beauties of this forgotten tradition, and for your own sensitivity in recapturing it. The trick does not work, however, if outside on the street every peddler and roughneck has a 'Celtic' harp, which he habitually

33 See Page 1987 , or Jarman & Hughes 1997, or chapter four of this study.

> uses to accompany the latest bawdy songs. Conditions in Edinburgh in the late nineteenth century were kind, in this sense, to the revivers of the harp.'
>
> Chapman 1998, 41-42

Chapman notes that those in the 'centre' who carry out re-evaluation benefit from it, and that is the motivation for the whole thing. (ibid., 41). They acquire some feature, which is dying out in the 'periphery', or already dead but now dug out in new clothes and fashion. The process needs distance between centre and periphery, but it does not necessarily have to be centuries in time, thousands of miles geographically, or due to 'exotic' and 'non-exotic' groups of people. In early decades of the 20th century the five-string kantele tradition in Finland got out of fashion and nearly died out, partly due to modern concert kantele and the written arrangements and compositions made for it. The tradition was revived only as late as in the 1970s, through efforts of similar people as mentioned earlier in connection of Chapman's sphere one.

Chapman (ibid., 41) calls Romanticism as process from centre to periphery. I suggest that it can be the other way round as well. Many members of the 16th century Anglo-Welsh and Welsh gentry (representing 'periphery' in relation to London) took the Tudor Court in London (representing 'centre') as their source of inspiration and tried to benefit as much as they could by adopting the latest fashions in music, other arts, speech, language, trickery and so on. In Wales, where people of the gentry represented 'centre', their distance to what they regarded as 'periphery' (e.g. Welsh-speaking representatives of cerdd dant and cerdd dafod) got wider and wider. The 'self/other'-dichotomy works in at least two ways. You may feel representing 'other' one time, but after conscious efforts, hard work, intrigues, good relationships to right ones in 'self'-category you can become one representing 'self'. A good example of this is the present-day system of Welsh eisteddfod. The ideals and aesthetics of the present-day Welsh 'eisteddfod' are based and modelled upon re-evaluative work carried out by some late 18th century Welshmen, who resided not in Wales but in London. Thus the distance between 'centre' and 'periphery' existed already then; in time, in geography as well as in people. Today very few people in Wales seem to pay any difference that at original eisteddfodau [such as those held in Caerwys in the sixteenth century] there were neither pedal harps, nor mixed choirs singing in Western Classical harmony. Both have been in the course of time made as self-contained features of Welsh national identity, which should not be missing from any national event, such as an eisteddfod, whereas medieval Welsh harp music played on medieval harps may. So the Welsh eisteddfod has a very strong flavour of 'self' within the minds of the people, while its content and features, compared to the originals, are evidently 'other'. One should, however, remember that the dichotomy 'self/other' (or 'centre/periphery') should never be taken as something that remains stagnant, or as something that exists only between nations or large ethnic groups.

3 THE ROBERT AP HUW MANUSCRIPT

3.1 General

The Catalogue of Additions to the Manuscripts in the British Museum in the year MDCCCXLI - MDCCCXLV contains the following description:

> Musica neu Berroriaeth, the Music of the Britons, as settled by a Congress, or meeting of masters of music, by order of Gryffyd ap Cynan, Prince of Wales, about A.D. 1100; transcribed by Robert ap Huw of Bodwigan, Anglesea; temp. Car. I., from the original, by William Penllyn, a harper who lived in the reign of Henry VIII. Prefixed to, and at the end of the volume, in the handwriting of Lewis Morris, are various extracts from MSS. on the subject of Welsh music; with a copy of the Commission of Queen Elizabeth to the Counsel of Wales, for the admission of the competent persons to be minstrels, dat. 23 Oct., 1567, and a drawing of the silver harp at Mostyn, in 1748, bestowed on the chief harper. Small folio. [14,905] [34]

The introductory text presented above belongs to the manuscript, today officially titled as Lbl. Add. MS 14905, better known as the 'Robert ap Huw manuscript' among musicologists. [35] The catalogue text implies that it contains music based on decisions of a congress of master musicians under the order of prince of Wales, Gruffudd ap Cynan, c. AD 1100. Paleographically the Robert ap Huw manuscript consists of two layers of writing. On one hand it contains material compiled by Robert ap Huw at the turn of the seventeenth century. On the other, it consists of texts copied from various sources by brothers Lewis (1701-1765) and Richard Morris (1703 - 1779) during the early and mid eighteenth century. These two layers can be distinguished by different styles in handwriting and by the types of paper used. Lewis Morris had gained ownership of the manuscript in late 1720s (Rees & Harper 1999a, 54), and one can read from the first folio [i] that in 1742 it still belonged to him. After the

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34 'The Robert ap Huw Manuscript'; facsimile(editor Wyn Thomas, 1986); introduction. The King referred to in line four ('Car.I') should actually be James I. (Sally Harper, private discussion).

35 Older catalogue number was B M Add. MS 14 905

death of Lewis Morris the manuscript was first owned by Richard Morris, and later by the London Welsh School. In 1844 the manuscript ended up in the collections of the British Museum (later British Library) and got its first catalogue number BM Add. MS 14905. Palaeographical research on this manuscript has been carried out, among others, by Henry Lewis (Lewis 1936), Claire Polin (Polin 1979), and most recently by Stephen Rees and Sally Harper (Rees & Harper 1999).

Henry Lewis, the curator of the National Museum of Wales in the 1930s, was the editor of the first facsimile version of the Robert ap Huw manuscript. In his preface to that edition he gives a lot of interesting information, which, to great extent, has been ignored by later researchers. According to Lewis, the manuscript was presented in 1844 to the British Museum by the Governors of the Welsh School in London, and thus entered to the manuscript collections of that museum. Lewis gives the credits from the texts of the title page ('Musica neu Beroriaeth...') to Lewis Morris, and the authorship of Robert ap Huw extends from page 15 to page 112 of the manuscript. Interestingly, nothing is stated in this portion concerning the antiquity of the music, with the exception of the note at the foot of p.19 (at the end of 'Gosteg yr Halen', where references are made to the court of king Arthur). [36] Henry Lewis pays attention to a note made by Lewis Morris (at the foot of p.22 of the manuscript), concerning the Penllyn portion of the manuscript 'This is in Mr. Meyrick's Manuscript' (pp. 23-34 of the manuscript, see the index below). Henry Lewis thinks that this 'Mr. Meyrick' was possibly one Owen Meyrick of Bodorgan, to whom Lewis Morris sent a long letter titled 'On the Cambro British Musick' on 30.12.1738. This letter contains a reference to William Penllyn's graduation at the 1568 Caerwys eisteddfod.

Other contributions by the two Morris brothers, but primarily by Lewis, to the manuscript contain some explanatory and theoretical material. There are also fragmentary quotations from various Welsh manuscripts (some of them referred to as the 'Bardic Grammars', or 'Grammars'), a copy of part of the '"Statute of Gruffudd ap Cynan"', a copy of a Royal Proclamation, and some observations and suggestions on playing techniques, harp strings and the crwth. On the manuscript's title page we find the name of Robert ap Huw for the first time. The title, 'Musica Neu Beroriaeth' has been given by Lewis Morris, and the following text is also by him:

MUSICA NEU BERORIAETH

> The following manuscript is the Musick of the Britains, as settled by a Congress, or Meeting of Masters of Music, by order of Gruffudd ap Cynan, Prince of Wales, about A.D. 1100. with some of the most antient Pieces of the Britains. Supposed to have been handed down to us from the British Druids. In Two Parts, (i.e. Bass & Treble) for the Harp. This

36 According to the note at the bottom of page 19 of the Robert ap Huw manuscript, 'Gosteg yr Halen' was played when the salt tray ('halen' = 'salt') was brought to the table at King Arthur's court. This kind of statement most obviously belongs to the attempts to invoke ancient authorities for help to raise the status of 'old style' music and poetry. One should also note that there was a big Arthurian revival in late 15th-century Wales, and many hopes were set on Henry Tudor's (Henry VII) ascendance to the throne.

> Manuscript was wrote by Robert ap Huw, of Bodwigen in Anglesey, in Charles the 1st´s time, some part of it is Copied then, out of Wm Penllyn´s Book. [37]

On the following pages (folio 6r and 6v) the musical contents of the manuscript is given, again in the handwriting of Lewis Morris:

As can be noticed from the index, pages 9 – 14 are missing. The first piece of music ("Gosteg Dafydd Athro") is on page 15, and the page preceding it is number 8. Rees and Harper suggest that pages 9 – 14 were missing already at the time when the numbering of the contents page was made, since there seems to be nothing missing from the beginning of the tablature. (Rees & Harper 1999a, 57). It may be worth mentioning here that the titles of the pieces, as written by Lewis Morris, differ to some extent from those written by Robert ap Huw. As we notice later, the spellings of the pieces, musical terms, etc. vary considerably in different manuscript sources. This may indicate that medieval and renaissance Welsh, as it was used in 'cerdd dant' and 'cerdd dafod', was

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37 The name of the King should be James I (or Siams, in Welsh. It is, however, possible that Robert ap Huw served two monarchs as a court musician, as suggested by Claire Polin (Polin 1982). Robert's role as a court musician has been doubted, since the documentary evidence for it is somewhat ambiguous. See e.g. Wyn Wiliam 1974 and Ellis 1973.

and renaissance Welsh, as it was used in 'cerdd dant' and 'cerdd dafod', was primarily a spoken language, and not a written. As referred to earlier, the bardic poetry was first and foremostly art for the ear, not for the eye.

On the front of folio 6 of the Robert ap Huw manuscript Lewis Morris has written vertically, next to the list of pieces, the following:

> *'Mae hofyd o du dalon (23) i (34) y Klymau Kydgerdd, ar y pedwar mesur ar hugain; gwedi eu prikis allan o Llyfr Wiliam Penllyn. ---------- see p. 22. '*
>
> ['On pages 23 - 34 Klymau Kydgerdd –has been included in 24 measures, copied from William Penllyn's book. ———— — see p. 22']

On the same folio another reference to the mesurau is given:

> *'Y Pedwar mesur ar hugain. p.32'*
>
> [Twenty-four measures. P.32]

On the back of the index folio Lewis Morris has written the following:

3.2 The musical contents of the manuscript

The core of the manuscript is its musical contents, compiled by Robert ap Huw (c. 1580 – c. 1665), a harpist and poet from the farm of Bodwigan (Isle of Anglesey). [38] It is not known whether Robert ap Huw copied his parts of the musical contents of the manuscript from other written sources, or whether, and if so, in what extent, he attempted to transcribe musical performances or compositions as he had [orally] adopted them. In addition to music the manuscript contains instructions on playing techniques (page 35 of the ms), tunings (pages 108-109), a list of 24 mesurau of string music (page 107) and lists of pieces with their tunings/keys (pages 102-104). The majority of the pieces listed on pages 102-104 are not included in the musical corpus of the Robert ap Huw manuscript.

The Robert ap Huw manuscript has puzzled scholars and musicians the world over for more than two centuries. It has been studied from very different

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38 Pages 23-34 of the manuscript were allegedly copied by Robert ap Huw from 'William Penllyn's Book'. Penllyn (flourished 1550-1570?) has been regarded as Robert ap Huw's teacher in bardic arts by Claire Polin (Polin 1982), which seems rather strange if Robert himself was born as late as c. 1580. Penllyn was nominated as 'pencerdd' at the second Caerwys eisteddfodd in 1567/1568 (Lewis 1936; Thomas 1968).

access points and methods. Some have considered the manuscript as being a source of very ancient material. This misconception may stem from the introductory text by Lewis Morris on the title page of the manuscript, which states that the music is '...supposed to have been handed down to us from the British Druids.' The original musical corpus of the manuscript stems mostly from the fourteenth and the fifteenth centuries, belonging to the time of oral and memory-based transmission. (Crossley-Holland 1998). The most obvious year for the manuscript's compilation has generally been regarded to be the year 1613. [39] The need to write down an orally transmitted repertory of string music known to have been in decline from at least the end of the fifteenth century may have been a strong factor for the compilation (Harper 1999a, 130).

The manuscript contains music (thirty-two items in all) in different compositional genres for the harp in a unique tablature notation (see figure 8). The compositional genres represented in the manuscript are 'caniadau' (the largest selection with 15 examples), 'gostegion' (four), 'clymmau cytgerdd' (three sets), profiadau' (eight) together with two 'ceinciau' and one 'pwnc'. [40] Several attempts to transcribe the tablature into modern staff notation have resulted in various versions, more or less different from one another. A great disadvantage in these transcriptions, mostly ignored by the transcribers, is that they represent a literal translation of the second hand, at least, from a musical tradition originally transmitted orally; a tradition where the first (if not the second, or even later) layer of literal translation was done by Robert ap Huw himself. When one is forced to use only written documents as the primary sources of information in the research of early music, the processes of coding and decoding the material, together with the results, are of a very subjective nature and unfortunately cannot be confirmed by original informants. Ambivalence and controversiality of early written musical treatises causes further difficulties in getting reliable results.

What about Robert ap Huw himself, as a man and musician then? Was he indeed a harper to James I, as suggested by Dafyd Wyn Wiliam (Wiliam 1974). Some lines in Huw Machno's poem also refer to that. (Harper 1999b, 330). If Robert was a court musician, to what extent had he adopted the schemata of written court music and to what extent may it have had its effect on his transcription attempts? Or whether they [transcriptions] were copies from other manuscripts? In that case we need to discuss the role of possible pre-Robert compilers. Somewhere in the beginning of the written information-chain must have been either one man, or a group of people, who made the first attempts to write down their versions of orally transmitted cerdd dant music. One may try to guess which particles of a musical composition/performance were then considered as most important, and which less. One may also try to guess to what extent this system had changed until the time of Robert ap Huw, not to mention the contents of the music. Did the sporadic fencing (e.g. on page 56 of the manuscript) derive from the French lute tablature system that was used in

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39 This assumption is largely based on the contents of page 69 of the manuscript, where 1613 written between the end of 'Caniad Tro Tant' and the beginning of 'Caniad San Silin'. Whether this denotes the year of the manuscript's compilation, is a matter of debate.

40 More about analysis and interpretations of compositional genres in e.g. Greenhill 1998, Harper 1999a and Toivanen 1997, and in chapter six of the present work.

English lute music of the time, obviously familiar to Robert if he was a court musician? And what about the use of triangular mensural-like notation on page 35 of the manuscript; was it adopted from part books of Renaissance consort and vocal music? The non-systematic use of both in the Robert ap Huw manuscript apparently shows, I dare to suggest, difficulties in trying to explain oral music culture's phenomena in the written.

Osian Ellis, one of the Robert ap Huw scholars, has not found any reference to Robert ap Huw's position as a court musician in the Public Record Office, or in the Calendar of State Papers. Many other musicians at the time of James I are mentioned, among them an Irishman Cormack McDermott [one of whose pavans was the musical basis for William Lawes's 'Harp Consort in D']. Neither is Robert ap Huw's name to be found in a list of musicians who took part in the Royal Masques in the beginning of the 17th century. Ellis concludes that either Robert did not receive payment directly from the Royal officers (suggesting that he might have been only an assisting harper and performed only as a substitute musician, thus getting paid unofficially from the permanent harpers), or that he did not get any payment at all, only the silver arms to place on his harp. Besides, his time at the service of the King may have been brief. (Ellis 1973, 80-81).

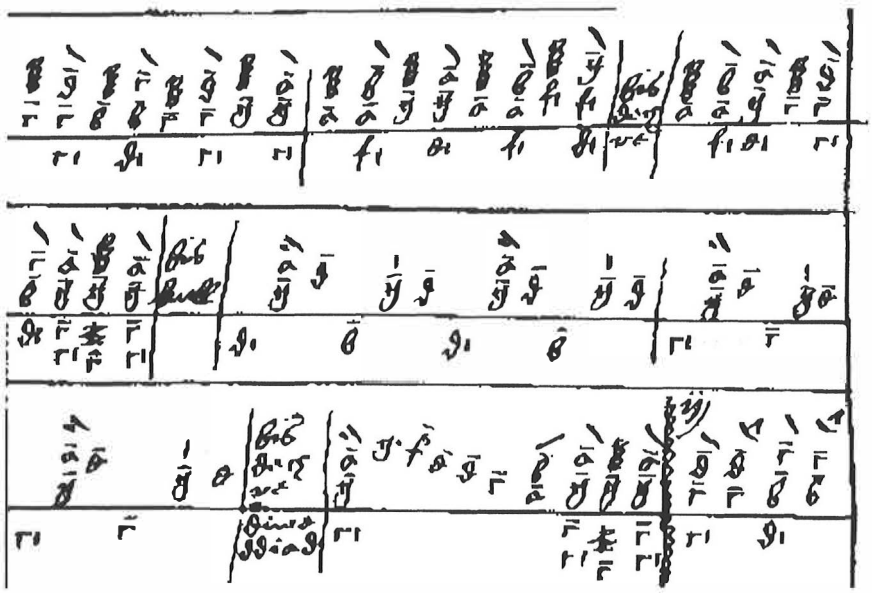

FIGURE 8 Opening of "Caniad San Silin" (the Robert ap Huw manuscript, p. 69). The first *cainc* of the piece, followed by the opening of the *diwedd* (an 'ending', which is to be repeated after each cainc) are presented. The continuous horizontal line separates 'upper' and 'lower' hands. Lines, points and numbers stand for registers, letters for strings and the rest of the marks (such as the skewed lines) indicate different playing techniques.

Figure nine is an attempt to present the Robert ap Huw manuscript in a cultural environment connected both to cerdd dant and cerdd dafod. On the left side of the figure a time line is shown, starting roughly from the year 1150. Around

that time Gerald of Wales wrote his 'Deskriptio Kambriae' and 'Itinerarium Kambriae', both of which contain descriptions about music and music making practices in the twelfth-century Wales. Other names presented in the figure are the famous poet of medieval Wales, Dafydd ap Gwilym, and some distinguished harpers whose material is included in the Robert ap Huw manuscript. By the earliest of them, Gruffudd ab Adda ap Dafydd, only a short 'cainc' has survived. By the other three contributors more music has been included in the manuscript. At the end of the time line we come to the Robert ap Huw manuscript. The other manuscript sources, containing information about 'cerdd dant' [titled 'Grammars'] are placed to the upper right corner of the figure.

If Robert was primarily more rooted in the bardic arts than English court music, what was his way of learning cerdd dant? If he studied under William Penllyn, how did this pencerdd teach Robert? With the help of the written (with musical objects), or orally (musical processes)? The overall picture of Robert ap Huw as a musician is rather vague. A suggestion by Osian Ellis (Ellis 1977, 79) that he undoubtedly was the last one to play the ancient harp music of medieval times may not necessarily be true.

Some of the pieces in the manuscript give an impression that Robert was rather imprecise in copying, but, on the other hand, the previous compilers might have made a lot of mistakes as well, if we assume that Robert mainly copied the earlier transcriptions as they were. If not, then Robert did not fully understand the music and tradition he was trying to preserve (mis-copying, lines which divide sections are very irregular etc.). It is possible that Robert may have tried to correct some mistakes or misconceptions of his own, or of his earlier colleagues. Such locations in the manuscript are, for example, the lower hand part in 30.3.25-27, or column 40.3.18. Perhaps the most apparent example of correction attempts is in connection with 'Profiad chwith Ifan ap y Gof (after 61.1.), where someone (possibly Robert himself) has first written the word 'terfyn' ('the end') after a thematic sequence which, either similarly or slightly varied, finishes all the other 'profiadau' in the manuscript. Robert has then struck over the word 'terfyn', and changed the end of the piece to the end of 61.4. This matter is discussed in more detail in chapter six of this work.

Peter Crossley-Holland has mentioned (in Crossley-Holland 1942, 156) about the Robert ap Huw manuscript that '... it [the manuscript] is evidently the work of a school with a considerable tradition behind it'. I agree completely with that. It is one of the main goals of this work to get closer to that tradition, and how it was taught, adopted and passed on. Therefore I prefer to see the Robert ap Huw manuscript, when placed on an imaginary timeline, as the zero-point in a journey backwards in time; to the time of the flourishing oral tradition of cerdd dant.

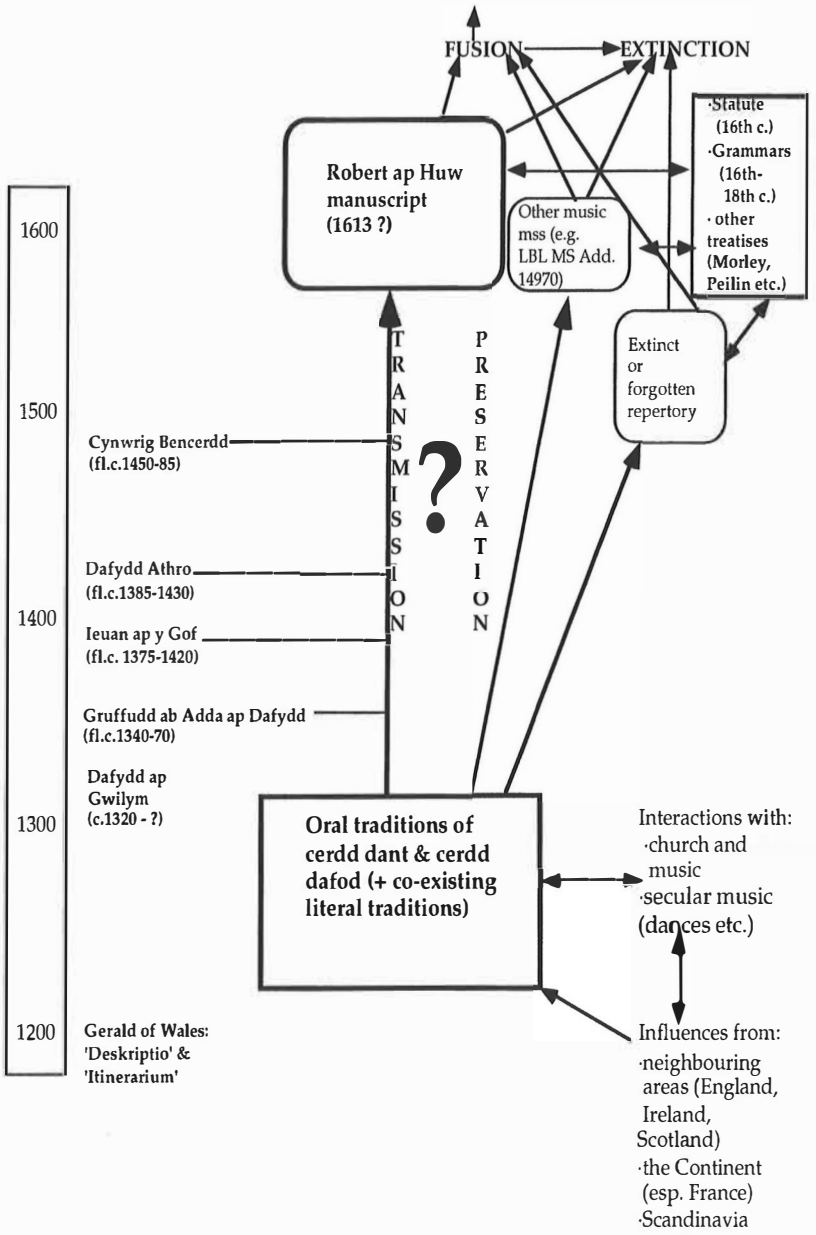

FIGURE 9 The music culture of medieval Welsh cerdd dant and the position of the Robert ap Huw manuscript, presented as the fields of study. The dates of both Ieuan ap y Gof and Dafydd Athro are based on Crossley-Holland 1998. Dafydd Wyn Wiliam has, in his recent study (Wiliam 2000), set both composers to the latter half of the fifteenth century.

3.3 Previous studies on the Robert ap Huw manuscript

In the following I shall briefly discuss some of the scholarly work, done so far on the manuscript. First there is a short summary of works written before the twentieth century, followed by a more detailed survey of articles by Arnold Dolmetsch; a man, who laid the foundations for modern Robert ap Huw studies. The main reason for choosing Dolmetsch to be discussed here is his enthusiastic and re-evaluative vantage point (see chapters 2.12. and 2.13. of this work) to the manuscript. Such research paradigm has influenced many later scholarly works as well. Most of the recent studies on the manuscript are only briefly referred to in this chapter, since I have found more relevant to discuss and comment on several occasions later in this work. Both Welsh and non-Welsh scholars have studied the manuscript in the twentieth-century, and nearly all contributions, with the exception of those by Robert Dowd (1950) and André Schaefer (1973), are discussed on various occasions throughout this study. The reason for leaving out both Dowd and Schaeffer is that in spite of several attempts I was not able to get their works at my disposal.

3.3.1 Studies before the twentieth century

The first scholarly references to the Robert ap Huw manuscript derive from the 18th century. In addition to the two Morris brothers, we have names, such as John Jones, Mr Parry [obviously the famous 'John Parry Ddall, the blind triple harpist and author of the 'Antient British Music' from 1742] and Charles Burney, all of whom had hopes to be able to decipher the manuscript's contents. They found considerable difficulties, for example in establishing rhythmic values or in identifying the tunings. (Rees & Harper 1999, 59-61). The common goal was then, as has been until recently, the attemption to present the music in contemporary notation. Ree;s & Harper regard Charles Burney (1726-1814) as 'perhaps the most notable scholar' of the manuscript during the eighteenth century. (Rees & Harper 1999, 61). Although Burney studied the manuscript on several occasions, and presumably very intensively, he had to admit his defeat. Arnold Dolmetsch, later, rather harshly criticized the work of Burney. According to Dolmetsch, Burney was 'a narrow-minded pedant, full of conceit, incapable of genuine criticism'; a prototype of a line of musical writers not yet extinct. (Dolmetsch 1934, 8-9). Such rather cynical commentary by Dolmetsch, concerning attempts to solve the tablature's mystery, previous to him, was not untypical of him, as we may see later.

Whatever we may think of Burney's and his contemporaries' conclusions, it is noteworthy that the study of the Robert ap Huw manuscript in those days was, in many ways, collaborative. Richard Morris was in the habit of loaning the manuscript to people whom he felt might have had a better understanding of its contents than he himself. (Rees & Harper 1999, 62). It is partly sad to notice that the collaborative work on the manuscript ceased for quite a long time, and was actually revived only as late as in 1995, when an interdisciplinary symposium on the Robert ap Huw manuscript was held in Bangor. This study can be seen as a continuum of that symposium.

During the 19th century there was no less interest in the Robert ap Huw manuscript. Antiquarian Edward Williams, better known as Iolo Morganwg (1747-1826), was fascinated by the tablature and maintained that he could decipher its notation. Iolo copied [or created] the other existing example of similar harp tablature, included in the Lbl MS Add.14970. (Rees & Harper 1999, 63-65; Whittaker 1999). According to Henry Lewis (Lewis 1936), the music pages in that manuscript may derive from a manuscript of a Rice Jones of Blaenau, Llanfachraeth, Merionethshire (born 1713, died 1801). Lewis claims that Iolo was a copyist, and that the manuscript in question may have been one of the many old manuscripts in Jones's possession.

To other nineteenth-century researchers belonged also a Welsh [?] violinist Barthelemon (in the early 1800's), who according to Arnold Dolmetsch 'followed Burney's 'false track' of lute tablatures...claimed to have deciphered the whole music; after his death (1808) all his manuscripts were dispersed, or destroyed, and 'posterity lost nothing' (Dolmetsch 1934, 8-9). A mention should be made of John Thomas, 'Pencerdd Gwalia' (1826-1913); a renowned Welsh harpist, who played the pedal harp and not the 'delyn deires' (the triple harp), an instrument more typical to the Welsh culture. He worked on the Robert ap Huw manuscript around 1869, and suggested that the music in the manuscript was made for crwth and not for the harp .Most of Thomas's conclusions and writings dealing with the subject [among others an article about the 'ancient notation of the Britons'] are to be found in the M.A.W. That book also contains the printed version of the Robert ap Huw manuscript as well as that of the Iolo Morgannwg manuscript. The order of the pieces in the M.A.W is, to some extent, different to that of the original manuscript (the clymmau cytgerdd portion, i.e. pieces copied from the Penllyn manuscript, is presented first).

3.3.2 Arnold Dolmetsch

Arnold Dolmetsch (1858-1940) was one the first, and probably the most influential, Renaissance revivalists in Britain during the first half of the 20th century, and his name and work are still highly appreciated [there is a society named after him, which organises early music courses]. A French- born, a distinguished and contradictory personality, who, in spite of his enthusiasm for the musics of the Renaissance and the Middle Ages, was Romantic in mind. Sometimes named as the founding father of the 'cult of authenticity', he was one of those figures in the history of music who had a great influence on later generations of music scholars and performers, especially in Britain. Yet he was an isolated figure in relation to the general musical life of his own time. Many of his ideas were not so well received or shared by his contemporaries, and many professional musicians of his day by and large wrote Dolmetsch, off as a rustic crank. Also his, and his family's, level of performance was ranked as low. It is no wonder that, as his life went on, he adopted more and more the embattled and embittered tone of 'a voice crying in the wilderness.' (Mayer Brown 1988, 39-42; Taruskin 1988, 198-200). In his attempts to re-create the past [or several 'pasts'] he often got carried away into a world of fantasies and beliefs.

Dolmetsch's studies on the Robert ap Huw manuscript date to the 1930s, to the time when his 'bitterness' to the 'musical mainstream' was not yet so

evident in his writings, although [this is my personal impression] some seeds were already planted. The studies on medieval Welsh harp music by Dolmetsch included articles and transcriptions. The earliest of them, entitled 'Concerning my recent discoveries' [published in 1934 in his own periodical 'The Consort'], embraced his ideas and conclusions on various musics, as well as that of the Robert ap Huw manuscript. He first mentions the manuscript's 'centuries old perpendicular harmony [being] of the most complex kind' before going on to its history. Dolmetsch apparently believed the music of being of ancient origin. His view of the 'nature of music' led to suggestion that it cannot have originated later than the eighth century, and he considers the pieces being 'perfect in substance and form' and not as results of 'spontaneous invention'. (Dolmetsch 1934, 7-11). Assumingly Dolmetsch had no doubts of his own abilities as a saviour of the old Welsh harp music.

As a general comment on Dolmetsch's first contribution to the Robert ap Huw scholarship, one cannot help noticing that all his analysis work is done in the terms and limits of tonal Western music, and following the paradigm of literacy. He had a complete trust that everything contained in the manuscript is faultless (e.g., 'chords of the sixth' considered as one of the characteristics of 'Bardic Harmony'). He did not question the origins of the Robert ap Huw manuscript, or processes, which may have left to its compilation. Dolmetsch does not say anything about possible oral transmission of music, but has a complete trust in the correctness of written information per se. He made many profound mistakes; his scales/tunings, for example, were wrongly conceived, as has been shown by later Robert ap Huw scholars.[41]

The second contribution by Dolmetsch, entitled 'Ancient Welsh Music' (published in 1937), is essentially no different to its predecessor. The flowery speech, one of his trademarks, is there again, possibly in even more self-conscious and self-oriented form, as if complaining the lack of appreciation and respect that Dolmetsch was expecting from his contemporaries. The trust in the written is as evident as before, and may partially have been the reason for many of Dolmetsch's misconceptions. One of those is misunderstanding Wiliam Penllyn's role. (Dolmetsch 1937a, 115 and 117). Penllyn did not copy the whole musical corpus of the manuscript, but allegedly only a portion of it [the clymmau cytgerdd-sets]. Neither was Penllyn responsible for the text on the title page about the congress of bards to the order of Gruffudd ap Cynan in about 1100. This misconception may be one of the reasons why the third contribution by Dolmetsch, published also in 1937, was entitled 'Translations from the Penllyn Manuscript of Ancient Harp Music' (Dolmetsch 1937b).

His own role, in relation to the manuscript, Dolmetsch regarded as someone who has 'brought light into this darkness'. He writes:

> '...when I saw the Welsh Tablature it did not frighten me. In fact, I had the immediate intuition of some of the beauties hidden in it... the deciphering of the tablature was an easy thing for me; I was well prepared for it by my *intuition* and my long experience. The absolute faith I had in the beauty of the music guided me all through the work...'
>
> (Dolmetsch 1937a, 116-117, his italics)

41 See, for example, Whittaker 1974c or Evans 1999.

It is evident that Dolmetsch, as a civilized man, had read a lot about the cultures of Antique Greece and other old civilisations, and, as a Romantic in spirit, he wanted to link the bardic arts, its concepts and philosophy, to them. He had no doubts about the antiquity of the manuscript, and regarded the notation as an inseparable of the instrument it was meant for [a very good point]. Some of his sayings, concerning the antiquity of the manuscript, sound enthusiastic, even passionate:

> 'The only source of knowledge of the polyphonic music of the pre-Christian civilizations is through our priceless Welsh MS [=manuscript].'
>
> (Dolmetsch 1937a, 118)
>
> '...some day people will make pilgrimages [to the British Museum, where the original manuscript was kept at the time] to look at it'.
>
> (ibid., 124-125)[42]

For Dolmetsch, Robert ap Huw was possibly the "last exponent of the glorious Welsh music" (ibid., 119. According to Dolmetsch, there had been too much English influence in Welsh musical and cultural life since the seventeenth century, resulting with Wales being nearly as "any English province" musically. Dolmetsch had an anxiety to re-create the music of the past. It was the 'red thread' throughout his works, and Dolmetsch saw himself possibly as the new Gruffudd ap Cynan, the saviour of ancient tradition.

One of the paradoxes in Dolmetsch's writings concerns his ideas of harmony. He made references to perpendicular [vertical] harmony, and that the Welsh had invented it far earlier than the sixteenth century [the heyday of the Renaissance polyphony]. Dolmetsch considered the rules of harmony in Wales deriving from, at the latest, year 650 AD. On another occasion he wrote '...this harmony existed, we do not know how many thousand of years ago'. Yet he called the two contrasting harmonies as 'tonic and dominant chords in any of their inversions', this time denoting 0 for the tonic and I the dominant (ibid., 120-123). This kind of interpretation is probably due to confusing the mesur conceptions of the crwth with that of the harp (see chapter six for more about them). The concepts of tonic and dominant are neither proper to modal music, but predominantly to functional major-minor harmony. I dare to suggest the kind of harmony, as represented in the Robert ap Huw manuscript, as having existed for a long time in musical performances, whether intentionally or unintentionally. If we acknowledge the innovative character of a musician in any era and culture, harmonic experiments must have taken place as soon as there was an instrument capable of producing several pitches at a time.

A very good remark [regardless whether it is a conclusion or an intuition] by Dolmetsch, concerning the nature of the mesurau, was to name them as:

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42 This prophecy actually became true.

> '...fixed ground, a rhythmic pattern to serve as a base for tunes and variations...every musician knew these measures; two or more instruments or voices could join together and improvise... this is the secret of the improvised part music in Ancient Wales... [on the measure] " a practically unlimited field is open to the flights of imagination of a gifted musician.'
>
> (ibid., 122)

Dolmetsch was convinced that the congress of bards, referred to, for example, in 'Cadwedigaeth Cerdd Dannau', and where these mesurau supposedly had been established and were given their names, took place in 1040, and that the names of the mesurau were of Irish origin. Although Dolmetsch does not mention the source, he is here of similar opinion as Edward Bunting. (ibid., 122-123; Bunting 1809, 19-23).

There are some allusions to the instruments of the Welsh, primarily to the harp and the crwth, in Dolmetsch 1937a. They include notions of the antiquity of harp in various civilizations, about wire and gut strings and the problems concerning the modulations. Dolmetsch, on other occasion, generalized the majority of world's music having been unitonal, including the Eastern and Ancient schools. Dolmetsch calls forth the 'modern' musician and his feeling of discomfort if he must avoid modulations... unitonal music forms an antidote to atonal music (p.121-125). How one should relate to the statements of Dolmetsch here depends, of course, how one defines modulation. The concept of modulation is a culture-bound concept, and has a different meaning and contents in European classical tradition, when compared to Indian or Arabic traditions. In the first it is bound to the rules of vertical harmony, whereas in the latter two it is bound to the rules of the melody, which is horizontal or linear in character. So, if a modern musician feels discomforted, when being forced to avoid modulations in music that is unitonal, then his values are based on modulations he is more familiar with in his own tradition, and may know nothing of other cultures' concepts of modulation. Considering the characteristics of the maqam and/or raga, it is far too simplified to call them unitonal. They just have different conceptual basis than Western majors and minors.[43]

Dolmetsch considered the music of the manuscript as sacred to him. He warns about the sacrilege and blasphemy of piano and orchestral arrangements, which would ruin the spirituality of the music. In this sense he was different to many of his followers in the Robert ap Huw research, who have tried to make reproductions on piano and other keyboards. To quote Dolmetsch:

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43 The system of maqam (lit. 'meeting place') is the foundation of the Near Eastern classical music. In theory there are several hundreds of maqamat (pl.), each one containing extra-musical worlds of association (emotion, ethnic group, area, etc.). The system of raga in Indian classical music has its own doctrine of ethos (the 'rasa'). Both [maqam and raga] are more than merely scales or modes. They dictate the rules of composition and improvisation in their cultures, and are capable to arouse desired affectual worlds among listeners and players, when performed well enough.

'...this music, so scientific in its inception, is actually simple and close to the nature. Its spirituality ... rouses their [=listeners'] emotion to a degree far beyond the powers of ordinary music.'

(Dolmetsch 1937 a, 122-125)

Here Dolmetsch seems to follow in the footsteps of ancient philosophers, such as Confucius and Plato, for whom 'good' music contained crucial and profound conditions for the whole existence of human beings and the Cosmic order. Therefore it may be no wonder that Dolmetsch saw himself as the 'saviour of ancient musical traditions of Wales', very much as the spiritual brother of the compilers of 'Statud Gruffudd ap Cynan' or of the 'Grammars' [although he does not say a word of any of those treatises in any of his own contributions]. In a real sense of the word he is closer to the nineteenth century Romantics and their world-views than to the sixteenth century representatives of cerdd dant, albeit he worries about the state of the Welsh music of the time, and in between the lines admonishes the Welsh of not having preserved 'their own music as did their ancestors'. Dolmetsch regarded himself as a true 'pencerdd', being able to help the 'sacred fire of ancient music' to be lighted again. Taking his relation to the Music Establishment of his time (described by Dolmetsch as 'intolerant modernity' already in 1915) into consideration, his self-boasting can be understood as a kind of provocative criticism against the mainstream.

In his treatises, Dolmetsch did not say a word about the oral nature of cerdd dant, and neither a word about the hierarchical structures and substructures of music, nor a word about how to perform the swnemes. There is nothing about the processes of learning, adoption, perception or transmission in his writings. At the same time one may call him as truly honest man in what he was doing. He wanted intensively to create the antique Celtic music culture after his own ideals, and saw himself in the straight line of the 'pencerddiaid', being able to re-create the 'golden age of Welsh music', as he saw it.

The preface of the third contribution by Dolmetsch, 'Translations from the Penllyn Manuscript of Ancient Harp Music '(Dolmetsch 1937b), offers nothing new to what has been said previously, but it may be worth suggesting here another kind of interpretation to his arguments. This interpretation can be understood as a 'deed of justice' for Dolmetsch and his work on the Robert ap Huw manuscript, although I cannot be certain that my interpretation is the one he actually meant. According to Dolmetsch, the chief characteristics of the Bardic Music were:

1) 'that it is based upon the system of perpendicular harmony developed to the utmost limit of imagination, yet always tempered with logic.'
2) 'that the fundamental chords are eventually modified and elaborated in a multitude of ways.'
3) 'that the form of the pieces, which is often based upon the recurrence of refrains, like very complicated rondos, achieves perfect architectural beauty, to the full satisfaction of the auditor.'

(Dolmetsch 1937b, the preface)

What comes to his first argument, it is not necessarily in contradiction with the hypothesis presented in the introduction of the present work. The system of 'mesurau', as discussed in more detail later, was based on logic of interchangeable variables, already before the attempts of standardisation in the 16th century. There was a logic of variables, which were practised, in a wild array of appearances. Although Dolmetsch does not say a word of oral transmission in connection of medieval Welsh harp music in his studies, one gets impression that he, after all, did have a glimpse beyond the script. The 'fundamental chords' may, in case of Dolmetsch, refer to tonic-dominant harmony, but on the other hand his reference to modification and elaboration may also have something to do with two essential features of orally transmitted music, namely variation and ornamentation. The comment on form, repetition of refrains and 'architectural beauty' is ambiguous. It is evident, as is attempted to be shown in this work, that cerdd dant performances and compositions were based on multilayered and substructurally linked patterns, which included repetition of segments, and that they were known to culturally oriented listeners as well. Whether this is what Dolmetsch actually meant, cannot be confirmed. He, nevertheless, was completely right in saying (Dolmetsch 1937b, preface) that '...ordinary notation is inadequate to give a correct impression of this Music and its special Technique.'

3.3.3 Other twentieth-century contributions

As mentioned earlier, only short presentations and general commentaries to some other works in the Robert ap Huw scholarship are presented here. With the exception of some later contributions by Peter Crossley-Holland and Osian Ellis, all scholarly works discussed here were written between the early 1940s and the early 1970s. Many of these contributions have their biases on certain themes and topics related to the Robert ap Huw manuscript and the music culture it represents, although some works have a more holistic approach as well. Attempts for musical transcription of the tablature [either the whole corpus, or a selection of it] has been a common feature in many of these contributions. Transcriptions, when compared to each other, represent different ways of understanding and interpreting cerdd dant music. There are differences in interpreting tunings, modes, rhythm and playing techniques, to name but a few. As mentioned earlier, it is not my intention to create yet another transcription attempt of the manuscript's musical portion, since it does not serve the purpose of this work, namely getting closer to the cognitive and musical core of cerdd dant, in other words the 'pencerdd's toolkit'. Therefore my comments of the transcriptions made by other contributors should not be taken too rigidly. The few tentative notations of swnemes and swneme stacks, presented in this work, are meant to be taken merely as guidelines.

The scholarly works presented briefly here are the following:

Peter Crossley-Holland: 'Secular Homophonic Music in Wales in the Middle Ages' (1942)
Peter Crossley-Holland: 'The Composers in the Robert ap Huw Manuscript' (1998)

Thurston Dart: 'Robert ap Huw's Manuscript of Welsh Harp Music' (1968)
James Travis: 'Medieval Celtic Harp Music' (1968)
Osian Ellis: 'Welsh Music: History and Fancy' (1973)
Osian Ellis: The Story of the Harp in Wales' (1980/1991)

Several other scholarly works on the Robert ap Huw manuscript, or on related topics, exist, which are not discussed in this chapter. Such contributions include the following:

Paul Whittaker: 'A New Look at the Penllyn Manuscript' (1974a)
Paul Whittaker: 'British Museum Additional Manuscript MS 14905: An Interpretation and Re-examination of the Music and Text' (1974c)
Claire Polin: 'The ap Huw Manuscript' (1982)
Bethan Miles: 'Swyddogaeth a Chelfyddyd y Crythor', 2 vols. (1983)
Peter Greenhill: The Robert ap Huw Manuscript: An Exploration of its Possible Solutions'; Synopsis (1995); Part IV: Technique (1996) and Part V: Metre (1998)

All the studies in the latter group, together with some from the first group of scholarly works, are referred to and discussed frequently throughout this work. The same goes to the proceedings of the 1995 Robert ap Huw Symposium, as well as to some very recent contributions to the Robert ap Huw scholarship.

3.3.3.1 Peter Crossley-Holland

Of all Robert ap Huw scholars, Peter Crossley-Holland (1916-2001) did the longest career on the manuscript research, a career that spanned nearly 60 years. He was also very active in ethnomusicological research. His first article dealing with the Robert ap Huw manuscript, 'Secular Homophonic Music in Wales in the Middle Ages', was published already in 1942. It is an excellent article, far ahead of its time. I find it very stimulating and conclusions and suggestions presented in it still very actual and informative. Crossley-Holland's vantage point [I dare to call it cognitive-ethnomusicological] to the Robert ap Huw manuscript was very avant-gardish in early forties. Even since there have been very few serious attempts to get to the core of the cerdd dant as music culture at the expense of, more or less, misleading transcription attempts. In 1995 Crossley-Holland presented his research on the composers of the Robert ap Huw manuscript, which was published in 1998 as a monograph and as an abridged version in the 'Welsh Music History, vol. 3'. Throughout the present work there are many references, on various occasions, to Crossley-Holland's contributions.

In the very beginning of his 1942 article, Crossley-Holland brings forth a very good point concerning the 'evolutionist' school of musical historians (his concept). He pointed out that '...the lack of evidence in support of a proposition cannot be taken as evidence against it.' (Crossley-Holland 1942, 135). Suffice to say, the same statement, with which I agree, recurred also in his work on the Robert ap Huw composers (Crossley-Holland 1998,).

Crossley-Holland divides the musical traditions in the British Isles and the west of Europe during the Middle Ages (broadly speaking) into the following:

a) Folk music; songs and dances of the people, no demonstrable centre of culture as an art; on surface exclusively melodic in character, frequently having harmonic basis
b) Polyphony: 'Reading rota' given as an example; polyphony was not confined to church music, but existed outside of it as well
c) Minstrelsy; music and poetry of court and home; one of the highest peaks was the troubadour culture of France; alongside there existed also the folk-like minstrelsy represented by jongleurs and the like

(Crossley-Holland 1942, 136)

He sees the musical art of Welsh bards belonging to minstrelsy in larger scale, having essentially been homophonic and separate from polyphony.

Crossley-Holland sees Dolmetsch as having been the first to make serious attempt at understanding and demonstrating some of the pieces, but adds that transcriptions by Dolmetsch are untrustworthy and full of inconsistencies, but perhaps fundamentally on the right lines. He offers his own transcriptions of four of the manuscript pieces, different to those chosen by Dolmetsch. Crossley-Holland's selection of pieces is:

1. 'Cainc Gruffudd ab Adda ab Dafydd'
2. 'Profiad y Botwm' (section I)
3. 'Caniad San Silin' (section IV)
4. 'Caniad Tro tant' (section I)

(ibid.,137-140 and 151-152)

The pieces, with the exception of 'Cainc Gruffudd', are not transcribed as complete, but only some of the sections are notated. One reason for this selection may be that three of them, according to Crossley-Holland, should be in the same key, namely that of 'isgywair' (transl. as 'low key'), one of the 'five main tunings' mentioned in the 'Grammars' ('Cadwedigaeth Cerdd dant', now extant, quoted in Peniarth MSS 62 and 147, and partially by Lewis Morris also in the Robert ap Huw manuscript.)

Crossley-Holland acknowledges the importance of mesurau as fundamentals in medieval Welsh harp music for improvisation, composition and performance (and as musical and cognitive feature). He is the first among the Robert ap Huw scholars to notice about the components of the mesurau that:

> 'it must be understood that cyweirdant and tyniad do not always correspond to the modern conception of tonic and dominant'

(ibid., 141-142)

Crossley-Holland was the first to pay attention to the different ways to write the names and 'numeric codes' of the mesurau in various manuscript sources. His comment about the scribes (ibid.143): '...for the scribes would copy without understanding and were not above writing what they considered to be phonetically the nearest word in their own language instead...' speaks about the difficulties of transmission from the oral to the written. (see Miles 1983, or chapter six of this work). He also notes that no poems bearing the titles of any of the pieces [in the manuscript] have been found. (Crossley-Holland, 144). In 'strict pieces', as Crossley-Holland calls them, theme and variations is the most obvious form according to him. (ibid., 145). I would not call them as such, since the variations are not so much based on any theme-like melody lines. Variations (in 'strict pieces') are executed by different swneme-combinations on the mesur-bound segment called 'cainc'. This matter is discussed in chapter six.

When talking about the swnemes (he calls them on some occasions appoggiaturas), Crossley-Holland mentions that 'ornaments cannot always be given in modern notation' (ibid., 149). Here Crossley-Holland shares his thoughts with Dolmetsch. To my opinion they [swnemes] certainly cannot and should not either, while more important is to master those by practical rehearsal, adoption and learning processes and make them as 'items of performance-oriented musical warehouse' into one's cognition; brains and fingers. Attempts to present them on score may lead to an enslaving web of percentage ratios (see Greenhill 1996 &1998), and mathematically unified performance practice.

Crossley-Holland sees that musical connections between Ireland and Wales were more than obvious. He finds 'Irishness' for example in the section IV of 'Caniad San Silin', which contains major sixth, and is 'undeniably Irish in feeling'. He refers here to Bunting, according to whom the major sixth characterizes melodies of Irish music (Crossley-Holland 1942, 153-154; see Moloney 1995 for a different viewpoint). Crossley-Holland mentions also the possibility that the modes of French troubadours came to Wales through Ireland, and that the Continent was much influenced by the Irish during the 'Dark Ages' (foundation of many monasteries, e.g. St Gall, a centre of musical learning; the Irish monks compiled and wrote music-theoretical works, Odo of Cluny and Notker as eminent music theorists of Irish origin; Ireland had her own centres of learning, etc.). There are contrary viewpoints concerning the entrance of Continental influences to medieval Wales, some of which are presented in chapter four of this work. But the Irish influence on Welsh music should by no means be excluded either.

Peter Crossley-Holland's another important contribution to the Robert ap Huw research came into existence more than fifty years later. Based on the paper he gave at the Bangor Symposium in 1995, the book 'The Composers in the Robert ap Huw Manuscript - the Evidence for Identity, Dating and Locality' was published in 1998. This time Crossley-Holland focuses on finding the identities to those pieces in the Robert ap Huw manuscript, whose titles bear references and implications to personalities. As has been noted on various occasions, no literal documents (apart a single fragment from c. 1475) related to cerdd dant date from earlier than the sixteenth century. By detailed examination of several manuscript sources, with references to thesis of Bethan Miles (1983), Crossley-Holland traces times and whereabouts of nine

composers. The earliest of them, Gruffudd ab Adda ap Dafydd, flourished c. 1340-1370, and the last, identified by name, Cynwrig Bencerdd, c. 1450-85. (Crossley-Holland 1998, 79; see also figure nine in this work). As can be noticed, they were active long time before the compilation of the Robert ap Huw manuscript, and therefore we do not have a clue how the pieces attributed to them in the manuscript sounded, or were performed, in their own time. Crossley-Holland's study of the ap Huw composers, which unfortunately was to remain his last in this area, is of utmost importance from the point of view of this work. One may conclude from the dates of the composers, and that of the manuscript, that cerdd dant music existed as an oral tradition long before the advent of music writing attempts in Wales. [44]

3.3.3.2 Thurston Dart

Of all British musicians of the post-war period, Thurston Dart (1921-1971) best represents the ideal prototype in the way he combined scholarly and practical interests, and yet extraordinary for his energy, the diversity of his interests, and for his vision. As editor, expert performer on the clavichord, organ, and harpsichord, conductor of the Philomusica, and educator - in short, a polymath and catalyst - Dart came closer than anyone else in later times to filling the role played earlier by Arnold Dolmetsch. (Mayer Brown 1988, 47-48). Dart has also been considered as an 'interpreting editor', in the vein of Edmund H. Fellowes, whose spiritual heir he sometimes has been appointed to. In his editing policy Dart has, in many of the prefaces of his editions, said that: '...performers will want to follow such and such an editorial direction.' This paternal attitude is common in early music circles still. (Brett 1988, 95-96). So, Dart divides opinions, but nobody can deny the worth of his contribution to early music, which was abruptly put to an end due to his untimely death.

Dart's contribution to the Robert ap Huw scholarship includes one article, published in 1968 in the 'Galpin Society Journal'. It can be roughly divided into three sections [author's division], namely 1) a general description of tablature script, 2) tunings or settings of the harp, and 3) mesurau and ornaments (or swnemes, as they are called here).

In the first section (Dart 1968, 52-54) the manuscript's history, definition of genres and seeking comparisons to some of them from the Renaissance music (for some reason the plural of 'gosteg' is for Dart 'gostegur', not 'gostegion') is discussed. It is interesting to note that Dart sees the 'clymmau cytgerdd'-section as a demonstration of mesurau of bardic sung poetry (i.e. that the mesurau, according to him, were primarily meant for poetry reciting and not as deep structural patterns for musicians). Even if, and possibly when, the mesurau were used for poetry reciting, their meaning as deep structural patterns is in no way excluded. Dart makes a good point concerning the manuscript's position at the end of a long indigenous, mostly unwritten tradition. He comments critically the work of Arnold Dolmetsch and his interpretations of tunings,

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44 During the final moments of writing this work I have come across with a new scholarly work on the composers in the Robert ap Huw manuscript by Dafyd Wyn Wiliam (Wiliam 2000), in which different suggestions on the dates of some of the composers are given.

scales and ornaments, but gives positive feedback to the 1936 facsimile edition and its preface (by Henry Lewis), as well as to Peter Crossley-Holland.

Concerning the script, Dart sees similarities with the Robert ap Huw tablature, and those made by Bermudo (1555) and Cabezòn (1578) in Spain. He also points out that the correct hand position is the left hand for the treble and right hand for the bass. Dart sees no logic in Robert's use of vertical lines (Dart calls them bar-lines). Also Robert's 'rhythm fencing', similar to those in the lute tablatures, is regarded as very inconsistent and arbitrary. (Dart 1968, 54). It may well be that 'fencing' indeed is a later addition by Robert, as suggested by Greenhill (Greenhill 1996), and possibly adopted from the lute tablatures of the time.

Dart discusses about the instrument this music was meant for. No Welsh harp survives from early seventeenth century, and the earliest evidence about the construction of the harp comes from the James Talbot manuscript, from 1690's. Robert's harp was diatonic, plucked with fingernails, had twenty-five strings running from C D F G and then diatonically to g''. The harp was strung with gut (not with horsehair, as presented on some other occasions). Dart says nothing about the leathered soundboxes, as referred to later by e.g. Ellis, in his article. (Dart 1968, 54-55). It is difficult to believe that there was merely one 'canonised' construction model of the harp, and thus deny the existence of instrument building technology.

Dart's central question in his article deals with the tuning/tunings of Robert ap Huw's harp, and he is the first one to pay attention to different tuning possibilities and playing techniques. His hypothesis is that the signs in the tablature do not denote note pitches per se, but how notes are obtained (by various ways of plucking and damping). (ibid.,55). This suggestion is in complete contrast to previous, and also some later, studies on the manuscript. There is evidence of a fairly number of scordatura tunings that were in use in the Middle Ages (see, e.g. Page 1987).[45] These, and other tuning possibilities, are discussed more in chapter five. Dart's interpretations of tunings (Dart 1968 56-57) are not always in line with later suggestions of Whittaker (e.g. 1974c) and Evans (1999). See more in chapter five.

Dart sees their role similar to the harmonic grounds used in various forms of Renaissance music (both instrumental and vocal), although earlier he had taken them as belonging primarily to the recitation of poetry. (Dart 1968, 59). He does not agree with Bunting's view concerning the Irish origin of the mesurau. Noteworthy are Dart's remarks about the long 'cwlwm cytgerdd' (pp. 23-28 in the manuscript) in 'mak y mwn hir' and its mnemonical character, as well as of the other 'clymmau' (Dart 1968, 60). Finally there are ornaments (or swnemes, as they are called here). Dart notices (a very important point) that due to the almost total absence of indications of rhythm, meter or duration, some conclusions could be made from 'comparable omissions in certain early manuscripts of lute music.' In these, such as some Scottish lute manuscripts of the 16th century, the missing rhythms were relatively straightforward and

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45 Scordatura is a concept which refers to deviations from 'normal' tuning of an instrument. Scordatura tunings have been applied to many string instruments, particularly to violin. The best known examples of scordatura use are probably the 'Mystery Sonatas' by Bohemian composer Heinrich von Biber (1644-1704).

could easily be committed to memory. Dart, then, gives his interpretations of swnemes, calling his interpretations as guesses. (ibid., 61).

A very important contribution, in connection of swnemes, is that for the first time the 'pluckings' and 'dampings' [of the strings] are brought forward. Dart notes the following:

> 'A black note in the modern version denotes a string whose sound is silenced after it is struck, a white note one whose sound is allowed to continue. When two fingerings are given for a single note, the upper one denotes the striking finger, the lower one the stopping finger.'
>
> (ibid., 62)

Although Dart did not interpret all the triangular notes, and their indications to fingerings correctly [possibly having been too much influenced by Bunting's observations] I consider his contribution as groundbreaking in the Robert ap Huw studies. For the first time the musician's role and the importance of timbral changes (together with the central role of the ear compared to the eye) are brought into general discussion. I also agree with Dart's remark that the durations of swnemes (and their combinations and/or parts) are very relative, dependant on the context and the player's ability. (ibid., 62-63).

3.3.3.3 James Travis

In short, I consider the contribution of James Travis, an American, to be of very little value to the Robert ap Huw scholarship. His analysis of the musical contents are within terms of Western classical music only, and his vantage point is that of an enthusiast who is deeply, or entirely, rooted in Western art music tradition. Although I notice some similarities between Dolmetsch and Travis in their 'visionary intuitions', it has to be said that Dolmetsch did understand the conceptual basis of cerdd dant as having been different to Western art music tradition. Travis, instead, is desperately searching for some ways of musical expression from the Robert ap Huw manuscript, which could somehow place it alongside with European, and American art music composers and their products. Noteworthy also is that evidently Travis has not seen the original manuscript, or its facsimile, but only the printed version of it in the Myvyrian Archaiology. Evident is also that Travis did not know Welsh, and thus ignores indigenous musical terminology and performing instructions given by Robert ap Huw.

Travis writes, for example, that '...repetition occurs to an extent that might seem excessive...' (Travis 1968, 14), and calls this kind of repetition boring for *present day listener* (my italics). He continues by saying: '...the element of recurrence remains too prominent for modern ears accustomed to music of pronounced dramatic contrasts'. (ibid., 14-15). We have discussed on other occasion about the futility and impossibility of the concept of modern or present day listener, as well as that of medieval listener.

Travis has also made some incomplete [in the sense that only small fragments of the complete pieces are taken into account] transcription attempts, for example of 'Caniad Marwnad...' and 'Caniad Hun Gwenllian' (ibid., 18-24).

He has put all in the key of C [with no B-flats], and many in strange combination of time signatures and meters, which obviously should be taken as they are written. I find barring, phrasing, note values and the key in both pieces, as written by Travis, very inconsistent and I cannot take them as guidelines for musical interpretation (makes me wonder if Travis would prefer pieces to played on a concert grand piano). Furthermore, in his short descriptions of some of the pieces, Travis writes as if he was doing a concert review of Romantic music. When referring to 'Caniad Marwnad Ivan ap y Gof', he writes:

> '...the austere woe, the intense and lofty pathos, of this composition is of refinement almost unsurpassed in music, despite echoes of the clashing of the spears and the rattle of shields. The unknown composer is more nearly akin in spirit to Sibelius, Mac Dowell and Beethoven than to any other masters of the dominant European tradition...'
> (ibid., 24)

All this shows ignorance of the cultural and historical background of the cerdd dant tradition, being simultaneously full of rather kitschy images and clichés. Travis has complete trust in literal sources, to which, however, the original manuscript sources did not belong.

3.3.3.4 Osian Ellis

Osian Ellis, a native Welshman, is widely known as a prominent concert harpist, to whom many well-known and respected composers (Benjamin Britten, among others) have written works. Ellis has given contributions to the Robert ap Huw research since early 1970s. His first piece of scholarship was titled 'Welsh Music: History and Fancy', published in 1973.

His article starts with references to the musical life of the Welshmen [in London] in the 18th century. Having possibly been influenced by Scottish nationalism, societies such as the 'Temple of Apollo', plus the ideas of the Enlightment), there came a wide interest in the circles of musicians and literary people to re-awaken the old music and poetry of the Welsh. We meet such men as Blind John Parry and his assistant Ifan Wiliam (Evan Williams). Parry played much Italian music (Corelli, Vivaldi, Geminiani), pieces by Handel (Handel's 'Harp Concerto' was primarily meant to be played on the triple harp, and was dedicated to Parry), and his own baroque-styled variations on Welsh airs [as can be noted in his 'Antient British Music', published in 1742]. Similar kind of variation style was used by, inter alia, Edward Jones, 'Bardd y Brenin', and later in the 19th century by John Thomas. (Ellis 1973, 73-75).

Ellis seems to accept that the Robert ap Huw manuscript dates back to the time of Gruffudd ap Cynan, regardless that no evidence of any written documents about Welsh music is known to have existed then. Ellis relies on Powell's 'History of Cambria' (1584) and notes about Gruffudd ap Cynan and the manuscripts dating back to his time, contained in it. (ibid., 78-79). Later Ellis makes remarks about oral tradition that was put on paper in the sixteenth century (ibid., 88).

In his article Ellis presents his first transcription attempts by Ellis, consisting of parts of the first 'cwlwm cytgerdd'-set. The tuning, chosen by him

is that of 'cras gywair' [this choice is discussed more in chapter six]. A good point is mentioned by Ellis about relationship between a 'pencerdd' and a student as having been based on personal instructions. Earlier transcriptions of the manuscript's musical contents are heavily criticized by Ellis. (ibid., 80-83). To Ellis, the mesur was not merely 'a sequence of chords upon which 24 variants could be played'. According to him the students of cerdd dant did not learn only 'a specific number of these compositions' [referring to 'clymmau cytgerdd'] but adopted them [the mesurau] as a basics for their musical cognition and various ways how to use them in order to make pieces of music, or musical performances. Ellis, however, sees the mesurau as same as the 'clymmau cytgerdd', which is a misconception. He is right in his suggestion that Robert did not fully understand what he was copying, but at the same time I find that there are more mistakes and inconsistencies elsewhere in the manuscript than in connection of the 'clymmau cytgerdd', emphasised by Ellis. (ibid., 86-88).

Ellis wanted to separate the 'fancy' from the 'history' in his article, but he did not succeed completely in that. In 1977 an abridged version of above-referred article, with some revisions included, was published under the title 'Ap Huw: Untying the Knot'.

So far the latest contribution by Ellis is titled 'The Story of the Harp in Wales'. It was first published in 1980 as a bilingual edition (Welsh/English), and later as a revised version in 1991, this time only in English. I am here concentrating on the latter. That publication is a monograph dealing with various aspects of the harp in Wales. Pages 11-47 are devoted to Robert ap Huw. Many arguments and suggestions by Ellis, presented in the issue in question, are taken directly from his previous writings, although there are some new ideas and things introduced as well.

Although Ellis, again, speaks, about the importance of personal relationship between a pencerdd and his student, he seems to have taken stricter literal standpoint. He writes about detailed instructions in the poetry books, and not-detailed instructions in the music books. Neither speaks against the oral culture, but imply that the matters concerning poetry were easier to write down. (Ellis 1991, 12-13). Ellis cites a 'marwnad' by Wiliam Cynwal ([made to a pencerdd and harpist Dafydd Maenan, who died in 1567; see Harper 1999a, 159-160 for the poem], which, according to Ellis, implies that the 'clymmau cytgerdd' were part of professionals' repertory. Ellis also makes a reference to a poem around 1397 by Iolo Goch, which implies that such pieces (or such a way to make music) were part of the common repertory. (Ellis 1991, 13).

The standpoint of literacy is very evident in the writings of Ellis. No music seems to have existed before, or outside, the time of manuscripts. The compositions are approached from today's paradigm of literacy, and no attempt is made to understand or experience the music as it might have been understood by the cerdd dant harpers themselves. In transcriptions the damping process is in no way taken into account. Moreover, Ellis also gives strictly defined time values to each particle of a swneme (or a swneme-combination), together with fingerings, which are mostly wrongly interpreted by him. (ibid., 25-35).

The paradigm of literacy is difficult to understand, since, according to Ellis, music was transmitted by word of mouth and became written down only during the sixteenth century, and also that music was played from memory and was taught without the aid of books. (ibid., 25-27).

4 HISTORICAL AND CULTURAL PERSPECTIVE

4.1 Introduction

In this chapter it is attempted to give an overview of political, historical and cultural life of Wales within a time span from roughly 1200 until 1650. It is hoped that a proper cultural and historical contextual setting can be given. In this chapter there will also be references to Welsh bardic poetry, its contents, treatises and representatives, as well as to various cultural influences, adopted from outside Wales.

An authority of poetry [generally speaking] derives from its formal and functional definition. It has a more or less permanent shape in terms of length, structure and metrical pattern. A prose tale is more liable to change from teller to teller [since it is very rich in using formulaic variables on the surface level], whereas in poetry, also formulaic and schematic, there has been more profound sense of continuity in its art. Poetry, in Celtic society, had a high status, its authors were known, but the prose was amorphous and anonymous and lacked status. The Celts regarded verse as the medium proper to lyric expression, and that for straightforward narrative they preferred prose. The two were often combined in insular Celtic narratives [see the 'Táin Bo Cuailgne', an epic from the Ulster cycle, for example], and similar union of prose and verse can be paralleled from the earliest Indian narrative. The primary prose narrative in Wales and Ireland derived its integrity from oral tradition and the several written variants are more or less imperfect summaries of the storyteller's spoken text. Too common misconception is that literature, and most especially prose literature, only begins with writing. Those who have some acquaintance with learned or artistic oral traditions would find no essential difference between these and written with the exception that one remains spoken while the other is written. The words mean what the people want them to mean. The problem of adapting oral to written speech is not so much that of transferring individual words and sentences from discourse to vellum as of coming to terms with a diction and style which are proper to the spoken word and adjusting the prodigality of the oral mode to the unavoidable economy of the earliest manuscripts. After all, direct translation of written texts is one of the most

convenient ways of encouraging an entirely oral language through its first stages of literacy. (MacCana 1992, 5-12).[46]

The problem of the economy of manuscripts can also be seen in the earliest notations and/or transcriptions. The lack of space is evident almost always. This has sometimes led to abridged notations, together with written instructions concerning performance. In the processes of transferring something from the oral into the written, the very first stages (i.e. what are the primary things that should, or usually will be written) are crucial from the point of view of further development and research. In many early societies the law used to be the first, or one of the first, branches of native tradition to be consigned to writing. Analogous to that were that when something of orally transmitted and adopted music culture must, for one reason or another, be written down, the decisions must be made what is of primary importance: rules, aesthetics, music theory, terminology or the actual pieces of music. Choices may be based on the current state of the culture in question (e.g. whether it is in danger to extinguish, attempts to raise its status for various reasons, to gain more supporters and practitioners, etc.). In many Western music cultures, originally having been oral, theoretical and aesthetical treatises have first been written down before the musical repertory.

In Celtic [oral] literature, the epic of 'Táin Bó Cuailgne' taken as an example, a great deal of the actual content is accounted for by thematic repetition [in this case in the extended series of single combats between Cú Chulainn and various warriors from Maeve's army]. At the same time one must remember that the 'Four Branches' [of the Mabinogion] is the product of a lengthy evolution during which it has undergone substantial changes at the hands of several storytellers and redactors. The extant forms of the stories have been shaped by various discrete agents - the skills and preferences of the final author for example, the structure, style and content, and the lengthy evolution of the traditional narrative constituents with which he worked, and of course, the mythology which gave some of these constituents their primary meaning and motivation. If we think of the author, as most moderns do, as a writer who has a complete control over his material within the limits of his talents, then the final redactor of the 'Four Branches' was not one. Most orally conditioned literature gives itself free rein in the use of repetition, hyperbole, simile and a host of other characteristic stylistic devices, culminating at moments of emotional tension or dramatic action in streams of rhetorical language richly embellished with alliterating adjectives and designed for the ear rather than the eye. (MacCana 1992, 32-45). More or less similar it seems to have been with music as well. To cite Peter Crossley-Holland (Crossley-Holland 1942, 144): ' ... it is doubtful if the words existed in any fixed form.'

46 For an English translation of the 'Táin Bo Cuailgne', see Kinsella 1969.

4.2 Wales before the Conquest

Observation of Welsh cultural history in this work starts from the time of the 'Gogynfeirdd' (literally 'not so early bards'), opposed to 'Cynfeirdd' (the early or the first bards, such as Taliesin and Aneirin in the seventh century). Gogynfeirdd or 'Beirdd y Tywysogion' ('Poets of the Princes') were professional poets in the sense that composing poetry was not only their function but also means of livelihood in the courts of the Princes from the eleventh to the end of the thirteenth century. Approximately 30 of them are known by name, but very little is known of their lives. The majority of them came from Gwynedd (North Wales). First of them, Meilyr Brydydd, was the chief poet to Gruffudd ap Cynan, to whom he composed an elegy when the prince died in 1137. (Caerwyn Williams 1978, 1-4)

In many places of Western Europe during the twelfth century, in France, Germany, England, Italy and Spain, men's hearts were waking to a new appreciation of the world. There was a curiosity about the world in all its aspects; the world of men, the world of the spirit, the world of the cosmos and the world of the nature. The Church, as a part of an international body, provided a channel for the influx of new cultural ideas, and brought Anglo-Norman and continental influences to Wales. The Welsh literary revival of the twelfth century was not confined to poetry, and the poets were not its sole promoters. Also the revival of Latin took then place in Britain (Geoffrey of Monmouth's 'Historia Regum Britanniae' was published c. 1138). 'Hanes Gruffudd ap Cynan' ('The History of Gruffudd ap Cynan'), written [probably later] by some ecclesiastic is obviously based on the contemporary bardic materials, also those by Meilyr Brydydd. The period of the Gogynfeirdd coincided with the golden age of medieval Welsh prose; the age of 'Culhwch and Olwen', 'Four Branches of Mabinogion' and 'Breuddwyd Rhonabwy' (as native compositions) and the romances 'Peredur', 'Owain' and 'Geraint', which show a considerable amount of French influences. It may well have been that the main gateway for Celtic influences to enter medieval France was Wales and the works of the Gogynfeirdd. In the 'Roman de Horn', the protagonist performs his lai in the chamber of an Irish princess. This is an interesting detail not only from the point of view that Iseut [the tragic heroine in the story of Tristan] was the [possibly even more in relation to the present work] that performing in the chamber of the lady of the Court was, according to the laws of Hywel Dda, one of the main duties of 'bardd teulu', the bard of the house. It is possible that similar extended poetic forms as the lai were in favour among the ladies of medieval Welsh gentry. The motif of the hero-harpist existed before the troubadours and trouvères. This motif is, essentially, Celtic and the early lais of the 12th century (northern) France already had the Celtic aura of their own. Brittany and Celtic Britain played a considerable role in lai compositions, and since the lai looks backwards in commemorating the events of ancient Ireland, Scotland, Wales and Cornwall, this is no wonder at all. Many professional instrumentalists and storytellers of Celtic extraction were active in France and England during the 12th century. There is a bulk of stories set in named areas of Wales, Scotland, Ireland and Cornwall known to and by French

romancers of the 12th century. There are also loose references to Breton instrumentalists in contemporary fiction. If the word lai is of Celtic origin, then it is not difficult to explain how this concept became attached to the legend of these commemorative compositions. It may be that the panegyrics, elegies and historical poems and epics of the medieval Celtic bards were essentially not very different to the lais of the Breton and the French. (Caerwyn-Williams, 4-8; Page 1987, 96-107; see also Miles 1983, 116-121). If we attempt to find out some parallels with the two main categories of lai and the genres of cerdd dant, we cannot ignore the striking similarities between the quatrainal Arthurian lais and the cainc-diwedd pattern (of the gostegion), and the lyrical lai-schemes parallels to the long complex caniadau. Christopher Page (Page 1987, 106-107) maintains that the quatrainal lais were those, which might be called the harp-lais, i.e. those that were accompanied on harp.

Proinsias MacCana suggests (MacCana 1992, 14-16) that South-East Wales was the main gateway for Continental influences and the springboard for their extension throughout Middle Welsh prose. The special status of the area becomes more meaningful when one notices that three notable Middle Welsh romances ('Peredur Son of Efrawg', 'Owain', and 'Geraint, Son of Erbin') were, most obviously, composed in the same area.[47] In this area there was continual intercourse between Welsh, Normans and English. Noteworthy may be that lais of Marie de France [a 12th century poetess] contain details, which go a long way to prove that her original tales sprang from a local source in the Caerwent-Caerleon area. According to Christopher Page (Page 1987, 105-106), the narrative poems of Marie de France contain many Welsh place names. Marie, according to Page, mentions the 'lais de Bretagne', which has given one reason to suggest that the lais may originally have been composed by Britons. The clear impression of the lais is very difficult, almost impossible to form.

The interweaving of cultures [the Norman and the Welsh] began fairly early, and it can be concluded that if the Celtic stories and mysteries found their way to France, then some French performance practices entered Wales. Wales certainly was different land in the Middle Ages than it is today; few roads, valleys and mountains played more significant role than today. It did not, however, prevent Wales receiving cultural influences from outside, and if there were influences to Welsh poetry from the Continent, it would be very big surprise if music had not been influenced at all.

The pre-conquest Welsh Law Books contain many references to bards. Three kinds of poets are usually mentioned: the 'cerddor', the 'pencerdd and the 'bardd teulu'. Bardd teulu was one of the court officers. When the king desired to hear a song, the pencerdd was the first in turn [singing two songs, one of or to God, the other of or to the king(s) in the upper hall], and only after him the bardd teulu, who sings one song in the lower hall. The pencerdd's part may be regarded as a remnant of archaic practices. One song to celebrate God and one to celebrate the king or the kings has parallels in the early eastern (Hindus and Persians) and western (Romans and Scandinavians) literatures. It has been claimed that two kinds of hymns were composed in Indo-European societies; one praising and glorifying a single mighty act of god, the other

47 These romances contain parallels in construction to medieval French romances. See the formulaic scheme, presented in Page 1987.

celebrating a number of such acts. [48] Songs of the first category were sung to those remote deities who were far removed from the world of men and their affairs, songs of the second to those hero-deities who had taken an active part in the world of mortals as saviours, dragon slayers, etc. [49] The second type of hymn would have formed a prototype to 'Fürstenpreislied' [the song in praise of kings or princes]. In case the queen desired for a song, it was the duty of the bardd teulu. He sang in her room in order not to disturb and interrupt the business of the court. The pencerdd was not a court officer, but he had privileges in it. (Caerwyn-Williams 1978, 12-18; Jenkins 1990, 20 & 38-39).

The class of learned men [obviously very seldom women, if at all], who were specifically trained for that purpose, shaped the traditions in early Ireland and Wales, as well as in India. Those poets told prose narratives, but as an important part of their professional learning also a varied range of myth, religion, tribal origin, legends, genealogy, onomastics and so on were included. Most of the vast range of prose literature that circulated constantly among these storytellers did so only by oral transmission, even after the advent of writing. Many familiar features of written narrative in Irish and Welsh obviously derive from the oral prose of professional storytellers. Characteristically oral devices such as repetition, alliteration, juxtaposed synonyms, dramatic dialogue and hyperbole occur in Irish literature of all periods, and neither are they absent in Middle Welsh prose. (Matthews & Matthews 1988; Pennar 1989; MacCana 1992, 9-10). One should, however, keep in mind that the written does not spring forth from a vacuum.

Medieval storytellers and poets were expected to be well versed in the history, traditions and genealogy of their people. In many countries the same is true also of the post-medieval storytellers and poets. In the 'Trioedd Cerdd' [the poetic or song triads - as recorded in 'Llyfr Coch Hergest'-version of the grammar, attributed to Einion Offeiriad; see later in this chapter] there are the following words:

> 'Tri pheth a beir y gerddawr vot yn amyl: kywarwyddyt ystoreau, a barddoniaeth a hengerdd'
>
> ['Three things that give amplitude to a poet: knowledge of histories, the poetic art and old verse'.]
>
> (translation: Robin Gwyndaf)

Some examples of the wealth of narratives are included in the 'knowledge of histories', namely the legends and traditions related to:

> I. Early historical and pseudo-historical characters (such as King Arthur, Myrddin or Merlin, Taliesin, Welsh Saints)

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48 Here Caerwyn-Williams refers to works of F.R.Schröder, but does not mention any of his works by name.

49 There are parallels to the second category in baroque operas and the Florentine intermedi preceding them, and in 'hero-deities of modern action movies, such as James Bond, Terminator, the 'good guys' in Star Wars and the like.

II. Famous and remarkable Welshmen of different eras (e.g. Owain Glyndwr, Barti Ddu, Twm Siôn Cati, Dafydd y Garreg Wen, David Lloyd George)

III. Well-known local characters.

IV. Local and historical events

V. Place-names and physical features, such as fields, stones, caves, wells, lakes, and bridges. Many of the narratives in this category are onomastic - explaining the origin of a name or the location of a physical feature (for example, Beddgelert).

(Gwyndaf 1988, 80-93

One recurring element in these legends, according to Gwyndaf, is the close interrelationship, which exists between history and tradition, fact and fiction. Especially to early historians the boundary between history and legend was very unreal. One should also remember that memorates and local legends relating to the supernatural, and based on messages in the human brain and communal folk beliefs, were once regarded as being true accounts of personal paranormal experiences. Story is always told as if it was true, and the narratives are not static items of folklore, but folklore in action. It is a performance and a process. And as we may have noticed, more or less the same schemata have been valid from the Middle Ages till the 20th century. Some things merely do not belong to their own age only, but to all ages where there is need of identification with them [such as ancient heroes, early poets and musicians, visionary leaders or mythical characters of the past, charismatic politicians, etc.]. It is a part of searching one's identity, as well as that of the nation. (Gwyndaf 1988, 80-93).

Perhaps the key to the strength and vigour of the bardic organizations in Ireland and Wales was their 'elaborate system of training recruits'. The Law Books refer to the training given by the pencerdd to cerddorion. (Jenkins 1990, 38 &39). Cynddelw (fl.1155-1200), a chaired bard, boasted: ' Our pupils know our learning', and adds that he teaches brilliant bards. There are parallels between the Hindu brahminic and Irish brehon schools, as noted by one H.S.Maine, referred to by Caerwyn-Williams (Caerwyn-Williams 1978, 14-15; his sources are, again, left unmentioned). The nucleus and model of ancient schools was the family, and there is evidence in Wales of bardic families, i.e. of bards who trained their own sons to follow them in their profession (see, e.g. Crossley-Holland 1998). The poetic gift ('awen') was stressed alongside learning and the training. The poetic gift could not always be transmitted from father to son, and sometimes the poet's [or musician's] father was not the best teacher. Hence there was a demand for bardic schools. The system of bardic apprenticeship most obviously persisted in Wales to the seventeenth century. In Irish 'Senchas Mór' we are told how the ancient lore of law was preserved and transmitted, namely by 'the joint memory of the ancients, transmission from one ear to another, and, let it be noted, by the chanting of the poets'. (Caerwyn-Williams 1978, 14-15)

The social position of the bards at the native courts was one of great honour up to the time of the fall of the Welsh princes. Bards frequently referred to gifts received at Christmas and New Year's Day, and some were presumably allowed to make love to the daughters of their patrons. (Gwynn Williams 1932, 40-41). Robert ap Huw, obviously, was involved in this kind of action, when trying to seduce the daughter of one of his patrons. (Powell 1999). According to the Laws of Hywel Dda the pencerdd had the privilege to receive 'cyfarws neithior'; a bridal gift from every maiden on the occasion of her marriage [a gift of money, or a gift of clothes] (Jenkins 1990, 39). Similar custom was common among the Vedic brahmans in India. Proinsias MacCana has explained this parallelism as being a survival of an ancient custom practised by Indo-Europeans before they spread as far East as India and as far West as Ireland and Wales. (MacCana 1992, 9-10). It has also been believed that such parallel survivals are to be explained as some linguistic phenomena on the principle that in isolated or lateral areas of a given territory a survival of common archaisms is to be found, and that innovations spread out from a cultural centre. According to Caerwyn-Williams, (early) Ireland, Wales and India had something in common, apart from their existence in the lateral areas of Indo-Europa, namely their priestly orders and the brahmana, and, perhaps most important of all, that these had their well organised schools. (Caerwyn-Williams 1978, 15-16). It may be noted here that there are many parallels in Indian classical music education system (both in North and South) and medieval Welsh bardic schools.

In all probability, there was a mythical-religious background to the cults of medieval Celtic society, and obviously the Gogynfeirdd had the same 'world order' as the Cynfeirdd before them. Both made celebration poetry (thematical similarity), sharing similarities in metres, in poetical embellishments and in stock ideas. It has been said that the Gogynfeirdd were content to re-work the poetry of their predecessors. Both generations of poets show that it was possible to be Christians and simultaneously write heroic-age poems. (Caerwyn-Williams 1978, 20-21). Cults of mythical-religious background, together with tribal organizations, can be found in many heroic age societies. Old Finnish Kalevala poetry; its characters and toolkit, for example, were used for Christian purposes after the advent of Christianity in Finland. The pre-Christian themes and personalities mingled in the post-Christian poetry. This was prominent in the Orthodox Christian areas of Finland and inhabited territories of many Fenno-Ugrian folks up to the late twentieth century. One may notice here that old habits die hard. It looks as if 'the epic frame of mind' is very characteristic for representatives of human race. The 'epic frame of mind' has been defined as 'a rudimentary heroic imagination [among people in a culture] which already gives to mere historical events and situations a glimmering of their epic significance' (W.P.Ker, referred to by Caerwyn-Williams). It has effectively been used in the twelfth-century Europe (the Age of Chivalry, in troubadour and trouvère culture), as well as later (the Arthurian revivals in the fifteenth and sixteenth century, the 'Celtic Twilight' in the nineteenth century, the 'Carelianism' in Finland and so on). The rulers/princes/dictators (of any era) want to be reflected, and have themselves described, in the Heroic Age lineaments. The myth and fact get mixed and mingled. (Toivanen 1997; Baigent & Leigh 1994; Caerwyn-Williams 1978).

Wales [in the twelfth century] was not culturally isolated from the Continent. The heroic ideals mingled there with new ideals; e.g. that serving God is more important than serving men. Thus with the 'epic frame of mind' there also was a religious or spiritual dimension. Yet the Welsh court poet was primarily a servant to his king, and thus a panegyrist. That they were also genealogists and historians should not be forgotten either. There is a considerable possibility that they were also court storytellers. References to this are found e.g. in 'The Four Branches of Mabinogi'. (Caerwyn-Williams 1978, 27-31; Gantz 1987; MacCana 1992).

The status of the panegyric, heroic song or heroic epic, indicate that honour and fame were the highest values in world of medieval Welsh princes. To call them 'values' is somewhat misleading, since honour and fame were concrete things. They could be extended or diminished. To deprive a man of his honour and fame was virtually equivalent to death sentence. Panegyric for the living person becomes an elegy as soon as he is dead. An elegy must express the mourning of the living, springing from the sense of loss and from sorrow. It is in the same spirit as the panegyric, for dead heroes have not ceased to exist nor lost their power. They may yet return [or may be summoned] to help their living descendants. The reverse of the panegyric and the elegy is the satire, which illustrates clearly the magic or occult powers of the words. The custom of satires was preserved in Wales and in Ireland well up to late Middle Ages, or even further, although it seems to have lost its former power and turned into mere abuse and obscenity. (Caerwyn-Williams 19 -36). Nevertheless, no pencerdd was allowed or expected to practice t satire. Such prohibition, with all probability, was launched because they did practice it. We may also see here attempts to raise the status of the bardic arts and thus keep it alive in the political turmoil of the sixteenth century, and therefore satire was regarded as non-suitable or even rebellious. (Thomas 1968; Gwyndaf 1988). There were also lighter veins of bardic poetry, sung at the feasts, for example 'gorhoffeddau' (lit. 'boasting' or 'exultation'). They were possibly sung at the end of the feast, after the obligatory panegyrics. These boastings may have analogies with some Continental troubadour/trouvère lyrics, where in all cases the poets boast of their abilities as warriors or lovers or both. (Caerwyn-Williams 1978, 36-38). The Gogynfeirdd also composed love poems and religious songs. The latter were stylistically close to panegyrics (God is described and honoured very much in same way as poets' patrons), and not so much psalms or hymns, or outbursts of devotion. The poets seem to have taken pride in their vocation and their ability to address God as poets. Parallels to this can be found in Continental culture as well, for example in a famous medieval Spanish collection 'Cantigas de Santa Maria'.

Concerning the language of the poets, Saunders Lewis has argued that the word order of other poets [than Gogynfeirdd] was based on syntax with the object of achieving meaning. The Gogynfeirdd, however, based their order on metre (e.g. 'cynghanedd') with the object of achieving 'value', i.e. musical value. Words were for their 'aural pleasure', not for their meaning. Thus the sound/music of the words played more important role than the meaning of the words; the words (old, new, compound, hero names and places, etc.) were used in a pattern(s) in which music had primacy over statement. Saunders Lewis' arguments formed a standpoint for the appreciation of Welsh poetic tradition.

In poetic metres the sound of one word is orchestrated with the sound of another so that ear quickly divines a pattern, which it expects to be completed. (Caerwyn-Williams 1978, 47-54). The 'cynghanedd', used in the poetry of Gogynfeirdd, is a technical term, which denotes the regularized pattern of alliteration combined with internal rhyme. (Bromwich 1993, xv). The argument of Saunders Lewis brings forth the pencerdd's toolkit in poetry. A gogynfardd (singular of 'gogynfeirdd') was a craftsman, who produced artefacts through the exercise of his technical skill. He was also a craftsman working in a tradition, and therefore the products of his craftsmanship were rigidly prescribed by his tradition. Within these boundaries he had considerable liberty. He was traditional also in the sense that the means and even the methods of his craft were handed down to him by his predecessors and imposed upon him by his contemporaries. The variety does not derive from the choice of means and methods available for them. The word 'rhetoric' is sometimes used to denote these methods and means; rhetoric was part of the technique, inherited with the ideas. The poets accepted that the great constructive element in both life and art is the dealings of genius with the continuity of tradition. [50] All this, on its own behalf, hopefully tells the reader that medieval Welsh, at least in poetry, was a language for reciting and listening to, not for writing. And, as we may see later in this work, when the bardic terminology was attempted to be written down, what a wild array of spellings was the result.

There are times, writes Caerwyn-Williams, when one generation of artists realises that it cannot improve the achievements of its predecessors, that it must either strike out in an entirely different direction or cease its artistic endeavours. [51] The Gogynfeirdd thought obviously that they could improve on the heritage of Cynfeirdd in several ways. For them the purpose of poetry was declaration, aim to achieve a 'monumentary' rather than a 'documentary' statement. In the creation of the [poetic] language the [bardic] schools played a vital part, devoting a great deal of time to studying the work of past generations. In Wales the poets had to memorise the works of Aneirin and Taliesin, and were obliged to study their language [orally] in order to be able to do so. This was reflected in their own language, for the emphasis in the schools was on the practice and not on the theory of poetry. The students were taught how to exploit the linguistic resources of the language in meeting the demands of cynghanedd and the metre (= how to learn and learn to use more possibilities of the surface structure within the frameworks of middle and deep structure). The originality for the Gogynfeirdd was the ability to develop a received idea in so fruitful a manner that no one else would easily have discovered how much lay hidden therein. They had to effect novelty without abandoning the familiar, to arrive at the unusual without relinquishing the customary, to attain the effect of surprise without seeming to reject the natural. (Caerwyn-Williams 1978, 53-64; see also Thomas 1968 concerning later applications).

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50 The Finnish readers may be reminded about the toolkit used in Kalevala and related poetical material (laments, poems in 'Kanteletar', etc.) in order to understand the importance of the sound over the straight meaning of words.

51 Some nineteenth-century composers, for example Mendelssohn, openly admitted that they had a Beethoven-complex, referring to Beethoven's incomparable skills as a composer [of symphonies].

4.3 Wales after the Conquest

The conquest of Wales in 1282 is partly a misconception. Great changes in the political geography of Wales had already occurred in the eleventh and twelfth centuries, dividing Wales between 'Pura Wallia' (territories of Welsh dynasties) and the March (south and east territories ruled by a number of Anglo-Norman lords). Many Welshmen of 'Pura Wallia' were familiar with the Anglo-Norman rule and its customs, culture included. It may be significant that in the Marches the laws of Hywel Dda survived as a living jurisprudence down to the Union (in 1536 and 1542), whereas the Welsh rulers, for example in Gwynedd, had political reasons for encouraging changes in law, administration and economic activity. In Marches the lords had realised that the Welshmen should govern the Welsh, and from mid-thirteenth century the 'uchelwyr' formed a network of Welsh speaking local authorities.[52] Their loyalty to the English (or Anglo-Norman) was more on personal basis than national. After 1282 it was the uchelwyr who dominated society and did it for a very long time. As social leaders they fulfilled a further function, namely taking the place of traditional patrons for music and poetry. Some of the most important surviving medieval prose and poetry were written for them, and some of the uchelwyr were men of considerable culture, open, as one may guess, also to other influences but the Welsh. Not only were the male patrons worthy of praise in poems and songs, but their wives and daughters as well. (Jarman & Hughes 1997, 1-4). A similarity to troubadour and trouvére culture was evident, as well various influences from them.

The Church played an important role in medieval Wales, especially after the Conquest. Many bishops and members of higher clergy, especially in the North, were drawn from the ranks of the uchelwyr. Some of them were not very popular among the poets and musicians, as may be noticed from some poems of Dafydd ap Gwilym and Iolo Goch, for example, whereas some monastic orders (notably the Cistercians) and their leaders were respected patrons of bardic arts up to the fifteenth and even to sixteenth century. Some bishops preferred English minstrels to Welsh poets [by patronizing them], thus paving way to English cultural influence to Wales. (ibid., 6-7). Of the Robert ap Huw scholars, Peter Crossley-Holland has noted the obvious influence of the Church to representatives of both cerdd dant and cerdd dafod.[53] According to Gwyn Thomas (Thomas 1968, 37-67), the Church had given food and shelter to poets, and church festivals had been of importance to the craftsmen in poetic art (and obviously in music as well), for it was on the festivals that they went on circuit. The bardic circuit meant the wandering of the craftsmen from the house of one nobleman to the other. There are also many statements about points of identity between bardism and the early monastic doctrines to be found in 'Barddas', a compilation of material drawn in the 19th century from various

52 Uchelwyr', lit. 'high men', free Welsh men of good stock and influence, many men of clergy among them.

53 See Crossley-Holland 1942 (e.g. 159-160) and 1998.

medieval manuscript sources. (see Matthews 1991b, 241-253). It may also be noteworthy that old Catholicism-based beliefs seem to have been very hard to die out in Wales, in spite of the warnings and attempts of suppression by the [Anglican and/or Nonconformist] Church. Old saints, sacred wells and the like were revered by the people at least in the 17th century, even later. Robin Gwyndaf gives a list of writings from the 18th and 19th centuries containing criticism about 'abominable relics of Popery' or warnings to people not to visit magicians or wizards (Gwyndaf 1994, 233).

Wales got involved in the Hundred Years War, which began in 1337. Some Welshmen fought alongside with the English, some found their way into the service of the French. One of them was Owain ap Thomas ap Rhodri, or Owain Lawgoch ('Redhanded'), later assassinated by the English in 1378. He, together with Owain Glyndwr, were subjects of prophetic poetry as the once and future kings of Wales, similar to king Arthur. It is not difficult to see a rising national awareness here. The real sources of tension were the royal neglect, great social and economic crisis together with the Black Death. Here were the ingredients of an explosion and that explosion came in 1400 in the revolt of Owain Glyndwr. This was the first nation-wide revolt, representing to many the beginning of modern Wales. Owain Glyndwr's bid for independence, however, failed and ambitious Welshmen seeked to gain power within the English political system. Henry Tudor's rise assumption of the Crown, as Henry VII, in 1485 meant many Welshmen the fulfilment of prophecies, since Henry was of Welsh descent. But soon great disappointment was to follow, while Henry was keener on staying on the throne than to take interest in Welsh affairs. His successor Henry VIII first broke with Rome (because of his divorce affairs), and then through two Acts for laws and justice to be ministered in Wales in like form as it is in this realm, in 1536 and 1542 respectively, the Union of England and Wales was made. Knowledge of English was to be required of those holding office in Wales, and all the national territory was from now on subject to a single government in London. Although English was now the official administration language, it had been highly used long before the first Act (1536) in higher levels before the Anglicisation of Wales's social leaders. One should also note that neither the local governments nor the courts could have functioned without the use of Welsh for a long time afterwards. Yet the class of uchelwyr existed still and continued to patronise the poets, and it was to them that the authorities looked to regulate the order at the two Caerwys eisteddfodau in 1523 and 1567. One of the causes of the Union was the dissolution of the monasteries followed by the successive phases of Reformation. Before the dissolution there seems not to have been any particular depth of spirituality in Wales, and religion to most people was a matter of pilgrimages, saints and images. The praise of the poets of the fifteenth century for the hospitality of Cistercian abbots is a telling comment on the decline of the ideals of that particular order. But there was not very much enthusiasm for new religion either, before the translation of the Bible and the Prayer Book into Welsh. (ibid.,9-21)

The era of Henry VIII introduced the Renaissance thought in Britain, and expanded its role in culture, politics and religion. It meant the collision between the oral and the written; the former presented, e.g., by the bardic poets and musicians, the latter by the Humanists. Henry's reign caused decline in

philosophy and theology, the Humanism still being at its roots, leading to mediocrity in both subjects, and culture in general. The ideals of Chivalry were lost, if not already long time before, as was the courtesy among the aristocracy. Man's preliminary interests were in material things only. The letters of law were seldom letters of justice, and whole Britain was on the way to an age of dictatorship with strong central government. Everybody had to express his allegiance and loyalty to the king. In this light the dissolution of monasteries was merely an economic matter, where religion played a small, if any, role. (Knowles 1979, 1-7). The political history of medieval Wales is to be seen in the activities of various families and individuals who were the leaders of the local community. National politics were the politics of London. The dominant class in Wales was that of uchelwyr, once the patrons and nourishers of the native literary and music tradition and the class from which the poets and harpists themselves came. (Jarman & Hughes 1997, 21). During the course of the 16th century, cultural trends were more and more adopted from London. Ellis describes (Ellis 1991, 35) a Christmas gathering in 1595 at Llewenni Manor, referring to the lyrics of a contemporary ballad 'Mae hi'n wyliau...' [lyrics possibly by Simwnt Fychan, who was a pencerdd in the art of poetry], on which occasion only imported music from England was demanded and the 'age long art in riddles were disappearing'. [54]

4.4 Bardic poetry after the Conquest

The collapse of Gwynedd and the death of prince Llywellyn in 1282 were taken as a mortal blow by the Welsh court-poets [of northern parts at least]. The learned and highly trained professionals, dependant on the patronage of princes, having spent years in trying to master the complexities of their art, were suddenly facing the situation where no patrons were possibly to be found in future. As we know, the bardic arts did survive the Conquest and patrons were found, both clerical and lay patrons, i.e. the uchelwyr. There were changes to come. The travels of the poets throughout the country started to increase, references to taverns and towns begin to appear, and influences of new surroundings and circumstances intersperse with the archaic vocabulary of the 'heroic epic frame'. The relationship between poet and patron is no longer defined by law, but relies on more personal basis. This is reflected in patrons' increased interest in the techniques of poetry, and in their role as collectors and readers. The domestic virtues and gentler qualities gain foothold as themes in the poems, and the place of the lady as hostess as well. The lady of the house is lovable, wise, of unfeigning nobility, proud but courteous, a gem of ladies, fair

54 The exact date of the Christmas gathering at Llewenni Manor is somewhat confused, but it obviously took place in 1590s. According to the paper given by Dr. Sally Harper at the sixth CAWMS Conference (August 2001), most of the music mentioned in the tune lists of the gathering had its roots in Elizabethan court and theatre music, and in English ballad repertory. It is possible, as was suggested by Dr. Harper, that the Welsh musicians and poets (thirteen altogether), present at the gathering, kept more to themselves and were there mainly to remind the hosts of their Welsh roots.

as the snowdrift on a hill slope, refined and delightful in her patronage of poets. All familiar features from the Chivalric poems. The cult of the Blessed Virgin grew in Wales alongside with the 'domna' figure, as it had by a great esteem done in the Continent already. (Jarman & Hughes 1997, 24-35; Thomas 1968, 67)

The later Gogynfeirdd [generation of poets who were active and lived after the fall of Gwynedd] made many references to the great days of Welsh history, thus linking the past to the present in their attempts to seek continuity. The ancient classical world, Welsh historical tradition, Arthurian romance, and Biblical figures were all featured in their poetry. Together with, and perhaps partly due to them, there was also a gateway to foreign influences. Gruffudd ap Maredudd ap Dafydd, Dafydd ap Gwilym's contemporary, describes in his elegy to Hywl ap Gronwy a 'gathering of poets, of lovely rhymes, proud young men and their sports, ...fine red gems, streams of wine in gold and glass, soaring songs and harp music in the fine hall. The splendid hero of elegant manners and the carousal of bards – woe to the loss'. (Jarman & Hughes 1997, 28-37). Similar elaborate style was still evident in elegy poems contemporary to Robert ap Huw. (Harper 1999a, 159-160).

Medieval Welsh bardic poetry, fostered throughout centuries in bardic schools, was social in function, formal and conventional in both theme and treatment, archaic and polished in diction, impressively dignified in style and generally conservative in metrical patterns. It demanded a complete mastery of the complicated strict metres and detailed knowledge of archaic vocabulary and syntactical constructions. This was acquired after many years of detailed instruction,. ...imparted orally. Long and rigorous system of training helped to preserve and enhance the essentially esoteric nature of the bardic craft. A distinguished pencerdd could attract several disciples. Pencerdd was the only one allowed to teach, according to the Laws of Hywel Dda. Gruffudd Hiraethog (d.1564) instructed some of the foremost bards of the second half of the sixteenth century, such as Wiliam Cynwal and Simwnt Fychan. (Jarman & Hughes 1997, 44-46). Cynwal and Fychan belonged to the generation of the 'last Gogynfeirdd', and are two of most prominent representatives of it. Cynwal, e.g., had disputes (in the form of cywyddau) with contemporary humanists (such as Edward Prys), who favoured literal knowledge and learning. (Thomas 1968, 9-19). It should be noted that the London parliament had already earlier regarded many Welsh poets and musicians as vagabonds. During the reign of Henry IV of England, in 1402, a law was passed to get rid of '... many diseases and mischiefs... in Wales [caused] by many wasters, rhymers, minstrels and other vagabonds. (Thomas 1968, 37).

There, most obviously, was a written treatise of bardic arts (poetry) before the compilation of the 'Statute' and the 'Cadwedigaeth Cerdd Dannau' and 'Dosbarth Cerdd Dannau'. This particular bardic grammar is attributed to Einion Offeiriaid, and stems most probably from the first half of the fourteenth century, as a result of gradual evolution. Its two sections deal with the science of grammar and features of Welsh prosody and bardic craft respectively. The science of grammar is an adaptation of Latin prototypes, and reflects the influence of monastic schools, where the rhetorical instructions mostly were

given in the Middle Ages.[55] Here, in monastic schools, ancient Welsh bardic lore was blended with European cultural elements, for example, with the poetic reforms made in the fourteenth-century France. (Jarman & Hughes 1997, 85-88). It is noteworthy that grammar was studied as a science, as was music in those days. Neither should one overlook the connection between secular and ecclesiastical learning in medieval Wales. The earliest manuscripts containing secular verse and prose were almost certainly transcribed by the clerics.[56] (Jarman & Hughes 1997, 57-59).

The existence of the grammatical section implies that Welsh poets were to some extent acquainted with currents of thought of the twelfth and the thirteenth centuries. Grammar was one of the seven liberal arts, and poetry was sometimes regarded as a part of grammar. In the grammatical section of the bardic treatise in question there is an interesting classification dichotomy of syllables, from the point of view of music in particular. The syllables are either 'heavy' (trwm) when they end in two consonants or in a consonant originally double, or 'light' (ysgafn) when ending in a single consonant. During the period when the accent fell regularly on the ultima in Welsh words of more than one syllable there was a distinct difference between the length of final syllables in such words as 'kallonn' and 'afon'. The early medieval bards tended to preserve this distinction, and it is tentative to think that perhaps the early sixteenth century bards, in their attempts to revive the heyday of bardic arts, wanted to revive this kind of pronounciation at least in the poetry.

The most in detail analysed sections of the bardic treatise is the one that includes a discussion of twenty-four strict metres of poetry, of the metrical errors and faults in language and matter, and of other aspects of the poet's craft. The account of twenty-four metres included in this part of the grammar has been regarded as the authoritative account of the intricate rules, and although some changes were made to these rules in the fourteenth and the fifteenth centuries, the total number of twenty-four remained. This number had a special symbolic significance in the Middle Ages, medieval Wales included. We meet this number on various occasions in connection of t Welsh bardic arts. We have twenty-four mesurau of instrumental music, twenty-four officers in the king's court (in the Laws of Hywel Dda), as well as the best knights in Arthur's court and the amount of prime virtues also numbered twenty-four. Payments to some court officials for certain defined deeds were twenty-four pence, for example for the court justice for testing other justices. Ceri Lewis argues that this number was a kind of canon in itself, and in order to arrive at twenty-four rules, metres etc. could either be increased or decreased, sometimes even doubled. (Jarman & Hughes 1997, 65-67; Jenkins 1990, 5-17). Peter Crossley-Holland, when giving

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55 Einion's definition/surname Offeiriad stands for 'priest'. He may have come from scholastic circles, and thus from outside bardic craft, as has been suggested. (Jarman & Hughes 1997, 67-69).

56 These include 'Pedair Cainc Mabinogi', 'Cân Taliessin', 'Llyfr Du' and 'Llyfr Goch', among others. In Ireland there was a fruitful and continuous liaison between the monastic scriptoria and the learned poets from the eighth century. The monasteries in Wales interested themselves seriously in the writing of prose narrative until the 11th or 12th century. (MacCana 1992, 19-20).

his suggestions for the importance of number twenty-four, cites an old manuscript (he does not mention which): '...2400 devout men in three sacred places in Britain, a hundred of them appointed for each of the twenty-four hours of the day and night, in... service to God' (Crossley-Holland 1942, 158). It seems obvious that this number had many spiritual connotations in medieval Wales. Whether it originally derived from the number of the Elders in the 'Book of Revelation', is left open. [57]

4.5 Dafydd ap Gwilym

Dafydd ap Gwilym was a mediator between the late Gogynfeirdd and the new Anglo-Norman styles of love and nature poetry, and he is regarded by many as the greatest representative of medieval Welsh poetry. Roots in the southeast Wales, where the Norman cultural influences had strong foothold centuries before Dafydd's birth in c. 1320. He adopted many of his new influences, which had originated far beyond the borders of Wales from his bardic teacher Llywelyn. The newly developed form of 'cywydd' turned in the works of Dafydd ap Gwilym and his contemporaries to full 'cynghanedd'. Cywydd gained rapidly popularity among the successors of Dafydd ap Gwilym and Iolo Goch and by the end of the fourteenth century it had won a secure and lasting prestige until to the present day among practitioners of poetry. It is no wonder that Dafydd and Iolo were titled as the 'prophets'. (Jarman & Hughes 1997, 95-99). In a 'cywydd' by Llywelyn Goch Dafydd is compared to the prophet David, who was first sinner in love but repented afterwards. (ibid., 136) This is a very interesting analogy to the possible provenance of 'Cainc Dafydd Broffwyd' in the Robert ap Huw manuscript, and in the second lineage to 'Caniad ar gainc Dafydd ap Gwilym', mentioned in both Panton 56 and Gwysaney 28 manuscripts. In Dafydd's poetry there are also many references to music making, especially on the harp. [58]

It is noteworthy that no manuscripts of Dafydd's poems were either written for a century after his own lifetime [or possibly have not survived prior late fifteenth century], which implies that his cywyddau must have circulated originally among various audiences by oral channels. That, among other things, implies that the art of poetry was not basically a literal art in the fourteenth and fifteenth centuries but was practised within orally taught and adopted frameworks. One of Dafydd's friends and contemporaries was Gruffudd ab Adda, possibly the one of the composers included in the Robert ap Huw

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57 The 24 elders, each one with an instrument, are carved in the portal of the cathedral of Santiago de Compostela. Santiago de Compostela was the second after Jerusalem in importance for pilgrimages. An interesting note is, according to W.S. Gwynn Williams, in the 'Codex of Pope Calixtus II (a manuscript kept in Santiago de Compostela, and dates back to 1140),about the music-making of Welsh pilgrims before the altar of the Santiago Cathedral. These pilgrims sang to the harp and the crwth. (Gwynn Williams 1932, 35).

58 See Dafydd ap Gwilym: 'Poems', ed. Rachel Bromwich (Bromwich 1993), e.g. pp.30-31.

manuscript. Besides, Dafydd seems to have been acquainted with wandering minstrels, equivalent to the 'clerici vagantes' or 'joculatores' of other countries. (ibid., 103-104). Against this kind background of social relationships it is far easier to understand such poems in his output as 'Cywydd y Gal' (The Penis), not very different in spirit (though more explicit) to some of poems found in 'Carmina Burana', for example. The erotic poems by Dafydd and others reflect continental (mainly French) influences of 'pastourelle' and 'fabliau'. The minstrels, poets of lower rank if compared to bards, mainly absorbed such genres. Dafydd Johnston, however, suggests that it would be wrong to imagine a hard and fast distinction between the two groups, since they became much closer in the later Middle Ages, and the bards undoubtedly absorbed influences from the minstrels. (Johnston 1998, 18; Crossley-Holland 1942, 135-136).

4.6 The crisis in bardic poetry

There are copies of bardic treatises in the sixteenth century, partly based on the work of Einion Offeiriaid, some of them preserved in Welsh manuscripts, such as Peniarth 158. They contained triads (triple groupings), which had originated as convenient mnemonic devices for technical information. Later there were triads containing general moral, gnomic and proverbial statements. The bards were required to memorize many of the numerous triad sequences. It is also evident that down to final disintegration of the bardic order in the late sixteenth and early seventeenth century much of the instruction continued to be imparted orally, and the extant copies of bardic grammars were only a comparatively late supplementary aid to the traditional bardic teaching. It is generally agreed that the prose narrative literature that has survived from the medieval period in both Wales and in Ireland represents only a very small part of the great corpus of oral literature that was carefully preserved and transmitted orally throughout the centuries by a skilled and highly trained men. What was written down could be used as mnemonic devices, as well as sources of reference and comparison. And not to supplant the oral instruction but rather to supplement it. (Jarman & Hughes 1997, 76-85). The triads, according to Rachel Bromwich, refer generally to persons, events and other component elements of tales typical to oral tradition. The triads were designed as a thesaurus of references for the use of the poet in his role of court poet and eulogist. All the evidence suggests that early Welsh had a rich and varied abundance of oral narrative similar to that of Irish. (Bromwich 1961, lxxxvii).

It is significant that even after a large part of the bardic lore had been committed to writing, the bardic craft continued to be regarded as secret – 'Cyfrinach Beirdd Ynys Prydain' – which the initiated were under a strict obligation to keep. The reasons for changes made for the Carmarthen eisteddfod in 1450s (and later) were to make the examinations for bardic degrees more difficult and thereby protect the professionals against the 'vagabonds and ruffians', as stated in some proclamations. This was condemned by the sixteenth-century humanists, who strongly demanded the bards to explain the mysteries of their craft to all who wished to understand

them. (Jarman & Hughes 1997, 86-87). The poets, however, wanted to guard their speciality, and therefore kept their craft a secret from outsiders. They rejected purposedly the 'new learning' and were volunteered to remain in their 'darkness.' (Thomas 1968, 16-23). Some representatives of the bardic arts were more co-operative with those representing the literal learning, but transmission-perception processes did not always, if ever, end up with desired results. Do we see here yet another explanation to the ambiguous and sometimes very confusing contents of various Welsh manuscripts of the time? The misunderstood terminology and anxious attempts to find comparisons from, e.g., mensural music of the time by the perceivers? (see Miles 1983).

The Welsh bards of the late Middle Ages were dependant on the uchelwyr, and became more dependent on them from the mid-fourteenth century onwards. The changes in the social and political life of Britain led finally to the disintegration of the bardic culture. The union of Wales with England, the progressive Anglicisation of the gentry, the dissolution of the monasteries, the invention and advent of printing, the new learning and the new trends in culture, poetry and music included – all these affected to the collapse of the native bardic tradition. To what extent the increased adoption and popularity of lighter love and nature poetry (after Norman-French influences and prototypes) had its effects on the 'demands of dignity', as expressed in the 'Statute of Gruffudd ap Cynan', and to what extent it actually worked to re-establish the 'heroic frame of mind' to the practitioners of bardic arts? The process of disintegration was not merely due to the outside factors but to the inside as well. It seems that the criteria enunciated in the grammar were probably accepted or rejected by each bard as it suited to his individual purpose. And it is significant that the copyists who transcribed the earliest extant texts of the work could not completely ignore the existence of love and nature poetry either. So, despite Einion Offeiriad's attempts of canonisation, the outside influences were too tempting to resist, and so the influence of the Church to bardic arts diminished considerably from the fifteenth century onwards. (Jarman & Hughes 1997, 89-92).

4.7 The Statute of Gruffudd ap Cynan

At this stage I would like to remind the reader that although there has been a very little about music, per se, in this chapter so far, all that has been discussed about historical and cultural matters in Wales between c. 1100 and c. 1600 has had profound influence to music. I hope that this chapter has clarified that Wales was not culturally isolated from outside influences, that there has been cultural interaction between Wales, Ireland and France (and English, especially later). A considerable amount of interaction took place not only between bards and the Church, but also between bards and minstrels. Changes in politics and social climate denote changes in culture, music included. It would be rather strange to claim that no changes took place in bardic poetry and music in the above time span. And in such situations attempts to find balance between change and stability play a considerable role in society's or community's

cultural life. The 'Statute of Gruffudd ap Cynan' can be understood also in this light. It [the 'Statute'] is an important document and cannot be ignored, if we want to understand in what kind of circumstances both the poets and the musicians operated in the sixteenth-century Wales. Therefore I have decided to include a short discussion of the provenance and the position of the 'Statute' in relation to medieval Welsh bardic arts, especially music.

One of the most common wrong estimations in historical research is the attempt strictly to discern the [factual] 'history' from the 'myth'. That meaning, only the documented facts, whether written, recorded or otherwise stored, deserve to be called 'the history'. It would be the data that could scientifically be tested and thus prove that 'something indeed took place sometime'. In this respect the 'history' would consist merely of names, dates, battles, wars, political movements, revolutions and other phenomena, which could be 'objectively discerned'. The 'myth', therefore, would be either irrelevant or of secondary importance in relation to the 'history'. It could be said to belong to the world of fantasy, poetry and/or literature, and not to be taken seriously since it misinterprets the facts. Thus both should be discerned from each other, otherwise the 'real truth' from the past cannot be revealed. (Baigent & Leigh 1994, 151).

Many creative personalities of bygone days, whose achievements were called myths by representatives of later periods, were either not aware of distinction attempt mentioned above, or simply did not care of it. Homer's 'Odyssey', epic poetry with an emphasis on single person's fictious adventures, was neither considered as 'un-historic' or untruthful in the Antique world, nor centuries later.[59] We have examples from historical personalities of the American Wild West (such as Jesse James, Billy the Kid and Wyatt Earp), which have later become more or less myths, due to the Hollywood film industry. In cases such as King Arthur or Robin Hood, we could speak about myth turned into history. It is very difficult, or even impossible, to say which of their deeds were real and which were not. Were they themselves real in the first place? We may see comparisons to King Arthur and Robin Hood with some more contemporary figures turned into myths, such as James Dean, Che Guevara, John Lennon or Jim Morrison. When their 'histories' are transmitted from people to people, it may well be that so called hard facts are overshadowed (or even overruled) by myths. Myths, which may include exaggeration, variation, re-creation and so on. When the myth and the reality intertwine (or mingle), new history is made, which, in time, is embraced with new layers of myth. It is then possible to claim that all historical writings contain a certain amount of myth. The documents of any age and culture orient to the values and needs of their times and situations. They are selective, having bias on certain things at the expense of others, and, at their worst, they can misinterpret or even forge what really happened. (Baigent & Leigh 1994, 152-153; Titon 1992, Toivanen 1997, 35 - 37). We may, again, notice how facts and myths get mixed in a living culture, and each culture in the history of the human race has once been a living culture, either for a shorter or a longer time. How can we then define [the absolute and

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59 Many happenings in the Old Testament, such as the division of the Red Sea by Moses, may be regarded as myths by some people but at the same time there are many who truly believe that the sea was divided.

the objective] truth? Can we define it? Should we [try to] define it? Why [to try] to define it?

Referring to what has been presented above, it may be not so hard to accept Baigent and Leigh's different approach to the 'history', in which no distinction between the 'hard facts' and the 'myth' should be attempted.[60] (Baigent & Leigh 1994, 154-156). According to that, the history consists of not only the scientifically proved facts but also the mental and spiritual togetherness of the humans to which the facts are tied and interpreted differently by different cultures and generations. [61] The 'real' history is to be found in mental and psychic experiences of various people, cultures and civilizations. In other words, all 'real' histories contain a certain amount of 'lies' when referred to so-called hard facts. The concept of 'lie' here is very ambivalent and vague, since the matters understood as lies by some, are considered as essential facts by other. The use of such lies in history writing may reflect needs, wishes, dreams or compensations of those who write, and may function as a tantamount for the 'new reality', whatever that may be. [62]

One of the most prominent Welsh mixings of history and myth is probably the 'Statute of Gruffudd ap Cynan'. One of the reasons for choosing Caerwys to host the 1523 eisteddfod was that reputedly in the same town an eisteddfod had been once held '...in the presence of prince Gruffudd ap Cynan himself'. (Thomas 1968, 43-45). There the prince is reputed to have given a proclamation in his own name, which contained new regulations for making cerdd dafod and cerdd dant. There has been much dispute about the true provenance and age of the 'Statute...', which has, among many people, created an image of prince Gruffudd as a patron saint of music, comparable to Pythagoras. The statute has earlier been reputed to be a proclamation by prince Gruffudd ap Cynan (c.1055-1137) of Gwynedd (North Wales), who was partly of Irish descendant and who lived and ruled at the turn of the 12th century. Today most scholars, however, share the view that the 'Statute...' derives from the 1520s, approximately from the time of the Caerwys eisteddfod. (see Thomas 1968, 53). Its [the 'Statute's] attribution to Gruffudd seems to bear testimony to the myth about an old tradition that he made some contribution to the bardic order.

The second volume of Bethan Miles's thesis (Miles 1983, 539 onwards) deals with various Welsh manuscript sources and their contents in relation to medieval Welsh string music. Miles has done extremely thorough and detailed research work, and has explored a vast amount of both manuscript and early printed material. She has found and put together relations of various text sources dealing with genres, rules, terms, and early Welsh music culture in general. One of the foremost assets of her work, in relation to the present one, is the fact that it clearly demonstrates the ambiguous nature of early written sources dealing with cerdd dant. Her work, moreover, reveals how difficult it was to transmit the essential information of an oral culture into the written, and how difficult it is to perceive by representatives of written culture and transmit it further, mainly orally but meant to be taken down as written. My own

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60 Baigent & Leigh refer to the views of some authors (such as Gabriel García Márquez ja Desmond Hogan) of re-evaluating the history.

61 See Page and his concept of 'transhistorical humanness' in 'Introduction'.

62 A concept by Nobel-prized author Ivo Andric, cited by Baigent & Leigh.

experiences from various Welsh manuscripts dealing with music (for example Gwysaney 28, Panton 55, Panton 56, Peniarth 62, Havod 24 and, primarily of course, the Robert ap Huw manuscript) can only confirm this The first document Miles deals with, in volume II of her thesis, is the 'Statud Gruffudd ap Cynan'. According to her, some parts of the 'Statud...'are to be found in 50 manuscript sources, the earliest of them dating from 1520s. (Miles 1983, 539-541). One of he earliest copies of the 'Statud' could have been made by Gruffudd Hiraethog around 1545-1546 (this statement is after Thomas Parry and makes one wonder whether Gruffudd Hiraethog might have been the first, or among of the first, in the pedigree of musical transcribers, either as a copyist or even among inventors of the tablature script). Did Gruffudd invent some (or all) musical terms and their explanations and convert them, as first, into the written? An interesting, but so far also unsolved dilemma. Nevertheless, the earliest true accounts to the 'Statud' stem only from the sixteenth century and not from the twelfth, the actual era of Gruffudd ap Cynan.

4.8. The 'moral' canon of the Statute

According to Bethan Miles (Miles 1983), the earliest written source of any kind dealing with cerdd dant dates obviously from around 1500 (also suggested by Daniel Huws in 1995 during the Robert ap Huw symposium, and more recently by Sally Harper in Harper 2001b), but at the latest from 1525, two years after the first so called modern and official Caerwys eisteddfod. To the earliest written documents belongs undoubtedly the 'Statute'. It is closely joined to the first Caerwys eisteddfod in 1523, but it is a matter of opinion whether it pre-dates the eisteddfod, or whether it is a result of that gathering. The opening lines of the 'Statud' tell that the eisteddfod is to be arranged '...yr ail dydd ovis gorffenhaf y bymthe<g>ved vlwyddyn o goronedigaeth harri wythved...', in English '...on the second day of the month of July the fifteenth year of the reign of Henry the Eighth'... (as translated by David Klausner in Klausner 1999, 292). Henry VIII ascended on the throne in 1509, so the 'fifteenth year of his reign' would rather be 1524 than 1523. Yet all the Welsh sources I have come across to unanonimously say that the first Caerwys eisteddfod took place in 1523. Some questions evidently are brought forward. Is the 'Statute' a written document based on agreements of some authorities of bardic arts who got together at the Caerwys eisteddfod in 1523 and who wanted to set some things straight? Was there a document dealing with rules of 'decent behaviour' and composing music and poetry already before 1523? Be it as it may, both the music (cerdd dant) and the poetry (cerdd dafod) existed as living practised forms of art long before the sixteenth century. Written rules, regulations and restrictions, set to the practitioners of bardic arts in the 'Statute', were attempts to raise the status of bardic culture from its apparent degeneration. In reality, however, the musicians and poets seemed to have been in close touch with contemporary popular culture, tavern life and all other kind of joys. They used satire, which was forbidden in the 'Laws of Hywel Dda' and the 'Statute', and made sometimes very explicit erotic poems and songs. Such way of life was not

unknown even for 'venerated' masters of bardic arts, such as Dafydd ap Gwilym and Cynwrig Bencerdd. Apparently there was a need for such rules and regulations, as written in the 'Statute', since even the 'dignified pencerddiaid' were not able to resist temptations, and the cultural and political obsession by the English in Wales was becoming more and more heavier.

As an example of such life habits, whether true or not, practiced by some 'pencerddiaid', I would briefly like to quote one poem by a poet called Ding Moel, who flourished sometimes in the fifteenth century (Johnston 1998, 47). The poet's name is obviously a nickname, bearing strong sexual connotations ['ding' referring to a 'thing' or 'cock', 'moel' standing for 'bald' or 'bare']. The poem in question, by this fellow, is entitled 'Cyngor i Gyfaill' ['Advice to a Friend'], and its only known manuscript source is the Peniarth 57 (late fifteenth century). The most interesting lines in this poem in relation to this study, and the possible reasons for moral codes included in the 'Statute', are the following:

'Cynwrig, hud merch anerchgael,
fab Ednyfed hoywged hael,
caru'dd wyd, coeth annwyd cain,
a'I gorllwyn dan frig eurlliw…'

'Cynwrig, allurer of a girl greeted by many,
son of Ednyfed the river of fine gifts,
you are wooing, refined gracious nature,
a lovely slender-browed girl…'

transl. Dafydd Johnston(Johnston 1998,46-47)

Few lines later we may read:

'Och Gynwrig, caredig gerdd,
medr iawngof mydr awengerdd…'

'Oh Cynwrig, beloved song,
learned skill in the metre of poetry,…'

transl. Dafydd Johnston (ibid, 46-47)

The 'friend' in this poem is called Cynwrig. He is advised how to woo a girl. The wooing should not be done 'too lovingly' and man should not wait for too long to 'mount a girl' but use the opportunity whenever there is a chance. It seems also that the Cynwrig of the poem above was a bard, who was 'learned in music and poetry'. Peter Crossley-Holland (1998, 10-11) mentions that 'Cynwrig Bencerdd' probably came from Flintshire area (North Wales), and one of his friends was poet Dafydd ap Edmwnd, who flourished 1450-1497 and could have been the one who used the nickname 'Ding Moel'. Crossley-Holland suggests that Cynwrig himself flourished c. 1450-1485.

If we are here talking about the same Cynwrig, who composed 'Caniad Cynwrig Bencerdd' included in the Robert ap Huw manuscript (pp. 46-50), then the poem certainly puts the 'dignified' lifestyle of Welsh bards into rather strange light. It seems that the concept of dignity, if it is to be understood as leading a 'virtuous' life, was more myth than reality. Attachment to pleasures

of life and various kinds of 'light' entertainment is further confirmed in other contemporary poems. The following example is from a sixteenth century poem titled 'Ymddiddan rhwng yr Wtreswr a'r Dylluan' ('A Dialogue between the Rake and the Owl') which gives different description about bards and their encounters with popular culture, but less of their 'dignity':

'... a chyn y bod hi'n hanner dydd
kael kymdeithion yn ddyribydd
gwledd fwyn a gloddaist ddibrydd
a gwr o gerdd yn gelfydd
a ddoe yno yn ddigon yffydd
y chwanegi fy llawenydd
a chwedi darfod yr dydd passio
a than a chanwill i oleuo
kael telyn rawn a [i] chweirio
a phawb ar hwyl pennhyllio
nid oed rhaid fynd yr yscol
kyn kael dyry a charol
o law y law rhay yr delyn
y gael ysgower ag englyn...'

'...and before mid-day
to have unexpected companions
a fine feast and happy carousing
and clever musicians
to come there quite obediently
to add to my enjoyment
and after the day has passed
with a fire and a candle to give light
to have a horsehair harp and tune it
and everybody having fun singing verses
there was no need to go to school
before having a light song or a carol
from hand to hand went the harp
to have 'is gywair' and 'englyn'...'

transl. Meredydd Evans/Phyllis Kinney (private correspondence)

It seems that every now and then, some of the bards, who were supposed to represent the 'high culture', in fact went to taverns and had good time with local people [at least in the sixteenth century]. They sang popular songs and verses, improvised music (possibly using for popular melodies the skills based on their own 'musical toolkits') and poetry on occasion. The skills and systems taught to them in bardic schools could as well be used for songs and poetry dealing with more profane and, at least later, officially disapproved themes as drinking and sex. As can be read from the poem above, on such occasions 'everybody had fun singing verses' and 'there was no need to go to school before having a light song or a carol'. In this respect it may be no wonder why the 'Statute of Gruffudd ap Cynan' contained so many rules and doctrines concerning what a bard, or a bardic disciple, was allowed to do, and especially what he was not.

But was akinness for enjoying 'forbidden fruits' of life among some bards the main catalyst for creating such a tight canon of behaviour to musicians and poets, presented in the 'Statute'? Could one of the crucial factors rather have been the possibility that musicians and poets might have proved to be too dangerous to the Tudor government and its policy? Good in making satires and well familiar with popular forms of music and poetry, socially active with close connections to so-called common people in taverns, villages and on other informal occasions, might, due to things presented, poets and musicians had tools and channels for getting their message heard. They might have had a big impact to the minds and behaviour of masses of people due their musical and poetical abilities. The power of word and song seems to be independant of time.

It seems as if the practitioner of the Welsh bardic arts, in order to get an official status of professional musician or poet and to be allowed to practice his art in the Tudor era needed, in the first place, to be an obedient and loyal subject to the Crown in London.

Robin Gwyndaf refers to a description about ways of entertainment in the early sixteenth century Wales, originally written by Morys Clynnog in Gruffydd Robert's 'Dosbarth Byrr ar y rhann gyntaf i ramadeg cymraeg' ('Short class/lesson in the first part of Welsh grammar'). The book was begun in 1567 in Milan, around the time of the second Caerwys eisteddfod. Both Clynnog and Roberts were Catholic exiles, fled from Wales due the policy of Henry VIII and his successors. In the prologue of the grammar we may read the following passage:

> '...yet I have longing for many things which were to be had in Wales to pass the time away pleasantly and happily... If one wished entertainment, one would have a musician with his harp to play sweet tunes and a melodious singer to sing harp verses according to his desire, whether praise of virtue or satire of evil. If you wish to hear of the custom of the country during our grandfather's time you would find grey old men who could relate to you by word of mouth every remarkable and famous deed which happened throughout the land of Wales a long time ago.'
>
> (Gwyndaf 1988, 85-86)

Although the above quotation most obviously refers to times before the Act of Union (i.e. before 1536), it looks as if some of the old ways of entertainment survived in Wales also afterwards. Even though many representatives of the Welsh gentry became anglicised and adopted the new lifestyle and trends, it was, obviously, the 'common people', among whom old customs were practiced. For its own part it shows that the cultural gap between the Welsh-speaking upper and lower classes had become narrower, possibly due to the increased contacts between bards and villagers, for example at taverns, as referred to above. What comes to the anglicised part of the Welsh gentry, the cultural gap had, however, become much wider and the same can be said about the situation between Crown officials and common people. A Government official, when writing a secret report around 1600, has given the following description about gatherings of Welsh speaking people and their ways of entertainment:

> 'Upon the Sondaies and hollidaies...all sortes of men and women and childerne...doe use to meete in sondrie places...where theire harpers and crowthers singe them songs of the

> doeings of theire auncestors, namelie, of theire warrs againste the kings of this realme and the English nacion...Here alsoe doe they spende theire time in hearing some part of the lives of Thalaassyn, Marlin, Be[u]no, Kybbye, Jermon[Garmon], and suche other the intended prophets and saincts of the cuntrie'
>
> (Gwyndaf 1988, 86, original in the BM Landsdowne MS 111, fol. 10)

It may be no wonder that the Tudor officials regarded some representatives of bardic arts as a kind of threat, as potential conspirers and revolters against the Crown. Singing or telling about the heroic deeds of early Welsh princes and chieftains against the English might, directly or indirectly, have been interpreted as reflection of the general opinion of the Welsh people, and could be regarded as encouragements for open resistance. Therefore the officials tried to suppress the bardic arts, or at least have them under their strict control. As can be read from the 'Queen's Proclamation' on the pages [vi - vii] of the Robert ap Huw manuscript, the wandering poets and musicians were possibly regarded as the most dangerous from the Government's point of view, and therefore named as 'vagabonds', 'troublemakers' or 'ruffians'. Not necessarily because of their lifestyles, but because they, as travelling minstrels, could easily spread their message from one place to another. One can therefore see the Caerwys eisteddfodau, and the like, not primarily as cultural but rather as political operations.

It fits well here, as referred to by Gwyndaf in connection of humorous stories, that simply retelling the incident was not thought to be sufficient. An active local bard would always be ready to recreate the whole incident in verse. And not only the humorous incidents, but historical and tragical as well. Story is always told as if it was true, and the narratives are not static items of folklore, but folklore in action. It is a performance and a process. (Gwyndaf 1988, 83-93). The same goes also to poetry and music, which include processes of recreation, and are processes of action.

4.9 The musical canon of the Statute

The more important parts of the 'Statute', in relation to this present work, deal with musical matters. In this paragraph, before a more detailed discussion, I shall present the requirements, set for a bardic disciple in different phases of his studies, as a figure, based on information gathered from two manuscript sources of the 'Statud', both closely dated to the Caerwys eisteddfodau (1523 and 1567 respectively). Before that, however, I find relevant to cite some passages of the 'Statud', both in Welsh and in English, as an attempt to clarify some essential features of cerdd dant as it was understood and emphasised by those behind the proclamation. The English translation is by David Klausner (Klausner 1999, 293), based on Gwysaney 28 as the original text material.

'Disgybl pennkerddiaid a ddyly wybod [.20 oglymav ac 20 o ganiada<vd>wy gadair a dwy golofn ar. 24.arhvgain o glymav kydkerdd ar pedwar messur ar vgain] ai dosbarthv ai kanv yn bennkerddiaid...

'Ac os Telynor Raid iddaw wybod..., dosbarth pob gwan a ragwan vob kynhwyssiad ac ysmvdfa pob gorhwynfa ar dyniad achywairdant adangos kerdd gvarantedic oi waith e hvn yn bennkerddiaidd ac yn athrawaidd val y bo kydwybodus i bennkerddiaid a doethion varnv ai ddewisso yn awdur ac yn athraw ar <i> gelfyddyd'

(from Gwysaney 28, as presented in Klausner 1999, 286)

'An apprentice to the master craft ought [to know twenty clymmau and twenty caniadau, two cadeiriau and two colofnau and the twenty four clymmau cytgerdd and the twenty-four measures, and ought] to be able to classify them and compose them in the manner of a master...'

'And if he is a harper,..., he must know how to classify each weak beat and anacrusis, each inclusion, and the movement of each excessive length on tyniad and cyweirdant and present an attested song of his own making, with master craftmanship, and in an instructive manner so that it may be possible in the judgement of a master craftsman and learned men, to judge whether he may be chosen as a poet and teacher of his art.'

(Klausner 1999, 293)

Interestingly, a 'disgybl ysbas graddol' (the second lowest in rank) should, according to Gwysaney 28 (wherein the earliest survived manuscript version of the 'Statute' is), learn and adopt caniadau and gostegion after his teacher's wishes. This might be understood as a soft landing to the essential features of that music culture. In later manuscript source of the 'Statute' (Peniarth 77) there is no mention of gostegion in connection of 'disgybl ysbas graddol'. The lists of pieces a bardic disciple was meant to learn do not indicate anything else but to the amount of pieces in certain genres. Should we take this as a number of applications in different stylistic genres of cerdd dant, to be executed according to the rules [=mastering the patterns, hierarchies and so on]? Or as a fixed number of fixed compositions performed in a fixed, canonised way? Or as a mixture of both? It may, again, be relevant to bring forth the composer's definition according to the 'Statute':

'Athro o gerdd dant a ddyly gwnaeth kwlmav a chaniadav E hunan yn warantedic ac yw chadw kans: athro or gelvyddyd ac or dysc ac yn gwnaethur ac i warantedic ac nid y Rai sydd yni chanv gwneler wrth wasanaeth a gwaith...'

'A llawer o wahaniad yssydd Rwng gwnaethvriadwr ac atkeiniad kans gwnaethuriaidr a wyr gwnaethur pob peth ac atkeiniad y ssydd yn kanv peth awnaeth ef or blaen achos yneb a fo yn gwnaethur y peth niwnaethbwyd erioed ac na wypo neb o atgeinid ymvssig beth avo hwnnw piav yglod gwnethur dim val anivail yddydys yni gyfflybu os kanmol vwchder llyverydd yr assen ar yr Eos ai ar llaw yn vwchaf o vwchder llais am hynny nid yr vwchaf a gano a roir yn ddoethineb ar dysg[v]'

(Lbl MS Add.19711, as presented in Klausner 1999, 288-289)

'A teacher of music should compose clymmau and caniadau himself under guarantee and to be kept by a teacher of the art and the learning guaranteeing it and not those who sing it...'

'And there is a great difference between composers and declaimers, because composers know how to compose everything and declaimers sing something which he made before, because he who composes that which was never composed and which none of the declaimers of music knows what it is, that one deserves the praise and the honour because of it, and he who follows the art and does not know how to compose anything may be compared to an animal, in praising (to the) braying of a donkey compared to the nightingale, or, on the other hand, to the loudest loud voice. Therefore it is not he who sings loudest who is
considered wise in learning.'

translations by David Klausner (Klausner 1999, 296)

	Cwlwm	Colofn	Cadair	Caniad	Gosteg	Cwl Cyt	Difr	TMO	TMN
1.									
2.	5 (10)	(1)	1 (2)	x (8)	x	(5)			
3.	10 (20)	1 (2)	1 (2)	10 (16)		10			
4.	20 (30)	2 (3)	2 (3)	20 (24)	4 (4)	24 (15)			
5.	30 (40)	3 (4)	3 (4)	(32)	(4)	(20)	24		
6.		4	4			24			
7.	30	3 (4)	3 (4)					1 (1)	(1)

1. *Disgybl ysbâs heb radd* (Apprentice for a time without degree)
2. *Disgybl ysbâs graddol* (Apprentice for a time with degree)
3. *Disgybl disgyblaidd* ('Amenable' apprentice)
4. *Disgybl Pencerddaidd* (Apprentice of the master craft)
5. *Pencerdd/Athro* (Master craftsman/ teacher)
6. *Ariandlws Telyn/Crwth* (Eisteddfod victor)
7. *'Ac os telynor...'* ('Master harper')

Cwl Cyt: Cwlwm Cytgerdd

TMO: Tri mwchl (mwchwl) odidog

TMN: Tri mwchl (mwchwl) newydd

Numbers in brackets refer to the group of sources containing the Statute, associated with the second Caerwys Eisteddfod of 1567. The rest of the numbers come from earlier group of sources containing the Statute, associated with the first Caerwys Eisteddfod of 1523.

x) *'ac a barno athraw o ganiadau a gostegion'* ('caniadau' and 'gostegion' according to teacher's wishes)

FIGURE 10 Requirements of the Statute of Gruffudd ap Cynan (author's application after Harper 1999a, 151).

The first quotation from the 'Statute' refers to the importance of proper teaching methods and the secrecy of them. '...Art profits when concealed, disgraces when revealed... from this cause, those very strains which afford deep and unspeakable mental delight to those who have skilfully penetrated into the mysteries of the art...' noted already Gerald of Wales in his 'Deskriptio Kambriae' (Book I, Chapter XII). Keeping the methods of art as a secret property of the qualified teachers only seems to have played a very important role in the cerdd dant culture. These methods, or a great deal of them, were not to be revealed even to declaimers/singers, since their task was to perform something that was created by the real craftsmen of the art of music, as can be read from the latter citate. Furthermore, a composer was regarded as someone who knew how to compose and who was able to create something that was not created before. Comparison of a 'mere' performer of other people's works to an animal (more precisely a donkey here) are in essence very similar to the writings of Boethius and Guido d'Arezzo, both of whom valued those who knew how music was, or should be, constructed to those, who either merely sang or played instruments. In between the lines, one may also notice some criticism to those bards who preferred carousing in taverns and singing popular songs of the time to the 'real' knowledge of 'real' music.

Bethan Miles has taken the text of the 'Statute' in Gwysaney 28 for her source of reference. The version of the 'Statute' in Peniarth 77 contains the following: ' ... pencerdd a ddyly wybod deugain cwlwm a phedair colon ac vgein cwlwm cytgerdd ... gwybod xxiiii o diffre a dosbarth y mesur megys y mae y llyvyr...'. In other words, '...the master musician has to know forty cwlwm [=clymmau], four colofnau and twenty cwlwm cytgerdd [=clymmau cytgerdd]... twenty-four difres and has to be able to classify the mesurau as they are *in the book*...' (my italics).[63] The book, referred to here, is, most obviously, 'Cadwedigaeth Cerdd Dannau', one of the 'Grammars' and contemporary to the 'Statute'. Yet, all the performing matters, genres, terms, theories, swnemes, hierarchies and so on, mentioned in various manuscripts, pre-dated all the books and anything that was written in the sixteenth and the seventeenth centuries. The 'Statute' and other 'Grammars', together with many poems (mostly elegies) about musicians, refer to certain numbers of pieces in different musical genres, rather than to a fixed repertory of established works by well-known and respected pencerddiaid (master musicians). The following examples is by Wiliam Cynwal, a famous pencerdd, in the genre of 'cywyddau' to commemorate a respected musician of the time. This comes from an elegy to a harper named Ieuan, titled 'Marwnad Ieuan Delynor' ('Elegy of Ieuan the Harper'), and its lines 19-28:

'Aeth i fedd, agwedd ogof
Y pedair cadair a'r cof.
Cuddiwyd awen pen y pair,
Caewyd ar a pum cywair.
Cerydd aeth ar bob cerdd ddofn,
Celir y pedair colofn.
Toorwyd gwraidd diarwaidd da,
Trimcwhl yn y tir yma.

63 See chapter six for a explanation of the difr.

Gradd i fil oed ei gerdd fo,
Gardd burfrwyth gordd Aberffro. '

'The four cadeiriau and the memory
Have gone into the grave which is like a cave.
The Muse in the head of the leader has been concealed,
The five cyweiriau are locked away.
All profound music is rebuked,
The four colofnau are hidden.
The gentle good source
Of the tri mwchwl has been cut off in this country
His song was a tune for a thousand,
The fine fruitful garden of the strong leader of Aberffro.'

Transl. By Glenda Carr (Harper 1999a, 159)

And had there actually been a canon of such fixed compositions, I dare to suggest that the transmission processes of that repertory contained much musical re-creation. Re-creation, in which components of surface structure (order of pitches, direction and time values of melodic and rhythmic motives, etc.) as foremost, but also longer segments of middle and deep structure varied from one performance to another. In the course of time, and partly due to other musical and cultural influences, even entire pieces of different genres may have been substituted by new material. Oral transmission in music relates very clearly to the degree of change that occurs in the repertory, including those factors that create distance from the 'ancestral tune'. During the years of bardic study composers and players must have practiced assiduously, learning to memorise and apply their technique to music making - and ultimately adopting a fair degree of regularity. In the chain of transmission, however, the composer's immediate successor is the first player to make changes to the 'ancestral tune', if not even the composer himself. Differences in technique of playing and phrasing (which may change swiftly sometimes), the size, material and/or strings of his instrument, together with his different perception of the music and ability to transmit it, all enable changes to be made. The version that he produces from the 'original' will certainly contain an adequate number of recognisable cultural elements [emphasising and representing the elements and expectations of stability] to qualify it for being included to the tradition, together with some obvious changes caused by individual creativity. We cannot, however, prove to what extent his realisation differed from the 'ancestral tune', because neither version can be reconstructed. A version of a piece or performance of music, after a lengthy span of time and several transmissions, receptions, perceptions and further transmissions by generations of musicians within the same tradition, but with different capabilities and preferences, finally found its place in the Robert ap Huw manuscript. The number of cerdd dant players between the non-written 'Urtexts' and the manuscript version may remain forever unsolved. We can not, for example, say for sure how Dafydd Athro, an attributed composer to 'Gosteg Dafydd Athro', as suggested by Crossley-Holland (1998), might have reacted to the intabulated version of the piece with same title, as it is included in the Robert ap Huw manuscript, to his own playing, in other words the real 'Urtexts'. The word

'Urtexts' is purposely in plural here, since there may have been many 'Urtext'-versions for Dafydd in his own time.

5 INSTRUMENTS AND TUNINGS

5.1 Robert ap Huw's harp

Since the emphasis of this work is on the cognitive and musical hierarchies of the Welsh cerdd dant, and not that much on instruments and tunings, I shall discuss those matters rather briefly in this chapter. The reader is advised to works of Thurston Dart (Dart 1968), Paul Whittaker (Whittaker 1974c), Robert Evans (Evans 1999), or the author (Toivanen 1997) for further reference.

Whatever the cultural context, very often in the research of music history the [possibly] most creative factor has been forgotten or ignored, namely the musician. Together with the listener/perceiver he is one of the key figures in the transmission chain, especially in oral cultures. The role of the musician is closely tied to the instrument (or instruments) he is using, in other words to the matters of idiomacy. In ethnomusicological studies, to say nothing about the traditional Western musicological studies, an area, which is also more or less ignored, is 'idiomacy' (or 'idiomatics'). One has too often paid no, or very little, attention to the limits and/or possibilities of instrument(s), and their impact to actual musical products (be they compositions, performances, timbral elements or any combination of them) and processes when trying to make conclusions. Taking a style of Scottish bagpipe music called 'piobaireachd' (also called 'ceol mór') as an example, one may notice how an elaborated style of music making can be made out of rather limited possibilities of the instrument itself. A Scottish bagpipe (here I am referring to so called Highland pipe) has a range of a ninth, is not an equally tempered instrument and cannot produce adjacently two same pitches. This limitation in tone production has paved way, in a long course of time, to a highly elaborated performance style, having emphasis of series of complicated ornamentation figures with strict rules and indigenous terminology. Mastering the ornamentation system of 'piobaireachd' convincingly requires long time committed practice and the study of the style. (see Collinson 1978; Cooke 1986). Another good example comes from didgeridoo music of the Australian aborigines. An instrument capable for one

basic pitch, but simultaneously in skilled hands for an amazing array of sound colours.

One of the most fundamental factor setting boundaries to any music culture has been its preferred instrumention. In case of cerdd dant, it was primarily the harp, and to some extent the crwth. A single-row and diatonic harp was not capable to produce such lushy chromatic passages and glissandi, mostly familiar from romantic-impressionistic orchestral repertory. Its low-tension strings needed different fingerings and playing techniques when compared to modern concert harps. Early cerdd dant harpists seemed to have known how to turn the limitations of their instruments (from general present-day view, that is) to extensive versatility in use of swnemes and swneme-chains and -stacks (ornamentations, timbral possibilities etc). Many of their ways and preferences of musical expression, together with their sometimes rigid, sometimes flexible, way of mastering the deep and middle structural hierarchies of cerdd dant may not always be easy for present day Western ears and minds to understand or appreciate. And, as already stated before, neither seemed that be easy for the ears and minds of sixteenth and early seventeenth century Welsh, or Anglo-Welsh, gentry. Cerdd dant was a kind of 'musica reservata'; music for connoisseurs and experts to be shared and enjoyed within the circles of insiders.

Hannu Saha (Saha 1996, 102) distinguishes two levels of idiomacy in the study of instrumental music. On the first the emphasis is on music culture's more or less similar repertory which is executed on different instruments and instrumentations. With the help of idiomacy a researcher can study how and to what extent musical results are dependant on instrument or instruments they are performed (instrument's impact to a musical product). The interest on the other level focuses how culture's more or less similar repertory is executed on more or less similar instruments and instrumentations. Also important, according to Saha, is to realize how instrument's idiomatic features (possibilities, limits, limitations, construction and construction material, size, shape, etc.) may dictate the whole generative system (deep structure included) supposedly to be played on it (ibid., 105). This dictation should not be regarded as merely limiting or narrowing phenomenon. As is the case with piobaireachd, and has been with cerdd dant, the 'obvious' limitations of an instrument can be turned into expanded possibilities of musical expression in the hands (and minds) of creative musicians.

The instrument, used by cerdd dant harpists, was a single-row, diatonic instrument. According to Dart (Dart 1968, 54-55), and later to Greenhill (Greenhill 1996), the instrument had 25 strings, spanning from the equivalent of CC to g'''. Much debated has been the question of existence or non-existence of the low 'ee' string. The fact that it is not denoted in the tablature notation does not necessarily mean that it did not exist as a string of the instrument. How it was tuned, or could have been tuned, are matters of discussion, of course. And, if that string indeed existed, could it not have been that the two strings next below it were also retuned (to CC and dd respectively), implying that there were more strings on the Robert ap Huw harp (or medieval Welsh harp) than officially accepted in the scholarly works. We should keep in mind that the repertory recorded in the Robert ap Huw manuscript presents only a fraction of the whole bulk of material known (or assumed) to have existed, at least once,

among the harpists. And if in reality there was no canon in the harp repertory (at least that is how I see it), how could there have been a canon in instrument design and building? No room for individuality, no chances for developments in harp making for centuries? No competition among princes or 'uchelwyr' for the best instrumentalists and instrument makers? It seems rather crazy to think that all these could have been completely unknown in medieval Wales, since there existed features of continental cultural life, especially of those of France, which were highly admired and followed in medieval Wales. In figure eleven the generally accepted range of such an instrument, which covers the range of all music in the Robert ap Huw manuscript, is displayed:

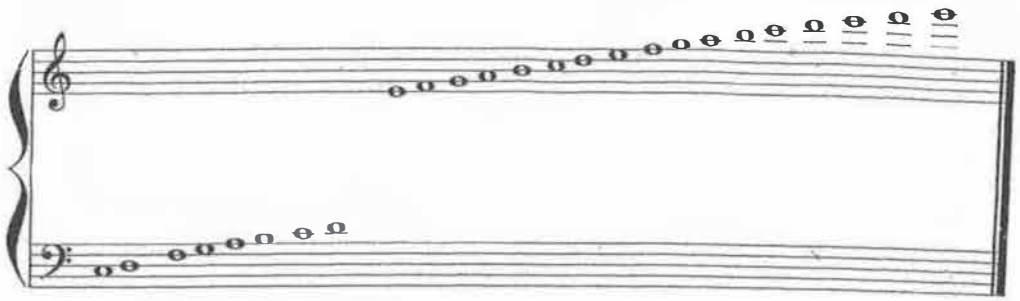

FIGURE 11 The range of Robert ap Huw's harp.

There has also been debate about the construction and the string material of the medieval Welsh diatonic harp. The Welsh word for the harp is 'telyn'. When discussing its origins, Osian Ellis (Ellis 1973, 78-79) refers to professor Jarman [A. O. H. Jarman, an expert on Welsh literature], according to whom 'telyn' should derive from the old Irish word 'teillin', meaning 'humming' or 'buzzing of the bees'. This may refer to the use of the brays or bray pins. The first mention of the bray pins (in 16th-17th century Welsh 'gwrach - gwrachiod') as a constructional element of the harp are to be found in famous cywydd by Huw Machno (soliciting a harp from Robert ap Huw titled 'Cywydd i Ofyn Telyn'). It reads:

'Ceimion wrachïod cymwys
Yn siarad bob teimlad dwys'

'Purposeful curved pegs
Giving voice to every intense emotion'

transl. by Glenda Carr (Harper 1999b, 332)

The brays have generally been accepted as having belonged to medieval Welsh harp and its music, as exemplified in some scholarly works (e.g. Ellis 1973 & 1991) and recordings by William Taylor. Ellis, however, has made some misconception concerning the function of the brays by comparing them to semitone levers of a modern lever harp. (Ellis 1991, 31). The brays in medieval harps were sound devices, not tuning devices. When they are placed close against the strings, a resounding and slightly 'distorted' sound is achieved as

the strings are plucked. I dare to suggest, however, that even though the brays are mentioned in some poems, it does not necessarily mean that they were always used when harp music was performed. If a new invention in instrument technology is created, one of its functions is probably to widen the musical and timbral possibilities and not to substitute already existing sound entirely with new.

There are further topics that have been discussed in connection of the harp construction. Were there harps provided with leather soundboards, as has been suggested (e.g. Rimmer 1963, 63-73), and were the strings made of horsehair rather than of gut or wire? One further problem is that there are no survived Welsh harps from the early 17th century. The earliest Welsh source dealing with harp construction is the James Talbot manuscript, from c. 1690. Robert Evans of Cardiff, who has given valuable contributions to the studies of tunings in cerdd dant, has constructed a harp after the instructions in the James Talbot manuscript. The harp is strung with gut, has got the bray pins and structurally resembles the Continental model known as Gothic harp. The instrument is kept at the Museum of Welsh Life, in St. Fagans (near Cardiff). But, as mentioned earlier, in the heyday of medieval Welsh cerdd dant there must have been several kinds of harps in different sizes and constructions.

5.2 Tunings

Since Dart's hypothesis concerning various scordatura tunings in cerdd dant (Dart 1968, 55), there has been a big array of suggestions by scholars for scales or modes. Generally speaking, most of the scholars agree with Dart in that there has been various ways to tune the harp in the Middle Ages, the Welsh music included. As a matter of fact, only one of the Robert ap Huw scholars, Peter Greenhill, has constantly argued against the use of multiple tunings (e.g. in Greenhill 1995).

Greenhill persists in his argument that the letters and marks of the tablature refer simultaneously to both the strings and actual pitches/notes produced on them, with the exception that letter b in the tablature script refers to B-flat and not B-natural. Although I agree with him that the pitch of B-flat plays a significant role (much more important than B-natural, when trying to avoid the tritone) in many pieces of the manuscript, and thus in different tunings as well, it is far too one-eyed to claim that there was only one way of tuning the harp, and that the letters always refer to the sounding pitches. Many sources, i.e. the Grammars, speak in favour of the fact that certain pieces could have been played in different tunings, and the choice of the tuning was left to the player. My observations and experiments in many of the pieces show that they work well in various tunings. 'Caniad San Silin', for example, works both in 'is gywair' and 'tro tant', and all sets of 'Clymmau Cytgerdd' can be played in 'cras gywair' and 'is gywair', as well as in other settings equally well. That the letters and marks do not always refer to the pitches, one needs only to have a look at the 'Caniad Cynwrig Bencerdd' (pages 46-50 of the Robert ap Huw manuscript). The mark 'dd.' refers rather to the sound of low C, executed on the

low d-string. In the course of the 'cainc' IX of the piece, 'dd.' is actually changed into 'cc'. Either we are dealing here with the copyist' s/transcriber's error, which he corrects, or the implication that the low d-string was tuned down to C. It remains open, whether the harpist should carry on plucking the 'dd.-string after the correction has been introduced, or to start to pluck the 'cc'-string instead.

5.2.1 Multiple tunings

There are many references, both in Welsh, Irish and Continental documents, to various ways to re-tune the [diatonic] harp. Some passages of the Grammars (those contained, i.e., in Peniarth 62, Panton 56, Havod 3, Gwysaney 28) and Gwilym Puw´s 'Trefn Cywair Telyn' may be mentioned as Welsh sources, and a treatise [possibly] by Jean Vaillant as a medieval Continental document (see Page 1984 for the last mentioned). References to established pitches ('cywairdannau') and movable pitches ('tyniadau') strongly suggests the important status of tetrachords (in cerdd dant, those of G-C, D-G) as basic musical units in cerdd dant, very much similar to practices in ancient Greece, Islamic countries and India. In the two last mentioned cultural areas they are very valid even today. The symbolism of tetrachords (four seasons, etc) in the medieval world should neither be ignored.

One of the most striking reference to accompanied performance, and the process of tuning the harp, in medieval literature comes from 'Roman de Horn' (c1170), an Anglo-Norman manuscript. The text indicates that tuning of the harp was of utmost importance to performer. The hero prepares to sing something called a lai to the harp. The text goes:

'Lors prent la harpe a sei, qui'il la veut atemprer.
Deus! ki dunc l'esgardast cum la sout maniër,
Cum ces cordes tuchout, cum les feseit trembler,
Asquantes feiz chanter asquantes organer...'

'Quant ses notes ot fait si la prent a munter
E tut par autres tuns les cordes fait soner:
Mut se merveillent tuit qu'il la sout si bailler.
E quant il out (is) si fait, si cummence a noter
Le lai dont or ains dis, de Baltof, haut e cler,...'

Then he took the harp to tune it. God!whoever saw
how well he handled it, touching the strings and
making them vibrate, sometimes causing them to
sing and at other times join in harmonies...

When he has played his notes he makes the harp
go up so that the strings give out completely different
notes. All those present marvel that he could play thus.
And when he has done all this he begins to play the
aforesaid lai of Baltof, in a loud and clear voice...

(Page 1987, 92)

So the protagonist checks the tuning by plucking the strings melody-wise ('chanter') and chord-wise ('organer'). When he has done this testing ('Quant ses notes ot fait') he begins to retune it, making the strings give out completely different notes ('...si la prent a munter/E tut par autres tuns. les cordes fait soner'), and then sings the lai. This testing piece (melody-wise and chord-wise passages) has parallels to the 'Try if it is in tune' test-piece notated by Bunting in 1792 (Bunting 1840, 89). It also bears some similarities the 'pwnc' on page 56 of the Robert ap Huw manuscript, which might have been a test-piece as well.

The above passage from 'Roman de Horn' is a vivid description of a lai-performance, done by a courtly amateur, yet skilled, musician. It tells us about the performing techniques, such as the tuning-preliminary, which seems to have been a very vital part of the whole performance. A preparatory phase, during which the listeners were 'turned on' to the feeling and the song/story to come; a phase, which could not have been carried out, just anyway you wanted but rather in a ritualistic way.

The above description, although telling some details about a performance occasion, does not contain information about the musical contents of the lai (mode, rhythm, ornamentation, playing techniques and so on). This, on its own behalf, shows what was relatively easy to put on paper and what was not. With the help of poetical language one could give information dealing with musical practices, which benefit later attempts to reconstruct the performing scheme. It does, though indirectly, denote that the performer had to be aware of the stylistic and musical grammar of the lai in general, and the lai of Baltof in particular. This implies that there were not in detail predetermined musical contents of that particular piece, and that the performances were more or less different in each occasion. We may perhaps speak of hierarchical structures (and substructures) of musical knowledge proper to the genre of the lai, and this toolkit was used as performance occasions required, or to the extent the musician was capable in each occasion to use it.

Several medieval vernacular sources, according to Christopher Page (1987), suggest that this (=changes in tunings) did happen among harpists (=> tuning-preliminaries before playing; we can call the tuning processes as kind of formulaic things); an expert harpist knew many diatonic settings of his/her instrument (although no details about the actual modes used are given in the texts); the importance of different settings is nevertheless evident, as may be read from the following:

> '....pren ceste harpe et lacorde a ta uolente selonc
> la cant de tes uers...li harperes...le commence a
> atemprer selonc ce kil sauoit kil couenoit au
> cant kil uoloit dire.'
>
> '...take this harp [said Iseut], and tune it according
> to the music for your lines...the harper...then began
> to tune it according to what he knew would be
> necessary for the music he was about to perform.'
>
> (from 'Tristan en prose', transl C.Page) (1987,112)

Often [in the tales] the harp is passed from hand to hand, and each time the harper-hero discards the tuning used by the previous player, and 'begins to tune it in his way and after his fashion...'. Thus the tuning-preliminary is a part of musician's uniqueness, emphasizing the performance skill and creativity of the musician in turn. The harp is not tuned just artfully, but also after one's way and fashion. (ibid., 114).

Page seems to be bit confused about the natures of scordatura-tunings, since the survived music of the lais in some manuscript sources are seemingly in just normal diatonic modes to which no special scordaturas are needed. But we may take another access point to this question. First the setting of the harp and the mode used for the pieces can bee seen as two different things (as probably was the case in the Welsh cyweiriau). The concept of 'cywair', as often mentioned, should be understood as having more than one meaning only. It does not necessarily mean only 'tuning', but may refer also to 'setting', 'tonal area', 'key', 'scale' or 'mode', or some or all of them. In other words, one setting can be used for several modes, and the two adjustments, often mentioned in the romances, could refer to the following procedures:

1. the 'basic' setting, where the harp is set in relation to one or more established strings (G, for example)
2. the 'further' setting, where the harp is set to one or more modes, which can be deducted from the basic setting (a fine-tuning, or adjustment)

The above procedures imply that first the harp is tuned against certain 'sette string' (very often this seems to have been one of the G-strings; the lowest G was often called 'Gamut', i.e. the lowest in the tonal range); in this setting the three established or strong pitches within an octave are fixed (the three strong cyweirdannau). The second phase is needed either for possible adjustments of the non-fixed pitches (tyniadau-strings) in order to get the proper modes for the music needed in the performance to come, or to make some 'fine tuning' adjustments of certain strings. This could refer to the importance of certain drone-strings in the lower register, or possible different alterations in different octaves. One possibility is, of course, the fine adjustments of concords for the modes that are needed (the pure fifths, for example), which could not have been made in the first setting. Even if the setting of non-established pitches had been made in the first setting, some changes may have proved to be necessary in order to make the instrument most satisfying for the needs of the performer. Perhaps that is what is referred to in the romances by '...to tune it in his way and after his fashion...', or 'he accords some strings to the demands of others so that those below reply to those above in true sound and true accord'.

A citate from a 16th century Irish manuscript [kept in Trinity College, Dublin] presents the process of tuning in the following way:

'To set a harpe, factum per J.Stovell.

> Ffirst ye shall begynne to set your harp at the 4th string and let hymme stand still for your chef tenor; and set all the harpe to hymme. Thenne remove your finger shall ye set the 5te above to hymme. Thenne remove your finger to the same strynger that the thomb stordes uponne, and remove youst thombe to the 5te above your fynger and set hymme to the

> fynger. Thenne toche the 8th to the thombe and set hymme to the thombe. Thenne remove the thomb to the 5te fro the fynger and set hymme to the fynger. Thenne taketh hede and set your fynger uppone the chef tenor, and that a next stryng bynethe the place that he stondes onne, and remove the thombe up to the 5th to hymme and set the thombe to the fynger. Thenne remove the fynger uppe to the 8th fro the thumb and set the fynger to the thombe. Thenne remove the thombe to the 5te fro the fynger and set the 5th to the fynger. Thenne remove the fynger to the chef tenor and set the thombe to the 8th to hymme and set the thombe to the fynger, and thenne remove the fynger uppe to the 5th fro the thombe and set hymme to the thombe. Thenne remove the thombe uppe to the 8th fro the fynger and set hymme to the fynger. And thenne set uppe 8 up up up till ye come to the ende; thenne shall ye set the next stryng bynethe your chef tenor to the 8 above hymme, and so to the next benethe, till ye come to the end. And thenne shall your harpe be well set. Amen.'
>
> (Manuscript 02.53, cat.no 1157, f.71)

If our 'chef tenor' is the low G (the fourth string from the bottom in Bunting's observations), the process goes: G -> d ->a ->A; G->b ->B ->f#; G ->g ->C ->c, and after that in octaves accordingly. It may be noteworthy to mention that the harp type used by the old-style Irish harpists was also a diatonic, single-row instrument. (Bunting 1840; Rimmer 1964 & 1969; Billinge & Shaljean 1987). The situation was similar in Scotland as well. (Sanger & Kinnaird 1992).

There are more supporting, and very informative, passages concerning the tuning process in 'Lumiere as Lais' ('Light to the Laity'), a religious poem in Anglo-Norman language, completed at Oxford in 1267 by Pierre of Peckham. Here we find allegoric comparison of the condition of Man living in charity to the well-tuned strings of a harp. This motif is, according to Page, a common one in medieval literature. Here we have a very detailed description of tuning process:

> 'Coment l´em deit temprer la harpe; Ky deyt harpe dreyt temprer, Pur fere la en acord suner, Les cordes couient si adrescer Ke chescune acorde a sun per, Solum dreyte proporciun. Ke le oreylle iuge en le sun, E sulum le art k`est troue E par art de musike proue, Ke deus acordent en diapason, E deus en diatessaron, E deus ausi en dyapante...'
>
> 'How should one tune the harp. He who wishes to tune the harp aright; And Make it sound harmoniously; Must arrange the strings; So that each one agrees with his fellow; According to true proportion. Let the ear judge the sound, Both according to skill; And according to the demonstrable laws of music; So that two accord in an octave; And two in a fourth; And two in a fifth...'
>
> (Page 1987, 115)

In the original text there are many contemporary musical terms either in Latin ('dyapente'; 'fifth', 'diatesseron'; 'fourth', 'diapason';'octave') or in Anglo-Normanized form ('proporcium'; 'proportion'). There is more important information to be found in the same poem, which are well in line with the two-phase tuning procedure referred to above:

> 'Les regards puet em chaunger, Par tuens diuersement temprer, E par diuers ordeyne ment De semitoens diuersement. Par la quele veie e nature En harpe est la diuerse temprure. Mes coment ke turne le curs As treys touz jours auerunt recurs.'

'One may change the settings; By tuning different notes; And by different arrangements; Of variously placed semitones; By this means; There is diverse tunings in the harp; But wherever it may turn; There will always be need of three; The fifth and the octave together with the fourth.'

(Page 1987: 115/116)

Here we have a clear statement for the importance of tetrachords ('need of three...the fifth and the octave...with the fourth') as basic units in medieval music. The three established non-changeable pitches within an octave are the first and the fourth notes of two tetrachords (e.g. C-F and G-c). The four non-established pitches, either one or more, could be altered according to the needs of the piece of music to be performed. We have references of similar kind in later Welsh manuscripts (e.g. Gwysaney 28, Peniarth 62), which include material from 'Cadwedigaeth' and 'Dosparth'. There were three strong cyweirdannau (G, C and D), which were not to be altered, and four, which could be changed (tyniad-strings, or 'tannau lledfon'). These different settings were diatonic in nature, but enabled the use of several modes with their various tonal centres. Even occasional use of musica ficta (see Wegman 1992 for more about this concept) could be fitted into this framework. To the basic setting of the Irish harp an F# could be inserted between G and F, thanks to the 'sister-strings' used in that setting. One notices in several sources (e.g. in Morley's 'Plaine and Easie Introduction to Practicall Musicke' and in Welsh translations of its various sections in some manuscripts, for example in Panton 56) that the pitches in the diatonic gamut were named after Guidonian doctrine of hexachords, and were in use still in the early 17th century. One should also keep in mind that the temperament systems (with or without musica ficta) was not equal, but either after Pythagorean or just intonation. Thus the semitones and tones (and other intervals, as a matter of fact) were of unequal size, and this might have been a further reason for the need to tune 'after one's fashion'. In just intonation, for example, the fifths G-D and D-A are of unequal length.

As a medieval concept, the meaning of 'bourdon' lies in the area of 'something, which produces an unvarying note, a drone'. The bagpipe's drone was termed bourdon, the drone-pipe of an organ was a bordunus organorum, and the lateral unstopped strings of medieval fiddles were borduni. The basic connotation of the word bourdon has not changed even in our time. (Page 1987, 118-119). The lowest strings of the harp appear to have been called bourdons in the 13th century French (or Anglo-Norman). In Pierre of Peckham's 'Lumiere as Lais' one may read, after it has been stated that however the harp is tuned there will always be a need for the octave, fifth and fourth, for:

'Kar saunz ices ne purra mie; En harpe estre sun de armonie; Les essais e les burduns; De ces treis unt ausi les suns.'

For without these there cannot be any harmonious sounds in the harp; The essais [=upper strings] and the burduns [=lower strings] also exhibit these sounds.'

(Page 1987: 119)

The essais, then, probably refer to the higher strings, and the burduns to the lower. The use of both of them together may refer to the whole compass of the harp strings, i.e. the range of the whole instrument. This can also be taken as

denoting the importance of the three established string-pitches in any octave. If medieval harpists used drone-strings in their playing as accompanying strings, there are some references in contemporary literature, which may be taken as pieces of evidence for it. Gerald of Wales describes in his 'Topographica Hibernica' (Gerald of Wales 1982, 103-104) that the Irish musicians 'play quite freely the tinklings of the thinner strings along with the duller sound of the thicker one' ('sub obtuso grossioris chordae sonitu, gracilium tinnitus licentius ludunt'). This 'thicker string with duller/deeper sound' might have been the drone-bourdon string used for the accompanying. According to Bunting's 'Ancient Music of Ireland' (Bunting 1840, 22) the term 'cronan' was used by Old Style harpists for the deep-sounding string(s) of the low register. A short notated example of its use ('Lamentation of Deirdre' on page 89 in the 1840 edition) show the extentious use of one low string (that of G, quite surprisingly) for accompanying. On a metal-strung harp, or bray harp, the use of one low string gives a long resounding effect, close to that of bagpipe drone.

What comes to Bunting, one should note that most of the basses (in transcriptions in his notebooks) involve the interlocking of parts [i.e. melody is shared between the treble and the bass], which may also be explained by the suggestion that tunes of this kind were the easiest for Bunting to transcribe, due possibly to a strong bias for linear hearing). A tonic drone bass (as named by Moloney) where the tonic note (if we can call it as that in modal music) and chord (often without the third) in its various inversions are fragmentary notated in two pieces. In some tunes the fragmentary bass parts are simplified motifs of melody line in parallel motion, often in parallel octaves, although some other intervals are also found. This parallelism indicates a performance practice of old, possibly medieval, origin. (Moloney 1995, 319-321)

There are indications to different tunings in the ap Huw manuscript; in the diagrams on pages 108 and 109, in tune lists and in the names of some of the pieces ('Caniad bach yn bragod gywair', 'C. bach in gogywair', two 'profiadau' in different 'cywairiau', etc.) themselves. It is, according to my observations and experiments, true that many of the pieces work musically well in various tunings, so the 'telynor' might have had many choices of his own, as suggested by Paul Whittaker, for example. (Whittaker 1974c, 36). Thus the tablature is not, to my opinion, the body of evidence to tell unambiguously that there was only one tuning used in cerdd dant. And although the majority of the pieces in the ap Huw manuscript do not have indications of cyweiriau in the ap Huw manuscript itself, there are many allusions to them in other sources, such as the 'Grammars'. I still need to point out that none of these pieces, or the stylistic elements of 'cerdd dant' were learned from any written source in the first place, and hat, I think, includes the cyweiriau as well. The cyweiriau were learned during the course of bardic music education.

There are admittedly inadequacies in the tablature, what comes to indication of tunings. The 'lledf gywair gwyddyl' on page 109 is different to that on page 108. Both do, however, have two strings tuned to g (similarly to the 'Sisters' in Bunting's collections). The ciphers, referring to the strings, do not always coincide with the actual pitches. But Bunting' s version for the basic Irish tuning is different to both of the 'Irish tunings' on pages 108-109 of the Robert ap Huw manuscript. The time gap between Robert ap Huw and the Belfast Harp Festival is nearly two centuries, and it is only in Bunting's edition

from 1840, almost fifty years after the Belfast gathering, where he gives the old-style tunings. The test-piece on page 89 of Bunting's 1840 edition ('Try if it is in tune') has a strong bias on pentatonism; c-string (or pitch) is played only once. If there are any conclusions to be drawn about 'Irishness' in the Welsh 'cyweiriau', then the above-mentioned test-piece suggests that the 'lledf gywair gwyddyl' on page 108 would be better alternative.

5.2.2 Harp tunings in cerdd dant

According to Thurston Dart, names of seventeen different tunings or settings are to be found in connection of cerdd dant, either on the pages of the Robert ap Huw manuscript, or in other sources. (Dart 1968, 56-58). Some are mentioned in connection of piece titles (or at the end of some pieces), some in connection of piece lists at the end of the manuscript, and some on pages 108 and 109 of the manuscript, where diagrams of some tunings are presented (see figure 12). Various sources denote that there were five tunings or settings superior to other, so called 'five standard and warranted tunings' ('Y pump cywair safedig a gwarantedig'). In the Robert ap Huw manuscript (in the hand of Lewis Morris) we may read:

> 'Pum cywair y sydd yn safedig ag yn warantedig; ag o'r rhai hynny gellir gwneuthur a fynner o gweiriau.
>
> 'There are five standard and warranted tunings, and from these any tunings can be made'
>
> (Lbl Add. MS 14905, 7)

If, for example, the harp is tuned diatonically so that one has 'c', 'd', 'e', 'f', 'g', 'a', 'b flat', and upper 'c' within an octave (which, I think, might have been basic setting of Robert ap Huw's harp), you have a big choice of cyweiriau at your disposal. Provided, of course, that you accept the concept of cyweir standing not only for tuning, but for other things, such as 'setting', 'mode', and 'scale' as well. To support this suggestion, here are two freely translated extracts (as they appear in Whittaker 1974c) from two Welsh manuscripts:

> 'We are dealing here with cerdd dant, and its strong cyweirdannau, and the number of them. There are seven of them altogether, and four of them can be altered in mode (mewn modd), and three cannot. It is because these three are principal or strong, and those four are not. These (four) have reason for being so, because these no number between them (in a mode), and they do have more than just one state of being. These four weak ones are inner strings (cynnwysdannau). Often they become discords (tyniadau).
>
> Peniarth - 62
>
> 'There are three proper strong strings: Bécarré [equivalent, most obviously, to 'Ut' of a hexachord], Bémol [Fa] and Properchant [Sol].... thus there is Bécarré-

cyweirdant, Bémol-cyweirdant and Properchant- cyweirdant.' [64]

Panton - 56 (pp. 36-37)

In this exemplary case, there are the following modes to try on the [intabulated] pieces of the Robert ap Huw manuscript:

C-mixolydian: fits well to 'Gosteg Dafydd Athro', to 'Clymmau Cytgerdd-section', 'Caniad Gwyn Bibydd' (as an alternative), and 'Caniad San Silin'for example

D-aeolian: fits well, at least, to 'Profiad Brido ar uwch gower'

F-ionian: fits well to 'Gosteg yr Halen', 'Gosteg Ieuan ap y Gof', Gosteg Llwyteg', ' Caniad Cynwrig Bencerdd', 'Caniad Cadwgan' and 'Profiad chwith Ieuan ap y Gof'

G-dorian: fits well to 'Caniad Suwsana', for example

The above-mentioned setting fits very well to many other pieces of the manuscript as well, but needs, by no means, to be the only one. In some longer caniadau, some ceinciau may have g as their tonal centre, but later, in the course of the same piece, the tonal centre is shifted to c, or occasionally to d. Such is the case in 'Caniad marwnad Ieuan ap y Gof', and yet the above-mentioned tuning fits very well to the entire piece. Thus, one cywair (tuning) may contain several cyweiriau (modes). In the case of basically diatonic instruments, such as the single-row harp, the chromatic deviations were probably not frequently used, although it was possible to execute them (with the technique of 'bys y fawd', for example).

It is commonly acknowledged that the system of hexachords, in the Middle Ages and in the Renaissance, indeed did have just one chromatic alteration (b natural to b flat) to the 'basic' diatonic scale. Theoretically they were considered as the same pitch, being perhaps an early, and not commonly understood, version of the 'musica ficta'. It is equally acknowledged that the hexachords could be, and also were, transposed during the Middle Ages and the Renaissance. This can be read, for example, from Thomas Morley´s 'Plaine and Easie Introduction ...', or several citations of it (in Welsh) in Panton 56.

Of Robert ap Huw scholars, Paul Whittaker has been of the opinion that no piece in the manuscript 'on musical grounds alone' works in any of the tunings given on pages 108/109. (Whittaker 1974c, 37). This, of course, is very relative matter. The problem of 'something working or not-working on musical grounds' depends on what we expect the music to sound like. Very often this

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64 The names of 'three proper strings' refer obviously to the three main [relative] pitches of the hexachords, and simultaneously to the most important pitches of a tetrachord (the first and the last). The quotation from Panton 56 may be an application of Guido's 'Doctrine of Hexachord' to Welsh harp music. It may originally be taken from Thomas Morley's 'A Plaine and Easie Introduction for Practicall Musicke'. There are several quotations from Morley's book in Panton 56.

problem has seen and analysed on terms of Western classical or tonal music, which is of far later origin than any music in the Robert ap Huw manuscript or other pieces of cerdd dant not included in that. The 'avant-garde in archaism' seems to be far too difficult to accept still. Anyway, even in terms of tonal music, 'Caniad Gwyn Bibydd' and 'clymmau cytgerdd' work well in 'cras gywair', given on page 108 of the Robert ap Huw manuscript. Track 8 on the joint CD is our version of 'Caniad Gwyn Bibydd' in tuning we understand to be 'cras gywair'. On 'musical grounds alone' I find that the piece worked really well in 'cras gywair', as well as in two other tunings that are, according to Whittaker (ibid., 36), given in manuscript sources to 'Caniad Gwyn Bibydd'. It is, of course, completely another matter if listeners find our musical interpretation as 'not-working'.

To my opinion so far the most peculiar interpretation of the above mentioned diagrams (of which some are presented in figure 12) comes from Peter Greenhill (Greenhill 1996, 115), where it is stated that the diagrams present the relationship of cyweirdant and tyniad, and their finger movements in the mesurau. The changes presented in the diagrams do not refer to finger movements, but to the importance of tetrachord as a basic unit in modal music. Besides, the names in the diagram boxes refer to various tunings and settings, and bear no resemblance whatsoever to names of any mesur. Some of the cyweiriau on page 108 of the Robert ap Huw manuscript are, if we take them as tunings/settings, indeed peculiar. It may have been that tunings, such as 'Kower yr athro fedd' and 'kower chwith', did exist, but were not widely used. As in Turkish music, in which out of hundreds of different 'maqams' only a dozen or so are commonly used, some of the cyweiriau (five) were more popular than others. However, some players might very well have used these peculiar tunings, in order to gain special musical effects. We must bear in mind, in the first place, that there was no fixed concert pitch (such as a1 = 440 Hz) in the heyday of cerdd dant, and secondly that, for example in case of 'Kower yr athro fedd', replacement of strings could have been taken place. In other words, the a1-string was not necessarily tuned down, but a thicker string might have been in its place and tuned to ff. Hypothetical, but not totally impossible. In Iraqi oud, for example, the lowest string (lowest in pitch) is always placed as the uppermost on fingerboard.

What, indeed, could have been the functions of such 'weird' tunings? Whether they had something to do with satire, or something else, must be left out of scope of this work. However, in poetry and narratives there was a lot of satire, e.g. the famous 'Journey to Meganwy' (Matthews 1991b), in which Taliesin´s magical powers made other bards unable to say anything else but 'blerwm, blerwm'. Such 'unpoetry' might have required an 'unmusical' tuning.

As referred to and discussed in this chapter, many medieval documents and treatises imply that re-tuning of harps was very common practice in Europe. I see no reason why the Welsh harpists would not have followed such a practice. It seems still to be far too common viewpoint that medieval musicians were stupid and unable to creative musicianship.

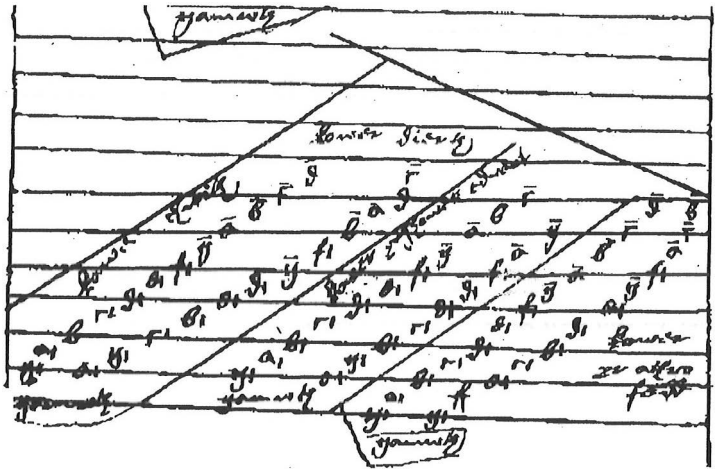

FIGURE 12 Examples of tuning diagrams (page 108 of the Robert ap Huw manuscript).

5.2.3 Five standard and warranted cyweiriau

According to 'Grammars' (especially 'Dosbarth Cerdd Dannau') the five most important tunings or settings were:

Cras gywair
Lleddf Gywair
Gogywair
Is Gywair
Bragod gywair

Various interpretations of these have been suggested so far by Robert ap Huw scholars, and they are discussed in more detail in Toivanen 1997. The most convincing suggestions of their ontology are, to my opinion, those of Robert Evans (Evans 1999). His conclusions are based on large body of evidence (including many theoretical treatises of the Middle Ages and the Renaissance), and on his many experiments as a musician and instrument maker. The construction principle of all the 'five main cyweiriau' is, as referred to already earlier in this work, that there are three strong and established tones (the strong cyweirdannau) 'g', 'c' and 'd' (corresponding the first and the fourth pitch of a tetrachord, and also the open strings of the crwth) and four weak and non-established tones (the weak cyweirdannau), sometimes also called as tyniadau or 'tannau lledfon' (the moveable strings). The construction principles of the Welsh cyweiriau has many analogies with those of Islamic maqams, Indian ragas or scales of antique Greece, in which the importance of tetrachord as a basic musical unit has been acknowledged. The suggestions by Evans for the five main tunings are presented in figure thirteen. In addition to the five main cyweiriau, the sixth tuning ('tro tant', literally 'turn of the string') is sometimes mentioned as belonging to the category of important tunings. The suggestion by Evans for 'tro tant' is presented in figure fourteen.

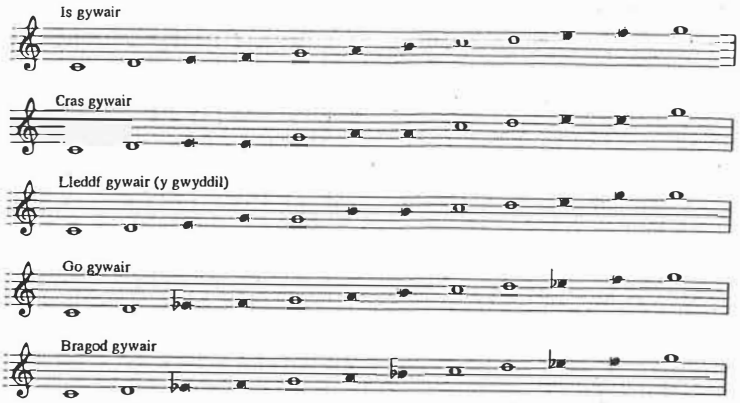

FIGURE 13 The five main tunings of cerdd dant, according to Robert Evans (Evans 1999, 337).

FIGURE 14 The suggestion for 'tro tant' by Robert Evans (ibid., 337).

Concerning the main cyweiriau of cerdd dant I agree with Evans' suggestions, with one exception. That exception is the relationship of 'is gywair' and 'tro tant'. As mentioned earlier in this work, the medieval mode theory made no distinction between 'b natural' and 'b flat'. They were not two different pitches, but one with two tone heights. I prefer to consider 'is gywair' and 'tro tant' as the same setting; i.e. as setting where both b natural and b flat could have been used, depending on the context. My own musical experiments on the manuscript's material support the importance of b flat to that of b natural. In this I agree with Peter Greenhill who has emphasised the importance of b flat. (e.g. Greenhill 1995. My own suggestions for the five main cyweiriau are the following:

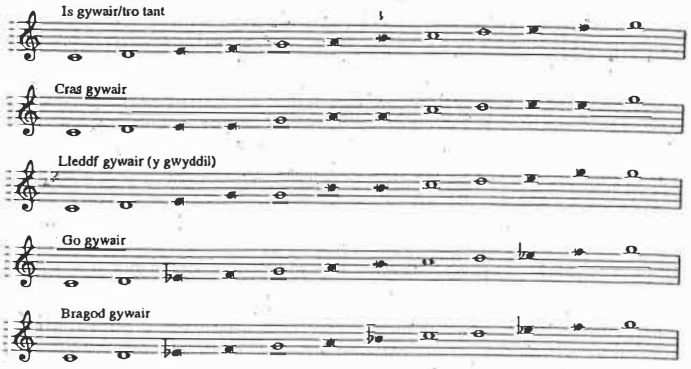

FIGURE 15 The author's suggestions for 'the five standard and warranted tunings' of cerdd dant.

On the accompanying CD three of the above settings, namely 'is gywair/tro tant', 'bragod gywair' and 'cras gywair', are used in performances.

Before going further to the crwth and the crowders, I would make one more reference to Gerald of Wales, and his comments about the concept of B-flat, which needs a comment. There has been a lot of debate and discussion of this particular matter (e.g. Rimmer 1969, 31). The English translation of the text goes:

> 'By the sweetness of their musical instruments they soothe and delight the ear ... and by astonishing execution of their fingers, and their swift transitions from discord to concord, produce the most pleasing harmony ...The strings strike together fourths and fifths: they always begin with B-flat and return to it, that the whole may be completed under the sweetness of a grand and pleasing sound.'
>
> (Gerald of Wales 1982, 103-104)

The Latin word, translated above as B-flat, is 'bemol'. Most scholars have taken this word to denote the pitch or tone of 'b-flat'. When Bunting referred to the text of Gerald in his 'Ancient Music of Ireland', he talked about '...beginning with ...and returning to the soft mood' (Bunting 1809, 4). This could imply to a performing practice, in which player starts with a 'simple' version of a theme, then proceeds to more complex and technically demanding variations/improvisations, and in the end returns to the 'simple' version. Instead of a theme, the player could have used a generative musical system, such as 'gosteg', as a starting point, proceeding from simple to complex, and finally 'returned to the soft mood'. There are similarities to this kind of performing practice, for example in Scottish 'piobaireachd'. (see e.g. Collinson 1978; Cooke 1986; Purser 1992 or O'Sullivan 1982). And further suggestions in connection of cerdd dant shall be made in chapter six.

5.3 The crowders and the crwth

In connection of cerdd dant, something should be mentioned about the crwth and its players, the crowders. The crowder, according to Bethan Miles (Miles, 1983), was sometimes called in Welsh manuscripts as 'crouder' or 'le crouder'. This indicates some Continental (possibly French) cultural or etymological (or both) influences, and may also denote that their instrument might as well have been plucked, and not only bowed. In the Middle Ages, names such as 'crowd', 'rota', 'crotta', etc. were frequently used in connection of string instruments (whether bowed or plucked), the harp included, as can be read in many early documents dealing with musical instruments.

Miles gives (ibid., 1983, 116-121) a list of names of crowders who flourished in Britain (or possibly in Wales only) in the fourteenth and the fifteenth centuries. Her list stems from her own extremely thorough research, together with writings of one Bob Owen, who used terms, such as 'grythor' and 'ffidler' in connection of those musicians. This could indicate that the musicians in the list played primarily a bowed instrument. Miles has written the names of the crowders in chronological order. Quite surprisingly, the number in

connection with the name of the first musician in Miles's list is 122. It probably refers (as do the others) to page numbers in Bob Owen's work. A big array of titles referring to the trade (of each musician) can be seen in the list. Those titles include, among others, 'crutheur', 'krethaur', 'le crouthur','crouthur', 'crouthour', 'croudere', 'le croudere', 'le crouther', 'crowder', 'grythwr' and 'gerddor'. Names of musicians listed give an impression that not all of them were native Welsh, or even English. A further possibility is that some of them might have been largely influenced by Continental culture, and therefore adopted a more French-sounding name. One should, however, keep in mind that many representatives of Anglo-Norman culture, who lived in Britain, bore French names. The list includes names such as 'Colin(us) le Grouthur', 'Thomas Le Croudere', 'Johannes le Crouder', ' Petro Crouder apud Pityngton', 'Ankws' (an early Welsh setting for a Scottish name Angus?), 'William Ffaroe' (from Faroes?) and 'James Green'. Some names are provided with their bearers' (obvious) home area ('Dafydd o Lyn', 'Tomas Môn', 'Edward Grythor o Riwabon') or family relationships ('Risiart ap Siôn', 'Robert ap Dafydd ap Rhys gutyn'). Some names indicate their bearers having been blind (such as 'Thomas Grythor Dall').

There are some names of very special interest in relation to this work mentioned in the lists collected and researched by Miles. Names such as Rhydderch Foel and Oloff Gerddor (Miles 1983, 117) are included among the four masters of cerdd dant who, according to 'Cadwedigaeth Gerdd Dannau', compiled the book for the preservation of string music and contributed their knowledge and genius so that music could be composed, remembered and performed correctly. These two, together with Allon y Cena and Matholwch Wyddel plus some other master musicians, were also responsible for the [in the 16th century canonised] 24 mesurau of cerdd dant, according to 'Cadwedigaeth...'. So, when referred to the list of musicians presented by Miles, at least two of the eminent legendary figures mentioned in the 'Grammars', with a reputation of having belonged to those who reformed the medieval Welsh string music, were primarily crowders. This is not to say that they might not have been able to play the harp as well.

Total amount of names of crowders (or players of string instruments) in Miles's thesis ends up with 167. Apparently, as I understand it, no woman's name is included in the lists. Some names indicate that crowder's (and possibly harpist's as well) occupation in medieval Wales could have been held by a non-Welsh born musician as well. In case all these musicians mentioned by Miles lived between the 14th and the 16th centuries (during the era of 'uchelwyr' as most eminent patrons of music and poetry in Wales), some earlier names (if Miles's list is to be taken as a chronological list) denote a close affection to Continental cultural influences, possibly those of the Chivalry. Some of the later ones, on the other hand, can be seen as being more closely connected to the English culture, probably to early Tudor. Where did the apparently non-Welsh professional crowders come from? From England, Ireland, Scotland, France, Flanders, or even from Scandinavia (Faeroes)? If they were guest musicians and immigrant workers, to what extent their own culture had influence on the Welsh 'uchelwyr' and the cultural life of Wales in general terms? Dafydd Johnston (in Jarman and Hughes 1997), among others, claims that medieval French culture got a strong foothold in Wales of pre-Tudor era. This, among others, indicates that medieval Wales was a very multicultural area and not

isolated from foreign influences as has been stated in some dissertations and articles.

Some of the repertory of the Robert ap Huw manuscript can, and might well have been played on the crwth, either with or without the company of harp. But most of the repertory has far too wide an ambitus for the crwth, no matter what kind of scordatura might have been used. In case of the crwth I would rather talk of various ways of placing the fingers in order to make different cyweiriau, and not different ways to tune the instrument. The two open strings, normally tuned to Gg, represent the strongest cyweirdant in cerdd dant. In the ap Huw manuscript g is the string/pitch, where octave registers change. For the open strings of the crwth one may use the backs of the thumb the index finger of the left hand, in same way as with Finnish bowed lyre or Cretan lira (or Turkish kemança), to stop the strings. I am not claiming that this was the case, but if there ever existed a crwth with no fingerboard (as the drawing on p. 358 of Havod 24 implies), this was the only way to make any kind of melodies on it. Anyway, the two other (tuned) strings of the crwth also belong to the cyweirdannau in cerdd dant (see figure six in this work).

A rather peculiar interpretation, concerning the tunings of the crwth, has been suggested by Peter Greenhill. (Greenhill 1996, 138 - 141). He states that a large number of scordatura was needed for the crwth in order to realize the full harmony of the text [in the tablature]. He suggests that the strings of the double courses are to be tuned a whole tone apart, not in unison or octaves. In order to be able to perform the whole contents of the manuscript one should indeed have a very special kind of instrument, with the range of more than three octaves, no string or course off the fingerboard and always to be retuned. According to Greenhill, there was no need to retune the harp but there was vast need to use a big array of scordatura-tunings for the crwth! He also suggests that some overtones could have been used for melodic movements, basing his ideas on his own statement about Eastern Turkestan bowed instrumental tradition. I really do not see the point in Greenhill´s argument that the three main cyweirdannau should have been re-tuned in order to widen the scope of the crwth. The references to cyweiriau in the Grammars, in the context of the crwth, imply strongly to fingering techniques in order to create different scales and modes. The keywords, for example in Peniarth 147, are '...Un bys y crythor'; the finger of the crwth-player. The construction of the instrument dictates majority of the rules, both the limits and the possibilities. The central role of the crwth in the context of tunings and their exploration is quite obvious, since the open strings of the crwth (g, c, and d) are the same as the three strong cyweirdannau of cerdd dant.

I would rather suggest that the role of the crwth in cerdd dant, at least what can be deducted from the musical corpus of the Robert ap Huw manuscript, was limited to some genres only, having mostly been an accompanying instrument. Where the melodies were supposed to be played on it, then the range of the pieces must have been very limited. It is, of course, possible that the crwth was used for 'melody and drone' playing, in the same way as medieval vielle (see Page 1987). In the case of the crwth, melodies were played on c- and d-strings, and the bottom g-string was used as the drone-string. The idiomatic features of the crwth must have been taken into consideration when adapted to performances. It suggests that the complete

'Satz' of the tablature was beyond the possibilities of the crwth. I think it is rather odd, seriously to suggest that the crwth was used in all pieces, or that it was capable to do same things as the harp.

6 TOWARDS THE PENCERDD'S TOOLKIT

6.1 Mesurau

Let us first have a look on activities of some anonymous old authorities of 'cerdd dant'. There are allusions to master musicians and their writings on the first pages of 'Cadwedigaeth Gerdd Dannau':

> Llyma Llyfr a elwir Cadwedigaeth Cerdd Dant, nid amgen telyn a chrwth, o fewn tair Talaith Gymru; yr hwn a dynnwyd o'r Miwsig wrth ddymuniad pedwar penkerdd o Delyn a chrwth, a meddwl ac athrylith pob un ohonynt at eu gilydd, i wneuthur Cerdd ac i'w chadw ynghôf, ac i'w chanu yn ei lle, ac i'w dosparthu. A henwau'r Pedwar Pencerdd yw, Allon y Cena, Rhydderch Foel, Alatholwch Wyddel, ac Olaf gerddor. Ac yr oedd yn gwrando Henri Gyfeurhydd, a Charsi delynior a llawer arall a'u Cyngor ac o'u Celfyddyd gyd â hwynt. A thrwy gynghor yr athrawon hyny .... y gwnaed y pedwar mesur ar hugain ... O dri achaws y gwnaed hwynt: y cyntav, i wneuthur cerdd; yr ail, i adnabod cerdd; a'r trydydd, i ddal cerdd mewn cov, ...
>
> [This is the book for the preservation of string music, namely the harp and the crwth, within the three provinces of Wales compiled by four master musicians of harp and crwth,each one contributing his knowledge and genius in order to compose music, remember it,perform it correctly and classify it. The four masters of the craft were Allon y Cena, Rhydderch Foel, Matholwch Wyddel [the Irishman] and Olaf Gerddor. Present also were Henry Gyfourhydd and Carsi Telynor and many others who shared their counsel and craft. And through the council of these masters.... twenty-four measures were made...They were made for three reasons: first, to make music; second, to recognise music; third, to keep music in mind,...]
>
> (from a version copied by Lewis Morris; the Robert ap Huw manuscript, p [v], translations by Meredydd Evans and Pekka Toivanen)

The compilation of a ' book about string music', which obviously took place sometime in early 1520's, may tempt us to consider it as the beginning of literal era in Welsh bardic music. I find the above extract suggesting the importance of

keeping music in mind instead of reading it. Neither the descriptions of music in bardic poetry, nor the existence of the many blind old-style harpists (at least in Ireland and in Scotland, for example Carolan and Hempson), support the alleged importance of written transmission. There are, in various occasions, references to a master-disciple relationship in medieval Celtic music culture.[65] The master, a distinguished and respected 'pencerdd' taught poetry and music to some selected representatives of younger generations.

The attempts to create 24 canonised mesurau were, obviously, in order to make, recognise [orally, I suppose] and remember the music, as the text implies. However, from other sixteenth century Welsh manuscripts (e.g. Gwysaney 28) we know that more than 24 of them had been earlier used by itinerant musicians, or at least theoretically existed. There evidently was a great need to attempt to standardise the rules and regulations concerning music and musical performances, but not only merely by some eminent figures of Welsh bardic arts.

The schema of mesur provides a practical system of musical and cognitive knowledge, as can be noticed from the passages from the 'Cadwedigaeth'. The mesurau (or measures) are harmonic patterns (or grounds) formed, in most cases, of two variable components called 'cyweirdant' (strong or established string/tone, or concordant element; in various sources described either with number 1 or letter k) and 'tyniad' (weak or non-established, or discordant element; usually described with 0, sometimes with +). From what kind of components was a mesur conceived, what is its inner hierarchy? The following quotations may shed some light on these questions.

> 'Dyweder bellach o sann y pyncian aubathau a mesuri ychai (?) a elwir yn Saesneg notes, ac yn gyntaf am brif gan adog Uaill ymmaith; Ugma ei bathhi [brevis] ei hyd yw dau bwnc; gwedi hynny semibrif [semibrevis] un pwnc ym ol hyn hynym [minima] hanner pwnc yna crotchett [semiminima] chwarter pwnc; ar cwafr a wnair falhyn wyth or ihair a â i un pwnc o fesur; arr lleiaf ei fesur yw hwn Semicwafr hanner awafr, ôr vhair (?) ib a â ir un pwnc neu notes. -- Llyma hwynt hwygn olenach fal hyn_____

> 'Now the pynciau and their kinds and measure; those that are called in English notes. and first of the breve leaving the rest aside; this is the sort (brevis) its length is two bynciau; after that a semibreve (semibrevis) one pwnc after that a hynym (minima) {minim} half a pwnc then a crotchett (semiminima) a quarter pwnc; and a quaver is made like this (fusa). eight of these go into one pwnc of measure; and the smallest in its measure is this semiquaver (semifusa); of these 16 go into one pwnc or note — here is how they are illustrated ...'
>
> (Panton 56; fol. 13 A; transl. by Robert Evans)

---

65 In e.g. 'Laws of Hywel Dda' (see Jenkins 1990) and 'Statute of Gruffudd ap Cynan' (see Klausner 1999). For the existence of blind old-style harpists in Ireland and Scotland see Bunting 1840; O'Sullivan 1983; Kinnaird 1986 and Sanger & Kinnaird 1992. For the styles and various influences in Carolan's music, see Rimmer 1987.

On another occasion we find:

> 'Y mae yn dangos fod mewn cwlwm a chaniad gywair dannau, a thyniadau ... ac o´r rhai hynny y gwneir pynciau; ac o´r pynciau y gwneir mesurau; ac o´r mesurau y gwyneir proffidiau, gostegion, clymmau a chaniadau.'
>
> 'This shows that within cwlwm and caniad there are cywairdannau and tyniadau... and from them pynciau [pwnciau] are made; and from pynciau mesurau are made;
> and from mesurau profiadau, gostegion, clymmau and caniadau are made'
>
> (M.A.W. 1205, transl. by Pekka Toivanen)

My interpretation to both text quotations, concerning the essence and ontology of the 'pwnc', is that in order to create a mesur one needs to combine various kinds of 'pwnciau' in a chain. A 'pwnc', as I understand it, can be one of the following fours:

1. One cyweirdant and one tyniad (1 0)
2. One tyniad and one cyweirdant (0 1)
3. Two cyweirdannau (11)
4. Two tyniadau (00)

The above quotations refer to pwnc's role as a temporal, and thus rhythmic, unit as well as constructional unit of a mesur. As we shall see later, at shortest a 'mesur' can be of length of a 'pwnc'. But more common way seems to have been to use the four 'protocombinations' of cyweirdant and tyniad for creating chains from them, and not necessarily always quatrainal in form. The term 'pwnc' is used in the Robert ap Huw manuscript in connection of a short piece of music (p. 56) meant to be played after each 'profiad'. In other words, it should be used as a kind of 'diwedd'. This would bring the genre of profiadau closer to that of gostegion or caniadau. This matter will be discussed in more detail later in this work, but perhaps it is sufficient to say already now that I find pwnc not to be a proper term for a piece of music. There is, moreover, a different musical segment more proper for uniting the profiadau included in the Robert ap Huw manuscript than the 'pwnc' on page 56 of the manuscript. In many respects, the mesurau bear similarities to common musical patterns (or perhaps we should also call them structures of cognitive and musical knowledge) of the Middle Ages and Renaissance. The patterns, such as the 'dump', the ' romanesca' and the 'passamezzo antico', were the harmonic and structural basis for many pieces of music in the fifteenth and sixteenth centuries. [66]

Figure 16 is an attempt to present the inner hierarchy of a mesur:

---

66 The well known song 'Greensleeves', for example, can harmonically be based either on the 'romanesca' or the 'passamezzo antico'. There are various examples of the 'dump' in English Renaissance lute and keyboard music of 15th and 16th centuries. The best known of them is probably 'My Lady Carey´s Dump', a set of variations based on two alternating chords.

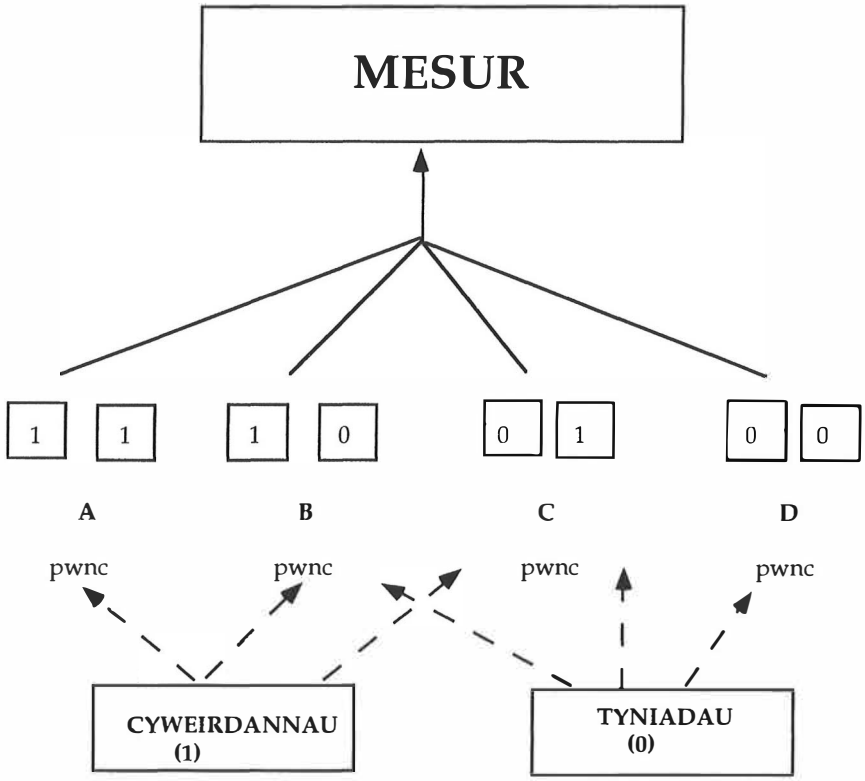

FIGURE 16 Components and inner hierarchy of a cerdd dant-mesur.

The mesurau may be considered as basic elements of deep structure in cerdd dant system. They represent stable reproductivity in a composition and/or performance, on which varying degrees of change may be added to the middle and surface level. The established structural elements of cerdd dant defined different events in music. They formulated phrases or established lengths of substructures. They can be taken as representatives of established musical practices and processes. Such processes were additive, and the musician was the creative factor within a musical or textual framework, necessitating a solid knowledge of cultural segmentation principles. Performance occasion added elements of surface structure to middle and deep structures. It is hoped that the examples of gostegion, discussed later, give more profound and solid pieces of evidence, as much as it is possible to obtain from an oral music culture, long since dead.

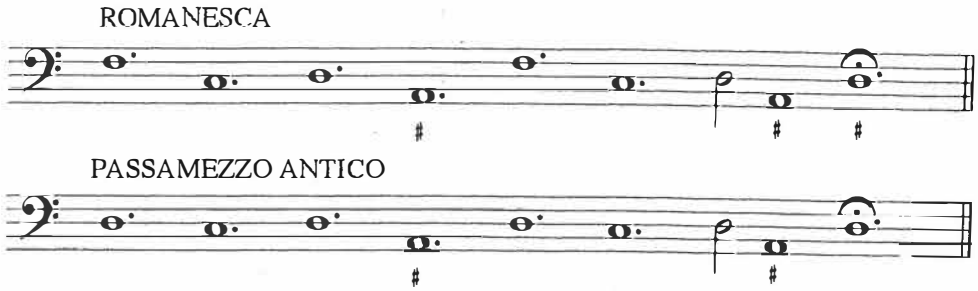

FIGURE 17 The bass lines of the 'romanesca' and the 'passamezzo antico'. For a Renaissance musician both patterns meant more or less the same as the '12-bar blues pattern' for today's rock and jazz musician; a suitable framework for improvisations and compositions.

It seems evident that some genres of ancient Welsh harp music were meant to be learned and memorised through the canonised mesurau, a list of which, together with their numerical codes, is on page 107 of the ap Huw manuscript. [67] Once all [twenty-four] were committed to memory by a harpist or a crowder (crwth player), they could be used for creation of ceinciau, gostegion and the like, and musicians phrased and segmented their music accordingly. A conclusion that can be made from both the ap Huw pieces and piece lists in many other manuscripts (e.g. Panton 56, Gwysaney 28) is that only a few of the canonised twenty-four mesurau seem to have been used extensively. But, as usually in connection of a creative human mind, the truth was not that simple in real life.

There are 19 manuscript sources altogether which include twenty-four mesurau for the crwth, and 17 sources with twenty-four mesurau for the harp (Miles 1983). The earliest source in both cases is Peniarth 60, dating roughly from 1500. These manuscript sources contain information about music theory, terms, rules, aesthetics, musicians' duties and obligations. Only one (the Robert ap Huw ms.) contains music. And not all mss contain all 24 canonised mesurau but differ in their contents. In Miles' lists one can see how differently the mesurau are written and/or presented as series of digits (1s and 0s) in various manuscripts (ibid., 581-590. All this speaks for difficulties in transmitting and receiving/perceiving information (how differently words and their meanings are understood; the informant may have his difficulties and the receiver his, and these two did not necessarily always meet. This happened at the time of the turning point when there were serious attempts to convert an oral music culture into the written, and thus, at least partly, gain the acceptance of higher authorities. The following lists are not based on Bethan Miles' work, but are drawn by the author from various sources, both manuscripts and prints. I have used the Robert ap Huw manuscript as a basic reference source, and in the end

67 For an interesting hypothesis concerning the possible connections between the Welsh mesurau and the famous 'Reading Rota', see Shai Burstyn, 'Gerald of Wales and the Sumer Canon' (Burstyn 1987). A tentative 'measured' version of 'Reading Rota' is presented later in this chapter.

made comparisons of the canonised 24 mesurau in relation to their ontology in the Robert ap Huw manuscript. As can be seen, there are many differences in spellings and in contents of the digit series.

A The Robert ap Huw MS (page 107)

'llyma /r/ pewar mesur arhigain kerdd dant'

1.Mak y mwn hir	1111 0000 1010 1111 0000 1011
2. Korffiniwr	1100 1011· 1100 1011
3. Korsgoleff	1011 001011
4.Rhiniart	1001·10011
5.Koraldan	1110 1001 0001
6. Tresi heli	1000 1110 001011
7. Wnsach	1111 0001
8. Kor dia tutlach	1011 0001 001111
9. Korfinfaen	1011 011·1011 011
10. Korwrgog	1001 011011
11. Karsi	1000 1011·1000 1011
12.Brath yn ysgol	10110·100 1011 0100 1011
13. Fflamgwr gwrgan	1011·1011 0011 0011
14. Mak y mwn byr	1100 1011
15. Kalchan	1100 11101
16. Bryt odidog	0010·0010·1101·1101·
17. Trwsgwl mawr	0000 1111 0000 1011
18. Tytyr bach	0011 0011
19. Mak y mynfaen	00)1100·0011 001111
20. Toddf	0110 0011
21. Hatyr	001011·001011
22. Mak y delgi	0111 011
23. Alban hyfaidd	1011·0100·0100·1011
24. Alfarch	0000 0000 1111 1111

'terfyn y pedwar mesur arhigain kerdd dant'

B Gwysaney 28 (N.L.W. MS 17116 B, fol. 60B-61A)

The following 24 mesurau have been given here:

1. Mak y mwn hir	1111 0000 1010 1111 (this series of digits is overruled, and 1111 1111 0000 0000 is written instead)
2. Alfarch (?)	0000 1111 0000 1111
3. Korffiniwr	1100 1011
4. Alfarch (??)	1011 0100 0100 1010 (the spelling of this looks very similar to that of number two
5. Rriniart	1001 11001
6. Lunfarch (?)	1111 0001
7. Koralban	1110 1001 0001

8. Tresi hcli (?)	1000 0111 0000 101
9. Kortirlarch (?)	1001 1000 1001 11
10.Korfinfayn	1011 0111 0110 11
11.Korlurkok (?)	1001 0110 11
12. Kalchan (?)	1100 1111 01
13. Karsi	1000 1011 1000 1011
14. Brath yngol (?)	1011 0100 1011 0100 1011
15. Fflamgwrghwgan (?)	1011 1011 0011 0011
16. Macymwnbyr	1100 1111
17. Bwdidor (?)	0011 0010 1101 1101
18. Tutyr bach	0011 0011
19. Trowsgwl maawr	0000 1111 0000 1111 or 0000 1111 0000 1011
20. Makynynfayn (?)	0011 0000 1100 1111
21 Tuddf (?)	0110 0011
22. Gatyr bach (?)	0010 11
23. Mwyn helgi (?)	0111 011
24. Karsi gorlach	1101 1001 011

Noteworthy here are the two versions of 'Mak y mwn hir'. The first (1111 0000 1010 1111) has been ruled out, and above it 1111 1111 0000 0000 has been written. Some of the names are different to those included on page 107 of the Robert ap Huw manuscript. Presentation of the mesurau is in different order also. Some are spelled differently (the handwriting in Gwysaney 28 is sometimes very difficult to read and may have lead to misinterpretations in spellings); some of the mesurau that are included in Gwysaney are missing from the Robert ap Huw manuscript. Could those belong to the 'non-standardized' mesurau? Which ones should be regarded as the canonised ones? Those on page 107 of the Robert ap Huw manuscript?

On folio 68B of the Gwysaney 28 there is a list of 20 mesurau with different numeric codes and order than those listed on fols. 60B - 61A. The emphasis in the latter list is on 0 rather than on 1, referring obviously rather to the crwth than the harp. On folio 69A of the same manuscript there is a list titled 'llymar pedwar mesur ar hugain cerdd dant...', this time clearly stated as mesurau for the crwth. The mesur 'mak y mwn hir' is presented as 0000 1111 0101 0000 1111 0100. Even if we take literally the statement that 'Tyniad yn rhol y Crythor yw Cyweirdant yn rhol y Telynior' (tyniad/0 in the role of the crowder is cyweirdant/1 in the role of the harpist), the result we get from this mesur is different to any earlier written versions of 'mak y mwn hir'. Again the order of the mesurau is different to that given on fols. 60B – 61A.

C 'Y Pedwar Mesur ar ugain Cerdd Dant, Oc y Casgliad Didrevn'

List of mesurau on pages 1072 – 1073 of the 'Myvyrian Archaiology of Wales' is presented differently than in two previously presented manuscript sources. The first mesur ('Alvarch') is shown here first as it is in the M.A.W. (with '+' denoting 'tyniad' and 'k' denoting 'cyweirdant'), and then with numbers. The other 23 are presented in digits 0 and 1.

1. Alvarch	+ k
	iiii iiii
	0000 1111
2. Mac y mwn hir	0000 1111 01 0000 1111 0100
3. Cotititlas	1001 1000 1001 11
4. Coraldan	1110 1001 0001
5. Corsinsan	1011 011
6. Carsi	1000 1011
7. Cwrlog	1001 0110 11
8. Wicsach	1111 00011
9. Toddyv	0110 0011
10. Mac y Delgi	0001 0111 0110 11101
11. Calchan	1100 111101
12. Rhinart	1011 0001 100
13. Macamwn Byr	1100 1111
14. Mangler Gwrgan	1011 1011 0011 0011
15. Brath yn (*)	1011 0100 1011 01001
16. Macamwnvaen	0011 0000 1100 1111
17. * * * * Bach	1100 1100
18. * * * *	0011 0011
19. Brud Odidog	1100 0001 0110 11101
20. * * * *	1100 1011 1100 1011
21. Alban Rhydderch	1011 0100 0100 1011
22. Trwsgyl Mawr	0000 1111 0000 1111
23. Corsgolovn	1101 1001 011
24. Tresi Heli	1000 0111 000011

The sentence 'Tyniad yn rhol y Crythor yw Cyweirdant yn rhol y Telynior' follows the list, indicating that these mesurau were meant for the crwth. The asterisk in brackets after the mesur 15 ('Brath yn') refers to a footnote on page 1073 of the M.A.W stating: 'Enwau allan yn y mànau hyn', i.e. 'Another (or different) name in this place'.

D 'Oc yr un Llyvyr y Canlynawl'

This list of 'mesurau' is on page 1072 of the M.A.W.

1. Alvarch	0000. 0000. 1111 1111
2. Macmon Hir	00. 1111 1011 1110 011.
3. Brath yr Ysgol	1010 0100 1011 0100 1011.
4. Gwrgan	1101 0110 0101 1010 011.
5. Gorsiniwr	1100 1011 1100 1011.
6. Hwyrwyn Gowri	0111 1000 1111.
7. Mac y Mynvaen	1100 00.
8. Tutyr	1100 100.
9. Brud	0010 0010 1101 1101.
10. Dewis Hywel	1111 0100.

11. Odid à'i gwypo	0101 0010 1011
12. Cwlwm Grufydd Grythor	1101 01101.
13. Fwrain	1101 01101.
14. Cwlwm Brido	1111 0011 10110.
15. Trwsgyl	0000 1111 0000 1011.
16. Trwsgyl Trwyngi	0100 1011.
17. Alban Rhydderch	0110 110001.
18. Cwrsi	1000 1011 1000 1011
19. Cercyrt	1001 1000 1001 1101
20. Gochel Geibio	.....
21. Cell Ieuan vab y Gov	1010 1111.
22. Mac y Delgi	.....
23. Toddyv	0111 10.
24. Cenedlon	1000 111010.
25. Tresial	1000 111010.

The above list is rather strange in many ways. Not only that some of the names (e.g. numbers 12, 14 and 21) seem to refer to titles of pieces of music in two different genres ('cwlwm', 'cell'), rather than to mesurau, two series of digits (20, 22) are missing completely. It is also noteworthy that the numeric codes of 12 and 13 are identical, as are those of 24 and 25, although the names are different. This leaves, if we take 12,14 and 21 also as names of mesurau, only 23 mesurau in total, two of them without their numeric codes of 1's and 0's. In other words, only 21 mesurau are presented as complete. And if we exclude 12,14 and 21 as titles of musical pieces, we have only 19 mesurau left.

In Panton 56 (page 61, fol 26A) there is a piece titled 'Cwlwm ar leddf gywair Prido 13. M.Br a [ffalyr or halyr]'. 'Cell Ieuan ap y Gof' is mentioned, among other sources, in 'Gwysaney 28' (fol. 68) as a piece for the crwth. One manuscript gives it the following numeric code: 1100.1011.0100.1011.0100.1011. Peter-Crossley Holland suggests (Crossley-Holland 1998, 27-28) that 'cell' may have been a name for a supplementary (and thus a non-canonised) mesur, and that Ieuan ap y Gof might have composed a 'cwlwm' on it. In the M.A.W, however, the numeric code for the 'cell' is different. There are again differences in spellings and numeric codes, when compared to other lists. The manuscript sources of the 'Grammars' contain several other mesur names, which are not mentioned in the lists presented above.

Taking the list on page 107 of the Robert ap Huw manuscript as our basic list, to which the others are compared, we end up with the following. The names and the numeric codes of the mesurau, as they are in the Robert ap Huw manuscript, are given first in bold letters, followed by corresponding mesurau from other three (sometimes only one, depending on how many times they are presented) sources. The comparison material is given in the following order: 'Gwysaney 28' (fols 60B – 61A),'Casgliad Didrevn' (MA 1072 – 1073) and 'Llyvyr y Canlynawl' (MA 1072). Often a corresponding mesur is missing from 'Llyvyr y Canlynawl'. With the exception of the mesur 'Mak y mwn hir', in which case two alternative codes are given in Gwysaney 28 (fols 60A – 61B and 69A respectively), the above-mentioned paradigm has been applied to all material. Numbers in brackets refer to the ordinals of each of the mesurau in their lists.

1. Mak y mwn hir	**1111 0000 1010 1111 0000 1011**
Mak y mwn hir	1111 0000 1010 or 1111 1111 0000 0000 (1)
Mak y mwn hir'	0000 1111 0101 0000 1111 0100 (Gwysaney 28, fol. 69A; ?)
Mac y mwn hir	0000 1111 01 0000 1111 0100 (2)
Macmon Hir	00. 1111 1011 1110 011. (2)
2. Korffiniwr	**1100 1011· 1100 1011**
Korffiniwr	1100 1011 (3)
* * * *	1100 1011 1100 1011 (20)
Gorsiniwr	1100 1011 1100 1011. (5)
3. Korsgoleff	**1101 1001 011**
Karsi gorlach	1101 1001 011 (24)
Corsgolovn	1101 1001 011 (23)
4. Rhiniart	**1001·10011**
Rriniart	1001 11001 (5)
Rhinart	1011 0001 100 (12)
5. Koraldan	**1110 1001 0001**
Koralban	1110 1001 0001 (7)
Coraldan	1110 1001 0001 (4)
6. Tresi heli	**1000 1110 001011**
Tresi heli	1000 0111 0000 101 (8)
Tresi Heli	1000 0111 000011 0001 (24)
Tresial	1000 111010. (25) plus
Cenedlon	1000 111010. (Llyvyr y Canlynawl as in M.A.W. 1072/24)
7. Wnsach	**1111 0001**
Lunfarch (?)	1111 0001 (6)
Wicsach	1111 00011 (8)
8. Kor dia tutlach	**1011 0001 001111**
Kortirlarch (?)	1001 1000 1001 11 (9)
Cotititlas	1001 1000 1001 11 00011 (3)
9. Korfinfaen	**1011 011·1011 011**
Korfinfayn	1011 0111 0110 11 (10)
Corsinsan	1011 011 (5)
10. Korwrgog	**1001 011011**
Korlurkok (?)	1001 0110 11 (11)
Cwrlog	1001 0110 11 (7)
11. Karsi	**1000 1011·1000 1011**
Karsi	1000 1011 1000 1011 (13)

Carsi	1000 1011 (6)
Cwrsi	1000 1011 1000 1011. (18)

12.Brath yn ysgol	**10110·100 1011 0100 1011**
Brath yngol (?)	1011 0100 1011 0100 1011 (14)
Brath yn (*)	1011 0100 1011 01001 (15)
Brath yr Ysgol	1010 0100 1011 0100 1011. (3)

13. Fflamgwr gwran	**1011·1011 0011 0011**
Fflamgwrghwgan (?)	1011 1011 0011 0011 (15)
Mangler Gwrgan	1011 1011 0011 0011 (14)
Gwrgan	1101 0110 0101 1010 011. (4)

14. Mak y mwn byr	**1100 1111**
Macymwnbyr	1100 1111 (16)
Macamwn Byr	1100 1111 (13)

15. Kalchan	**1100 11101**
Kalchan (?)	1100 1111 01 (12)
Calchan	1100 111101 (11)

16. Bryt odidog	**0010·0010·1101·1101·**
Bwdidor (?)	0011 0010 1101 1101 (17)
Brud Odidog	1100 0001 0110 11101 (19)
Brud	0010 0010 1101 1101. (9)

17. Trwsgwl mawr	**0000 1111 0000 1011**
Trowsgwl maawr	0000 1111 0000 1111 or 0000 1111 0000 1011 (19)
Trwsgyl Mawr	0000 1111 0000 1111 (22)
Trwsgyl	0000 1111 0000 1011. (15)

18. Tytyr bach	**0011 0011**
Tutyr bach	0011 0011 (18)
* * * *	0011 0011 (18)
Tutyr	1100 100. (8)

19. Mak y mynfaen	**00)1100·0011 001111**
Makynynfayn (?)	0011 0000 1100 1111 (20)
Macamwnvaen	0011 0000 1100 1111 (16)
Mac y Mynvaen	1100 00. (7)

20. Toddf	**0110 0011**
Tuddf (?)	0110 0011 (21)
Toddyv	0110 0011 (9)
Toddyv	0111 10. (23)

21. Hatyr	**001011·001011**
Gatyr bach (?)	0010 11 (22)

22. Mak y delgi	**0111 011**
Mwyn helgi (?)	0111 011 (23)
Mac y Delgi	0001 0111 0110 11101 (10)
Mac y Delgi	…….. (22)
23. Alban hyfaidd	**1011·0100·0100·1011**
Alfarch (??)	1011 0100 0100 1010 (4)
Alban Rhydderch	1011 0100 0100 1011 (21)
Alban Rhydderch	0110 110001 (17)
24. Alfarch	**0000 0000 1111 1111**
Alfarch (?)	0000 1111 0000 1111 (2)
Alvarch	0000 1111 (1)
Alvarch	0000. 0000. 1111 1111 (1)

To sum up the data, all the 24 mesurau listed in the Robert ap Huw manuscript are included on fols. 60B and 61A of the Gwysaney 28, although their spellings vary considerably sometimes, as do their numeric codes and order of appearance as well. If the names of these 24 are to be taken as the names of the canonised 24 mesurau, the amount of which is stated in the 'Grammars', which ones of the different versions of mesurau are the culturally 'correct' ones and which are not? One of the canonised mesurau bears the name 'Risiart' (or 'Rhisiart' or 'Rhiniart') who possibly was a pencerdd, and obviously a respected one as well since one of the canonized measures was named after him. According to a ms. source (Havod 24), his hand has written a list of mesurau for it. In some other ms. sources mesurau, which share same name (e.g. 'trwsgwl trwynki', 'ysgwirin') do not share same series of digits (although in all cases these mesurau are meant for the same instrument, namely the crwth).

There were more mesurau in cerdd dant than the canonised 24. In one manuscript source (there were 17 manuscript sources in all, according to Miles, in which non-canonised mesurau are mentioned) even as many as 54 different mesurau (which includes also the canonised 24 as well) are listed. Some of these extra mesurau are specifically for the crwth, some exclusively for the harp.

Many of the non-canonised mesurau seem to bear either names of musicians or titles of pieces. Some names bear references to musical genres ('Kwlwm', 'Cor', 'Kel'), and one even to a tuning ('lleddf gwaer gwyddyl'). This is true, for example, in the list included in Gwysaney 28 ('Kelt/kell ifan ap y gof', 'Kwlwm grûff grythor', 'Henrri gefnrrvdd', etc.), in which the mesurau, as stated earlier, are for the crwth. (Miles 1983, 592). Should Ifan ap y Gof, one of the key figures among the composers included in the Robert ap Huw manuscript, be primarily regarded as a crowder then? Or, for the sake of argument, are the names referring to pieces only, and the digits to patterns, which are tied only to the pieces in the lists? Was it allowed to musicians themselves to create mesurau of their own after their own will before the attempts of standardization? We will come to this later.

In Peniarth 62 we find some non-canonised mesurau meant for the harp. Although it is stated elsewhere in the 'Grammars' that the 'tyniad in the role of crowder is cyweirdant in the role of harper', in Peniarth 62 those mesurau

(meant for the harper) sharing same names with those in Gwysaney 28 (which were meant for the crowder) are not mirror images to one another. Who is the one to be blamed for this rather confusing information? Is it the first informant (or someone after him) from inside the bardic circles? Or is it the first receiver either from inside or outside those circles (or someone after him on the both sides in the information chain), due to his different perception? Or, which should also taken into consideration, are we to blame the individualism of musicians? In any case, the oral and the literate do not meet. The spellings of the mesurau (and the digit series as well) in ms. sources differ from one another considerably.

Bethan Miles mentions (Miles 1983, 599) one very short mesur (0 1) called 'Korkadwg'. This might refer to Cadwgan, a composer included in the Robert ap Huw manuscript. (see Crossley-Holland 1998). If so, then some passages of (intabulated version of) 'Caniad Cadwgan' would make more sense, since there are long segments based harmonically on either 0 1 or 1 0. Miles mentions the 'extra' mesurau on the page 109 of the Robert ap Huw manuscript as well (1983, 601). Some bear references to pieces of music (one of them is 'y gaing ddu or werddon', that is 'the black song/tune from Ireland'). One gets implication that the digit series presented are meant to tell how certain pieces are based harmonically, in this case cainc parts of some caniadau. Words 'gaing', 'gangk', 'kaingk' and 'ddigan' are used in this connection for the 'cainc'. Do they mean the same thing practically, a melodic segment to be used for building pieces in extended forms? This kind of hypothesis makes actually a lot of sense, as we shall see later.

Miles writes (Miles 1983, 636) that the list of clymmau in many manuscript sources is rather misleadingly under the title 'Rrol Vessurav Telynior' ('Roles of the harpist's mesurau'?). Miles is of the opinion that whatever reason there may have been for such heading, it is very doubtful that such mesurau ever existed as mesurau. If there, however, was a close connection between the clymmau and the mesurau, could it have been that the cwlwm-type pieces originally were applications or derivations of mesurau with no cainc-diwedd pattern as musical or structural basis. This could be one explanation for the term 'difr' (pl. 'difrau') in connection of some titles. Difr is generally considered as a piece derived from one of the mesurau (Harper 1999ab, 303), and therefore it may be no wonder that difrau in the lists were named, for example, as:

Divr Carsin
Divr Gwrgan
Divr Fflamgwrsen
Divr Macmon Hir
Divr Mac a Delgi
Divr Trwsgyl
Divr Tudyr Bach

(M.A.W., 1072)

The titles above are a selection of pieces under the heading 'Amryw Glymau ar y Crâs Gywair, ni soniodd, y Dr. I.Davies am danynt, o'r Casgliad Didrevn' ('Some tunes in crâs gywair-tuning/setting, mentioned also to us by Dr. I. Davies, from

Didrevn [dissorted/unsorted] collection). According to Miles (Miles 1983, 643) the manuscript source of this list is Peniarth 77. The whole list consists of 62 pieces, eleven of them put into 'bragod gywair', seven into 'lleddf gywair' and the rest into 'cras gywair'. From the pieces in 'cras' 26 bear names of mesurau, and of them 21 are named as 'Divr something', that 'something' being a name of a mesur, not necessarily always one of the canonised 24. Furthermore, in Peniarth 155 there is a list of pieces, under general title of cwlwm, the names of which refer rather to mesurau ('alban huvaidd', 'kor aedan', 'korcholofn').

Lewis Morris, in his additions to the Robert ap Huw manuscript, quoted some manuscript sources, which dealt with features of some mesurau. The most common question stated was 'Pa ruw vessur uw'r egwyddor?' ('What kind of measure is the principle?'). Morris commented his additions from manuscripts by stating that '...this I found in a fragment of an old manuscript 1730, very uncorrectly wrote' (Robert ap Huw manuscript, 3). These text fragments, added by Lewis Morris into the Robert ap Huw manuscript, are also included as printed in the 'Myvyrian Archaiology', like the following:

> Allan o ddryll o hen lyvyr ysgriv:
>
> 'Pa ryw vesur yw yr Ogwyddawr? O'r Tutyr, neu o Drwsgwl Mawr? Os Tutyr à vydd, dau gyweirdant a dau dyiad. Os Trwsgyl Mawr, rhaid bod pedwar cyweirdant a phedwar tyniad.'
>
> From another old manuscript:
>
> 'What kind of measure is Ogwyddaur? Is it from Tutyr or Trwsgwl Mawr? If from Tutyr, [it has] two cyweirdannau and two tyniadau. If from Trwsgwl Mwr there must be four cyweirdannau and four tyniadau.
>
> (M.A.W., 1205, transl. Pekka Toivanen)

'Ogwyddaur' is not among the mesurau listed on the page 107 of the Robert ap Huw manuscript, and neither is it included in the lists of 'Myvyrian Archaiology'. It may be a derivation or application of either tutyr [bach] and/or trwsgwl mawr, or it may have nothing to do with any of the standardised 24 mesurau. Robert gives tutyr bach digits 0011 0011, whereas M.A.W. (on p. 1072) 1100 1100. The latter can be understood as being the crowder's version of it. To trwsgwl mawr, however, both Robert ap Huw and M.A.W. give the same numeric code, namely 0000 1111 0000 1011. Therefore it is rather problematic to decide whether to take the crowder's or harpist's mesur as starting point for selecting the cyweirdannau and tyniadau. The following is another contemporary writing dealing with same matters:

> 'Pa ryw Ddivr y mae Gosteg Ieremiah ab y Gov? Gosteg Ieremiah dyvod allan o'r macmwn byr; Gosteg Davydd Athraw Corfiniwr: trosiggin Pibau Morvudd, yn dyvod allan o drwsgyl bach.'

> 'What kind of divr is in Gosteg Ieremiah ab y Gov? Gosteg Ieremiah comes from macmwn byr; Gosteg Dafydd Athro [comes from] Corffiniwr: Conversely [?] Pibau Morfydd comes from trwsgwl bach.'
>
> (M.A.W., 1205, transl. Pekka Toivanen)

There are different versions of the above text in various manuscript sources, the earliest of them in Gwysaney 28 (Crossley-Holland 1998, 23). In all of them the word 'divr', in one form or another, is used, and it can be suggested that it indeed has same connotation as 'mesur'; i.e. denoting the structural harmonic pattern of deep or middle structure in the musical hierarchy of cerdd dant. 'Gosteg Ieremiah ap y Gof' is most obviously the same as 'Yr osteg fawr neu osteg Ifan fab y gof' of the Robert ap Huw manuscript (p. 20-22). It is the longest of its kind, and deserves briefly be mentioned here (the other three gostegion are discussed in more detail later in this study). The first-sight analysis of the intabulated version of this gosteg gives, as result, the following series of digits:

1111 0100 1111 1111 (the first cainc)

1111 0100 1011 1111
1111 0100 1111 1111 (diwedd)

All available literal sources I have come across to unanimously state that the mesur in question should be 'mak y mwn byr', and in some manuscripts (such as Peniarth 62) it is even confirmed with the digit series 1100 1111. What we might be dealing here with is an 'augmentation' of the mesur 'mak y mwn byr'. In other words, the mesur, or rather its cyweirdannau and tyniadau (1's and 0's) have hierarchically organised subdivisions in the following way. This kind of interpretation has earlier been suggested by the author (Toivanen 1997, 139), and also by Peter Greenhill (Greenhill 1998).

The problems of the rhythm and the pulse, in connection of the mesurau, have so far been unsolved and also a topic of constant debate among the scholars. Standardising the rhythmic expression into four beat-pattern only, as e.g. Peter Greenhill suggests (Greenhill 1998), is, to my opinion, an attempt to squeeze music into far too limited metric framework, as if there has been only one rhythmic scheme of performing all poetry and all music. Many pieces in the Robert ap Huw manuscript can successfully be performed in various rhythmic patterns. Some pieces seem to be, according to my observations, heterometric (e.g. 'Caniad San Silin', 'Caniad Cadwgan', 'Caniad Suwsana'); some contain passages in rubato time (e.g. 'Caniad Ystafell'), whereas some seem to be rather straightforwardly in duple or triple time ('Gosteg yr halen', some segments of 'Caniad Suwsana'). The problems of the rhythm and the harmony in the cerdd dant have been widely discussed among the scholars. Certainly four-beat rhythmic pattern fits to many pieces in the manuscript, but I do not think it is the only way to execute rhythm. Musical performance is always more than what is, or can be, written down, and that includes Mozart's symphonies as well as penillion singing or the Southern blues. The less written information we

have, the more we need to find out about other factors of the culture, which have, or might have had an influence to its music.

Peter Greenhill quotes (in Greenhill 1998) 'The Clanricarde Memoirs' (from 1722), according to which: 'The bards ... pronounc´d it *orderly*, keeping even *Pace* with a harp' (his original underlinings are presented in italics here). It is not entirely clear to me, whether he wants to use this quotation as a piece of evidence for 'four-beat rhythmical units', emphasised heavily in his writings. Firstly, words 'orderly' and 'pace' do not necessarily mean the same as 'four beats in the bar' or 'never-ever changing pulse'. The rhythmical frame has certainly existed, but it (most obviously) has been flexible according to the needs and skills of the performers. Secondly, 'orderly' could refer to such things as 'clearly', 'in clear voice', 'expressively' and the like. Thirdly, in the ceinciau-segments of the caniadau (of those contained in the Robert ap Huw ms as written) are of different length, in most cases. That alone makes 'paces' often very different from of 'even' length. Also, in case of the written 'caniadau', I find some diweddau longer than the ceinciau preceding them. In case of 'Caniad ystafell' and 'Caniad cadwgan', at least, this seems to be the case. Then, 'Caniad gwyn bibydd' has no diweddau. Under the general genre of caniadau there hardly could have been a unified rhythmic framework. If one can conclude anything from the poetry of the gogynfeirdd on one hand, or the troubadours on the other, one notices that there were differences in poetical meters, phrases, syllables, structures and syntax of the language from time to time. It is improbable then that there was just one musical meter, or rhythmic framework, to perform within. In the 'high art' of troubadour poetry, as Christopher Page has argued (Page 1987), music was servant to the flow of the verse; the more complex the text, the more symbolic and flexible the music. The ideal situation, of course, always is (and was) that everyone involved could share the same musical and cultural vocabulary. How a single thing (such as melodic formula, cyweirdant, and tyniad) could lead to bigger segments, and how they are joined together hierarchically.

In case of all the 'gostegion' and 'clymmau gytgerdd' in the manuscript, the 1s and the 0s certainly match to the given basic scheme of 'mesurau'. The evidence from the Grammars, when compared to the 'caniadau' in the manuscript is more ambivalent. In many cases, however, the written versions seem to indicate kind of 'augmented' types of 'mesurau'. Once again, the obvious difference between the written and the performed music is aroused.

It seems evident that 'cerdd dant' musicians had a preference to some of the 'mesurau' at the expense of others. There also existed more than only the canonised 24 'mesurau'. They might, more or less, have been out of fashion (or, were 'officially' forced out of fashion through standardization) in the 16th century, having been forced to give way to more contemporary concepts of harmony, as exemplified in the Robert ap Huw manuscript in 'Erddigan y droell' (p. 56-57 of the Robert ap Huw manuscript).

My suggestion is that there hardly were any conductors, with or without baton, or any kind of 'human metronomes' present when music and poetry were performed in front of royal or any other audience. That the Irish harpers should have kept an even pace (according to 'The Clanricarde Memoirs') while accompanying a reciter/singer does not necessarily mean that there was only one metric pattern that was used in all performances. The pieces of [literal]

evidence we have from medieval genres of accompanied poetry, and even the tablature script of the Robert ap Huw manuscript with its various rhythmic implications imply that every performance has been more or less unique happening at a time. Performances, although maintained within stylistic limits and frameworks, bore a strong implication to change.

6.2 Ceinciau

'Ceinciau' is the plural of the word 'cainc' (lit. branch), and denotes either a short independent melody, which could have been based on one or more mesurau, or a mesur-based segment created on playing occasion with the help of swnemes and/or swneme-combinations on the surface level.

'Cainc' can be considered as the shortest [compositional] form of cerdd dant in general. A mesur can sometimes, as in case of (written version of) 'Gosteg Llwyteg' (page 22 of the Robert ap Huw manuscript) be as long as a cainc. Of pieces in this genre in the Robert ap Huw manuscript 'Cainc Dafydd Broffwyd' (57.3.1. - 57.4.20) can be considered as quatrainal in form (AABB), but rhythmically I find it to be in triple meter. Its 'mesur' may be taken as combination of 'coralban' (the first half of the piece, but only partly) and 'corffiniwr' (the second half). Its title may refer to King David of the Bible, but there are other possibilities as well. In 'A Guide to Welsh Literature' (Jarman and Hughes 1997, 136-137) there is an interesting remark. Some acknowledged poets, such as Dafydd ap Gwilym and Llywelyn Goch, were (in poems by Madog Benfras and Iolo Goch) compared to Prophet David, who was a sinner in love but who repented afterwards. This makes one wonder whether the title of this tune could have some connotations with such poetical comparisons, mentioned above, if this cainc had something to do with 'Cainc Dafydd ap Gwilym' [mentioned in tune lists of various Welsh manuscripts]. It is assumed that Dafydd ap Gwilym sang his cywyddau to his harp accompaniment (Crossley-Holland 1998, 8), and might well have composed some tunes also. On the joint CD this tune is used on two occasions, which are introduced in more detail in appendix.

There are two other pieces in the Robert ap Huw manuscript, which can be said to belong to the genre of 'ceinciau', namely 'Cainc Gruffudd ab Adda ap Dafydd' and 'Erddigan y droell'. The shortest of them, 'Cainc Gruffudd ab Adda ap Dafydd' (57.2.1. - 57.2.17) is, as considered by the author, rather an independent harp tune than mere accompaniment. There is an englyn, possibly by Gruffudd ab Adda himself, with references to (obviously) this piece:

'E gâr meinwar fy mun - lws dyniad
Ar laes dannu'r delyn;
Caingc Ruffudd, groyw-wydd ddi-gryn,
Ab Adda, nis gwyr bowddyn.'

'A maiden, my maiden
Loves the enchanting plucking of the strings of the harp;
[Witness] the Tune of Gruffudd ab Adda,

Firm as the stately trees, of which the uninitiated knows nothing.'

(Crossley-Holland 1998, 7-8)

From the short poem above one notices again a special feature of bardic arts, namely that it was not meant for 'outsiders', in other words, not to the uninitiated. Peter Crossley-Holland (ibid., 8) refers here to a statement given to him by Daniel Huws [in private conversation], according to which the poem's reference to Gruffudd's cainc can be regarded as reference to his music in general.

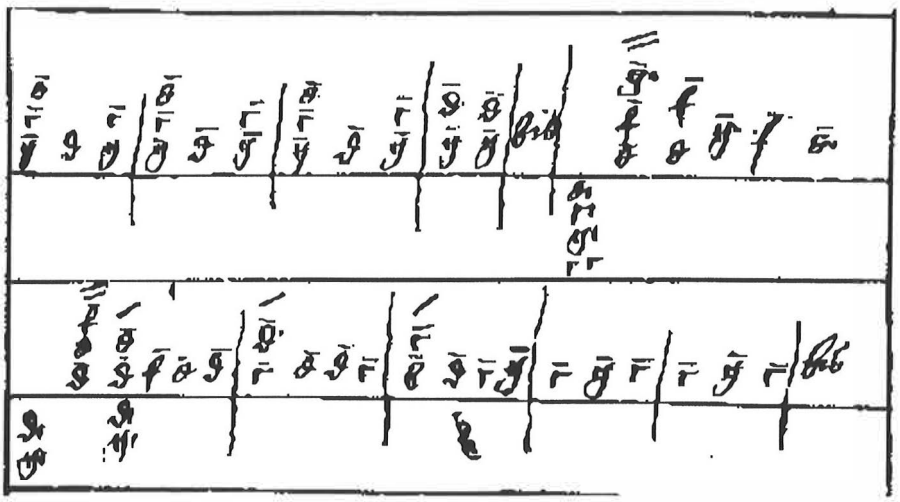

FIGURE 18 The intabulated version of 'Cainc Dafydd Broffwyd' (the Robert ap Huw manuscript, p. 57).

'Erddigan y Droell' (p.56-57 of the Robert ap Huw manuscript) may have been used as an accompaniment to a song (whether fixed or improvised). The deep level of the intabulated version [of 'Erddigan y Droell] resembles to a great extent such Renaissance bass ostinato patterns as 'passamezzo antico e moderno', 'bergamasca', 'la gamba' and others. This piece, due to the character of its evidently non-measure bound harmony, obviously represents later musical style than the rest of the musical corpus, as stated by many other Robert ap Huw scholars on several occasions.

In extended musical genres, such as 'gostegion' and 'caniadau', both kinds of ceinciau mentioned above (either those based on one or more mesurau, or a mesur-based segment created on playing occasion with the help of swnemes and/or swneme-combinations on the surface level) could have been used within one piece. In case of caniadau, several examples of both kinds of ceinciau might have been used for a complete caniad, since a caniad could have been based on more than one mesur and more than just one non-changing melody as a diwedd. Examples of this are, among others, 'Caniad ystafell', 'Caniad marwnad Ifan ap y Gof' and 'Caniad San Silin'(see paragraph 7.4.). Bethan Miles gives eighteen manuscript sources (Miles 1983, 610), which contain names of

ceinciau. Miles suggests that all eighteen manuscripts derive from one and the same (albeit unnamed, undated and obviously lost) source. The basis for such suggestion remains unclear. There are suggestions, among others by Crossley-Holland (1998) that the first written source dealing with ceinciau stems from c. 1560.

Gwysaney 28 (fol. 70 ff) contains list of 27 pieces that includes, among others, the names of so-called prifgeinciau, 'principal melodies'. There were fourteen of them, five attributed to Cyhelyn and nine to Cadwgan.[68] Only the titles of them have survived. English translations in Italics are derived from Peter Crossley-Holland (Crossley-Holland 1998: 46-52), the others from 'The Records of Denbigh and its Lordship' (Williams 1890,98).

Cyhelyn: Kas gan dincker (*Tinker's envy:* Tinker's Dislike)
Dillin eva (*Eve's clothes*; Eve's Fashion)
Organ leuku (Lucy's Organ)
Y goweithas (The Party or Picnic)
Irlaes goeden (*The young green tree*; The Young Green Tree The Sapling)

Cadwgan: Evrai gowydd (The Warbler's Ode)
Kas gan grythor (The Fiddler's [Crowder's] Dislike)
Krechen feinir (*The maiden's laughter*; The Maiden's Laughter)
Llon ynhafarn (The Merry Slattern)
Awen wirli (The Reeling Muse)
Avel y fawd (The Thumb-Note)
Awen olevddydd (The Daylight Muse)
Eos werfyl (*The nightingale of Gwerfyl*;The Nightingale Reel)
Yr wyddeles (The Irishwoman)

On one hand, some titles (of the prifceinciau) give an impression that there were pieces of somewhat lighter character included among the prifgeinciau. On the other hand, some titles contain implications to rather serious and deep kind of bardic knowledge: the word 'awen' (rough English equivalent is 'inspiration') refers to a specific feature required from professional bards; an ability to reach deeper states of consciousness and ability to take his audience with him into the realm of the otherworld. (Matthews 1991a).

Gwysaney 28 also includes some more ceinciau attributed to these two fellows. In the Robert ap Huw ms (p. 117), however, 'Irlaes goeden' is attributed to Cadwgan, and 'Eos werfyl' to Cyhelyn, although this might be a misinterpretation by Lewis Morris. To make a modern scholar more confused, in Peniarth 62 (p. 144) the authorship of the 'prifgeinciau' is divided fifty-fifty to both Cadwgan and Cyhelyn. In many sources these two names are more or less always mentioned together, so there must have been a very close relationship between them. Interestingly, the first four in the Gwysaney 28 list of ceinciau are the following:

Evrlais goeden ar y wyddeles sydd ar lleddf gowair

68 See Crossley-Holland 1998 for more about their characters and possible activities.

Eos werfyl ynnyl y fawd y sydd ar y gogowair
Ysmwythra kyhelyn sydd ar y kras gowair
Kas gan grythor sydd ar is gowair

This may indicate that both 'Evrlais goeden' and 'Yr wyddeles' are in 'lleddf gowair' [tuning], or rather in 'lleddf gowair gwyddel' (see chapter five, or p. 109 of the Robert ap Huw manuscript). It may also imply to possible Irish origin of the pieces or some of their predecessors, or, indeed, their authors. The two last titles refer to other tunings ('gogowair' and 'is gowair'), used frequently in cerdd dant. Could this possibly mean that the prifgeinciau functioned as introduction to different cyweiriau of cerdd dant as well, and partly due to this they were called 'principal melodies'.

Cainc number 16 in the Gwysaney 28 list is, rather enigmatically, titled 'Bragod gowair ar y gogowair'. This may indicate some mistakes in the process of copying. It may mean that no. 16 is not a title of any cainc but refers to the cyweiriau of the pieces following (the numbers 17-27 in the list). In another list of the pieces with same names (Peniarth 62:7, called there as '14 cainc gyntaf') it is stated after 'Awen oleudhydh' that '11 of these are in bragod gowair', and after the rest of the three pieces 'and the other three are to be played in gogywair'. Again rather confusing for today's researcher.

One of the pieces in the list of prifgeinciau mentioned above is worth more commenting. 'Eos werfyl', in English 'the nightingale of Gwerfyl' may refer (as suggested in Crossley-Holland 1998: 50) to a famous female poet of medieval Wales, namely Gwerfyl Mechain. Gwerfyl was one of the few acknowledged female poets of the time. She hailed from Llanfechain in Montgomeryshire, kept a ferryside inn and seems to have been a rather merry and easy-going person. She flourished in the latter half of the fifteenth century, which makes her direct personal contact to Cadwgan improbable if Cadwgan lived and flourished during the first half of that century, as suggested by Crossley-Holland (ibid., 54). Examples of Gwerfyl's erotic poetry can be read in Johnston 1999, and some of it heard in the joint CD of this work.

6.3 Gostegion

On page 22 of the Robert ap Huw manuscript there is a fragmentary intabulation of a piece titled 'Gosteg Lwyteg' (figure 19). It consists of ten vertical columns, each containing graphical signs (or digits), again referring to either harp strings, registers of the instrument or different ways of plucking and damping the strings

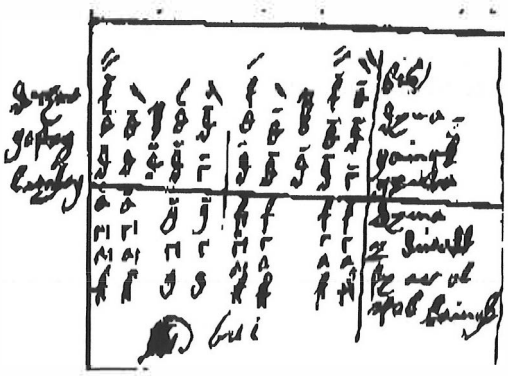

FIGURE 19 The intabulated version of 'Gosteg Llwyteg' (Lbl Add. MS 14905; p.22).

At the end of 'Gosteg Lwyteg' Robert ap Huw has written:

'Dyma gaingk gynta Dyma y diwedd sy ar ol pob kaingk'

'This is the first cainc This is the diwedd which follows' [=for every cainc]

The cainc -diwedd structure seems to have formed the basis (deep-middle structure) for most pieces in oral medieval Welsh harp repertory, the genre of gosteg included. As mentioned previously, the Robert ap Huw manuscript contains four gostegion, three of which are given in rather 'complete' when it comes to the written, the only exception being 'Gosteg lwyteg' which is given as presented in figure 19.

In figure 20 an analysed version of a cainc-diwedd section, an application by the author to 'Gosteg Dafydd Athro [the first piece in the manuscript] is given. The intabulated first cainc and the diwedd following it are shown first. Below the hand-dividing continuous line (in rectangle) are the digits of mesur 'corffiniwr'. Strings cc, c and g are the cyweirdannau (concordant strings) in this piece, and are referred to with number 1. Strings dd and b together with g represent discordant strings, the tyniadau, referred to with 0. The cognitive reference points (CR-points), presented in the figure, are meant to denote the player's awareness of certain important locations and timings during the course of a musical performance. Such are in the case of 'Gosteg Dafydd Athro' the beginning and the end of mesur 'corffiniwr' and the beginning of the diwedd. Figure 20 thus presents some possibilities to interpret cognitive and musical hierarchies that are contained in the genre of 'gosteg', applied to the intabulated version of 'Gosteg Dafydd Athro'. Generally the musical basis for any piece in the genre of 'gosteg' seems to have been the regular mesur-tied cainc-diwedd pattern. In this case such pattern consists of a section based on mesur 'corffiniwr' (1100 1011).

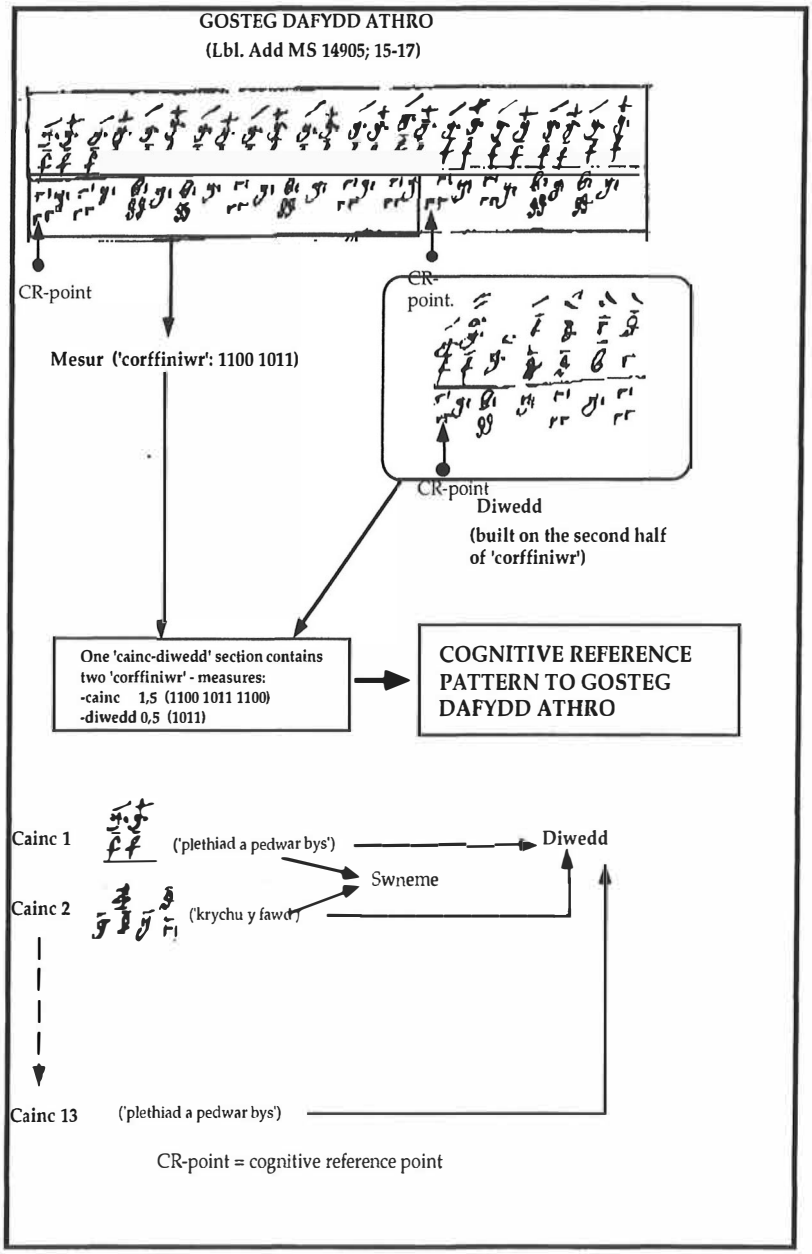

FIGURE 20 'Gosteg Dafydd Athro' consists of 13 cainc -diwedd sections. In each section two corffiniwr –mesurau are needed.

The cognitive reference pattern of the intabulated version of 'Gosteg Dafydd Athro' first requires the knowledge that for one complete cainc-diwedd section mesur 'corffiniwr' is needed twice. That knowledge as such is insufficient unless the player is aware that for a cainc one and a half mesurau is required, and that the length of the diwedd is the (latter) half of 'corffiniwr'. It is here where the

concept of the 'cognitive reference point' comes in.[69] In the case of 'Gosteg Dafydd Athro' the concept is used primarily as knowledge about time-spatial points that dictate beginnings and endings of 'corffiniwr' during performance, as well as beginnings of diweddau within each section. After the cerdd dant musician had the above-mentioned elements of information "installed" in his brain, he was able to create any number of cainc-diwedd sections proper to 'Gosteg Dafydd Athro', even on the spot if necessary. A common way to create cainc-diwedd sections in medieval Welsh harp music, whether within framework of extended genres (such as 'gosteg') or merely as such, seems to have been to execute 'swnemes' and/or 'swneme-combinations' on mesurau. The process of plucking and damping, needed for swnemes, can be carried out in rhythm or beat. It is a question of timing, placing and fingering them right, and of course technical problem as well.

In the 'Grammars' there is very ambiguous information about swnemes (under the title of 'tagiadau', 'plethiadau', etc) and their features. What I can gather from that is that some parts of these swnemes are to be treated as cyweirdannau and some as tyniadau. These figures join, connect and distinguish pitches to one another. Thus within a swneme there is also a hierarchy [see paragraph 2.5 of this study] and we should try to find out this hierarchical relationship. The weaker element is probably to be placed, and played 'off-beat', and in lighter way than the stronger one. As in Celtic, or in any other, folk music the subordinate elements [the weaker ones between the stronger ones] are an essential part of musical and individual expression, and the swnemes in cerdd dant tradition contained them both. Thus with the help of the mesurau (or their varied combinations) as deep-structural elements or patterns the placing and timing of strong and weak parts of the swnemes or the swneme-combinations can be done. This needs some trial and error, and (for today's musician) preferably the use of the tablature, and master the swnemes from that and not from any 'practical edition' in modern notation. Some swnemes of 'Gosteg Dafydd Athro' (first cainc and diwedd) are presented in figure 21 in modern notation. The note values should not be taken too rigidly and literally, and it should also be remembered that there could be other ways of presenting the same thing in notation. Figure 21 is merely one possibility among others to transcribe a fraction of the musical features of the Robert ap Huw manuscript.

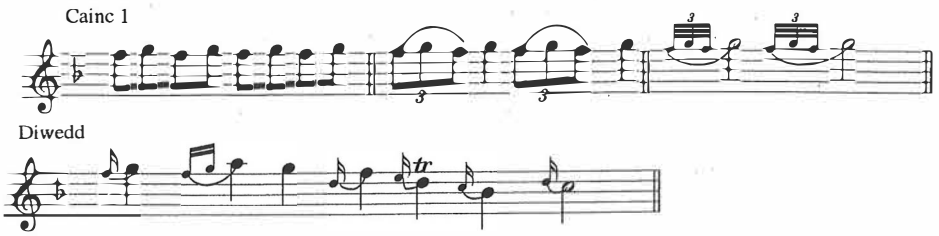

FIGURE 21 Some swnemes/swneme-combinations from 'Gosteg Dafydd Athro'.

69 Cognitive reference point in connection with music was first launched by Carol L. Krumhansl in her research projects dealing with notions of tonal hierarchy. See Krumhansl 1990.

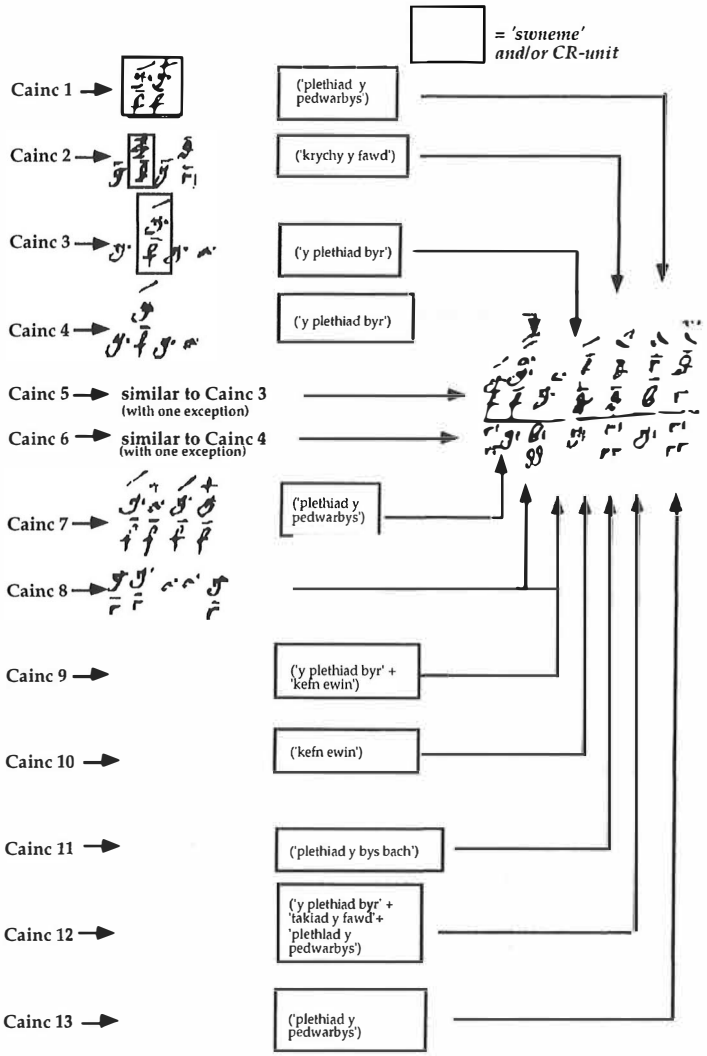

FIGURE 22 The list and order of swnemes, used in the intabulated version of 'Gosteg Dafydd Athro'.

The second piece in the Robert ap Huw manuscript, 'Gosteg yr halen', is also a good example of musical reproduction and variation based on a hierarchical system, similar to other 'complete' gostegion in the manuscript. Now the caincdiwedd section is based on the mesur 'mak y mwn byr' (1100 1111), which here forms the repeated, invariable foundation of the piece. The length of each section, if one follows Robert ap Huw's instructions, is three times 'mak y mwn byr'. Again each cainc is followed by the same diwedd, and different musical solutions are to be executed after similar principles as presented in connection of 'Gosteg Dafydd Athro'; the use of various swnemes on the established mesur,

for example in different transpositions. The impression of repetition and regularity is increased even by the fact that only one principle of melodic or rhythmic idea is applied to each cainc at a time, as was also the case with 'Gosteg Dafydd Athro'. Figure 23 is an attempt to show, in a modified tree-structure, how the intabulated version of 'Gosteg yr halen' is constructed.

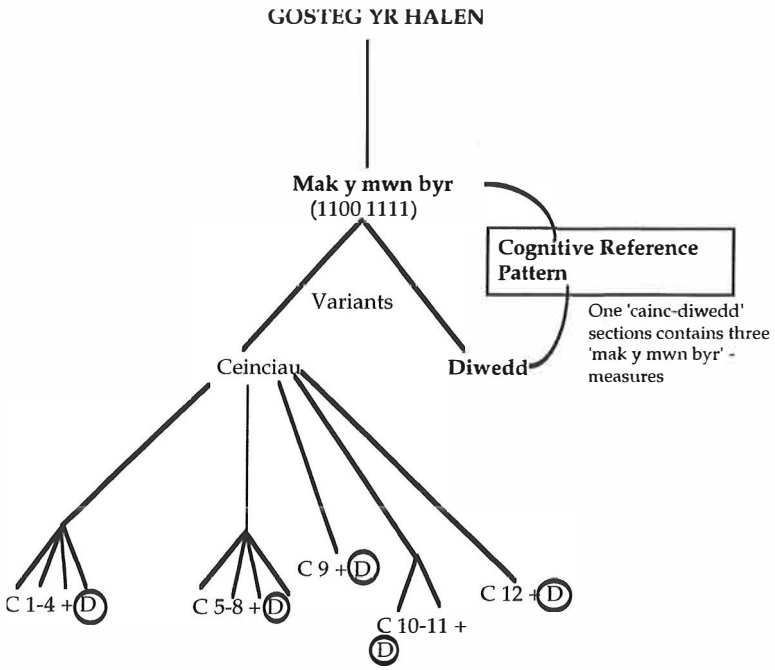

FIGURE 23 A structural analysis of 'Gosteg yr Halen' (Lbl. Add. MS 14905, 18-19).

The numbers below the 'branches' denote the following happenings on the surface level:

> Ceinciau 1-4 (each followed by the diwedd): descending thirds and fourths; one rhythmic change in cainc two, minor melodic and rhythmic changes in both ceinciau three and four.
> Ceinciau 5-8: 'krafiad dwbl' and 'krychu y fawd' as swnemes, both executed in two different transpositions.
> Cainc 9: related to cainc 3.
> Ceinciau 10-11: arpeggiated chords, smaller time values in cainc 11.
> Cainc 12: derived from the previous cainc, together with 'y plethiad byr' as a swneme.

In figure 24 the first cainc-diwedd section of 'Gosteg yr halen' is presented both as intabulated and transcribed (my transcription should not be taken too rigidly as a definite performance instruction). If one follows the performing

instructions, written Robert ap Huw in connection of this piece, it is three times the mesur 'mak y mwn byr' (1100 1111) that is needed for one complete cainc-diwedd round. The swnemes of cainc 1 consist merely of two descending thirds in two positions, one on cyweirdant (1) and other on tyniad (0) part of 'mak y mwn byr'. Similar swnemes are to be found, for example, in the second cwlwm cytgerdd-set on page 23 of the manuscript. The upper-hand swnemes, with their fingerings, are given at the bottom of figure. The numbers in brackets denote fingers used for damping. What is presented in figures 23 and 25 indicate that, when creating a gosteg, one may use different kinds of swnemes and/or swneme-combinations on a regular mesur-based pattern for cainc-sections, and a re-occurring swneme-combination for diwedd. The diwedd is repeated after a cainc-section of regular length, which may vary from one gosteg to another as exemplified in 'Gosteg Dafydd Athro' and in 'Gosteg yr halen'.

This brings us back to the earlier presented fragmentary example of the gosteg. Why did Robert ap Huw give us only the beginning of 'Gosteg Lwyteg'? And to what was he referring with his text at the end of the piece? Did he intend to direct his message primarily towards musicians who knew the musical grammar of cerdd dant? I suggest that precisely that was the case. Whether he copied 'Gosteg Lwyteg' from other manuscripts we do not know, but in spite of that possibility the written message seems to be self-sufficiently clear. Those who knew the musical hierarchies of cerdd dant together with cognitive processes proper to it, needed no further instructions in order to be able to make culturally acknowledged and accepted music out of these instructions. Thus in the case of 'Gosteg Lwyteg' one may, by using various ideas of musical expression from the 'complete' examples of the genre, create extended performance version(s).

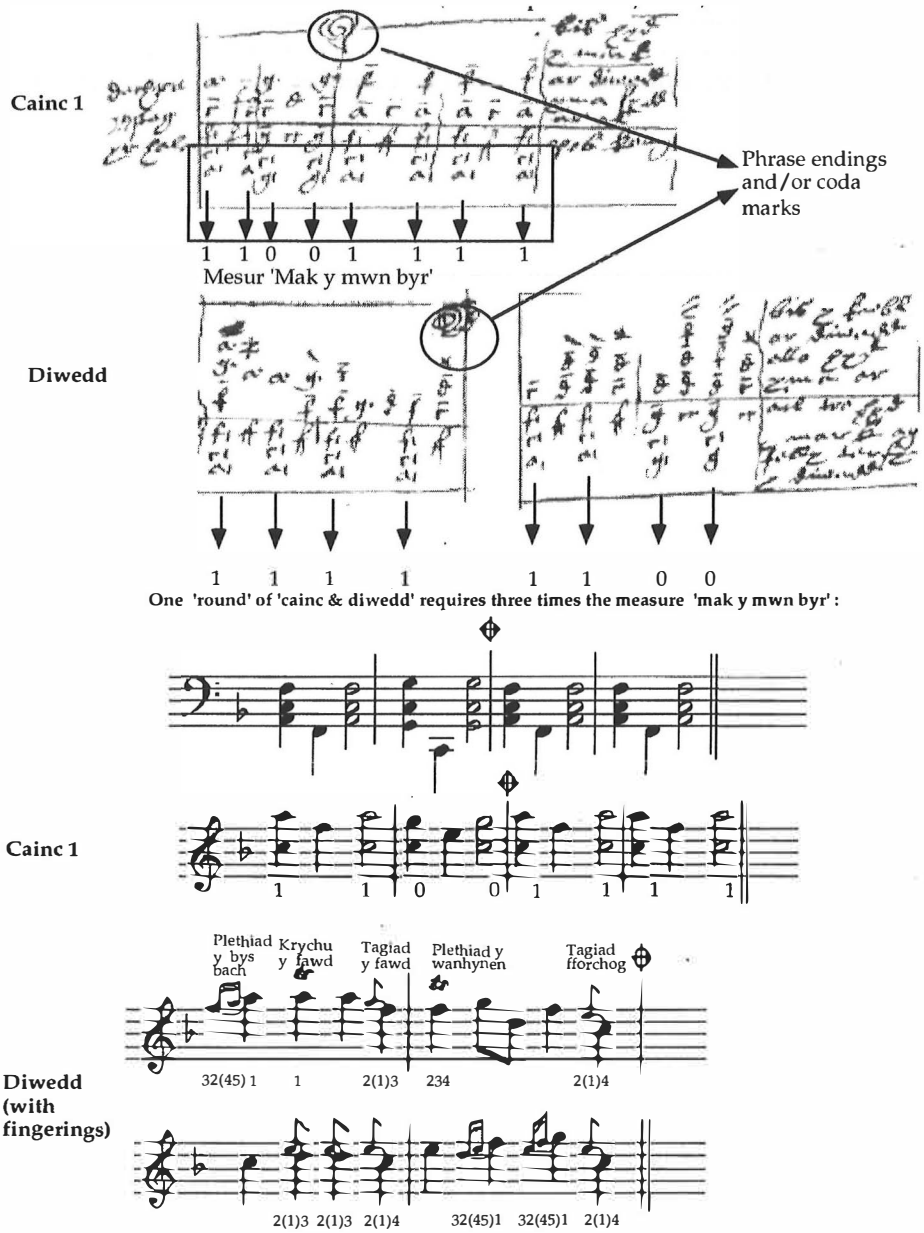

FIGURE 24. An analysis of the first cainc-diwedd round in the intabulated version of 'Gosteg yr Halen'.

For the sake argument, a hypothetical 'performance version' of 'Gosteg Lwyteg', is given below (figure 25), based on the analysis ideas presented above, and interpretations gained from the manuscript and the 'Grammars'. It is assumed here that both the cainc and the diwedd are of equal length, i.e. one complete 'mak y mwn byr'. I have simply given some possibilities how to use various swnemes and formulas as part of surface levels, while mesur 'mak y

mwn byr' forms the deep structure. All this is in line with the schema of the gosteg. The 'branches' should be read as follows:

> Ceinciau 1-3: Ascending and descending intervals together with scale passages on 'mak y mwn byr'; variations related to each other. No swnemes (or very few of them).
> Ceinciau 4-6: Introducing various 'swnemes', for example 'tagiad y fawd' together with 'krafiad dwbl' in different transpositions; scale passages also included.
> Ceinciau 7-9: More demanding 'swnemes', such as 'plethiad y pedwarbys' and 'krychy y fawd' in various transpositions, and with rhythmic and melodic variations.
> Ceinciau 10-n: '...and now to something completely different...'

Two short performance applications, different to each other, are demonstrated on the accompanying CD and explained in the appendix.

Seven manuscript sources, which include gostegion, are mentioned by Miles (1983, 617). The Robert ap Huw manuscript is not included among them, possibly due to the fact that Miles has primarily concentrated in manuscripts, which contain lists of piece titles, and which pre-date Robert's manuscript. And the tune lists of the Robert ap Huw manuscript contain no mention of gosteg.

Peniarth 62 manuscript [from the late sixteenth century] is probably the first manuscript source to include the usual four gostegion. Interestingly, in the earliest [obviously] manuscript source (on page 106) a piece entitled as 'Gos deg bedn trevddvn' is mentioned; a piece, which did not belong to the usual four gostegion. In seven ms. sources that include titles of gostegion, the spellings of the titles and texts associated to the pieces vary considerably. This gives (again) an impression of difficulties in transmitting and perceiving information.

Bethan Miles notes on page 617 of her thesis ('Ymddengys y testun gyda 14 cainc Cyhelyn a Chydwgan'; 'they [the gostegion] are presented in the text together with the fourteen ceinciau by Cyhelyn and Cadwgan'. This observation is interesting. If the prifgeinciau by Cyhelyn and Cadwgan were considered as part of the basic repertoire for bardic disciples, could the gostegion also have enjoyed similar status?

On some occasions the gostegion were included as part of the professional musician's official repertoire only from the degree of 'disgybl pencerddiad' onwards. They are, however, mentioned in the 'Statud Gruffudd ap Cynan' (the version contained in Lbl Add. MS 19711) as part of the program already for 'disgybl ysbâs graddol', a matter which increases the ambiguity even more.

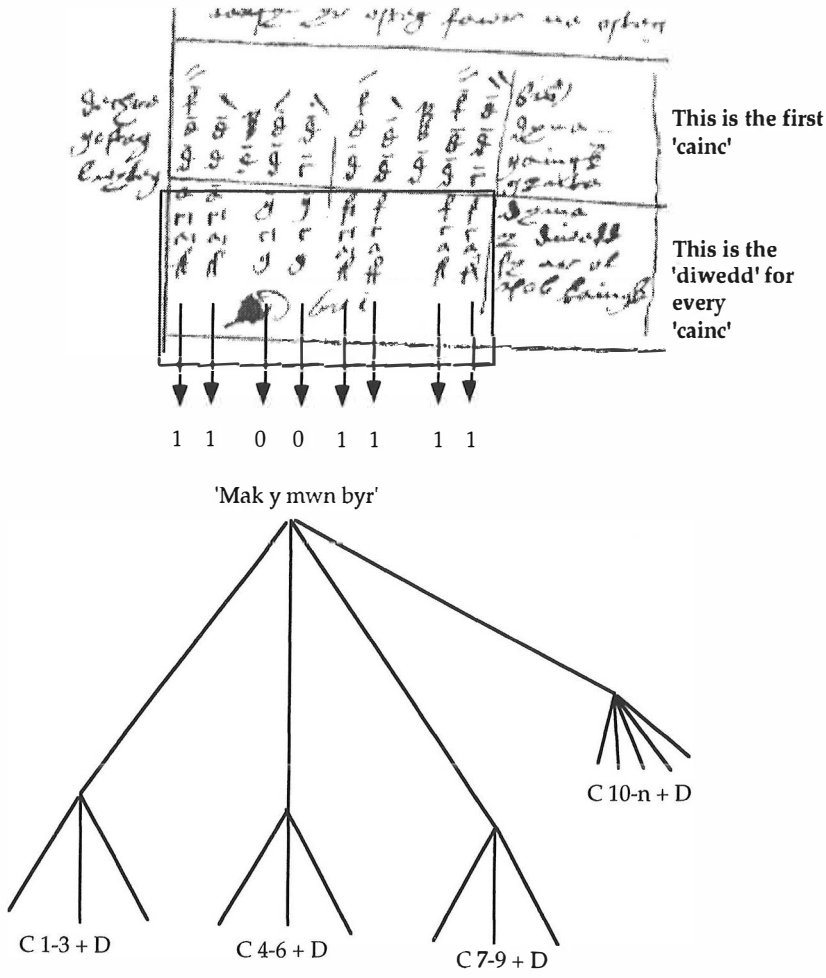

FIGURE 25 A tentative performance version of 'Gosteg Lwyteg'.

My main point of interest is, whether it was the hierarchical scheme of gosteg and its applications that was primarily required from the bardic disciples, and the four representatives of the genre known by their titles only at later stage as a kind of 'reference store'. The written version of 'Gosteg lwyteg' indicates that the main thing was to master the scheme of gosteg and its applications.

The following figure (figure 26) is an attempt to show the general scheme of gosteg:

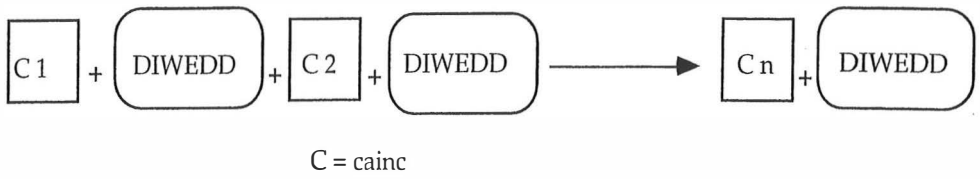

FIGURE 26 Structural scheme of gosteg.

To sum up, I am not convinced that the four gostegion, mentioned in the 'Grammars', have throughout their time of existence been exactly in same format as they have survived to us in the Robert ap Huw manuscript. Neither am I convinced that the four gostegion have always been performed exactly according to the versions as they are written in the manuscript. There must have been many ways to perform, or create, pieces of music in the genre of gosteg. The framework (yet another way to name a generative or hierarchical system) of gosteg gave many possibilities for musical realisations, whether to accompany poetry recitation or dance, or just to adopt new techniques, and thus amaze fellow musicians or an audience, unaware of bardic secrets. I consider it possible that such a scheme could have been known outside Wales in the Middle Ages, as referred to by Gerald of Wales in his writings. Figure 27 is a tentative application of the scheme of gosteg to an English 'estampie' tune. The construction of estampie's melody, as a matter of fact, bears striking similarities to that of gosteg (i.e. the principles how to use swnemes).

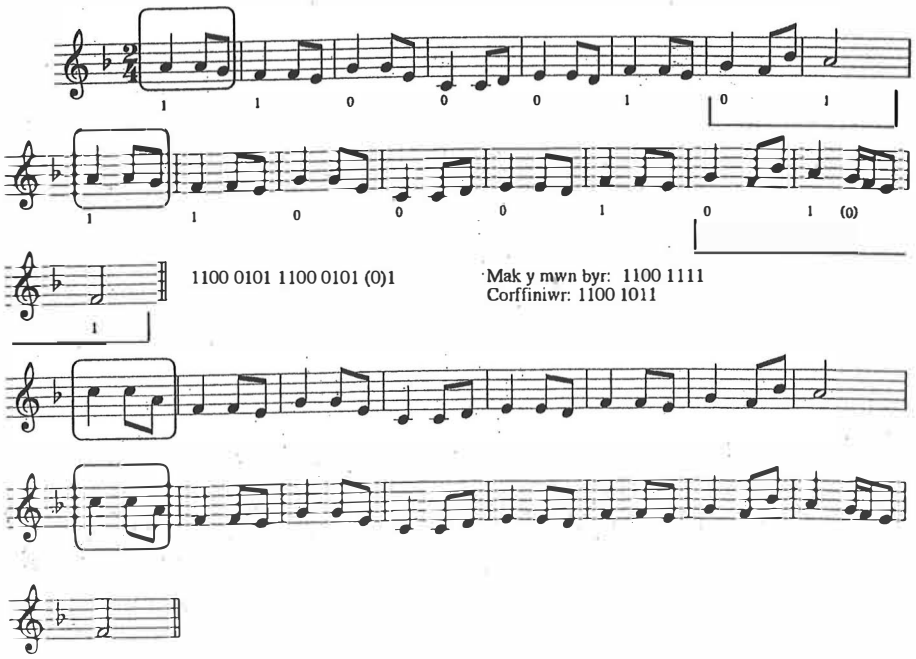

FIGURE 27 A medieval English estampie with a mesur application. Notice the melody construction, which bears similarities to those of gostegion.

I prefer to consider gosteg as a performance oriented, culturally acknowledged musical and cognitive system for music making, rather than as a genre that included only four 'canonised' pieces of music. If we consider gosteg as frameworks for learning stylistically correct instrumental expressions of cerdd dant, then they might as well work as basis for recitations and vocal improvisations for the datgeiniad. Due to regular lengths of the ceinciau and strict, mesur-bound harmony, the gosteg is an ideal system for trying out various ways of vocal expression. Experiments based on such, albeit fictive ideas are tried out on the CD-recording, for example on the track that combines 'Cainc Dafydd Broffwyd' and 'Gosteg Dafydd Athro' with a poem by Gwerful Mechain.

Finally, once more back to the statement of 'Statute of Gruffudd ap Cynan', which says that the four 'gostegion', i.e. those which were adopted to the canon, belonged to the harpist's repertoire only from the degree of 'disgybl pencerddiad' onwards. How could the harpist disciples, lower in rank to 'disgybl pencerddiad', be prepared for spontaneous music making (if we take gosteg as frameworks for such practice) within the cultural limits and styles? Through clymmau cytgerdd perhaps? According to the 'Statud...' already the students of the second lowest degree were to learn '... caniadau and gostegion according to the teacher's will. ´ It is, of course, possible that adopting and applying other musical genres (caniadau, cadeiriau, etc.) was considered more important in bardic music education. In the course of time from the thirteenth to the sixteenth century, new caniadau, cadeiriau etc. must have been composed. Which of them formed the 'standard' corpus of pencerdd´s repertoire, or was that corpus a subject of change from time to time as well? If so, to what extent did the repertoire change from ca. 1350 to 1567, the time of the second Caerwys eisteddfod? If four gostegion were considered enough as a part of standard repertoire, it does not necessarily mean that the gosteg pattern was not used for other purposes, i.e. for spontaneous and extemporised music performances on various occasions, as may be deducted from the manuscript version of 'Gosteg Llwyteg'. As an extended and/or varied scheme, the gosteg could have worked as a basis for some caniadau as well. The gosteg seems to have been a very flexible, yet straightforward, system, and could well have been extended in the course of performance, when necessary. The system is very suitable for ensemble performances (i.e. two harpists, harpist and a crowder, etc.), where instrumentalists could compete in creating technically more and more demanding variations.

Figure 28 is an attempt to present the famous medieval canon 'Reading Rota' ('Sumer is icumen in') with the help of cerdd dant terminology (mesurau, swnemes and the like). The fixed 'pes' [ground, or harmonic foundation] of the canon can be seen to follow a mesur-like pattern of 1010 1011, which is very close to 'Cell Ieuan vab y Gov' (a non-canonised mesur) or can be taken as a variant of 'Alban hyfaidd' (no. 23 of the canonised mesurau listed in the Robert ap Huw manuscript). Thus the 'pes' represents the deep structure level in this song, on which the melodic formulas are set. This is not to claim that 'Reading Rota' was somehow rooted in Welsh bardic tradition, but only to show some similarities in construction principles. Shai Burstyn's (Burstyn 1983) analysis of the 'Rota' fits well to Leo Treitler's concept of 'aural paradigm' (see 2.10 of this work). What it may also imply is that they [both the song and some genres of

Welsh bardic music] seem to share similar 'aural paradigm', and that this kind of framework may have been in quite frequent use in medieval Britain. [70]

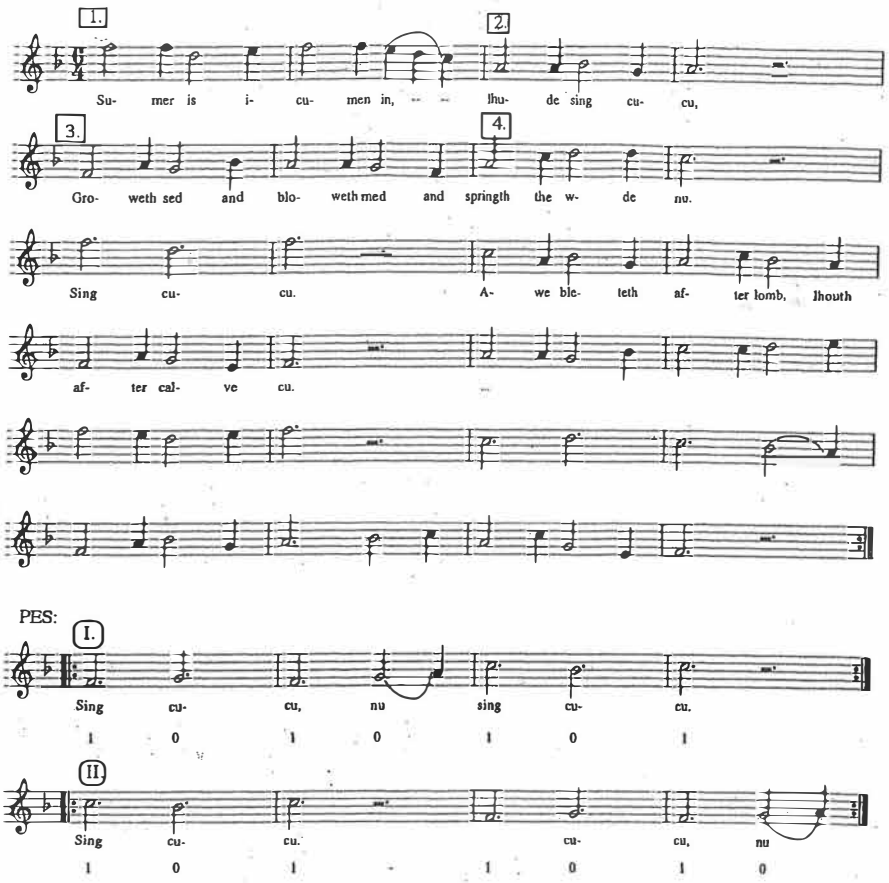

FIGURE 28 A tentative mesur-bound version of the 'Reading Rota'.

6.4 Caniadau

Bethan Miles has divided (Miles 1983, 619) the sources containing caniadau in two categories. The first is called simply as 'group I' and it consists of eight manuscripts, the one by Robert ap Huw included, plus the John Rhys Grammar as a printed document. The other category is titled as 'eraill' (others), and it contains some folios from the Gwysaney 28 (this ms. is also included in the first category) and 'Panton 56'. Reason for this categorisation seems to be that the pieces belonging to group I are either in bragod gywair, cras gywair or lleddf

70 See the descriptions written by Gerald of Wales (Gerald of Wales 1978) about part-singing practices in the twelfth-century Britain, for example.

gywair. Thus pieces in both is gywair and go gywair are, for some reason, excluded from group I.

The reference source for Miles is, here again, Gwysaney 28, from f. 71 onwards (Miles 1983, 634). It contains a list of 68 pieces, 33 in bragod gywair, 29 in cras gywair and six in lleddf gywair. In second group of sources in Miles's work we are faced with different spellings of same titles. The list in Gwysaney 28: 67 ff. (the same ms. as in group I but starting from different folio) contains a list of caniadau with references to mesurau, whereas the list in the same ms. from folio 71 did not have any information about mesurau. There are 22 pieces contained in this list (two gostegion and two clymmau included). The caniadau, as they are intabulated in the Robert ap Huw manuscript denote that several ceinciau might have been used in constructing a caniad; in other words, a caniad could contain more than one cainc as a diwedd and thus more than one mesur. In Panton 56 (p. 55) there is a list of caniadau, allegedly written by Cynwrig Bencerdd (obviously the list only and not the pieces, at least not all of them), totalling 32 items in all. In other lists under the genre of the caniadau there are also pieces with titles such as cwlwm, salm and cell to be found. It may surprise nobody anymore that the titles of the caniadau in various manuscript sources are spelled and written in various ways, when compared to each other. Something to do with problems in transmitting and perceiving/receiving information?

According to some manuscript sources (which included parts of the 'Grammars') there were four principal caniadau for the crwth, and four principal caniadau for the harp. These were, possibly, pieces that were to be adopted by the high rank musicians. But were they meant to be performed in one unified way throughout centuries, since they were taught and adopted orally? I doubt it. And even if they were meant to be adopted so, were they also performed without any changes or additions in the course of time? I doubt that too. Could it have been that in these four the essentials of the whole bardic culture were considered as been taken to the utmost limit? Or were these pieces considered as the most difficult ones around 1560 when measured (by whom?) by the contemporary standards? The principal caniadau for the harp were:

1. Kaniad krych ar gainck o vydd
2. Pibe morvydd o waith arthur
3. Yr hen vragod gowair
4. Hvn wenllian

(Gwysaney 28: 62)

Striking thing is that from many caniad titles one gets an impression that 'caniad x' is built 'ar gainck y'; a caniad is built, or based, on someone's cainc. This indicates that caniadau were expanded compositions/performances based on ceinciau. There are titles such as ' Kanniad ar gainck dd ap gwilim', 'Kanniad ar gainck rres ap kowrda' among others. This may denote that some short melodic segments or songs/tunes were used as basic 'construction material' for more expanded forms of music, such as the caniadau, possibly in similar way as with pieces in the genres of 'piobaireachd'. The main differences between a caniad and a gosteg seem, then, to have been in principles of construction. A

gosteg can be, constructionally, understood as a very uniformed: the cainc-sections of equal length, the use of only one mesur at a time, and musically same diwedd-section throughout. This constructional paradigm can be clearly seen in any of the four gostegion included in the Robert ap Huw manuscript, as discussed in the previous paragraph. A caniad, however, may have cainc-sections of unequal length, and the diwedd can either lack altogether (as in 'Caniad Gwyn Bibydd'), be musically the same throughout the piece (as in 'Caniad Cadwgan') or there can be several, musically different, diweddau (as in 'Caniad Marwnad Ifan ap y Gof').

One caniad could also include several mesurau. A suggestion, but nothing more, is that some of such ceinciau, which were widely known among medieval Welsh musicians, may have been used for constructing diwedd sections of caniadau. Such ceinciau may have been part of standards musical repertory, which was passed from a master to a disciple, or may have been adopted from sacred or popular music. Caniad was an expanded musical application of such melodic segments and the use of mesurau and swnemes.

Below are some exemplary cases from the caniadau in the Robert ap Huw manuscript, which may shed some light on the arguments presented above. The first caniad to be examined is 'Kaniad Tro Tant' (67.4. 1. - 69.3.20.). Its mesur is said to be based on ('corfinfaen'; 1011 011, written at the end of the piece) is written as augmented in connection of the first 'cainc' and 'diwedd' (with the exception of the latter's closing) but abbreviated in others (as 1011 0) for some reasons. It may be that the diwedd-section consists of three last digits (011) of the mesur, and thus the second complete mesur section is just a repetition of the first 'cainc', only with different ending. A different solution is also possible. The abbreviated sections should be played as complete (following the rules, of course), then repeated but with that different ending, comprising the last three digits of the mesur. This would mean a rather free interpretation of 'corfinfaen'. Or, then, there has been various 'correct' ways of mesur-construction, and thus for performing this caniad. In the written version of 'Kaniad Tro Tant' there are some peculiarities, which support the previous argument. The sections IV, VII and XIII of the piece bear mesur-wise little resemblance to the rest of the sections. This leads one to speculate whether the application of mesurau, swnemes and segmentation principles, after they had been learned and mastered by harpists, was rather free to some extent in case of caniadau. This could partly explain the need for including quite a big number of them in various stages of bardic learning. One possibility might be that the 'different' or 'irregular' sections could have been instrumental interludes/improvisations and the 'regular' ones for singing or recitation, but it may as well have been the other way round. No two performances were alike, and if one takes comparison to troubadour and trouvére culture, especially to pieces in their 'high style' repertory and the ways of performance connected to them (e.g. the 'lai'), one notices the importance of mastering the cognitive and musical hierarchies and construction material.

The preceding piece in the manuscript, 'Kaniad y wefl' (66.1.1. - 67.3.19) is also somewhat curiously written. On the bottom of the page the digits of mesur 'fflamgwr gwran' (1011 1011 0011 0011) are given. Peter Greenhill argues (Greenhill 1998, 49) that the mesur is that of 'fflamgwr gwrgan' (he spells the name like that) throughout. His version of this mesur in connection of this

particular piece is rather peculiar. The first playing section is probably correct but the second one is probably misunderstood. Again the diweddau in some sections are different to each other (the last one compared to others, for example). Greenhill (ibid.) suggests that the digits can represent any part of the mesur, but he does not have any need to base his conclusions on anything, or critically evaluate them. His idea of 'borrowings' is a good and acceptable one, but he does not seem to have very much confidence in that himself.

'Caniad ystafell' (38.1.1. - 41.5.26.) is an interesting piece. The 'ceinciau' of the first three sections can be said to be in 'corffiniwr' (11001011). To define the mesurau of the diweddau of same sections is more complicated case. The beginnings of the diweddau can be considered as being in a kind of 'mirror image' of 'corffiniwr' (i.e. 00110100), whereas the endings seem to be more freely constructed. They are partly melismatic (the segment 38.2.11. - 38.2. 20 in the first cainc-diwedd section), partly built on a variant of 'alban hyfaidd'. This could be interpreted that we are here dealing with 'corffiniwr' both from harpist's and crowder's point of view, together with combination of more mesurau than one in the diwedd. In Panton 56 (fol 23B) this piece is mentioned to be in 'corffiniwr', but such a description fits only to three first ceinciau of the intabulated version of 'Caniad ystafell'. As in the case of 'Kaniad Tro Tant' and many other caniadau, the whole piece (as it is written in the manuscript) seems to be constructed on similar principles as stated earlier.

'Kaniad marwnad Ifan ap y gof' (71.7.1. - 76.4.15.) is, in its written format, a long piece consisting of 16 sections. It is, as written, a piece of special interest from the author's point of view, because it shares a lot of melodic motifs (or 'swneme'-motifs, if preferred) with other pieces of the manuscript. Such motifs are, in most cases, at the end of (written versions of) cainc-sections. It is noteworthy that these melodic quotations come from pieces representing at least three different genres, namely the caniadau, the gostegion and the profiadau. It leads to speculate whether the author of 'Kaniad marwnad Ifan ap y gof' also composed those 'original source pieces', or that they had some other special meaning to the protagonist of this piece. Yet a further possibility is that the pieces in cerdd dant were common property and heritage, and the swneme-combinations were used freely, possibly to arouse certain associations or to pay respect to earlier pencerdd(s). Thus the 'source pieces' or parts of them might as well have been composed by Ifan ap y gof himself (see Crossley-Holland 1998, 30-31 about the possible relation of the composers in question), and the author of the elegy may have used the same motifs on purpose. The melodic motifs included in the intabulated version of 'Kaniad marwnad Ifan ap y gof', which are to be found in a more or less similar format in connection of other pieces of the manuscript, are the following:

> Cainc III (72.7.4-7; possibly a new diwedd, preceded by a change of mesur) -> similar to the diwedd-ending of 'Caniad Suwsana' (e.g. 54.2.20-23 both melodically and mesur-wise)
>
> Cainc V & VI (73.4. 13-16 and 73.6. 5-8; both may belong to a new diwedd as well -> very similar, almost identical, to the diwedd-endings of 'Gosteg Dafydd Athro', only melodically this time)

Similar passages to those of 'Gosteg Dafydd Athro' are to be found also in 74.3.4-7, 74. 6. 4-7 and 75. 11-14. In these particular cases the harmonic basis is drone-like, especially in the first two. The third one is closer to 73.4.13-16 and 73.6.5-8. Does this indicate possible links/connotations to Scottish piobaireachd, especially to piobaireachd-laments?

Cainc XIII (75.4.8-17) has similarities to the opening of 'Erddigan y droell' melodically but in different key/tuning, and also (albeit less) to 'Profiad Cyffredin'. All these are very sequential in character, and the similarity can be pure coincidence. Furthermore, stylistically 'Erddigan...' in my opinion outdates Ifan and other musicians of the ap Gof family, being harmonically more a product of a more modern era.

Finally, the ending of the written version of the piece (76.4. 11-15) can be found many times in the written version of 'Caniad San Silin', although in different transposition (apparently a fourth lower).

Coincidences? Copyist's errors? Copyists' errors? Be it as it may, it is interesting to speculate with the possibility that 'Kaniad marwnad Ifan ap y Gof' was composed by Ifan's blood-relative Dafydd Athro (ap y Gof), and that Dafydd could also be the author of 'Caniad Suwsana' and 'Caniad San Silin'. This hypothesis gets some support from the piece list on page 56 (fol. 23B) of Panton 56. The title of piece 21 is 'Can: Mar: Ieuan ap y gof o waith Dd Athro 17. Trwsgl', denoting that this caniad is 'work of Dd Athro'. A reverse interpretation is also possible, as stated earlier, meaning that Dafydd Athro has borrowed melodic material from works made both by himself and Ifan ap y Gof. This could mean that 'Caniad San Silin', for example, could have been composed (or put together) first by Ifan ap y Gof. There is another, also hypothetical, suggestion that these swneme-combinations shared by the above-mentioned pieces were part of common property among harpists and they were more or less consciously and frequently circulated and used in performances. At the end of the day some of them found their way into the intabulated version of 'Kaniad marwnad Ifan ap y Gof'.

It is far too simplified to classify the mesur of this piece being 'tityr bach' (0011 0011) only, as Peter Greenhill in his dissertation (Greenhill 1998, 52-54) argues. The 'Grammars', moreover, state that the mesur for this caniad is 'trwsgl', as can be read in the list on page 56 (fol 23B) of Panton 56. Which one, or ones, of the 'trwsgl'-mesurau we are dealing with here is a matter of further study. Putting this piece into the framework of one mesur only simply does not work, since the basic character of caniad- genre was obviously not that straightforward as Greenhill writes.

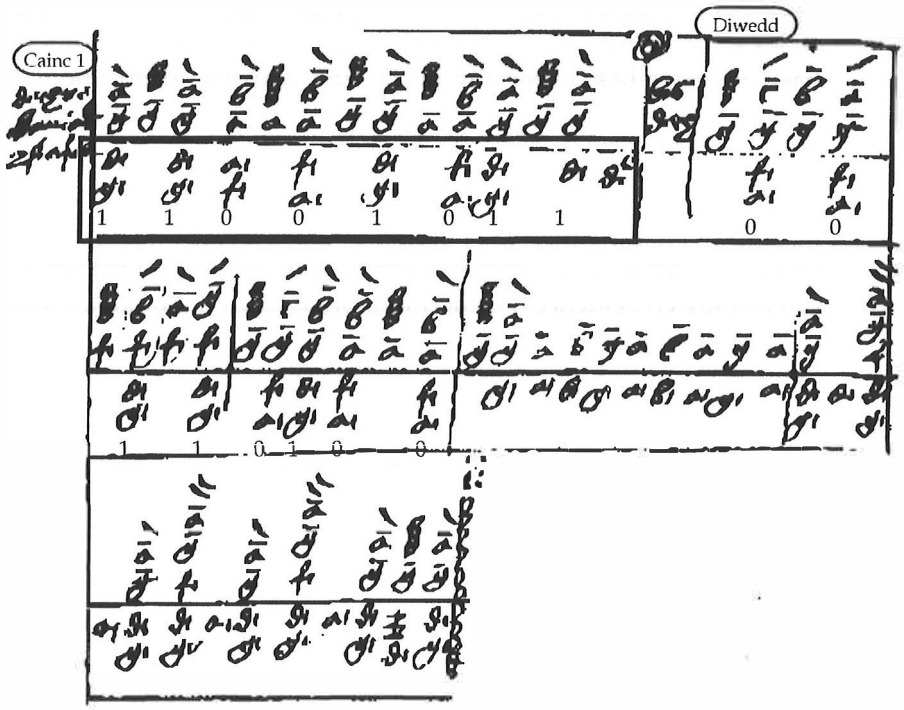

FIGURE 29 The first cainc-diwedd section of 'Caniad ystafell'. Digits in the rectangle (in connection of the lower hand signs in the cainc) are those of 'corffiniwr'.

Greenhill further writes that the corruption of a piece of music [either referring to 'Kaniad marwnad Ifan ap y Gof, or speaking in general terms] is due to its oral transmission (Greenhill 1998, 54). In other words, had the particular piece of music been written down and learned from a written source, and had the music culture called cerdd dant been a literal one, none of the pieces would have been corrupted in transmission processes. Such an argument, belonging to the paradigm of literacy, indicates that the only source that matters is what has been written down, and that music should not be transmitted orally, or exist outside the written. Another paradox in this context is that although Greenhill frequently condemns Robert ap Huw as having been a mere naïve copyist of the music, yet at the same time he is of the opinion that the tablature is adequate and self-sufficient. Greenhill's argument gives an impression that no corruption is possible in literal transmission. As has been stated elsewhere in this study, transition from aural to literal sometime in the sixteenth century and series of literal transmission attempts after the transition phase did more or less change the contents of originally oral music culture. Should this to be considered as corruption of the original as well? Also the fact that written versions of the pieces sometimes share long segments of texts does not speak in favour of the 'incorruptness' of the literate. Some segments (swneme-segments or melodic ones) could have been applied to various mesurau (or mesur-combinations) or used for cainc-sections rather freely in performance. One may, if preferred, take the Robert ap Huw manuscript as a corrupted literal

version of an oral music culture's musical products and practices. Products and practices, which were based on orally learned and adopted cognitive and musical frameworks. Terms, concepts, names, digit series, spellings etc. are also presented in rather ambivalent ways in other literal sources, such as the 'Grammars', as has been discussed on many occasions in this work. One should keep in mind that the written version (such as the manuscript) is not necessarily the definite version of a piece of music or performance.

In case of 'Caniad Cadwgan' we have a lot of regularity in both cainc- and diwedd-sections, although one cannot call it a piece based on any of the canonised 24 mesurau. The first cainc can be said to on 1010 1011, which is not included as such in the series of mesurau on page 107 of the Robert ap Huw manuscript. In most cainc-sections there are swneme-expansions spanning from the third digit till the sixth, afterwards adding an extra 10 to the whole section. Thus the cyweirdannau and the tyniadau could have been added in performance in the following style:

Cainc I 1010 1011
Cainc II 1010 10 1011
Cainc III 1010 10 1011 01
Cainc IV 1011 010 1011 01
Cainc V 1011 10 1011 01
Cainc VI 1011 010 1011 01
Cainc VII 1011 010 1011 01
Cainc VIII 1011 010 1011 101

Change to the pattern above kind occurs in cainc IX:

Cainc IX 1111 010 1111 101
Cainc X 1111 010 1111 101
Cainc XI 1111 010 1111 101 or (less obviously) 11010 11101
Cainc XII 1111 010 1111 101

In the Renaissance mensural notation the last note of segment/section (usually after a full or half cadence, or cadence-like pattern) was [and still has been] considered as the long one, indicating a pause, caesura or end of movement. Thus the following pattern (as in cainc X) would practically be 1111 0100 1111 1011. Diwedd of 'Caniad Cadwgan' remains more or less stable, although its digit series is rather difficult to interpret in relation to the 24 canonised mesurau. It can be read (again we are referring to the written version of the diwedd) as 01010 (101010) 1011, the most ambivalent part being bracketed here.

As mentioned already earlier, Bethan Miles has referred to one very short mesur (0 1) called 'Korkadwg' (Miles 1983, 599). This might have something to do with Cadwgan, a possible composer of the above-mentioned caniad (see Crossley-Holland 1998, 45-56). The Welsh word 'kor' (or 'cor') contains meanings such as 'choir' and/or 'dance', and 'kadwg' can be abbreviated form of 'Kadwgan'.[71] If so, then some passages of (intabulated version of) 'Caniad

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71 In Irish the word 'cor' stands for 'tune'. It has been suggested, for example by Edward Bunting (1809), that many concepts used in Welsh bardic music (such as

Cadwgan' would make more sense, since most of the segments are based harmonically on the extended use of either 0 1 or 1 0. This may indicate that the matters of mesurau in connection of caniadau were not that strict as in gostegion and clymmau cytgerdd. The two types of the latter mentioned are to be discussed later.

There have been attempts (in Greenhill 1998) to fit all the pieces in the Robert ap Huw manuscript into the 24 canonised mesurau. In such attempts, occasionally, only one mesur has been officially 'allowed' within a piece or a section. This paradigm seems to fit well to gostegion and the first type of clymmau cytgerdd, but not so well to other genres. Conversingly, it also has been argued (also in Greenhill 1998) that the mesurau could be altered (augmented, diminished, provided with substitute harmonies occasionally, etc.) in performance, and even several mesurau within the piece could be used. To me it seems quite evident that some sections within some caniadau, sometimes even complete pieces/performances, were based on mesur combinations (two, even three mesurau in a section or a piece), or on a flexible use of them. This has given more variety for musical happenings on the surface level, for example by allowing an extended use of melodic formulas. The melodic formulas could either have been based on the use of swneme-combinations, or on (well-known) existing melodies, either as complete or as fragments. Many caniad titles, included in the 'Grammars', strongly imply this.

A further possibility for melody constructions could, of course, have been a practical application of both afore-mentioned techniques; swneme-combinations together with melodies or melody-fragments. I dare to suggest that the genre of instrumental (and probably also those with poetry) caniadau was for the harpists and harp students in medieval Wales a kind of maturity test to show how well they were able to apply what they had learned. If, and most obviously when, it was primarily performance-oriented genre (and not compositional in fixed sense of the word), the harpist had all the elements (units, details, hierarchies together with their order) at his disposal. He was expected to show that he could, as written in the 'Statud Gruffudd ap Cynan', '...present a song of his own making, with master craftsmanship, and in an instructive manner so that it may be possible in the judgement of a master craftsman and learned man, to judge whether he may be chosen as a poet and teacher in his art.' (Klausner 1999, 293). Further in the 'Statud...' we may also read that '... there is a great difference between composers and declaimers, because *composers know how to compose everything* and declaimers something which he made before, because *he who composes that was never composed* and which none of the declaimers of music knows what it is...' (Klausner 1999, 296, my italics). That statement speaks for the importance of knowing how to make music on culturally accepted and acknowledged principles, and not so much of stereotyped imitation of rather obscure 'standard repertory' of pieces. Similar emphasis can be read in various poems by Welsh poets who belonged to the 'cerdd dafod' culture. In the 'Statud' we may furthermore read that the harp disciples of various degrees had to know this and that number of pieces in different genres (see chapter six in the present work). Was that primarily for

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the names of the mesurau) are derivations of original Irish. For more about possible Irish origins of Welsh bardic concepts see Harper 2001 a.

pedagogical purposes rather than to memorize them by heart? Obviously it was for both, with emphasis, I suggest, on the pedagogical side. Memorizing pieces composed by pencerddiaid of earlier generations was, no doubt, important. Through thorough adoption of the pieces bardic disciples learned not only compositional principles of how to make caniadau and the like, but also applications of those principles as earlier master harpists had done them. The attempts to standardise the mesurau to total amount of 24 during the sixteenth century did not necessarily mean that they were adapted to performance practices of cerdd dant overnight. The cainc-sections (in the caniadau) could have been of different length in the same piece in different times, and the versions we have in the manuscript are not necessarily the proto-versions that had remained unchanged for centuries. The documentary evidence is sometimes rather confusing.

Figure 30 summarizes the three main construction schemes of caniadau discussed above. The first two are exemplified with fragments of 'Caniad Gwyn Bibydd' and 'Caniad San Silin' respectively. It seems that amounts of irregularity belonged to cerdd dant, for example what comes to the flexible use of mesurau in caniadau. Irregularity that may have derived from greater amounts of regularity contained in other genres, such as the gostegion. This, again, speaks for performers' creativity and his abilities to make applications based on results gained from oral learning and transmission methods.

6.5 Clymmau cytgerdd

The four sets of 'clymmau cytgerdd', included in the Robert ap Huw manuscript, are reputedly copied from a William Penllyn's book'. The 'clymmau cytgerdd' are also to be considered as hierarchical musical systems within cerdd dant culture, and they may have been meant for joint performances of two instruments, the harp and the crwth, as the name of the genre indicates. This system is, like gosteg, strictly mesur-based, either (1) containing 24 musical and technical exercises on one mesur at a time (as the first three sets of clymmau cytgerdd in the Robert ap Huw manuscript indicate), or (2) containing the one and same musical and technical exercise on all the canonised 24 mesurau (as in the fourth set in the manuscript).

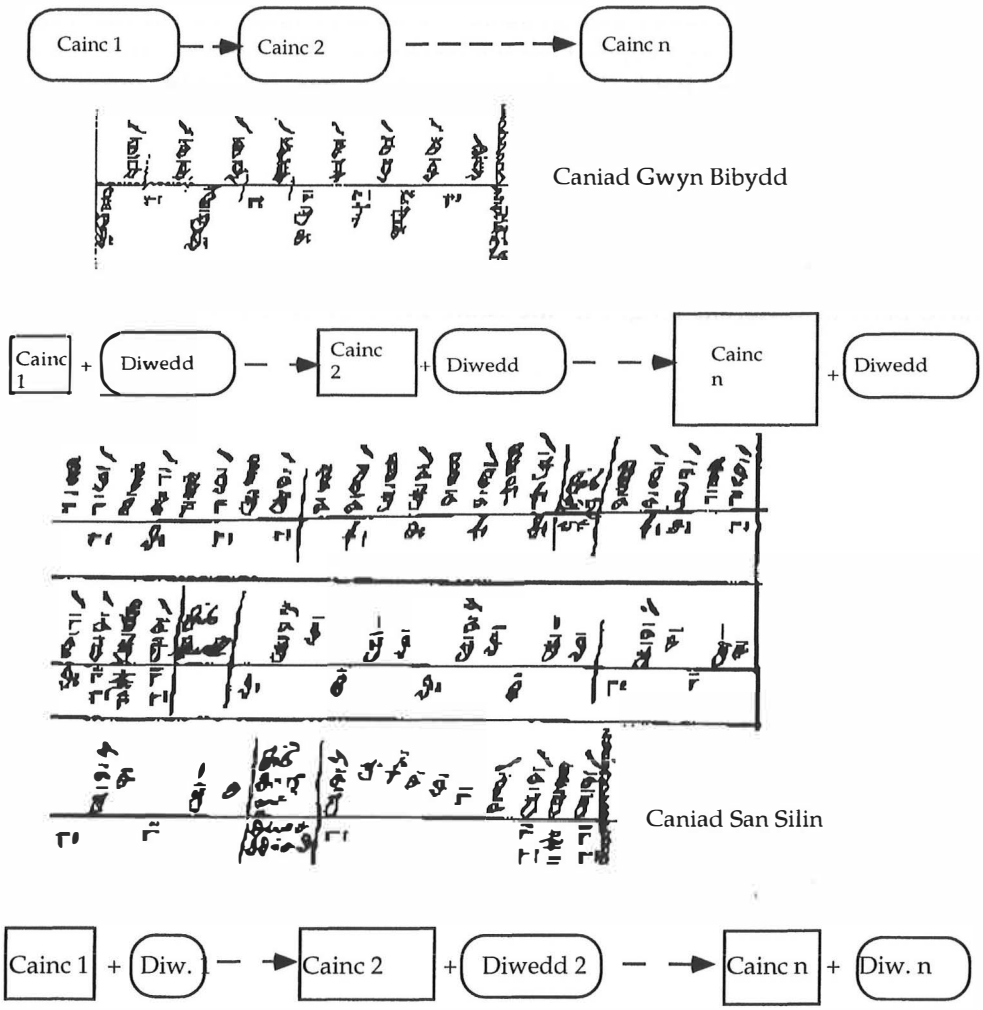


FIGURE 30. Three construction principles of caniadau.

Even if some sources (e.g. Ellis 1980 & 1991) give an impression that 'clymmau cytgerdd' were performed in one setting/tuning only ('cras gywair'), in practice it was necessarily not so. The 'clymmau cytgerdd' of the Robert ap Huw manuscript work fine also in other main tunings/settings of 'cerdd dant'. Joining such, presumably rather short, exercises of above mentioned kind into a longer sequence could once have been a basis for the provenance of extended forms of cerdd dant, such as gostegion, caniadau and the like. A very good example of this kind of piece is 'Caniad Gwyn Bibydd' (pp. 36-37 in the Robert ap Huw manuscript), which is regarded by this author rather as an advanced example of 'cwlwm cytgerdd', consisting swneme-variations on one mesur ('tutyr bach'), and therefore being very different to other exponents of 'caniadau' contained in the manuscript. To 'Caniad Gwyn Bibydd' three different tunings

are given in the 'Grammars' (those of 'cras gywair', 'bragod gywair' and 'is gywair'), all of which are tried on the accompanying CD. On the same disc there is also a performance of the first six clymmau cytgerdd from the Robert ap Huw manuscript, with the first cwlwm used as a kind of diwedd, implying to a hypothetical provenance of the gosteg. Similar basic guidelines are applied to our two versions of 'Gosteg llwyteg' as well.

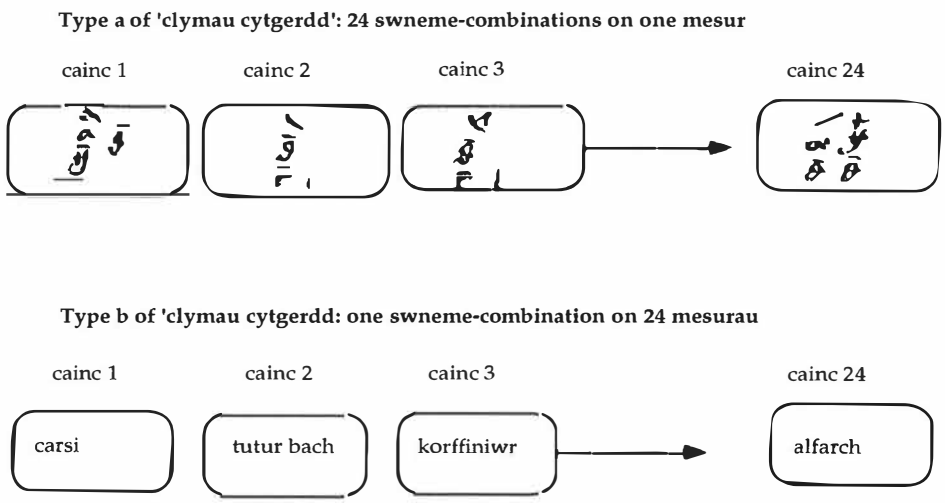


FIGURE 31 Two construction schemes for 'clymmau cytgerdd'-sets.

6.6 Profiadau

The eight examples of profiadau, which have survived as intabulated, are on pages 56 - 65 of the Robert ap Huw manuscript. With the exception of 'Pwngk ar ol profiad' (56.1.1. - 57.2.10.), 'Y ddigan y droell' (56.6.1. - 57.1.17.), 'Caingk Gruffydd ab Adda ab Dafydd' (57.2.1. - 57.2.17.) and 'Caingk Dafydd Broffwyd' (57.3.1. - 57.4.20.), the rest on above mentioned pages are covered with pieces under the general title of 'profiad'. So far there has been a considerably little interest to profiadau among the Robert ap Huw scholars. Often the whole subject has been ignored, partly possibly due to the fact that it has not been regarded as belonging so clearly to mesur-bound musical genres, and therefore being not so easily analysed or deciphered. A further reason for the neglect, rather paradoxically, may be due to one-sided obedience to the paradigm of literacy, a concept referred to on various occasions in this study. People may have tried to find out such features from the 'profiadau' that might be similar to some extent to features in other genres of cerdd dant, and obviously have failed. And yet, as I hopefully am able to demonstrate, there has not been such a wide gap between 'profiadau' and the more 'formal' genres of cerdd dant as previously thought.

The 'profiad' has been defined, for example, as follows:

> '...literally 'test', 'trial' or 'proof'... a compositional genre in cerdd dant, different to caniad and gosteg. Profiad is not divided into sections in the usual way, and are not overtly based on the measures. There is, thus, greater compositional freedom in these pieces, both rhythmically and harmonically.'
>
> (Harper 1999c, 306)
>
> 'profiad' (lit. 'experience', 'a proving')
>
> (Lewis 1936, preface)

What kind of trial or proof? The freedom in rhythm and harmony is on rather vague base when applied to some of the profiadau in the Robert ap Huw manuscript. It is correct that in some profiadau harmony consists of more than two components, which have been considered as a common feature of mesur-bound pieces. Yet there are examples of pieces in this genre, which, as intabulated in the Robert ap Huw manuscript, bear many similarities to more 'regularly' structured 'gostegion' and 'caniadau'. Noteworthy is also that many of the caniadau, intabulated in the manuscript after the profiadau, seem to contain many similar elements of playing technique as the profiadau. Such techniques are not evident in pieces tabulated before the profiadau in the Robert ap Huw manuscript, which may imply to some kind of 'gradus ad parnassum' order of the pieces. It makes one think of possibility that the few examples of ceinciau on pages 56 and 57 are located there, primarily, as an 'invitation' for creating extended musical solutions as caniadau and the like. In the LB Add. 19711 version of the 'Statud Gruffudd ap Cynan' it is stated that a datgeiniad (a singer/reciter) had to master, among others, the 'plethiads' from all gostegion and from 'profiad kyffredin'. Elsewhere in the 'Statud...' no profiadau are required, which does not necessarily mean that they were not adopted and practiced by harp and crwth students as well as by singers. They could well have been 'test', 'trial' and/or 'proof' pieces before entering to the world of more 'demanding' material in bardic musical genres. This material might have included caniadau or clymmau with high technical complexity when compared to pieces in same genres that had to be mastered at earlier stages of bardic apprenticeship.

The passage in figure 32 is the closing of 'Profiad Cyffredin', the first profiad in the Robert ap Huw manuscript. The passage includes 'ysgwyd y bys' as a swneme, and is here put into the digit series of 001011. In all intabulated 'profiadau' but one the following passage, either as complete or abbreviated, is included:

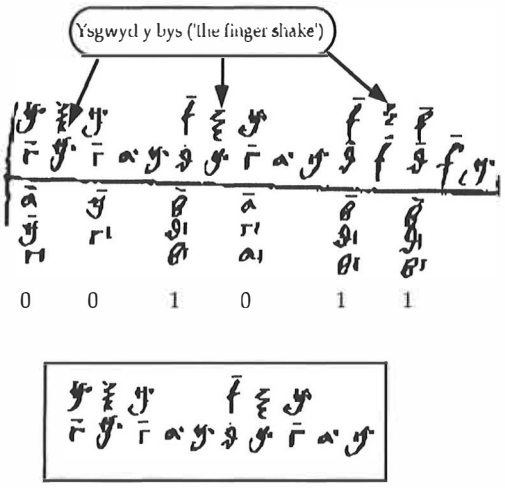
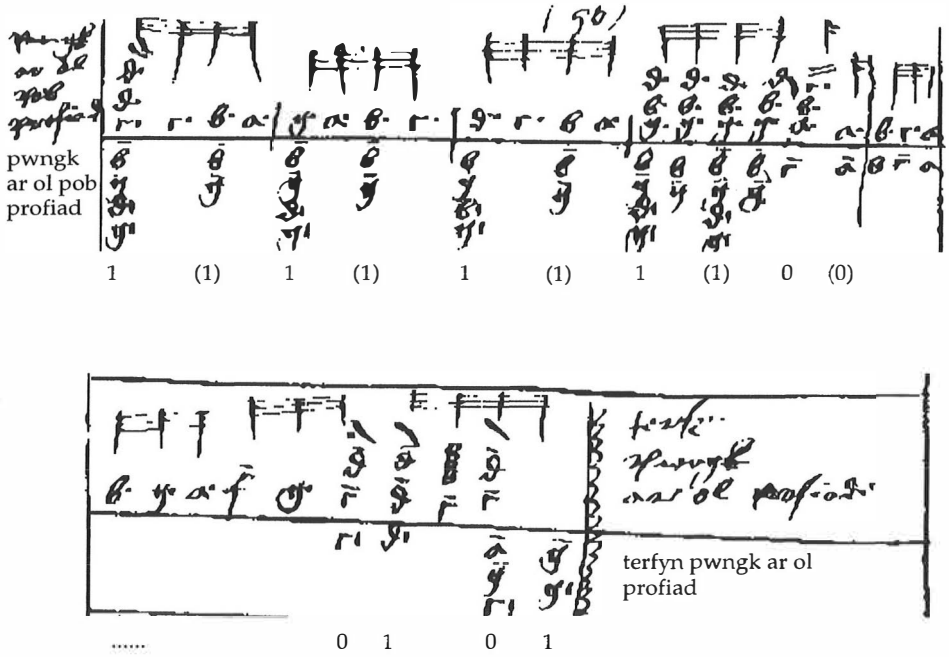


FIGURE 32 A musical passage common to seven profiadau in the Robert ap Huw manuscript. It includes 'ysgwyd y bys' as a swneme, and is here hypothetically put into the digit series 001011. In many profiadau this passage is harmonically preceded by digits 11, which, together with above series makes, as complete, 1100 1011, in other words 'corffiniwr'. In rectangle the activities of the upper hand only are presented.

In many profiadau this segment is harmonically preceded by digits 11, which, together with above series makes, as complete, 1100 1011, in other words 'corffiniwr'. Since this passage is the closing passage of six profiadau (the exception being 'Profiad chwith Ifan ap y gof', of which more later), it has a diwedd-kind of feeling and role, perhaps close to that of 'diwedd fach'. This is not being taken as an argument, or even as suggestion, for this passage's role as a diwedd for the profiadau, although it is rather tempting to consider it as a possibility. This can be said, albeit in many earlier studies a profiad has been considered as a piece without a diwedd, or any dependence on cainc-diwedd structures or mesurau.

The piece preceding 'Profiad Cyffredin' in the Robert ap Huw manuscript is titled 'Pwngk ar ol pob profiad', i.e. 'Pwngk following every profiad'. The author's point of view concerning 'pwngk' or 'pwnc' is discussed in paragraph 7.1. of this present work, with suggestion that the pwnc is, prima facie, a component of mesur and not a compositional genre. However, the concept of pwnc (or pwngk) is also used in connection of a short piece of music in the Robert ap Huw manuscript, and therefore some discussion is needed. The intabulated version of the piece consists mostly of ascending and descending scale passages together with few chord blocks in one harmonic position ending up with curving downward melodic passage, occasionally in contrasting harmonic position (rather its implication) as well. Some fences by Robert ap Huw are added above the script, possibly for rhythmic cues. Figure 33 shows the whole intabulated piece, with some suggestions for its harmonic contents.

If this piece is taken, as its title implies, as to be played after each (or any) of the profiadau, then its role is very close to that of the diwedd in other genres. But, as mentioned above, the profiadau share another melodic passage (figure 32), which could well be regarded as a 'diwedd for all profiadau'. Furthermore, some of the profiadau in the Robert ap Huw manuscript bear very little resemblance to cainc-diwedd structure, although some mesur-bound construction principles are evident. So, what could be the role of this short piece of music called 'pwngk'? One suggestion could be that this is the 'real' survived (as written) 'test' piece from the cerdd dant repertory, comparable in function to 'Feaghan geleash' ('Try if it is in tune'), on page 89 of Bunting 1840. In other words, a 'test' piece for 'test' pieces, if profiadau can be taken as such. Descending and ascending scale passages, successive repetitions of one 'chord' only, implications to parallel octaves (at the end of 56.1. and the beginning of 56.2) might have worked as tests for proper tuning(s).



application of 1 1 1 1 0 0 0 0 1 0 1 1 (second half of 'mak y mwn hir')

FIGURE 33 'Pwngk ar ol pob profiad' (Lbl Add. MS 14905, 56) and its implied mesur.

The first profiad in the Robert ap Huw manuscript, 'Profiad cyffredin', is also a short piece, as intabulated. Above it has already been referred to that a datgeiniad had to master the 'plethiadau' from all 'gostegion' and from 'profiad kyffredin'. In the same manuscript source (LB Add.19711) it is stated that the datgeiniad had to master 13 'main melodies' (prifgeinciau). In most of the manuscript sources, according to Miles, the total number of 'prifgeinciau' is fourteen, and only in very few the ability to play the plethiadau of gostegion and those of 'Profiad cyffredin' are mentioned in connection of datgeiniad's

duties. In some sources the datgeiniad needed to be able to know the tunings/settings of either harp or crwth, and had to be able to play/sing profiadau, know/master plethiadau, to be able to play two gostegion, clymmau and caniadau, and also know the 24 (canonised?) mesurau of string music and be able to classify them well. (Miles 1983, 547 - 556).

How was it, then, that 'datgeiniad', the one who 'did not know how to compose...' and the one who merely reproduced something that was created by someone else, had to know that much of music making principles. Albeit the sources are to some extent either overlapping or controversial, a bias on profiadau at the expense of caniadau and gostegion is evident in the case of datgeiniad. Was it considered enough for him to know (or how to make) just a few examples of caniadau and/or gostegion, or was he allowed to perform only a few examples of those genres since his main occupation was to sing and recite? Obviously the latter, since knowing the principles and rules to make gostegion or caniadau may well have enabled him to make any number of pieces in those genres. Why, then, were the profiadau considered more suitable for the singer or reciter, and not so much for the instrumentalist? And why the importance of the plethiadau? Could it be that plethiadau is to be considered as a general term for all swnemes and swneme-combinations here? That the singer had to know the essential elements of surface structure of cerdd dant performance? That he had to know the 24 mesurau of music, with the ability to classify them, required him with compositional techniques of middle and deep structures as well. Does all this mean that the datgeiniad was capable to make music in various genres, obviously with those of 'cadair', 'colofn' and 'tri mwchwl' excluded, to a certain extent but due to his professional picture had to concentrate on singing and reciting and therefore the door to great mysteries of bardic arts was barred to him. This might imply that the lack of his compositional abilities refer rather to those of poetry than of music.

Let us return to 'Profiad cyffredin'. One notices that here the combinations of 'plethiad y pedwarbys' are not so easily to be executed with same fingerings, given on page 35 of the Robert ap Huw manuscript. As suggested by Whittaker (1974c) and Taylor (1999), fingers two and three are needed for the first half of that particular swneme-combinations (marked with askew line), and fingers one and four for the second half (marked with +). Fingers three and four have function for both plucking and damping (presented in figures 34 and 35).

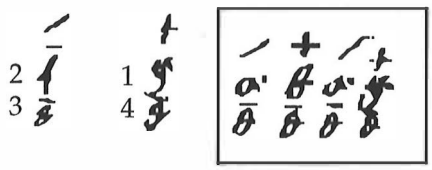


FIGURE 34 Three opening swneme-combinations of 'plethiad y pedwarbys' from 'Profiad cyffredin'. The numbers denote fingering as explained above. This fingering works well for the first 'plethiad y pedwarbys' but is rather unpractical for the following two (in rectangle) due to too wide space between the strings.

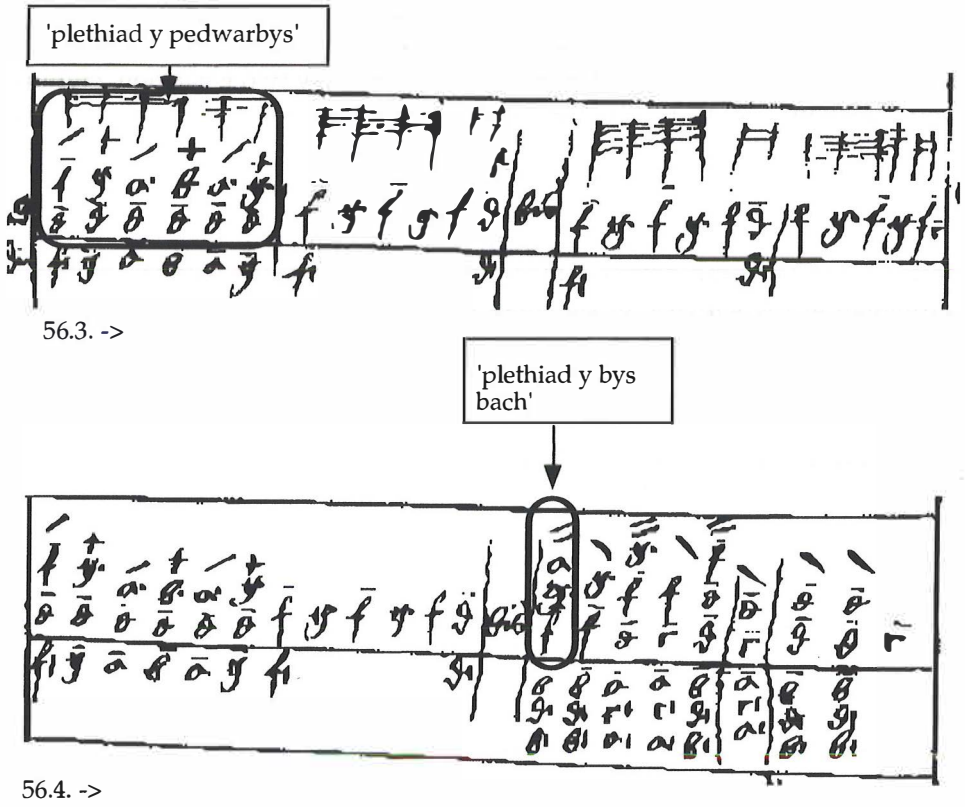


FIGURE 35 The two 'plethiad'- types included in the intabulated version of 'Profiad cyffredin'. The numbers 56.3. and 56.4. refer to the appropriate places in the manuscript.

The [in scholarly discussions] generally accepted interpretation how to finger 'plethiad y pedwarbys' is rather awkward for all combinations of its presentations in 'Profiad cyffredin'. Was the datgeiniad, mentioned in the 'Statud...' to practice all the transpositions with the same fingering and damping system as that on page 35 of the Robert ap Huw manuscript, or was he encouraged to find out some alternatives more fit to the length and size of his fingers, the size and string spacing of his harp? We cannot invoke any 15th or 16th century Welsh datgeiniad to give a demonstration about it, at least not with the present cloning or any other technology. What a modern colleague of medieval datgeiniad [=the author, who luckily does not sing or recite] has experienced is not, of course, the same thing, but in this case, possibly the closest equivalent anyway. And this colleague, after having assiduously tried the page 35 fingering, sought new alternatives and found them more practical on his light-tension gut strung medieval harp with narrow string spacing. The accompanying CD contains a version of 'Profiad y Brido ar is gywair. For more about it and its character, see appendix.

6.7 Clymmau

'Clymmau' is plural from the word 'cwlwm' (literally meaning 'a knot', 'bow' or 'tie'), sometimes described in the as 'cwlwm ymryson' ('ymryson' implies 'dispute', 'contention', or 'competition'. The lists in various manuscripts give an impression that 'cwlwm' was the most prolific genre in cerdd dant, and yet only a few examples under this title survive in Lbl MS Add. 14970, known as the 'Iolo Morgannwg' manuscript. If these examples are to be considered as genuine, they are very similar structurally to the caniadau. (see Harper 1999ab, 301 and Whittaker 1999). The term 'cwlwm' is also used in connection of (most obviously more advanced) genres of 'cadair', colofn' and 'tri mwchl', 'almach', saeth', 'lleddau cerdd', 'dirgeluwch', 'marwnad', 'salm' as well, which makes it even more ambivalent. The possible ontology of some of these is discussed later in this chapter. There are no examples of any of these genres intabulated in the Robert ap Huw manuscript.

According to Peter Greenhill, about 158 specimen of 'cwlwm ymryson' are listed in manuscript sources. (Greenhill 1998). According to my observations, however, the word 'ymryson' is included in connection of tune titles only for a few times. In Peniarth 77 there is a list of pieces under the heading 'y maent y bragod gyweir o gwlyme ymryson', and the total number of pieces is 62. Panton 56 (fol. 25B) there is an 'Ymrysson Llaw a Choesgrych' mentioned. It remains a mystery what sort of 'competition/debate/dialogue between the hand and the (scrape?) foot' (as a free translation would imply) here is, perhaps allegorically, referred to, but this is nearly the one and only occasion, where I have come across to the word 'ymryson' in connection of titles. Should it be understood that all the 'clymmau' (with the exception of 'clymmau cytgerdd', which are discussed earlier in this chapter) were of 'cwlwm ymryson'-type? Greenhill (ibid.,) suggests that '...usually they were called clymmau for short' [he does not mention where his suggestion is based]. It is, of course, possible that in order to make distinction between 'cwlwm' and 'cwlwm cytgerdd', the former was generally known as 'cwlwm ymryson', but for some reason the word 'ymryson' was seldom written in the tune lists. The 'clymmau cytgerdd' of the Robert ap Huw ms are, to my opinion, the most probable candidates for harp and crwth duets. The tonal range in them is quite narrow, making them suitable to be played on the crwth, whereas the ranges of 'clymmau' in the Iolo Morganwg ms (if they can be taken as proper examples) have far too wide ambitus for that. There is, moreover, a passage in 'Dosbarth Cerdd Dannau' (quoted in the 'Robert ap Huw manuscript, on pp.5-6), which goes: 'Ac o´r clymmau cydgerdd ymryson yn davod ar y caniadau, y rhai sy yn dyvod o´r mesurau ereill.' This probably refers to possibility of making 'caniadau' from 'clymmau cytgerdd ymryson' (an interesting concept), using other 'mesurau'. A further possibility for the essence of 'cwlwm ymryson' could be that it was intended as a joint performance for singer/reciter (datgeiniad), crowder and harper.

The list in Peniarth 77 contains also five pieces, which are called as 'Alban something', and in these cases 'something' can denote a mesur ('Alban Rhydderch'), colour or feature ('Alban Du', 'Alban Voelvin'), or possibly a

person ('Alban Bensin').[72] The piece titles in Peniarth 56 containing 'alban...' also have names of the mesurau connected to them (for example, 'Cwl: Alban Maenan 12. Macn. hir' on fol. 25A, or 'Alban Rhodri 12.Corffiniwr' on fol. 24B), which imply more to kind of 'scottishness' of such pieces than to mesurau of 'alban' category.

6.8 Other items

The Robert ap Huw manuscript contains some pages with piece titles only. One such list is on pages 102-105. Among listed titles we notice, for example, such as 'Anrheg yr Iesu' ('Gift of Jesus'), 'Anrheg Ddewi' ('Gift of St. David') and 'Salm wgan' ('Psalm of [Cad]wgan'), which may either imply to spiritual and religious practices among cerdd dant musicians, or that such pieces were composed for patrons, many of whom were of clergy. At the end of the list (p. 105) one can read 'hyny sydd gen i Robt ap hvw o ddifre wedi prikio' ('these are the pieces pricked by me, Robert ap Huw'). It remains yet open whether Robert transcribed or copied these pieces (in tablature or otherwise), even if he claimed so, or just wrote down the titles from some other source(s). If he copied or transcribed them, where could those manuscripts be now, provided that they still exist?

In general, the mesurau connected to the pieces (on pages 102-105 of the Robert ap Huw manuscript) are given, and many pieces have more than one mesur only. When compared to other manuscript sources (Panton 56 and Lbl Add. 14939), which contain names of some of the pieces included in the Robert ap Huw ms, one notices several differences with the mesurau. Panton 56 (fol 25B) includes titles such as 'trimwchwl odidog' and 'trimwchwl newydd' under the general heading of 'cwlwm'. Both examples of this enigmatic genre are supposed to have twelve ceinciau each, one in mesur 'mak y mwn hir' and the other in 'corffiniwr'. On fol. 32A of the same manuscript there is a reference to Carsi (obviously the same prominent pencerdd mentioned in 'Cadwedigaeth Cerdd Dannau' as Carsi Delynior, one of the renovators of music) in connection to 'tri mwchwl odidog'. This may indicate that Carsi had something to do with this genre, either as a composer or as a creator of 'tri mcwhwl odidog' as a genre of harp music, or even as both. Whether Carsi Delynior was the same as Carsi Wyddel ('Irishman') mentioned in Panton 56 in the list of pencerddiaid (on fol. 30B), remains a subject of further studies. Incidentally, in Gwysaney 28 there is no mention of 'tri mwchwl newydd', which, apparently, was one of the genres reserved only for the selected few in the highest rank of musicians. There are differences in spelling in various sources, and also in the contents. (See Miles 1983, 545-549).

According to Miles (Miles 1983), in some manuscript sources a genre of 'tri mwchwl was mair' is mentioned. 'Tri mwchwl was mair' can be translated as

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72 The word 'alban' refers to Scotland or Scottish, implying to a cultural exchange of some (or considerable) degree between the two countries; the matter already referred to by Gerald of Wales in the 12th century. It may also refer to Scottish origin of the pieces, entitled 'alban...'.

'tri mwchwl of Mary's son/servant' or as 'tri mwchwl by Mary's son/servant'. It seems that, again, we have a religious connotation here. Could it have been that 'tri mwchwl' was a genre of special religious and spiritual importance? In other words, it was not necessarily the most technically demanding kind of piece but enjoyed its high status due to its extramusical (=religious) world of association. The words 'tri' and 'Mary' may indicate that some Christian symbolism was connected to this genre, but other religious connotations may also be possible. [73] As stated earlier, some of the famous pencerddiaid (e.g. Ifan ap y Gof) may have had strong affection for monastic, or otherwise religious and spiritual lifestyle in the times before the Act of Union and Henry VIII.

According to the 'Statud Gruffudd ap Cynan' and some earlier scholars and commentators, 'tri mwchwl' was reserved for the pencerddiaid of the highest rank only. (Roberts 1966; Harper 1999a). What was there so special that only the best of the best were initiated to its secrets? Demanding techniques, extreme subtleties? Or did the genre of 'tri mwchwl' allow the master pencerdd more musical freedom than the other genres, but at the same time contained more extra-musical symbolism (such as religious or spiritual) that was closely connected to musical expression? The possibility of bardic doctrine of ethos, in the similar vein as the 'rasa' in Indian classical music, has not been discussed so far, as far as I am aware. [74] Another interesting analogy with Indian music is, that the secrets of 'alap' are among the most heavily guarded in the instrumental repertory. Alap is the opening part of a raga performance, in free rhythm and completely improvised. Improvisation in alap is guided by the rasa, and a good musician is expected to be able to express the countless combinations and possibilities of the rasa with his instrument. In Indian tradition, according to Stephen M. Slawek (Slawek 1993, 171-172), alap is taught only after a student is judged to be worthy of this most exalted form. The determination is arrived at through tests of varying severity that mesur student's loyalty and perseverance.

The possible bardic doctrine of ethos, presented above, is, of course, based on pure speculation. But at the same time I find it as mind stimulating to great extent, more particularly because the analogy with alap and the rasa is not the only area where there are (or has been) similarities between Indian and Celtic cultures.

Peter Crossley-Holland has also discussed the possible meaning of 'tri mwchwl odidog'. (Crossley-Holland 1997). He finds a mythical surrounding to this genre, and gives parallels from Irish, Arabic and Graeco-Egyptian material. According to Crossley-Holland the myths in various parts of the world have told how performances by divine personages set an ideal by which human performances were to be judged. Best players could approach the divine

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73 For other possible religious or spiritual connotations in bardic arts see, for example, Toivanen 1997, 124-126; Matthews 1991a & 1991b.

74 The 'rasa' means the spiritual and affectual world of associations in Indian music culture. There are nine basic rasas (each denoting various emotions and characters, such as love, sorrow, courage, anger, etc.) and their countless and multi-dimensional variations. The system of raga is the means to awaken the rasa; bending notes in different ways awaken different rasas, different melodic motifs, various ways of glissandi or tremolo are tied to their own rasa-combinations.

standards more and more, but never surpass them. Crossley-Holland sees the 'tri mwchwl odidog' as a possible Welsh counterpart of the three modes or strains of Irish sun-god Dagda's lyre; those of 'Suantraighe' [sleep music], 'Genntraighe' [joyful music] and 'Golltraighe' [sorrowful music]. Similar effects of [divine] music on human being are to be found in various myths all over the world. (Crossley-Holland 1997, 17-21). Those who know something about the world of the Baroque opera may find a proper parallel in the story of Orpheus, and those who know their 'Kalevala' may recall the effects of Väinämöinen's kantele-playing to the Creation. Crossley-Holland's suggestions are, to my opinion, not in essence different what I have stated above about the possible similarities (or even connections) between Indian and Celtic cultures. It may be worth mentioning that Indian (as well as Turkish, Persian and Arabic) music theory derives from that of Ancient Greece, including a strong emphasis on ethos doctrines and the use of myths for setting ideals on musical performances, compositions and music pedagogics.

7 CONCLUSION AND DISCUSSION

This study has been an attempt to introduce some interdisciplinary methodological possibilities that can be obtained mostly from contemporary ethnomusicology, together with other branches of musicology, especially from cognitive musicology, to the research of early music. I have understood my field of studies, the medieval Welsh harp music, essentially as having been an oral and memory-based music culture. Therefore my reference material and methodology has dealt to great extent with dialectic between oral and written, different levels and kinds of variation and variable factors within various structural hierarchies of music, adoption, performance and transmission processes of music, processes of change, culture studies and so on. This kind of access point to the study of early music poses many dangers and pitfalls, since a scholar will not be provided with conclusions based on 'hard evidence, i.e. living informants. But there is also a great amount of [new] possibilities offered, and I, personally, am very amazed that ethnomusicological and/or interdisciplinary methodological framework is still so rarely used in the scholarship of early music. If ethnomusicology is interested in music made by human beings in all ages and cultures, why should early music be excluded, since early music has also been music made by human beings. Regardless time and place - there has been early music not only in Europe, as noted in the introduction of this work. So far it seems often having been the case that keeping strictly to various schools, ideologies and methods has been more important than an honest attempt to get closer to the core of research topics. Perhaps now it could be a proper time for lowering borders between different fields of musical scholarship, for example by giving more room for interdisciplinarity together with increased flexibility in methods and more co-operation and integration between different research traditions.[75]

Many conclusions (or suggestions) I have come to, during various processes when making this work, have been presented throughout the body of this study. Summing up the actual core of this work, as stated in the title, needs still to be made. This study has, if not firmly confirmed, at least made me more

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75 Jukka Louhivuori has (in Louhivuori 1997) discussed the benefits of new paradigms in music research. He sees the closer contact between musicologies being both interesting and challenging for the future.

assured about the correctness of my main hypothesis, i.e. that understanding a composition or a performance as a series of structural and interlocked hierarchies, both cognitive and musical, was essential in the medieval Welsh string music. Music making in unwritten traditions is often dependent on systems and methods of procedure that entail design in the sense of both praxis and systems. After having entered the final chapter of this study, I still suggest that the hierarchical systems, discussed in this work, together with their adoption through rules of the bardic education system, were the essential foundations, which enabled to keep the music alive in memory of musicians through oral transmission for centuries. This also emphasizes the fact that there has been a vast amount of music belonging to unwritten traditions, which is, or was, not improvised, nor produced without a plan. Medieval Welsh cerdd dant was not a music culture emphasizing on reproductivity, but rather a system where stability co-existed with repetition and variation, in other words, change.

The mesurau were considered as basic elements of deep structure of cerdd dant style. They represent stable reproductivity in a composition and/or performance, on which varying degrees of change may be added to the middle and surface level. The established structural elements of cerdd dant defined different events in music. They formulated phrases or established lengths of substructures. They can be taken as representatives of established musical practices and processes. Such processes were additive, and the musician was the creative factor within a musical or textual framework, necessitating a solid knowledge of cultural segmentation principles. Performance occasion added elements of surface structure (swnemes and swneme-combinations) to middle and deep structures. Once the music-making principles were committed to memory by a harpist or a crowder, they could be used for creation of ceinciau, gostegion and the like, and musicians phrased and segmented their music accordingly.

The cainc -diwedd section formed the basis for most pieces in medieval Welsh harp repertory, at least in the repertory that has survived. The time-spatial cognitive reference points were meant to remind the player's awareness of certain important happenings and their correct placings in the context of a musical performance. In the case of 'Gosteg Dafydd Athro', for example, the term [cognitive reference point] was used primarily as knowledge about time-dimensional points determing beginnings and ends of mesur during performance, and also defining beginnings of diweddau within each section. After the cerdd dant musician had the above-mentioned elements of knowledge 'installed' in his brain, he was able to create any number of cainc-diwedd sections, even on the spot if necessary. Also a swneme might have had a cognitive dimension. That happened, for example, when the musician had to decide which swnemes to choose, in which order and why, how to execute them and in which transpositions, or on which points of 'cainc-diwedd' section (when on cyweirdant and/or when on tyniad?) they should be played.

In this study I have continuously referred to the importance of cognitive processes within the frameworks of structurally organised musical and cultural knowledge in connection of cerdd dant. It is evident that such schemata enabled the preservation and transmission of the bardic harp tradition and may have been more important than is generally accepted or assumed. It also puts the standard repertory, if there ever was any strictly defined standard bulk of

pieces, compulsory to all bardic disciples to learn, into a new position. The 'Statute' and the 'Grammars', together with many poems about musicians, refer to certain numbers of pieces from different musical genres, rather than a fixed repertory of established works by well-known and respected pencerddiaid. And even if there indeed had been a canon of such pieces, I dare to suggest that the transmission processes of that repertory contained much musical re-creation. Re-creation, in which the components of the surface structure (order of pitches, direction and time values of melodic and rhythmic motives, etc.) as foremost, but also longer segments of middle and deep structure varied from one performance to another. In the course of time, and partly due to other musical and cultural influences, even entire pieces of different genres may have been substituted by new material. We can only imagine, what Dafydd Athro ap y Gof might have said of the manuscript version of the gosteg attributed to him.

Oral transmission in music relates very clearly to the degree of change that occurs in the repertory, including those factors that create distance from the 'ancestral tune'. During the years of bardic study composers and players must have practiced assiduously, learning to memorise and apply their technique to music making - and ultimately adopting a fair degree of regularity. In the chain of transmission, however, the composer's immediate successor, if not composer himself, is the first player to make changes to the 'ancestral tune'. Differences in his technique of playing and phrasing, in the size, material or strings of his instrument, together with his different perception of the music and ability to transmit it, all enable changes to be made. The version that he produces from the 'original' will certainly contain an adequate number of recognisable cultural elements to qualify it for inclusion within the tradition. We cannot, however, prove to what extent his realisation differed from the 'ancestral tune', because neither version can be reconstructed. This hypothetical piece of music, after a lengthy span of time and several generations of musicians, perpetuated by different players within the same tradition, finally found its place in the Robert ap Huw manuscript. Whatever was the number of cerdd dant players between the non-written 'Urtexts' and the manuscript may remain unsolved.

Figure 36 is an attempt to summarize the essence of the 'pencerdd's toolkit'; i.e. an attempt to present the inner relationship and hierarchies of that toolkit as a network. The substructural relationship of deep, middle and surface level elements and patterns are multidirectional regarding awareness of all ingredients involved. In other words, the 'mental' procedure within a musician's head may start from the top of the figure downwards (from definition of a genre) and go to the bottom (mesur or mesurau) and from there, depending on situation, either to a cainc-diwedd pattern, or directly to the layer of swnemes. The procedure may as well start from the bottom and proceed upwards, e.g. directly from mesurau to swnemes, or through patterns of cainc-diwedd (or ceinciau-diweddau). Starting point could also have been the cainc-diwedd pattern, from which one may proceed downwards for suitable mesur, or mesurau, and upwards for suitable swnemes. Awareness of the crucial turning points or moments, earlier referred to as CR-points, are foundations for the CR-patterns.

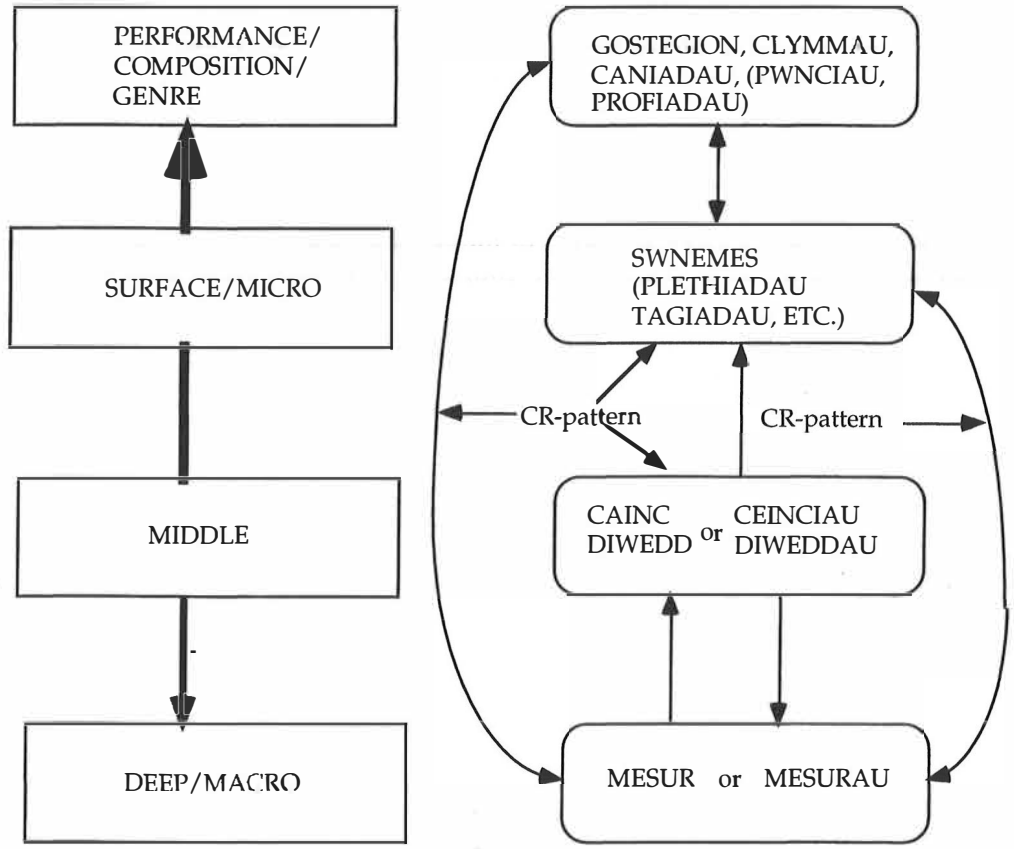

FIGURE 36 A graphic presentation of 'the pencerdd's toolkit', i.e. cognitive and musical hierarchies in medieval Welsh harp music.

In connection with 'cerdd dant', the formulas used for variations on the surface level seem to have been pre-rehearsed and pre-adopted, and were obviously not results of spontaneous creativity [from scratch]. That there were numerous different possibilities to combine those formulas or formula-chains (also called swnemes and/or swneme-combinations in this work) in performance, with some personal, improvised, varied and ornamented items of musical activity added to them, is, nevertheless, evident already if one thinks that one characteristic feature for a human being is to seek balance between stability and change. The characteristics of such musician-oriented systems that enabled many possibilities for improvisation and variation in medieval music draw attention to performance prior to composition in traditional Western sense. Improvisation was not just a medium for the presentation of [prepared and/or pre-created] works, but also a medium for composing by ear. When moving from 'the point(s) of departure' to 'the point(s) of arrival', such an idea could be adopted equally well for both monophonic and polyphonic music as in medieval Welsh harp music seems to have been the case. Such suggestions can

be deducted from the Robert ap Huw manuscript and related sources, at least, especially when compared to various other oral music traditions of the world, both of the past and the present. Since the musical [and poetical as well] systems were developed in an oral culture with a long tradition behind it in medieval Wales, and since they functioned as an essential part of it, they could not have ceased immediately after the first attempts to write 'bardic' music down took place in the sixteenth century. Rather on the contrary; they, most obviously, continued to guide practical music making, since they had a long continuum within the tradition, whereas notated music was something very new. In the sixteenth-century Wales, and especially among cerdd dant harpists, there seem to have been very few such people who could have claimed to have had expertise in transcribing orally adopted music into a written form. To say nothing about their willingness to do that.

It has been asked, in many discussion sessions, why Robert ap Huw did not use the 'normal' white mensural notation of his time. Robert's most prominent biographer, Dafydd Wyn Wiliam, argues that he must have been familiar with it, particularly if he served as a musician in the English court. (Wiliam 1974). One should, however, keep in mind that the tablature script may have had a completely different purpose. It may more have been an attempt to record into permanent format various aspects of playing techniques, structural and formal aspects such as mesurau, and the names of the strings and their registers (although not necessarily their actual pitches). One may view it as an idiomatic notation system, which lays emphasis on the characteristic features and possibilities of an instrument, in this case the harp. If Robert ap Huw was a mere copyist of manuscripts in the lineage of other transcribers and copyists (see e.g. Greenhill 1998, or Harper 1999a), then Robert's own relationship to the music he was copying from other manuscript sources may have been of relatively superficial nature. Whoever invented the transcription system first faced a challenge of enormous difficulty in attempting to transform orally adopted musical performances and practices into written format. How to transform the [oral] core of cerdd dant into the written was not self-evident to its transcribers, even to those from inside the culture. It should be noted that the informants themselves did not know well enough how to pass on their knowledge. Their goal was to facilitate practical music making in accordance with the principles of the learning processes of their tradition, but it seems not to have been achieved. Some of the original informants were also reluctant to pass on their knowledge to those who attempted to write it down.

Referring to what has been presented in this work I dare to suggest that mere transcription of the Robert ap Huw manuscript into modern notation cannot be a proper basis for understanding its musical and cultural content, firstly because the manuscript is already a transcription in itself. If it is positioned in an imaginary time-line, it stands at zero as we journey backwards in time in search of context. If our attempt stops at changing the tablature script into modern notation, without questioning the factors from which the tablature and its code system arose, and if we ignore the long musical process of oral transmission which was already in place before Robert ap Huw was

born, we may end up with a short circuit rather than with imagined shortcut.[76] When an existing entity is translated into some other form, its information content is also changed into something that may have very little to do with the original. A Zulu song in Zulu language, when translated into English, may retain its story in outline, but it cannot retain the phonemes, glottal shakes or glissandi which are characteristic features of its original soundscape, and without whom certain dimensions of performance remain obscured. Similarly we are stuck with a web of performing rules if we change a 'contextual' notation aimed at musicians aware of the stylistic elements of their culture into a standard present day notation, possibly with detailed instructions which include bar lines, marks for phrasings and dynamics etc. Within the context of Classical-Romantic style such instructions may well suit a conservatory student, but at the same time are a million miles away from their original context. Those many modern editions of baroque music with annotated continuo parts and pedal markings for piano are an example of this phenomenon. Today's musicians and scholars often have difficulty interpreting medieval notation and other original sources of early music. There are diverse opinions concerning the performance practice of troubadour songs, the use of instruments in connection of Burgundian 'air de cour', and the degree of influence the 'high art' received from the 'low art'. [77] We have tried to find watertight solutions by studying the existing literal evidence, and drawing our own conclusions about it. Varied forms of interpretation have led to different schools of thought and sometimes to heavy disagreements, and occasionally personal interest and vision have taken precedence over critical evaluation of written documents and other evidence.

Despite these disagreements, many Western musicologists and performers seemingly support the paradigm that early music (or any music) cannot be accessible until it has been transcribed into modern score. This could be called, as Heikki Laitinen has written (Laitinen 1994), the 'paradox of notation'; nothing can be approached, perceived or discussed unless it is presented to us in a format we are familiar with. Unilateral vision and experience will lead us to ignore the different conceptual bases of musical cultures. No matter how faithfully a 'critical edition' of a medieval motet reproduces the original source, it is still a translation of an 'Urtext', taken out of its cultural context. Can it be that we do not even want to attempt the experience of how the medieval musician might have experienced the score of his time, and what he might have got out of it? Not everything had to be written down, and a great number of elements simply cannot be notated, as we well know from musics of non-European cultures. The poetical meters of Welsh poetry do not work if we substitute an English or Finnish translation, any more than African singing styles work without their own special characteristics.

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76 The parable of shortcut/short circuit is borrowed from an article by Margaret Bent (1994).

77 Difficulties and disagreements concerning interpretations of medieval and renaissance music are widely discussed e.g. in the following two books: " Companion to Medieval and Renaissance Music" (edited by Tess Knighton and David Fallows 1992), and "Performing Practice - Music before 1600" (edited by Howard Mayer Brown and Stanley Sadie 1990)

So what about of the music in the Robert ap Huw manuscript? I am strongly suggesting that it cannot be approached in the same way as a conventional score. Even if the tablature resulted primarily from the concern that ancient Welsh harp music was in danger of dying out and something had to be preserved, we must remember that the transcribers and copyists were, in the first place, members of non-literal music culture. We also need to keep in mind that the script of the tablature is only a partial representation of how the music was meant to be performed. What has been presented in this work suggests for the importance of the cognitive and musical hierarchies in medieval Welsh harp music, in other words 'the pencerdd's toolkit'.

We, as people of the present age, have possibly paid far too little attention to the fundamental differences between both acoustical and musical-cognitive realities of our times and those of earlier periods in musicological research and performance practice. The music, which comes to us from the past, has to pass through the veil of our own experience; and that experience includes our consciousness of many other kinds of music. The aesthetic response of today's listener, performer or scholar is his response only, and we should not use such aesthetic responses as evidence of the musical perception of our early counterparts. One of the first steps towards a historical reconstruction is the realization that early listeners and performers, especially the medieval ones, operated in a musical environment different from the one in which a modern music historian is steeped. Also in that sense the past remains as a foreign, inaccessible world. But acknowledging this might help us in creating new research methods for early music studies.

What will the future give to the pencerdd and his toolkit. We can, as suggested by Shai Burstyn (Burstyn 1997), in order to try to understand better the ways past listeners and performers perceived, received and transmitted their music, try to construct a hypothetical musical-mental model of a composer [listener/performer/teacher] in a given place and time. That requires the combined resources of historical knowledge and musical sensitivity, knowledge of musical perception, musical cognition and so on. Yet being only hypothetical experiment and exercise in musical-historical imagination, it might still be worth trying, for example by using computer-based modelling.

There is already a considerable tradition in interdisciplinarity, together with computer-based modelling research in my own department (Department of Music) in Jyväskylä, including studies on jazz (e.g. Toiviainen 1996; Järvinen 1997), Finnish folk hymns (Krumhansl et al 1999) and Sami yoiks (Krumhansl et al. 2000). In some on-going projects, which are not completed at the time of writing this, modelling is applied, among others, to the flute music of the Age of Enlightment and European folk music. Many of the above-mentioned studies are not solely based on computer modelling, but are essentially interdisciplinary in character and modelling is merely a part of the whole. The versatility and flexibility in methodological frameworks is essential, since the main objects of these studies, the people, are, and have always been more or less flexible as well. Attempts to put people and their music(s) into tightly defined and bounded pens by scholars can be regarded as an insult to them and their music(s). Therefore, if one day I may have a chance to call my pencerdd and his toolkit back, for example in the form of a virtual musician, it will require collaboration, flexibility in methodology, all-round respect within the

study group, good sense of humour and enthusiasm for experimenting. That would be an exciting, but not an easy or a simple project. I also hope that there would be a possibility for further Robert ap Huw studies with the CAWMS, preferably in collaboration with the University of Jyväskylä and its Department of Music. For there is a lot of work to be done on Robert ap Huw and medieval Welsh string music.

As I have mentioned already in the 'Introduction' of this work, the conclusions I have made must be taken as possibilities, at best as probabilities, but not as a final or definite facts. I sincerely hope that this contribution could benefit ethnomusicological [or interdisciplinary] scholarship concerning the musical past in different times and places. It is simultaneously hoped that this could help us in attempts of defining our relationships to various early musics and cultures, and to the human beings [performers, listeners, composers]; the creative and shaping force in them. We may notice that our counterparts of earlier times were, in essence, not so different to us as we may sometimes think.

TIIVISTELMÄ

Länsimaisen musiikin, erityisesti vanhan musiikin tutkimuksessa on perinteisesti jätetty huomioimatta musiikin oppimiseen, omaksumiseen, vastaanottamiseen, tekemiseen ja opettamiseen liittyviä kuulon- ja muistinvaraisuuteen pohjautuvia prosesseja. Kuulonvaraisen adoption ja transmission olemassaolo ja tärkeys keskiaikaisessa walesilaisessa harppumusiikkitraditiossa on eräs tämän työn perushypoteeseja. Kyseinen traditio nojautui pitkälle koulutettujen ammattimuusikoiden varaan. Tässä tutkimuksessa on pyritty soveltamaan interdisplinäärisen metodologian sovellutusmahdollisuuksia keskiaikaisen musiikin tarkasteluun, ja metodologista viitekehystä on muokannut erityisesti etnomusikologia ja kognitiivinen musiikkitiede. Lähdemateriaali ja sen pohjalta tehdyt sovellutukset käsittelevät pääasiassa kirjoitetun ja kuulonvaraisen välistä dialektiikkaa, muuttujien ja variaatioiden eri tasoja ja lajeja erilaisissa musiikillisissa hierarkisissa ympäristöissä, musiikin adoptio-, performanssi- ja transmissioprosesseja, muutosprosesseja, kulttuurin tgutkimusta ja niin edelleen. Tutkielmaan liittyvällä CD-äänitteellä kuullaan joitakin rekonstruktiototeutuksia keskiaikaisesta walesilaisesta harppumusiikista, sekä kyseiseen musiikkiin perustuvia moderneja kokeellisia esityksiä.

Tutkimukseni peruslähtökohtana on ollut keskiaikaisen walesilaisen harppumusiikin ymmärtäminen ensisijaisesti kuulonvaraisesti välittyneenä ja omaksuttuna musiikkina, ja josta ainoastaan yksi kirjallinen notaatiota sisältävä dokumentti (tabulatuurinotaatiota sisältävä Robert ap Huw-käsikirjoitus n. vuodelta 1613) on säilynyt. Mainitussa käsikirjoituksessa oleva nuotinnos ei ole välttämättä alkuperäisen mahdollisen tekijänsä versio sävelmästään, vaan pikemminkin versio jossa aikojen kuluessa on tapahtunut runsaasti kaikenlaisia muutoksia, eikä alkuperäiseen mahdolliseen säveltäjään ole enää olemassa suoraa linnkkiä. Tutkittavan musiikkikulttuurin keskeisiin piirteisiin on oletettu kuuluneen kuulonvaraisesti omaksuttu, kulttuurisidonnainen ja hierarkkisesti organisoitunut viitekehysjärjestelmä musiikin oppimista, luomista [säveltämistä] ja tekemistä varten. Tämä järjestelmä osa-alueineen toimi muusikkojen 'työkalupakkina', mahdollistaen paitsi musiikillisten produktioiden tuottamisen myös musiikkikulttuurin elävänä säilymisen. Rakenteelliset ja toisiinsa liittyvät hierarkiatasot olivat sekä musiikillisia että kognitiivisia. Musiikillisilla hierarkioilla tarkoitetaan syvä-, keski- ja pintarakenteen tasoja. Syvärakenteellisilla elementeillä ymmärretään erilaisia sävellysgenrejä sekä niiden rakennusperusteita, joista keskeisin oli harmonisten muuttujien varaan rakentuva 'mesur'. Mesur-kaavojen varaan voitiin rakentaa musiikillisen hierarian keskitasoon kuuluvia yhdistelmiä (esim. 'caincdiwedd'), jotka puolestaan varustettiin pintatason elementteihin kuuluvilla musiikillisen ilmaisun yksiköillä ('swneme') tai mainituista yksiköistä muodostetuilla yhdistelmillä.

Kognitiivista hierarkiajärjestelmää edustavat erilaiset aika-spatiaaliset rakenteet (cognitive reference patterns) ja -pisteet (cognitive reference points), sekä niiden tiedostamisen että ajoittamisen kyky. Interdisplinääristä teoreettis-

metodologista viitekehystä on tässä tutkimuksessa pyritty hyödyntämään kokonaisvaltaisesti, vaikkakin varsinainen analyysi ja siihen liittyvä pohdinta perustuukin ensijaisesti etnomusikologian ja kognitiivisen musiikkitieteen antamiin menetelmiin. Työssä on myös, varsinaisen keskeisen tutkimuskohteen tarkastelun ohessa, pyritty kartoittamaan niitä mahdollisuuksia joita etnomusikologisilla metodeilla voidaan tuoda vanhan (ja yleensäkin) historiallisen musiikin, mutta ennen kaikkea ihmisen ihmiselle tekemän musiikin ymmärtämiseen.

Tutkimuksessa on pyritty antamaan lukijalle yleiskuva siitä historiallisesta ja kulttuurisesta kontekstista, jonka kiinteä osa cerdd dant-traditio oli aina 1500-luvun ensimmäisiin vuosikymmeniin. Vastaavasti on pyrkimyksenä ollut, muutoksen ja pysyvyyden välisen problematiikan kautta, kuva niistä olosuhteista jotka vaikuttivat vanhan bardisen kulttuurin häviämiseen Walesissa, ja jotka osaltaan olivat luomassa pohjaa yrityksille siirtää edes osa perinteisestä kuulonvaraisuuteen pohjautuvasta musiikkikulttuurista ja sen tuotteista kirjalliseen muotoon. Tähän liittyvää problematiikkaa on niinikään pyritty käsittelemään. Myös idiomaattispainotteisella soitintutkimuksella, sekä sen pohjalta tehdyillä käytännön sovellutuksilla (oheis-CD), on ollut merkittävä rooli kokonaisuuden ja tutkimuksen perusongelmien hahmottumisen kannalta. Eri lähteisiin pohjautuvaa harpun virityksiin ja virityskäytäntöihin liittyvää aineistoa on hyödynnetty, paitsi keskiajan walesilaisen ammattiharpistin 'työkalupakin' sisältöä mietittäessä, myös käytännön musiikillisissa sovellutuksissa. Eräänä keskeisenä tavoitteena tässä työssä onkin ollut yhdistää tutkiva muusikkous ja musisoiva tutkijuus.

Johtopäätöksissä korostuu etnomusikologisen metodiikan hyödyntämisen keskeinen rooli myös vanhan musiikin tutkimuksessa. Vaikka emme voi olla autenttisia minkään muun kuin hetkellisten, itse esittämiemme musiikillisten performanssien suhteen, ei tämän tosiasian tunnustaminen saisi olla esteenä pyrkimyksissämme lähestyä muita joko ajallisesti tai paikallisesti toisenlaisia musiikillisia todellisuuksia. Esittävä prosessi –joko moderni tai menneisyyteen kuuluva- on aina vähintään kahdensuuntainen; joko syvärakenteesta pintarakenteeseen tai päinvastoin. Musiikkikulttuurisen 'työkalupakin' sisällön tunteminen korostuu erityisesti kuulonvaraisesti omaksutun ja tietyn soittimen ominaisuuksien ja mahdollisuuksien ollessa samanaikaisesti kysymyksessä. Kuulonvaraisen musiikkikulttuurin tuotteiden pelkkä nuotintaminen ilman perehtymistä niihin johtaneisiin mahdollisiin prosesseihin, varsinkin jos ne perustuvat edellä mainitun kaltaisen kognitiivisen että musiikillisen hierarkiajärjestelmän omaksumiseen ja soveltamiseen, ei voi kertoa kuin pienen osa-alueen kyseisen kulttuurin soivasta todellisuudesta. Mitä kauemmaksi ajassa menemme taaksepäin, sitä mahdottomampaa on kenenkään sanoa millaiselta kyseisen ajan musiikki kyseisen ajan ihmisen korvissa. Miettiessämme mahdollisia uusimman metodologian antamia vaihtoehtoja tulisi tämäkin haaste pystyä huomioimaan.

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APPENDIX

NOTES ON PERFORMANCES

The musical performances on the CD can roughly be divided in three different categories, namely traditional (T), musical (M) and experimental (E). Versions called traditional are those on which we have tried to avoid adding anything that is not written in the tablature, and on which we try to follow the performance instructions given in the manuscript in full detail as well as we have understood them.

In versions called musical some extra things, in relation to the original script, are added. Those can be, for example, our own variations on a given sequence or a mesur, or variations, which are not written in the manuscript but are out of 'our heads'. Some executions on a surface level of a piece can be adaptations and derivations from other pieces of the manuscript than from those they are originally applied to [in the manuscript].

The majority of the performances can, to some extent, well be called experimental. Some of those are free combinations of two or more pieces from the manuscript. In some performances we have, rather freely, added texts by bardic poets for both recitation and singing. The vocal parts are in all cases either improvised, or based on improvisational experiments, described in more detail in connection of the particular piece. The rest of our experimental versions either bring forward some hypothetical suggestions for new music based on old techniques and rules, or include some examples, which combine medieval cerdd dant with contemporary ideas and practices.

All instrumental parts were played directly from the manuscript, or were direct adaptations from the tablature script. No transcriptions in modern notation were used, since we were akin to learn to use the tools in the 'bardic toolkit' as best as we could. This is in no way to say that our versions should be taken as authoritary, even less as definitive. They are meant merely to present some possibilities of musical interpretation, and if they work as basis and tantamount for other reconstructions, we feel very happy about it. Although our versions include a rather big amount of experimentality, they are mostly based on the research work presented in this study. It is our sincere hope that the music of the Robert ap Huw manuscript could, once again, become a part of contemporary living tradition, both in Wales and outside it. That music deserves to be performed, studied, experimented, but not merely to be stored in vacuum in some museums or archives. We may learn a lot from the tradition and creativity of our predecessors, although we have to acknowledge that we can never reside in their world as natives, as emic informants. It should, however, not to prevent us from our attempts to get as close as possible to their cultural core, and start to create a new tradition (or traditions) based on theirs. Making innovations or reforms should be based on sincere respect to what our predecessors, most of them innovators in their own times, have done. The 'avant-garde of archaism' might be proper concept in this connection.

All music on the CD is performed by the group 'Yr Awen', which consists of Sanna Kivinen (medieval fiddle), Minja Niiranen (voice) and the author (medieval harp). The musical line-ups from track to track vary; some are harp solos, on some tracks only theharp and the fiddle are present. The medieval fiddle, played by Sanna Kivinen, is a five-string instrument after Hans Memling, and is made in Germany by Helmut Gotschy. The fiddle is tuned into g's and d's, after the second tuning of Jerome of Moravia (Page 1987, 126-127). The author's medieval harp is a copy of an early 15th century Flemish model. It has 24 gut strings, and it also has brays. The harp was made in Scotland by Tim Hobrough in 1988.

On the recording we have a selection of pieces from the Robert ap Huw manuscript, representing all genres that are included in it. Some of the longer caniadau are not presented, due to the fact that their range is wider than the compass of the author's harp. We hope, in spite of such pieces lacking, that our selection of material is proper and relevant. The order of the tracks on CD follows principally the order of the pieces in the Robert ap Huw manuscript.

I want, once more, to express my loving and sincere thanks to Sanna and Minja for their help and deep commitment to this project. My deepest admiration is also due to their great talents as musicians. I can consider myself as lucky and privileged, being allowed to work with two such wonderful persons. Once more, I also want to express my gratitude to Jarkko Tornberg, who unselfishly gave a lot of his valuable time and recorded and edited everything that is on the CD. Thanks are also due to the Jyväskylä University's Department of Music and the Faculty of Human Sciences for their financial support.

The contents of the CD

Track 1: 'Gosteg Dafydd Athro' (T) **Time: 3'11"**

A harp solo, played directly from the tablature. I have tried not to add anything extra to my playing apart from what is in the manuscript, and at the same time tried to follow the playing instructions written by Robert ap Huw. The chosen meter is even (could be called as 4/4), tempo medium slow. The digits in the last column of the diwedd are played as twice as long as the others, since they end the cainc-diwedd- segment. Such a practice is derived from the general performance usage in connection of white mensural notation, in which the last note of a segment or verse, although possibly written as the preceding ones, is played or sung as a longer note. The tuning is that of is gywair (with b-flat) and the resulting mode is C-mixolydian.

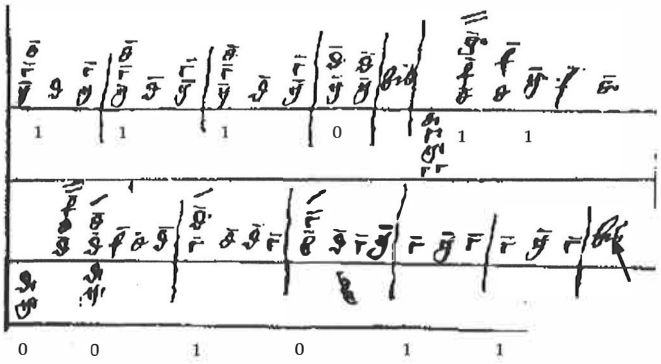
Track 2: 'Cainc Dafydd Broffwyd/Gosteg Dafydd Athro/I Wragedd Eiddigeddus' (E) **Time: 6'14"**

Here we have combined two pieces from the Robert ap Huw manuscript with a poem by Gwerful Mechain, a female poet. The poem is erotic in contents, and it

may have been recited at Gwerful's own inn by the poetess herself. It should be said here that all the possible faults and mispronounciations of the Welsh language on our recording should be laid at my door, since I have been responsible for teaching the pronounciation to my fellow musicians, and therefore the mistakes are all mine. If any native speaker understands what is recited and sung on this track, and possibly gets blushed, then my pronounciation teaching may not have been that bad at all. We have used 'Cainc...' (transposed to g-aeolian) as an instrumental introduction and occasional interlude, and 'Gosteg...' as a basis for recitation and vocal improvisation. The whole vocal melody is a result of Minja's improvisational experiments on the 'Gosteg...' In other words, we have attempted to combine here the roles of telynor (represented by the harp), crowder (represented by the medieval fiddle) and datgeiniad (represented by the voice).

The overall scheme of the recorded performance can be presented as follows:

A combination of 'Cainc Dafydd Broffwyd' and 'Gosteg Dafydd Athro', together with the poem 'I Wragedd Eiddigeddus' ('To Jealous Wives') by Gwerful Mechain (fl. around 1480)

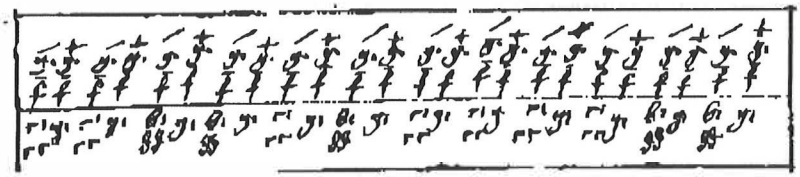


'Cainc Dafydd Broffwyd' (B.M. Add Ms 14905; page 57); used as an instrumental opening, interludes and closing

The mesur of B-section (1100 1011) is 'corffiniwr' (the same as in 'Gosteg Dafydd Athro')

Opening (instruments)
Cainc 1 (voice, instruments) + Diwedd (instruments)
Cainc 2 + Diwedd
↓
Cainc 5 + Diwedd
Interlude (instruments)
Cainc 6 + Diwedd
↓
Cainc 10 + Diwedd
Interlude
Cainc 11 + Diwedd
↓
Cainc 13 (twice) + Diwedd
Closing

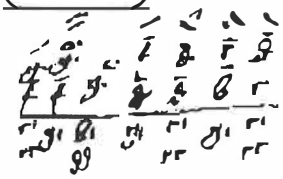
Cainc 1



+

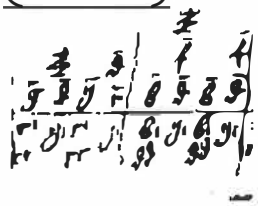
Bath ryw fodd, beth rhyfedda´, i ddyn, rhyfedda´dim, rhyw fodd dig, annawn wyd yn enwedig;
What sort of manner is it for a person, it does no good whatsoever, most strange, grievous kind of manner, particularly calamitous vice;

Diwedd



(works as an instrumental 'ritornello')

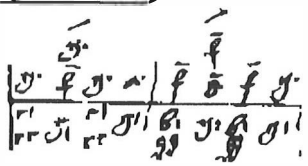
Cainc 2



etc. + **Diwedd**

Bod gwragedd, rhyw agwedd rhus, rhwydd wg, yn rhei eiddigus? Pa ryw natur, lafur lun, pur addysg, a´i pair uddun? That wives, lundering kind of attitude, swift frown, are excessively jealous? What nature, troublesome image, pure instruction, causes them to be so?

Cainc 3



+ **Diwedd**

Meddai i mi Wenllian - bu anllad gynt benllwyd gân - nid cariad, anllad curiaw,
Gwenllian said to me - the hoary old song was wanton in days gone by - that it is not love, wanton languishing, which turns towards gold yonder,

transl. Dafydd Johnston
('Medieval Welsh Erotic Poetry')

The first three cainc-diwedd 'rounds' of our performance, together with the original Welsh text and translations, are shown above.

Track 3: 'Gosteg yr Halen' (T) **Time: 4'31"**

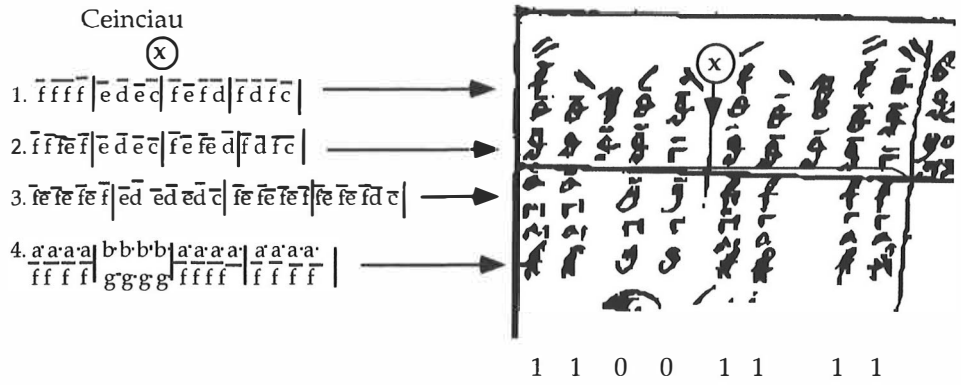
Same things can be said here as in connection of 'Gosteg Dafydd Athro', with the exception that only the last column of the last diwedd is lengthened here. I

have tried to play this gosteg as a flowing musical entity, and have therefore not stopped after each cainc-diwedd section. The meter is again even, the tempo rather medium fast than medium slow. The tuning is again 'is gywair', the mode this time F-ionian.

Track 4: 'Gosteg Lwyteg' (T/E) **Time: 2'56"**

Again a harp solo; the tuning and the mode are the same as in track three. The traditional part in this performance is played in the very beginning, comprising only of the fragmentary segment that is intabulated in the Robert ap Huw manuscript. That segment is played twice. After that, two examples of gosteg-realisation are presented, the first following same principles as in 'Gosteg Dafydd Athro', the second those of 'Gosteg r Halen'. Musical material for cainc-sections in both cases is taken from the clymmau cytgerdd pages of the manuscript.

The gosteg examples can be presented as follows:



The circled x-mark in the first cainc denotes the place from which the diwedd, after the repetition of the first part of the cainc, in the 'Gosteg yr Halen'-like version, starts. Similarly, the x-mark in the diwedd denotes the place from which the diwedd starts, after which the whole diwedd is to be repeated. When expressed with digits 1 and 0, we get for one round:

Cainc: 1100 1111 1100 Diwedd 1111 1100 1111

In other words, a similar 'cainc-diwedd'-round as in the intabulated version of 'Gosteg yr Halen' in the manuscript.

Track 5: 'Clymmau Cytgerdd I-VI' (M) **Time: 4'29"**

These short exercises, from pages 23-24 of the Robert ap Huw manuscript, are performed on the harp and the medieval fiddle. We used the first cwlwm as a kind of diwedd (repeated after each on of the cwlwm cytgerdd), thus getting a

gosteg-kind of wholeness. The mesur used here is that of 'mak y mwn hir' (1111 0000 1010 1111 0000 1011), which is used throughout the first 24 exercises of the manuscript (pp. 23-28). The tuning is the same as in previous pieces, the mode is C-mixolydian.

Track 6: 'Caniad Gwyn Bibydd ar is gywair' (E Time: 2'59"
Track 7: 'Caniad Gwyn Bibydd ar bragod gywair' (E) Time:3'46"
Track 8: 'Caniad Gwyn Bibydd ar cras gywair' (E) Time: 3'59"

Structurally 'Caniad Gwyn Bibydd' is like a series of 'clymmau cytgerdd' put into a chain. Within a same harmonic pattern ('tutyr bach', i.e. 0011 0011) thirteen different sections, obviously to be repeated in performance. Section IX and the first half of section X are to be repeated more than just once, if you follow the instructions given after section XI on page 37 of the manuscript. The fact that this caniad does not have a diwedd makes it, structurally speaking, an extended 'cwlwm cytgerdd'. In many manuscript sources it is suggested that the tuning of this caniad is 'bragod gywair', equivalent to aeolian mode (when in g):

Gwysaney 28 (fol.71): bragod
Panton 56 (fol.23): bragod
Panton 56 (fol.26): no definite tuning is given
Panton 55 (fol.71-72): bragod

Since it is also suggested that the choice of the tuning/mode was sometimes left to a musician himself (there are implications to this, for example, on page 71 of the Robert ap Huw manuscript after 'Caniad San Silin', albeit this could be interpreted in other way as well), we wanted to experiment with some possibilities and feel the moods of different modes and settings. We tried three different settings, namely those of 'is gywair', 'bragod gywair' and 'cras gywair'. Since, according to the tablature script, the tonal centre is c, we got C-mixolydian, c-dorian and C-pentatonic as modes. The reason for choosing bragod is obvious, due to many references in the manuscript sources. Is gywair (with B-flat) has been the basic setting in all our previous performances, and it certainly fits to this as well. Choosing cras is based on some references concerning the tunings of 'clymmau cytgerdd' (see, for example p. 1072 of the M.A.W.) and its frequent appearances in many folk traditions, some of them very close to us Finns. It was our intention, primarily, to experiment with different tunings and moods, not to emphasize any kind of 'authenticity' here. Again, the instrumental parts were played from the tablature (this time the fiddle doing merely 1's and 0's), and the vocal parts were improvised without words. The tempi and meters in all three versions are different to each other, due to the moods and feelings aroused by the tunings, and the decisions of the musicians. We have made three new interpretations on the same tune, which we like roughly describe as the 'ambient' (is gywair tuning), 'blues' (bragod gywair) and 'yoik' (cras gywair) versions. The last description refers to the traditional Lappish (or Sami) way of singing, in connection of which [major] pentatonic mode is often used. I am aware that our versions may raise some eyebrows, but even on that risk I strongly suggest that if we want to make the

music of the Robert ap Huw manuscript to be a part of the contemporary living tradition again, we should not fear experimenting. Provided, of course, that we are simultaneously aware of the traditional ways and means as best as we possibly can. And, at the same time, acknowledging that we may never be natives of the past, which, in spite of that fact, should not prevent us from exploring it.

Track 9: 'Caniad Ystafell'(ceinciau I - IX) (T) Time: 5'14"

'A harp solo version of the first nine ceinciau (together with the diwedd) of this piece. 'Caniad Ystafell' is analysed in more detail in chapter six. The tuning is that of bragod gywair, denoted in many manuscript sources, and the mode is g-aeolian.

Track 10: 'Caniad Ystafell/Marwnad Dafydd Maenan' (E) Time: 5'24"

The same ceinciau as in the preceding track, this time the melody parts (or the upper hand parts) divided between the harp and the medieval fiddle. The poetic material for vocal improvisation and recitation stems from Wiliam Cynwal's cywydd 'Marwnad Dafydd Maenan, Delynor' ('Elegy for Dafydd Maenan, the harpist), lines 24-47 (see Harper 1999a, 159-160). In his poem Cynwal, who was proud for his bardic degree and who retained voluntarily in his 'art concealed', describes the loss of musical heritage and craft, which went into the grave together with Dafydd's death. The protagonist is described as a musician who knew how to make music in all possible genres, and who was highly skilled in this.

Track 11: 'Caniad Cadwgan' (M) Time: 9'09"

A performance of the complete intabulation on the harp and the fiddle. We have tried to follow the manuscript instructions what comes to repetitions, and due to that our version is longer than nine minutes. The piece is analysed in more detail in chapter six. The mesur pattern is not any of the 'canonised' 24, rather one could speak about an extended use of 'cor kadw' (the pattern of 1 0). The mode is F-ionian.

Track 12. 'Pwngk ar ol pob profiad/Profiad Cyffredin' (T) Time: 1'13"

A combination of two short pieces on page 56 of the Robert ap Huw manuscript, in ABA form, A denoting the 'pwngk'. A form, A denoting the 'pwngk'. Harp solo in is gywair-tuning, with resulting mode of g-dorian.

Track 13. 'Y Ddigan y Droell' (T) Time: 1'11"

Solo version of the piece with the most amount of harmonic changes in the Robert ap Huw manuscript. The piece itself has a lot of Renaissance 'flavour', and bears some resemblances to such harmonic grounds as the Romanesca and the Passamezzos.

Track 14. 'Y Ddigan y Droell' (E) **Time: 3'34"**

A longer version of the preceding piece on two instruments, this time with 'ad hoc' improvised variations of more (or less) Renaissance style.

Track 15. 'Cainc Gruffudd ab Adda/Cainc Dafydd Broffwyd' (T)
Time: 1'39"

The two short ceinciau combined and played on the harp.

Track 16. 'Profiad y Brido ar is gywair' (T) **Time: 1'24"**

Peter Crossley-Holland has suggested that the composer of this profiad flourished c. 1420-1440 (Crossley-Holland 1998, 60). Y Brido may have his roots in French Prideaux family, and the name 'Brido' or 'Prido' may just be a Welsh version of the original French. According to the list of crowders in Miles 1983, many French musicians or their descendants were among the professionally ranked instrumentalists in late medieval Wales. Brido's profiad, as intabulated, cannot be regarded as a harmonically free piece. On the contrary, it seems to be rather strictly bound to mesurau, not to a single one but a combination of two or three ('mak y mwn byr' and 'trwsgwl mawr', possibly also 'kor dia tutlach'). Another striking feature is that the upper hand part from 63.6.1 until 64.2.8 has striking similarities to the opening motive of 'Gosteg yr Halen', being actually a series of variation of it in two harmonic positions. This does not necessarily mean that 'Gosteg yr Halen' should also stem from Y Brido. It rather confirms the importance of shared musical vocabulary among the cerdd dant harpers. In some tablature columns (for example in 64.1.13, 64.1.15-16, 64.2.1, 64.2.4-5) a single string (f1 and e1 respectively) is written as if to be played with both hands (the same string is written both above and below the hand-dividing line). This is one of the many anomalies, which are contained in the manuscript. The last sequence of this profiad (the melodic sequence shared by most of the profiadau) is written as incomplete but played as complete, in similar way as in connection of 'Profiad Cyffredin' (track 12).

Total time: 61'34"