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**'A Holding, Uniting-Constant Friend': The Organ in
Seventeenth-Century English Domestic Music**

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Submitted in accordance with the requirements for the degree of
Doctor of Philosophy

The Open University
Department of Music

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Abstract

This thesis presents an investigation into the nature and use of the consort organ in English secular instrumental music of the seventeenth century with a view to informing present-day performance practice. Whilst the English string consort repertoire has been widely studied from the perspective of the viol and violin, the role of the organ and organist has remained neglected. This study seeks to redress this through the examination of manuscript sources, contemporary writing and extant instruments to illuminate a variety of performance practice issues. The development and organology of the instrument is considered, focussing particularly on the distinctive methods of construction and voicing that were designed to enhance the instrument's role in playing with string ensembles. The contexts of chamber music at the court, in domestic establishments, and in theatres, choir schools and music meetings are examined from the perspective of the consort organ. Manuscript sources, contemporary historical sources and the consideration of extant instruments in relation to their original locations and associated repertoire are interrogated for performance practice information. The role of the consort organist, from both a musical and sociological standpoint, is also discussed with reference to contemporary sources. The findings reveal that seventeenth-century usage of the organ differed from present-day practice in relation to a number of key areas including pitch, temperament, registration and expression, and that the organist's role encompassed a wide range of skills that are rarely explored in modern performances or editorial realisations. The study concludes that a revised approach to the use of the consort organ in present-day performance of the seventeenth-century English consort repertoire is required.

Acknowledgements

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Library Sigla

Germany

- D-Hs Hamburg, Staats- und Universitätsbibliothek
D-KI Landesbibliothek und Murhardsche Bibliothek der Stadt Kassel

Ireland

- EIRE-DM Archbishop Marsh Library, Dublin

Great Britain (The prefix GB is omitted in the text)

- GB-CF Essex County Record Office, Chelmsford
GB-Ckc Rowe Music Library, King's College, Cambridge
GB-COLro Essex Record Office, Colchester
GB-Cu Cambridge University Library
GB-CW Trustees of the Chatsworth Settlement
GB-DRc Durham Cathedral Library
GB-H Hereford Cathedral Library
GB-Lbl British Library
GB-Lla Lincolnshire Archives Office, Lincoln
GB-Lna National Archives
-PROB 4 Prerogative Court of Canterbury: Engrossed Inventories
-PROB 11 Prerogative Court of Canterbury: Wills
GB-MA Kent County Record Office, Maidstone
GB-Mp Henry Watson Music Library, Manchester
GB-Ob Bodleian Library, Oxford
GB-Och Christ Church Library, Oxford
GB-Tar Somerset Record Office, Taunton
GB-WMI Longleat Old House Library, Warminster
GB-WWro Warwickshire County Record Office, Warwick

United States of America

- US-Cn Newberry Library, Chicago
US-NYp New York Public Library
US-R Sibley Music Library, Eastman School of Music

Abbreviations

AMS	American Musicological Society
BDECM	<i>Biographical Dictionary of English Court Musicians</i>
BIOS	British Institute for Organ Studies
BIOSJ	<i>British Institute for Organ Studies Journal</i>
CSP	Cambridge Scholars Press
CUP	Cambridge University Press
EEOP	Early English Organ Project
EM	<i>Early Music</i>
HMC	Historical Monuments Commission
HMSO	Her Majesty's Stationary Office
IAO	Independent Association of Organists
JAMS	<i>Journal of the American Musicological Society</i>
MB	<i>Musica Britannica</i>
ML	<i>Music & Letters</i>
NCEM	National Centre for Early Music
NEMA	National Early Music Association
NPOR	<i>National Pipe Organ Register</i>
NUOA	National Union of Organists' Associations
OHS	Oxford Historical Society
OHIS	Organ Historical Society
OUP	Oxford University Press
RCO	Royal College of Organists
RECM	Records of English Court Music
RMARC	<i>Royal Musical Association Research Chronicle</i>
SAHGB	Society of Architectural Historians of Great Britain
SCSSH	Society for Comparative Studies in Society and History
SPCK	Society for the Promotion of Christian Knowledge
UMI	University of Michigan
V&A	Victoria and Albert Museum
VdGS	Viola da Gamba Society
VdGSJ	<i>Viola da Gamba Society Journal</i>
VdGSA	Viola da Gamba Society of America
VdGSAJ	<i>Viola da Gamba Society of America Journal</i>

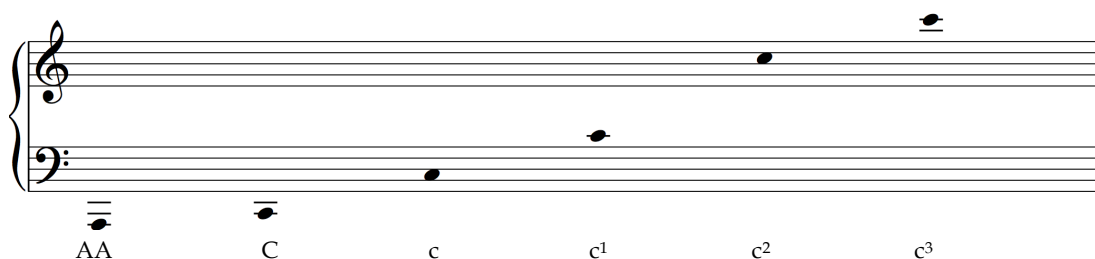
Conventions

Descriptions of organ stops employ feet (ft), e.g. Open Diapason 8ft, but measurements of features of pipes etc. are in millimetres (mm).

The pitch of individual pipes is described in Hertz (Hz), e.g. 440Hz.

Comparisons of pitch standards between organs relate to the pitch of the note a^1 (i.e. the a above middle c) of an 8ft stop and are given in Hertz without the unit abbreviation, e.g. a440.

Notes of the keyboard are identified as follows:



In many consort organs the lowest C# key plays the note AA. The compass of such an organ is given as, for example, C AA D-e³, indicating that the lowest key plays the note C, the next key (ostensibly C#) plays the note AA, the next key plays D and the keys then run chromatically up to e³.

Dates are given according to the modern practice of the year beginning on January 1st. The term 'Civil War' is used to refer to the extent of the three periods of unrest from 1642 and 1651. 'Interregnum' is used to refer to the period between the execution of Charles I (1649) and the Restoration of Charles II (1660).

Introduction

English works for instrumental consorts, of which the majority were scored for stringed instruments, were played in a wide variety of contexts over a period extending from the reign of Queen Elizabeth until the early eighteenth century. Their heyday at the court, with which most of the most prominent composers were associated, extended from c.1620 to c.1690. Consort music was practised in a wide variety of contexts, including the private apartments of the royal family, aristocratic households, choir schools and universities, together with the more prosaic surroundings of the Jacobean theatre, public music meetings and tavern entertainments. A substantial proportion of the consort repertoire was intended to be played with the involvement of the organ, often in an obbligato role, and organs were employed in as wide a variety of contexts as the string consorts themselves.

The history of the viol and violin in relation to the consort repertoire and its contexts has been widely examined in a number of studies, most notably those by Fleming and Bryan, Holman, Otterstedt and Woodfield.¹ Much has also been written about string playing techniques, and present-day players take a keen interest in matters of historically-informed performance by, for example, commissioning copies of extant instruments and researching contemporary sources for performance practice information.² By contrast, the role of the organ in string consort music is often overlooked or misunderstood. Many present-day ensembles employ modern 'continuo' organs that differ in a number of key aspects to the seventeenth-century English consort instruments. Where organs are unavailable, their part is given to other keyboard instruments, or omitted altogether. String players are frequently unaware of the organ's proper function in the music, and organists are not often familiar with the many and varied techniques, often of an *ex tempore* nature, that were employed by their seventeenth-century forebears, and rely instead on editorial keyboard realisations that often perpetuate unidiomatic or anachronistic solecisms.

¹ Michael Fleming and John Bryan, *Early English Viols: Instruments, Makers and Music* (London: Routledge, 2016); Peter Holman, *Four and Twenty Fiddlers: The Violin at the English Court 1540-1690* (Oxford: OUP, 1993); Peter Holman, *Life after Death: the Viola da Gamba in Britain from Purcell to Dolmetsch* (Woodbridge: Boydell & Brewer, 2010); Annette Otterstedt tr. Hans Reiner, *The Viol: History of an Instrument* (Kassel: Barenreiter-Verlag, 2002); Ian Woodfield, *The Early History of the Viol* (Cambridge: CUP, 1984)

² See Alison Crum, *Play the Viol* (Oxford: OUP, 1992) and *The Viol Rules* (St Albans: Corda Music Publications, 2009)

This lacuna of knowledge is amplified by a lack of detailed accounts of the consort organ's organology, performing contexts and playing techniques, and by a dearth of research into its practical deployment and the role of its players. There is thus a need for a reappraisal of the instrument and its role in the consort repertoire. It is that need that this thesis seeks to address.

Prior to the chance discovery of fragments of soundboards from two liturgical organs dating from c.1530 and their subsequent investigation by the Early English Project (EEOP) in the 1990s, the organological evolution of the consort organ was imperfectly understood.³ By 2000 it had become clear that the construction and conjectured pipework of the EEOP soundboards had strong links with the technology of the earliest extant chamber organs. Goetze and Gwynn's EEOP reconstructions of 2000-2001 identified a close connection between the pipework of the earliest extant domestic organs and the pipe-scales revealed by the Wingfield soundboard, an example of a small, semi-portable wooden-piped positive.⁴ Nevertheless, many writers continue to search for links between the larger, permanently-sited, metal-piped sixteenth-century 'great' organs and the domestic consort instruments.⁵ Chapter 1 therefore begins by developing the argument for recognising the wooden-piped liturgical positive as a more convincing antecedent for the consort organ, and thereafter seeks to clarify the morphological nature of the instrument by examining a selection of sixteen extant organs (listed in Appendix 1) chosen on the basis of the originality of their condition, the quality of specific types of data they can yield, or the detailed organological information already published on them. Gwynn's extensive and invaluable work in this field is built upon and duly acknowledged in the text.⁶

Gwynn made the observation that the unusual construction of consort organ pipework was designed to produce a distinct tonal result, and specifically one that was calculated to imitate, and homogenise with, stringed instruments, especially

³ Dominic Gwynn, 'The Early English Organ Project: Rediscovering the sound of the sixteenth century' *Organ Building* (2002), 70-77

⁴ Dominic Gwynn, *Report on the Manufacture of the 'Wingfield' Organ for the Early English Organ Project* (Welbeck: Harley Foundation, 2002)

⁵ A recent example being John Harper, 'Continuity, Discontinuity, Fragments and Connections: The Organ in Church c1500-1640' in Emma Hornby and David Maw (Eds.), *Essays on the History of English Music: Sources, Style, Performance, Historiography* (Woodbridge: Boydell Press, 2010)

⁶ A full list of Gwynn's works consulted may be found in the bibliography.

viols.⁷ Such observations are amply supported by contemporary evidence, such as the writing of Thomas Mace⁸ and the essays by Roger North in the early eighteenth century who provided much useful insight into the performance practices of his father's and grandfather's generations regarding the use of organs in conjunction with other instruments.⁹ Nevertheless, the organological significance of the consort organ in the consort repertoire often remains overlooked by musicologists and performers.

Some work has previously been done in examining the contexts in which consort organs were employed. An important area for study is the royal court, which was influential in the adoption of organs in other domestic situations. Prior to Andrew Ashbee's catalogue and transcription of references to music and musicians in the surviving court documents, published as the nine volumes of *Records of English Court Music*,¹⁰ the most frequently consulted source of information was the selection of Lord Chancellor's accounts entries published in 1909 as Henry Cart De Lafontaine's *The King's Musick*.¹¹ Of the several attempts made to extract a narrative from the court entries relating to organs, the most extensive was contained within James Boeringer's three-volume series *Organa Britannica*, based on Lafontaine's selection of sources.¹² Boeringer's analysis is flawed by confusion between secular and liturgical instruments and a tendency to speculate; his work is, however, still widely cited. Chapter 2 thus begins with an investigation into the use of consort organs at the court, and attempts a new interpretation of the surviving documentary evidence.

The provision of organs in domestic contexts outside the court is informed by many records in inventories, wills, accounts and other contemporary documents. These records were used as illustrative material in the work of several authors focusing on musical patronage in aristocratic households, such as the books by Walter Woodfill

⁷ Dominic Gwynn, 'The sound of the seventeenth century English chamber organ' *Chelys* 25, 22-31

⁸ Thomas Mace, *Musick's Monument, or a Remembrancer of the best Practical Musick...* (London: Mace, 1676)

⁹ John Wilson, *Roger North on Music* (London: Novello, 1959)

¹⁰ Andrew Ashbee (Ed.), *Records of English Court Music* 9 vols (Snodland: Andrew Ashbee, 1986-9 (vols. I-III); Aldershot: Scolar Press, 1990-96 (vols. IV-IX))

¹¹ Henry Lafontaine (Ed.), *The King's Musick: a Transcript of Records relating to Music and Musicians 1460-1700* (London: Novello, 1909)

¹² James Boehring, *Organa Britannica: Organs in Great Britain 1660-1860 III* (Lewisburg: Bucknell University Press, 1989)

on English domestic musicians,¹³ David Price on patronage in the late Renaissance,¹⁴ and Jonathan Wainwright's study of the patronage of the Hattons.¹⁵ In most cases, the presence of organs was noted without comment; in this respect Lynn Hulse's PhD thesis on aristocratic musical patronage was more informative insofar as the provision of organs and organists was placed in the context of the existence of other instruments and musicians, although even Hulse did little to interpret the evidence in any depth.¹⁶ Chapter 2 therefore discusses the contexts in which consort organs were used, including less well-documented arenas beyond the domestic such as choir schools, theatres, private music meetings and public music houses.

A number of articles have analysed the repertoire for string consort and organ from the standpoint of the string player, many of them appearing in the pages of the Viola da Gamba Society's journal *Chelys*, but there have been very few studies focusing specifically on the organ's role in the music. The most notable exception, Peter Holman's chapter in Ashbee's study of John Jenkins, posed a number of questions relating to the chronology and performance practice of the organ in consort music.¹⁷ Chapter 3 builds on Holman's work by presenting the hypothesis that the earliest extant obbligato organ parts in English consort works are a synthesis of an established indigenous keyboard accompanimental practice and certain Italian theorbo continuo techniques as practised at the Jacobean court. It also provides an overview of the manuscript sources (catalogued in Appendix 4) from the perspective of types of format (scores, dedicated organ parts and figured basses) and types of texture (doubling of voices, independent polyphonic accompaniments, polarised treble-and-bass textures). The relationship between secular and liturgical keyboard styles is examined, developing themes explored by Rebecca Herissone in her book *'To Fill, Forbear or Adorne'*,¹⁸ and posing further questions such as: are particular textual types or textures associated with particular establishments, types of performer, periods, places or genres? What prompted a particular composer to

¹³ Walter Woodfill, *Musicians in English Society* (Princeton: Princeton University Press, 1953)

¹⁴ David Price, *Patrons and Musicians of the English Renaissance* (Cambridge: CUP, 1981)

¹⁵ Jonathan Wainwright, *Musical Patronage in Seventeenth-Century England: Christopher, First Baron Hatton (1605-1670)* (Aldershot: Scolar Press, 1997)

¹⁶ Lynn Hulse, *The Musical Patronage of the English Aristocracy c.1590-1640* Unpublished PhD thesis, King's College, London, 1992

¹⁷ Peter Holman, "'Evenly, Softly, and Sweetly According to All": The Organ Accompaniment of English Consort Music' in Andrew Ashbee and Peter Holman (Eds.), *John Jenkins and His Time* (Oxford: Clarendon Press, 1996)

¹⁸ Rebecca Herissone, *'To Fill, forbear, or adorne': The Organ Accompaniment of Restoration Sacred Music* (Aldershot: Ashgate, 2006)

write for the organ in a particular way? How did non-keyboard specialist composers construct their written keyboard parts, and how did professional players realise scores and thorough-basses? The insight gained into contemporary performance practice is illustrated with close reference to the extant sources.

Although contemporary accounts of consort playing are relatively rare, Thomas Mace's description of the Cambridge music meetings and Roger North's account of domestic music making supply rich veins of information. Using these and other contemporary sources, Chapter 4 addresses a number of practical issues relating to the deployment of organs in consorts, such as the placement of musicians and instruments, the use of music stands, the influence of listeners, and the important subject of how 'humouring' or expression was realised on the consort organ. North also provided contemporary insight into the social dynamics within consorts, a theme explored by Ludwig Loren's PhD thesis on the social and cultural context of the viol consort.¹⁹ Loren's investigation was restricted by his failure to recognise the role of the organ and organist in the repertoire, leading him to ignore the contribution of both altogether. Chapter 4 redresses the balance by examining the various musical and social skills required by the seventeenth-century consort organist.

Much debate has focused on the pitch and temperament used by viols in the past, but little use has been made of the data available from the extant consort organs. The information recoverable from the surviving instruments is discussed in Chapter 5, along with aspects relating to registration, blowing techniques and divided keyboards and how these may be employed in performance. Christopher Kent's work relating the temperament of the ex-Hunstanton organ to the tonality of the surviving consort manuscripts formerly at Hunstanton Hall is an exemplar of the useful information that can be gleaned by connecting a specific instrument to its specific repertoire,²⁰ and this approach is developed by considering the organological nature of several extant organs in relation to their original locations and the repertoire known to have been associated with them.

¹⁹ Ludwig Loren, *'Equal to All Alike': A Cultural History of the Viol Consort in England, c.1550-1675*. Unpublished PhD thesis, University of Virginia, 2011

²⁰ Christopher Kent, *'...Softly, and Sweetly Acchording to All' The Historic St. Luke's Organ and Its Contemporaneous Repertoire* in John Watson (Ed.), *Organ Restoration Considered: Proceeds of a Symposium* (Warren, Michigan: Harmonie Parke Press, 2005)

Although this thesis focuses on the instrumental consort repertoire, it may be noted that the consort organ also found an important role in the accompaniment of domestic devotional vocal music and in playing the solo organ repertoire. The chapter concludes by considering how the organological nature of the instruments relates to these two repertoires. There remains considerable potential for research in developing in greater depth the various themes presented in this thesis in relation to the devotional and solo repertoire, which work would complement the present study in forming the next step towards assembling a full account of the consort organ's varied and important role in seventeenth-century English music making.

Chapter 1: The consort organ: evolution, taxonomy, characteristics

This thesis is not principally an organological study, but it is concerned with a quite specific type of instrument that has not, as yet, been widely associated with a dedicated taxonomic term. Bearing in mind Sabine Klaus's observation that 'to describe the object of one's research unambiguously... is the inevitable basis of respectable scholarship', it would be useful, before proceeding further, to establish a definition for the type of instrument under consideration, to which the term 'consort organ' will be applied.¹ In the light of recent methods of organological classification that employ 'upwards' definitions of instruments, involving not just morphological features, but historical, regional, sociological and performance practice factors, the consort organ is relatively easy to define.² This chapter addresses the morphological definition of the instrument; chapter 2 considers the historical and regional dimensions, whilst chapters 4 and 5 examine the sociological and performance practice aspects respectively.

For now, it may suffice to say that a consort organ is a distinct type of chamber organ made in England during the seventeenth century, which was principally intended for use with consorts of instruments (usually stringed) or with voices (often in a devotional, but not usually liturgical, context) for secular purposes, most typically in a domestic or court environment.³ Perhaps the most significant and striking feature of the instrument, from the perspective of both listener and player, is the tone-quality of the pipework, which is unlike that of similar types of organ from other periods and geographical regions. This particular sound was specifically created to complement the musical contexts in which the organ was originally used, and it is important to understand that it differs markedly from the typical modern box continuo organ that is most usually employed in the performance of this repertoire today. In pursuit of the better understanding of performance practice

¹ Sabine Klaus, 'More Thoughts on the Discipline of Organology' *Historic Brass Society Journal* 14, 3

² For a discussion of such methods, see Margaret Kartomi, *On Concepts and Classifications of Musical Instruments* (Chicago: University of Chicago Press, 1990)

³ No evidence of the manufacture of consort organs outside of England has yet been identified. The one known early seventeenth-century Scottish organ builder, William Leslie of Aberdeen, had left for the continent by 1611. A few organs in Scotland are recorded, such as the 'ane paire of organs ...wt frames' in the great hall of Glamis Castle in 1648, but these may have been imported. See David Smith, 'Keyboard Music in Scotland' in James Porter (Ed.), *Defining Strains: The Musical Life of the Scots in the Seventeenth Century* (Bern: Peter Lang, 2007)

issues that forms the main argument of this thesis, this first chapter seeks to explore the physical nature of the consort organ by tracing its origins and development and by describing the characteristics that set it apart from other types of organ.

A surprisingly large number of English chamber organs survive from the seventeenth century. Some twenty examples are known that are either in substantially original condition or which retain sufficient evidence to establish what their original condition was. There are a further ten or so that have undergone a slightly greater degree of alteration but which retain a considerable body of original material, and there are also partial remains (casework only or individual stops) from another twenty-five at least.⁴ Compared to the survival of just nineteen English virginals from the same period,⁵ or even the 141 seventeenth-century extant English viols so far identified,⁶ this is a high number that reflects the extent to which the instruments were valued by later generations, and also the durability of their construction. From these survivals, this study selects sixteen extant organs that represent either the best-preserved examples or those that can yield the most reliable organological information as a sample from which to draw evidence (Appendix 1).

1.1 The evolution of the consort organ

There are a number of references to domestic organs in the sixteenth century,⁷ but detailed information on the nature of these early secular instruments is scarce. The most useful source is the inventory of goods compiled in 1547 after the death of Henry VIII which lists some 28 organs, including three claviorgans, two portatives, and a variety of single and double regals ranging in size from one to six stops.⁸ Today the term 'regals' is usually used for an instrument consisting solely of

⁴ Much of the organological evidence cited in this chapter is drawn from the technical reports compiled by the organ builder Dominic Gwynn of Goetze and Gwynn Organ Builders Ltd. I am grateful to him for the generous sharing of his data. For his interpretation of their history see Dominic Gwynn, 'The Chamber Organ in Stuart England' in John Watson (Ed.), *Organ Restoration Considered: Proceeds of a Symposium* (Warren, Michigan: Harmonie Parke Press, 2005), pp.105-21.

⁵ Donald Boalch, *Makers of the Harpsichord and Clavichord 1440-1840* (Oxford: Clarendon Press, 1974), p.203

⁶ Thomas MacCracken, *Online Database of Historical Viols* maintained by the VdGSA <<https://vdgsa.org/pgs/viols/viols.html>> accessed 4 February 2017

⁷ For a variety of contextual examples, see Walter Woodfill, *Musicians in English Society* (Princeton: Princeton University Press, 1953)

⁸ Lbl MS Harley 1419 (RECM VII, p.387)

fractional-length reed pipes, but it seems that in the inventory it referred more widely to other kinds of chamber organ: while several of the instruments certainly contained regal (reed) stops with tin or paper resonators, there are also examples of several other types.⁹ The king's organs included instruments with wooden, metal, or both types of pipes, organised into full-compass, treble-compass and divided stops. A frequently listed register was the 'Cimbell' - not the very sharp mixture of that name known from the later Baroque organ, but probably a stop with one or two ranks of relatively high-pitched pipes, perhaps including Fifteenth, Nineteenth or Twenty-second pipes.

The organs incorporated either an enclosed 'foot' or lower section of casework containing the bellows, or stood on an open frame. In this way they reflected the layout of the later seventeenth-century cabinet and table organs respectively, although the overall impression given by their specifications is of instruments that are better represented by the various types of German *Positiv* organs from the sixteenth and early seventeenth centuries (see section 1.2 below). An example of one of these within the British Isles is the late sixteenth-century instrument at Carisbrooke Castle, Isle of Wight, which contains a regal stop.¹⁰ Some of the king's organs may also have been the work of one or more of the several foreign organ builders recorded in Tudor London, such as Michael Mercator of Venlo or the Fleming Michael Langhedul.¹¹

Alongside these secular instruments, documentary evidence reveals that there were two principal types of liturgical organ. The 'positive' was a small, moveable instrument of up to five stops, usually supplied with wooden pipes, based on 5ft transposing 'organ' pitch, and intended for use in a smaller space within a church, such as a chapel or the chancel.¹² Evidence for the positive is represented by numerous references in inventories and accounts,¹³ by iconographical

⁹ Peter Williams, *The European Organ 1450-1850* (London: Batsford, 1966), pp.17-18

¹⁰ Martin Goetze and Dominic Gwynn, *Carisbrooke Castle Flemish Chamber Organ 1602* (Welbeck: Harley Foundation, 1993)

¹¹ Stephen Bicknell, *The History of the English Organ* (Cambridge: CUP, 1996), p.63

¹² Martin Renshaw, 'Beyond Ecclesiology: some implications which arise from considering medieval chancels as buildings designed for music' (2015). Hawksmoor Prize competition essay published on the soundsMedieval.org website <<http://soundsmedieval.org/library.html>> accessed 6 November 2016

¹³ See the examples quoted in Martin Renshaw, 'The Place of the Organ in the Medieval Parish Church' *BIOSJ* 37 (2013), 6-31

representations,¹⁴ and by the remains of the c.1530 Wingfield soundboard from which the Early English Organ Project (EEOP) has created a reconstructed instrument.¹⁵ By contrast, the 'great' organ was a permanently-sited instrument with a larger number of stops, mainly employing metal pipes based on 10ft pitch, often placed on a raised gallery or screen from which its sound could permeate the whole building.¹⁶ The great organ is represented by the surviving contracts for instruments at Coventry¹⁷ and Barking,¹⁸ by the remains of the case at Old Radnor, Powys,¹⁹ and by the Wetheringsett soundboard from which the EEOP has also derived a reconstruction.²⁰

The earliest extant domestic organ, the c.1600 instrument at Knole House, Kent, represents the product of an established and sophisticated tradition of organ building.²¹ It does not, however, correspond very obviously with the descriptions of organs in the Henry VIII inventory: it is a chest organ, not a table or cabinet organ; its specification does not include a Regal, a Cimbell, or any kind of divided or half register; with four stops, it is larger than all but two of the 26 chamber organs from the 1547 list; it is plainly decorated. It demonstrates characteristics that clearly differentiate it from the secular instruments of the Tudor period, and comparison with church organs reveals that it is much closer to the liturgical positive organ of the sixteenth century in terms of its specification, pitch, pipework and overall character, if not its casework.²² Together with its early seventeenth-century secular successors, it is also closely related in many respects to the new chair²³ organs (the smaller, secondary divisions played from a second keyboard) that were being

¹⁴ see Kimberly Marshall, *Iconographical Evidence for the Medieval Organ in French, Flemish and English Manuscripts* (New York: Garland, 1998)

¹⁵ Described in Dominic Gwynn, *Report on the Manufacture of the 'Wingfield' Organ for the Early English Organ Project* (Welbeck: The Harley Foundation, 2002)

¹⁶ *Ibid.*

¹⁷ Bicknell, *History* pp.29-30

¹⁸ *Ibid.* pp.28-9

¹⁹ Frederick Sutton, *Church Organs: their Position and Construction* (London: Rivingtons, 1883), pp.23-9

²⁰ Described in Dominic Gwynn, *Report on the Manufacture of the 'Wetheringsett' Organ for the Early English Organ Project* (Welbeck: Harley Foundation, 2003)

²¹ See Martin Renshaw, 'An early 17th century British organ: A preliminary study' *BIOSJ* 4 (1980), 34-42

²² Bicknell, *History* pp.194-9

²³ Various also spelled 'chayre', 'chaire', 'choire' and 'choir'

introduced as part of the newly-built two-manual or 'double'²⁴ liturgical organs of the early 1600s.²⁵

John Harper's study of the early English liturgical organ was the first to recognise the connections between the sixteenth-century church organ and the later chair and consort organs.²⁶ Harper's essay proposed an evolution for the consort organ from the liturgical great organ based on similarities between the earliest extant secular organs and the reconstructed Wetheringsett instrument. A more convincing argument, however, can be made by drawing a comparison with the Wingfield positive organ. Four organological features in particular are notable for linking the positive and the consort types.

Being smaller, the Wingfield reconstruction better represents the movable concept of the positive than the larger Wetheringsett organ. While such organs were clearly not meant to be transportable with as much ease as the small portatives that often appear in late medieval iconography, the Wingfield positive is nevertheless relatively easy to dismantle and move. As will be seen in Chapter 2, there is much evidence to demonstrate that seventeenth-century consort organs were also moved frequently. Secondly, the Wingfield specification is based entirely on ranks of open pipes. This includes the diapason rank, which, following early English tradition, is a sub-octave rank to the unison-pitch principal ranks. It is augmented by doubled principal and octave ranks, each of which has its own slider and thus may be controlled by a separate stop. Unlike the diapason of the Wetheringsett organ, which is a short-compass stopped rank, the Wingfield diapason does not have a slider in the soundboard, meaning that its pipes are permanently 'on'. The fact that it is permanently selected means that it has effectively become the main unison rank of the organ, and in this respect it looks forward towards the later seventeenth-century English practice of basing the fundamental pitch of organs on the diapason

²⁴ The use of the term 'double' in this context refers to the dual nature of the great and chair divisions rather than the earlier sixteenth-century usage where 'double' is taken to refer to an instrument with a compass extending below GG. See David Kinsela, 'A Taxonomy of Renaissance Keyboard Compass' *Galpin Society Journal* 54 p.361.

²⁵ John Harper, 'Continuity, Discontinuity, Fragments and Connections: The Organ in Church c1500-1640' in Emma Hornby and David Maw (Eds.), *Essays on the History of English Music: Sources, Style, Performance, Historiography* (Woodbridge: Boydell Press, 2010), pp.225-6

²⁶ *Ibid.*

ranks (10ft in church organs, 8ft in secular instruments), rather than on the principal ranks.²⁷

This emphasis on open pipes forms the third feature linking the positive and consort organs. Open ranks are used for all of the upperwork found in the extant consort organs, and also in the 8ft Open Diapason stop provided in seven of the sixteen sample instruments. The particular tone-colour of open stops played an important role when consort organs were used with viol consorts, even if, due to constraints of space, the open rank could usually only be provided in the treble half of the compass.

Fourthly, and perhaps most significantly, the Wingfield soundboard is clearly designed to accommodate wooden, not metal, pipes:²⁸ wooden pipework is perhaps the single most important defining feature of the consort organ, with all but one of the sixteen instruments forming the core sample for this study consisting entirely of such pipes.²⁹ The evidence of the Wingfield soundboard pipe-hole spacing suggests that its pipes were very narrow in scale,³⁰ being some four to five notes smaller than those of the Knole and Smithfield organs, which are among the most narrowly-scaled surviving ranks from their period.³¹

The very distinctive narrow-scaled wooden pipework of the consort organ was thus linked to a pre-existing, well-established English tradition of wooden pipe-making that demonstrated a high degree of technical skill and expertise in its methods of construction and voicing.³²

²⁷ For an explanation of the difference in pitch between secular and liturgical English organs, see John Caldwell, 'The Pitch of Early Tudor Organ Music' *ML* 51:2 (1970), 156-63

²⁸ Gwynn, *Wingfield* p.4

²⁹ The Compton Wynnyates organ is unique in a number of other ways and it is difficult therefore to assess the significance of these features.

³⁰ The scaling of organ pipes represents the diameter, or (in the case of wooden pipes) the internal horizontal area, of the pipe in relation to its speaking length (i.e. that part of the pipe from the mouth to the upper end).

³¹ Dominic Gwynn, 'The Early English Organ Project: Rediscovering the sound of the sixteenth century' *Organ Building* 2002, 74

³² Dominic Gwynn, 'The sound of the seventeenth century English chamber organ' *Chelys* 25 (1997), 22

These four features – portability, choruses of open pipes, a unison rank of stopped pipes, and the ubiquity of wooden pipework – demonstrate a strong organological link between the sixteenth-century liturgical positive and the seventeenth-century secular consort organ. Indeed, it is easy to imagine how, faced with the widespread removal of organs from churches from the 1560s, post-Reformation organ-makers were forced to focus their attention elsewhere, with the domestic organ being an obvious outlet for their skills.³³ The transference of technology and manufacturing methodology from the church positive to the secular consort organ is evident in the Knole organ and its successors, which, despite their modest size, are sophisticated instruments demonstrating the application of a high level of craftsmanship that had evolved over an extended period of time.

One further development of the early 1600s may be used to strengthen the link between the positive and the consort organ, namely the introduction of the chair organ as a secondary division in the double, or two-manual, organ that emerged with the resumption of church organ construction in the early seventeenth century. The earliest double organ for which technical information survives (Thomas Dallam's 1609/10 instrument for St George's Chapel, Windsor) was described as an 'Instrument Consistinge of a greate Organ and a Chayre portative', the contract revealing that an existing positive of 1599 was adapted to stand on the screen as a chair, together with a new great organ.³⁴

Subsequent chair organs were usually bespoke divisions, but their ancestry in the positive is evident in several ways. These include the use of a comparatively high proportion of wooden pipes, a low proportion of unison-pitch stops, and the absence of reed stops – features that are also characteristic of the consort organ.³⁵ This may be demonstrated by comparing the specifications of the Wingfield organ and some early seventeenth-century consort and chair organs (Table 1.1):

³³ Many recorded instances are collated in Martin Renshaw, 'Master list of churches with documented or other signs of musical activity, c.1545' (2016). Version 04.03.2016 published on the Sounds Medieval website: <<http://soundsmedieval.org/library.html>> accessed 15 December 2016

³⁴ Sidney Campbell and William Sumner, 'The Organs and Organists of St George's Chapel, Windsor Castle' *The Organ* 45:180, 145-56

³⁵ A selection of specifications may be found in Bicknell, *History* pp.77-132

Table 1.1: Pre-Restoration organ specifications

(Stop names have been standardised. *Italics* indicate wooden pipes)

Wingfield Soundboard Positive organ c1530	Knole House Consort organ Anon c1600	Worcester Cathedral Chair organ Thomas Dallam 1613	Staunton Harold Consort organ Anon c1630	Magdalen College Oxford Chair organ Robert Dallam c1631
<i>[Diapason]</i>	<i>Diapason</i>		<i>Open Diapason (treble)</i>	
<i>[Principal I]</i>	<i>Principal I</i>	<i>[Stopped] Diapason</i>	<i>Stopped Diapason</i>	<i>Stopped Diapason</i>
<i>[Principal II]</i>	<i>Principal II</i>	Principal	<i>Principal</i>	Principal I
	<i>Twelfth</i>	<i>Flute</i>	<i>Twelfth</i>	Recorder
<i>[Fifteenth I]</i>	<i>Fifteenth</i>	Fifteenth	<i>Fifteenth</i>	Fifteenth
<i>[Fifteenth II]</i>		Two and Twentieth	? <i>Mixture</i>	

Dominic Gwynn has asserted that ‘many of the people who made chamber organs in the late sixteenth and early seventeenth centuries did not have names that are known to us as church organ builders’, but the simultaneous emergence of the chair organ and the rise in popularity of the consort organ in the early seventeenth century is reflected in the fact that several of the most prolific builders of chair organs during this period are also among the few identifiable makers of consort organs.³⁶ Among them may be numbered Thomas and Robert Dallam, John Burward, and the provincial West Country builder John Loosemore (see also section 1.7 below). All of these builders constructed new chair organs for existing instruments, or new double organs incorporating chair divisions, and during the same period also built consort organs for domestic customers (Table 1.2).

Table 1.2: Makers of chair and consort organs³⁷

Thomas Dallam	Robert Dallam	John Burward	John Loosemore
Chair organs: King’s Coll. Cambs. 1605/6 Westminster Abbey 1606/7 Norwich Cathedral 1608/9 St George’s Windsor 1609/10 Worcester Cathedral 1613 Eton College 1613 Holyrood House 1616 Durham Cathedral 1621/22 Bristol Cathedral 1629	Chair organs: Magdalene Coll. Oxford c1635 York Minster 1632-4 Lichfield Cathedral 1640 Gloucester Cathedral 1641 St George’s Windsor 1660 New College Oxford 1663	Chair organs: Chirk Castle 1631 Salisbury Cathedral 1635 Hampton Court 1637	Chair organs: Exeter Cathedral 1662-4
Consort organs: Hatfield House 1611	Consort organs: New College Oxford c1660 Tawstock Court 1641/2	Consort organs: Oxford Music School 1625 Tawstock Court 1646	Consort organs: Tawstock Court 1655 Exeter Choir Sch. c1666 Nettlecombe Court 1666

³⁶ Gwynn, *Chamber Organ* p.109

³⁷ Dates and builders drawn from information in Bicknell, *History* pp.69-121

Despite the inevitable overlap of technology between church and chamber instruments, it is important to note that there are also a number of distinct differences between the two types, as described in the sections below. These differences underline the fact that soon after 1600 the two types evolved along divergent paths, the consort organ preserving a conservative, consistent and vernacular style. These paths were guided by differing musical demands: the chair conformed more closely to continental models by adopting more of the features of the great organ (such as metal pipes, flute and reed stops, wider principal scales) whilst the consort organ retained characteristics that suited it to a role in conjunction with stringed instruments (wooden pipes, divided stops, narrow scales).³⁸

By the time that William Hathaway was engaged in 1664 to rebuild the Worcester Cathedral chair organ after Civil War damage, his work was condemned by the organist Nathaniel Tomkins for 'the many poore cheap wooden stops of pipes in it to fill up the Number'.³⁹ Nevertheless, many similarities between chair divisions and contemporary consort instruments can still be observed even after the Restoration (Table 1.3):

Table 1.3: Post-Restoration organ specifications

(wooden stops in italics)

Durham Cathedral Chair organ George Dallam 1662	Canterbury Cathedral Chair organ (proposal) Lancelot Pease 1662	Oxford Music School Consort organ Ralph Dallam c1665	Winchester Cathedral Chair organ Thomas Thamar 1666	St George Nottingham Consort organ Anon c1680
	<i>Stopped Diapason</i>			
<i>Stopped Diapason</i>	<i>Stopped Diapason</i>	<i>Stopped Diapason</i>	<i>Stopped Diapason</i>	<i>Stopped Diapason</i>
Principal	Principal	<i>Principal</i>	Principal	<i>Principal</i>
Flute	<i>Flute</i>		<i>Flute</i>	
Fifteenth	<i>Fifteenth</i>	<i>Fifteenth</i>	Fifteenth	<i>Fifteenth</i>
Twentysecond		<i>Mixture II</i>	Two and Twentieth	<i>Mixture II</i>

The organological evidence from the early extant consort organs, together with documentary and archaeological evidence of liturgical organs, thus demonstrates an evolution from the small, wooden-piped positives of the late sixteenth century

³⁸ Bicknell, *History* pp.77-82

³⁹ Ob MS Add. C 304a reproduced in David Newsholme, *The Life and Works of William Davis c.1675/7-1745*, Unpublished PhD thesis, University of York, 2013

towards the secular consort and liturgical chair organs of the early seventeenth century. The lacuna in liturgical organ building in the late sixteenth century enforced by the Reformation appears to have encouraged organ makers to channel their energies into the development of secular organs based on the technology of the positive, before the resumption of church organ building in the early 1600s prompted the inclusion of this same technology in the chair division of the double organ and in the increasingly popular secular consort organ.

Dominic Gwynn suggested that the Knole instrument, as the earliest extant domestic organ, represents an 'older, perhaps hybrid tradition... and one with indigenous roots'.⁴⁰ These comparisons suggest that it is indeed an important organological 'missing link' between the tradition of late-medieval positive organ construction and the Jacobean and Stuart consort instruments.

1.2: Taxonomy

Early sources contain a wide variety of terminology used to describe organs. Sixteenth-century terms were often convoluted, such as the 'instrument with divers instruments in it' at Wanstead House, Essex in c.1585⁴¹ or the 'instrument with sundrie stoppes' at Leicester House, London.⁴² Beyond the term 'organ' itself, in various spellings, the most common early seventeenth-century description was 'wind instrument', which needs to be read in context to disentangle any ambiguity. 'Chamber organ' is occasionally encountered, as is 'cabinet organ', using the word 'cabinet' in its contemporary sense of a private withdrawing room. In modern organology, the extant consort instruments may be divided into four broad types, based on the physical disposition of the pipes, wind system and keyboard within the casework.

Claviorgan

Combined pipe and stringed keyboard instruments were first recorded in England in the Henry VIII inventory of 1547, when three such instruments were listed, one of

⁴⁰ Gwynn, *Chamber Organ* p.109

⁴¹ David Price, *Patrons and Musicians of the English Renaissance* (Cambridge: CUP, 1981), p.168

⁴² *Ibid.* p.169

which was placed in the king's private chambers at Hampton Court.⁴³ The only extant English example from before the eighteenth century is the remains of the claviorgan built in 1579 by Lodewijk Theewes for Farningham Manor, Kent (Table 1.4 and Fig.1.1).



Fig.1.1 Claviorgan: Victoria and Albert Museum, 1579 (photo: the author)

Table 1.4: The Theewes claviorgan

Lodewijk Theewes 1579⁴⁴

4ft open wood
2ft open wood
1ft open wood
8ft regal wood resonators, paper boots
1/4ft cimbell, open metal, repeating
Tremulant
Nightingale

All stops divided between b/c¹

⁴³ Ashbee, *RECM* VII p.396

⁴⁴ Specification from Wilson Barry, 'The Lodewyk Theewes claviorgan and its position in the history of keyboard instruments' *JAMS* 16, 5-41

The regal, cimbell and the 4ft-based chorus all suggest a much closer affinity with the instruments of the Henry VIII inventory, or perhaps with contemporary German *positiv* organs, than the later English consort organ. Numerous references to English claviorgans exist from the early seventeenth century, but there appears not to have been an accepted term for the instrument; instead expanded descriptions such as ‘a virginal with a wind instrument in it’ (Skipton Castle, 1620)⁴⁵ or an ‘Organ and harpsicall to geather’ (Welbeck Abbey, 1636)⁴⁶ are found.

These descriptions suggest that there may have been two broad approaches to construction, one being to combine the two sections in a single case, the other being essentially to place a harpsichord or virginals on top of a separate, lower case containing the organ, as in the Theewes example. Both types are represented in surviving continental examples.⁴⁷ Although references to claviorgans at court and in domestic contexts are rare after the 1630s, some remained in use after the Restoration, most notably at the Oxford Music School where the ‘Harpsichord with a winde instrument of two stops’⁴⁸ donated by William Heather in 1627 was still in use until Dallam provided a new cabinet organ in c.1665.⁴⁹ In January 1667 Pepys viewed a claviorgan at St James’s Palace belonging to Lord Aubigny, who had apartments there:

I to St. James’s, to see the organ Mrs. Turner told me of the other night, of my late Lord Aubigny’s; and I took my Lord Bruncker with me... so he and I thither and did see the organ, but I do not like it, it being but a bauble, with a virginall joining to it: so I shall not meddle with it.⁵⁰

Pepys’s use of the word ‘bauble’ suggests a degree of disdain for the concept that was probably prevalent in the latter half of the century, despite the forthcoming revival of interest in such combination instruments in eighteenth-century England.⁵¹ Although distinct roles for the organ and harpsichord are identifiable in the consort

⁴⁵ CW Bolton MSS bk. 99, f. 223v (Skipton Castle inventory)

⁴⁶ Lynn Hulse, ‘The Duke of Newcastle and the English Viol’ *Chelys* 29 (2001), 29

⁴⁷ See Eleanor Smith, *The History and Use of the Claviorgan*. Unpublished PhD thesis, University of Edinburgh, 2013

⁴⁸ Ob S.E.P.C9 and Ob MS Mus. Sch C203*(R) (Catalogues of the Oxford Music School)

⁴⁹ Sir John Hawkins, *A General History of the Science and Practice of Music* IV (London: Payne & Son, 1776), p.375

⁵⁰ Robert Latham and William Matthews (Eds.), *The Diary of Samuel Pepys* 11 vols. (New York: Harper Collins, 2010), entry for 23 Jan 1667

⁵¹ Smith, *Claviorgan* pp.278-320

repertoire, there is little firm evidence to suggest that the two sonorities were used simultaneously, even if the possibility for this was perhaps the principal *raison d'être* of the claviorgan.⁵²

Chest Organ

The chest organ superficially resembled the familiar modern box continuo organ, the pipework and bellows being placed within the case, with the keyboard at the top. Only one English example, the Knole organ, is extant, but others were recorded, such as the 'payre of orgaynes bought at London in the facion of a countyngeborde or lowe table' purchased for Brasenose College, Oxford in 1513.⁵³ The 'wind instrument like a virginall' in the 'chamber where y^e musicions playe' listed in a 1603 inventory at Hengrave Hall, Suffolk was probably also a chest organ.⁵⁴ Similar rectangular instruments survive from the continent.⁵⁵ The Knole instrument does not have a pipe display: instead, the panelled sides give the case a very similar appearance to the kind of chest that was commonly used in the early seventeenth century for storing household goods and, indeed, instruments (Fig.1.2).⁵⁶

Visually, the Knole organ has more in common with the base section of the Theewes claviorgan, and it seems probable that this is one of the several ways in which this type of design is more closely connected with a sixteenth, rather than seventeenth, century tradition. When Thomas Mace illustrated one of two similarly conceived instruments constructed to his own specification (see section 1.8 below) in *Musick's Monument*, he claimed the design as his own innovation; the fact that he did not appear to have been aware of the earlier or continental examples suggests that the type was uncommon in England by the late seventeenth century.⁵⁷

⁵² An exception, from a continental source, is a virginals lid painting, *The Four Seasons* (1619) by Frederik van Vallenborch in the Germanisches Nationalmuseum, Nuremberg, which depicts a polygonal virginals mounted above a chest organ: the player has his right hand on the former and left hand on the latter.

⁵³ A.V. Butcher, 'Two Small Hill Organs' *The Organ* 27, 18

⁵⁴ John Gage, *The History and Antiquities of Hengrave Hall, Suffolk* (London: James Carpenter, 1822), pp.21-2

⁵⁵ E.g. the German seventeenth-century example in the Metropolitan Museum of Art, New York (accession no. 1978.6)

⁵⁶ Michael Fleming, 'Unpacking the 'Chest of Viols'' *Chelys* 28 (2001), 4-5

⁵⁷ Thomas Mace, *Musick's Monument, or a Remembrancer of the best Practical Musick...* (London: Mace, 1676), p.243



Fig.1.2 Chest organ, Knole House, Kent c.1600 (photo: the author)

Table Organ

The table organ contained its pipework and wind mechanism within a case that was supported by an open wooden frame (Fig.1.3). In the case of the extant examples the frame is specifically designed for the instrument, but, as with many continental examples, it is possible that others were placed on any suitable table or base as required.



Fig.1.3 Table organ, Historic St John's, Smithfield, Virginia, c.1630
 (photo courtesy of TripAdvisor https://www.tripadvisor.ie/LocationPhotoDirectLink-g58187-d1674544-i77032906-St_Luke_s_Historic_Church_Museum-Smithfield_Virginia.html#77032906)

The references to such organs in inventories and other records often allude to such a separate base, such as the 'paire of organs upon a frame' listed in the chapel at Salisbury House in 1624,⁵⁸ or the 'payer of little orgaynes, wth a board w^h they stand on' at Hengrave Hall, Essex in 1602.⁵⁹ The keyboard of the table organ was at the bottom of the instrument, with the pipe-front above. The stops were controlled by draw-knobs mounted on the sides of the case operating directly on the sliders, or in the case of the Dean Bargrave organ, by sliding stop levers mounted to the sides of the keyboard. In the Smithfield and Christianus Smith organs, the pipe fronts are

⁵⁸ Salisbury MSS Box C/4. (Salisbury House inventory). For further details see Lynn Hulse, 'The Musical Patronage of Robert Cecil, first Earl of Salisbury (1563-1612)' *Journal of the RMA* 116:1, 29-31

⁵⁹ Gage, *Hengrave Hall* p.32

organised and painted to produce a faux-perspective effect. All three extant organs have enclosing doors: when closed, the instrument closely resembles a typical seventeenth-century side cabinet. The extant instruments, and the majority of references to similar ones, all date from before 1650.

Cabinet Organ

The cabinet organ is the most common type among the extant organs and represents a development of the table organ in which the open stand is replaced by enclosed lower casework. The lower section usually contained the blowing mechanism, operated by a foot pedal, although some retained the bellows at the top of the case (Fig.1.4).



Fig.1.4 Cabinet organ St George's Church, Nottingham, c.1680 (photo: the author)

All of the extant instruments have an ornamental pipe display with gilded or polished pipes and carvings. The stop mechanism is operated by vertical levers mounted in the jambs at either end of the keyboard. Several have, or originally had, enclosing doors, and when closed these organs also bore a close resemblance to a domestic cupboard. All of the surviving instruments date from between c.1630 and 1700, with the majority dating from after the Restoration, but the instruments from the Henry VIII inventory which stood 'uppon a foote of wainscott the Bellowes lieing in the same' may have been of a similar type. The earlier extant cabinet organs show evidence of having been painted, whilst later organs were usually finished in stained wood.⁶⁰

Continental equivalents

Although the English consort organ differed in several significant ways from continental chamber organs, it is nevertheless worth noting that all four of these types had equivalents on mainland Europe.

In Italy, Antonio Barcotto's treatise *Regolo e breve raccordo...* of 1652 identified five types of continuo organ including *graviorgani* (claviorgans), *organi in forma di tavolina* (table organs), and *organi di legno* (wooden-piped organs).⁶¹ The latter were based either on an 8ft or 4ft *Principale* with an *Ottava* at 4ft or 2ft and, sometimes, a quint-sounding rank; in most cases the pipes were open, with stopped bass octaves for 8ft ranks. They were used in chambers 'o vero d'Accademia, acciocche per la vicinanza delle orecchie d'ascoltanti non siano fastidite dall'altezza del suono' (or in academic halls, so that listeners' ears are not disturbed by the vicinity of too much sound).⁶² Many such instruments are recorded in the inventories of aristocratic Italian homes where they were used to accompany both instrumental and vocal music,⁶³ and were also regarded as the best instruments for continuo purposes in the theatre for their

⁶⁰ Gwynn, *Chamber Organ* p.134

⁶¹ Antonio Barcotto, *Regola e breve raccordo per far rendere agiustati, e regolate ogni sorte di instrumenti da vento, cioè organi, clavorgani, regali e simili [...]* (1652) transcribed in Renato Lunelli, 'Un trattatello di Antonio Barcotto colma le lacune dell'arte organica' *Collectanea Historiae Musicae* I, 135-55

⁶² Barcotto, quoted in Amaldo Morelli, 'Basso Continuo on the Organ in Seventeenth-Century Italian Music' *Basler Jahrbuch für Historische Musikpraxis* XVIII, 31-45

⁶³ For an account of such instruments in Rome see F. Trinchieri Camiz, 'Gli strumenti musicali nel palazzo, nelle ville e nelle dimore della Roma del Seicento' *La Musica a Roma attraverso le fonti d'archivio*, 595-608 (Lucca: Libreria Musicale Italiana Ed, 1994)

ability to blend both with voices and instruments, to hold their tuning in hot environments, and to adapt their dynamics to ensembles of different sizes by means of stop selection.⁶⁴

In Germany, *Positiv* organs were widely used for domestic music and for accompanying small ensembles, both instrumental and vocal, in church.⁶⁵ The four types noted above were all represented, and a number of examples of the *Claviorganum*, *Truhenorgel* (chest organ), *Tischpositiv* (table organ) and cabinet-type organ survive. A number of the latter bear a close visual similarity with the English cabinet organ.⁶⁶ The main difference between these and their English equivalents lies in their specifications, which are often based on 4ft ranks in the smaller examples, and usually contain metal pipes and fractional-length regal stops. Unlike the harmonically-rich English principal-toned ranks of the seventeenth century, the German equivalents had a strong fundamental and less harmonic development.⁶⁷

Germanic countries were the first to adopt the *Ruckpositiv* as a secondary manual division in church organs (the first examples appearing in the Netherlands in the mid-fifteenth century) and there are some similarities between these and the chair division of the early English double organ. Most notably, Arnolt Schlick's specification for a *Ruckpositiv* included 'die principal höltzen oder zynne pfeiffen vff die hültzen art' (a principal [8ft] of wood or tin pipes made like wood).⁶⁸ The main difference was one of voicing: the *Ruckpositiv* was designed to stand its own against the tonal output of the *Hauptwerk*, whereas the English chair was tonally the inferior partner to the great.

French domestic organs of the seventeenth century were a rarity. In the south of France, the influence of Italian organ-building saw the construction of some wooden-piped instruments, but elsewhere small organs used in a continuo role in

⁶⁴ Qualities listed in *Il corago*, an anonymous treatise of c.1630 on the practicalities of staging musical drama. Morelli, *Basso Continuo*, 34

⁶⁵ Peter Williams, 'Basso Continuo on the Organ' *ML* 50:1, 151

⁶⁶ The 1651 instrument built in Nürnberg by Nicholas Manderscheidt, originally for Visingborgs Slott, Gotland and now at the Academy of Music and Drama, Gothenburg, Sweden, is a good example. See < <https://www.orgelsammlung.de/orgelsammlung/361/> > (Website of organ builder Gabriel Issenburg)

⁶⁷ Williams, *The European Organ* p.115

⁶⁸ Elizabeth Berry Barber, (Ed.), *Arnolt Schlick: Spiegel der Orgelmacher und Organisten (Mainz 1511) – Bibliotheca organologica* 113 (Buren: Frits Knuf, 1980), p.97 (tr. the author)

church were essentially scaled-down versions of the larger contemporary liturgical instruments, usually based on a single stopped 8ft rank and containing a majority of metal ranks.⁶⁹ Some evidence for *espinettes organisées* (claviorgans) exists, but many of these appear to have been imported from England.⁷⁰ French organ music emerged as a discrete repertoire earlier than that of other countries, and the characteristic prevalence of a wide palette of set registrational sonorities meant that small organs with a limited number of stops could not meet the demands of the music.⁷¹ Although works for viols and organ by a few composers, most notably Henri Dumont survive, the French preference appears to have been for the harpsichord in consort music from early on in the seventeenth century,⁷² and domestic organs did not become common until the fashion for *orgues du salon* took off in the mid 1700s.⁷³

Despite some similarities, therefore, the English consort organ was distinct from its continental contemporaries in a number of ways, as indeed it became increasingly different from the contemporary English liturgical organ in terms of its sound and construction. Extending the examination of the English chamber organ into the eighteenth century, though beyond the scope of this study, would reveal that the renewal in interest for domestic organs from the 1740s onwards was not based on a continuation of the consort organ tradition, but on reproducing the liturgical organ in miniature, much after the French fashion.⁷⁴ The seventeenth-century consort organ therefore stands apart as a distinct type when viewed from the perspectives of both its contemporaries and its successors, and also of chamber organs from the continent.

⁶⁹ See Fenner Douglass, *The Language of the Classical French Organ* (New Haven: Yale University Press, 1995), pp.15-16

⁷⁰ Smith, *Claviorgan* pp.233-53

⁷¹ Douglass, *Classical French Organ* pp.20-7

⁷² Robert Zappulla, *Figured Bass Accompaniment in France: Speculum Musicae 6* (Turnhout: Brepols, 2000), pp.38-9

⁷³ See the commentary on the 1784 *orgue du salon* by Jean-Baptiste Schweikart at the Cité de la Musique, Paris on the Europeana Collections website:

<http://www.europeana.eu/portal/en/record/09102/_CM_0992754.html> accessed 28 January 2017

⁷⁴ For an examination of instruments of the eighteenth century, see Michael Wilson, *The Chamber Organ in Britain, 1600-1830* 2nd Ed. (Aldershot: Ashgate, 2001); Alan Barnes and Martin Renshaw, *The Life and Work of John Snetzler* (Aldershot: Scolar Press, 1994) and David Wickens, *The Instruments of Samuel Green* (London: Macmillan, 1987)

1.3: Specifications and compass

The specifications of the sixteen sample consort organs are recorded in Table 1.5 below. It is at first noticeable that the specifications do not vary widely. All the organs except Belchamp Walter contain a minimum provision of Stopped Diapason, Principal and Fifteenth.⁷⁵ Organs built prior to the Restoration are more likely also to include a Twelfth, whereas those built afterwards are more likely to contain a two-rank Mixture.⁷⁶ The surviving Mixtures in original condition tend to contain unison and fifth ranks in the earlier instruments, and fifth and tierce ranks in the later examples. Seven of the sixteen organs contain an Open Diapason, of which all but two are treble-compass stops.

Flute stops at 4ft pitch are found in only two of the extant organs: one is the unique two-manual cabinet organ at Compton Wynyates, and the other is the organ at Staunton Harold, where the 4ft flute was inserted when the instrument was rebuilt for use in the estate church in 1686.⁷⁷ The presence of a 4ft flute seems to have been reserved for instruments intended for use with voices, such as that built by John Loosemore for Exeter Choir School in 1665, and reflects the provision of the various wooden 4ft 'anthem' stops seen on a number of contemporary chair organs (see Chapter 5.4).⁷⁸

⁷⁵ The Stopped Diapason in the Knole organ, whilst not original, appears to have been provided in the seventeenth century. See Martin Renshaw, 'The Organ at Knole: its History and Significance' *Organists' Review* December 2015, 9-15

⁷⁶ Their effect being described by Roger North as 'mettaline and sprightly'. John Wilson, *Roger North on Music* (London: Novello, 1959), p.226

⁷⁷ Dominic Gwynn, *The Organ in the Church at Staunton Harold, Leicestershire* (Welbeck: Harley Foundation, 1998), p.2

⁷⁸ Edward Hopkins and Edward Rimbault, *The Organ: Its History and Construction* (London: Robert Cocks & Co., 1855), pp.51-2

Table 1.5: Consort organ specifications

	Open Diapason	Stopped Diapason	Principal	Twelfth	Fifteenth	Mixture (2 ranks)
Knole House c.1600			✓ (✓)	✓	✓	
Dean Bargrave 1629		✓	✓	✓	✓	
Smithfield VA 1630	✓	✓ b/tr	✓ b/tr		✓ b/tr	
Staunton Harold c.1630	✓ tr	✓	✓	✓	✓	
Christianus Smith 1643	✓ tr	✓ b/tr	✓ b/tr		✓ b/tr	✓
Canons Ashby c.1650		✓	✓		✓ b/tr	✓ b/tr
Mander c.1660		✓	✓		✓	✓
Thornton c.1660	✓ tr	✓	✓		✓	✓ b/tr
Worcester Cathedral 1665		✓	✓		✓	
Compton Wynyates c.1670	✓	✓	✓		✓	✓
Ex-Finchcocks c.1680		✓	✓		(✓)	
Nottingham c.1680		✓	✓		✓	✓ tr
Russell Collection c.1680		✓ b/tr	✓ b/tr		✓	(✓)
Dingestow Court c.1680	✓ tr	✓	✓	✓	✓	✓ b/tr
Belchamp Walter c.1690		✓	✓			✓
Royal College Music 1702	✓ tr	✓	✓		✓ b	✓ tr

Reed stops are entirely absent in the extant organs, and are only otherwise recorded in Mace's 'table organ'. An interesting insight into why such stops were not favoured in this context is gained from Roger North who, in a discussion of various aspects of sound production in wind instruments, criticised the imitative reed stops he had encountered:

This voicing hath divers infirmitys: first, the temper of the air works upon the spring, and in a short time vitiates the tune [i.e. reed stops fall out of tune quickly due to the movement of the reeds]; 2nd, the pipes are backwards to sound and require other pipes to accompany, whereby to beat them into action [i.e. are slow to speak and need doubling by another stop]; 3rd, the bases will always snore, and that defect cannot be conquered, so that in Organs they are rather an encumbrance than useful.⁷⁹

In addition to this, reed stops tend to hold their pitch despite changes of temperature, which makes them appear to fall out of tune with flue pipes, which vary in pitch with fluctuating temperatures. This is more noticeable in conjunction with metal flue pipes, which expand and contract to a greater extent than do wooden ranks, but is still a problem when reeds are combined with wooden flue ranks.⁸⁰ This difference in tolerance may be the reason why wood and metal pipes are rarely found together in consort organs: provincial customers who did not have ready access to an organ builder or tuner required organs that were reliable both mechanically and in the stability of their tuning. Dominic Gwynn has discovered some evidence to suggest that the flue pipes were made exactly to length and not provided with any tuning devices, such as metal flaps;⁸¹ his empirical experience of using such a method suggests that such pipes do indeed hold their tuning and temperament successfully over time.⁸²

It is notable that the seventeenth-century preference for a principal-based wooden-piped tonal homogeneity in the consort organ contrasts with the variety of sonorities and pipe materials recorded in the Henry VIII instruments. This may perhaps be an expression of a gradual shift in contemporary taste from the varied instrumental colours of the broken consort towards the more uniform sound of the viol consort. It may also reflect a move away from the more strident tonal effects of some of the Renaissance woodwinds catalogued in the Henry VIII inventory (crumhorns, bagpipes, dulcians and shawms, represented on the sixteenth-century organ by the regal stops) towards the 'smoother' sonorities of the instruments

⁷⁹ Roger North, *The Common Sonorous Tubes* (Unpublished essay, n.d.)

⁸⁰ Herbert Norman and John Norman, *The Organ Today* (Newton Abbott: David & Charles, 1980), p.137

⁸¹ Dominic Gwynn, *Canons Ashby House Northamptonshire: Anonymous 17th Century Chamber Organ Restoration Report* (Welbeck: The Harley Foundation, 1990), p.27

⁸² Goetze and Gwynn's 2003 organ for Harm Vellguth, based on the Staunton Harold pipework, used pipes cut to exact length. See <http://www.goetzegwynn.co.uk/organ/consort-organ-in-17th-english-style-made-for-harm-vellguth/> accessed 29 March 2016

recorded at the Jacobean court (cornetts, trumpets, sackbuts, viols, violins, echoed in the homogenous tonal effect of the chorus of similarly-voiced wooden diapasons found in the consort organ). Many of the stops were divided into treble and bass halves, with the dividing point falling between b/c¹ before c.1640 and between c¹/c^{#1} thereafter. The provision of this feature, which increases the complexity of the instrument, is at first sight a puzzling one given that there is no obvious use for it in contemporary solo organ repertoire, but when considered in the context of instrumental consort music its potential becomes clearer; this aspect, together with the various uses of the stops, are discussed more fully in chapter 5.5.

All of the organs, excepting that at Compton Wynnyates, have a single manual. None has pedals. The keyboard octave span varies relatively little (164mm - 168mm) between c.1630 and 1700, although the earlier Knole and Smithfield organs have rather wider keys, at 178mm and 170mm respectively. The most common compass found among the extant instruments is 49 notes, C AA D-c³, occasionally extending to d³ after the Restoration (Table 1.6). This corresponds closely with the compass found in the majority of extant contemporary English virginals and harpsichords.⁸³

It is noteworthy that all the extant organs have a full bass compass from C, excepting C#. This seems very probably to have been directed by the need to correspond with both the compass of the contemporary English virginal or harpsichord, and to that of the viol consort. It contrasts with continental practice where a compass from F - a² or c³, equating to the vocal gamut, was the typical provision for all but the largest organs.⁸⁴ Indeed, Kinsela argued the case that where a compass from C was found in Italian or German keyboard instruments of the late Renaissance, it was closely related to their use with other instruments, especially the bass viol.⁸⁵ Evidence from the sixteenth century suggests that the F and C compasses represented the 'single' and 'double' nomenclature encountered in sources such as the Henry VIII inventory: consort organs were, therefore, 'double' instruments in this sense of the term.⁸⁶

⁸³ Kinsela, *Taxonomy* pp.387-8 and 392

⁸⁴ *Ibid.* pp.371-2

⁸⁵ *Ibid.* p.373

⁸⁶ *Ibid.* p.376

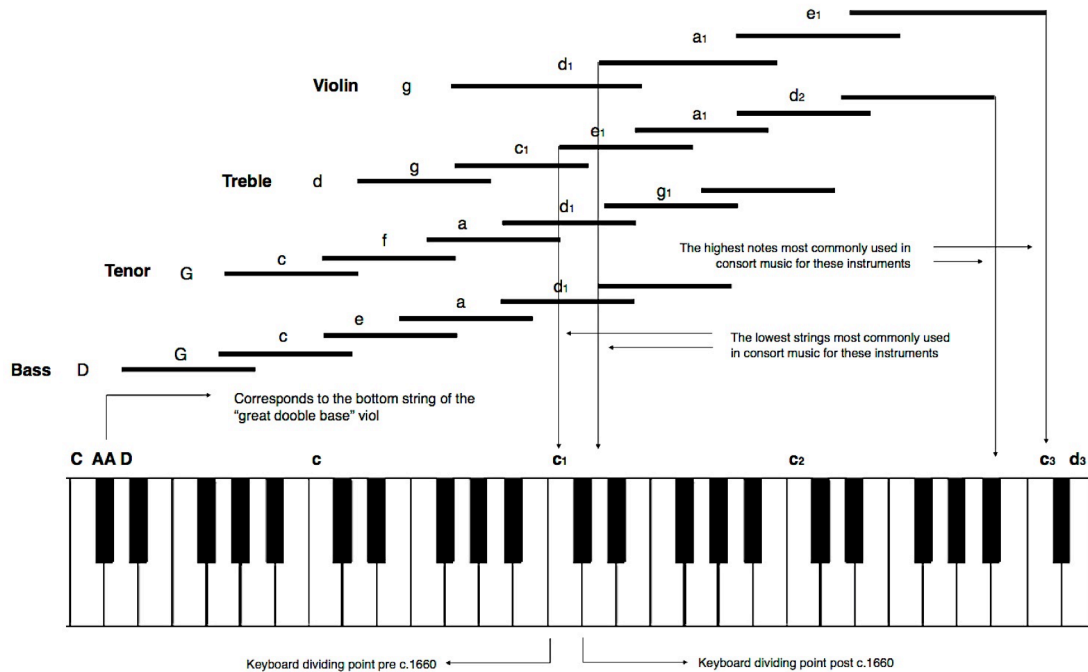
Table 1.6: consort organ keyboard compass and stop controls

	Compass	Notes	Octave Span	Dividing Point	Stop Position	Stop Type
Knole House c.1600	C D-a ² (Gwynn) AA C D E-a ² . (Force)	45	178	none	keyboard jambs	levers
Dean Bargrave 1629	C-a ²	46		b/c ¹	front horizontal	levers
Smithfield VA 1630	C AA D-c ³	49	170	b/c ¹	side	? knobs
Staunton Harold c.1630	GG C AA D-c ³	50	168	b/c ¹	side (front 1686)	? knobs
Christianus Smith 1643	C AA D-c ³	49		c ¹ /c ^{#1}	keyboard jambs	levers
Canons Ashby c.1650	C AA D-c ³	49	166	c ¹ /c ^{#1}	keyboard jambs	levers
Mander c.1660	C AA D-d ³	51		none	keyboard jambs	levers
Thornton c.1660	C AA D-c ³	51			front horizontal	Knobs (C18)
Worcester Cathedral 1665	C AA D-d ³	51		c ¹ /c ^{#1}	replaced c.1777	Knobs c.1777
Compton Wynyates c.1670	C AA D-c ³	49	166	none	keyboard jambs	levers
Ex-Finchcocks c.1680	C-c ³	49		none	keyboard jambs	levers
Nottingham c.1680	C AA D-c ³	49		c ¹ /c ^{#1}	keyboard jambs	levers
Russell Collection c.1680	C AA D-d ³	51	164	c ¹ /c ^{#1}	keyboard jambs	levers
Dingestow Court c.1680	GG C AA D-e ³	54		c ¹ /c ^{#1}	front vertical	levers
Belchamp Walter c.1680	C AA D-c ³	49		c ¹ /c ^{#1}	keyboard jambs	levers
RCM 1702	GG C AA D-c ³	49	167	c ¹ /c ^{#1}	keyboard jambs	levers

The compass of these organs corresponds closely with the usual compass of a consort of viols (Fig.1.5), which ranges from D of the bottom string of the consort

bass to the bb^2 of the seventh fret of the treble's top d^2 string. The highest note found in the repertoire scored for a violin on the top part rarely exceeds c^3 , and at the opposite extremity, the lowest note in the viol consort repertoire (found in a few works by Gibbons incorporating the low-pitched 'great dooble base') corresponds to the low AA, operated on the organ by the bottom C# key.⁸⁷

Fig 1.5: consort organ keyboard compass in relation to viols and violin



Stop controls

The Smithfield and Staunton Harold cabinet organs have (or originally had, in the latter case) stop knobs that were effectively extensions of the sliders projecting from the bass and treble sides of the case.⁸⁸ This arrangement is often reflected in iconographical representations of positives, and has been used for the EEOP reconstructions. The Dean Bargrave organ had horizontally-projecting sliding levers either side of the keyboard,⁸⁹ and all the other cabinet organs employ vertical sliding metal stop levers that are placed in the key jambs at the bass and treble ends. In all three types of stop action, the movements required to bring a stop 'on' or 'off' are very small (ranging from 5mm to 13mm in the case of the Smithfield organ) and

⁸⁷ Francis Baines, 'Fantasias for the great double bass viol' *Chelys* 2 (1970) pp.37-8

⁸⁸ Gwynn, *Staunton Harold* p.39 and *Chamber Organ* p.112

⁸⁹ James Collier, 'Dean Bargrave's Organ at Canterbury' *BIOSJ* 21, 56-74 (1997) p.72

their close proximity to the keyboard means that stop changes can be made very quickly without removing the hands far from the keys.⁹⁰ This contrasts with the usual seventeenth-century church organ arrangement, where the stop knobs are mounted in vertical columns either side of the music desk and, due to the greater forces required by the longer mechanical runs, require a much longer draw to operate. The performance practice implications of these differences are discussed in Chapters 4.6 and 5.3.4.

1.4: Tonal characteristics and soundboard construction

It was, in particular, the continued development of the English wooden pipe-making tradition that imbued the consort organ with its distinctive, and indeed unique, sound, and which provided it with the tone quality that enabled it to blend so effectively with stringed instruments.⁹¹

Pipe construction

The pipes of consort organs, and indeed English wooden pipes generally, were made in a way that differed distinctly from the methods employed on the continent.⁹² As such they represented a distinctive and long-established national tradition that extended back into the sixteenth century, and possibly before.⁹³ Dominic Gwynn neatly summed up the essential characteristics of their construction when he wrote that ‘they resemble metal pipes made in wood, in that the block, with its bevelled top edge, projects above the lower lip of the cap as if it were a languid bevel, and the flue is in the cap rather than the block’.⁹⁴ The earliest extant wooden pipes, from the Knole organ, are made entirely of oak. The feet, blocks and caps of the pipes in the other extant organs are mostly made of oak, but with bodies

⁹⁰ James Collier and Dominic Gwynn, *The 1630 Consort Organ from Hunstanton Hall, Norfolk, England now in St Luke’s Smithfield, Virginia, USA* (Smithfield: Historic St Luke’s Restoration, 2002), p.25

⁹¹ Gwynn, *Sound of the English Chamber Organ* pp.24-6

⁹² George Ashdown Audesley, *The Art of Organ Building* (New York: Dodd, Mead & Co., 1905), pp.447-69

⁹³ The earliest reference to an organ with a chorus of wooden pipes occurs in 1509 when Lady Margaret Beaufort bequeathed a ‘payre of Organs the pypis of wayndskott’ to Christ’s College, Cambridge. Scott, R., ‘On a List ... of the Plate, Books and Vestments Bequeathed by the Lady Margaret to Christ’s College’ *Proceedings of the Cambridge Antiquarian Society* 9, 361-5

⁹⁴ Gwynn, *Chamber Organ* p.113

of softwood.⁹⁵ By the eighteenth century it was more usual for all parts of the pipe to be made from softwood:⁹⁶ the partial retention of oak in the consort organ pipes is another way in which they refer back to an earlier tradition. In addition to this distinctive construction, the consort organ pipework is distinguished by the use of relatively narrow scales (length-to-width ratio of the pipe bodies) and very low cut-ups (mouth heights). These two features in particular, in combination with other factors that are necessary to allow pipes so constructed to speak successfully, imbue the consort organ with its characteristic and distinctive tonal quality.

Scales and cut-ups

Gwynn has suggested that the scaling of seventeenth-century wooden pipework in church organs was based closely on the scaling of metal pipes, using the same inner circumference and mouth widths as the equivalent circular metal pipes.⁹⁷ The comparative data he collected on consort organ pipe-scales was also based on measurements of the pipe circumferences.⁹⁸ A drawback with this method is that different pipes of a given circumference do not necessarily have the same internal area: depending on their dimensions, the area can vary by as much as 15% within the normal parameters of pipe geometry. This study therefore expresses the scaling in terms of the internal area of the pipes, which allows better comparisons between differently constructed ranks in different instruments.⁹⁹

Because English organ pipework has generally increased in scale with each succeeding century, there is a danger in over-stating the narrowness of consort organ pipes, and comparison with examples from later periods does not therefore

⁹⁵ Gwynn, *Canons Ashby* p.25; *Staunton Harold* pp.13-27; *Smithfield* p.39; Dominic Gwynn and Martin Goetze, *Compton Wynnyates: Late Seventeenth Century Chamber Organ* (Welbeck: The Harley Foundation, 2005), pp.3-5; Dominic Gwynn, *St George in the Meadows, Nottingham: Late 17th Century Chamber Organ* (Welbeck: Harley Foundation, 1994), p.4

⁹⁶ David Wickens, 'Archaeological Research: Pipework' in James Berrow, (Ed.) *Towards the Conservation and Restoration of Historic Organs* (London: Church House Publishing, 2000), p.53

⁹⁷ Gwynn, *Chamber Organ* p.113

⁹⁸ *Ibid.* p.114

⁹⁹ Throughout this section, consort organ ranks are compared with pipework with as similar a mode of construction as possible, e.g. consort organ principals are compared to other open wood ranks. I am grateful to William McVicker for his guidance in avoiding some of the potential pitfalls that this kind of comparison might encounter.

yield particularly significant information.¹⁰⁰ The pipes are certainly extremely narrow by modern standards, but the alchemy of pipe-voicing involves a balance between the adjustment of a number of variables (of which scaling is but one) that can be manipulated to achieve a wide spectrum of tonal results from the same basic pipe construction. Nevertheless, it can be shown that the scaling of English consort organ pipework is indeed narrow compared to that of contemporary church organs. Table 1.7 presents the internal pipe area of 4ft Principals from four of the extant organs.

Table 1.7: internal pipe area (in mm², rounded to the nearest mm) of open 4ft ranks¹⁰¹

	C	F	c	f	c ¹	f ¹	c ²	f ²	c ³
Knole House (Chest organ c.1600)	4485	2400	1152	750	413	298	-	-	-
Smithfield, Virginia (Consort organ 1630)	missing	1207	620	417	189	139	71	50	26
Canons Ashby (Consort organ c1650)	stopped	1132	567	332	167	102	62	39	30
Compton Wynyates (Consort organ c1670)	2322	1294	689	417	208	123	75	49	37

Unlike the theoretically calculated pipe scales of later centuries, the scale progressions of these stops appear to be based on simple mathematical formulae that were subject to much empirical adjustment during construction in order to achieve a satisfactory tonal result. Indeed, plotting these scale progressions on a graph reveals a number of deviations from the smooth curve expected from a rigorously applied mathematical formula, and similar digressions may be seen within the dimensions of the cut-ups discussed below. As Roger North observed,

¹⁰⁰ Data from later organs is listed in David Wickens, *Aspects of English Organ Pipe Scaling* (Oxford: Positif Press, 2004)

¹⁰¹ The data quoted in Tables 1.7-1.12 are obtained from the following sources:

Knole: Dominic Gwynn, *Knole House Anon ca1600/ca1660 Chest Organ* (Welbeck: Harley Foundation, 2005), pp.7-16

Smithfield: Gwynn, *Smithfield* pp.61-70

Canons Ashby: Gwynn, *Canons Ashby* pp.10-22.

Compton Wynyates: Gwynn, *Compton Wynyates* pp.18-31

Staunton Harold: Gwynn, *Staunton Harold* pp.14-25

Nottingham: Gwynn, *St George* pp.16-19

Cambridge: Dominic Gwynn, *Great St. Mary's Cambridge Father Smith Organ 1698*. (Welbeck: Harley Foundation, 1995), pp.17-18

‘organ pipes made to the same gage and tone by different workmen – nay by one and the same at severall times – tho’ designed to imitate, shall yet differ.’¹⁰² When working with pipes constructed at the limit of their physical properties, theory inevitably had to give way to practical expediency in the quest for a satisfactory sound.

Comparison of the 4ft scales with the surviving 2ft Fifteenths at Smithfield and Canons Ashby demonstrates that the 2ft stops (Table 1.8) are even more narrowly scaled. For example, the internal pipe area of the c pipe of the Smithfield Principal is 620mm², whereas the C pipe of its Fifteenth (a pipe of the same length and sounding pitch) is only 546mm², some 12% smaller.

Table 1.8: internal pipe area (in mm², rounded to the nearest mm) of open 2ft ranks

	C	F	c	f	c ¹	f ¹	c ²	f ²	c ³
Smithfield, Virginia	546	432	210	140	58	52	31	24	23
Canons Ashby	529	342	190	114	-	-	43	-	-
Knole House (new rank c.1660)	789	-	365	289	189	151	68	53	-

As an experienced organ restorer, Gwynn observed that the ‘pipes of a seventeenth-century chamber organ are as narrow as one finds in any organ. Their width is close to that of normal pipes an octave higher in pitch, [such] that they can overblow to the second harmonic, which is the octave for open pipes, and the twelfth for stopped pipes. The result is that the fundamental is relatively weak, and the lower harmonics are relatively strong, as in a viol’.¹⁰³ After setting the mouth height and scale, the remaining adjustments open to the voicer are ones to control the speech of the pipe, and in particular the tendency to overblow. These comprise adjusting the angle of the wind towards the upper lip, and controlling the amount of air entering the pipe.¹⁰⁴ The internal construction of the pipe mouths causes the air stream to be directed quite far back into the pipe body, which results in a reduction of turbulence

¹⁰² Wilson, *Roger North* p.71

¹⁰³ Gwynn, *Chamber Organ* p.113

¹⁰⁴ See Gwynn, *Sound of the English Chamber Organ* pp.24-7 for a more detailed discussion of this process.

around the upper lip and thus a reduction in the edge tones at the beginning of the pipe's speech. Restricting the volume of air admitted to the pipe foot by means of toe-hole plugs results in a reduction of the overall dynamic level of the pipe.

These two operations together result in very smooth speech, without a noticeable starting transient or 'chiff' at the beginning of a note, combined with relatively modest dynamic levels.¹⁰⁵ These two qualities are further features that may readily be associated with the characteristic sound of the viol, and imbue the pipes with a sound that even today would readily be identified by organists as 'stringy'.¹⁰⁶

Pipes with similar characteristics to these came to enjoy great popularity in the nineteenth and twentieth centuries, where they were known as 'string' stops and were provided with names that reflected their perceived tonal quality, such as *Viole d'Orchestre*, *Violin Diapason*, *Geigen* and indeed *Viola da Gamba*.¹⁰⁷ This close tonal affinity with the sound of stringed instruments is one of the defining characteristics of the consort organ, and rendered it a suitable partner to the viol consort, where it could be employed, as Thomas Mace put it, 'Evenly, Softly, and Sweetly Acchording to All'.¹⁰⁸

In conjunction with the narrow scales, the cut-up, or mouth height, of the open pipes is very low, and this also serves to add emphasis to the lower harmonics (Table 1.9).

¹⁰⁵ D. Steenbrugge, 'Flow acoustical determinants of historic flue organ pipe voicing practices' (2010). Paper given at the International Symposium on Music Acoustics, 25-31 August 2010, Sydney, Australia.

¹⁰⁶ Such subjective responses to organ tone, though familiar to organists, have until recently defied classification, but for examples of research in the field see Vincent Rioux and Daniel Västfjäll, 'Analyses of Verbal Description of the Sound of a Flue Organ Pipe' *Musica Scientiae* 5:1, 55-81 and Vincent Rioux, *Sound Quality of Flue Organ Pipes: an Interdisciplinary Study on the Art of Voicing* (Göteborg: Chalmers University of Technology, 2001)

¹⁰⁷ Audsely, *Organ Building* pp.469-79

¹⁰⁸ Mace, *Musick's Monument* p.234

Table 1.9: cut-up (measured to the cap, in mm) of 4ft Principals

	C	F	c	f	c ¹	f ¹	c ²	f ²	c ³
Staunton Harold	10.2	10.4	8.3	6.6	4.6	3.8	2.6	2.8	2.6
Smithfield, Virginia	missing	6.3	4.8	3.5	2.8	2.5	1.7	1.6	1
Canons Ashby	stopped	5.9	6	3	2.5	1.9	2.1	1.5	1.4
Compton Wynyates	8.4	8.3	5.9	4.9	3.5	3.3	2.6	-	-

Again, the direction of wind flow and the volume of air admitted are crucial in controlling the tendency of such inherently unstable pipes to lose speech. In some of the smallest pipes, the cut-up is barely 1mm, demonstrating the way in which the builders of the consort organ pushed the possibilities of wooden-pipe voicing to the extremes. In conjunction with the cut-up, the treatment of the upper lip is an important ingredient in the production of tone quality. The consort organs have particularly thin lips, which are important for successful voicing when the flow-through of air in the pipe is relatively limited.¹⁰⁹

Thin lips also play a part in encouraging the production of lower harmonics, especially in the smaller pipes, thus allowing them to maintain their ‘stringy’ tone quality throughout the treble part of their compass. Nicking of the lips (small indents used to create turbulence, which allows a more steady speech and reduces edge tones)¹¹⁰ is entirely absent in the Smithfield and Canons Ashby organs, and where it exists in the Compton Wynyates and Staunton Harold organs it is clearly non-original.¹¹¹

The Stopped Diapasons in all the organs are voiced slightly differently to the open principal pipes. As well as dropping the pitch by an octave, the stoppers remove the octave harmonics from the tonal spectrum of the pipe and provide an emphasis on

¹⁰⁹ Gwynn, *Sound of the Chamber Organ* p.24

¹¹⁰ See Colin Pykett, ‘The Tonal Structure of Organ String Stops’ (2012). Author’s website <<http://www.pykett.org.uk/tonal-structure-of-organ-strings.htm>> accessed 16 December 2016

¹¹¹ Gwynn *Staunton Harold* p.12 and *Compton Wynyates* p.4

the fundamental and the third harmonic, or twelfth, which imbues the sound with a more ‘nasal’ quality than that of the open principals. Although still quite narrow even by contemporary standards (Table 1.10), these pipes are scaled wider than the principals, with a less restricted windway, allowing a slightly louder dynamic, and with the air stream aimed more directly at the upper lip, allowing the formation of edge tones and therefore a small but discernible starting transient to the speech.¹¹² The Stopped Diapason therefore adds strength to the overall tonal output of the organ, and can also bring a degree of clarity in polyphonic textures through the definition provided to each note by its more articulated speech.

Table 1.10: internal pipe area (rounded to the nearest mm²) of 8ft Stopped Diapasons

	C	F	c	f	c ¹	f ¹	c ²	f ²	c ³
Knole House	7350	3304	2272	1325					
Staunton Harold 1686 stop for church	11250	5760	2700	1645	821	441	330	202	109
Smithfield, Virginia	5706	3580	1701	1142	664	340	170	109	59
Canons Ashby	Modern	3170	1729	994	623	390	199	156	95
St George’s Church Nottingham	Missing	4652	2214	1375	794	516	332	215	132
Great St Mary’s Cambridge Church organ, 1698	11396	7491	4002	2554	1474	959	586	385	189

Comparison of the cut-ups of these same stops shows that their dimensions are rather closer to those of liturgical and later organs than those of the open pipes (Table 1.11).

¹¹² Gwynn, *Sound of the Chamber Organ*, 25

Table 1.11: cut-up (measured to the cap in mm) of 8ft Stopped Diapasons

	C	F	c	f	c ¹	f ¹	c ²	f ²	c ³
Staunton Harold 1686 stop for church	17.9	13.2	10	8.3	6.4	6.4	5.2	3.8	2.8
Smithfield, Virginia	16.1	13.2	9.1	8.4	6.0	4.7	3.6	3.1	2.7
Canons Ashby	Modern	10.6	6.8	5.3	4.1	3.6	2.4	-	1.9
St George's Church Nottingham	Missing	13.5	10	8.4	6.3	6.5	5.2	5.2	2.6
Great St Mary's Cambridge Church organ, 1698	18	16.7	12	10.2	6.2	6.6	4.2	3.9	2.7

Wind pressure

Although no organ retains its original blowing mechanism intact (see section 1.6 below), the importance of the correct wind pressure in each individual organ means that the later replacement wind mechanisms have, of necessity, preserved wind pressures close to the originals. The wind pressures that the extant organs operate on vary quite widely (Table 1.12).

Table 1.12: wind pressures of extant consort organs, measured at the soundboard

	Wind Pressure	Source
Knole House c1600	80mm	Renshaw 1980
Staunton Harold c1630	65mm	Gwynn 1998
Canons Ashby c1650	42mm	Gwynn 1990
St George, Nottingham c1680	35mm	Gwynn 1994
Wollaton Hall c1690	44mm	Bicknell 1982

The earlier organs supply relatively high pressures to the soundboard, but use regulation at the pipe foot (in the form of wooden wedges that restrict the airflow) to reduce the pressure at the pipe mouth, allowing the low cut-ups that produce the distinctive harmonic profile of the pipe sound. The later instruments also employ this manner of regulation, but to a lesser extent due to the lower pressure supplied by their bellows. This manner of voicing contrasts with the so-called 'baroque' techniques often employed in many modern continuo organs in which low wind

pressures (typically 40-50mm)¹¹³ are combined with open-toe voicing of the pipes – i.e. the toe (the hole at the bottom of the pipe) is opened to its fullest extent with no restrictions in place, and the voicing is achieved by adjustments to the cut-up, which is usually high.¹¹⁴ Similar techniques may be observed in seventeenth-century French and German church organs,¹¹⁵ but it is important to note that the typical modern interpretation of these practices – low pressures, open toes and high cut-ups – is exactly the opposite of the usual seventeenth-century English consort organ practice and results in quicker speech, a more pronounced starting transient and a brighter overall sound.

Within this context, it is interesting to note that the variations of pressure inherent in the filling and emptying of bellows has relatively little impact upon the tuning stability of the pipes, although it can be made to influence the dynamic output of the pipes by a small margin. Roger North remarked upon this phenomenon:

But in the Organs the blast is always the same, which is a great perfection to the sound of the flutes there [i.e. compared to their instrumental equivalents - flutes and recorders], which kind are most apt to stray.¹¹⁶

North also applauded the makers' ability to voice pipes of varying sizes on the same wind pressure:

And it is a wonderfull nicety and skill in the organ builders, to make the same wind serve all pipes, great and small, and not to overblow the small ones and make them break into the whistle, and at the same time [not to let] the great ones want wind. And not onely that, but other perfections in that magnifick instrument, shew a result of the most utmost study and experience of ages upon ages, to bring it to what it is.¹¹⁷

The pipe scale charts above reveal that, whilst the bass pipes are exceptionally narrowly scaled, the trebles tend to move closer to the norm as the compass ascends; this is undoubtedly the factor which allows the uniformity of voicing that North noted. He was surely correct in identifying the 'study and experience of ages

¹¹³ D. Steenbrugge, 'Flue organ pipe operating regimes and voicing practices' *Proceedings of the Acoustics 2012 Nantes Conference* (Nantes: Société Française d'Acoustics, 2012), p.2793

¹¹⁴ Rioux, *Flue Organ Pipes* p.7

¹¹⁵ See Steenbrugge, *Historic organ flue pipe voicing* for a comparative study

¹¹⁶ Wilson, *Roger North* p.233

¹¹⁷ *Ibid.*

upon ages', as the voicing skill displayed in the consort organs represents many decades, if not generations, of accumulated empirical experience, and underlines the fact that these instruments were the heirs to an established, well-developed and sophisticated tradition of wooden pipe-making. The performance practice possibilities afforded by such winding systems are discussed in Chapter 5.4.

Soundboard Layout

The soundboard and casework of the consort organ formed part of the structural framework of the instrument, unlike those of the church organ in which the soundboard was attached to a building frame and the case was usually structurally separate.¹¹⁸ As Gwynn has discovered through his restoration work on several of these instruments, the consort organ soundboard was built sequentially from the bottom upwards and was not intended to be taken apart again easily, although the upper and lower halves of the case itself could usually be separated to aid moving the instrument.¹¹⁹ The layout of the soundboard was generally chromatic, sometimes with some bass pipes offset to the treble end. This contrasted with the diatonic layout of the church organ, in which pipes were divided between c and c# 'sides'.

While the consort layout simplified the necessary action runs considerably, it posed problems relating to the tuning of the pipes, given the risk of adjacent pipes pulling each other out of tune – an effect exacerbated by the need to juxtapose the pipes so closely for maximum space efficiency.¹²⁰ The builders showed considerable resourcefulness in solving the technical problems created by the cramped interiors of the cases, with the use of mitres (angled joints) on the bass pipes to reduce their height and ingenious windways that allowed the pipes to be placed very close together.

Unlike the church organ, which underwent considerable development, particularly after the Restoration, the consort organ was built in a style that did not change significantly throughout the century. The later organs from the 1680s are

¹¹⁸ John Norman, *The Box of Whistles: the History and Recent Development of Organ Case Design* (London: SPCK, 2007), pp.44-5

¹¹⁹ Gwynn, *Canons Ashby* p.34

¹²⁰ See A.B. Pippard, *The Physics of Vibration* (Cambridge: CUP, 1989), p127

mechanically very similar to the Smithfield organ of c.1630 in many respects. This may be linked to the conservatism that is a characteristic of much of the consort organ repertoire, or it may simply be that the consort organ fulfilled its function perfectly well and did not require development. There was a contemporary trend of venerating old instruments, as demonstrated by the value placed on sixteenth-century Ruckers harpsichords by seventeenth-century players,¹²¹ or the esteem for the work of the early English viol makers reflected in Thomas Mace's remark that 'we chiefly *Value Old Instruments*, before *New*; for by *Experience*, they are found to be far the *Best*'.¹²² This conservatism is one factor that makes establishing a precise chronology for the extant organs difficult.

1.5: Pitch and Temperament

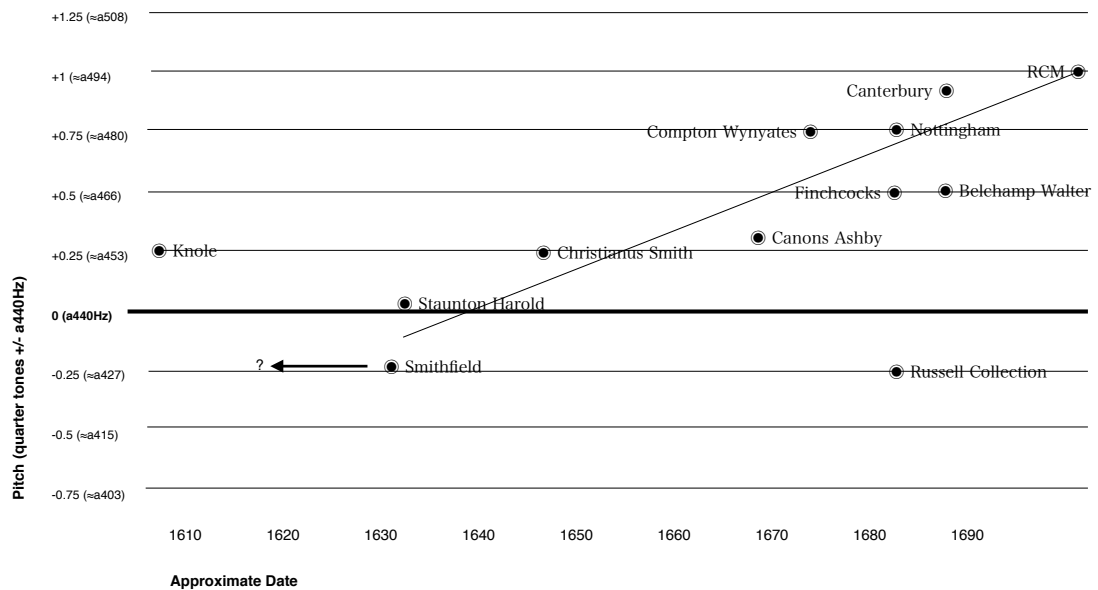
Although most of the extant organs have undergone modifications that have altered their pitch to a lesser or greater extent, sufficient evidence remains in twelve of the sixteen instruments to enable the original pitch to be recovered reliably. This information is represented in Fig.1.8.

There are not enough data from the first two decades of the century to provide any useful information, and it is therefore impossible to ascertain if the pitch of the Knole organ is typical of its time. It can be seen that the majority of the organs were pitched above modern concert pitch, and all were significantly sharper than the modern 'Baroque' pitch of a415. A clear trend is the gradual rise in pitch over the century, from something close to modern concert pitch of a440 in the 1630s rising by up to a tone by the end of the century. This places the later organs as much as six quarter-tones, or a minor third, higher in pitch than the a415 standard widely adopted by most amateur and the majority of professional viol consorts today.

¹²¹ Edward Kottick, *A History of the Harpsichord* (Bloomington: Indiana University Press, 2003), p.248

¹²² Mace, *Musick's Monument* p.245

Fig.1.8: Scatter graph of extant consort organ pitches, in quarter-tone intervals relative to a440



The evidence examined in chapter 2 suggests that most provincial domestic musical establishments outside the court did not, in practice, appear to share or exchange musical instruments to any significant extent. Visiting musicians would presumably have used the household instruments when playing in consort at each establishment. It would have been relatively easy to construct an organ to match the bespoke pitch of an existing chest of viols belonging to a specific customer, given that the scales of consort organs were built up from the bottom pipe of each rank rather than being based on absolute, pre-existing scale charts.¹²³ It seems likely that some sort of pitch standard would have been applied at court, given the multiplicity of interchangeable organs, players and instruments employed over an extended period, but no information survives.¹²⁴ In contexts such as music meetings, where a more rapid turnover of musicians was inherent in the nature of the music-making, it is not clear how pitch differences would have been accommodated. Some leeway is possible in the tuning of viols and violins, but given the common advice to string players to tune their strings up to a point just before they would break,¹²⁵ the larger low-pitched instruments described below would not have easily been usable with consort organs.

¹²³ Gwynn, *Chamber Organ* p.120

¹²⁴ For an examination of a contemporary court pitch standard employed in France, see Bruce Haynes, 'The King's Chamber Pitch' *Early Music Performer* 12 (2003), 13-23

¹²⁵ John Playford, *A Breefe Introduction to the Skill of Musick* (London: Playford, 1654), p.107

Comparison of organ pitches with extant viols is made difficult by the fact that the surviving viols are few in number and are not likely to be a representative sample.¹²⁶ As Eph Segerman has pointed out, most of the survivors were specifically selected for preservation because they conformed to particular types or sizes most suited to the musical purposes of later generations, such as conversion into cellos.¹²⁷ Furthermore, variables in factors such as the gauge and density of gut, and the tension applied to it, mean that the size and pitch of viols are not necessarily directly related.¹²⁸ The derivation of pitch standards from the analysis of the dimensions of extant viols is not therefore always a reliable or consistent process.

Reference to contemporary treatises does little to clarify the situation; Praetorius's comments on the pitch of English viol consorts are rather opaque and open to differing interpretations,¹²⁹ whilst Mace's observations are hampered by imprecision.¹³⁰ The measurements of viols taken by James Talbot in the late 1600s¹³¹ inspired the twentieth-century adoption of relatively large instruments pitched at a415,¹³² but the current ubiquity of these instruments is challenged by the survival of a number of much smaller contemporary viols that suggest use at a higher pitch. Whilst the adoption of two polarised pitch standards, after the manner of choir and organ pitch, as suggested by Ian Harwood seems now unlikely, these variations serve to illustrate the wide range of pitches that appear to have constituted the norm.¹³³

¹²⁶ John Catch, 'Praetorius and English Viol Pitch' *Chelys* 15, 26-32 (1986), 29

¹²⁷ Ephraim Segerman, 'The Sizes of English Viols and Talbot's Measurements' *GSJ* 48, 34

¹²⁸ Catch, *Praetorius*, 29

¹²⁹ Compare Catch, *Praetorius* and Wilfred Myers, 'Renaissance Viol Tunings: A Reconsideration' *JVdGSA* 44, 13-40

¹³⁰ Mace's most useful information is that a chest of viols should be 'as *near Suiting* as you can ... especially for *Scize'* such that the total string length of a treble should equal that of the distance from the bridge to nut of a bass. Mace, *Musick's Monument* p.234

¹³¹ Transcribed in Robert Donington, 'James Talbot's Manuscript (Christ Church Library Music MS 1187): III Bowed Strings *GSJ* III, 27-45

¹³² Established through the influence of Arnold Dolmetsch, *The Interpretation of the Music of the Seventeenth and Eighteenth Centuries* (London: Novello, 1930), G.R. Hayes, *Musical Instruments and their Music 1550-1750 Vol. 2: The Viols and other Bowed Instruments* (London: OUP, 1915) and Nathalie Dolmetsch, *The Viola da Gamba* (London: Heinrichson, 1962)

¹³³ Ian Harwood, 'A Case of Double Standards? Instrumental pitch in England ca.1600' *EM* 9:4, 470-85. See also Michael Fleming and John Bryan, *Early English Viols: Instruments, Makers and Music* (London: Routledge, 2016) pp.315-20

Throughout the modern debate on this subject, the consort organ as a potential source of evidence has largely been ignored. The information presented above suggests that a reappraisal of the current understanding of viol pitch standards, at least for the consort repertoire with organ, is overdue. The implications of this for modern performance practice is discussed more fully in chapter 5.4.1.

Temperament

Most of the extant organs have undergone alterations that have resulted in the loss of the original temperament to which they were tuned. These alterations include the addition of metal tuning flaps in the eighteenth or nineteenth centuries (as at Smithfield and Canons Ashby) or the transposition of the pipework by one or more notes to bring the pitch into line with later pitch standards (as at Staunton Harold and Nottingham). Although these changes do not affect the collective ability of the pipework to yield information on its original pitch, they do destroy the subtle relationships in pitch between individual pipes that identify temperament. There may yet be some potential in examining the discolouration of the wood within the Stopped Diapason ranks to establish the original position of the stoppers, and this process has already been used to establish the original pitch of several of the organs.¹³⁴

The question of reconciling meantone keyboard temperaments with the more flexible tunings afforded by adjustable viol frets continues to be a vexed one. Historical sources suggest that experiments in temperaments were essayed from the early years of the seventeenth century in England. At the court of Prince Henry, for example, Henry's organist John Bull was writing works such as the *Ut re mi fa sol la* fantasia that employed a full set of twelve chromatic hexachords, prompting Christopher Field to suggest that Bull had some form of enharmonic organ with nineteen notes to the octave at his disposal.¹³⁵ Bull's court colleague Ferrabosco II also wrote a series of *Ut re mi fa sol la* fantasias for viols at some point between 1604 and 1612,¹³⁶ and it is interesting to note that Salomon de Caus, a mathematics tutor to Prince Henry who was employed at St James's Palace from

¹³⁴ Gwynn, *Chamber Organ* p.37

¹³⁵ Christopher Field and David Pinto (Eds.), *Alfonso Ferrabosco the Younger: Consort Music of Five and Six Parts, MB 81* (London: Stainer & Bell, 2003), xxix

¹³⁶ *Ibid.*

1610-12, wrote in a treatise dedicated to Queen Anne that the fingerboards of viols were 'eslongues par intervalles de semyttons exgaus (set out in intervals of equal semitones)'.¹³⁷ It seems possible, therefore, that experiments in equal temperament were being undertaken in London as early as the first decade of the century.

In practice, a modified $1/5^{\text{th}}$ comma tuning produces a temperament that works tolerably well in most of the keys employed in viol consorts to the organ. The harmonic demands placed on the Smithfield organ by the contents of the L'Estrange manuscripts, and the resultant implications for tuning, are explored further in chapter 5.3.¹³⁸ What is clear is that the $1/4$ comma meantone espoused by Mersenne for 'ordinary organs', and frequently used today for keyboards employed in seventeenth-century music, is too inflexible to cope with the harmonic demands of the viol consort repertoire, despite the potential of adjustable fretting of viols to agree with it, if necessary.¹³⁹ Goetze and Gwynn's experience has shown that an exact equal temperament will not always work with all the extant pipework, but something along the lines of a modified $1/5^{\text{th}}$ or $1/6^{\text{th}}$ comma tuning seems to have been the most likely solution to the practical requirement of the repertoire and the associated instruments. Support for this approach from a documentary source may be found in the instructions for tuning 'clavical' (i.e. keyboard) instruments published by Roger North in 1726.¹⁴⁰ Wilson suggested that North may have learned his method from Captain Prendcourt, the German-born ex-court musician in his employment, or possibly even from Father Smith, who built a chamber organ for North's music gallery at Rougham Hall. North observed that 'some very good tuners will help a little, by robbing Peter to pay Paul; as by making #G over sharp... for that reason they call that note the wolf'.¹⁴¹ The end result of following North's formula is, essentially, the same as the empirically-derived modified $1/5^{\text{th}}$ comma meantone employed on the Nottingham organ.

¹³⁷ Salomon de Caus, *Institution Harmonique...* (Heidelberg, 1615)

¹³⁸ For a detailed harmonic analysis of the L'Estrange MSS see Christopher Kent, "'...Softly, and Sweetly Acchording to All'" The Historic St. Luke's Organ and Its Contemporaneous Repertoire' in Watson, *Organ Restoration*.

¹³⁹ Marin Mersenne, *Harmonie Universelle* (Paris: Cramoisy, 1636), III p.341

¹⁴⁰ See Wilson, *Roger North* pp.203-12.

¹⁴¹ *Ibid.* p.211

1.6 Wind Supply

Being the components subjected to the greatest movement and mechanical force in the organ, and given the perishable nature of bellows leather, there is relatively little original material left in the extant instruments of their blowing mechanisms. When worn mechanisms and bellows were replaced, they were often superseded by different designs reflecting advances in technology, such as eighteenth or nineteenth century multiple-fold or horizontal bellows to replace original single-fold bellows. Nevertheless, enough evidence of previous arrangements survives inside the extant organs to gain some insight into the winding system.

The earlier table organs had external bellows. The Dean Bargrave organ had two pairs,¹⁴² whilst the Smithfield organ had a single pair¹⁴³ (a similar arrangement may be seen in the EEOP constructions).¹⁴⁴ The apertures by which these were attached to the organs may be seen at the rear of the cases, although it is not absolutely certain whether the bellows themselves were placed at the rear of the organs, or were sited beside them and attached by means of wind-trunking. An assistant would have raised the single-fold bellows alternately to provide a constant supply of air directly into the windchest. In both instruments these arrangements were replaced by internal bellows at the top of the case in the eighteenth century, with a pedal mechanism to allow the player to raise the wind. At Knole, the original bellows were housed in the upper part of the case and appear to have been operated remotely by a cord accessed via a panel in the treble end.¹⁴⁵ Again, a later foot pedal was subsequently provided. The bellows in the cabinet organs were housed out of sight in the lower part of the case; at Staunton Harold an aperture survives in the treble end of the case for a cord or strap that would have been operated by an assistant, and it seems likely that similar arrangements would have been found in the other cabinet organs, although little evidence survives.¹⁴⁶

It is not clear whether a foot-operated pedal for the player was also originally provided in any of these organs; Thomas Mace's chest organ, described in 1676, had

¹⁴² Collier, *Dean Bargrave* p.71

¹⁴³ Gwynn, *Chamber Organ* p.111

¹⁴⁴ Gwynn, *Wingfield* p.23

¹⁴⁵ Renshaw, *An Early 17th Century Organ*, 41

¹⁴⁶ Gwynn, *Staunton Harold* p.39

such a mechanism, and all the extant organs were provided with such a system in the eighteenth or nineteenth centuries.¹⁴⁷ These comprised a horizontal reservoir fed by a single multiple-rise bellows. Most of the organs show evidence of the winding systems being subsequently modified, repaired or replaced several times over the years. None of the extant organs retains any evidence of a tremulant, but the fact that such devices were known in seventeenth-century England is demonstrated by Christopher Simpson's description of viol players' use of a 'Shake or Tremble with the *Bow*, like the shaking Stop of an *Organ*'.¹⁴⁸

As noted above, the wind pressures required by the organs varied widely. Compared to modern chamber organs of similar size, the pressures are generally high, but the pipes incorporated a greater degree of toe-hole plugging than would be normal today in order to regulate the volume of air flowing through the windway, thus helping to ensure that the delicately balanced voicing was not induced to fly up the octave. The relatively small size of the consort organ's wind mechanism and soundboard made the system more sensitive to fluctuations of pressure created not just by differing amounts of air in the system, but also by the action of pumping itself. The wind was very much a 'live' supply that had to be carefully controlled, but which also opened up opportunities for allowing careful manipulation of the bellows to introduce subtle nuances of phrasing and expression. The effect of varying the manner of operating the bellows handle or pedal on the sound produced by the organ, and the potential performance practice implications of this aspect of the organ's capability, is discussed in chapter 5.4.5. These subtleties, once an integral part of the art of performance on such organs, are now lost to all but a few enlightened players due to the widespread use of electric blowing equipment.

1.7: Casework and decoration

Iconography representing the consort organ from the seventeenth century is very scarce. Illustrations of organs that occur in contexts such as the title pages of printed music, carvings and paintings mainly feature generic, symbolic, allegorical and

¹⁴⁷ Mace, *Musick's Monument* p.244

¹⁴⁸ Christopher Simpson, *The Division-Violist, or an Introduction to Playing on a Ground* (London: Playford, 1659), p.9

often organologically-deficient depictions of the portative organs of the late medieval period rather than anything that represents the appearance of the extant consort instruments. Unlike in the seventeenth-century Dutch tradition, where keyboard instruments frequently appear in paintings by Vermeer and his contemporaries, English oil painting of this period did not favour detailed depictions of domestic life, and little information can therefore be gleaned from contemporary paintings.¹⁴⁹ The Henry VIII inventory reveals that mid-sixteenth century domestic organs could be lavishly decorated: some were gilded or painted, such as the double regals 'of woode gilte silvered and painted with Rabeske woorke and histories havinge the Kinges Armes with a gartire supported by his graces beastes'.¹⁵⁰ Less elaborate instruments in the collection were simply varnished or painted black. The Knole chest organ has no pipe display and the pipes are hidden within varnished panelling with moulded detailing derived from contemporary domestic furniture. The later extant table and cabinet organs, by contrast, have decorative and sometimes complex pipe-fronts that demonstrate that the visual appearance of the instruments was important. The sophistication of the designs suggests that they represent an already well-established tradition.

The pre-Commonwealth Smithfield and Christianus Smith table organs employ *trompe-l'oeil* fronts in which the pipes are arranged in decreasing size and painted to create faux-perspective effects of looking into a room,¹⁵¹ the latter organ including painted figures in contemporary secular dress.¹⁵² These reflect the diminishing-perspective appearance created by the pipe fronts in some pre-Commonwealth church organs, particularly in the work of the Dallam school of builders.¹⁵³ The pipe-front of the Canons Ashby organ appears to represent a transitional design, with 'flats' clearly derived from the faux-perspective front of the table organs, but with the characteristic 'towers' of three pipes that are a feature of the post-Restoration instruments inserted at each side and in the middle. With its plain, unpierced pipe shades and lack of decorative detail, the effect is austere, perhaps reflecting a Puritan approach to decoration. The post-Restoration organs have more flamboyant pipe-fronts that generate their effect from the groupings of the pipes

¹⁴⁹ Fleming and Bryan, *Early English Viols* pp.106-9

¹⁵⁰ *RECM* VII p.391

¹⁵¹ For a discussion, see David Goist, 'The Conservation of the Painted Surfaces on the Historic St. Luke's Organ' in Watson, *Organ Restoration*

¹⁵² For an illustration, see Collier, *Iconography* p.57

¹⁵³ e.g. the Robert Dallam case at Lanvallec, Brittany (1653). See Bicknell, *History* p.96

themselves within carved and sometimes gilded surrounds, rather than from applied decoration. The pipes are typically divided into five fields, organised to reflect the layout of alternating towers and flats found in contemporary church organs, but without horizontal projections and with the tops of both flats and towers placed at the same level to fit within a flat-topped case. The pipes themselves were usually gilded, or occasionally painted, as at Wollaton Hall, and are made of wood carved with a circular or semi-circular section to make them appear, from the front, like metal pipes.¹⁵⁴ In most organs the front pipes speak, unlike those of the dummy case-fronts of many later eighteenth-century chamber organs.¹⁵⁵

The pre-Restoration cases show evidence of having been painted in sober colours,¹⁵⁶ much as contemporary European chamber organs were, but the post-Restoration instruments were made of polished and stained wood, offering a more opulent finish.¹⁵⁷ The potential of such organs as a vehicle for the expression of status was probably a significant factor in the richness of their decoration: the organ was often placed in one of the principal rooms of a house where its visual impact as a statement of wealth and cultural sophistication, echoing that of the royal court, could be appreciated to maximum effect. The early table organs, along with several of the later cabinet instruments, such as those at Staunton Harold, Canons Ashby, Compton Wynyates and Wollaton Hall, have enclosing doors. As well as providing practical protection to the pipes within, they formed another surface that could receive decoration, usually in the form of oil paintings on Biblical subjects, allegories or coats of arms, thereby expressing wealth, power and perhaps the political or religious affiliations of the owning family.¹⁵⁸ Yet in an age when even the domestic organ was viewed with suspicion by some due to its perceived ritualistic or royalist associations, the ability to make the instrument appear from without as an ordinary item of furniture could be advantageous.¹⁵⁹ Opening the doors could then transform the instrument into an object of wonder, the experience being akin

¹⁵⁴ Ibid. p.25

¹⁵⁵ Wilson, *Chamber Organ* pp.43-7

¹⁵⁶ Gwynn, *Smithfield* p.134

¹⁵⁷ Gwynn, *Compton Wynyates* p.4

¹⁵⁸ A detailed description of the Smithfield door paintings is found in Goist, *Conservation*.

¹⁵⁹ Love has argued that instruments such as the Smithfield organ actually took on a 'quasi-ecclesiastical' status: Harold Love, 'The Religious Traditions of the North and L'Estrange Families' in Roger Sell and Anthony Johnson (Eds.), *Writing and Religion in England, 1558-1689: Studies in Community-Making and Cultural Memory* (London: Routledge, 2009), pp.411-28.

perhaps to that of opening a contemporary cabinet of curiosities to reveal the exotic treasures within.¹⁶⁰

1.8: Thomas Mace's 'Table Organ'

Contemporary descriptions of consort organs are rare. By far the most detailed is found in Thomas Mace's *Musick's Monument*, in which he described an organ 'of a very Convenient, Handsom, and Compleat Table-Scize; (which may Become, and Adorn a Noble-Mans Dining Room).¹⁶¹ From an organological point of view, this was more properly a chest organ. Mace's account implies that it was one of two organs he had built himself, although it seems more likely that he had drawn up the general design (Fig.1.9).¹⁶²

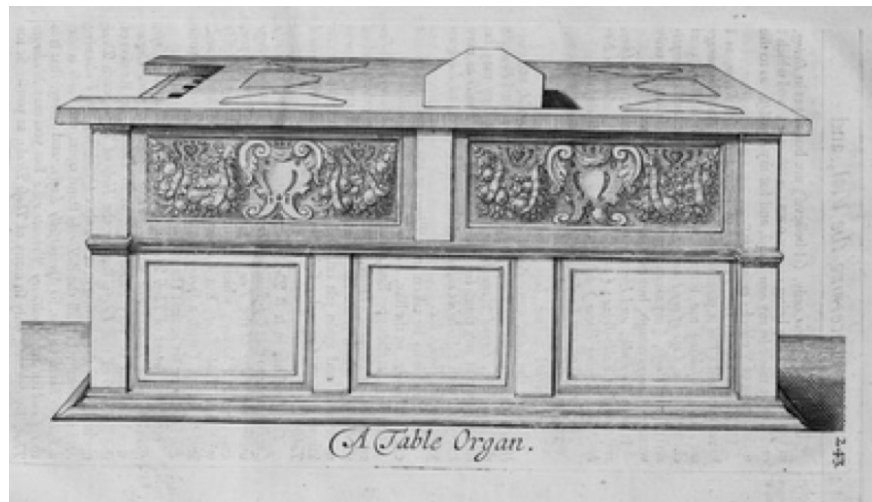


Fig.1.9 Thomas Mace's 'Table Organ' (*Musick's Monument*, 1676, p.243)

The dimensions were given as 7ft 5in in length, 4ft 3in in width, and 3ft 1in in height.¹⁶³ The wainscot case was pierced with grilles and included a music cupboard:

Beneath the Leaf [i.e. top panel], quite Round, is Handsom Carv'd, and Cut-Work, about 10 Inches Deep, to let out the Sound; And Beneath the Cut-Work, Broad Pannels, so contriv'd, that they may be taken down at any time, for the Amending

¹⁶⁰ See Celeste Olalquiaga, 'Object Lesson/Transitional Object' *Cabinet* 20

¹⁶¹ Mace, *Musick's Monument* p.244

¹⁶² *Ibid.*

¹⁶³ By comparison, the five stop Theewes claviorgan measures: length 8ft 6in, width 3ft 4in, height 3ft 5 in. Howard Schott, *Catalogue of Musical Instruments in the Victoria and Albert Museum. Part I: Keyboard Instruments* (London: V&A Publications, 2002), pp.40-2

such *Faults* as may happen, with 2 *Shelv'd Cubbords* at the *End* behind, to *Lock* up your *Musick Books*, &c. The *Leaf* is to be taken in 2 *Pieces* at any time for conveniency of *Tuning*, or the like. *Neatly Joyn'd* in the *Midst*.¹⁶⁴

The keyboard was provided with a lockable cover:

The *Keys*, at the upper *End*, being of *Ebony*, and *Ivory*, all *Cover'd* with a *Slipping Clampe* (answerable to the other *End* of the *Table*), which is to take off at any time, when the *Organ* is to be us'd, and again put on, and *Lock'd* up; so that none can know it is an *Organ* by sight, but a *Compleat New-Fashion'd Table*.¹⁶⁵

The top panel had eight folding music desks built into it, and the low height of the organ allowed the players to gather around the instrument in line of sight of each other, reflecting the typical performing layout of a consort spaced around a table.¹⁶⁶

The *Leaf* has in It 8 *Desks*, cut quite through very *Neatly* (answerable to that *Up-standing One*, in the *Figure*.) with *Springs* under the *Edge* of the *Leaf*, so *Contriv'd*, that they may *Open*, and *Shut* at *Pleasure*; which (when *Shut down*) *Joyn Closely* with the *Table-Leaf*; But (upon occasion) may be *Opened*, and so set up, (with a *Spring*) in the manner of a *Desk*, as your *Books* may be set against Them.

The desks could be used to regulate the volume of the instrument, and had the effect of adding more sound with the addition of each participating player:

Now the Intent of *Those Desks*, is of far more *Excellent use*, than for meer *Desks*; For without *Those Openings*, your *Organ* would be but of very *Slender use* as to *Consort*, by Reason of the *Closeness* of the *Leaf*; But by the *Help* of Them, each *Desk* opened, is as the putting in of another *Quickning*, or *Enlivning Stop*; so that wen all the 8 *Desks* stand open, the *Table* is like a *Little Church Organ*, so *Sprightfully Lusty* and *Strong*, that It is too *Loud* for any *Ordinary Private use*: But you may *Moderate That*, by opening only so many of *Those Desks*, as you see fit for your *Present use*.¹⁶⁷

Mace does not state whether the pipes of his organ were made of wood or metal, but the bellows were placed at the bottom of the case and could be activated either

¹⁶⁴ Mace, *Musick's Monument* p.244

¹⁶⁵ *Ibid.*

¹⁶⁶ Discussion of this practice is found in Richard Rastall, 'Spatial Effects in English Instrumental Consort Music c.1560-1605' *EM* 25:2, 269-88

¹⁶⁷ *Ibid.*

by a foot pedal operated by the player, or a cord, operated by an assistant.¹⁶⁸ The specification of the organ (with stops in the order quoted by Mace) was:

Open Diapason
Principal
Fifteenth
Twelfth
Two and Twentieth
Regal
Hooboy (operated via a foot pedal)

It is significant to note that the only unison flue stop in the organ was the Open Diapason, rather than the more typical provision of a stopped 8ft rank. Mace was at pains to point out that the role of the organ in viol consorts was to act as a 'Holding, United-Constant-Friend', which role, from a tonal perspective, was better achieved by a harmonically rich and 'stringy' principal rather than the more 'flutey' Stopped Diapason.¹⁶⁹

Mace explained that the two reed stops could be combined to provide a 'Voice Humane' - presumably, therefore, not the single fractional-length reed stop familiar from the later Baroque period that magnified the plangency of its distinctive tone quality by means of a tremulant, but an effect produced by the interaction of the two reed stops. This is the only recorded instance of reed stops being used in a consort organ.

Contemporary organs built along similar lines are known from the continent, such as the anonymous German chest organ in the collection of the Metropolitan Museum of Art, New York, which incorporates a similar arrangement of folding music desks, but apart from the Knole chest organ, the two Mace instruments appear to be the only known examples of their kind in England dating from the seventeenth century.¹⁷⁰ Mace himself was apparently unaware of other examples, for he claimed that '*Two of such Organs only, (I believe) are but as yet in Being, in the World; They being of my own Contrivance; and which I caus'd to be made in my own House, and for my own Use, as to the maintaining of Publick Consorts, &c.*'¹⁷¹

¹⁶⁸ Mace, *Musicks Monument* p.244

¹⁶⁹ *Ibid.* p.242

¹⁷⁰ Accession no. 1978/6. Anon., *A Checklist of American Musical Instruments* (New York: Metropolitan Museum of Art, 1989), p.21

¹⁷¹ Mace, *Musick's Monument* p.244

1.9: Builders

Unlike contemporary virginals and harpsichords, none of the extant organs bears an external inscription by its maker, or a date, and only one, the Christianus Smith organ of 1643, is signed and dated internally. Nothing is known about this Smith, except that he is unlikely to have had any connection with the well-known Bernard 'Father' Smith (c.1630-1708) who arrived in Britain in around 1667.¹⁷² A practice prevalent from the mid-nineteenth century until relatively recently was to ascribe almost any anonymous seventeenth-century chamber organ to 'Father Smith'.¹⁷³ One contributory factor to this phenomenon was the difficulty in dating consort organs due to their essentially conservative nature and relatively slow rate of development. It is now clear, however, both from internal evidence and from better methods of dating, that the majority of the chamber organs previously ascribed to Bernard Smith are not by him.¹⁷⁴

Foremost among the known consort organ builders was the Dallam family. Some eleven members from five generations of this dynasty are known to have built organs during the long seventeenth century, both in England and France. Their work encompassed chamber, church, university and cathedral instruments as well as a number of organs built for the court between the reigns of James I to George I.¹⁷⁵ As a Catholic family, they emigrated to France during the Interregnum where they built a number of major instruments, and after their return to England in 1662, French-influenced features and nomenclature became a distinguishing fingerprint of their style.¹⁷⁶ Seven of the sixteen organs considered in this study are by, or bear very strong resemblances to, the Dallam school, and there are a number of others in less well-preserved condition that appear to come from the same sphere of influence.

¹⁷² John Rowntree, 'Bernard Smith (c.1629-1708) Organist and Organbuilder: his Origins' *BIOSJ* 2, 11

¹⁷³ Sam Clutton and Austin Niland, *The British Organ* (London: Batsford, 1963), pp.58-9

¹⁷⁴ John Rowntree's 1977 edition of Andrew Freeman's seminal 1926 monograph on Smith, itself now outdated, illustrates the ongoing process of research: John Rowntree, *Father Smith... by Andrew Freeman, edited, annotated and with new material* (Oxford: Positif Press, 1977)

¹⁷⁵ Bernard Edmunds, 'The Dallam Family' *BIOSJ* 3, 137-9

¹⁷⁶ Bicknell, *History* pp.91-103

Other builders prominent before the Restoration who worked on domestic organs included John Burward, who was based in London and built and tuned organs for the court and several domestic customers between at least 1618 and 1638.¹⁷⁷ Some builders operated a mainly local practice, such as John Loosemore of Exeter¹⁷⁸ who worked in the West Country after the Restoration, and George Mashrother¹⁷⁹ and George Brownlesse of Yorkshire who worked in the north in the 1620s.¹⁸⁰ Mashrother is interesting insofar as he is known to have made other types of instrument, notably viols.¹⁸¹

A number of other post-Restoration church organ builders are known, but few as yet have been connected with chamber instruments. Among them were Edward Darby of Newark, a prominent Roman Catholic,¹⁸² and Roger and William Preston, who worked in the north.¹⁸³ The latter claimed to be a former apprentice of Dallam, and one of the Prestons was the brother-in-law of Darby, which connections led Bicknell to suggest that all three may have been connected to the Catholic Dallam workshop.¹⁸⁴ If so, we might perhaps add their names to the list of builders who may have produced domestic instruments with the distinctive features of the Dallam school.

Other extant consort organs possess constructional features, especially pipe-markings,¹⁸⁵ which display a Teutonic influence. This suggests that German-trained craftsmen worked on them, albeit operating within the very distinctive English tradition.¹⁸⁶ It has naturally been tempting in the past to ascribe these instruments to Bernard Smith, but any such connections can be tentative at best. One known German-trained practitioner was an organist and composer who, in England, styled himself as Captain Prendcourt;¹⁸⁷ a native of Würzburg, he served in the Catholic

¹⁷⁷ Ibid. pp.87-9

¹⁷⁸ William Loosemore, *Loosemore of Devon: an Outline Family History* website (1987) <<http://www.loosemore.co.uk/Chapter6/Chapter6.htm>> Accessed 30 August 2016

¹⁷⁹ Fleming and Bryan, *Early English Viols* pp.242-3

¹⁸⁰ Ibid. p.243

¹⁸¹ Ibid.

¹⁸² Dorothy Owen (Ed.), *A History of Lincoln Minster* (Cambridge: CUP, 1994), p.86

¹⁸³ Bicknell, *History* p.108

¹⁸⁴ Ibid.

¹⁸⁵ Gwynn, *Canons Ashby* p.24

¹⁸⁶ Gwynn, *Chamber Organ* p.107

¹⁸⁷ Edward Corp, 'Further Light on the Career of 'Captain' François de Prendcourt' *ML* 78:1, 15-23

Chapel of James II in Whitehall Palace and later found employment under the patronage of Roger North, who reported that

his very expressions of the musically scale are derived from the German organ makers;¹⁸⁸ ...[his method of notating pitch] is common with ... what is wrote upon the rowling board, sound chest, and pipes in my Organ, which was made by Mr Smith.¹⁸⁹

Other builders within the orbit of Smith included Christian Smith¹⁹⁰ (Bernard's nephew, not to be confused with Christianus Smith), and Christopher Schreider, who took over Smith's workshop after his death. An eighteenth-century letter, possibly written by Handel, offers an interesting insight into the nature of Smith's consort organs:

Father Smith's chamber organs generally consist of a stop diapason of all wood. Sometimes there is an open diapason of wood. Down to Cefaut, an open flute of wood, a fifteenth of wood, a bass mixture of wood: that is to the middle C of two ranks, the cornet of wood of two ranks to meet the mixture in the middle. Sometimes the mixture is of mettle, as is the cornet. N.B. – if it is stiled 'a furniture' it is not one of his, that is if the mixture is stil'd so it is not. Remark that the wooden pipes are of clean yellow deal.¹⁹¹

The term 'furniture' is derived from the French *Fourniture* (a mixture stop), and here Handel is apparently drawing a distinction between Smith's practice and the Gallic features of the Dallam school instruments. By the time Smith achieved his status as King's Organ Maker in 1671, the consort organ was already well on the decline at court. Although influential in the field of the liturgical organ, Smith's impact on the chamber instrument has been overstated due to the inaccurate attribution of many otherwise anonymous instruments to his workshop. Only one of the sixteen organs examined for this study can safely be ascribed to Smith (Royal College of Music, 1702).¹⁹²

¹⁸⁸ Ibid.

¹⁸⁹ Sarah Boydell, *The Domestick or retired life of The Honble Roger North* (Unpublished MS.: Forster Collection, Victoria and Albert Museum, 1826)

¹⁹⁰ For further detail on Smith's associates see Nicholas Thistlethwaite, 'Notes relating to the organization of organ building in England to c.1740' *BIOSJ* 5, 46-51

¹⁹¹ Mrs. Delany, *The Autobiography and Correspondence of Mary Granville* 6 vols, 2 series (London: R. Bentley, 1861), Vol. 1 series 2 n.568

¹⁹² Elizabeth Wells (Ed.), *Royal College of Music Museum of Instruments Catalogue Part II: Keyboard Instruments* (London: Royal College of Music, 2000), pp.119-24

Contemporary accounts provide some insight into the cost of organs (Table 1.13). The extant four-stop Smithfield table organ made for Hunstanton Hall was, by some margin, the least expensive at £11, which may suggest that it was second-hand and might therefore be older than its purchase date of 1630.¹⁹³ The most costly was Loosemore's extant organ for Nettlecombe Court at £100, although this is atypical insofar as it is a large instrument that shares many features with liturgical organs. The majority fall within the range £20 - £60. Some sources include valuations of organs, but these are a less reliable way of gauging an instrument's worth as the valuations were often made by people whose expertise lay elsewhere. The court organs valued for sale during the Interregnum, as described in Chapter 2, were valued particularly low: although some of those described in the catalogues were clearly in poor condition, others were evidently still in use.

Whilst a few detailed contracts for seventeenth-century church organs survive, there are none for domestic organs. The most detailed account entry for a consort organ occurs in the accounts of the court of Prince Charles for the organ supplied in 1622 to St James's palace:

To Thomas Cradock for new making the Princes Winde Instrum^t at St James viz for making a new stoppe of Pipes £4, for timber, leth^r, glewe, wier, soder, scruepinnes, nayles, Coales and lighties 40s., for his owne and his servants wages for 20 weeks: £38, In all amounting to £44. 0s. 0d.¹⁹⁴

Cradock's labour charges seem very expensive when compared to those of Robert Dallam some twenty years later. Dallam was paid £55 for the new organ at Tawstock Court, Devon in 1641, which equated to 825 days', or approximately two and a half years', pay for a skilled craftsman.¹⁹⁵ The Tawstock accounts reveal that it actually took approximately seven months (October 1641 - March 1642) to complete the instrument.¹⁹⁶ On this basis, the cost of Dallam's time would have been

¹⁹³ MA U269/A518/5 (Bourchier accounts)

¹⁹⁴ SC6/Jas.I/1685 (RECM IV p.225, Receiver General's accounts)

¹⁹⁵ Conversion tables from Phelps Brown and Sheila Hopkins, 'Seven Centuries of Building Wages' *Economica* 22:87, 195-206

¹⁹⁶ MA U269/A518/5 p.185, (Bourchier accounts) MA U269/C276 (Bourchier correspondence)

approximately £15, assuming that he worked alone,¹⁹⁷ leaving £40 for materials, transport and other costs.

Table 1.13: Dates, builders and costs of newly-built domestic organs

Date	Cost	Builder	Location	Type
1608	£24	T. Dallam	Hatfield House	'portative'
1609	£35	Anon	Hatfield House	'positive'
1619/20	£55	Burwood	Belvoir Castle	
1622	£44	Cradock	St James's Palace	
1629	£22	? Dallam	The Deanery, Canterbury	Table, 4 stops
1630	£11	? Dallam	Hunstanton Hall	Table, 4 stops
1641/2	£55	R. Dallam	Tawstock Court	
1646	£20	Burwood	? Bath House, London	
1655	£21	Loosemore	Tawstock Court	
c1665	£48	R Dallam	Oxford Music School	Cabinet, 4 stops
1665	£100	Loosemore	Nettlecombe Court	8 stops
1667	£40	Anon	Whitehall Palace	

¹⁹⁷ Whilst Dallam's presence was recorded at Tawstock, there is no mention of any other workman or assistant. MA U269/A518/5 (Bourchier accounts)

1.10 Conclusion

It may be seen that the consort organ possesses a number of distinctive features that distinguishes it from contemporary liturgical organs, from contemporary continental chamber organs, and from later English chamber organs. The significance of these differences for present-day performance practice will be explored further as the thesis develops.

For now we may note that the consort organ drew on a long-standing tradition of wooden pipe voicing and general construction that had its origins in the smaller positive type of English church organ. Whereas the seventeenth-century liturgical instrument took as its starting point the larger metal-piped great organ, technology from the positive persisted in the consort organ and, at first, the subsidiary chair division in double organs. As the century progressed, the church organ moved in a divergent direction, developing its tonal resources and underlying technology, whilst the consort organ's construction remained remarkably consistent in terms of specification, technology, voicing, appearance and overall character.

The essential characteristic of the consort organ is its sound, which is both unusual and difficult to achieve compared to that of other types of organ. The combined effect of wooden pipework, narrow scales, low cut-ups and specialised voicing techniques produces a tone quality that was specifically designed to complement the harmonic content, speech characteristics and overall homogeneity of the string consort. The high pitch, flexible temperament, modest dynamic output and relatively gentle impact of its upperwork were all contrived to assist its role in this repertoire first and foremost. Sensitive winding systems and a closely-placed stop control system enabled it to respond rapidly and subtly to the nuances of the music, aided in many cases by the flexibility offered by divided stop registers.

It held the potential, in addition, to be a fine piece of furniture, ranging from the simple dignity of the post-Restoration examples to the exuberance of the early *trompe-l'oeil* fronts and the lavish decoration of the instruments for aristocratic contexts. It spoke of status, both social and musical, and, as will be demonstrated in the next chapter, could also indicate political or religious affiliation. When required, it could also assume the modest anonymity of a typical cupboard when its casework

doors were closed.

In many of these respects it may be seen that these organs differ markedly from the type of organ generally used in the performance of the string consort repertoire today. Many of these are continuo organs based on later periods of tonal design, often inspired by continental schools of organ building. Being conceived for general use in a wide range of contexts, they are often voiced more loudly, with bolder principal tone, stronger upperwork and more marked speech transient characteristics. They often lack divided stops, or division points in the same place as the consort organ, and are fed by inflexible, electricity-driven wind systems. Very few indeed are available at the pitches that were employed by English consort organs, especially from later in the century, and many are tuned to meantone systems that are less flexible than the milder practices employed in consort contexts (Table 1.14).

By contrast, the consort organ was a tool particularly well designed and suited to its specific role, and its basic concept held good for an extended period of time within the context of an otherwise rapidly changing instrumental technology and a developing range of musical styles. It says much about the quality and general usefulness of these instruments that such a good number has survived until today in relatively intact condition. It is therefore surprising that relatively few modern-day practitioners of the repertoire these instruments were built to serve are aware of the true nature of these distinctive and characterful organs.

Table 1.14: comparison of consort organ and modern continuo organ characteristics

Consort organ	Continuo organ
Pitch rose from a mean of a440 in c.1630 to a465 by c.1670 and a494 by c.1700	Transposable between a415 and a440, occasionally a430, and more rarely a465
Something close to equal temperament in many cases, or otherwise mild modified 1/5 or 1/6 comma meantone	Variable depending on context, but often $\frac{1}{4}$ comma meantone, or tunings based on 18 th century continental formulae
Compass typically C AA D-c ³	Compass typically C-f ³ , g ³ or a ³ ; no AA
Keyboard division b/c (before c.1650) or c/c# (after c.1650)	When provided, b/c
8ft treble Open Diapason common	8ft Open Diapason very rare
4ft Principal always provided	4ft Principal often omitted in favour of a 4ft Flute for reasons of space
Low-pitched Mixture, typically 12.17	High-pitched upperwork, usually separate 19 and 22 ranks
All wooden pipework	Mixture of wooden and metal pipework, the latter especially for principal-toned stops
Narrow scales, based on empirical methods	Wider scales, based on mathematical formulae
Very low cut ups	High cut ups
Relatively high wind pressure	Very low wind pressure
Pipework regulated at the toe with wedges	Open-toe voicing
Voiced with rich harmonic content to blend with strings	Prominent emphasis on 2 nd harmonic for 8fts, 'nasal' or 'flutey' tone colour common
Little starting transient to pipe speech	Prominent 'chiff' to pipe speech
Voicing style evolved from 16 th century English positive organ tradition	Voicing style usually based on 17 th or 18 th century models, often continental, often liturgical
Upperwork of moderate dynamic output, used to enrich tone colour not overall volume	Upperwork louder as stop pitches ascend, used to increase overall dynamic volume
Dynamic output designed for use with small ensembles in small, often domestic, spaces	Dynamic output of upperwork designed for use with larger ensembles and venues
Flexible hand or foot blowing by player or an assistant	Inflexible electric blower
Pipes speak at seated head height	Pipes speak near floor level

Chapter 2: Contexts for the Consort Organ

The consort organ is most readily associated with secular music-making within the large corpus of seventeenth-century instrumental music written 'to the organ' for use at the royal court or in domestic settings. This chapter examines these contexts and explores some of the other situations in which consort organs are known to have been employed. It seeks also to examine the distribution of organs in relation to the geographical, social, financial, political and religious circumstances of their owners.¹

2.1 The Jacobean Court

The extant documents relating to music at the court during the seventeenth century contain numerous references to the commissioning, tuning and maintenance of organs.² In addition to entries relating to the chapel organs at the various royal residences, there are also references to instruments used for secular music making. Responsibility for the provision and maintenance of organs was given to the Keeper of the King's Instruments, a post superseded by that of King's Organ Maker in 1671. From 1630 Queen Henrietta Maria also employed her own Keeper of the Organs at Denmark House, of whom the first was Robert Dallam.³ Early holders of these titles, such as Robert Henlake and Edward Norgate, appear to have undertaken much of the practical maintenance work themselves, whilst later incumbents, such as John Hingeston and Henry Purcell, operated in a mainly supervisory capacity, carrying out tuning but leaving the maintenance to established organ builders contracted from without. Among the latter are numbered members of the Dallam/Harris family and, from 1671, Bernard Smith.

The number of individuals employed at the court in relation to the organs reflects the importance of the instrument in both liturgical and secular contexts, yet the detail of their provision, as illustrated by the surviving sources, is far from

¹ For a list of seventeenth-century references to secular organs in domestic contexts see <https://consortorgans.info/references-to-english-secular-organs-from-the-long-seventeenth-century/> Author's website, accessed 19 January 2019

² Much of this information is transcribed in Andrew Ashbee, *Records of English Court Music [RECM]*. 9 vols. (Snodland: Andrew Ashbee, 1986-9 (vols. I-III); Aldershot: Scolar Press, 1990-96 (vols. IV-IX))

³ Lna SC6/ChasI/1704 (RECM V p.17, Receiver General's accounts to Henrietta Maria)

complete. A particular difficulty lies in differentiating references to liturgical organs in the various royal chapels from those relating to secular instruments in the domestic apartments. Another is created by the fact that the secular chamber organs were frequently moved, both within the palaces and between them, in order to service the many musical events that took place in the various state and private apartments. Nevertheless, the extant records do allow at least a partial picture to be drawn of the provision and use of secular organs at court during the seventeenth century.

The court maintained a large body of musicians during the reigns of James I and Charles I. A list of 1625 numbered over 80 instrumentalists, to whom may be added the choral establishment of the Chapel Royal and the musicians who served in the separate musical establishments maintained at various times by Prince Henry, Prince Charles and Queen Henrietta Maria.⁴ The king's instrumentalists were broadly divided into those who played for the larger ceremonial occasions, such as the members of the wind and violin bands, and the chamber musicians who played for more intimate occasions. The latter group, often referred to in the records as the Lutes, Viols and Voices, consisted of some twenty-nine musicians, probably serving in rotation, including two keyboard players, four violinists and a harpist.⁵

That organs had played an important role in Tudor court music is indicated by the number of instruments catalogued in the inventory of goods taken at the death of Henry VIII in 1547.⁶ Of the 28 organs listed, 25 were domestic instruments comprising two portatives, three claviorgans, and twenty instruments described as either single or double regals. A few of these instruments seem to have survived into the seventeenth century: some of them may be represented by the dilapidated instruments recorded at Hampton Court in 1649 as part of the inventory of Charles I's goods.⁷ These included 'One Paire of Portaves broke to peeces' and another pair 'covered with sattine'; another 'broken Organs' was stored in the kitchens.⁸ It is not clear what musical purpose, if any, these old instruments served at the Jacobean

⁴ The accounts of the Great Wardrobe quoted in *RECM I* list the appointments

⁵ For a description of the organisation of court music see chapter 1 of John Cunningham, *The Consort Music of William Lawes 1602-1645* (Woodbridge: The Boydell Press, 2010)

⁶ Lbl MS. Harley 1419 (*RECM VII* pp.390-8)

⁷ See Oliver Millar (Ed.), *The Inventories and Valuations of the King's Goods 1649-1651* (London: Walpole Society, 1972)

⁸ *Ibid.* pp.178, 184

court, but the few accounts of the Jacobean secular court organs all make remarks about their appearance, reflecting the rich decoration described in the 1547 inventory. In 1598 Baron Waldstein, a Czech visitor to Whitehall, described 'an organ ... made of mother-of-pearl' with verses inscribed upon it extolling the virtues of Elizabeth I,⁹ whilst in 1611 Prince Henry purchased a secular chamber organ from Dordrecht decorated with his arms and inlaid with mother-of-pearl.¹⁰ This foreign transaction appeared in the context of the long-standing interaction between the court and a number of continental organ builders during the sixteenth century, although it is difficult to judge what influence, if any, they exerted on the indigenous tradition of wooden-piped organ making.¹¹ Waldstein also recorded that in the 'Secret Jewel House' among the Privy Gallery apartments at Whitehall there was an organ 'on which two persons can play duets'.¹² Probably the same instrument was viewed in 1612 by a German visitor who noted that the room contained 'various musical instruments, on one of which two may play at the same time and place'.¹³ This description seems to suggest something more than two players side-by-side at the same keyboard, although it is not clear quite what: perhaps it was something along the lines of a claviorgan with non-aligned manuals.

Prince Henry's Flemish instrument would have been used in the context of the household he established at St James's Palace soon after his investiture as Prince of Wales in 1610.¹⁴ This comprised two singing boys and some twelve instrumentalists, including the organist John Bull.¹⁵ Expenditure on instruments included the purchase of viols, including 'twoe great ons, £40' (probably 'dooble basses') in 1610, but Henry's untimely death in 1612 resulted in the curtailment of the establishment and the redeployment of most of his musicians within the main court ensembles of the king.¹⁶ The organ and 'dooble' basses would have found good use in the musical establishment subsequently founded at St James's by Henry's younger

⁹ G.W. Groos, (Ed.), *The Diary of Baron Waldstein* (London; Thames and Hudson, 1981), p.45

¹⁰ Strong, R., *Henry, Prince of Wales, and England's Lost Renaissance* (London: Pimlico, 2004), p.173

¹¹ See Stephen Bicknell, *The History of the English Organ* (Cambridge: CUP, 1996) pp.60-7. Two imported seventeenth-century continental chamber organs survive, at Carisbrooke Castle (?1602) and Blair Atholl Castle (c.1630).

¹² Groos, *Baron Waldstein* p.43

¹³ Paul Hentzner, *Itinerarium Germaniae, Galliae, Angliae, Italiae* (Nuremberg 1612), pp.127-8

¹⁴ Strong, *Henry, Prince of Wales* pp.152-60

¹⁵ Lbl MS. Harley 252 ff.8-9 (RECM IV p.211, list of Prince Henry's servants)

¹⁶ Lna E351/2794 (RECM IV p.215, Privy Purse accounts)

brother Charles in 1617, employing some 30 musicians.¹⁷ In December 1622 expenses were paid to:

Thomas Cradock for new making the Princes Winde Instrum^t at St James viz for making a new stoppe of Pipes £4, for timber, leth^r, glewe, wier, soder, scruepinnes, nayles, Coales and lighties 40s., for his owne and his servants wages for 20 weeks: £38, In all amounting to £44. 0s. 0d.¹⁸

It is not clear whether 'new making' means a new or restored instrument, but nearly five months' work by two men might suggest the former. An important body of chamber repertoire incorporating the organ was written during this time by four significant composers employed by the prince: Giovanni Coprario (c.1570-1626), Thomas Lupo (c.1571-1627), Alfonso Ferrabosco II (c.1575-1628), and Orlando Gibbons (1583-1625).¹⁹ An ensemble was formed specifically to play these works: known as 'Coperario's Musicke', its members including John Woodington and Adam Vallet (violins), Ferrabosco and Coprario himself (viols), and Orlando Gibbons (organ).²⁰ The prince seems likely to have participated too as, according to the preface of John Playford's 1683 edition to the *Introduction to the Skill of Music*, 'Charles I could play his part exactly well on the Bass-Viol, especially of those Incomparable Fancies of Mr. Coperario to the Organ'.²¹ The widespread influence of the music composed for this ensemble, particularly with regard to the use of the organ, is discussed in Chapter 3.6.

2.2 The court of Charles I

After Charles's coronation in 1625, the majority of his musicians were amalgamated with those of the main court ensembles at Whitehall Palace. The king's principal residence during this period was the palace of Whitehall, in which the monarch's private apartments were focused around the nine rooms of the Privy Gallery on the west side of the building. All the rooms were modest in size, averaging around 7m

¹⁷ Ashbee, *RECM IV* pp.217-30, Receiver General's accounts

¹⁸ SC6/Jas.I/1685 (*RECM IV* p.225, Receiver General's accounts)

¹⁹ Information drawn from *RECM V*

²⁰ For a detailed account of Coprario's role at court, see Peter Holman, *Four and Twenty Fiddlers. The Violin at the English Court 1540-1690* (Oxford: OUP, 1993), pp.213-6.

²¹ John Playford, *An Introduction to the Skill of Musick* (London: Playford, 1683)

square.²² These, and a similar suite of rooms on the east side of the palace reserved for the queen, were serviced musically by the Lutes, Viols and Voices, a body who thus enjoyed access to the monarch otherwise reserved only for the most privileged courtiers. Among them were four significant composers of works for strings and organ, namely Coprario, Lawes, Hingeston and Locke.²³ Many of their works were based on the model of Coprario's three-movement fantasia-suites with organ of the 1620s,²⁴ or consisted of division-based movements for smaller combinations, again usually with the organ. There is no firm evidence to suggest that consort organs were ever used in the context of public occasions in the larger spaces of the palace, such as the Great Hall, Guard Chamber and Banqueting House,²⁵ where music for formal state occasions was supplied by the larger wind and string ensembles, and they remained a vehicle principally for use in small instrumental ensembles.²⁶

A mile further up the Thames, a new household was set up at Denmark House in the Strand in 1626 for Charles's new queen, Henrietta Maria.²⁷ The queen maintained an establishment of fourteen musicians, most of them singers, lutenists and viol players, many of them brought with her from her native France.²⁸ Under the charge of their master, Louis Richard, they provided music exclusively for Denmark House and for the queen's Roman Catholic chapel.²⁹ In 1627 Richard Mico was first listed in the accounts as Her Majesty's Organist,³⁰ and in 1630 Robert Dallam appeared as Her Majesty's Organ-Maker.³¹ Both men were Catholics: Mico had previously been a resident musician at Thorndon Hall, Essex, the seat of the prominent Catholic Petre family who had also patronised William Byrd.³² Dallam also came from a Catholic background, and it is interesting to wonder whether his family's fruitful period of exile in France during the Interregnum was enhanced by

²² A detailed plan may be found in Simon Thurley, *Whitehall Palace: An Architectural History of the Royal Apartments, 1240-1698* (New Haven: Yale University Press, 1999), p.83

²³ Cunningham, *Lawes* pp.249-54

²⁴ John Cunningham, 'Review: John Jenkins: Fantasia Suites II' *VdSGJ* 4, 154-9

²⁵ Thurley, *Whitehall* p.93

²⁶ Cunningham, *Lawes* pp.15-16

²⁷ Originally Somerset House but renamed Denmark House in 1603, it had reverted to its original name by 1640.

²⁸ The earliest list appears in Lna SC6/ChasI/1694 (*RECM* V p.4, Receiver General's accounts)

²⁹ Simon Thurley, *Somerset House: the Palace of England's Queens 1551-1692* (London: London Topographical Society, 2009), p.51

³⁰ *Ibid.*

³¹ *Ibid.*

³² John Bennett and Pamela Willetts, 'Richard Mico' *Chelys* 7, 27-34

the contacts with the French musicians that he gained during his service to Henrietta Maria. Previously, Burward had tuned an organ in the house in 1629,³³ but by 1640 Dallam was tuning the chapel organ and 'mending and tuneinge the Newe Cabinet Organ in the draweing Room.'³⁴

Sufficient evidence survives to reconstruct a plan of the queen's privy chambers at Denmark House during this time (fig. 2.1).³⁵

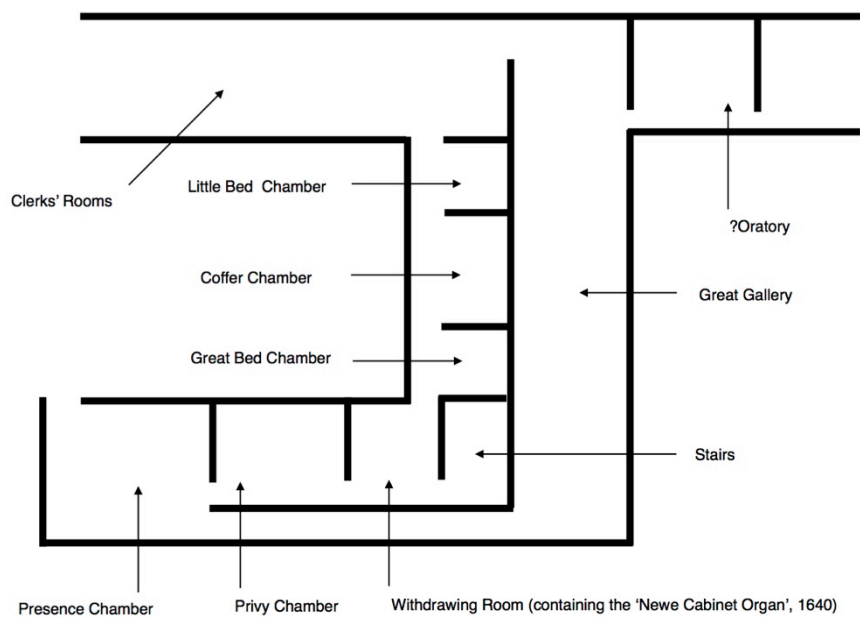


Fig.2.1. Diagrammatic layout of Queen Henrietta Maria's apartments, Denmark House, c.1640

Henrietta Maria's Withdrawing Room measured some 7m by 5m and was placed in a corner of the south wing next to her Privy Chamber. It communicated directly with her Great Bed Chamber by a doorway. In contrast to contemporary English practice at Whitehall, the queen adopted the French fashion of receiving state visitors in her privy apartments, which were lavishly decorated and furnished in the French manner. The Withdrawing Room therefore served as the final waiting room before guests were ushered into the queen's presence in her bedchamber, and the organ and other instruments would have served to entertain visitors during the

³³ Lna SC6/ChasI/1694 (RECM V p.5, Receiver General's accounts)

³⁴ Lna SC6/ChasI/1704 (RECM V p.17, Receiver General's accounts) At this period 'cabinet' referred to a type of room (i.e. a private withdrawing room) rather than the type of instrument.

³⁵ Thurley, *Somerset House* p.37

wait. Although the organ was being used in a more 'public' context here than at Whitehall, these were still small and relatively intimate spaces.

2.3 The Interregnum

At the outbreak of the Civil War Charles moved his court to Oxford, accompanied by a small number of his musicians. Other court musicians found employment in provincial houses, particularly those with royalist sympathies, possibly taking with them copies of the court repertoire for consorts to the organ. Prior to the king's execution in 1649, little had been done to disturb the contents of the secular spaces in the royal palaces, but in January of that year Parliament approved an ordinance that required the 'Discovery, Inventorying and Preserving' of the king's possessions.³⁶

The detailed inventories that resulted, together with the list of items subsequently sold off, contain some references to organs. At Wimbledon House there was an instrument valued at £6,³⁷ another valued at £20 was in the quarters of Major Legg at Whitehall,³⁸ and a third, valued at £10, was in the possession of a Colonel Hamond.³⁹ An instrument from Denmark House was sold for the sum of £10 in 1650,⁴⁰ and the Wimbledon and Hamond organs went to private buyers in 1651. The other court organs seem to have come under the category of 'reserved goods', retained for the use of the government at the royal houses it had taken over, although it appears that some may have been removed without permission. John Playford supported his petition of 1674 to Charles II to import paper with the claim that, at the Restoration, he had secured an organ and books belonging to the Chapel Royal, which had been embezzled;⁴¹ the organ brought 'from Mr. Micoes' to St James's Palace in 1663 may perhaps similarly represent a Dorset House instrument being restored to its rightful owners by the former court organist.⁴²

³⁶ Millar, *The King's Goods*, xiii

³⁷ *ibid.* p.296

³⁸ *ibid.* p.364

³⁹ *ibid.* p.419

⁴⁰ Raymond Needham and Alexander Webster, *Somerset House Past and Present* (New York: Dutton & Co., 1905), p.287

⁴¹ Donald McKenzie, *A Chronology and Calendar of Documents Relating to the London Book Trade* (Oxford: OUP, 2005), p.71

⁴² Pro LC 9/375 (RECM I p.43, Accounts of the Great Wardrobe)

A few references indicate the continued presence of organs in the palaces during the Interregnum. Anthony Wood reported that John Hingeston, formerly organist to the royalist Earl of Cumberland at Skipton Castle, was appointed

...organist to Oliver Protector who had the organ of Magdalen College in the palace Hall of Hampton Court till his Maties Restauration, he breed up two Boyes to sing with himself Mr. Dearings printed latine songs for voices, which Oliver was most taken with though he did not allow singing, or Organ in Church. He had them sung at the Cockpit in Whitehall where he had an organ, and did allow this John Hingeston 100l. per Annum during his usurpation.⁴³

The Magdalen organ, built in 1631 by Thomas Dallam, was acquired in 1654;⁴⁴ the poet Milton (who possessed his own chamber organ) is said to have played to Cromwell on it.⁴⁵ The evidence for the organ in the Cockpit is interesting; built originally for Henry VIII, the building was extensively remodelled in 1629 by Inigo Jones as a theatre, based loosely on the design of the Teatro Olimpico in Vicenza,⁴⁶ and was the setting for the lavish masque productions that were such a significant feature of court music during Charles I's reign.⁴⁷ There is, however, no evidence for the use of the organ in surviving masque music, and the continuo role was mainly fulfilled by theorbos or, less often, harpsichords.⁴⁸

2.4 The post-Restoration court

After the Restoration, Charles II re-engaged many of the former court musicians in their previous roles, and the musical establishment was operational at Whitehall by June 1660.⁴⁹ The first court musicians to be reinstated by Charles were the Lutes, Viols and Voices, now known as the 'Private Musick'.⁵⁰ Among the newly recruited members was 'Mr [Christopher] Gybbons approved of by the King at Baynard's Castle, and an organ to be made for him'; his role was defined as 'For the organs

⁴³ Lynn Hulse, 'John Hingeston' *Chelys* 12, 28

⁴⁴ Bicknell, *History* p.104

⁴⁵ *Ibid.*

⁴⁶ Simon Tidworth, *Theatres: An Illustrated History* (London: Pall Mall Press, 1973), pp.63-4

⁴⁷ See Leeds Barroll, 'Inventing the Stuart Masque' in David Bevington and Peter Holbrook, *The Politics of the Stuart Court Masque* (Cambridge: CUP, 1998)

⁴⁸ See Peter Walls, *Music in the English Courtly Masque, 1604-1640* (Oxford: OUP, 2001)

⁴⁹ Lna C66/2933 no.46 (*RECM* V p.26, Chancery patents)

⁵⁰ Lna LC 3/2 (*RECM* I p.2, Court Establishment Books:)

verginells in ye Presence [Chamber]'.⁵¹ On 15 March 1660 John Hingeston, now the newly-appointed Keeper of the Instruments, was charged with the provision of 'a new Cabinet Organ, 4 Violins and severall other Instruments' for Whitehall.⁵²

The king also re-established the choral foundation of the Chapel Royal and regular payments appear from 1661 to Henry Cooke in relation to the Whitehall chapel music room where he taught the boys Latin and to play the violin and organ.⁵³

Pepys recorded a visit to the room in 1667: 'At Whitehall: I did go into the musique-room, where [were] Captain Cocke and many others; and here I did hear the best and the smallest organ go that ever I saw in my life'.⁵⁴ The Private Musick continued to be responsible for entertainment within the privy chamber and its associated suite of rooms (Fig. 2.2). In November 1667 the Privy Purse accounts listed £40 'Pd for a pair of New Organs',⁵⁵ although the maker is not recorded, and in 1673 'a new lock for ye organ in the privy lodgings' was provided for 10s.⁵⁶

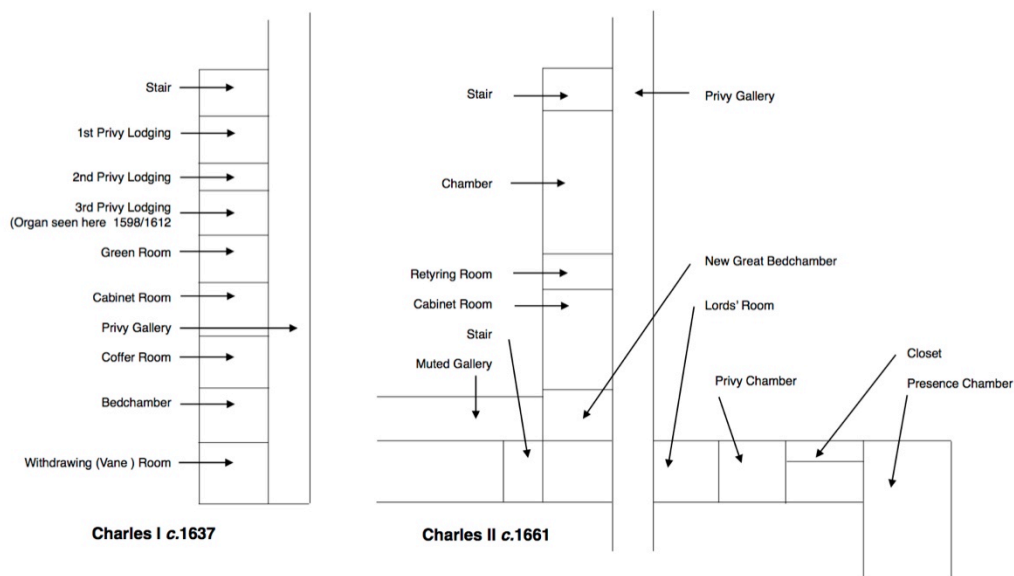


Fig.2.2. Diagrammatic layout of the king's apartments, Whitehall Palace c.1637 and c.1661.

⁵¹ Lna LC 3/2 (RECM I p.3, Court Establishment Books)

⁵² Lna E351/546 f.25r (RECM V p.113, Henrietta Maria's accounts)

⁵³ Lna LC 3/33 (RECM I p.17, Court appointments)

⁵⁴ Robert Latham and William Matthews (Eds.), *The Diary of Samuel Pepys* 11 vols. (New York: Harper Collins, 2010) Entry for 16 November 1667

⁵⁵ Ob MS. Malone 44 f105v (RECM VIII p.183, Privy Purse payments)

⁵⁶ Lna LC 5/141 (RECM I p.156, Miscellaneous warrants,)

Charles's queen, Catherine of Braganza, established her court at St James's in 1662, including the extensive retinue of courtiers, priests and musicians that she had brought with her from her native Portugal.⁵⁷ In April 1662 Hingeston was paid for the provision of 'an organ for the Queene's private Chappell' there,⁵⁸ and in November of the same year this instrument was moved to a secular role in a new 'musique room' within the palace.⁵⁹ Hingeston's payment of £155 also included a harpsichord and an organ for Hampton Court, so the two organs can only have been chamber-sized instruments. In April 1663 Hingeston was paid £67 11s for moving three organs at St James's. One of these was set up in the chapel; the second was brought across from Whitehall for the purposes of the 'French music',⁶⁰ and the third was described in relation to 'portage of a larger organ from Mr. Micoes to St. James's and setting up there'.⁶¹ A possible interpretation of these manoeuvres is that the Whitehall organ was set up for the secular 'French music' in the 'musique room', whilst the chamber organ in that room, that had previously been used in the chapel from April-November 1662, was returned again to the chapel to act as a secondary instrument to the 'larger organ' obtained from Mico that was now set up in the loft overlooking the altar.⁶²

The provision of two organs appears to have been a distinctive feature of the royal Catholic chapels. At Somerset House chapel 'Draghi used the great organ, and Lock[e] ... had a small chamber organ by, on which he performed with them the same services'.⁶³ If 'by' is understood to mean 'by the choir', this practice appears to reflect the arrangement in the larger metropolitan churches of Italy in which movable *organi portativi* of the *organo di legno* variety were particularly associated with accompanying small vocal groups.⁶⁴ André Maugars, writing in 1639, reported that it was possible 'to see more than two hundred in Rome, but in Paris barely two

⁵⁷ S.M. Wynne, 'Catherine of Braganza (1638-1705)' *Oxford Dictionary of National Biography online* <<http://www.oxforddnb.com/index/4/101004894/>> accessed 26 March 2017

⁵⁸ Lna LC 5/137 (RECM I p.32, Miscellaneous Warrants)

⁵⁹ Lna LC 5/138 (RECM I p.49, Miscellaneous Warrants)

⁶⁰ Lna LC 9/375 (RECM I p.43, Accounts of the Great Wardrobe)

⁶¹ Ibid.

⁶² An engraving is reproduced in Peter Leech, 'Music and Musicians in the Catholic Chapel of James II at Whitehall, 1686-1688' *EM* 39:3, 574

⁶³ Mary Chan and Jamie Kassler (Eds.), *Roger North's 'The Musicall Grammarian' 1728* Cambridge: CUP, 1990), p.260

⁶⁴ Michelangelo Gabbrielli, 'Organo e Polifonia: Prassi Esecutive in Italia fra XVI e XVII Secolo' published at <www.organa.it/monteverdi/resources/Gabbrielli> accessed 24 February 2018

can be found.⁶⁵ The immigrant Italian musicians would have found that the English wooden-piped consort organ fulfilled this role well. In addition to the dual organs at Somerset House and St James's, two organs were later commissioned from Renatus Harris for James II's 'Popish Chapel' at Whitehall from 1667 onwards.⁶⁶ Polychoral repertoire employing multiple instrumental ensembles in the Italian manner under the direction of Innocenzo Fede was a noted feature of the liturgical music at Whitehall at this time,⁶⁷ and the figured basses of works such as Godfrey Finger's *Sonatae XII* op.1 for strings, entitled 'haec musica Capellae Regiae',⁶⁸ were ideally suited to realisation on a consort organ.

A considerable body of music involving the organ was written for the Private Musick in the post-Restoration period, although little survives from royal sources. The ensemble comprised some eleven singers, two violinists, eleven viol players, seven lutenists, and two keyboard players.⁶⁹ One of the first keyboard players appointed was Christopher Gibbons (1615-1676), formerly a chorister of the Chapel Royal and organist at Winchester Cathedral (1638-1641). Other court organists who wrote consort music included Hingeston and Purcell, who successively held the post of Keeper of the Instruments, and Locke. Locke's sober and sometimes rather academic works, written in the old polyphonic style, were not, apparently, well received by the king, who, according to Roger North, had 'an utter detestation of Fancys',⁷⁰ and the Broken Consort was disbanded as early as 1662 in favour of new ensembles, most notably the Twenty-four Violins, a demonstrative affirmation of Francophile enthusiasm in direct *homage* to Louis XIV's *Vingt-quatre Violons*.⁷¹ Locke's polyphonic fantasias were, in fact, among the last flowerings of the 'Grave Musick' sentimentally described by Thomas Mace in 1676 and ousted by the 'Ayrey, Jocond' suites of dance-based suites.⁷²

⁶⁵ André Maugars, 'Risposta data a un curioso sul sentimento della musica d'Italia' translated in Jean Lionnet (Ed.), *Nuova Rivista Musicale Italiana* 4, 681-707, 683-7

⁶⁶ James Ackermann (Ed.), *The Secret Service Accounts of Charles II and James II...* (London: Camden Society, 1851), p.85

⁶⁷ Leech, 'Chapel of Catherine of Braganza', 393-6

⁶⁸ Godfrey Finger, *Sonatae XII pro diversis instrumentis...* (London: Finger, 1688)

⁶⁹ Andrew Ashbee, *The Harmonious Musick of John Jenkins* (London: Toccata Press, 1992), p.78

⁷⁰ John Wilson, *Roger North on Music* (London: Novello, 1959), p.299

⁷¹ Holman, *Violins* pp.282-304

⁷² Thomas Mace, *Musick's Monument...* (London: Mace, 1676), p.234

No further transactions regarding secular organs appear in the surviving records after 1674, and it may therefore be useful at this point to refer to Appendix 2 for a summary of the organs provided at the court prior to this date. From this it may be seen that the principal residences of Whitehall and St James's were supplied with at least one organ throughout the century, and that several were available to the Private Musick during the Carolingian period. Whilst the listed instruments fulfilled a secular role, a few other chamber organs saw service in a liturgical context, complementing the larger liturgical organs in the royal Catholic chapels at St James's, Denmark House and Whitehall at various times. The precise role of these consort instruments in the instrumental and choral repertoires of the Catholic liturgy at court, whilst outside the remit of this study, is imperfectly understood and deserves further research.

Other secular organs were recorded at various times in the private Whitehall apartments of various court officials, such as that observed by Pepys in the dining room of the Earl of Sandwich in 1660⁷³ and another in Hingeston's chambers seen by Roger L'Estrange,⁷⁴ but it seems doubtful that these were part of the pool of instruments available to the Private Musick. Given the amount of consort music originating at the court and its impact on the wider repertoire, the importance of these few instruments in shaping the nature of the organ's role was significant. The innovative composers of 'Coperario's Musicke' all shared the same instrument at St James's, and the post-Restoration organists, such as Hingeston, Christopher Gibbons, Locke and Purcell, would all have used the two organs from the Privy Gallery in their works.

None of the extant consort organs can be safely associated with the court, but one possibility is a post-Restoration chamber organ sold to a private owner in the USA in 1924,⁷⁵ of which the current whereabouts are unknown. This instrument was illustrated in a sale catalogue of items from Stowe, Buckinghamshire in 1848 as 'The travelling organ of James II, used in his camp on Hounslow Heath' (fig. 2.3).⁷⁶

⁷³ Pepys, *Diary* 9 November 1660

⁷⁴ Roger L'Estrange, *Truth and Loyalty Vindicated...* (London: H Brome and A. Seil. 1662), p.50

⁷⁵ Michael Wilson, *The Chamber Organ in Britain, 1600-1830* (Aldershot: Ashgate, 2001), pp.119-21

⁷⁶ Henry Foster, *The Stowe Catalogue Priced and Annotated* (London: David Bogue, 1848), p.245

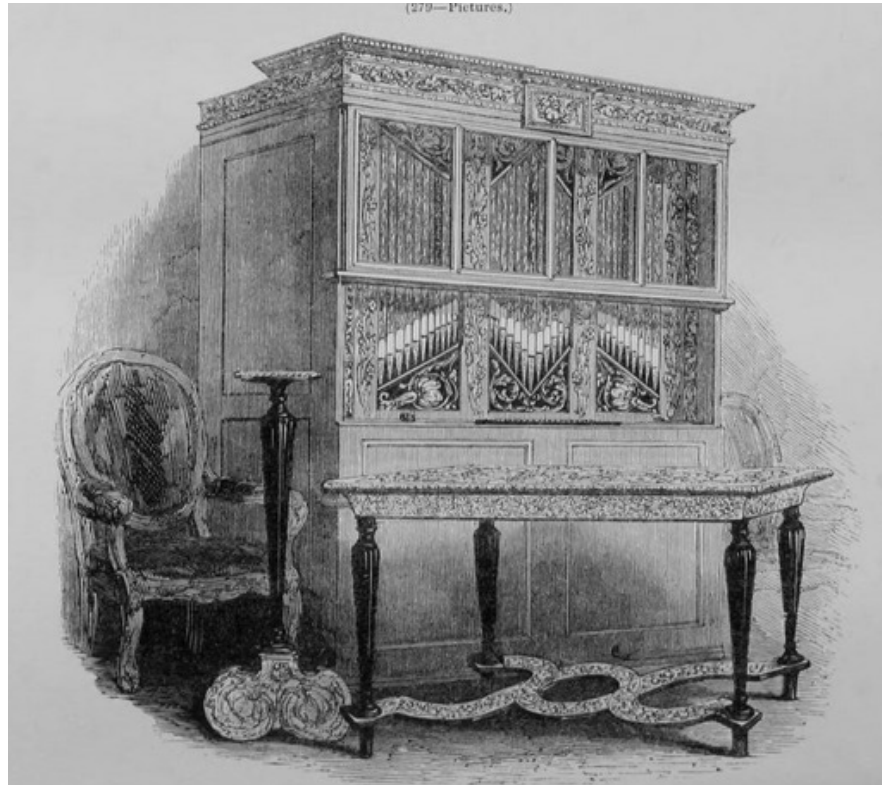


Fig.2.3. 'King James's Travelling Organ' (Foster, H., *The Stowe Catalogue Priced and Annotated* (London: David Bogue, 1848), p.245)

It is known that a portable chapel was installed at the military camp at Hounslow in 1688,⁷⁷ although it would seem to have been an unlikely home for an organ of such rich decorative quality. Many of the visual details of the instrument closely reflect those of the Compton Wynyates and Canons Ashby organs, which suggests an attribution to the Dallam/Harris workshop. The pipe front and cornice incorporated finely-executed gilded carvings, protected by a vertically-sliding glass front, rather like a sash window. This curious arrangement is only known to have been provided on a handful of other instruments, all of them church organs in London associated with projects in which Christopher Wren was involved. One such was Smith's organ of 1698 for St Paul's Cathedral (where the sashes are still preserved in the conservation department),⁷⁸ and another was the Harris organ of 1686 now in St James's, Piccadilly,⁷⁹ originally one of the instruments he built for the 'Popish Chapel' at Whitehall designed by Wren for James II. Wren was also active elsewhere at Whitehall, most notably in the alterations to the queen's apartments

⁷⁷ Edward Walford, *Old and New London IV* (London: Cassell, Petter & Galpin, 1878), p.314

⁷⁸ Nicholas Plumley and Austin Niland, *A History of the Organs in St Paul's Cathedral* (Oxford: Positif Press, 2001), pp.26-7

⁷⁹ Nicholas Plumley, *The Organs of the City of London* (Oxford: Positif Press, 1996), p.123

commissioned by the king between 1688-9,⁸⁰ and it is tempting therefore to wonder whether this consort organ was associated with the queen's private lodgings, or whether it might have had a role as a continuo instrument in the Catholic chapel. It would be interesting to know if the organ's chinoiserie decoration is original, as this would help to define a secular or liturgical role for the instrument.

The evidence from the court accounts provide some insight into the expenses and practical details involved in maintaining the organs. The organ builder John Burward was sworn in as a 'groom of his Majesty's vestrey Extraordinaire' in July 1626.⁸¹ He received 15s for tuning the Denmark House cabinet organ in 1633⁸² and sums ranging between £2 10s and £4 for moving a chamber organ between Denmark House and Whitehall on several occasions in 1640.⁸³ One of these journeys included 'Chardges by water', suggesting that the organ was transported by boat on the Thames. Both palaces had private landings on the river.

Edward Norgate, meanwhile, received an annual sum of £60 as keeper of the organs and virginals from 1611.⁸⁴ After the Restoration, Hingeston was admitted to the post for £60, plus a £16 grant for livery.⁸⁵ In 1673 he was given an assistant, one Henry Purcell, who succeeded him in 1683. Whereas Burward and Norgate were practising organ builders, Hingeston and Purcell acted as agents only, although they probably had the ability to tune and effect minor repairs. Payments for new organs usually went via them, which obscures the identity of the actual builders, but Ralph Dallam is first named in the accounts from 1665, Bernard Smith, as King's Organ Maker from December 1671⁸⁶ and Renatus Harris from 1686. The frequency with which the accounts record the 'remooveing, erecting and takeing downe' of organs reveals the flexibility with which they were deployed within the palaces.⁸⁷ One regular manoeuvre occurred annually between 1663 and 1683 when Hingeston was paid a

⁸⁰ Thurley, *Whitehall* pp.137-8

⁸¹ *RECM* VIII p.325 (Chapel Royal register)

⁸² *RECM* VIII p.109 (Receipt from Margery Burward)

⁸³ *Ibid.* p.127 (Bill from John Burward)

⁸⁴ *RECM* VIII p.65 (Signet Office docquet)

⁸⁵ *RECM* VIII p.140 (Sign Manual warrant)

⁸⁶ *Ibid.* p.218 (Sign manual warrant)

⁸⁷ *RECM* V p.125 (Treasurer of the Chamber's accounts)

fee of £2 5s for setting up an organ in the Banqueting House to accompany the Maundy service.⁸⁸ On another occasion in 1674 payment was made

To Bernard Smyth, the organ maker, for the loan of an organ for the banqueting house and for three days tyme: £2 0 0

For the setting it up in the banqueting house: £2 0 0

For 4 of his porters for carrying it thither: 0 18 0⁸⁹

The porters' wages represent approximately one and a half days' work for each of the four men,⁹⁰ suggesting that the organ was brought from, and returned to, a location relatively close to the palace. Smith gave his address in 1686 as 'over again the Cock, in Suffolck Stret, near Chering Crose',⁹¹ less than half a mile from Whitehall, so it seems probable that his workshop was close by.

The introduction of the violin band, Baltzar's keyboard continuo parts and Locke's figured basses were but three musical manifestations of that 'grand metamorphosis of musick', as North described it, whereby 'the old way of consorts were layd aside at Court, and the King made an establishment after a French model'.⁹² The French, and later Italian, music championed at court by Charles II and James II and promulgated by the continental musicians imported by their respective foreign-born queens exerted a considerable influence in the fields of church music and early opera in London, and – significantly for the consort organ – also transformed the landscape of secular chamber music by introducing continental models of instrumentation.

Prior to the arrival of Queen Catherine in London, John Evelyn had attended a dinner at Arundel House in the Strand in January 1663 at which he heard 'excellent Musique, perform'd by the ablest Masters both French and English, On Theorba, Viols, Organs and voices as an exercise against the coming of the Queene, as

⁸⁸ The first payment is listed in Lna 5/138 (*RECM I* p.49, Miscellaneous Warrants)

⁸⁹ Lna LC 5/141 (*RECM I* p.156, Miscellaneous Warrants)

⁹⁰ Janl van Zanden, 'Wages and the Cost of Living in Southern England (London) 1450-1700', International Institute of Social History website <<http://www.iisg.nl/hpw/dover.php>> accessed 22 February 2017

⁹¹ Andrew Freeman, *Father Smith Otherwise Bernard Schmidt, Being an Account of a Seventeenth Century Organ Maker* (London: Musical Opinion, 1926), p.72

⁹² Wilson, *Roger North* p.349

purposely compos'd for her chappell'.⁹³ It seems likely that this was the company of six 'Musiciens Francois de sa Maiesté' who were present at the court between 1663 and 1668,⁹⁴ comprising a 'Maistre de la Musique', a 'Joueur de Clavessin de la musique' (Jean de la Vollée), and four other musicians, probably singers.⁹⁵ Their principal role appears to have been to serve the queen's chapel at St James's, but they probably also fulfilled a secular function in her 'musique room' as suggested by the 70 works for two treble and bass viols that survive from the pen of de la Vollée. Although an organ was used for the Arundel House event, it was not generally favoured in French chamber music. There are some French works for which the organ was specified, such as the consorts by Dumont from his 1657 collection of *Meslanges*, but for the most part the French continuo instrument of choice was the *espinette* or *clavecin*.⁹⁶ The perceived disadvantages of the organ in consorts were enumerated in several French treatises: Mersenne, for example, catalogued a litany of problems relating to tuning, temperament, the need for a bellows operator and the overall expense.⁹⁷ As observed in chapter 1, French chamber organs of the seventeenth century were a rarity.

It was in this context that the court records began to fall silent with regard to secular organs from the 1670s onwards. Under James II in the 1680s Italian influence came to the fore,⁹⁸ and the movement of consort organs represented in the accounts was now replaced by payments for the frequent transportation of harpsichords between Whitehall and Somerset House under the supervision of Emanuel Diaz.⁹⁹ Written-out organ parts and organ scores were gradually supplanted instead by thorough-bass parts intended mainly for the harpsichord. The London-influenced practice at the Oxford Music School also reflected these trends, but generally the new ways were slower to permeate the provinces: Roger North, who was himself the compiler of a significant collection of Italian music, observed that 'the French manner of instrumentall musick did not gather so fast as to make a revolution all at once', and

⁹³ E.S. de Beer (Ed.), *The Diary of John Evelyn* (Oxford: OUP, 1955), III p.310

⁹⁴ Holman, *Violins* pp.290-1

⁹⁵ For further discussion, see Andrew Walkling, *Masque and Opera in England, 1656-1688* (Abingdon: Routledge, 2017), pp.214-5

⁹⁶ For an account of French practices see Robert Zappulla, *Figured Bass Accompaniment in France* (Turnhout: Brepols, 2000)

⁹⁷ Marin Mersenne, *Harmonie Universelle* III (Paris: Cramoisy, 1636), pp.104-7

⁹⁸ see Andrew Cheetham, Joseph Knowles and Jonathan Wainwright (Eds.), *Reappraising the Seicento* (Newcastle: CSP, 2014)

⁹⁹ Lla Worsley MS. viii (Worsley family papers, 1675-79)

that for most of Charles's II reign there was still an appetite whereby 'the old musick was used in the countrys'.¹⁰⁰ In 1676 Thomas Mace still needed to remind amateur players that the foreign-inspired '*Ayrey, Jocond, Lively, and Spruce*' repertoire should be performed 'not to the *Organ* (as many (now a days) *Improperly, and Unadvisedly* (perform such like *Consorts* with) but to the *Harpsichon*'.¹⁰¹ Although the consort organ had fallen from fashion at court by the early 1680s, it continued in use in provincial music-making until the end of the century. It is therefore to the role of the consort organ in the context of domestic performance spaces beyond the court that consideration next turns.

2.5 Domestic contexts beyond the court

The evidence for consort organs in domestic contexts outside the court can be found in contemporary sources such as household inventories, accounts, diaries, and music manuscripts: over a hundred individual instruments can be identified over the course of the century, and there were doubtless many more. Plotting their known locations on a map (Appendix 3.1) reveals that the majority were found on the eastern side of the country, with a particular focus on the south-east and East Anglia. One might reasonably expect the influence of London to be felt locally, but given that the seats of the aristocratic families in the orbit of the court were spread throughout the country, this distribution suggests that other factors were also at work. One such may have been practical ease of access to organ builders able to make and repair consort instruments, of whom many, like Hamlett, Craddock, Burward, Dallam and Smith, were London-based. Another may have been the ability to secure the services of organists, many of whom maintained close connections to London and the courtly musical circle whilst also undertaking domestic service in the provinces.¹⁰² Most aristocratic families were closely linked through marriages over many generations;¹⁰³ others shared political, religious or social interests. Music, as a focus of both formal and informal social interaction, was

¹⁰⁰ Wilson, *North* p.351

¹⁰¹ Mace, *Musick's Monument* p.235

¹⁰² David Price, *Patrons and Musicians of the English Renaissance* (Cambridge: CUP, 1981), pp.17-18

¹⁰³ A study of these links is found in Lawrence Stone, 'Marriage among the English Nobility in the Sixteenth and Seventeenth Centuries' *Comparative Studies in Society and History* 3:2, 182-206

a subject of common interest,¹⁰⁴ or, as David Price put it, 'a shared language: part of the vocabulary of civilised country life',¹⁰⁵ which manifested itself through such practices as the widespread copying and sharing of manuscripts among households.¹⁰⁶ In addition to the social networks among patrons and employers, there were also the close professional ties among the musicians themselves, ultimately leading back to the court. By all of these means, practices that required the use of consort organs were disseminated and instruments were duly acquired by those able to afford them.

Given that organs were complex and expensive luxury items, wealth inevitably played a role in their distribution. Comparing the locations of organs with the area representing the concentration of the top 50% of wealth in the country reveals a strong correlation (Appendix 3.2).¹⁰⁷ It may also be seen that the majority of organs in domestic contexts were found in the homes of members of aristocratic or gentry families. Consort organs are rarely recorded in houses of non-noble status, excepting a few instances where the householders were professional organists.¹⁰⁸ A relatively high proportion of owners were holders of the lesser noble titles, such as barons and baronets, many of whom had been ennobled after 1600. Consort organs were thus associated both with the establishments of the ancient nobility, modelled on, and strongly influenced by, the court, but also with the relatively modest households of the lesser gentry, often representing 'new money' and aspirational in outlook. The former frequently employed a professional musical establishment, whilst the latter were more likely to be recreational amateur musicians themselves, perhaps under the guidance of a resident or visiting professional.¹⁰⁹

The influence of the court can also be demonstrated by examining the political allegiances of the owners of consort organs during the Civil War. The overwhelming majority of the organs were found in Royalist households (Appendix

¹⁰⁴ Price, *Patrons* pp.67-71

¹⁰⁵ *Ibid.* p.151

¹⁰⁶ Andrew Ashbee, 'The Transmission of Consort Music' in Andrew Ashbee and Peter Holman, *John Jenkins and his Time* (Oxford: Clarendon Press, 1996) pp.243-70.

¹⁰⁷ Data sourced from R.S. Schofield, 'The Geographical Distribution of Wealth in England 1334-1649' *The Economic History Review* 18:3, 483-510

¹⁰⁸ For a study of instruments in wills and probate inventories, see Michael Fleming, 'An 'Old Old Violl' and 'Other Lumber': Musical Remains in Provincial, Non-Noble England c.1580-1660' *GSJ* 58, 89-99

¹⁰⁹ Price, *Patrons* pp.9-19

3.3). One possible extra-musical motivation to possess an organ may have been to suggest a connection with court practices as a matter of social status, or perhaps even to demonstrate an allegiance to it as a political statement. A particularly striking feature is that the areas of greatest density of consort organ ownership also corresponded closely with those regions that were undisputed Parliamentary territory during the Civil War. These households were therefore oases of royalist support in parliamentary areas, and in the light of the destruction inflicted on church organs by roundhead troops during the war, the ability to disguise a consort organ, with its royalist associations, as a cupboard or cabinet behind enclosing doors was no doubt advantageous. Perhaps a similar fear relating to the negative association in the popular mind of church organs with the Catholic liturgy resulted in the paucity of instruments recorded in recusant households (Appendix 3.4).¹¹⁰

One household closely connected to the court was that at Hatfield House, Hertfordshire, the country seat of Robert Cecil (1563-1612), Secretary of State to Elizabeth I and James I. Hatfield was extensively refitted in the early 1600s to receive visits by James and Queen Anne, as part of which the domestic arrangements were reorganised on the Whitehall model with the formation of separate royal suites for the king and queen, each centred around its own great chamber.¹¹¹ The larger chamber is an impressive space measuring approximately 20m by 8m with a ceiling height of 8m. Between 1605 and 1613 the Cecil household maintained eight full-time musicians, including the organist Thomas Warwick, Coprario, and several boys who appear to have been violists and singers.¹¹² In addition to these, Cecil's wealth and influence enabled him to buy or borrow the services of many more, including court musicians, as the need arose.

At Cecil's London residence, Salisbury House, the earl is recorded as having borrowed organs on several occasions, such as that procured from the house of Sir Fulke Greville of Austin Fryars for one day on 30th-31st October 1607 at a cost of 6s 6d.¹¹³ Considerable expenditure was also recorded on viols and other stringed

¹¹⁰ Ibid. pp.154-77

¹¹¹ Emily Cole, *The State Apartment in the Jacobean Country House, 1603-1625* Unpublished DPhil thesis, University of Sussex, 2010

¹¹² Lynn Hulse, 'The Musical Patronage of Robert Cecil, First Earl of Salisbury (1563-1612)' *Journal of the RMA* 116:1, 25-6

¹¹³ Richard Charteris, 'Jacobean Musicians at Hatfield House 1605-1613' *RMARC* 12, 119

instruments, and from December 1607 Thomas Dallam was paid 40s annually for the tuning and maintenance of the organs.

The first record of an organ at Hatfield appeared in April 1608 when Dallam received £24 for a second-hand 'portatyve wynd instrument' which had formerly stood in the Earl of Suffolk's rooms at Whitehall.¹¹⁴ Then, in January 1609, £1,060 was paid to John Haan, a Dutchman, for 'the greate winde instrm't and other things',¹¹⁵ the latter including luxury items such as a 'table of silver like a picture' and 'a clocke in the form of a turtus'.¹¹⁶ Haan received a further £35 for a positive in April of the same year.¹¹⁷ In July 1610 Dallam was paid 53s for 'setting up, renewing and perfecting' the organs¹¹⁸ and in September he received 17s 6d for working on the positive, including two days' work at 10s and the manufacture of 'one wodden pipe' for 2s 6d.¹¹⁹

In 1611, Rowland Buckett was paid £26 4s 3d for 'gildinge the organ in the greate chamber' as part of extensive work undertaken in anticipation of the king's first visit.¹²⁰ Buckett was a painter and gilder who had previously worked with Dallam on a mechanical organ presented to Sultan Mehmet III of Turkey in 1599; the organ had been commissioned by the Levant Company ostensibly as a gift from Elizabeth I, with Cecil overseeing the queen's interests in the project. Both Dallam and Buckett had accompanied it on its journey to the east.¹²¹ The Hatfield organ appeared in an inventory of 1612 as 'a fayre new wynd instrument of organ gilt, standinge in the great chamber' along with furnishings that also included six tapestries, a floor carpet, eight window curtains and various upholstered chairs.¹²²

¹¹⁴ HMC Salisbury MS Bills 33, Hulse, *Musical Patronage* p.118

¹¹⁵ HMC Salisbury MSS Accounts 9/5, Hulse, *Musical Patronage* p.116

¹¹⁶ *Ibid.*

¹¹⁷ HMC Salisbury MSS Accounts 160/1 f.139, *ibid.* p.119. Haan seems to have been a merchant of luxury goods; there is no clear evidence that the organs he supplied were sourced from the continent, as is often supposed.

¹¹⁸ This sum has been widely misquoted in the organ literature as £53.

¹¹⁹ G. Dynfallt Owen (Ed.), *The Cecil Papers in Hatfield House: 24 Addenda 1605-1668* (London: HMSO, 1976), Bills, p.46

¹²⁰ HMC Salisbury MS Bills 58/1, Hulse, *Musical Patronage* p.116

¹²¹ The trip is described in Stanley Mayes, *An Organ for the Sultan* (New York: Putnam, 1959)

¹²² Hulse, *Musical Patronage* p.116



Fig.2.4. Consort organ, Hatfield House, Hertfordshire, 1609 (Photo: the author)

This appears to be the organ that remains today at Hatfield (Fig. 2.4). Unfortunately, much of the pipework and the mechanism were replaced by Samuel Green in the late eighteenth century such that identification of the original builder is not possible, but beneath the rich Italianate detail lavished on the exterior, the underlying design is clearly related to that of other extant English cabinet organs, and the case alone represents an important survival from the early years of the century.¹²³ Buckett is the only decorative artist who can definitely be identified as having worked on a secular organ: payments to several artists and gilders are found among the court records for decorating organs, but it cannot be established whether they worked on the liturgical or secular instruments. The Hatfield organ is exceptional among the

¹²³ Boeringer, *Britannica*, p.34. Features of the decoration closely resemble those on an illustration of Dallam's organ for Sultan Mehmet, also decorated by Buckett: see *Illustrated London News* 20 October 1860

extant instruments for the richness of its decoration, but it represents a well-established tradition of embellishing keyboard instruments that is evidenced by the descriptions in the Henry VIII inventory, by accounts of gifts to foreign powers, such as the 'organes and vergenalls, all gilt and enambled' that were sent to Tsar Boris Godunov by the Russia Company in 1586,¹²⁴ and by the rich appearance of the surviving court virginals and harpsichords.¹²⁵ It seems reasonable to imagine that this tradition was also reflected in the visual appearance of the royal consort organs.

Another impressive household modelled on the court was that of Hengrave Hall, Suffolk, home to the Kitsons, a prominent recusant family. The house hosted visits by Elizabeth I, and was provided with an impressive suite of public rooms. The household accounts provide a detailed picture of the musical provision, with numerous entries recording the purchase and repair of instruments and payments for the services of musicians. Among those resident were the composers Edward Johnson and John Wilbye, the latter of whom was employed between 1592 and 1628. An inventory dated 29 March 1603 lists the contents of the 'chamber where ye musicyons playe' in detail.¹²⁶ Again, the instruments reflected the provision at court, including six viols, six violins, a case of seven recorders, numerous plucked strings and a variety of woodwind and brass instruments. The keyboards included a small and large virginals, 'one wind instrument like a virginall' and 'one payer of great orgaynes'. Two more virginals were found in the dining room and the winter parlour, and the chapel contained 'one payer of litle orgaynes, wth a board w^{ch} thay stand on'. Among the many music books were several volumes of instrumental dances, including 'Pavines and galliards for the consort'. Apart from the instruments, there was little furniture in the music room (two chests for the bowed strings, one long table with two trestles, and two forms) and the only soft furnishings were wall hangings. The adjacent room was 'Wilbee's chamber'; its comfortable furnishings demonstrated the high regard in which he was held by the family.

¹²⁴ see Ian Woodfield, *English Musicians in the Age of Exploration* (New York: Pendragon Press, 1995), pp.187-8

¹²⁵ Examples include the 'Queen Elizabeth' virginals of 1594 in the V&A (museum no 19-1887) and the 1664 'King Charles II' virginals in the Cobbe Collection, Hatchlands Park, Surrey.

¹²⁶ John Gage, *The History and Antiquities of Hengrave Hall, Suffolk* (London: James Carpenter, 1822), pp.21-2

Further afield from London, Welbeck Abbey, Derbyshire, was home to William Cavendish, Duke of Newcastle (1593-1676). Cavendish was an insider at court, being a confidant to Charles I and Queen Henrietta Maria, both of whom he entertained lavishly at Welbeck. The duke employed five resident adult musicians and several musical boys prior to the Civil War, including two violists, the lutenist Maurice Webster, an organist, Mr Tomkins (possibly either John or Giles, later organists of St Paul's and Salisbury cathedrals respectively), and a Mr. Watson who had charge of the instruments and music manuscripts.¹²⁷ Many others were employed on an occasional basis. An inventory compiled in 1636 by the duke's secretary John Rolleston provides an insight into the musical resources available, which numbered some 41 instruments, including 15 viols, 11 wind instruments (including flutes, cornetts and sackbuts), 10 plucked string instruments, five harpsichords, a virginal and two organs.¹²⁸ One organ and an old harpsichord were found in the chapel, and in the Long Gallery was an 'Organ and harpsicall, to geather' (i.e. a claviorgan). Here, though, there were no keyboard instruments listed in the Great Chamber, suggesting that the Long Gallery was the main focus for the secular consort music-making in the Cavendish household. William Cavendish was himself a keen violist, and he may have preferred to play privately with his resident musicians in an informal environment. Long galleries were principally provided for just such private recreations,¹²⁹ 'for the use of the master and his family, and his indulgent friends onely and not for proud and ambitious entertainment', as Roger North put it.¹³⁰ Such contexts were in effect the domestic equivalent of the Privy Gallery at court, and music fulfilled a similar function within them.

The dimensions of galleries were nevertheless generous, usually varying between 30m and 85m in length, with a width of 5m – 8m, and were a popular setting for a consort organ.¹³¹ In the 'High Gallerie', at Scampton Hall in Lincolnshire was found in 1663 a 'paire of Organs' valued at £60 along with a 'box with a duoble base viol

¹²⁷ Hulse, *Musical Patronage* pp.25-8

¹²⁸ Lynn Hulse, 'The Duke of Newcastle and the English Viol' *Chelys* 29, 28-43

¹²⁹ see Rosalys Coope, "'The Long Gallery": Its Origins, Development, Use and Decoration' *Architectural History* 29, 43-72, 74-84

¹³⁰ Howard Colvin and John Newman (Eds.), *Of Building: Roger North's Writings on Architecture* (Oxford: OUP, 1981), pp.136-7

¹³¹ *Ibid.* p.53

and two trible violls' and a 'deale box with a Theorbo and a Lute'.¹³² Thirteen further viols were also available elsewhere in the house. Scampton was the residence of Sir Robert Bolles (1619-1663), another keen viol player who patronised Christopher Simpson, whom he employed as a resident musician from the mid 1640s. Bolles was the dedicatee of the first edition of Simpson's *The Division Violist* (1659), and was also acquainted with a number of prominent court violists and composers including Jenkins and Locke.¹³³ Another organ was found in the gallery at Rougham Hall, Norfolk, constructed by the antiquarian and amateur musician Roger North 'sixty feet long to hold an organ built by old Father Smith.'¹³⁴ Charles Burney inspected the organ in 1752 and reported that: 'This instrument, though entirely composed of wooden pipes, was spritely, and infinitely more sweet in its tone, than any one of metal that I ever heard.'¹³⁵

North was one of only a very few amateur gentry musicians who are recorded as having played the organ themselves.¹³⁶ More frequently a professional organist was employed to play, as at Kirtling Hall, Cambridgeshire, where North's grandfather Dudley employed Henry Loosemore, organist of King's College, Cambridge, during the Interregnum. Loosemore was resident at Kirtling from 1652-58 for an annual wage of £8, and continued to be a regular visitor until 1663.¹³⁷ Skipton Castle, Yorkshire, was home to Francis Clifford, fourth Earl of Cumberland and a member of the Cecil faction at court. In March 1619/20 Clifford engaged one 'John of Yorke' as his organist, otherwise identified as John Hingeston.¹³⁸ Hingeston had access to an organ in the Parlour and a 'virginal with a wind instrument in it' purchased in 1620.¹³⁹ Another organ was recorded in the Great Parlour at Londesborough Hall, also a Clifford residence. The latter instrument was worked on by the Yorkshire organ builders George Mashrother and George Brownlesse in 1624; interestingly,

¹³² Michael leming and John Bryan, *Early English Viols: Instruments, Makers and Music* (Oxford: Routledge, 2016), p.207

¹³³ Margaret Urquhart, 'Sir Robert Bolles Bt. of Scampton' *Chelys* 16, 23

¹³⁴ Sarah Boydell, *The Domestick or retired life of The Honble Roger North* (Unpublished MS, Forster Collection, Victoria and Albert Museum, 1826)

¹³⁵ Charles Burney, *A General History of Musick from the Earliest Ages to the Present Period* III (London: Burney, 1789), p.409. Three stops of this organ survive at East Dereham church, Norfolk.

¹³⁶ Wilson, *Roger North* p.49

¹³⁷ North Family Account Books, the Loosemore website <<http://www.loosemore.co.uk/Chapter7/CHAPTER7text.htm>> accessed 18 January 2018

¹³⁸ Hulse, *John Hingeston* p.25

¹³⁹ *Ibid.* p.26

their work included replacing metal pipes with wooden ones, perhaps to render the organ more suitable for use with viols.¹⁴⁰ The inventories at Skipton also listed a large collection of instruments, including two chests of viols and a variety of plucked string instruments. Like many full-time musicians, Hingeston fulfilled other household tasks (butler and yeoman of the cellar) as part of his service to the Cliffords,¹⁴¹ as did the organist George Jefferys (steward) to the Hattons at Kirby Hall.¹⁴²

At Hunstanton Hall, Norfolk, the L'Estrange family numbered several keen and evidently very able violists among their number, but none appear to have played the organ.¹⁴³ Instead, Thomas Brewer found employment there, alongside John Jenkins who was resident in the 1640s.¹⁴⁴ The L'Estrange's music room contained '1 organ 1 pedal Harpeicon [sic] 3 presses with viols & musick books',¹⁴⁵ the latter comprising a considerable collection of consort music, much of which survives, as does the organ, purchased in 1630, which now resides at Smithfield, Virginia (see chapter 5.1 for an account of the Hunstanton establishment). Subsequent alterations to the hall have obscured the seventeenth-century internal layout of the house, but an inventory reveals that the music room was adjacent to the dining room and to Sir Nicholas's impressive library: again, court practice is reflected in the placement of the organ in a room between the principal public space of the house and the private sanctum of its owner.

Dining and music have a long historical association, and in the early seventeenth century, string consorts were considered the most suitable accompaniment to most formal meals except at the largest gatherings. Richard Braithwaite, writing in 1621, recommended that: 'At great feasts... give place to the Musitians, who are to play ... upon Shagbutte, Cornetts, shalmes and other instruments going with winde. In meale times to play upon Violls, violins, or other broken musicke'.¹⁴⁶ On July 16th

¹⁴⁰ Ibid. p.27

¹⁴¹ CW Bolton MSS bk. 97, f. 49r (Clifford family accounts)

¹⁴² Jonathan Wainwright. *Musical Patronage in Seventeenth-Century England: Christopher, First Baron Hatton (1605-1670)* (Aldershot: Scolar Press, 1997), p.119

¹⁴³ Anne Dunan-Page and Beth Lynch (Eds.), *Roger L'Estrange and the Making of Restoration Culture* (Aldershot: Ashgate, 2008), pp.150-1

¹⁴⁴ Ibid. p.152

¹⁴⁵ Lna PROB 4/3988

¹⁴⁶ Richard Braithwaite, *Some Rules and Orders for the Government of the House of an Earle* [1621] (London: Triphook, 1821), p.44

1607, the Merchant Taylors Company honoured King James I and Prince Henry with a banquet featuring an entertainment by Ben Jonson that included several songs and instrumental items scored for cornetts, treble violins, six lutes, a flute and five wind instruments. After the entertainment, the king retired to a separate room to dine privately whilst John Bull, Prince Henry's court organist, played on an organ that had been brought from Ruckholt, the house of Sir Michael Hicke in Essex, for the sum of £2 18s. Bull was awarded the livery of the Company for his efforts.¹⁴⁷ After the Restoration, Charles II, inspired by the practices of Louis XIV, reinstated the Tudor custom of the monarch dining in public and numerous accounts bear testimony to the presence of musicians at both public and private dining at court.¹⁴⁸

In many of the larger provincial houses the multi-functional Great Chamber was used for formal dining as well as for entertainment, and here too household musicians were often engaged to perform before, during and after meals. Pepys attended a dinner at the Earl of Sandwich's Whitehall apartments in 1660: 'Hence to the organ, where Mr. Child and one Mr. Mackworth (who plays finely upon the violin) were playing, and so we played till dinner and then dined'.¹⁴⁹ On another occasion 'After dinner my Lord Brereton very gently went to the organ and played a verse very handsomely.'¹⁵⁰ In April 1666 Pepys sought to emulate these practices in his own home: 'Up betimes, and with my Joyner begun the making of the window in my boy's chamber bigger, purposing it shall be a roome to eat and for having musique in'.¹⁵¹ Unfortunately, his ambition to equip the room with an organ was never realised.

That music during meals was intended for the background was demonstrated by a comment made by the 3rd Baron North in a letter to his resident organist, Henry Loosemore, in 1658, in which he remarked upon: 'the short airs which possess the present time... [which are] fit for common Consorts of pleasure, to tickle the ear, eat, drink, dance, or discourse, whilst they fill the Room and Ear, not the Soul'.¹⁵² 'Short airs' were the typical provision within the volumes of music for viols or violins and

¹⁴⁷ Martin Wiggins, *British Drama 1533-1642: A Catalogue Vol. I* (Oxford: OUP, 2011), p.400

¹⁴⁸ *Ibid.* p.307

¹⁴⁹ Pepys, *Diary* 20 November 1660

¹⁵⁰ *Ibid.* 5 January 1668

¹⁵¹ *Ibid.* 9 April 1666

¹⁵² 3rd Baron North to Henry Loosemore, Catlidge [Kirtling], 28 August 1658, Wilson, *Roger North* p.4

keyboard continuo published by English composers working on the continent in the German *Tafelmusik* tradition (for example, William Brade's *Neue ausserlesene Paduanen, Galliarden, Cantzonen, Allmand und Couranten* (1609) and Thomas Simpson's *Taffel-Consort* (1621)). Nothing quite comparable to these was published in England, but perhaps the fact that Brade's suites included numerous arrangements of items from English masques and theatrical productions provides a clue to the kind of light music that may have been favoured during meals at court and elsewhere.

The particularly comprehensive set of accounts and other papers dating between 1638 and 1655 relating to Tawstock Court, Devon, the home of the Bouchiers, Earls of Bath, provides a rare insight into the process of acquiring consort organs for domestic contexts, and a detailed description of their context. The Bouchiers were related by marriage to the Kitsons of Hengrave, the Cliffords of Skipton and the Sackvilles of Knole, illustrating the tight networks that linked musical aristocratic families at this period. Although far-removed geographically from the influence of the court, Tawstock maintained an ambitious musical household prior to the Civil War.

The accounts begin in January 1638 with an inventory taken on the death of the 4th Countess of Bath that includes a claviorgan in the Parlour along with a chest of viols in an upstairs chamber.¹⁵³ The 5th Countess's re-ordering of the interior resulted in a second inventory, taken in March 1639, which recorded a newly-created Great Chamber in which was placed a 'fair organ'. The claviorgan, by now probably an old instrument, was relegated to the staircase hall, where also was placed the chest of viols together with 'one very great double base viole, one Irish harp, one little viol, one violin'.¹⁵⁴ Maintenance of the organs was provided by the organ and virginals maker John Loosemore of Exeter, then in his mid-twenties, in addition to general household maintenance.¹⁵⁵ The two inventories demonstrate that the reception rooms at Tawstock were amply provided with soft furnishings. The 1638 Parlour contained:

¹⁵³ MA U269/A518/5 p.226 (Bouchier accounts)

¹⁵⁴ MA U269/A518/5 p.219 (Bouchier accounts)

¹⁵⁵ MA U269/A520/4 p.6 (Bouchier accounts)

1 drawing table, 2 side tables, 1 court cupboard, 1 billiard board, 25 green stools, 1 chair & cushion, 1 pair of organs with virginals, 1 pair of brass andirons, 1 pair of dogs, 3 large maps, 15 small pictures, 3 green carpets, 1 green cupboard cloth, 1 goose board, 1 pair of bellows with fire shovel and tongs, 4 low stools & 1 chair all of green velvet with red baize cases.

The new Great Chamber of 1639 included:

8 pieces of Arras of forest work £106, 1 long foot carpet Turkey work £6, 4 Spanish tables, 2 great chairs of red wrought velvet, 2 dozen of back chairs suitable, 1 great looking glass £15, 4 curtains of red baize ... 1 fair organ £100.

£100 was a considerable sum for a domestic organ of this period: Loosemore charged this amount for the 8 stop instrument he later built at Nettlecombe Court in 1667, so either the instrument was unusually large or, like the Hatfield organ, it was lavishly decorated.

In July 1641 the 5th Earl commissioned Robert Dallam to build a new organ for Tawstock at a cost of £55. This appears to have been the last work Dallam undertook before he left for his exile in France.¹⁵⁶ Dallam was initially paid a deposit of £7 in July 1641;¹⁵⁷ in October a further installment of £10 followed,¹⁵⁸ and in November £1 12s was paid for transporting materials from Gloucester,¹⁵⁹ where Dallam had been working on the cathedral organ. A further payment in January 1642 covered the transport of 'the residue of the things for the organ' to Appledore in North Devon, where they were loaded on to a boat and sailed to Tawstock for 3s 6d.¹⁶⁰ By March, the organ was completed, and Pollard, the Tawstock steward, wrote to the countess in London to report that: 'Lugg [John Lugg (c.1580-c1647)] the organist of Exeter hath byn here to trye the goodness of the new organ and gives it a very good commendation to bee sweetest that ever hee playd upon and that Mr Dallam hath well deserved X^{li} more according to the articles of agreement.'¹⁶¹

¹⁵⁶ Michel Cocheril, 'The Dallams in Brittany' *BIOSJ* 6, p63

¹⁵⁷ MA U269/A518/5 p.185 (Bourchier accounts)

¹⁵⁸ MA U269/A518/5 p.183 (Bourchier accounts)

¹⁵⁹ MA U269/A520/4 p.59 (Bourchier accounts)

¹⁶⁰ MA U269/A520/4 p.63 (Bourchier accounts)

¹⁶¹ MA U269/C276 (Bourchier correspondences)

The countess appears to have disapproved of the extra payment, but Pollard claimed that Dallam 'was soe much troublesome that he swore many fearfull oaths that he would not departe the house before hee had his full bargaine which I believe, if wee shuld have kept hym it would have cost your honour a great deal more.'¹⁶² Perhaps Dallam, conscious of his imminent departure to France, wanted to secure full payment before he left. Although the process of church organs being tested and approved by professional organists is well documented,¹⁶³ this is the only instance that has so far come to light relating to a consort organ.

In September 1641 Richard Cobb was employed as an organist for an annual wage of £14.¹⁶⁴ He had previously been a servant to Archbishop Laud until Laud's arrest by parliament in 1640: the archbishop later left him an organ, harpsichord, harp and a chest of viols prior to his execution.¹⁶⁵ The accounts suggest that Cobb also fulfilled the role of a steward at Tawstock. There was clearly much music: the 1639 inventory listed a 'Musicians Chamber' which contained four beds; in March 1640 8s was paid for making 'the fiddlers coats',¹⁶⁶ and there were numerous payments to various musicians including a harpist, a singing teacher, and violinists. Among the many instruments purchased were viols, violins, a gittern, guitar and theorbo, a harpsichord, and a trumpet for announcing the earl's arrival, alongside payments for strings and music books. The full-time liveried musicians, the presence of violinists and the ceremonial instruments are all features that reflect the provision of music at the royal court. They were probably employed to the full when Prince Charles visited Tawstock during the Civil War in 1645.¹⁶⁷

In 1646 the earl commissioned John Burward to build another chamber organ for £20;¹⁶⁸ this was most probably intended for the earl's London residence at Bath House, Lincoln's Inn Fields. Burward, like Dallam, was paid in four instalments as work progressed. Music was also a prominent feature of life at the London house: expenditure on viol strings suggests that consort music was played there, and court

¹⁶² MA U269/A525/5 (Bourchier accounts)

¹⁶³ e.g. the famous 'Battle of the Organs' of 1683 conducted between rival instruments for the Temple Church by Harris and Smith.

¹⁶⁴ MA U269/A518/5 p.233 (Bourchier accounts)

¹⁶⁵ William Laud, *The History of the Troubles and Tryal of ... Archbishop Laud* (London, Chiswell, 1645), p.455

¹⁶⁶ MA 269/A520/4 p.23 (Bourchier accounts)

¹⁶⁷ MA U269/A518/5 p.180 (Bourchier accounts)

¹⁶⁸ MA U269/A518/1 (Bourchier accounts)

musicians such as Stephen Bing and Charles Coleman were employed to teach members of the family.¹⁶⁹ An inventory taken after the death of the 5th earl in 1655 shows that the focus for music-making within the domestic apartments at Tawstock had moved yet again.¹⁷⁰ One 'old organ' had been relegated to an upstairs bedchamber, and now a 'fair organ', together with a harpsichord, was to be found in the Dining Room. It was to be joined later that year by yet another new organ, commissioned for £21 from Loosemore by the 6th countess.¹⁷¹ No details survive of this instrument, and at this point the extant accounts cease.

This seventeen-year glimpse into the music of a royalist household provides some interesting parallels with the practice at court. Consort organs were being employed in the public rooms (the Great Chamber and Dining Room), and also in the more private apartments (the Parlour and upper bedchambers). The instruments were moved as need or fashion dictated, and they were played by a resident professional, seemingly in consort with viols and violins. They were commissioned from London-based court instrument makers, but their provincial location required the services of a local man for maintenance and tuning. The detailed account of the payment procedure and testing process is unique among the surviving sources, but may well represent a common *modus operandi*, particularly where more expensive, bespoke instruments were concerned.

Music was as much for personal pleasure as public entertainment, and the private apartments of homes were often used for more intimate music-making. Samuel Pepys began to equip his London house for such activity when, in August 1663, he 'set some joyners on work to new lay my floor in our wardrobe, which I intend to make a room for musique'.¹⁷² The following year he 'set my plaisterer to work about whitening and colouring my musique roome',¹⁷³ perhaps to improve its acoustics. Pepys clearly felt the room was incomplete without an organ: 'Thence to the Exchange... while meeting Dr. Gibbons there, he and I to see an organ at the Dean of Westminster's lodgings at the Abby;.... Here I saw the organ; but it is too big for my house, and the fashion do not please me enough; and therefore will not have

¹⁶⁹ MA U269/A518/1 p.12 and MA U269/A518/5 p.102 (Bourchier accounts)

¹⁷⁰ MA U269/T96/4 (Tawstock inventory)

¹⁷¹ MA U269/A520/4 (Bourchier accounts)

¹⁷² Pepys, *Diary* 3 August 1663

¹⁷³ *Ibid.* 5 August 1664

it'.¹⁷⁴ Visiting the Earl of Sandwich's official residence at Whitehall in November 1667, Pepys 'found my Lord, who had an organ set up to-day in his dining-room, but it seems an ugly one in the form of Bridewell.'¹⁷⁵ This term was a synonym for prisons and workhouses, so perhaps the organ had some form of grille or pipe-less façade. It is interesting to note that the appearance of the organ was clearly an important factor, emphasising the potency of the organ to make a visual, as much as a musical, statement on behalf of its owner.

As in many domestic contexts, space was at a premium for Pepys and a compact instrument, such as that he saw in the choristers' schoolroom at Whitehall, was an advantage:

At Whitehall: I did go into the musique-room, where Captain Cocke [Henry Cooke] and many others; and here I did hear the best and the smallest organ go that ever I saw in my life, and such a one as, by the grace of God, I will have the next year, if I continue in this condition, whatever it cost me. I never was so pleased in my life.¹⁷⁶

Pepys's outlook provides an interesting insight into the aspirations of a wealthy household for the acquisition of an organ. Although they are rarely recorded in middle-class households, some professional organists acquired their own instrument. Among them were Edward Norgate (London 1649),¹⁷⁷ Henry Loosemore (Cambridge, 1661),¹⁷⁸ Richard Mico (London, 1663)¹⁷⁹ and Albertus Bryne (London 1668).¹⁸⁰ John Hingeston also had an organ in his private apartments: Roger L'Estrange recalled playing consorts there during the Commonwealth:

Being in St. James his Parke. I heard an Organ Touch'd in a little Low Room of one Mr. Hinckson's. I went in, and found a Private Company of some five or six Persons. They desired me to take up a Virole, and bear a Part... By and By (without the least colour of a Design, or Expectation) In comes Cromwell; He found us Playing, and (as I remember) so he left us.¹⁸¹

¹⁷⁴ Ibid. 24 February 1667/8

¹⁷⁵ Ibid. 9 November 1660

¹⁷⁶ Ibid. 16 November 1667

¹⁷⁷ Lna PROB 11/215 (Will of Edward Norgate, 5 October 1649)

¹⁷⁸ Anon., 'Organ Building at Cambridge in 1606' *The Ecclesiologist* 20:85, 395

¹⁷⁹ Lna LC 156/5/137 (RECM I p.43, Great Wardrobe accounts)

¹⁸⁰ Marcus Sealey, liner notes to *Albertus Bryne: Keyboard Music*. Compact Disc. Deux-Elles, DXL1124, 2008

¹⁸¹ L'Estrange, *Truth and Loyalty*, p.50

Roger North's brother, John, had an organ installed in his chambers at Jesus College, Cambridge in the 1660s, on which he was wont to practise late at night to the annoyance of his neighbours,¹⁸² whilst in his preface to the second volume of *Cantica Sacra* John Playford described 'some noble Friends Seeing and Hearing perform'd (at my House) several Choice English Anthems of like nature for Two Voices to an ORGAN.'¹⁸³

Among the other private domestic spaces in which organs were recorded, parlours, dedicated music rooms and occasionally bedchambers occur in inventories and accounts. The parlour of Skipton Castle contained '1 payre of organ, 1 harpsicon'¹⁸⁴ in 1643, and in 1645 an organ and harpsichord were recorded in the 'Byllyard Chamber' there.¹⁸⁵ The presence of a 'billiard board' in the parlour at Tawstock also demonstrates that music existed alongside other recreational activities. In the music room at Scampton Hall were two chests of viols, a harpsicord and some thirteen other viols, in addition to the organ and further viols found in the long gallery.¹⁸⁶ The furniture included seven stools and five chairs, the former presumably for violists and the latter perhaps for listeners. At Kimberley Lodge in Norfolk, Sir Philip Wodehouse, an amateur 'exceedingly skillful in music'¹⁸⁷ was bequeathed an 'organ, harpsecall, chest of violls and all other my musical instruments, now being or to be placed in ye musick roome of my house'¹⁸⁸ by his father in 1658. It was at this house that Jenkins spent his final years. The Petres of Thorndon Hall, Essex, a prominent recusant family and patrons of Byrd and Mico, also had a dedicated music room. Organs had been provided for the house since 1555,¹⁸⁹ and in 1589 a new one was purchased from the builder Robert Broughe, Byrd's brother-in-law, for

¹⁸² Lbl Add. MS. 32.514 f.28 p.253 (Reminiscences of Roger North)

¹⁸³ John Playford (Ed.), *Cantica Sacra ... The Second Sett* (London: Playford, 1674). Richard Hedgebeth claims that the reconstructed organ at Old Narrangansett Church, Wickford, Rhode Island, USA contains part of Playford's organ: personal email, 20 March 2016.

¹⁸⁴ Thomas Whitaker, *The History and Antiquities of the Deanery of Craven, in the County of York* (London: Nichols, 1805), p.303

¹⁸⁵ CW Bolton misc. papers: *Inventory of goods left at Skipton after the surrender wh'ch belonged to me* [Lady Elizabeth Boyle] ...

¹⁸⁶ Fleming and Bryan, *Early English Viols* p.207

¹⁸⁷ Inscription on the tomb of Sir Philip Wodehouse, St Peter's Church, Kimberley, Norfolk, 1681.

¹⁸⁸ Will of Sir Thomas Wodehouse, quoted in John Woodhouse, *The Wodehouses of Kimberley* (n.p., 1887)

¹⁸⁹ COLro D/DP A6 (Accounts of Thorndon Hall)

£50.¹⁹⁰ It was probably here that Charles de Ligny, a visiting Frenchman, heard 'Mre Willaume byrd qui sonnait les organs et plusiers aultres Instruments' (Mr William Byrd playing the organ and many other instruments) in 1605.¹⁹¹ When Mico entered service at Thorndon in 1608, he drew up an inventory of the 'Vialles, Lute, & Settes of singing Bookes'.¹⁹² It included a chest of five viols and bows, a lute, keys to the 'greate virginales' and 'wind instrument', and four sets of part books, most of which contained music by Byrd of three to six parts, including both volumes of *Gradualia*.

One last element relating to the provision of organs in domestic contexts is of interest in illustrating the potential of the instrument as a status symbol. A number of houses were provided with large organs after the Restoration in their Great Hall, usually placed on the gallery above the screens passage at the (socially) lower end of the room, a position that had often been used to accommodate musicians in the past. Three of these larger organs survive in situ, at Nettlecombe Court, Devon (1665/6), Wollaton Hall (c.1690) and Adlington Hall, Cheshire (1693), whilst others, such as the 1687 Smith organ formerly at Donyland Hall, Suffolk, have subsequently become church instruments.¹⁹³ The organ at Nettlecombe Court was constructed by John Loosemore of Exeter for £100 and originally contained eight stops consisting of both wooden and metal pipes.¹⁹⁴ The organ at Wollaton Hall has a consort organ case front surmounted by a re-used pediment and is enclosed by doors, but the console, unusually, is at the back¹⁹⁵ and all of the surviving original pipework is of metal. The Adlington organ is a remarkable, unaltered survival, comprising a two-manual organ of fourteen stops, including some very rare examples of reeds. It also possesses a unique set of French-style toe studs, which appear always to have been inoperable.¹⁹⁶

All three organs contain features more readily associated with liturgical instruments: all contain metal pipes; two include reed stops, and all three have church-style consoles with vertical rows of stop knobs. A devotional role seems unlikely, however: Adlington already had a chapel within the building, and

¹⁹⁰ COLro D/DP A20 (Accounts of Thorndon Hall)

¹⁹¹ Hatfield House, Cecil Papers cxci ff.272r-273v (Letter by Charles de Ligny)

¹⁹² COLro D/DP E2/1 (Thorndon Hall musical inventory)

¹⁹³ Freeman, *Father Smith* p.46

¹⁹⁴ TAr DD/WO 40/11 (Contract for organ)

¹⁹⁵ Stephen Bicknell, 'The Organ in Wollaton Hall' *BIOSJ* 6, 43-57

¹⁹⁶ John Mander, 'Some Notes on the Organ in Adlington Hall' *BIOSJ* 10, 67

Nettlecombe had an estate church directly in front of the house. Neither does a consort role seem likely: there is no room for seated musicians in the gallery at Adlington, and at Nettlecombe they would have had to sit either side of the organ case, out of sight of each other. Only Wollaton has space for a small consort in its gallery. All three organs would have been suited to playing the single manual solo repertoire, and Adlington could additionally have tackled works for double organ. Perhaps a clue to one purpose of these organs may be found in the opulent appearance of all three: Adlington with its two-storey case, Nettlecombe with its embossed tin pipes and revolving stars, and Wollaton with its elaborate cornice and painted doors are all visually impressive. These features, combined with a commanding position in a public part of the house, may suggest that their provision was as much about expressing wealth and status as musical use.

2.6 Domestic Chapels

Apart from those in the royal palaces, there are relatively few references to organs in domestic chapels in the seventeenth century. Only the largest houses supported sacred musical establishments at the turn of the century, and most domestic chapels were small and better suited to a spoken rather than sung liturgy. Due to the ongoing complexities of religious upheaval, it was generally prudent not to draw attention to one's private devotional practices, especially if these involved the Roman Catholic rite. Devotional music-making was important to many families, but was often conducted in private apartments, away from the public gaze (see Chapter 5.5).

One of the few households where music was used more extensively in the family's worship was that at Fawley Court, Buckinghamshire, where in 1631 Sir James Whitelocke 'had good musicke, by way of verse, before the lessons, with lutes, violes, harpe & organ playing together, all in an upper room att the lowere end of the chappell, with a courtain before them...'¹⁹⁷ The dramatic effect of the hidden musicians echoes that of the curtained musicians' galleries in contemporary theatres discussed below, and reflects the practice recorded in the royal chapels by which organists and instrumentalists were concealed behind curtains in the organ loft. Whether this was simply to prevent distraction by activity in the loft, or was related

¹⁹⁷ WMI Whitelocke Papers, v24 f239 (Miscellaneous family papers)

to an ideological unease with the sight of non-religious participating in the liturgy, is difficult to know. A similar arrangement may have existed in the chapel at Knole House, Kent, discussed in detail in Chapter 5.2.

Most domestic chapel organs were modest in size. At Hengrave Hall in Essex an inventory of 1602 recorded 'one payer of little orgaynes, wth a board w^h they stand on' in the chapel,¹⁹⁸ and in 1624 the upper chapel at Salisbury House in London had a 'paire of organs upon a frame';¹⁹⁹ the 'board' and 'frame' suggest that both these instruments were of the table organ type.²⁰⁰ By contrast, the organ built by Burward for the chapel at Chirk Castle, Denbighshire in 1631 for £150 was a liturgical-type instrument.²⁰¹

In compliance with the 1644 Lords and Commons Ordinance requiring the 'speedy demolishing of all organs, images and all matters of superstitious monuments in all Cathedrals, and Collegiate or Parish-Churches and Chapels',²⁰² most domestic chapel organs were removed. After the Restoration there seems to have been much less enthusiasm for maintaining a musical tradition in private chapels, and most domestic devotions were of a more modest and private nature.²⁰³

2.7 Choir Schools

The consort organ was not exclusively the preserve of the domestic environment, and there are a number of other contexts in which these instruments were used. There is evidence that cathedral and collegiate choristers were instructed in playing the organ from at least the early 1400s, and the practice became commonplace in the sixteenth century.²⁰⁴ The use of viol consorts as an educational tool in cathedral and college choir schools emerged in the 1540s and continued well into the late

¹⁹⁸ Gage, *Hengrave* p.32

¹⁹⁹ MA MSS Box C/4 (Bourchier accounts (London))

²⁰⁰ The term 'board' usually referred to a table-top, and 'frame' to the supporting structure.

²⁰¹ Bicknell, *History* pp.87-8

²⁰² C.H. Firth and Robert Rait (eds.), *Acts and Ordinances of the Interregnum 1642-1660* (London: HMSO, 1911), p.426

²⁰³ See Susan Treacy, *English Devotional Song of the Seventeenth Century in Printed Collections from 1638 to 1693: A Study of Music and Culture* Unpublished PhD thesis, North Texas State University, 1986

²⁰⁴ Alan Mould, *The English Chorister: A History* (London: Hambledon Continuum, 2007), pp. 107-12

seventeenth century;²⁰⁵ as late as 1675, for example, Bishop William Fuller of Lincoln left his chest of viols and organ for use at Christ Church Cathedral, Dublin.²⁰⁶ The influence of this practice was significant insofar as many professional musicians and composers began their careers as choristers, which resulted in the close textural connections between much pre-Restoration viol consort repertoire and the polyphonic music of the church.²⁰⁷

At Canterbury Cathedral in 1615 a chest of viols was purchased for the use of the lay clerks, where they may have been used for entertainment in the Deanery in conjunction with the extant Dean Bargrave organ.²⁰⁸ The will of John Holmes, master of the choristers at Salisbury, included a claviorgan valued at £3 in conjunction with a chest of viols in the choristers' house,²⁰⁹ and at Chester in 1634 the visiting Lieutenant Hammond was invited to 'Mr Organists Pallace [the house of cathedral organist Richard Newbold] and their heard his domesticke Organs, [and] Vyalls, with the voyces of this civil merry Company sweetly consorted'.²¹⁰ Christianus Smith tuned a 'little organ in ye music room' at Worcester Cathedral in 1686.²¹¹ At court, Henry Cooke, appointed Master of the Chapel Royal choristers at Whitehall in 1665, was paid £115 10s 6d for teaching 'Latin, writing, violin, organ, lute stringing and penning their harpsichords[,] fire and stringing in the musique room at the Chappell...';²¹² the small organ he used for this purpose, as described by Pepys, has been discussed above.

In 1666 John Loosemore built an organ for Exeter cathedral choir school, then sited in the Cloth Hall in the cloisters, where William Wake was paid £20 per annum to

²⁰⁵ Ian Woodfield, *The Early History of the Viol* (Cambridge: CUP, 1984); see also Ian Payne, *The Provision and Practice of Sacred Music at Cambridge Colleges and Selected Cathedrals, c.1547-c.1646* (New York: Garland, 1993), pp.134-155

²⁰⁶ Barra Boydell, *A History of Music at Christ Church Cathedral, Dublin* (Woodbridge: Boydell Press, 2004), p.83

²⁰⁷ For a study of this topic see Rebecca Herissone, *To Fill, Forbear or Adorne: The Organ Accompaniment of Restoration Sacred Music* (Oxford: Routledge, 2006)

²⁰⁸ Roger Bowers, 'The Liturgy of the Cathedral and its Music, c.1075-1642' in Patrick Collinson, N. Ramsey and M. Sparks (Eds.), *A History of Canterbury Cathedral* (Oxford: OUP, 1995), p.442

²⁰⁹ Ian Payne, 'The Will and Probate Inventory of John Holmes (d.1629): Instrumental Music at Winchester and Salisbury Cathedrals Revisited' *The Antiquaries Journal* 83, 369-96

²¹⁰ Leopold Legg (Ed.), *A Relation of a Short Survey of 26 Counties in a Seven Weeke Journey* (London: Russell Press, 1904), pp.46-7

²¹¹ WO MS A29 (Book of Acquittances)

²¹² Henry Lafontaine (Ed.), *The King's Musick: a Transcript of Records relating to Music and Musicians 1460-1700* (London: Novello, 1909), p.177

'teach and instruct the Choristers and Secondaries of this Church in instrumental Music, viz. Viols, Violyns, Composing, and Singing.'²¹³ Loosemore had previously built a double organ for the cathedral in 1665 and also held the post of Clerk of Works until his death in 1681.²¹⁴ The organ's specification, as recorded in the mid-nineteenth century,²¹⁵ comprised six stops, all of wood, including a 4ft flute. As noted in chapter 1, the provision of a flute is a feature more readily associated with the liturgical chair organ than secular instruments, and, as here, the examples known in consort organs are nearly all associated in some way with vocal music.

The only extant organ that can be associated with a choir school is the Mander organ that was provided by Robert Dallam for New College, Oxford in the 1660s. It may be noted that this organ and, as far as is known, the other choir school consort organs, were provided at the secular pitch of C rather than the liturgical pitch of F. At New College, the contemporary chapel organ was an early example of a liturgical instrument pitched in C, so there was no disparity between the two instruments, but it might otherwise appear impractical to have two organs, used for the rehearsal and then performance of the same repertoire, at two different pitches. In practice, the adjustment required for this could be achieved relatively easily by the (mental) substitution of clefs in the score.²¹⁶ For pedagogical purposes, and for use in conjunction with consorts of viol-playing choristers, a non-transposing organ was of greater practical use for a choir schoolroom.

2.8 Private Theatres

Although organs were provided in a number of concert halls and opera houses in Georgian London, there is little evidence for them in the Restoration theatre.

Thomas Shadwell's 1675 play *Psyche* specified a 'Chorus of three Trebles to the Recorder, Organ and Harpsichord',²¹⁷ but Locke's score for the vocal numbers is imprecise with regard to the required instrumentation and Shadwell's wish may

²¹³ D. Wood, *National Union of Organists Associations' Quarterly Record* 9:3, 18

²¹⁴ Loosemore, *History*

²¹⁵ Edward Hopkins and Edward Rimbault, *The Organ: Its History and Construction* (London: Robert Cocks & Co., 1855), pp.51-2

²¹⁶ For a discussion of this practice, see John Bunker Clark, *Transposition in Seventeenth Century English Organ Accompaniments and the Transposing Organ* (Detroit: Information Coordinators Inc., 1974)

²¹⁷ Thomas Shadwell, *The Works of Thomas Shadwell, Esq.; Volume the Second* (London: James Knapton, 1720), p.76

not, in practice, have been fulfilled. Neither is there any indication that organs were used in the court masques: the lists of musicians in the accounts frequently mention harpsichordists and lutenists, but not organists. An exception, however, may be found early in the century in the works staged at the private Blackfriars and Paul's theatres by the choristers of the Chapel Royal and St Paul's Cathedral, respectively.

The Blackfriars Theatre, instituted in 1596, possessed an auditorium measuring approximately 22m by 12m, with three levels of galleries. Behind the stage was a two-story tiring-house, the upper story being divided into three boxes of which one, concealed behind a curtain, was for the use of the musicians.²¹⁸ The Blackfriars plays were known for their extensive use of music, including songs, dances, preludes and entr'actes, and the directions for some of them, most notably those by John Marston, specified a wide range of instruments including the broken consort, fiddles, lutes, viols, cornets, flutes and recorders as well as the organ.²¹⁹ In 1602, Frederic Gershow, a German visitor to Blackfriars, recorded that 'For an entire hour before [a play] one hears an exquisite instrumental concert of organs, lutes, pandoras, mandoras, bowed strings, and woodwind.'²²⁰ The organ was also frequently called for within the drama. Marston's *The Tragedy of Sophonisba* (1606), for example, specified 'cornets and organs playing loud full Musicke' at the end of the first act, 'Organ mixt with recorders' in the second and 'Organs, Violls and Voices' at the end of the third.²²¹ In each of the five instances where the organ was specified, it was used to accompany scenes with a ritualistic significance, such as a wedding, a funeral or a sacrifice: it is possible that the symbolic association of the organ with liturgical ritual was Marston's reason for its inclusion at these points.

The St Paul's theatre was converted from the Almoner's Hall of the cathedral in the 1570s. The layout was similar to Blackfriars, but on a smaller scale. Here too music for organ was specified in a number of plays. In Middleton's 1605 satirical comedy *A Mad World, My Masters*, it is notable that the organ is employed as a symbol of Sir

²¹⁸ Linda Austern, *Music in English Children's Drama of the Later Renaissance* (Philadelphia: Gordon and Breach, 1992), pp.27-9

²¹⁹ David Lindley, 'The Use of Music in the plays of John Marston'. Paper given at the conference *Silver Sounds and Moody Food: Theatre Music and Musicians 1560-1650* NCEM, York 16 July 2016

²²⁰ David Lindley, *Shakespeare and Music* (London: Bloomsbury, 2006), p.92

²²¹ William Kemp (Ed.), *John Marston's The Wonder of Women, Or The Tragedy of Sophonisba* (New York: Garland, 1979)

Bounteous Progress's great wealth: 'My organ is double-gilt my Lord; some hundred and fifty pound will fit your lordship with such another pair', this amount being greatly exaggerated compared to real-world prices (see Table 1.13).²²² In act I scene 2 there is a 'song to the organs' where Sir Bounteous boasts to his dinner guests of the consort of musicians he maintains in his household, gesturing to 'my organist' before bidding them play. Perhaps the curtains of the musicians' gallery were drawn back at this point to allow the audience a view of the players:

The organs play, and covered dishes march over the stage

SIR BOUNTEOUS Come, my lord, how does your honour relish my organ?

FOLLYWIT A very proud air i'faith, sir.

SIR BOUNTEOUS Oh, how can't choose? A Walloon plays upon 'em and a Welchman blows wind in their breech.

*Exeunt. A song to the organs*²²³

The directions for Marston's *Antonio's Revenge*, also premiered at Paul's theatre, reveal that the musicians were divided between two 'music houses' above the stage. Given that the theatre was of modest dimensions, accommodating a hundred spectators at most,²²⁴ the organ must have been small. At Blackfriars, room had to be found in the musicians' gallery for the six players of the broken consort in addition to singers and several types of wind instrument, and even assuming that some of the players doubled on more than one instrument, space would have been at a premium. It is significant to note that there was no mention of any type of plucked-string keyboard instrument in the musical directions of any of these plays. Space constraints may have been a reason for this, given that the footprint of a consort organ is smaller than that of most harpsichords and many virginals.

The variety of tone-colour and pitches available, coupled with the ability of the elevated and forward-facing position of the pipework in a table or cabinet organ to have projected its sound over the gallery wall, may have been other features that gave a consort organ an advantage over a harpsichord in this context. Wooden pipes would have provided good tuning stability in the hot, candle-lit environment, and the registrational resources would have supplied variety of tone and dynamics

²²² Michael Taylor (Ed.), *Thomas Middleton: A Mad World, My Masters, and Other Plays* (Oxford: OUP, 1995), p.16

²²³ Ibid. p.17

²²⁴ Reavely Gair, *The Children of Paul's: The Story of a Theatre Company, 1553-1608* (Cambridge: CUP, 1982), p.57

to match the varied vocal and instrumental ensembles.²²⁵ Voicing practices designed for the domestic chamber would also have suited the dry theatre acoustic designed for the spoken word.²²⁶

The most common non-vocal musical directions in the choristers' plays were for 'loud musicke', 'soft musicke', 'solemn musicke' and 'infernal musicke'. The latter may have involved a combination of bass instruments in conjunction with the organ, as in the contemporary Italian *orchestra infernale*. Indeed, organs, and particularly wooden-piped claviorgans, were recorded in use in a number of Italian theatrical productions of the early seventeenth century, such as at the 1610 Carnival in the Palazzo dei Trecento, Treviso, in conjunction with strings and voices.²²⁷ Contemporary Italian sources extolled the virtues of the registrational variety afforded by these organs in these contexts,²²⁸ and the stop combinations available on an English consort organ would have provided similar flexibility.

No specific repertoire for the theatre organ of this period survives, but Marston provided detailed directions for the instrumentation of the music. Ross Duffin has argued that the well-known extant song settings from Elizabethan and Jacobean dramas, such as those by Robert Johnson, post-date the actual productions by some years, and that the metrical structure of the lyrics suggest that popular tunes of the day were originally employed in the original performances.²²⁹ It seems likely, therefore, that the theatre musicians composed, arranged or improvised the music themselves in much the same way as the court chamber musicians adapted popular dance tunes for the Privy Chamber (see Chapter 3.8).

One composer associated with the organ in a theatrical context is Stephen Tullidaff, a musician of the royal chapel at Holyrood Palace, who wrote an ode entitled *Caledonia* for a pageant staged to celebrate Charles I's visit to Edinburgh in 1633. A

²²⁵ See Neville Fletcher and Thomas Rossing, *The Physics of Musical Instruments* (New York: Springer, 2000), pp.158, 198

²²⁶ For a discussion of the acoustics of the Blackfriars Theatre, see Bruce Smith, *The Acoustic World of Early Modern England* (Chicago: University of Chicago Press, 1999), pp.215-7

²²⁷ Franco Mancini, Maria Muraro and Eleanor Povoledo, *I teatri del Veneto IV* (Veneto: Fiori, 1994), p.40

²²⁸ See Patrizio Barbieri, 'Roman claviorgans and 'table organs with a spinetta on top', 1567-1753', *EM* 44:3, 395-416

²²⁹ Ross Duffin, 'Robert Johnson and Songs for the Shakespearean Stage'. Paper given at the conference *Silver Sounds and Moody Food: Theatre Music and Musicians 1560-1650*. NCEM, York 16 July 2016

stage was erected on the High Street representing mount Parnassus, on which 'sat two Bands of vocal and instrumental Musick, with an Organ to complete the Concert'.²³⁰ At one point in the show there struck up 'instruments of peace, as Harpes, Lutes, Organs, Cisseres, Hauboises'.²³¹ Andrew Sinclare, the chapel royal organist, played for the occasion.²³²

2.9 Taverns, Music-Houses and Private Meetings

With the suppression of theatrical productions during the Commonwealth, the popular appetite for public entertainment was catered for by the provision of 'publick consorts' in taverns or music-houses. These establishments were mostly aimed at the lower end of the market, where the availability of alcohol inspired a rowdy atmosphere, often involving the performance of pithy contemporary catches and dancing.²³³ More erudite gatherings were held in the regular series of private meetings organised in Oxford, Cambridge and London. The Oxford meetings in particular were frequented by many ex-university and former court musicians, and became centres for the sharing of new, and especially continental, music; these are discussed further in chapter 5.3. Hawkins drew the distinction between the music played in taverns that was designed as 'recreation for the vulgar', consisting of itinerant players of the fiddle and hautboy, and the more 'sober recreation' of the music house, in which the 'masters of music exerted their utmost endeavours'.²³⁴ The consort organ found a role in these contexts too, although they were often far removed from the courtly or aristocratic domestic environment.

Roger North related that the first music-house meetings took place in the Mitre Tavern in London, 'in a lane behind Pauls, where there was a chamber organ that one Phillips played upon, and some shopkeepers and foremen came weekly to sing in consort, and to hear, and injoy ale and tabacco: and after some time the audience

²³⁰ William Maitland, *History of Edinburgh* (Edinburgh: Hamilton, Balfour and Neill, 1753), p.66

²³¹ W. Drummond, *The Entertainment of the high and mighty monarch Charles King of great Brittain, France and Ireland....*' (Edinburgh: John Wreittoun, 1633), p.12

²³² Gordon Munro, *Scottish Church Music and Musicians 1500- 1700* Unpublished PhD thesis, University of Glasgow, 1999, pp.181-2

²³³ A popular selection being found in publications such as Playford's *Catch that Catch Can...* (1652)

²³⁴ Sir John Hawkins, *A General History of the Science and Practice of Music IV* (London: Payne & Son, 1776), pp.762-3.

grew strong... their musick was chiefly out of Playford's Catch book.'²³⁵ It has frequently been asserted that, following the suppression of liturgical music during the Interregnum, organs were removed from churches and set up in taverns.²³⁶ The one and only contemporary source in support of this claim is found in a critical pamphlet entitled *The Character of England*, published by John Evelyn in 1659. Ostensibly a translation of a letter from an anonymous French Protestant observer, but almost certainly penned by Evelyn himself, the pamphlet claimed '...they have translated the organs out of their churches and set them up in Taverns, chanting their dithyrambics and bestial Bacchanalias to the tune of those instruments which were wont to assist them in the celebration of God's praises.'²³⁷ If the putative Frenchman existed, it is more likely that he mistook a typical consort organ for a church instrument (particularly given that chamber organs were a rarity in contemporary France). It seems implausible that any but the very smallest of church organs could in practice have been accommodated in tavern rooms. Evelyn's claim is most probably rooted in a desire to achieve dramatic effect than to reflect actual fact, and is not supported by any other contemporary evidence. The question then remains of whence the taverns acquired their organs. It seems unlikely that they were commissioned as new instruments, but were most probably acquired second-hand from sources such as royalist individuals and households whose possessions were forfeited during the Civil War.

A satirical account of the use of an organ at a music-house was provided by Ned Ward, the 'London Spy', in 1689-90. In an account of a visit to the Mitre at Wapping he wrote:

Remembering we had heard of a famous Amphibious House of Entertainment, compounded of one half *Tavern* and t'other *Musick-House* ... [we] were Usher'd into a most Stately Apartment, dedicated purely to the Lovers of Musick, Painting, and Dancing... The Room by its compact Order and costly Improvements, looks so far above the use its now converted to, that the Seats are more like Pews than Boxes; and the upper-end, being divided by a Rail, looks more like a *Chancel* than a *Musick-Box*; that I could not but imagine it was Built for a *Fanatick Meeting-House*, but that they have for ever destroy'd the Sanctity of

²³⁵ Wilson, *Roger North*, pp.107-9

²³⁶ E.g Percy Scholes, *The Puritans and Music* (London: OUP, 1934), pp.243-4 and Geoffrey Cox, *Organ Music in Restoration England* (New York: Garland, 1989), p.17

²³⁷ John Evelyn, *A Character of France, to which is added, Gallus Castratus; Or, an answer to a Late Slanderous Pamphlet called the Character of England* (London: Nath. Brooke, 1659), p.30

the place by putting an *Organ* in it; round which hung a great many pretty *Whimsical Pictures*.²³⁸

The use of liturgical terms to describe the room is interesting. The layout resembles a church, yet the 'sanctity' of the secular space is defiled by the organ with its 'sacred' associations: the room is seen as a temple to secular art in which the intrusion of the organ jars. The presence of the pew-like seats and the separate performance space also suggests a formal layout, similar to a modern concert hall. The audience here was clearly expected to face the music, although Ward's description does not make it an attractive prospect: 'Fiddlers and Hoitboys, together with a Hum-Drum Organ, make such incomparable Musick, that had the Harmonious Grunting of a Hog been added as a Bass to a Ravishing Concert of Caterwauling Performers... the unusualness of the sound could not have render'd it ... more engaging.'²³⁹

Hawkins described a music-house at Stepney where 'in a great room ... was an organ and a band of fiddles and hautboys, to the music whereof it was no unusual thing for parties, and sometimes single persons, and those not of the very inferior sort, to dance.'²⁴⁰ At Ben Wallington's meetings, held in a house close to St. Paul's, the gatherings were, according to Roger North, 'at first private, then turned public, being a large room in an alehouse, where stood a chamber organ; and with the help of a dull organist and miserable-singers, folks heard musick out of the Catch-book and drank ale together.'²⁴¹ In 1652, at the house of the court violinist Davis Mell, Lodewijk Huygens encountered a group of former court musicians, including Christopher Gibbons and Benjamin and John Rogers, playing a 'concert for organ ... bass viol and two violins',²⁴² whilst in August 1663 Pepys visited Greenwich and repaired with his companions 'to the musique-house, where we had paltry musique, till the master organist came, whom by discourse I afterwards knew, having employed him for my Lord Sandwich, to prick out something (his name Arundell), and he did give me a fine voluntary or two.'²⁴³

²³⁸ Edward Ward, *The London Spy Compleat* (London: John How, 1703), p.329

²³⁹ *ibid.* p.328

²⁴⁰ Hawkins, *History* p.700

²⁴¹ Lbl Add. MS. 32,536 (Roger North: 'An Essay of Musicall Ayre')

²⁴² Peter Holman, 'Mell, Davis' in Sadie, S. and Tyrell, J. (Eds.) *The New Grove Dictionary of Music and Musicians: Second Edition* 16, 348-9 (Oxford: OUP, 2001)

²⁴³ Pepys, *Diary* 21 August 1663

The view of observers such as North may have been coloured by the social prejudices of an aristocrat, but such tensions were put aside at Aylesbury Street, Clerkenwell, where the small-coal merchant Thomas Britton (1644-1714), supported by Sir Roger L'Estrange, established a music club in 1678 in a room above his coal shop. Despite being 'very long and narrow, and had a ceiling so low, that a tall man could but just stand upright in it', it was fitted with an organ.²⁴⁴ On Britton's death, a catalogue of music manuscripts and instruments to be auctioned was published that contained some 160 books of instrumental consort music, 42 volumes of vocal music and several hundred folios of music in score. The instrumental works included many viol consorts to the organ by Jenkins, Lawes, Brewer and others from the pre-Restoration period, together with contemporary English works and, demonstrating the influence of music at the court, a considerable body of music by French and Italian composers. Britton's instruments included five viols, seven violins, a harpsichord and a Ruckers virginals in addition to the organ. The latter was 'of five stops, exactly consort pitch, fit for a room, and with some adornments may serve for any chapel, being a very good one'.²⁴⁵

Outside of London, the main centres for music meetings were found in the university towns of Oxford and Cambridge. In Oxford a number of regular private meetings were recorded during the Commonwealth, such as those held by Narcissus Marsh in Exeter College between 1666 and 1678,²⁴⁶ and the series organised by William Ellis, formerly organist of St John's College, at his tavern,²⁴⁷ all of which employed instrumental music with organ. These were eventually superseded by the Thursday concert series founded in the university Music School, for which Ralph Dallam built an organ in c.1665.²⁴⁸ Even the latter was housed in modest surroundings: the section of the Quadrangle building allocated to Music measured approximately 17m by 6m – barely larger than the domestic great

²⁴⁴ Hawkins, *History* p.790

²⁴⁵ *Ibid.* p.793

²⁴⁶ An account of these is found in Raymond Gillespie and David Fitzpatrick (Eds.), *Scholar Bishop: the Recollections and Diary of Narcissus Marsh 1638-96* (Cork: Cork University Press, 2002)

²⁴⁷ Nicolas Kiessling (Ed.), *The Life of Anthony Wood in His Own Words* (Oxford: Bodleian Library, 2009), pp.47-9

²⁴⁸ Hawkins, *General History* p.375

chambers in some aristocratic houses.²⁴⁹ Prior to the arrival of Dallam's organ, the Music School appears to have been served by a claviorgan.

Two catalogues of printed books and other equipment gifted by William Heather in or around 1627 list the following items:

A Harpsichord with a winde instrument of two stops.
Tenne Violls
Seaven Chayres
Seaven Stooles
A Presse for the Songe Books
A pew for the Musick Reader
A Table²⁵⁰

The building's use as a 'magazine for cloth for soldiers' apparel and coates'²⁵¹ during the Civil War meant that afterwards 'all the old instruments and books left by the founder, being either lost, broken or imbeasled in the time of rebellion and usurpation'²⁵² were in need of restoration. Although the high proportion of the books from the 1627 catalogues that are still extant suggests that this was an exaggeration, the accounts presented to John Wilson, Heather Professor from 1656-61, reveal that considerable expenditure was outlaid on the restoration of the faculty.²⁵³ A catalogue of the music manuscripts compiled at the time of Lowe's death in 1682 summarises the musical resources acquired by that time succinctly:

There are belonging to ye Musick School 15 pieces of Painting, a Chest of Viols 6. & 5 Violins. An Organ & Harpsichord. And a Lute, eleven Chairs & 2 stools. And Eight Desks.²⁵⁴

An insight into the Cambridge series was provided in *Musick's Monument* by Thomas Mace who, as a lay clerk of Trinity College, had attended them regularly. The impression given is of a preference for a more conservative repertoire than the

²⁴⁹ Andrew Clarke (Ed.), 'The Life and Times of Anthony Wood' II *Oxford Historical Society* 21, 63-4

²⁵⁰ Oxford University Archive S.E.P.C9 and Ob MS Mus. Sch C203*(R) (Inventory of Oxford Music School)

²⁵¹ Clarke, *Anthony Wood* p.83

²⁵² Hawkins, *General History* p.375-7

²⁵³ A transcription of the bills is provided in R.L. Poole, 'The Oxford Music School and the collection of portraits formerly preserved there' *Musical Antiquary* 4, 151-2

²⁵⁴ Ob MS Mus. Sch C204*(R) (Catalogue of Oxford Music School MSS)

contemporary trends explored at Oxford; the Cambridge players 'had for our *Grave Musick, Fancies* of 3, 4, 5, and 6 Parts to the *Organ; Interpos'd* (now and then) with some *Pavins, Allmaines, Solemn, and Sweet Delightful Ayres*'.²⁵⁵

Mace's writing also provides a fascinating insight into the practicalities of playing in such contexts. He highlighted some of the problems encountered during consort making – crowded rooms, interruptions of noise and movement from auditors, and the acoustic implications of furnishings. This prompted him to outline the principles for equipping an ideal university music room (Fig. 2.5), which was to have a central performing space six yards square, surrounded by twelve elevated galleries seating 200 people.

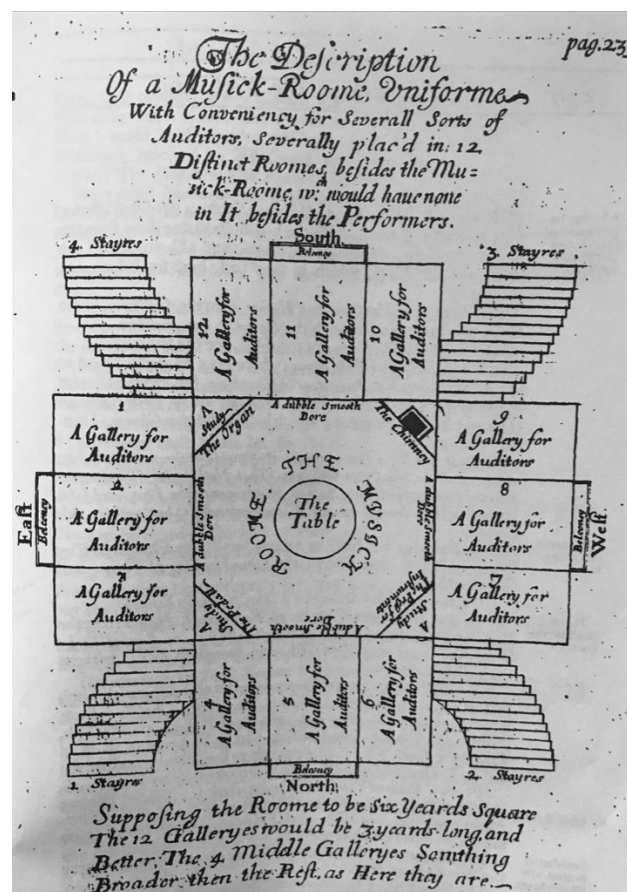


Fig.2.5 Thomas Mace's design for a music room (*Musick's Monument*, 1676, p.239)

The four corners of the room were occupied by a fireplace, an organ, a pedal and a 'Presse for Instruments', and in the centre was a table for resting part-books on. Mace's interest in acoustics was reflected in the provision of an arched ceiling with a

²⁵⁵ Mace, *Musick's Monument* p.234

smooth finish, and, more eccentrically, a series of tapering 'conveyances', or acoustic tubes, to convey sound from the central space up to the galleries. Mace's ambitions were not to be realised at Cambridge, and it is not known whether any of these features were put into practice elsewhere.

As the century progressed the London music-houses became a profitable endeavour and soon 'the Masters of Musick determined to take the business into their owne hands'²⁵⁶ by founding their own concert venues. The earliest of these, in York Buildings, Villiers Street, was founded in 1675 in 'a great room... with proper decorations as a theater for musick, and ... [there was] a vast coming and crowding to it.'²⁵⁷ There was also a growing taste for larger ensembles of instruments. The *Musick: Or a Parley of Instruments* by John Banister, for example, performed at the Academy in Lincoln's Inn Fields in December 1676, included 'A Symphony of Theorboes, Lutes, Harps, Harpsicons, Guittars, Pipes, Flutes, Flagellets, Cornets, Sackbutts, Hoboys, Rechords, Organs, and all sort of Wind Instruments...' In such contexts, the domestic consort organ, scaled and voiced for the private chamber, ceased to be equal to the task of providing sufficient volume and depth of tone to support larger ensembles. Thus when Bernard Smith provided the newly-built Sheldonian Theatre in Oxford with an organ in 1671, it was a church-style instrument with mostly metal pipes, a fully developed chorus and a trumpet.²⁵⁸ Similar instruments were soon to follow in the London theatres of the early eighteenth century. As at the court, this was another context in which changing musical demands were no longer met by the consort organ.

²⁵⁶ Wilson, *Roger North* p.112

²⁵⁷ Lbl Add. MS. 32,537 f.109 (Roger North: unpublished essay)

²⁵⁸ Freeman, *Father Smith* p.15

2.10: Conclusion

Whilst the consort organ is most frequently associated with the court and the domestic environment, it is striking to note the overall variety of the contexts in which it was used. From private chambers to the public theatre, from the rarified refinement of the court to the social melee of the music-house, and from the hands of skilled professionals to those of enthusiastic amateurs, the consort organ found employment across social, political and cultural borders.

In attempting to draw conclusions from the confused and incomplete evidence for the provision of organs at court, a picture emerges of a small pool of high-quality instruments available to the musicians at the three principal London palaces of Whitehall, St James's and Denmark House. Tended by resident technicians, they were largely reserved for use in the most private sanctum of the privy chambers, but could easily and quickly be deployed elsewhere when the need arose. The organs were employed in a significant and influential body of repertoire written by resident composers over some eight decades from the beginning of the century to c.1680 when the competing influence of French and Italian practices eventually ushered in the age of the harpsichord as the continuo instrument of choice. Some also found a significant role as secondary instruments in the performance of vocal and instrumental repertoire in the specialised context of the royal Roman Catholic chapels.

The influence of London practices can be seen operating in the contemporary musical establishments of aristocratic households in the orbit of the court, with professional musicians and expensive instruments employed in similar repertoire and playing contexts. The fashion for consort music began to percolate even further down the social order in the 1620s and 1630s such that, by the time of the Civil War, consorts to the organ had become a popular amateur pastime for many gentrified households. The distribution of instruments demonstrates the importance of a close connection to the services of organ builders, organists and composers in London, or in regional centres such as Lincoln, York and Exeter. Households with organs were most likely to be Royalist in affiliation and Anglican in persuasion, and were mainly situated in the most affluent parts of the country. It is notable, too, that the consort

organ was a particularly English phenomenon, with but a handful recorded in Scotland and none, to date, identified in Wales.

Outside the domestic context, consort organs found a minor role in chapels, a more significant one in chorister schools, and achieved some popularity in the private and public music meetings held in London and the university cities, particularly during the Interregnum. Here they were required to service music of widely different kinds, from the popular glees and catches of the London taverns to the most contemporary art music practised in the university colleges. They also found, for a brief time, a specialised but intriguing role in the Jacobean theatre, of which very little has been hitherto written.

This diversity of use is all the more remarkable when the evidence from chapter 1 demonstrating the general similarity in design, specification and sound of these instruments over an extended period of manufacture is considered. Although it was conceived for a very specific repertoire, it was the musical adaptability of the consort organ that ensured both its longevity and popularity.

Chapter 3: Performance practice: evidence from manuscript sources

The extant sources for consort repertoire with organ encompass a period spanning from the 1620s to the 1690s, although there is evidence, discussed below, to suggest that organs were used with various combinations of voices and viols in domestic contexts prior to 1600.¹ The survivals represent a mere fraction of those that once circulated within the contexts described in Chapter 2. Nevertheless, some seventy sources can be identified that can be considered as intended primarily for use by the organ in conjunction with instruments. A list of these is presented in Appendix 4. In the absence of any detailed published surveys of the repertoire focusing on the role of the consort organ, this chapter seeks to provide an overview of the sources, a consideration of the origins of the genre, and a discussion of a variety of performing practice issues arising from them.

3.1 Composers, copyists, owners and patrons

The sources listed in Appendix 4 contain the names of some thirty-one composers, all but one of whom are identified. The late sources containing works by foreign composers (DRc.D4/3 and DRc.D5/3) were acquired by Philip Falle, a post-Restoration antiquarian collector of Italian music: although both include works for viols and organ by indigenous English composers, it seems doubtful that the foreign works were originally intended for use with the organ, or that the sources were used for practical purposes once in England. Although few of the sources listed in Appendix 4 originated at the court, twenty-one of the twenty-six composers represented within them held court appointments. Eleven of the composers were principally organists, and ten saw service in domestic households, although only four remained in provincial service for the whole of their careers. It may be noted that all fourteen of the households at which the composers worked sided with the Royalist cause in the Civil War, reflecting the predominantly Royalist allegiance of consort organ owners remarked on in Chapter 2.

¹ Peter Holman, "Evenly, Softly, and Sweetly Acchording to All": The Organ Accompaniment of English Consort Music' in Andrew Ashbee and Peter Holman (Eds.), *John Jenkins and His Time* (Oxford: Clarendon Press, 1996), p.361

Despite this emphasis on the court, Appendix 1 reveals that only three manuscripts survive containing organ parts that can safely be associated with it, these being Lbl.24.k.3 and Och.732-5, both of which date from early in Charles I's reign, and Lbl.17801, presented to Charles II by Locke. Additionally, Cu.959, containing the parts to Finger's *Sonatae XII*, may possibly have originated at the court of James II.² Most of the court sources were destroyed or dispersed during the Civil War, or in the fires that devastated much of Whitehall in the 1690s. The dissemination of court repertoire may however be identified in many of the provincial domestic collections.³ Those compiled by the L'Estranges at Hunstanton Hall, the Hattons at Kirby Hall, and the North family at Kirtling Hall are particularly rich in sources of organ parts and scores derived from the court: all three families employed musicians connected with it. Much of the North repertoire found its way to the Oxford Music School after the Restoration, where it joined other sources acquired by Edward Lowe,⁴ although, reflecting changing tastes, the treble viol parts were now played on the violin.⁵ Lowe, and his successor Richard Goodson, also copied many manuscripts themselves. Ob.E451, compiled by Lowe over a period of some 45 years, changed its role from a scorebook to a thorough-bass part-book as the work progressed. The thorough-bass section was written by Lowe to provide organ accompaniments to works by Lawes and others in Ob.D233-6 and Ob.D.241-4 that had lost their organ book. DM.Z3.4.13 and Z4.2.16 both originated in the Oxford music meetings organised by Narcissus Marsh,⁶ whilst Och.1006 provides a glimpse of the repertoire employed by Charles I's court in exile in Oxford in the 1640s. The Hattons' organist George Jeffreys was engaged to play for the king there.⁷

Others sources include the work of professional copyists, such as John Lilly and Stephen Bing⁸, who compiled works for the Hattons including Och.436, an organ

² Robert Shay and Robert Thompson, *Purcell Manuscripts: The Principal Musical Sources* (Cambridge: CUP, 2000), p.119

³ See Ashbee, *Transmission*

⁴ A description of these may be found in Margaret Crum, 'Early Lists of the Oxford Music School' *ML* 48:1, 23-34

⁵ Sir John Hawkins, *A General History of the Science and Practice of Music* IV (London: Payne & Son, 1776), p.375

⁶ The Marsh sources are discussed in Richard Charteris, 'Consort Music Manuscripts in Archbishop Marsh's Library, Dublin' *RMARC* 13, 27-57

⁷ Peter Aston, *George Jeffreys and the English Baroque* Unpublished PhD thesis, University of York, 1970, pp.52-6

⁸ Jonathan Wainwright, *Musical Patronage in Seventeenth-Century England: Christopher, First Baron Hatton (1605-1670)* (Aldershot: Scolar Press, 1997), pp.46-114

book which, together with its associated score Och.2 and string parts Och.397-408, formed the Hatton 'Great Set' containing many of the most significant works of the Jacobean period. Among the host of anonymous scribes whose hands are familiar but whose names are unrecorded was the principal compiler of the North family manuscripts;⁹ his meticulous cross-checking of source material was echoed in the extensive annotations added to the Hunstanton manuscripts by Sir Nicholas L'Estrange, which reveal much about networks of source transmission and, in passing, aspects of performance practice on the organ (see Chapter 4.6).¹⁰ Several of the North family organ parts are in a second or third hand:¹¹ neither of these scribes contributed to the copying of the string parts, and it seems likely therefore that they represent the work of organists employed within the household. One of these was Henry Loosemore, who served at Kirtling from 1652-1663.¹²

Although both the chamber organ and the viol began to lose favour at the court after the Restoration, enthusiasm for consort music persisted among domestic circles until at least the close of the century.¹³ Works that were composed as early as the 1620s continued to be disseminated into the last decade of the century: Ob.E451 for example, comprising works dating from the 1620s, was compiled by Lowe for the Oxford Music School in the 1670s whilst Och.411-3, containing the parts to Coprario fantasia suites, were copied by John Hull as late as the 1690s. For those without access to a copyist, Playford's *Choice Ayres and Songs* of 1681 contained an advertisement for 'fairly and truly prick'd' copies of 'choice Consorts of *Musick* for *Violins* and *Viols*' that could be prepared to order.¹⁴ Other late sources of organ parts are found in the collections amassed in the second half of the century by Henry Aldrich and Phillip Falle. Both men collected principally for antiquarian interest rather than musical value. There being little practical demand for the music, Aldrich eventually bequeathed his manuscripts to Christ Church, Oxford, of which he was

⁹ Ashbee, *Index I* pp.11-12

¹⁰ Andrew Ashbee, 'A Further Look at Some of the Le Strange Manuscripts' *Chelys* 5, 24-41 See Chapter 5 for a discussion of the performance practice issues.

¹¹ Margaret Crum, 'The Consort Music from Kirtling, bought for the Oxford Music School from Anthony Wood, 1667' *Chelys* 4, 4

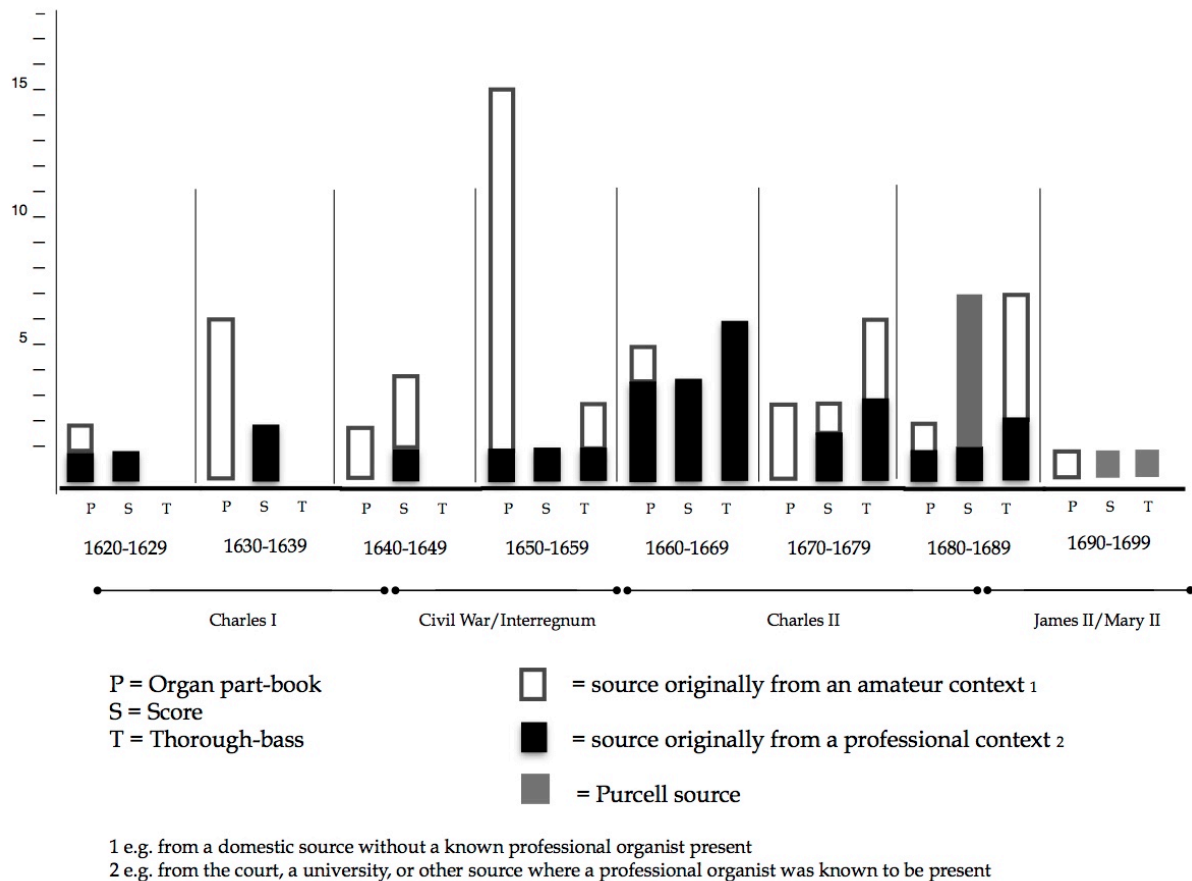
¹² North Family Account Books, quoted on the Loosemore website <<http://www.loosemore.co.uk/Chapter7/CHAPTER7text.htm>> accessed 18 January 2018

¹³ See Peter Holman, *Life after Death: the Viola da Gamba in Britain from Purcell to Dolmetsch* (Woodbridge: Boydell & Brewer, 2010), pp.12-48

¹⁴ Robert Thompson, 'Manuscript Music in Purcell's London' *EM* 23, 613

Dean, in 1710,¹⁵ and Falle donated his to the library of Durham Cathedral, of which he was a prebend, in 1722.¹⁶

Table 3.1: Types and origins of extant manuscript sources for the organ with instrumental consorts



3.2 Genres

The consort repertoire incorporating the organ encompassed a variety of styles, textures and instrumental combinations. From among them, three broad groupings emerge: polyphonic works, homophonic dance-based works, and virtuosic works for one or two instruments (particularly bass viols), often involving improvised or written-out divisions.

¹⁵ Joyce Horn (Ed.) 'Deans of Christ Church, Oxford' *Fasti Ecclesiae Anglicanae 1541-1857: 8: Bristol, Gloucester, Oxford and Peterborough dioceses* (London: Institute of Historical Research, 1996), pp.80-83

¹⁶ Ashbee, *Index II* pp.3-4

Among the surviving Elizabethan polyphonic works for viol consort, compositions based on cantus firmus techniques are the most numerous. The In Nomine was the most popular melody for this purpose, and many examples survive by principally liturgical composers such as William Byrd, Alfonso Ferrabosco I and Christopher Tye. These works draw upon the techniques of late renaissance liturgical choral music, although there are also links with contemporary keyboard works employing similar textures. Indeed, a number of polyphonic works for viols are also found in contemporary keyboard transcriptions: although they are often literal, most fall under the hands with ease. As discussed below, such sources are one of the strands of evidence that suggest that the organ and viols were used together in the last quarter of the sixteenth century.

The research of Bertenshaw,¹⁷ Monson,¹⁸ Wess¹⁹ and others identified another close stylistic connection operating in the development of the English viol consort in the 1600s, namely the influence exercised by the Italian polyphonic madrigal on the English viol fantasia. Although the polyphonic madrigal had passed the peak of its popularity in England by 1600, it was a common practice in the first two decades of the century for composers such as Alphonso Ferrabosco II, Thomas Lupo and Giovanni Coprario to produce untexted instrumental transcriptions of polyphonic Italian madrigals for both amateur and professional consort players. As Roger North related: 'In some old musick books, I have found divers formed consorts, with a Latin or Itallian epigrafe... [which] were songs for many voices composed and printed in Italy, and here transcribed for the use of instruments.'²⁰

These same composers also wrote original instrumental fantasias emulating Italian madrigal forms, or exhibiting influence from that genre by incorporating madrigal themes as parody fantasias. As North observed, 'It was from the Italian model [i.e. the polyphonic madrigal] that wee framed those setts of musick, which were called

¹⁷ Derry Bertenshaw, *The Influence of the Late Sixteenth-Century Italian Polyphonic Madrigal on the English Viol Consort Fantasy c.1600-1645: A Background Study* Unpublished PhD Thesis, University of Leicester, 1992

¹⁸ Craig Monson, *Voices and Viols in England, 1600-1650: the Sources and the Music* (Ann Arbor: UMI Research Press, 1982)

¹⁹ Joan Wess, 'Musica Transalpina, Parody, and the Emerging Jacobean Viol Fantasia' *Chelys* 15, 3-21

²⁰ John Wilson, *Roger North on Music* (London: Novello, 1959), p.289

Fancys, and in imitation of them inscribed *Fantazia*'.²¹ When first used, the organ's role in these early works was mainly to double the string parts, as demonstrated in the Ferrabosco II fantasias from Och.436, but from the 1620s it increasingly assumed an independent obbligato role, initially in the works written by musicians at the court of Prince Charles such as Coprario and Orlando Gibbons, and later by other court composers who fell under their influence, such as William Lawes and John Jenkins.

Alongside the polyphonic works there existed lighter, melody-dominated compositions based on dance forms such as the pavan, galliard, corant and almain. The early fantasia suites of the Jacobean period included two of these faster dance-based movements, whilst later works consisted of longer sequences of dances organised into suites. Many of these works are lightly scored, often for a simple texture of one or two treble instruments with bass and organ. This light scoring demonstrates close connections with the presentation of many of the dance movements from contemporary masques, where a bicinium texture was either filled out in performance by the keyboard or plucked string continuo, or was provided with inner instrumental parts at a later stage in the compositional process.²² Lbl.10444²³ is an important source, originally associated with the Smithfield organ at Hunstanton. Similar textures are encountered in sources of music for the violin band at court, where inner parts were also added later.²⁴

Another kind of two-part texture was found in the large corpus of repertoire for two bass viols and organ composed in the first half of the century. Part of the popularity for this combination may have derived from the fact that, as noted by Playford, Prince Charles himself 'could play his part exactly well on the Bass-Viol, especially of those Incomparable Fancies of Mr. Coperario to the Organ'.²⁵ Certainly the earliest such works originated among the composers at Charles's court. Much of the

²¹ Ibid.

²² John Cunningham, 'A Meeting of Amateur and Professional: Playford's 'Compendious Collection' of Two-Part Airs, *Court Ayres* (1655)' in Rebecca Herissone and Alan Howard (Eds.), *Concepts of Creativity in Seventeenth-Century England* (Woodbridge: Boydell & Brewer, 2013), pp.201-32

²³ For a key to the abbreviated references to sources used here, please refer to Appendix 4 column 2.

²⁴ Peter Holman, *Four and Twenty Fiddlers. The Violin at the English Court 1540-1690* (Oxford: OUP, 1993), pp.193 and 323

²⁵ John Playford, *An Introduction to the Skill of Musick* (London: Playford, 1683)

music consisted of divisions on ground basses, popular tunes, or the bass parts of pre-existing vocal or consort works. Ckc.113A contains the organ part to the twelve Coprario fantasias for this combination, which Charteris believes to date from the second decade of the century.²⁶ If so, they are the earliest extant works in which the organ part is largely independent of the strings.

Two rare exceptions to the otherwise ubiquitous use of strings with the organ come in the form of works by John Hingeston, one scored for cornett, sackbut and organ, the other for two cornetts, sackbut and organ, found in Ob.E382 (organ) and Ob.D205-11 (wind parts).²⁷ Both consist of the secular combination of Fantasia, Almand and Ayre and are cast in the mould of the pre-Restoration fantasia suite. It seems most likely that Hingeston wrote these pieces for the Protectorate court soon after his arrival in London in the 1650s: his related collection of 172 dances for cornett and sackbut consort (GB.Lv) bears the arms of Cromwell on its cover. The only other comparable works are two verses for similar combinations by Coprario and Henry Loosemore, but these were probably intended for liturgical use: they are found in the context of Loosemore's organ book (Nyp.5469), which is essentially a source of liturgical choral works probably compiled in relation to his role as organist of King's College Chapel, Cambridge from 1627-70.²⁸ There remains no other evidence from the court for the use of this combination in contexts where the Private Musick operated.

3.3 Textures

Having identified three groups of genre, we may also observe three types of texture employed by the organ in seventeenth-century instrumental consorts. A number of factors influenced which type was most likely to be employed in any context. All three were developed in the context of vocal and instrumental consorts from the late sixteenth century, and in viol consort music all three are represented from the earliest extant sources onwards.

²⁶ Richard Charteris (Ed.), *John Coprario: The Fantasias for Two Bass Viols and Organ* (Albany: PRB Productions, 2005), vii

²⁷ For a brief discussion, see Trevor Herbert, 'Matthew Locke and the cornett and sackbut ensemble in England after the Restoration: the 'labelled evidence'' *HBSJ* 17, 57-67

²⁸ Thurston Dart, 'Henry Loosemore's Organ-book' *Transactions of the Cambridge Bibliographical Society* 3:2, p.145

Obbligato parts, in which the organ is given an independent role supplying polyphonic lines without which the texture would otherwise be incomplete, were most frequently found where fewer instruments were scored in the consort, thus providing greater opportunity for the organ to exercise its independent role in the texture. Thus the early fantasia suites of Coprario and Gibbons, with their polarised scoring for treble and bass instruments, and also the suites for two bass viols, contained natural gaps in their tessitura within which the organ could contribute its own material.

Independent organ parts were a peculiarly English phenomenon, with no obvious contemporary parallels in continental music. In Italy, Germany and France, figured-bass continuo parts were the norm when the organ was employed with instruments,²⁹ and on the rare occasions that a written-out part was provided, such as in Henri Dumont's *Melanges... pour orgue et pour les violes* (1657), the accompaniment essentially doubled the strings. A few exceptions appear in the works for two and three basses by Finger, Marais and others found in DRc.D4/3 and D10: Ashbee considers these manuscripts to be of English origin but in a foreign hand, suggesting an interesting cross-fertilisation of practices.³⁰

The second role, in which the organ doubled, or at least shadowed, some or all of the string parts, was largely employed in denser textures involving four or more strings. It was often found in contexts where amateurs were involved, allowing the organ to fulfill Thomas Mace's role of 'a *Touch-stone*, to try the certainty of *All Things*; especially the *Well-keeping the Instruments in Tune &c*'.³¹ The popularity of the viol consort in aristocratic households, particularly during the interregnum, is reflected in the frequency with which such textures are found in manuscripts from domestic contexts outside the court (see Table 3.1 below). Ob.C83, prepared by Jenkins for use with his six-part fantasias in the North household at Kirtling, Cambridgeshire in the 1650s, is a typical example of an organ part employed with a larger ensemble in an amateur context, although today's practice is often to omit it.

²⁹ Peter Williams, 'Basso Continuo on the Organ' *ML* 50:1, 138-9

³⁰ Andrew Ashbee, Robert Thompson and Jonathan Wainwright (Eds.) *The Viola da Gamba Society Index of Manuscripts Containing Consort Music I* (Aldershot: Ashgate, 2001), p.64

³¹ Thomas Mace, *Musick's Monument, or a Remembrancer of the best Practical Musick...* (London: Mace, 1676), p.242

The third role, consisting of an improvised organ part derived from a score or thorough-bass, was originally the preserve of contexts where professional musicians operated, such as the court, the universities, the professional music-meetings, or those aristocratic establishments where resident musicians were employed. The earliest extant examples of the practice originated at the court of Prince Charles in the 1620s where Gibbons was organist; other court organists who improvised parts to their own music included Hingeston, Matthew Locke and Henry Purcell. Where written-out parts also exist for these works, they tend to be later in date, prepared by third parties, and often represent court repertoire being adapted for domestic use. Ob.C101a, Lbl.31416 and Lbl.29290 are but three examples, all from the North household at Kirtling. Lbl.29290, for instance, contains a full organ part for Jenkins's six-part fantasias in the hand of Henry Loosemore, the North's resident organist.³² Towards the end of the century, sources originating from domestic contexts suggest that amateurs began to essay the art of realising a thorough-bass, although with mixed success, if Roger North is to be believed: 'the poor scollars are tormented with fifths, sixts, and thirds sharp, and not one in 100 ever learne to know the sound of the one from the other.'³³

3.4 Formats

The organ's role in consort music was transmitted via three main types of format: organ part-books, open and compressed scores, and both figured and unfigured thorough-bass parts. Approximately half of the extant sources are organ part-books, of which many are still associated with their corresponding sets of string parts. Numerous concordances exist between the surviving consort manuscripts, which often enable organ parts to be supplied to otherwise incomplete string sets. Such correspondences are also invaluable in providing evidence relating to networks of transmission, or adaptations in instrumentation to suit varying playing contexts over time.³⁴

³² Ashbee, *Index I* p.48

³³ Wilson, *Roger North*, p.248

³⁴ See Andrew Ashbee, 'The Transmission of Consort Music in Some Seventeenth-Century English Manuscripts' in Andrew Ashbee and Peter Holman (Eds.), *John Jenkins and his Time: Studies in English Consort Music* (Oxford: Clarendon Press, 1996)

The majority of organ books are usually labelled as such to dispel any ambiguity: Ob.C82, for example, includes an 'Organ Parte' that distinguishes it from the 'Harpescon parte' of its sister volume Ob.C84. Both contain works by Jenkins from the North family collection. In common with contemporary solo keyboard music, the majority of organ books written before the 1680s contain treble and bass staves each of six-lines, the lowest and uppermost lines respectively corresponding to middle c (Fig. 3.1).



Fig.3.1: Organ part to John Jenkins - *Fantasia a 5* in C
 (©British Library Board, Lbl. Add. MS 29,290, f.2v)

Many of the scribal practices evident in organ books appear to have been adopted to aid the role of the organist in directing the ensemble, or to help him navigate his way through the music in a way that would enhance the organ's role as Mace's 'touchstone to try all things'.³⁵ For example, as illustrated by Fig.3.1, the stem directions on the staves are often aligned in a way that clarifies the identity of individual parts within polyphonic organ textures, and this is particularly carefully observed in those works where the organ doubles the strings. The organist can thereby more easily identify when a string part is approaching an entry, and thus provide a supporting musical lead.

This aspect is less important, and was therefore less meticulously observed, when the organ texture is largely homophonic, or in independent organ solo passages.

³⁵ Mace, *Musick's Monument* p.242

Whilst the string parts were not generally barred, except perhaps to indicate the location of repeated sections or changes of metre, the majority of organ parts usually include barlines, although the frequency and regularity of these can vary. In some sources bar numbers may also be included; in the case of many of the L'Estrange manuscripts every bar is individually numbered. Markings relating to performance directions are not frequently encountered at any period, but indications of tempo and dynamics do occasionally appear in sources from the mid 1620s onwards. The former may include 'slow', 'long' or 'drag' to indicate a slower tempo and 'fast' or 'away' to specify the opposite, whilst the latter comprise 'soft' and 'loud'.

More than twenty scores of consort works with organ survive, a few of which are still associated with corresponding sets of parts. These sources comprise two main types: the less common open score with each instrumental part assigned its own line (Fig.3.2), and the more usual compressed score where more than one instrument is represented on each staff (Fig.3.3). The sharing of staves in the latter type is usually arranged according to instrumental size and clef, such that a pair of trebles or a pair of tenors shares the same line. When included, the organ left-hand part often shares its staff with the lowest bass viol, whose music it often shadows or doubles, even in textures with an otherwise independent organ part.



Fig.3.2: Open score to Giovanni Coprario: *Fantasia Suite* in A minor
(©British Library Board, Lbl. Add. MS 23,779, p.12)



Fig.3.3: Compressed score to Giovanni Coprario: *Per far una* (madrigal arrangement)
 (©British Library Board, Lbl. Gresley MS 2485, f.2r)

In works where the organ played a doubling role, no separate organ line was provided and the organist was expected to improvise from the given string parts: Locke's holograph score of his broken consorts (Lbl.17801) is a good example. The absence of an organ part in a consort score cannot therefore be taken to imply that an organ was not required in performance. The holograph score Ob.B2 by William Lawes, for example, contains no direct indication of a keyboard part, but the existence of a corresponding organ book (Ob.D229) demonstrates that one was required. Although the organ fulfills a mainly doubling role, its necessity is indicated by additional polyphonic material for the organ even in Lawes's six-part works, and rarely is the keyboard writing merely a direct transcription of the string parts.

As with organ books, certain features of many scores suggest themselves as expedients to assist the role of the organist in leading the ensemble. In several sources the staves are organised in a stratigraphic layout in which they run fully across both pages of each opening. Peter Holman has identified several continental choral scores with this layout, in which only the bass part bears the text, suggesting that the score was for the use of an accompanying organist.³⁶ The opening section of Och.21, dating from the 1620s and containing fantasia suites by Gibbons also has this layout, as do folios 47-59 of DM.Z3.4.13, an autograph by another organist, George Jeffreys. It may be noted that in these, and many other examples, the music

³⁶ Holman, *Organ Accompaniment* p.362

is written on six-line keyboard-like staves rather than the five lines of string part-books; this feature is often an indicator that a score was intended for practical use with a keyboard. It is also often the case that the music is organised to fit on a single page, or a two-page opening, to remove the need for page turns.

Unlike continuo lutenists who, as Holman has observed, had largely adopted figured bass techniques for both solo and consort music by the end of the 1620s, keyboard players employed them relatively rarely before the Restoration.³⁷ In this respect, they lagged behind their continental counterparts for whom such practices were the norm. Holman has suggested that the advances in lute notation were a consequence of the presence of a number of foreign lutenists in London in the Jacobean period, such as the Italian Angelo Notari, the Frenchman Jacques Gaultier, and the German-born Maurice Webster.³⁸ It is certainly true that there were few organists who were first-generation foreign immigrants in the country at this time, but if Roger North was correct, there may have been another reason for the reluctance to adopt the thorough-bass: as he observed: 'the old [i.e. pre-Restoration] masters [of the organ] would not allow the liberty of playing from a thro-bass figured... but they formed the organ part express: because the holding out the sound required exact concord, else the consort would suffer'.³⁹ North is perhaps describing the relative difficulty of disguising errors given the sustained sound of the organ compared to the harpsichord - a feature that would be familiar to him as an amateur organist - but he may also be referring to the danger of the organ clashing with, or clogging the texture when playing from a figured bass without sight of the upper parts.

Despite this, a few pre-Restoration sources of unfigured bass organ parts for consort music survive. The earliest example is Och.67, compiled for Thomas Myriell in around 1625, which contains a *basso seguente* for a four-part fantasia by Ferrabosco II. The English approach to thorough-bass realisation was one founded on instinct and a good ear rather than methodical analysis. No treatise on the subject survives from before Locke's brief notes in the introduction to *Melothesia* (1673),⁴⁰ and, as

³⁷ Ibid. pp.366-8

³⁸ Ibid.

³⁹ Wilson, *Roger North* p.351

⁴⁰ Matthew Locke, *Melothesia, or, Certain General Rules for Playing upon a Continued-Bass...* (London: J. Carr, 1673)

Rebecca Herissone has pointed out, English treatises even after this date demonstrated a far from perfect theoretical understanding of basic features such as cadences and modulation compared to contemporary publications on the continent.⁴¹

Post-Restoration thorough-basses more frequently include figuring, although the detail (and accuracy) represented within these parts is variable. Purcell's two sets of sonatas (1683 and 1697) include a separate (and highly detailed) figured thorough-bass (Fig.3.4) as do Finger's *Sonatae XII* of 1688.

The image shows a handwritten musical score for a piece titled 'Canzona' in G major, 4/2 time. It consists of five staves. The top staff is the vocal line, followed by two staves for a lute or guitar (treble and bass clefs), and two staves for a figured bass (bass clef). The figured bass line is heavily annotated with numbers (e.g., 65, 98, 54, 43, 6, 7, 2, 5#6, #2#6, 76#5, 56, 65, 6, 43, 65, 756, 62, 762, 7#2, #65, 4#3, 65, 43, 43, 67, 67, 62, #b5, 9, 9, 66, 6, 6, 7, 6, 2, 6, 2, 2, #5, 9, 5, 9) and accidentals (sharps, naturals, flats) indicating the intended harmony for the bass player. The piece is marked with a '2' above the first measure, possibly indicating a second ending or a specific fingering.

Fig.3.4: Figured thorough-bass to Henry Purcell: *Sonnata's of III Parts*, Sonata No 7, 1683
 Reproduced by CC BY 4.0 Licence from http://hz.imslp.info/files/imglnks/usimg/9/92/IMSLP279006-PMLP85673-sonatas_of_3_parts2.pdf

3.5 Consorts to the organ before 1620

Modern commentators often state that the earliest works for organ and viol consort are represented by the fantasia suites written in the 1620s by the musicians associated with 'Coperario's Musicke' in the service of Prince Charles, most notably

⁴¹ Rebecca Herissone, *Music Theory in Seventeenth-Century England* (Oxford: OUP, 2000), pp.184-5

Gibbons and Coprario himself.⁴² These works, however, give every impression of being confident and stylistically cohesive essays in a well-established genre, and not tentative experiments in a new form. Rather than emerging fully formed, like *Venus from the shell*, in the 1620s, this repertoire was clearly the product of an extended period of development and based on a well-established practice of using the organ in instrumental consorts. Although the scant evidence relating to the genesis of this practice may mean that its origins will remain imperfectly understood, it is possible to trace the use of the organ further back towards the turn of the seventeenth century, and to cite manuscript sources that also suggest its employment in the last quarter of the previous century.

One example of the use of the organ with viols at the Jacobean court before 1620 comes in the form of the organ parts to the *In Nomines*, pavans, fantasias and almains of Ferrabosco II, written in the context of the brief existence of the court of Prince Henry, Prince of Wales, from 1610 to 1612. Although no autographs survive, several of the early extant sources for these works (Och.436 and 1004, Ckc.113A and Lbl.2485) clearly draw on an earlier common source.⁴³ The evidence for the use of the organ in Ferrabosco's repertoire is strengthened by a statement by Thomas Tomkins, Ferrabosco's successor as Chapel Royal organist, explaining the compass employed in his four-part fantasias: Tomkins noted on his copy of the score that 'the Reason he Takes such liberty of Compass which he would have restrained: if it had bin made for voyces only' was that it was 'made only for the Vyolls and Organ'.⁴⁴ The organ's role in these works was essentially one of doubling and supporting the string parts.

Another candidate for this practice includes the repertoire from Och.44, a scorebook partly compiled by Thomas Myriell before 1625, which includes Italianate consort works by John Ward, Coprario and Lupo among others. Willetts demonstrated that part of Och.44 is in the hand of Ward himself, who was among Myriell's circle of

⁴² The notable exception being Holman, whose 1996 essay was the first to explore the use of the organ with instruments prior to 1600: Holman, *Organ Accompaniment*.

⁴³ See Christopher Field and David Pinto (Eds.), *Alfonso Ferrabosco the Younger: Consort Music of Five and Six Parts* MB 81 (London: Stainer & Bell, 2003), xi and pp.205-11 for a description of these sources.

⁴⁴ Lbl Add. MS 29996 f72v-3: facsimile in Andrew Ashbee (Ed.), *Alfonso Ferrabosco the Younger: Four-Part Fantasias for Viols* MB 42 (London: Stainer & Bell, 1992), xxxiii. The compass of the works extends from F-Bb², which is not actually particularly extensive for this date.

London musical acquaintances in the orbit of the court.⁴⁵ As with the similar consort scorebooks that survive from the 1620s onwards, this manuscript had the potential to be used by an organist to provide an accompaniment. These works, together with repertoire such as Ward's five and six-part fantasias, were probably played in conjunction with the 'greate Wind Instrument in my howse in Warwyck Lane' listed in Sir Henry Fanshawe's will of 1616, by whom Ward was employed.⁴⁶ Also from Myriell's collection is an organ book (Och.67) that includes a selection of Italian madrigals; a corresponding Altus part without text is extant (Lbl.29427), which implies that the music was played instrumentally rather than sung. Och.67 also contains an organ part to nine five-part instrumental works by Lupo, Coprario, Ward, William White, and William Simmes: as in the contemporary Ferrabosco works, the organ mainly doubles the other parts.⁴⁷ A further piece of evidence comes in the form of a note in Myriell's hand on the last flyleaf of his 1616 collection of vocal works, *Tristitiae Remedium*,⁴⁸ which lists ten 'Songes fit for vials and organ, in the great bookes'. The implication here is that there was once an organ book associated with the collection, and that both viols and organ accompanied the voices for these particular pieces.

Evidence of this kind demonstrates that, at least in London, the organ was being regularly used in conjunction with viols in the second decade of the century. The repertoire found in the Myriell manuscripts represents the three principal genres of domestic music in which the organ was employed in the Jacobean period: vocal works with organ and viol accompaniment, transcriptions of Italian madrigals for viols and organ, and original polyphonic works for viols and organ. The London organists used dedicated organ part-books, and also scores from which an organ part could be extracted. It may be significant to note, therefore, the existence of a number of very similar scorebooks of vocal and instrumental repertoire dating from the late sixteenth century, together with collections of (ostensibly) solo keyboard works that consist of literal transcriptions of similar repertoire from the same period. These sources may enable the extrapolation of the involvement of the organ with domestic ensembles further back into the Elizabethan period.

⁴⁵ Pamela Willetts, 'The Musical Connections of Thomas Myriell' *ML* 49:1, 41

⁴⁶ S. Lee, 'Sir Henry Fanshawe' *National Dictionary of Biography* 18, 183-4 (London: Smith, Elder & Co., 1888)

⁴⁷ Craig Monson, 'Thomas Myriell's Manuscript Collection: One View of Musical Taste in Jacobean London' *JAMS* 30:3, 423

⁴⁸ Lbl Add. MSS 29372-7

Lbl R.M. 24.d.2, for example, the 'commonplace book' of the Chapel Royal tenor John Baldwin, compiled between c.1581 and 1606, includes textless Italian madrigals and a selection of three-part instrumental works, notably *In Nomines*, presented in a stratigraphic score format.⁴⁹ A similar layout may also be seen in the two scorebooks of madrigals, motets and instrumental works compiled by Francis Tregian in the early 1600s (Lbl Egerton 3665), once in the possession of the Chapel Royal organist John Bull.⁵⁰ Numerous scores with this layout also exist within continental sources of the late-sixteenth and early-seventeenth centuries: Robert Judd's study of such manuscripts discussed their purpose in detail, concluding that their principal functions included pedagogical study, the preservation of works for posterity, and use in performance.⁵¹ Many continental keyboard treatises from the late sixteenth and early seventeenth centuries extolled the advantages of playing from such texts. Banchieri, for example, writing in 1609, observed that contemporary organists 'non curano piu d'affaticarsi in fantasia, & spartiture (give little thought to exerting themselves in improvisation and playing from score)' such that there would soon be two types of player, 'Organisti (proper organists)' who read from the score and improvised, and 'bassisti (bassists)' who, through laziness, merely played the basso continuo.⁵²

Both the Baldwin and Tregian manuscripts probably owe their existence to a mixture of motives, but the similarity of their layout and untexted content to contemporary continental organ scores, and indeed to the later organ scores of seventeenth-century English consort works, suggests that one of their functions may have been to supply a keyboard part to instrumental consorts.

A similar possibility may be associated with those Elizabethan collections of apparently solo keyboard music that contain direct transcriptions of instrumental and vocal works. These include Thomas Weelkes's keyboard book of c.1593-1602

⁴⁹ Its contents are indexed in Roger Bray, 'British Library R.M. 24 d 2 (John Baldwin's Commonplace Book): An Index and Commentary' *RMARC* 12, 137-51

⁵⁰ See Ross Duffin, 'New Light on Jacobean Taste and Practice in Music for Voices and Viols' *Le Concert des voix et des instruments a la Renaissance* (Paris: CNRS Editions, 1997)

⁵¹ These categories are discussed in Robert Judd, *The use of notational formats at the keyboard* PhD thesis, University of Oxford, 1989

⁵² Adriano Banchieri, *Conclusioni nel suono dell'organo* (Bologna: Rossi, 1609), pp.24-5, translated in F.T. Arnold, *The Art of Accompaniment from a Thorough-Bass* (2 vols, New York: Dover, 1965)

(Lbl Add. MS 30485), and the Mulliner Book of c.1550-75 (Lbl Add. MS 30513).⁵³ Folios 43-50 of the Weelkes volume consist of transcriptions in score, evidently derived from part-books, of consort fantasias by Ferrabosco I and an otherwise unknown James Harding. The transcriptions appear to be literal, with few, if any, alterations aimed at making them more idiomatic for the keyboard.⁵⁴ Much the same can be said of the works in the Mulliner book.⁵⁵ Some of the Mulliner transcriptions, such as the anonymous no. 16, reveal their part-book origins by retaining the individual clefs of the three original instrumental parts disposed on a single 12-line staff. Others are awkward, if not impossible, to play as they stand. This is particularly noticeable in the instrumentally-derived works with their wider tessiturae, such as the *In Nomine* (no.45) by Johnson. The melodies to other pieces (such as nos. 11 and 12) are entirely omitted, leaving accompaniments to which the treble line would need to be supplied by a voice or instrument. Some of the dance-based works, such as the three French dances of nos. 13-15, are transcribed in simple treble and bass versions that call to mind the two-part presentation of the seventeenth-century masque tunes in Lbl.10444, or Jenkins's sparsely-textured consort organ parts in Lbl.29290 and Ob.C83 (see Ex.3.8 below). Although most of these pieces can operate as stand-alone solo organ works, the similarity of so many of them to the compressed scores and organ parts of early seventeenth-century consort works is nevertheless striking. It suggests that they represent further evidence for the type of use to which the chamber organ was put with instruments (and probably also voices) in secular domestic settings from the last quarter of the sixteenth century.

The secular context of this aspect of the organ's use is worth noting, as is the secular training received by many of the early composers of consort music with organ. It is natural, from a modern perspective, to wish to view the development of the consort organ and its repertoire in relation to the more widespread role of its liturgical cousin in church, and later in the century it is indeed possible to trace connections between the organ accompaniment of liturgical vocal music and practices employed

⁵³ See Holman, *Organ Accompaniment* p.361

⁵⁴ For a modern edition see Alan Brown (Ed.), *Elizabethan Keyboard Music* MB 55 (London: Stainer & Bell, 1989)

⁵⁵ See Denis Stevens, *The Mulliner Book: A Commentary* (London: Stainer & Bell, 1952)

in instrumental consort works.⁵⁶ But, as chapter 1 has shown, the consort organ rapidly diverged from the organological path of the church organ, and its music was mostly promulgated by musicians from essentially secular backgrounds. Only Gibbons, for example, from among the four composers of 'Coperario's Musicke' had a chorister-based musical education: Lupo, Ferrabosco II and Coprario reached the court via secular routes.⁵⁷ It may also be noted that Lupo and Ferrabosco were the sons of Italian musicians trained in Venice and Rome respectively. Coprario was an overt Italophile who had studied in Italy.⁵⁸ Along with a number of other Italians practising at the court, their presence reflected the ongoing influence of Italian music manifested in the nascent viol consort repertory.

This influence was not just seen in musical forms but extended also to instrumentation and compositional techniques. The introduction of the violin to court chamber ensembles was, in no small part, due to the activity of the Venetian Angelo Notari in the court of Prince Henry,⁵⁹ and the close correspondence between the English claviorgan, chest organ and cabinet organ with the contemporary Italian *graviorgano*, *organo in forma di tavolina* and *organo di legno* respectively may also reflect the importation of foreign organ-building concepts on to home soil.⁶⁰ Similarly, there is evidence to suggest that the innovative techniques first observed in the late Jacobean fantasia suite, in particular the independence of the organ within the texture, also drew on imported contemporary Italian practices.

The evidence supporting this hypothesis may be drawn from two areas of Italian continuo practice relating respectively to the keyboard and to the theorbo. A notable feature of the madrigal after 1600 in Italy was the inclusion of an accompanying continuo part, an idea first seen in published form in Luzzaschi's *Madrigali per cantare e sonare* of 1601 (although practised widely in the previous decades) and explored most fully by Monteverdi in his fifth to eighth books of madrigals (1605-

⁵⁶ For a study of the organ's accompanimental role in choral music of the late seventeenth century see Rebecca Herissone, *'To Fill, forbear, or adorne': The Organ Accompaniment of Restoration Sacred Music* (Aldershot: Ashgate, 2006)

⁵⁷ See the respective entries in Ashbee, *BDECM* I and II

⁵⁸ Richard Charteris, *John Coprario: A Thematic Catalogue of his Music* (New York: Pendragon Press, 1977), pp.2-8

⁵⁹ Holman, *Four and Twenty Fiddlers* p.203

⁶⁰ For a preliminary examination of cross-currents between English and continental organ-building practices at this time, see Stephen Bicknell, *The History of the English Organ* (Cambridge: CUP, 1996), pp.60-8. There is still much work to be done in this area.

38).⁶¹ The fifth book specified '*il Clavicembano, Chittarone, od altro simile istrumento*',⁶² the latter including the organ, and the distinctive texture of viol consort with organ continuo is one often found among the instrumental ensembles specified in books seven and eight. The organ Monteverdi appears to have had in mind for these roles was the *organo di legno* with its chorus of wooden principal-toned stops: in 1611, for example, at a performance in the Hall of Mirrors in the Gonzaga Palace, Mantua, he called for 'theorbos played by the musicians from Casale, to the accompaniment of the wooden organ, which is extremely [sweet]'.⁶³ Emilio de Cavalier wrote of *organi di legno* in the late sixteenth century that they were 'perfettissimi per dolcezza e soavità' (perfectly subtle and sweet) and 'pietra di paragone per le buone voci' (the touchstone for the best voices).⁶⁴ Some of these organs were large, fixed instruments, but movable *organi portativi* that were particularly associated with accompanying small vocal groups were especially popular.⁶⁵

The Italian-trained musicians at the English court would have found the early English domestic consort organ, with its wooden pipes, principal-toned stops and non-transposing pitch, very similar in concept to the portable type of Italian *organo di legno*, and thus the ideal partner in the performance of the 'Englished' Italian madrigal repertoire. By extension, it seems reasonable to imagine how, in the wider context of the enthusiasm for Italian cultural practices practised at the Jacobean court, the organ preserved its role as the continuo instrument of choice when the madrigal repertoire made its transition to instrumental forces in the early 1600s.⁶⁶

Little is known about indigenous continuo technique in England at this time, but English keyboardists were certainly slow to adopt continental developments such as the figured bass. It was left to the lutenists at court to forge ahead with the new techniques. By far the most significant development seen in Coprario's fantasia suites of the 1620s was the independent role ascribed to the organ in the texture, and

⁶¹ See Steven Zopfi, 'Instrumentation of the Basso Continuo in Early Seventeenth-Century Vocal Music' *Choral Journal* 48:8, 6-20

⁶² Claudio Monteverdi, *Il Quinto Libro de' Madrigali* (Venice: Amadino, 1605)

⁶³ Letter from Monteverdi to Cardinal Ferdinando Gonzaga, 22 January 1611. Denis Stevens, *Monteverdi in Venice* (Madison: Fairleigh Dickinson University Press, 2001), p.93. Stevens translates the Italian '*soave*' as 'suave', but its Italian meaning of 'gentle' or 'sweet' seems more in keeping with the tonal characteristics of the *organo di legno*.

⁶⁴ Duoi Organi per Monteverdi website <www.orggana.it> accessed 24 February 2018.

⁶⁵ M. Gabbrielli, 'Organo e Polifonia: Prassi Esecutive in Italia fra XVI e XVII Secolo' published at <www.orggana.it/monteverdi/resources/Gabbrielli> accessed 24 February 2018

⁶⁶ See Bertenshaw, *Italian Polyphonic Madrigals*

one likely source for the inspiration for this feature was Italian continuo practice on the theorbo.⁶⁷ A number of lutenists with Italian connections were employed at the court alongside the members of 'Coperario's Musicke' prior to 1620. One of them was Walter Porter, gentleman of the Chapel Royal, who had studied with Monteverdi and whose theorbo basso-continuo to his *Madrigales and Ayres* (1632) reflected contemporary Italian practices.⁶⁸ There were also John Maria Lugario, an Italian lutenist in the service of Queen Anne,⁶⁹ and Nicholas Lanier, who travelled extensively in Italy on court business from 1610 onwards.⁷⁰ The techniques employed by these practitioners would have been familiar to the musicians of 'Coperario's Musicke'. Among them, the increased independence of the continuo from the bass line is of particular note: rather than merely doubling the bass, or providing simple chords to it, Italian lute practice at this time was to improvise independent polyphonic material to augment vocal or instrumental textures.⁷¹ This was a technique required of Italian keyboard players too: Zarlino, for example, writing in 1558, extolled its virtues when he wrote 'It is one thing to compose all parts at once and another to add a third part to two that are given. This is a most difficult business and requires a man skilled in music, but it deserves high praise when the added part fits well'.⁷²

Of especial interest among the immigrant musicians in this context is the Italian Angelo Notari, who arrived in England to join Prince Henry's musicians in around 1610, remaining in court employment until his death, aged over 90, in 1663.⁷³ Notari's only publication was the *Prime Musiche Nuove* of 1613, a collection of two- and three-part madrigals together with monodic songs with theorbo continuo.⁷⁴ In these latter works, Notari extended the practice of improvising independent polyphonic material to notate fragments of a second, upper melody line written in

⁶⁷ For an account of the theorbo at the Jacobean court, see Matthew Spring, *The Lute in Britain: A History of the Instrument and its Music* (Oxford: OUP, 2001), pp.371-6

⁶⁸ Ian Spink, 'Walter Porter and the Last Book of English Madrigals' *Acta Musicologica* 26: 1/2, 35-6

⁶⁹ Spring, *Lute in Britain* p.209

⁷⁰ Ashbee, *BDECM II* p.689

⁷¹ Nigel North, *Continuo Playing on the Lute, Archlute, and Theorbo* (Bloomington: Indiana University Press, 1987), p.4

⁷² Gioseffo Zarlino, *Le istituzioni harmoniche III* (Franceschi: Venice, 1558), p.64, translated in Gregory Johnston, 'Polyphonic Keyboard Accompaniment in the Early Baroque: An Alternative to Basso Continuo' *EM* 26:1, 51-60+63-4

⁷³ Ashbee, *BDECM II* pp.839-42

⁷⁴ Ian Spink, 'Angelo Notari and his 'Prime Musiche Nuove'' *Monthly Musical Record* 87, 168-77

to the theorbo part. The notes of this material were indicated by a cross. His explanatory preface stated that:

I have for my owne particular gust added ... a third part, altering only in some sort the Bassus, and as I thought most agreeable with the Composition, where it is to be observed ... that wheresoever in the lyne of the Bassus you finde the notes with this mark [+] they must be played only and not sunge.⁷⁵

The extra third part entries are fragmentary, suggesting that they represent the given openings to otherwise extemporised polyphonic counter-melodies to the bass line (Fig.3.5).



Fig.3.5: Angelo Notari: *Prime Musiche Nuove*, 1613, p.20
Reproduced by CC BY 4.0 Licence from http://hz.imslp.info/files/imglnks/usimg/6/61/IMSLP71790-PMLP143972-notari_1mo_mus-bw.pdf

Notari's additions are remarkably similar to the fragmentary 'cues' for improvised organ polyphony first seen in some of Gibbons's slightly later fantasias for strings and organ, such as those for the 'great dooble bass' in Och.732-5 (see Ex.3.5 below).⁷⁶

This evidence seems therefore to suggest that the development of independent obbligato polyphonic material in the organ parts of the fantasia suites penned by Prince Charles's musicians in the 1620s represented a marriage of two established traditions, one being the indigenous use of the organ in conjunction with secular string ensemble music established in the latter part of the sixteenth century, and the

⁷⁵ Angelo Notari, *Prime Musiche Nuove* (London: William Hole, 1613)

⁷⁶ They also resemble the *bassetti* scores of Italian vocal music used by organists prior to c.1620. See Tharald Borgir, *The Performance of the Basso Continuo in Italian Baroque Music* (Ann Arbor, UMI Research Press, 1977), p.17

other the importation of early seventeenth-century Italian continuo practices, both practical and notational, on the theorbo and organ.

3.6 The development of secular English organ continuo style

It is within the compositions written for 'Coperario's Musicke', the chamber ensemble founded at the court of Prince Charles at St James's Palace soon after 1622, that the earliest extant evidence for this marriage of traditions appears. The ensemble's members included Ferrabosco II, Thomas Lupo and Coprario himself on viols, Gibbons on organ, and two violinists, John Woodington and Adam Vallet.⁷⁷ The generous salaries and ample provision of instruments invested in this ensemble was probably a reflection of the personal interest of Charles, who may even have participated in it himself.⁷⁸ The instruments employed included five viols purchased in 1621 for £23,⁷⁹ and a 'Cremonia vyolin to play to the Organ' purchased for £12 in 1638.⁸⁰ The date of the latter entry in the accounts reveals that the ensemble was still functioning some years after Coprario's death, and also suggests that the pitch of the organ differed in some way from the usual standard applied at court. Probably, like the later extant instruments, it was relatively high. The 'Princes Winde Instrum't' itself was supplied to St James's palace in 1622 by Thomas Cradock.⁸¹

Among the works written for this ensemble, Coprario's two sets of fantasia suites⁸² dating from c.1622-25, and Gibbons's three-part fantasias featuring the 'great Dooble Bass' of similar date, are the most significant.⁸³ The earliest sources for these works are the string part-books (Och.732-5) and associated organ book (Lbl.k.3) bearing the royal arms of Charles I dating from c.1625, a compressed score (Och.21) probably based on Coprario's autograph copied in the early 1620s,⁸⁴ and another score from the 1630s bound with a later written-out organ part probably in the hand

⁷⁷ see Holman, *Four and Twenty Fiddlers*, pp.213-6.

⁷⁸ John Playford, *An Introduction to the Skill of Musick* (London: Playford, 1683), Preface

⁷⁹ Ashbee, *RECM* IV p.224

⁸⁰ Ashbee, *RECM* III p.154

⁸¹ Ashbee, *RECM* IV p.225

⁸² The term is not one found in any contemporary sources but has wide currency in recent writing on the subject.

⁸³ For a discussion of the chronology of the fantasias see John Harley, *Orlando Gibbons and the Gibbons Family of Musicians* (Aldershot: Ashgate, 1999), pp.126-9

⁸⁴ Ashbee, *Index I* pp. 202-4 and 37-43 respectively.

of John Jenkins from the 1640s (Lbl.23779).⁸⁵ The numerous secondary sources have a range of dates that extends well beyond the Restoration, and originate from domestic as well as courtly circles,⁸⁶ bearing witness to their popularity and hence also their influence.

Each of Coprario's suites consists of three movements (fantasia, almain and galliard) whereas Gibbons's works are single movements containing contrasting sections. Fifteen of the Coprario suites are scored for violin, bass viol and organ and eight are for two violins, bass viol and organ. The early sources contain unambiguous inscriptions regarding scoring, such as 'Heare begettingh for 2 treble viollins ye basse violl. & ye Organ' from Lbl.k.3:⁸⁷ these are also the earliest extant consort works to specify the violin.⁸⁸ The Gibbons works are written for three-part viol consort and incorporate the 'great Dooble Bass' viol with its low AA string on the bottom part.⁸⁹ In addition to their interest for historians of the violin, these fantasia suites are significant in that they contain the earliest surviving examples of a range of keyboard techniques that exerted a considerable influence on the writing for consort organ until well into the post-Restoration period.

The dissemination of these techniques was aided by Coprario's tuition of Jenkins and Lawes, who were themselves influential musicians. Gibbons's tuition of Hingeston, who adopted the fantasia suite in such works as the Fantasias, Almandes and Ayres found in Ob.D211, was passed on to the young Henry Purcell, whose consort works with organ from the 1670s demonstrate an intimate familiarity with the compositional techniques of the Jacobean court some half-century previously. As Holman has argued, these works were probably apprentice exercises, but it is significant that such an innovative composer as Purcell should seek to base his work on a familiarity with a style established two generations before him.⁹⁰

⁸⁵ Pamela Willetts, 'Sir Nicholas Le Strange and John Jenkins' *ML* 42, .33

⁸⁶ A full list is provided in Richard Charteris (Ed.), *John Coprario Fantasia Suites* MB 66 (London: Stainer & Bell, 1980), p.173.

⁸⁷ *Ibid.* xix

⁸⁸ For a discussion of the use of the violin in these works, see Holman, *Four and Twenty Fiddlers* pp.215-8.

⁸⁹ See Francis Baines, 'Fantasies for the Great Dooble Bass' *Chelys* 2, 37-8

⁹⁰ Holman, P., *Henry Purcell* (Oxford: OUP, 1994), pp.75-84

Other composers who adopted the fantasia suite model included Mico and Christopher Gibbons, and its influence is also felt in the sequential suites of Simpson and Locke. The new techniques of organ accompaniment introduced by 'Coperario's Musicke' were therefore current for some five decades, and most subsequent consort works with organ may be seen to owe something to the Jacobean fantasia suite.

Like that of the fantasia suite itself, Coprario's background was secular and strongly influenced by Italian practice.⁹¹ Works such as his 36 Italian-texted madrigals (later adapted as viol fantasias), his parody-fantasias for viols based on Italian madrigal themes, and his 21 villanelles all attest to the influence of Italy on his music.⁹² The scoring of the fantasia suites for two violins, together with the overall structure of the works, with their stately polyphonic opening followed by two sprightly, homophonic dance-based movements, could be regarded as at least a nod towards the contemporary Italian *sonata da chiesa*. The absence of an autograph score necessitates some caution in ascribing the keyboard practices without reservation to Coprario himself, but the very early date of Lbl.k.3, compiled probably within five years of the composition of the suites,⁹³ suggests that the use of the organ here is representative of the methods current at the court at this period. Only the first suite has a written-out right-hand part, but this is enough to demonstrate that the features described below are already present.

Charteris has suggested that the remaining suites (for which the organ part consists only of a bass line) remain uncompleted by the scribe, but the presence of a few, apparently contemporary and thus very early, figurings suggest that this part was nevertheless used in practice by an organist, presumably Gibbons.

The second section of Lbl.23779 consists of a fully written-out part that appears to draw on a lost autograph score.⁹⁴ Although of slightly later date, it reflects the practices seen in the first suite of Lbl.k.3. The source originates from the L'Estrange household at Hunstanton, probably from the early 1640s, and has been shown to be in the hand of John Jenkins. Although a professional organist (Thomas Brewer) was

⁹¹ Charteris, *Coprario* p.9

⁹² *Ibid.* pp.3-8

⁹³ Charteris, *Fantasia Suites* xx

⁹⁴ *Ibid.*

available within the household, this source demonstrates the approach often encountered in music prepared for amateur domestic contexts where less experienced keyboard players were to be found.⁹⁵ As Roger North observed, in a 'musicall family... the masters never trusted the organist with his thro-bass, but composed his part'.⁹⁶

The first feature to note in this source is the independence given to the organ part in the fantasia movements of the single violin suites, where all but one open with an imitative polyphonic prelude for the organ alone (Ex.3.1).

The image shows a musical score for three instruments: Violin, Bass Viol, and Organ. The time signature is 3/2. The Violin and Bass Viol parts are mostly rests, while the Organ part plays a complex polyphonic prelude. The Organ part consists of two staves (treble and bass clef) and features intricate rhythmic patterns and melodic lines.

Ex.3.1: Giovanni Coprario: Fantasia from *Fantasia Suite No. 9* bars 1-12

These movements also include at least one, and as many as four, solo interludes for the organ. Some interludes are short two- or three-bar passages serving as vehicles for modulation or acting as links between points of imitation, but others are more extensive and see the organ introducing and developing new ideas that are not shared with the strings (Ex.3.2).

⁹⁵ Willetts, *Sir Nicholas Le Strange*. One of the other hands in Lbl.23779 is thought to be that of Thomas Brewer.

⁹⁶ Wilson, *Roger North* p.300

Ex.3.2: Giovanni Coprario: Fantasia from *Fantasia Suite* No. 10, bars 84-93

There are also many passages in which the organ develops melodic material with the accompaniment of the bass viol alone.

It is important to note that the organ here is no mere accompaniment, but an equal partner to the strings. This relationship was to pervade much of the consort repertoire for smaller instrumental groupings for the next four decades, and was implicit when Mace, for example, wrote of the organ 'According to All', being 'Equally-Heard to all', 'Equally mixt', or 'Equal with the other Musick'.⁹⁷ It is a point of which many modern-day ensembles and recording engineers might usefully be reminded.

The galliards are largely homophonic in texture, and here the organ plays a more traditional continuo role in supplying mainly chordal support to the strings. There are many instances where held organ chords underpin movement in the strings alternating with passages where the organ supplies independent strands within the harmony (Ex.3.3).

⁹⁷ Mace, *Musick's Monument* pp.234, 242, 233, 242 respectively.

The image displays a musical score for three instruments: Violin, Bass Viol, and Organ. The score is divided into two systems. The first system contains measures 32-36, and the second system contains measures 37-41. The Violin part is written in a treble clef with a key signature of one sharp (F#) and a 3/4 time signature. The Bass Viol part is in a bass clef with the same key signature and time signature. The Organ part is written in a grand staff (treble and bass clefs) with the same key signature and time signature. The organ part features a distinctive doubling of the upper line at the octave below in the lower register.

Ex.3.3: Giovanni Coprario: Galliard from *Fantasia Suite No 7*, bars 32-41

As in many sources intended for amateur use, the organ part of Lbl.23779 often doubles the strings closely, although there are moments when it also adds a fourth polyphonic line, or follows the lower of the violin parts rather than the upper. Another distinctive feature is the occasional doubling of an upper part at the octave below: this is a characteristic that is later found in both Jenkins's and Lawes's own works. In Coprario's suites, this latter feature may have been devised to help amateur string players by providing better definition between the two treble parts in the accompaniment, or perhaps to create a better balance between the left and right hands of the organ part (Ex.3.4). In other composers' works, particularly those of Jenkins where the transpositions are an octave lower, it may possibly indicate the use of a 4ft rather than 8ft organ stop, or even an organ pitched at 4ft: the possibilities for this practice are discussed further in relation to the extant consort organs in chapter 5.4.4.

Ex.3.4: Giovanni Coprario: Fantasia from *Fantasia Suite* No 4, bars 77-80

The string parts of Gibbons's fantasias for the 'great dooble bass' found in Och.732-5 contain a number of the fragmentary organ 'cues' described above. The low tessitura of the 'dooble' bass creates a gap in the texture between the treble and bass which Gibbons addressed in his later *Fantasia Suites* by the inclusion of a tenor viol, but here the organ 'cues' appear to offer an alternative solution by prompting the improvisation of additional internal parts on the organ (Ex.3.5).

Ex.3.5: Orlando Gibbons: *Fantasia for the Great Dooble Bass*, bars 1-14
Notes in small type represent the organ 'cues'

The efficacy of this expedient was ably demonstrated by Holman's recording of these works.⁹⁸ Holman suggested that Gibbons's cues were 'a step on the road'

⁹⁸ 'Music for Prince Charles: Fantasias and Dances by Orlando Gibbons (c1583-1625) and Thomas Lupo (?1571-1627)' Audio CD, Hyperion CDA 66395, 1990

towards fully written-out organ parts, but they more probably represent the shorthand approach of a composer who was an organ specialist.⁹⁹ It is not certain whether Gibbons would have played with reference to one or all of the string parts, but the ability of an organist to construct a polyphonic texture from several individual partbooks was one that was recorded widely from the mid-sixteenth century up until the time of Bach, extraordinary though it may seem today.¹⁰⁰ The only real obstacle to the use of the organ in the context of these pieces is the organ's left hand shadowing the string bass line: the extant organs demonstrate that the low AA of the double bass's bottom string was available on the organ, usually played by the C# key, but the low BB and BBb were not, unless Craddock's organ at St James's was exceptional.¹⁰¹ It is nevertheless a relatively minor objection that can be obviated in modern performance by octave transposition.

Och.732-5 is unusual in including a number of performance indications: numbers 3, 4 and 5 in particular contain numerous annotations such as 'Soft', 'Long' and 'Away', the latter emphasised by a reversal of the ¢ time signature. These directions underline the fact that these works are multi-sectional, with frequent changes of mood and character. Some of the Coprario fantasias exhibit similar traits, with the addition of changes of metre rather in the manner of his earlier masque music, but they do not contain performance directions. Such markings are rarely encountered in the viol repertoire at any time during the seventeenth century, and, if these are contemporary with the sources as Hancock has convincingly argued, it is particularly interesting to find them at such an early date.¹⁰² The implications of such markings for performance practice on the organ will be discussed further in chapter 4.

In the absence of any contemporary English treatises on secular continuo accompaniment, these works shed valuable light on contemporary keyboard practice.¹⁰³ The developing obbligato role of the organ, together with the range of

⁹⁹ Holman, *Fiddlers* p.224

¹⁰⁰ Edward Lowinsky, 'On the Use of Scores by Sixteenth-Century Musicians' *JAMS* 1:1, 17

¹⁰¹ The tessitura of Coprario's Suites occupies the more usual range of C-c³.

¹⁰² For a survey of such markings, see Wendy Hancock, 'Thomas Mace and a sense of 'humour': the case for expression in 17th-century English instrumental music' *VdGSJ* 6, 1-33

¹⁰³ The earliest published English basso continuo treatise was William Penny's *Art of Composition, or Directions to play the Thorow Bass* (1670); no copies survive. For an analysis of

text formats (part-books, scores and unfigured basses) employed in their dissemination, are evidence of an already well-established practice that was maintained until Italian continuo techniques gradually superseded it in the last quarter of the century. Och.732-5 and Lbl.k.3 furnish an insight into the improvisatory methods practised by Gibbons and, no doubt, other professional organists at court, and Lbl.23779 illustrates the approach taken by players in amateur domestic contexts in providing a fully written-out part. In either context, the fantasia suites are important in demonstrating a new-found confidence in harnessing the potential of the organ in an independent consort role in its own right, and not just as a slavish accompanying or doubling instrument.

3.7 Performance practice issues

3.7.1 The choice of keyboard instrument

The organ was not the only polyphonic instrument, however, that participated in string consort music. Five types of continuo instrument – the organ, harpsichord, lute/theorbo/bandora, lyra viol and harp – were used with English instrumental consorts during the seventeenth century. There is little evidence from prior to the Restoration that suggests that the organ was used in conjunction with any of the other continuo instruments, even though organs, theorbos, lyra viols and harpsichords often appear together in the court accounts as well as in some domestic documents. Italian practice often combined the organ and theorbo in the continuo role, particularly in works for the church or theatre, and here the latter frequently assumed a role that transcended doubling or harmonising the bass line and also added independent melodic material.¹⁰⁴ In this respect its role was similar to that of the obbligato organ parts of the early fantasia suites, but there is nothing to suggest that theorbos and organs were used together in England until after the Restoration.¹⁰⁵

liturgical organbooks see Herrison, *To Fill, Forbear or Adorn*. A similar study of secular sources is overdue.

¹⁰⁴ North, *Continuo Playing on the Lute* p.4

¹⁰⁵ See Spring, *The Lute in Britain* pp.388-9 for a list of seventeenth-century English publications specifying the theorbo as a continuo instrument.

The frequency with which claviorgans were listed in early seventeenth-century English inventories indicates that the combination of organ and plucked-string tone was also widely available,¹⁰⁶ although their role in consort repertoire is uncertain and remains open to speculation.¹⁰⁷ A German iconographical source of 1619 illustrates a two-manual claviorgan accompanying four viols: the instrument comprises a virginal placed on a chest organ, with the player's right hand on the virginal keyboard and his left on the organ manual (Fig 3.6).¹⁰⁸



Fig.3.6: Claviorgan from a virginals lid painting, 1619
(Reproduced under Creative Commons CCO 1.1 Universal Public Domain Dedication)

The string players have been identified as members of the Behaim von Schwartzbach family and the keyboard player as their *Haus-Musikmeister* Johann Stadem the elder.¹⁰⁹ A rare source of contextual evidence for the use of the claviorgan in England comes from another aristocratic and musical family with a

¹⁰⁶ See Eleanor Smith, *The History and Use of the Claviorgan*. Unpublished PhD thesis, University of Edinburgh, 2013. Smith is unaware of any firm evidence for the combined sonorities being used in England although there is some iconographical evidence for the practice from continental sources. (Private conversation, 2 September 2017)

¹⁰⁷ For the most comprehensive work in this area see Terence Charlston, 'An instrument in search of its repertoire? The Theewes claviorgan and its use in the performance of sixteenth- and seventeenth-century keyboard music' *RCOJ* 3, 24-41

¹⁰⁸ Lid painting on a virginal made for Lucas Friedrich Behaim (1619) in the Germanisches Nationalmuseum (inventory no. Gm1615)

¹⁰⁹ Further information and a bibliography is available in the Germanisches Nationalmuseum online catalogue: <<http://objektkatalog.gnm.de/objekt/Gm1615>> accessed 15 April 2018

resident organist, as revealed in an inventory of instruments and music compiled by John Rolleston, secretary to William Cavendish, Duke of Newcastle, at Welbeck Abbey in 1636.¹¹⁰ Here an 'Organ and harpsicall, to geather' was listed in the Gallery, along with a dozen viols and various wind and plucked string instruments found elsewhere in the house. Cavendish's music collection included books of divisions by Maurice Webster among others, and a set of seven part-books of consort works by John May, which probably represent works scored for six viols and keyboard.¹¹¹ Several harpsichords and a virginal were listed in the house, but the only other organ was found in the chapel and was probably therefore primarily associated with the liturgical works listed in the inventory. The keys to the keyboard instruments were in the possession of a 'Mr Tomkin', who appears to have been one of the organists Giles or Thomas Tomkins.¹¹² That viols were used with the Welbeck claviorgan is suggested by the presence of the 'Organ Violl' discussed in Chapter 2.

Och.1004 is one of a set of parts compiled for use by the Lutes, Viols and Voices whilst the court was established at Oxford during the Civil War. It contains unfigured thorough-basses for organ or theorbo, whilst its companion partbook, now lost, contained continuo parts for harpsichord or lyra viol. The scoring of the works, however, clearly indicates that the theorbo or lyra viol could be used in conjunction with the harpsichord (the two players reading from the two separate books), but that the organ was only ever used on its own. This arrangement reflects the practice recorded by Thomas Mace observed at the Cambridge music meetings of the 1660s: 'We had (beyond all *This*) a *Custom at Our Meetings*, that commonly, after such *Instrumental Musick* was over, we did *Conclude All*, with some *Vocal Musick*, (to the *Organ*, or (for want of *That*), to the *Theorboe*.'¹¹³

Gradually, however, the possibilities for the combination of organ and theorbo began to increase. Locke's Broken Consorts, though ostensibly scored only for two violins and a bass in Lbl.17801, also have three autograph theorbo parts in Och.772-6, and it seems reasonable to suggest that Locke would have improvised an organ

¹¹⁰ See Lynn Hulse, 'The Duke of Newcastle and the English Viol' *Chelys* 29, 28-43

¹¹¹ Lynn Hulse, 'Apollo's Whirligig: William Cavendish, Duke of Newcastle, and his Music Collection' *The Seventeenth Century* 9:2, App. 1, 233-8

¹¹² *Ibid.*

¹¹³ Mace, *Musick's Monument* p.235

part in performance. The parts for an anthem he composed for Oxford in 1665 also include partially-figured basses for both organ and theorbo.¹¹⁴

Whilst it is clear, therefore, that the organ was not generally combined with other continuo instruments until after the Restoration, and then only (and judging by the evidence, rarely) with the theorbo, present day performance practice still requires clarification with regard to which instruments are appropriate in any given situation. Current practice, based more on convenience rather than scholarship, takes a liberal approach especially to the interchangeability of the organ and harpsichord in the consort repertoire. Such an approach is encouraged by evidence that supports the appropriate interchangeability of continuo instruments in certain types of repertoire, particularly vocal music. Martin Peerson's *Mottects, or Grave Chamber Musique* (1630), for example, included the first example of a figured-bass organ part, 'which for want of Organs, may be performed on Virginals, Bass-Lute, Bandora or Irish Harpe'.¹¹⁵ Whether Peerson's approach reflected contemporary flexibility in accompaniment, or was merely a ploy to secure wider sales, is uncertain.

Even greater flexibility was demonstrated in an account dating from 1686 of devotional vocal music in the dining room at Knowsley House, where it was recorded that the Benedicite was 'often sung there to the organ, lute[,] Irish harpe and violls'.¹¹⁶ From the 1680s, as the harpsichord gradually succeeded the organ as the keyboard continuo instrument of choice in repertoire of Italianate inspiration, published works began to admit the possibility of either instrument. Finger's *Sonatae XII* of 1688, for example, included a 'bassum continuum pro organo seu clavicymbalo', which, as discussed in chapter 2, was probably played on a consort organ in James II's 'Popish Chapel' at Whitehall.¹¹⁷ Playford's 1683 edition of Purcell's sonatas was scored for 'TWO VIOLLINS And BASSE: to the Organ or Harpsecord', but by the time of the second set in 1697 the order was reversed with a 'Through Bass for the Harpsichord, or Organ'. No doubt the option of employing the harpsichord assisted sales of published editions in the wider domestic market,

¹¹⁴ Holman, *Life after Death* pp.41-2

¹¹⁵ Martin Pearson, *Mottects, or Grave Chamber Musique...* (London, 1630)

¹¹⁶ Owc MS 35 pp.45-7 (Derby household book)

¹¹⁷ For a demonstration in practice see 'Gottfried Finger: Sonatae pro diversis instrumentis op.1' Audio CD, ACC 24264, 2011

but it may yet be significant that the organ was often the first-mentioned instrument in many of these publications, even at a time when it was beginning generally to fall from favour.

Where precise keyboard scoring is not provided, contextual information can suggest the appropriate instrumental choice. Thomas Mace, writing in 1676, made the distinction between 'Grave Musick, Fancies of 3, 4, 5, and 6 Parts to the Organ' and the lighter, dance-based homophonic works 'when we would be most Ayrey, Jocond, Lively, and Spruce; Then we had Choice, and Singular Consorts, either for 2,3,or 4 Parts, but not to the Organ (as many (now a days) Improperly, and Unadvisedly (perform such like Consorts with) but to the Harpsichon'.¹¹⁸ Mace's protestation provides evidence that the organ was indeed used in the lighter dance-based repertoire, even though the percussive, non-sustaining nature of the harpsichord (the 'clink like a touch upon a kettel', as North put it)¹¹⁹ was felt to be a better match to rhythmically-incisive, homophonic textures. The legato polyphony of fantasias, aided by the sustaining tone of the organ, as North observed in the early 1700s, 'would seem a strange sort of musick now, being an interwoven hum-drum, compared with the brisk *battuta* derived from the French and Italian'.¹²⁰

The distinction between organ and harpsichord keyboard technique suggested by the contrasts in these types of repertoire was recognised in contemporary writing. Continental treatises recommended approaches based on liturgical practices, but with discretion and blend at the forefront of the desired effect. Werckmeister, for example, recommended a 'liebliches Sausen' (pleasant murmuring) as the desired effect of organ continuo,¹²¹ whilst de Saint-Lambert cautioned against using techniques taken from harpsichord accompaniments 'pour suppléer à la sécheresse de L'Instrument' (that compensate for the dryness of the sound), which would otherwise draw attention to the organ.¹²² In an essay entitled *The Comon Characters of Musik*, Roger North remarked on the irony of using techniques on instruments to imitate the effect of others, cautioning that 'If an organist should imitate the manner

¹¹⁸ Mace, *Musick's Monument* p.234

¹¹⁹ Wilson, *Roger North* p.248

¹²⁰ *Ibid.* p.11

¹²¹ Andreas Werckmeister, *Harmonologia Musica* (Frankfurt: Calvisius, 1702) tr. the author

¹²² Michel de St. Lambert, *Principes du Clavecin* (Paris: Christophe Ballard, 1702) tr. the author

and touch of an harpsichord, he would be laught at'.¹²³ This being so, the nature of the keyboard writing within a source can be a guide to the choice of instrument in repertoire with no stated preference. Sustained chords or polyphonic textures suggest the organ; homophonic textures and dance-based repertoire may admit the possibility of the harpsichord. A pre-Restoration source is more likely to require the organ than one from later in the century.

It is particularly important to remember that much of the viol consort repertoire that required a keyboard part was written and played within a specialised and closely-connected network of court-centred contexts in which consort organs were widely available. References to over 100 secular chamber organs have been recorded from over the course of the seventeenth century, and all bar none of the composers represented in the manuscript sources had a consort organ available to them in the contexts in which they operated. Both the expectation and the practical reality was that the keyboard part could be played on the organ in the repertoire that specified it in the contexts for which it was written. Where this was not intended to be so, the manuscripts sources are usually clear in their requirements. The titles of the works from the North family collection from the 1650s, later sold to the Oxford Music School and now housed in the Bodleian Library, are a good illustration of this point. Roger North recorded that at Kirtling Hall the consorts 'were usually all viols to the organ or harpsichord',¹²⁴ and the distinction was carefully noted on the title of each set of partbooks as originally inscribed.

This precision was maintained in the Music School catalogue drawn up by Edward Lowe in 1682. In the Jenkins consorts, for example, Ob.C81 is described as 'Mr. Jenkins: His set for one Base Viol & Violin to ye Organ', whilst Ob.C85 is recorded as 'His Aires For a Treble Vyole Base Vyole And Lyra Vyole To The Harpsecord'. The lack of a requirement for the organ was also carefully noted, as in 'His Fancies for 2 Trebles & a Bass without ye Organ' (Ob.C87).¹²⁵ It was only when the repertoire was disseminated into tertiary contexts, lower down the social scale and

¹²³ Wilson, *Roger North* p.194

¹²⁴ *Ibid.* p.11

¹²⁵ The suggestion that these works were not intended for use with organ is supported by the fact that none of the other four extant sets of seventeenth-century string part books for these works include or mention a keyboard part.

in principally amateur circles that the decreased probability of the availability of an organ necessitated the use of the harpsichord.¹²⁶

The distinctive sonority created by the combination of viols and the consort organ was an integral, essential dimension to the music that was explicitly specified in the extant sources and actively exploited by composers of the genre. This sonority extended not just to the sustaining ability of organ tone, but also to the carefully-engineered harmonic structure of the consort organ's sound, as discussed in Chapter 1. It was this very particular sonority that was alluded to when Thomas Mace wrote of the organ '*Evenly, Softly, and Sweetly Acchording to All*',¹²⁷ acting as a '*Holding, Uniting-Constant-Friend*' in the consort;¹²⁸ in this respect, the organ was not '*Eminently to be Heard, but only Equal with the other Musick*',¹²⁹ contributing to a homogeneity of sound which, as North described it, '*had a strange tranquill harmony... - nothing of hurry, but as a temperate air flowing and the Battuta [ie beat or pulse]... scarcely discernible*'.¹³⁰

These qualities are quintessentially the preserve of the organ, and are at odds with the percussive, non-sustaining nature of the harpsichord. In their original contexts, '*consorts to the organ*' were intended to be exactly that. It would be incorrect to suppose that any degree of interchangeability was intended between the organ and harpsichord (or indeed any other continuo instrument) unless specifically stated in the sources. This is important to note for present-day performance practice where, so often, the incorrect type of keyboard is employed or, worse still, the organ part is omitted altogether.

3.7.2 The potential for the player's intervention in consort organ parts

Practical engagement with consort organ texts raises issues that can challenge the modern musician. The extent to which interventions are justifiable on the part of a player or editor requires careful thought. That such considerations were familiar to the seventeenth-century keyboard player is demonstrated by Roger North's

¹²⁶ Holman, *Life after Death* pp.76-84

¹²⁷ Mace, *Musick's Monument* p.234

¹²⁸ Ibid. p.242

¹²⁹ Ibid.

¹³⁰ Lbl. Add. MS. 32,537 f.101 (Roger North: *Notes of Me*)

observation that ‘there is so much management in the manner of play, sometimes striking the accords, sometimes arpeggiando, sometimes touching the air, and perpetually observing the emphatick places, to fill, forbear or adorne, with a just favour, that a [mere] thro-base master, & not an ayerist, is but an abcedarian.’¹³¹ Many such decisions will be a matter of personal judgement, but contextual knowledge can enable informed choices to be made in many instances.

One such problematic situation for the organist relates to the approach to the simple, two-part treble and bass textures that are frequently encountered in many pre-Restoration consort organ parts. The works of John Jenkins in particular include a large number of relatively sparse, polarised organ textures, often with a single line in each hand. Holman has described them as ‘puzzlingly thin’, but they nevertheless remain a distinctive element of the composer’s style (Ex.3.6).¹³²

The musical score for 'The Bell Pavine' (bars 60-67) is presented in a consort organ arrangement. It features six staves: two Treble staves, two Tenor staves, two Bass staves, and one Organ staff. The time signature is 3/4. The music is characterized by its sparseness, with many measures containing rests. The organ part is particularly thin, often consisting of single notes or simple chords in each hand.

Ex.3.6: John Jenkins: *The Bell Pavine*, bars 60-67

¹³¹ Wilson, *Roger North* p.249

¹³² Holman, *Organ Accompaniment* p.377

In Jenkins's case, such textures occur within a wider variety of genres than is the case with most composers, being found not just in the lightly-scored works for two or three instruments and organ, such as the many works based on the fantasia suite model, but also in densely-textured works, such as the six-part fantasias. A consistent feature of this type of texture is that it doubles the highest and lowest notes in the string writing at all times, thus outlining the main melodic and harmonic essence of the music, albeit with some simplification of decorated melodic lines or the omission of repeated notes. The question facing a modern performer is whether these parts should be realised exactly as written, or whether the expectation was that the organist would 'fill in' the texture *ex tempore*.

A possible source of guidance lies in the fact that, in most works employing these textures, there are often short passages, sometimes of less than a bar, where a third part is added. These fragmentary entries, which are occasionally extended to last for a few bars, can occur in both hands, but most frequently in the left. They often coincide with exposed entries within the string parts, where they were probably intended to provide assistance to the string players. They are also found where *ficta* occurs in the internal string parts, in which case they assist the organist to accord with the strings (Ex.3.7).

Ex 3.7: John Jenkins: *Fantasia* in D Minor, bars 61-68

In lightly-scored works, Jenkins also added the third part at cadences to fill out the texture, whereas in his denser organ parts he often reduced the texture to two or three notes at the ends of sections, which Holman has suggested may have been to reflect a diminuendo executed in the strings.¹³³ The fact that the third part appears to be inserted at moments where the organist would most benefit from its information suggests the possibility that Jenkins may have expected the rest of the part to be similarly augmented in performance. If so, it might be seen as an extension of the idea of Gibbons's organ 'cues' from the Double Bass fantasias. Although Jenkins appears not to have been a keyboard player, a professional organist was employed at several of the households from which he received patronage: one may imagine that Brewer at Hunstanton Hall and Loosemore at Kirtling Hall had the necessary skill to turn Jenkins's skeletal outlines into a more substantial organ accompaniment in performance.

There are indeed many contemporary examples of how music originally transmitted as simple treble and bass lines was augmented in performance to encompass more complex textures or instrumentation. An early example may be found in the way that late sixteenth-century lute duet textures were adapted for performance by the Elizabethan broken consort. Nordstrom demonstrated how the typical two-part lute duet texture of divisions over a ground bass was expanded to incorporate the chordal input of a bandora and cittern, together with a third polyphonic line provided by a flute.¹³⁴

Similarly, Cunningham has demonstrated how Lawes's Harp Consorts, scored for violin, bass viol, theorbo and Irish harp, are expanded versions of what were originally two-part works.¹³⁵ This is discernible in the way that the violin plays the melody over the bass doubled in the viol, theorbo and the bass of the harp, to which the harp adds the third polyphonic line in its upper part (Ex.3.8).

¹³³ Holman, *Organ Accompaniment* p.379

¹³⁴ Lyle Nordstrom, 'The English Lute Duet and Consort Lesson', *The Lute Society Journal* 18, 9. Several examples of this process may be examined in Warwick Edwards (Ed.), *Music for Mixed Consort* MB 40 (London: Stainer & Bell, 1977), where the lute duet and broken consort versions are presented together.

¹³⁵ John Cunningham, 'A Tale of Two Harps: Some Issues Arising from Recordings of William Lawes's Harp Consorts', *Early Music Performer* 21, 13-24

Ex.3.8: William Lawes: Saraband, *Harp Consort No 4*, bars 1-4 (first time)

This expansion of a two-part texture may also represent a written-out version of the process used by court musicians, and particularly the Lutes, Viols and Voices, to adapt two-part dance music textures to varied instrumental ensembles, depending on the availability of musicians at any given time. Similarly, Holman has discussed how Simon Ives's theatre music, found in Lbl Add. MSS 18,940-4 and scored for four parts and continuo, was derived from two-part originals: the bass line is preserved largely intact whilst the melody line is distributed between the two treble instruments, with, again, an additional third part provided in the tenor.¹³⁶ All of these approaches preserve the essential melody and bass elements of the original texture whilst adding at least one extra line of polyphonic material and a chordal continuo part.

The organ accompaniment of post-Restoration liturgical works, although later than the majority of Jenkins's consort works, provides further insight within a keyboard context. Herissone's study of the genre found that, whilst the majority of such organ parts double the treble and bass parts of the choral texture, many composers or subsequent arrangers also 'included inner-part doublings selectively to inform the player about particular features of the music'.¹³⁷ Many of these features relate to the imitative polyphony within the vocal texture. Herissone also observed that the doubled material within organ parts adapted the vocal equivalent in various ways, by, for example, the omission of repeated notes or the simplification of decorated melodies. She also noted that certain vocal lines were transposed up or down an octave in the accompaniment, as well as the presence of independent material that does not double the vocal parts. All of these features are familiar from consort organ

¹³⁶ Peter Holman and John Cunningham (Eds), *Simon Ives: The Four Part Dances* (Bicester: Edition HH, 2008), v-vii

¹³⁷ Herissone, *To Fill, Forbear, or Adorne* p.112

parts. Herissone's thesis sought to argue that the doublings in such liturgical parts, particularly in the right hand, should be preserved in performance and not replaced with editorial realisations, as has been common practice in modern times, but 'this is not to suggest, however, that organists played strictly what was notated and nothing more: the way in which doublings of inner vocal parts are added on the score and in figuring strongly implies that players would have filled in notes suggested by the voice-leading principles of the day'.¹³⁸

The evidence above provides plenty of contemporary precedent supporting the argument in favour of amplifying Jenkins's treble-and-bass consort organ parts. In polyphonic movements, such as fantasias, the approach needs to be contrapuntal, whilst dance-based movements lend themselves to a more chordal style. In both cases, that 'Ingenuity, Observation, and Study' of the repertoire as specified by Locke in *Melothesia* is essential on the part of the organist for a successful outcome.¹³⁹ As Roger North put it, 'yet he may not pretend to be master of his part, without being a master of composition in general.'¹⁴⁰ A modern organist would not necessarily be failing in his or her duty if intervention were avoided, as this may have been the case in amateur playing contexts, but there would seem to be ample precedent from the practice of contemporary professional keyboardists to encourage some judicious augmentation - erring, as always with good continuo playing, on the side of restraint when in doubt.¹⁴¹

Like his fellow pupil Jenkins, William Lawes also adopted the fantasia suite model established by Coprario. 'When by the Fury of the Good old Cause/Will Lawes was slain by those whose Wills were Laws'¹⁴² at the battle of Chester in 1645, there was an outpouring of tributes from his fellow musicians. In the preface to *Choice Psalmes* of 1648, a posthumous collaboration between Lawes and his brother Henry, the latter claimed that 'Neither was there any Instrument then in use, but he compos'd

¹³⁸ Ibid. p.113

¹³⁹ Locke, *Melothesia* p.8

¹⁴⁰ Wilson, *Roger North* p.249

¹⁴¹ For a similar conclusion in relation to the harp parts of Lawes's harp consorts, see Tristram Robson, *The Irish harp in art music c.1550-c.1650* PhD Thesis, University of Durham, 1997, pp.191-3. Robson noted that Lawes's harp parts appear to be a development of his writing for organ rather than for theorbo.

¹⁴² Thomas Jordan, *The Muses Melody in a Consort of Poetry* (London: J.C., c.1680)

to it so aptly, as if he had only studied that'.¹⁴³ Nevertheless, some of the idiosyncrasies in William's keyboard writing for consorts might prompt the modern player to question the veracity of Henry's statement. The question here is whether, again, one should attempt to play the part as written, or whether some intervention to render it more idiomatic for the keyboard is justified.

That Lawes could write conventional and effective keyboard parts is ably demonstrated by his early sets of fantasia suites, composed in the early 1630s,¹⁴⁴ of which there are eight suites in each of the scorings employed by Coprario. Lawes also adopted the three-movement structure of Coprario's model, and his use of related keys suggests the sixteen suites were conceived as a single unit.¹⁴⁵ The principal source for the organ part is the autograph sections of Ob.D229, which is related to, if not an exact mirror of, the string parts Ob.D238-40. The organ parts here are well-executed and contain even more independent material than those of Coprario or Jenkins.¹⁴⁶ Lawes developed the role of the opening organ prelude with solo passages offering an extended discussion of the polyphonic material, and this independence is maintained throughout the fantasia movements, with the organ rarely doubling the upper parts, even in the works for two violins. Similarly, the left hand and the bass viol shadow rather than double each other: the one elaborates on the line played by the other in a division-like manner, the roles reversing frequently to maintain textural interest. All falls under the hands in a natural way.

By contrast, the organ parts to later works in Lawes's output display a variety of idiosyncrasies, including extensive sequences of consecutive thirds in both hands, a strong polarisation of the parts between left and right hands with gaps in the texture between, highly disjunct voice leading, and passages that, often due to combinations of the preceding features, are physically impossible to play. Ob.D229 includes many examples of these in the five- and six-part fantasias found in the second half of the manuscript.

¹⁴³ Henry Lawes, *Choice Psalmes put into Musick* (London: James Young for Humphrey Moseley, 1648), preface

¹⁴⁴ David Pinto, (Ed.), *William Lawes: Fantasia Suites* MB 40 (London: Stainer & Bell, 1991), although Cunningham has suggested that the organ part as represented in Ob.229 is a later reworking dating from the compilation of that source, i.e. c.1637.

¹⁴⁵ John Cunningham, *The Consort Music of William Lawes 1602-1645* (Woodbridge: Boydell Press, 2010), p.178

¹⁴⁶ *Ibid.* pp.184-200 for a comparison.

In densely-scored works such as these, the organ has less scope for independence within the string texture and the writing of necessity doubles the strings to a greater extent. As a result, the consecutive thirds in the organ reflect Lawes's characteristic use of them in adjacent string parts (Ex.3.9).

Ex.3.9: William Lawes: Fantasia from *Suite No 2* in A minor, bars 110-118

Similarly, the keyboard reflection of Lawes's technique of employing various combinations of contrasting pairs of viols in juxtaposition to each other results in a polarisation between left and right hands for the organ (Ex.3.10).

Ex.3.10: William Lawes: Fantasia from *Sonata No 7* in D Minor, Bars 84-88

The disjunct progress present in the organ part may often be seen to originate in the angular nature of Lawes's bass and inner string parts, but in Ob.D229 it also derives from the choice of selecting which viol parts the organ is to double at any given point.

It therefore comes as a surprise to discover from Pinto's research that the hand responsible for this section of Ob.D229 is Giles Tomkins, organist of King's College, Cambridge (1624-29), Salisbury Cathedral (1629-30) and Musician in Ordinary for the Virginals at court (1660-68).¹⁴⁷ Cunningham suggested that the part was conceived as a 'working document' for use by Tomkins himself at court, and was intended to be freely adapted in performance to make it manageable, in the same manner that a skilled player would extract an organ part from an otherwise literally-unplayable open score.¹⁴⁸ Such an argument is convincing, and might therefore also be used to justify interventions by a modern player to adapt Lawes's problematic writing in other works.

Caution needs to be adopted, however: as Cunningham himself has demonstrated, there are many similar examples in the composer's own hand that owe their idiosyncratic nature to different circumstances. Principal among these are those examples where the organ part was constructed as the primary stage of the compositional process, rather than being extracted afterwards from pre-existing string parts.

A good example of this *modus operandi* is provided by Cunningham's detailed analysis of the holographs for the seven sonatas for two bass viols and organ.¹⁴⁹ Once again, a portion of Ob.D229 provides the evidence, along with the associated string parts (Ob.238-40) and the score (Ob.B2). These sonatas are also relatively early works, probably dating from Lawes's appointment to the court in 1635. Six of the seven are arrangements of consort works that appear in the autograph Lbl.40657-61 (the Shirley Partbooks of c.1633), compiled for the household at Staunton Harold Hall. The nature of Lawes's penmanship within Ob.D229 and Ob.B2, along with other clues relating to the inter-relationship of the parts, led Cunningham to conclude that Lawes arranged the sonatas from Lbl.40657-61 in a three-stage process. Firstly, the treble and bass of the organ part were sketched in, followed by the inner organ voices, and finally the bass viol parts (Ex.3.11).

¹⁴⁷ David Pinto, 'Thomas Tomkins and a Copyist Associated with Him' *ML* 72, 518

¹⁴⁸ Cunningham, *Lawes* p.168

¹⁴⁹ *Ibid.* pp.256-63

Consort Version from Lbl. Add. MSS 40657-61 (Shirley partbooks)

Version for two basses and organ from Ob. MS. Mus. Sch. B.2

Ex.3.11: William Lawes: Aire from *Consort Suite* in G minor, bars 1-4

This might seem a curious approach until one realises that the organ part is essentially a simplified arrangement of the original four-part consort work, transmitting its melody and bass together with the essence of its inner polyphony, to which an elaborate contrapuntal commentary, employing new material, has been added in the bass viols. The organ part in Ob.D299 thus represents the first stage of the process, with the string parts being the second, and the score Ob.B2, possibly prepared for the use of a professional organist working in conjunction with amateur string players, forming the final stage.

In this instance, therefore, the organ part is integral to Lawes's concept of the work, and is no mere adjunct, nor the work of a third party. One might even argue that it forms the principal corpus of the work, to which the viol divisions are the adjunct. As such, it is another example of a circumstance where contextual information is essential before informed choices can be made by editors or players as to how to interpret the source material. However curious aspects of Lawes's sound-world may seem to the modern ear, Holman was surely correct when he cautioned that 'one does not alter Lawes's organ parts lightly'.¹⁵⁰ Indeed, much the same caveat applies to any composer's work from this genre. In the absence of the guiding light of a

¹⁵⁰ Holman, *Organ Accompaniment* p.377

contemporary treatise on English continuo practice, the performer must tread a careful line between employing contextual knowledge to intervene on the one hand, and, on the other, placing full trust in the text of the extant sources to leave alone. In North's words, one must decide whether it is appropriate to 'fill' or 'adorn', or to step back and 'forbear'.

3.7.3 Improvisation in divisions

An area of consort practice that was widely essayed in the seventeenth-century, but into which present-day viol and keyboard players seem hesitant to venture, is that of improvising divisions. The finest viol players were expected to be able to improvise divisions on a given bass or ground, and instruction in the art was given in Simpson's *The Division-Viol* (1665).¹⁵¹ Although Simpson allowed the possibility of either the organ or harpsichord to supply the accompaniment, the majority of his instructions refer specifically to an organist, who, 'if he have *Ability of Hand*', was expected not only to supply a realised version of the ground on which the piece was built but also 'upon a sign given by him, put in his Strain of *Division*, the *Viols* playing one of them the *Ground*, and the other *slow* Descant to it'.¹⁵² The clear prescription for this process in Simpson's treatise, and the closeness with which the extant examples adhere to it, suggest a well-established and widely observed practice.

Simpson's grounds were founded on the bass of 'some *Motett*, or *Madrigall*',¹⁵³ although the extant written-out versions by other composers incorporate a wider variety of source material. Many of Lawes's works in the genre are based on pre-existing four- or five-part consort works (sometimes by other composers) arranged into a mainly three-voice texture in the organ, over which new material is added (see Ex3.11 above).¹⁵⁴ Examples are found in Ob.B2 and Ob.D229, and John Merro's partbooks (Ob.D245-7) demonstrate similar techniques.¹⁵⁵ Many of the organ parts to the division works of Jenkins are now missing; those that survive often appear to be the bass lines of pre-existing dances presented in their entirety, rather than the

¹⁵¹ Christopher Simpson, *The Division-Viol or the Art of playing Ex-tempore on a Ground* (London: Brome, 1665)

¹⁵² Ibid. p.58

¹⁵³ Ibid. p.47

¹⁵⁴ See Cunningham, *Lawes* pp.253-63

¹⁵⁵ Holman, *The Harp in Stuart England* p.191

fragments used by Simpson, and it seems probable therefore that their realisation would have involved the creation of a keyboard reduction of the original dance.¹⁵⁶ Most of these are presented as unfigured thorough-basses, such as those found in Lbl.31423. Occasionally, as in Ob.C88, the harpsichord is specified instead of the organ. The holograph scores of the division works of the court organists Hingeston (Ob.D205-11) and Locke (Lbl.17801) lack an organ part, which would probably have been improvised by the composers; the same probably applies to the bass viol duos by Simon Ives also from Lbl.31423.

None of the sources include examples of divisions for the organ itself, but when played these would probably have followed the same principles described by Simpson for the viols. If so, it raises the possibility that the same types of ornament described in *The Division Viol* could also be employed in the organ part, although signs for these are singularly lacking in any of the consort keyboard sources. Simpson also includes an early English reference to a 'Shake or Tremble with the Bow' that resembles 'the shaking Stop of an *Organ*'.¹⁵⁷ This presumably refers to a species of the *tremolo con l'arco* as practised in Italy;¹⁵⁸ Mace (1676) similarly describes an 'Organ shake with the Bow'¹⁵⁹ and North (1724) mentions 'a trembling hand, which of all parts together resembles the shaking stop of an organ'.¹⁶⁰ All three refer specifically to the bowing of viols rather than violins: this association of the effect of the organ tremulant with viol technique, spread over more than half a century, may suggest that such devices were available on some of the consort organs, although none survives on the extant instruments. It may be noted that the earliest Italian printed direction for the bowed tremolo effect, found in Marini's sonata a3 *La Foscerina* (1617), occurs in conjunction with the instruction 'metti il tremolo' (draw the tremulant) in the organ continuo part.¹⁶¹

¹⁵⁶ Ibid.

¹⁵⁷ Simpson, *Division Viol* p.9

¹⁵⁸ See Stewart Carter, 'The String Tremolo in the 17th Century' *EM* 19:1, 42-59. C.f. 'the tremolo is done with a pulsing of the hand that has the bow imitating the manner of the organ tremulant'. Carlo Farina, *Ander Theil nower Paduanen...* (Dresden, 1627), preface.

¹⁵⁹ Mace, *Musick's Monument* p.264

¹⁶⁰ Wilson, *Roger North* p.186

¹⁶¹ I am grateful to Anna Liza Rogers of the Schola Cantorum Basiliensis for bringing this to my attention (email message, 3 April 2018)

3.7.4 The role of consort scores

The accompaniment of English consort music from score may be seen as part of a wider European tradition that preceded, and, for some decades, existed alongside, the Italian-dominated chordal-based basso continuo practice. As noted above, many continental treatises of the sixteenth century highlighted the virtues of performing from a score, and the practice continued well into the seventeenth century. Scheidt's *Tabulatura Nova* of 1624 espoused the use of scores on the grounds that English tablature (i.e. the six-line stave) was inadequate for representing polyphony due to the excessive crossing of parts,¹⁶² whilst Frescobaldi echoed the sentiment as late as 1635 when he stated that 'I deem it of great importance to players to practise [playing from] scores' as it 'distinguishes and makes known the true gold of actions of *virtù* from the Ignorant.'¹⁶³ Roger North took a similar, if more practically-orientated, view when he wrote that 'a thro-base part may best be played from the score; and if there were nothing else to recommend it but the capacity of a nicer waiting on the parts then displayed, by seeing their movement, it's enough'.¹⁶⁴

The majority of the extant scores are indeed associated with contexts where professional organists operated, such as Lbl.17801, a holograph by Locke originating at the court, and the later layers of DM.Z3.4b, compiled for Narcissus Marsh's music meetings at Oxford in the 1660s. The first layer of Och.21, dating from the 1620s and possibly associated with the court, presents three- to six-part works by Coprario and Gibbons in stratigraphic format, as is often seen in contemporary continental *partituren*. Whilst most scores employ the five-line stave of instrumental parts, Och.39, a score of Purcell's 1683 sonatas compiled by the Oxford musician Edward Hull in the 1690s, is unusual in employing six-lines staves. This suggests a keyboard-orientated approach, perhaps designed for use by a player who was uncomfortable with the idea of realising a part from the figured bass in Playford's published edition.

¹⁶² See Johnston, *Polyphonic Keyboard Accompaniment*

¹⁶³ Girolamo Frescobaldi, *Fiori Musicalli* (Venice: Vincenti, 1635), Al Lettore, translated in Frederick Hammond, *Girolamo Frescobaldi: An Extended Biography* website, Documentary Appendix, < <http://girolamofrescobaldi.com/appendix/> > accessed 20 April 2018

¹⁶⁴ Wilson, *Roger North* p.249

Several sources, such as Och.732-5 and ML96, contain additional cues among the string parts that were probably intended to prompt improvised independent polyphonic entries for the organ. The hand responsible for those in Och.732-5 appears to be that of John Tomkins, organist to the Chapel Royal from 1633.¹⁶⁵ In other sources, organ cues, or passages in which the organ diverges from the string parts, are indicated by the annotation 'org' or, as in Och.8, by the use of red ink. Such extempore practices were well established on the continent, and adding an improvised line of polyphony to a pre-existing composition was a technique that had been widely employed in English keyboard repertoire in the sixteenth century. It was seen both in the performance of secular works and the improvisation of *alternatim* organ verses to plainchant in the liturgy.¹⁶⁶ As described above, it was also a technique known at the Jacobean court in the context of theorbo continuo, as demonstrated by the cued entries seen in the accompaniment to Notari's *Prime Musiche Nuove*.

The majority of the scores listed in Appendix 4 are of works for which either the title inscriptions or concordances with other sources demonstrate with some certainty that an organ was employed with them. Not all of the scores were used for practical purposes: NYp.5061 for example, whilst being a valuable source of organ parts, is more likely an example of a 'repertory store' of widely-varying genres compiled by the Isaack family of musicians over two or more generations.¹⁶⁷ There were several possible functions for scores generally at this period in addition to their potential role as performance material, such as pedagogical tools, copies intended to preserve a work for posterity, or vehicles for the compositional process. Given that there is a number of extant consort scores that have no surviving organ concordances, it is important to try to identify the intended function of such sources to establish whether these can be considered as candidates for repertoire in which the organ should be used, where modern-day practice has hitherto been to perform them with strings only.

¹⁶⁵ Ashbee, *Index I* p.200 n.1

¹⁶⁶ For Italian secular usage see Lowinsky, *The Use of Scores by Sixteenth-Century Musicians* p.21-2; for liturgical use see Thomas More, 'The Practice of Alternatim: Organ-Playing and Polyphony in the fifteenth and sixteenth centuries' *Journal of Ecclesiastical History* 18:1, 15-32

¹⁶⁷ For a discussion of such sources, see Herissone, *Musical Creativity* pp.101-4

Much work needs to be done in this area, and space precludes more than a cursory examination in this study.¹⁶⁸ A number of projects studying composers' working documents have established a nomenclature for discussing manuscript sources, such as 'sketches', 'drafts' and 'fair copies',¹⁶⁹ but, as Herissone has observed, such terms are not especially illuminating in certain genres of seventeenth-century English music, the consort repertoire being a prime example.¹⁷⁰ Herissone's context-based examination of post-Restoration manuscript sources is a good model for the interrogation of consort sources generally, and may shed useful light on the role of scores in the repertory. The function of many consort scores was complex and changed over time or with change of ownership, and is therefore resistant to simplistic categorisation. As an example, Cunningham's research suggested that Ob.B2 was used by Lawes as a vehicle for compositional sketches, an idea that is supported by the numerous alterations and palimpsests within its pages,¹⁷¹ but this does not rule out the possibility that it was also used in performance in the same way that some of the composer's extant organ partbooks, such as the associated Ob.D229 discussed above, were used both as compositional tools as well as performing texts. Other scores may also have fulfilled dual roles. Lbl.17801 is now regarded as a file copy (i.e. a source created for reference purposes), being a holograph of Locke's consort works later presented to Charles II, but it contains no indication of the requirement for an organ. Nevertheless, organ parts are found in most of the secondary sources and it is possible that the original role for Lbl.17801 was as the composer's performing keyboard score.

Some of the more usual general roles for scores may be dismissed in the consort examples through lack of evidence. There is little to suggest that any of the extant scores were conceived as pedagogical tools, although it is possible that Purcell's early holographic sources such as Lbl.30930 are, as Holman proposed, apprentice works. One likely candidate for a file copy may be DRc.10, in which the small size of the staves would have hindered practical usage.¹⁷² It is also possible that some scores may have been prepared as transmission manuscripts, i.e. sources from

¹⁶⁸ For a discussion of some issues, see Holman, *Organ Accompaniment* pp. 368-72 and Herissone *Musical Creativity* pp.61-115

¹⁶⁹ See Jesse Owens, *Composers at Work: the Craft of Musical Composition 1450-1600* (Oxford: OUP, 1997) and Friedemann Sallis, *Music Sketches* (Cambridge: CUP, 2015)

¹⁷⁰ Herissone, *Musical Creativity* pp.61-2

¹⁷¹ Cunningham, *Lawes* pp.57-66

¹⁷² Ashbee, *Index II* pp.64-5

which copyists could extract individual parts in the process of disseminating repertoire among households or institutions. Lcm.939, a loose-leaf score of Locke's *Consort of Four Parts* may be an example, as may scores that originate from within known networks of transmission, such as Lbl.23779 from the L'Estrange collection which contains numerous annotations by Sir Nicholas L'Estrange testifying to the meticulous checking of contributory sources in its compilation.¹⁷³

Herissone argued that scores were not intended for practical use 'where professionals copied music that would not usually have been performed in the environment in which the musician operated'.¹⁷⁴ This definition may indeed apply to a few of the late consort scores compiled by copyists who exercised a mainly antiquarian interest in the music (some of the manuscripts compiled by Philip Falle and later bequeathed to Durham Cathedral Library may be considered to come under this category),¹⁷⁵ but the majority of consort scores may be seen to have originated in contexts where the music was actually performed. Indeed, the result of a detailed examination of the consort score sources is likely to concur with the conclusion of Herissone's survey of all types of post-Restoration manuscript sources that 'virtually all the extant manuscripts can be shown to have had some sort of practical function that enabled them to be used by others'. In the case of consort scores, that practical function very often included use by a keyboard player in the performance of the music.¹⁷⁶

From among the extant consort scores with no known organ concordances that may be regarded as candidates for performance with organ, several examples exhibit characteristics that strengthen their case for consideration. One of these is the stratigraphic layout of the staves, which is associated with both continental and English liturgical organ accompaniments, and with several of the known consort organ scores. Ob.44 ff.46-7 is one such example, consisting of a prelude for two violins and bass viol to a setting of the Jubilate by Locke. Its provenance is provided by a note in the hand of Edward Lowe recording that it was 'made, prickt and sunge at ye Musicke Schoole between the Howers of 12 and 3 afternoone ye 9th November

¹⁷³ For a detailed analysis of this process, see Willetts, *Sir Nicholas Le Strange*

¹⁷⁴ Herissone, *Musical Creativity* p.98

¹⁷⁵ Ashbee, *Index II* pp.3-4

¹⁷⁶ Herissone, *Musical Creativity*. p.113

[1665]'.¹⁷⁷ Presumably it was played using the 'Harpsichord with a winde instrument of two stops' that served until the provision of Dallam's cabinet organ in c.1667.¹⁷⁸

Another manuscript with provenance is DM.Z2.1.13, which originated in Narcissus Marsh's Oxford music meetings: ff1-2 and 5-6 contain stratigraphic scores of four-part fantasias by the Oxford organist William King. The remainder of the manuscript, in score but not stratigraphic, consists of fantasias attributed to Coprario and Orlando Gibbons, along with a selection of dance-based works by Christopher Gibbons. Several of the elder Gibbons's works, unique to this source, are scored for the same string instrumentation as the Dooble Bass Fantasias, which strengthens the case for the inclusion of the organ here. Lbl.31428 and Och.1005, holographic scores of Jenkins's fantasias for two trebles and bass and two- and three-part ayres respectively, both originate from the L'Estrange collection, whilst Y.20S, dated 1667 and also of three-part fantasias by Jenkins, is in the hand of Matthew Hutton, an officer of Brasenose College, Oxford, and a frequenter of the musical meetings in the city.¹⁷⁹ It contains a note in the hand of Edward Lowe dated 1671, which suggests that it was also later used at the Oxford Music School.

The evidence from fully written-out organ parts may provide some insight into how an organist extracted an organ accompaniment from a score. The first priority would have been to double the bass line throughout, or the lowest sounding part when the bass was silent, in the Italian *basso seguente* manner. The next was probably to double the highest-sounding treble part. Thereafter, the degree to which inner parts were incorporated was governed by the physical limitations of the hands, although at least one further line of polyphony would have been essayed. The organist's eye was inevitably drawn to imitative entries within the inner parts, and these were probably incorporated into the texture where possible: the entries in red ink in Och.8 and the occasional annotations of 'organ' or 'org' in other sources indicate where these were especially required. In addition to doubling the existing parts, the addition of improvised polyphony was called for in ML.96 and Och.732-5 by the abbreviated 'cues'. These were not optional: those in the opening bars of

¹⁷⁷ Ibid. p.76

¹⁷⁸ Ob. Mus. Sch, MS C203*(R) (Oxford Music School catalogue)

¹⁷⁹ David Griffiths, *A Catalogue of Music Manuscripts in York Minster Library* (York: York Minster Library, 1981), pp.85-6

Gibbons's 'dooble' bass fantasias, for example, supplied the second imitative entry, without which the polyphonic argument was incomplete. Holman has suggested that such practices point towards these works being arrangements of more densely-scored originals, which seems plausible.¹⁸⁰ In some scores, independent material for the organ was condensed onto a single bass clef staff; this was particularly common in post-Restoration sources such as Edward Lowe's scores from the Oxford Music School, Ob.102 being a good example, and represents a hybrid between an organ part and a thorough-bass. This process is developed in Och.8, another Oxford source in the hand of Francis Withy; here, in Christopher Gibbons's fantasia suites for treble, bass and organ, the organ entries are added to the single organ staff at the beginning, but then cease, leaving, in effect, an unfigured thorough bass.

3.7.5 Realising thorough-basses on the consort organ

Unfigured basses appear in the consort repertoire within the earliest extant consort organ sources, such as Och.67 in which such passages exist in juxtaposition with fully written-out organ parts. Whether or not these unfigured passages represent uncompleted work, it is clear from the markings added to them that they were used in practice, most probably by Thomas Tomkins in whose hand the majority of such examples occur. As noted above, English keyboard players were slow to adopt the Italian method of figuring compared to contemporary lutenists. Although extant thorough-basses are rare prior to the Restoration in consort sources, where they do occur, unfigured basses are the norm.

In the absence of a contemporary English treatise on continuo playing, the best method for gaining an insight into the ways in which these sources may have been realised is to study contemporary written-out organ parts in conjunction with treatises on composition, such as Morley's *Plaine and Easie Introduction* (1597), Coprario's *Rules how to Compose* (1610) and Campion's *A New Way of Making Fowre Parts in Counterpoint* (c.1619).¹⁸¹ The most important point to be gleaned from such a study is that the English approach to continuo keyboard practice in the pre-

¹⁸⁰ Holman, *Organ Accompaniment* p.369

¹⁸¹ An attempt to codify such methods may be found in Wendy Hancock, 'General Rules for Realising an Unfigured Bass in Seventeenth Century England' *Chelys* 7, 69-72, although in collating methods from sources ranging in date from 1597 to 1728 the resulting advice is too general to be of any great use.

Restoration period was mainly based on polyphonic techniques, rather than on the Italian-inspired, chordal-based methods familiar from later in the century.¹⁸² Held chords are rare, and vestiges of part-writing are discernible even in such sparsely-drawn textures as, for example, Jenkins's organ part to Coprario's fantasia suites for two violins, bass and organ found in Lbl.2.4.k.3.

Creating polyphonic textures with the assistance of a bass line alone presumably required some previous degree of familiarity with the music.¹⁸³ This would not be such a difficulty where the organist was also the composer, but for others the kind of spontaneous rendition made possible by playing from a score or organ part would have been hindered without previous study of the parts. As Roger North put it:

I have knowne many good hands and composers, applying themselves, turne very good thro-base men; but never one that entr'd by thro-base rules, and onely touching the accords in consort, ever understood air or made a composer... It is like a painter that copys after statues; when he comes to life, his work shall be statuary and stiff.¹⁸⁴

Figuring begins to appear in the extant sources from the 1650s, an early, though sparsely-figured, example being Lbl.27544 from c.1650, marked 'Organ' and containing four-part Fantasia-Ayre and Fantasia-Ayre-Corant suites by Jenkins.¹⁸⁵ The earliest surviving English treatise on figured bass realisation is found in the introduction to Locke's *Melothesia* of 1673, where the 'Certain General Rules for the Playing upon a Continued-Bass' contained the ten brief rules that Locke considered to be 'All that's Teachable' on the subject.¹⁸⁶ Beyond this, organists were to rely on their 'Ingenuity, Observation, and Study' derived from practical experience of the repertoire.

It is significant to note that the large majority of the extant thorough-bass sources from the Interregnum and post-Restoration periods originated in Oxford. The earlier examples include Ob.E436, prepared for the Music School, and Och.1004

¹⁸² Herissone, *Music Theory* pp.124-5

¹⁸³ *Ibid.* pp.121-6

¹⁸⁴ Wilson, *Roger North* pp.248-9

¹⁸⁵ Ashbee, *Index I*, pp.44-7

¹⁸⁶ Locke, *Melothesia* p.8

used by the court in exile. The music meetings of Marsh, Ellis and others were the contexts for which most of the extant manuscripts from the 1660s were prepared, such as Ob.C57, or DM.Z3.4.13 and DM.Z4.2.16 which both contain layers in score and thorough-bass format. Although the Oxford meetings were noted as forums for the exploration of the latest contemporary, and often continental, trends,¹⁸⁷ ('divers societys of a politer sort, who were inquisitive after foreign consorts', as North put it)¹⁸⁸ the majority of the post-Restoration repertoire was removed from the Marsh Library in Dublin at some point, leaving just the Jacobean works.¹⁸⁹ This makes it difficult to assess to what extent figured bass techniques were gaining currency in the city, but an extant set of parts for a motet by Locke first performed in 1665 includes partially figured continuo parts for the organ.¹⁹⁰ Holman has drawn attention to the presence of a number of continental organists in the city, such as the Italians Vincenzo and Bartolomeo Albrici, and the German Theodore Colbey (originally Colbius) at Magdalen College in the 1660s, and their influence may be responsible for the proliferation of thorough-bass sources from this period. Colbey was the copyist for Ob.D261 containing figured accompaniments to Jenkins's fantasia-air divisions.¹⁹¹

Several of the later Oxford sources contain repertoire known to have been written originally for the court, suggesting that modern continuo practices were in use in London too. Many of Jenkins's middle to late period works from the 1660s, notably the fantasia suites from this decade, composed in relation to his largely honorary position at the court, eschew written-out organ parts in favour of a lightly-figured bass.¹⁹² As a result, the solo organ preludes and interludes are also absent.

Purcell's consort works, which, from a continuo perspective, include the *Sonnata's* for violins, bass and organ as well as the early apprentice works, also incorporate sources that appear to be associated principally with either London or Oxford. These works employ a keyboard accompaniment tradition inherited through

¹⁸⁷ A phenomenon examined in Penny Gouk, 'Performance practice: music, medicine and natural philosophy in Interregnum Oxford' *The British Journal for the History of Science* 29:3, 257-88

¹⁸⁸ Wilson, *Roger North* p.351

¹⁸⁹ The missing sources are discussed in Richard Charteris, 'Music Manuscripts and Books Missing from Archbishop Marsh's Library, Dublin' *ML* 61:3, 310-17

¹⁹⁰ Holman, *Life after Death* pp.41-2

¹⁹¹ Holman, *Organ Accompaniment* p.382

¹⁹² Peter Holman, 'Suites by Jenkins Rediscovered' *EM* 6, 27

Hingeston's tutelage that originated in the Jacobean fantasia suites of Gibbons and Coprario. As such, it is important to bear in mind that the approach to Purcell's figured bass parts needs to be conceived in the older English polyphonic style rather than using the Italian techniques that were beginning to gain traction at the court in the 1680s. The latter may appropriately be used in the composer's theatrical and secular vocal repertoire, following the guidance outlined in contemporary treatises on the subject such as John Blow's *Rules*,¹⁹³ but the sacred vocal and secular consort works require the polyphonic approach.¹⁹⁴ Purcell had originally intended either to figure the bass line of the 1683 *Sonnata's*, or to require the organist to play from a score, but, according to Playford's preface, later 'thought fit to cause the whole Thorough Bass to be Engraven';¹⁹⁵ the resulting part is a *basso seguente*, differing from the bass viol line and shadowing (rather than exactly doubling) the lowest sounding part at all times (Fig.3.7).

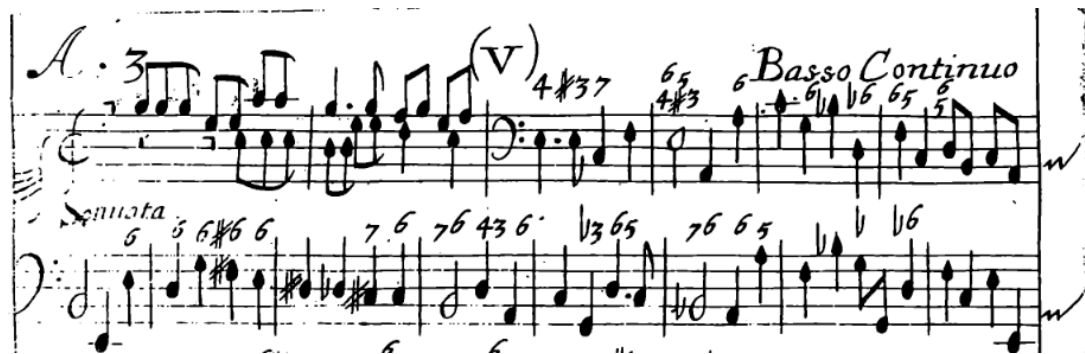


Fig.3.7: Henry Purcell: *Sonnata's of III Parts*, Sonata No 5, 1683

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Despite the homage to previous practices, Purcell's figuring is unusually detailed for English thorough-bass parts of its decade and reveals its transitional nature in incorporating certain Italianate gestures. The most notable of these occur where the realisation of the figuring produces clashes with the overlying string parts, particularly where the keyboard simultaneously plays the resolution of ongoing suspensions and other dissonances in the parts above. This effect, literally foreign to

¹⁹³ LbL 34072, transcribed in Arnold, *Art of Accompaniment*, pp.163-72

¹⁹⁴ See Stephen Rose, 'Performance Practices' in Rebecca Herissone (Ed.), *The Ashgate Research Companion to Henry Purcell* (Abingdon: Ashgate, 2012), pp.160-2

¹⁹⁵ Henry Purcell, *Sonnata's of III Parts* (London: Playford, 1683), Preface

contemporary English consort style, is part of the essence of the music and should be embraced rather than ameliorated.¹⁹⁶

With respect to the later consort repertoire, it may be worth noting a remark by Roger North made in *The Muscicall Grammarian* (1728) with regard to the practice of the thorough-bass in 'sociall musick', or occasions where there were auditors:

...during the whole sonnata, the *basso continuo* should not cease one moment, altho' divers of the parts may rest and perhaps all for a time. For any fissures in measures... hurts the enterainment, because they will run on in the auditors minds, and ought to be attended by the basso continuo so long as that enterainment lasts.¹⁹⁷

Elsewhere, North remarked in relation to 'musick exhibited in London publicly' that 'the thro-base should never cease but play continually, for that holds the audience in attention'.¹⁹⁸ These remarks are echoed in Muffat's introduction to his *Auserlesene Instrumental-Music* (1701) intended for 'entertainments given by great princes and lords, for receptions of distinguished guests, and at state banquets, serenades, and assemblies of musical amateurs and virtuosi': these works were intended for the 'accompaniment of an organist or theorbo player', who was instructed that

Inasmuch as the force and charm of these compositions largely depends on the connection between successive movements... no noticeable wait or silence... should interrupt the continuous order... that the listeners be maintained in continuous attention from beginning to end.¹⁹⁹

It would be interesting to know to what extent such practices were applied at the public music meetings, Oxford Music School performances or other venues of late seventeenth-century England.

¹⁹⁶ See Michael Tilmouth, (Ed.), *Henry Purcell: Twelve Sonatas of Three Parts* (Borough Green: Novello, 1976), xi

¹⁹⁷ Wilson, *Roger North* p.260

¹⁹⁸ *Ibid.* p.14

¹⁹⁹ Oliver Strunk (Ed.), *Source Readings in Music History* (New York: Norton, 1950), pp.449-52

3.8 Conclusion

The survey of the extant manuscripts reveals that the three main types of keyboard source (organ part, score and thorough-bass) were each developed to meet the specific needs of varying playing contexts and performers' skill sets. Professional or amateur players, private or public playing environments, and the presence or absence of the composer were all factors that influenced how the music was presented on the page. The three principal types of texture encountered (doubling of the strings, the independent obbligato role, and improvised continuo accompaniment) illustrate the variety of roles that the organ was expected to fulfil in different areas of the consort repertoire. That organ parts were specifically intended for the organ and not for other continuo instruments is demonstrated by the meticulous titling of the sources, the nature of the keyboard writing itself, and reference to the contexts in which the music was originally performed. Although some flexibility in instrumentation was inevitably required as the repertoire was disseminated from the court and the households of the aristocracy further down the social scale, it is clear that 'consorts to the organ' were intended to be exactly that wherever possible.

The confidence with which the composers of the Jacobean fantasia suites handled the organ in chamber ensembles, assigning it an independent, obbligato role that was an equal, rather than an adjunct, to the strings, points to the fact that these works were the product of an already well-established tradition of using the organ in consorts by the 1620s. That tradition can be shown to have drawn on the influence of Italian continuo techniques on both the keyboard and the lute that were employed by continental musicians working at the Jacobean court. The striking similarity between many of the seventeenth-century organ manuscripts (particularly the stratigraphic scores and written-out organ parts) and many of the extant Elizabethan keyboard sources suggests that some of these, such as the Mulliner Book, may represent hitherto unrecognised organ parts to instrumental and vocal consorts rather than being keyboard transcriptions. Such comparisons also prompt a reappraisal of a number of seventeenth-century consort scores that have not previously been considered as potential keyboard sources, suggesting that the repertoire of consorts to the organ may be wider than previously thought. The relationship between organ sources and their corresponding string parts also sheds

interesting light on the ways in which consort textures more widely related and interacted with those of other contemporary instrumental ensembles such as the Private Musicke and the court masque bands, as well as to vocal genres such as the verse anthem. It can also reveal insights into the compositional processes of individual composers, such as the manner in which William Lawes employed the organ part as a tool in the inception and construction of his music, rather than as an adjunct to it. Whilst it would be going too far to view the string parts in these works as of secondary musical importance to the organ, such practices do require an adjustment in the commonly perceived balance of roles between them. The organ part is no mere accompaniment, but stands at the heart of the work as the framework upon which the musical textures are hung.

The sources also demonstrate that the consort organist was expected to be the master of a wide range of skills. Among them were the ability to realise an unfigured bass, the facility to create an idiomatic organ part from a score of the string parts, the confidence to improvise additional polyphonic lines within a texture based on given cues, and the creativity to contribute improvised divisions on a given ground. In some works there was also precedent in contemporary chamber and liturgical music practice to suggest that the organist would adapt or augment a given organ part better to complement the string writing according to varied circumstances, such as the competence or number of string players. In all these instances, it may again be seen that the role of the organ was an integral and central element of the music.

Such evidence poses challenges to modern-day consort organists in two particular areas. The first is to incorporate the improvisatory and score-reading skills of the seventeenth-century players by relinquishing the reliance on modern editorial realisations and engaging with the music in similar ways to the organists of the past. This requires practice, experience, and not a little courage. It also needs full access to primary source material in modern editions, and indeed to secondary sources where changing practices over time, or in different performing contexts, affected the way the music was presented or played. Secondly, in order to employ this material most effectively, organists need to develop an understanding of the contextual background to any given work to allow them to make informed choices regarding their approach. Should one, for example, play the organ part to Coprario's fantasy

suites for violin, bass viol and organ from Lbl.2.4.k.3, the earliest extant c.1625 source provided for the court of Charles I, from Lbl.23779, the organ part provided for the L'Estranges' domestic establishment in the 1640s, or from Aldrich's Och.15 version from c.1675 that found its way to the Oxford Music School in the early eighteenth century? Each provides its own insight into performance practice from a discrete moment in the works' performing history, and each demonstrates a different approach to the use of the organ. The editorial organ part provided in MB XLVI, however, is a composite realisation based loosely on Lbl.2.4.k.3 with additions from up to nine secondary sources ranging over a 50-year period.²⁰⁰ The advent of editions presented via digital media, in which additional material can be provided without penalties of bulk or significant cost, may offer a practical medium through which better-informed decisions might be reached in the future.²⁰¹ Released from the control of the editor, ('not merely unnecessary but a provoking irritant', in the words of John Caldwell),²⁰² the organist would thus gain a better insight into, and more autonomy over, his or her approach to the realisation of the music.

²⁰⁰ Richard Charteris, (Ed.), *John Coprario Fantasia Suites MB 46* (London: Stainer & Bell, 1980), pp.174-88

²⁰¹ For a forthcoming example of such a publication, see Frauke Jürgensen, 'Editing the Buxheim Organ book: intersections of performance practice, compositional practice and digital musicology' Paper given at the conference *Early Keyboard Instruments – Repertoire, Use and Design*, Murray Edwards College, Cambridge, 2 September 2017

²⁰² John Caldwell, 'Editorial procedures in 18th-century music: the needs of the nineties' in Michael Burden and Irena Cholij (Eds.), *A Handbook for Studies in Eighteenth-Century English Music* vol. VII (Oxford: OUP, 1996), p.31

Chapter 4: Performance practice: evidence from historical sources

In developing a better understanding of the role of the consort organ in seventeenth-century English chamber music, it is necessary to explore the circumstances in which it was employed, not just in terms of the practical details of its deployment, but also with regard to the perception of its function among contemporary players, listeners, composers, patrons and society at large. As Andrew Ashbee observed with respect to the consort music of Lawes, 'the more we research such music, the more we need to comprehend its place in the social world',¹ and consideration of these elements is also important when we seek to evaluate the ways in which consort repertoire is presented and consumed today.

Unfortunately, evidence from contemporary sources regarding performance practice on the consort organ is scarce, especially from the first half of the century where it has largely to be inferred from references in inventories, accounts and aspects of the music itself. The evidence presented by the extant instruments, which is altogether more suggestive, will be explored in Chapter 5. From the middle of the century onwards a better light is shed by the works of diarists such as Anthony Wood, who participated in the Interregnum Oxford music meetings, and by Roger North and Thomas Mace, both writing retrospectively later in the century about the Post-Restoration music-making of their youth. Evidence of reception is yet harder to come by, and whilst there are numerous contemporary accounts of the more public musical genres such as church and theatre music, insights into the musical world of the domestic chamber or privy gallery are much more difficult to acquire.

Nevertheless, this chapter seeks to assess such information as there is regarding the wider issues of performance practice and contexts on the consort organ as presented by seventeenth-century sources, from which it is yet possible to extract some useful information to inform present-day practice.

¹ Andrew Ashbee (Ed.), *William Lawes 1602-1645: Essays on his Life, Times and Work* (Aldershot: Ashgate, 1998), p.6

4.1 The role of the organist in consort music

In addition to the organists and keyboard players active at the court, the names of a number of organists employed in aristocratic households are also recorded. Some went on to find employment at court, such as Richard Mico, who served the Petres at Thorndon and Ingatestone Halls before his appointment to Queen Henrietta Maria's court in 1630,² and John Hingeston, who was resident at Skipton Castle before the Civil War.³ Some are known for their compositions for consorts to the organ, such as George Jeffreys, who spent 52 years in the service of the Hattons at Kirby Hall from 1633. Several church musicians spent some time in domestic service, such as Giles Tomkins, organist of Salisbury Cathedral, who served the Cavendishes at Welbeck Abbey in the 1630s,⁴ and Henry Loosemore, organist of King's College, Cambridge, who served the Norths at Kirtling Hall during the Interregnum.⁵ Others are known by name only, such as the Master Goodwin who incensed Sir John Wray of Glentworth, Lincolnshire by defecting from his apprenticeship in 1633.⁶

Many of the domestic organists had received their training at choir schools, where viol consorts were played as an educational or recreational activity.⁷ Within the court, close pedagogical relationships are evident: Orlando Gibbons received tuition from his uncle Edward, organist of Exeter Cathedral, who also taught Christopher Gibbons and Locke; Hingeston studied with Orlando Gibbons, and the young Purcell received tuition as a Chapel Royal chorister from Cooke, and later from Hingeston, Christopher Gibbons and Locke. When the choral establishments were dismantled in the middle decades of the century, tuition continued within the framework of apprenticeships established in the larger domestic establishments and regulated by an act of Parliament of 1563.⁸

² John Bennett and Pamela Willetts, 'Richard Mico' *Chelys* 7, 27-34

³ Lynn Hulse, 'John Hingeston' *Chelys* 12, 24-7

⁴ Anthony Boden, *Thomas Tomkins: The Last Elizabethan* (Farnham: Ashgate, 2005), pp.134-7

⁵ William Loosemore, 'Henry Loosemore' entry on the Loosemore website <<http://www.loosemore.co.uk/Chapter7/CHAPTER7text.htm>> accessed 18 January 2018

⁶ Hulse, L., *The Musical Patronage of the English Aristocracy, c1590-1640*, Unpublished PhD thesis, King's College, London, 1992, p.37

⁷ Ian Woodfield, *The Early History of the Viol* (Cambridge: CUP, 1984), pp.212-21

⁸ Hulse, *Musical Patronage* pp.25-38

In the smaller households, the organist was often the only resident professional musician, and many undertook other domestic tasks in addition to their musical duties: as we have seen, Hingeston was also Yeoman of the Cellar to the Cliffords at Skipton from 1621-1645,⁹ whilst Jeffreys undertook the important role of steward for the Hattons. Whilst musicians at court received generous salaries, typically £40 per annum in the 1630s together with numerous perks of office, domestic service was a less lucrative form of employment.¹⁰ Mico received £20 per annum for his duties at Thorndon Hall, whilst Cobb was paid £14 at Tawstock Court. Henry Loosemore received only £8 from the Norths in the 1650s, but it seems that he was not a permanent resident and supplemented his income elsewhere. Resident domestic organists could, however, expect to receive full board and lodging, and sometimes also allowances for livery.¹¹ At court, by contrast, Orlando and Christopher Gibbons each received £86 per annum for their duties in the Private Musick and Chapel Royal, a sum that was roughly equivalent to the income from a large farm, or twice the stipend of a parochial clergyman.¹²

The elder Gibbons supplemented his income further still through the patronage of the 4th Earl of Cumberland.¹³ Mico received a yearly sum of £120 from the court of Queen Henrietta Maria from 1631 until 1642,¹⁴ whilst Hingeston's post-Restoration role as Keeper of the Instruments provided him with £110.¹⁵ Places within the Private Musick were therefore hotly competed for, and a previous post at the household of a prominent courtier in the inner circle of the king could offer a significant advantage. Given the privileged access to the restricted milieu of the Privy Gallery afforded to the members of the Private Musick, an aspirant organist needed to demonstrate loyalty, discretion and appropriate comportment as well as musical ability, rather in the manner of John Jenkins, whom North described as 'a very gentile and well-bred gentleman' who was 'allways not onely welcome, but greatly valued by the familys wherever he had taught or convers't'.¹⁶ Indeed, the

⁹ Hulse, *John Hingeston* p.27

¹⁰ Hulse, *Musical Patronage* pp.61-71

¹¹ *Ibid.* p.72

¹² Data from Gregory King's *Social Table* (1688), revised Lindert. See Peter Lindert and Jeffrey Williamson, 'Revising England's Social Tables' *Explorations in Economic History* 19, 393

¹³ Hulse, *Musical Patronage* p.48

¹⁴ Ashbee, *RECM V* p.9

¹⁵ Emil Bock, *The String Fantasias of John Hingeston (c.1610-1683)* Unpublished PhD thesis, University of Iowa, 1956. p.110

¹⁶ John Wilson, *Roger North on Music* (London: Novello, 1959), p.297

principal musician within a household was often afforded status above that of the majority of servants, as demonstrated by the comfortable room occupied by Wilbye at Hengrave Hall,¹⁷ or the letter sent to Henry Loosemore by the 3rd Baron North referring to him as 'Most affectionate Friend'.¹⁸ Richard Cobb had been employed by Archbishop Laud prior to his arrest by the Long Parliament in 1640, and was subsequently charged with the disbursal of his estate; he was left £150, an organ, harpsichord, harp and chest of viols in Laud's will of 1644.¹⁹ He appears to have undertaken a similarly responsible role beyond his musical duties during his subsequent employment with the Bouchiers at Tawstock, as large sums of money relating to the running of the estate passed through his hands in the accounts.²⁰

The accounts and other documents from such households provide evidence of the many tasks that organists undertook, such as the purchase of strings, paper and other materials, the copying of music, the acquisition, maintenance and tuning of instruments, and the organisation of ensembles for formal social occasions and for informal recreation.²¹ For the former, musicians could be hired in from elsewhere; for the latter, the resident musician was charged with the duty of mustering instrumental consorts from among the members of the family and those servants who could play an instrument.

When, however, the consort 'went to work' as North put it, the organist's role changed from obedient servant to musical director. Then the organist had to be mindful of Mace's ideal whereby 'the *Organ* stands us in stead of a *Holding, Uniting-Constant-Friend*; and is as a *Touch-stone*, to try the certainty of *All Things*; especially the *Well-keeping the Instruments in Tune &c.*'²² For this purpose, the professional musician was required to guide, assist and also to direct the efforts of the other

¹⁷ John Gage, *The History and Antiquities of Hengrave Hall, Suffolk* (London: James Carpenter, 1822), pp.21-2

¹⁸ Wilson, *Roger North* pp.4-5

¹⁹ Hawkins listed him as an organist to Charles I, but there appears to be confusion with John Cobb, who served at the Chapel Royal from 1638-42. The two men may have been brothers: the London accounts of the Bouchier household record a payment to 'Cobb's brother' for a 'music card' in 1651. MA U/269/A518/3 p.22

²⁰ The accounts are transcribed in Todd Gray (Ed), *Devon Household Accounts 1627-59 Part II* (Exeter: Devon and Cornwall Records Society, 1996)

²¹ see for example Lynn Hulse, 'The Musical Patronage of Robert Cecil, first Earl of Salisbury (1563-1612)' *Journal of the RMA* 116:1, 31-2

²² Thomas Mace, *Musick's Monument, or a Remembrancer of the best Practical Musick...* (London: Mace, 1676), p.242

players. Mace's metaphor of the organ as a touchstone (a stone used to test the purity of precious metals) for the tuning of the instruments suggests that the strings adopted the temperament employed by the organ. Although several of the extant organs show evidence of cut-to-length open pipes that would require little adjustment, organ tuning was another skill of which domestic organists would have needed some experience.

Having an overview of the music gained from a score, or from an organ part that encapsulated the thrust of the music, or often from being the composer of the work, the organist was usually the best-placed musician to direct the ensemble. As the provenance of the extant sources demonstrates, scores and organ parts most frequently originated in provincial or amateur contexts, whereas the less-informative thorough-bass parts were largely the preserve of professional contexts such as the court or the universities.²³ As discussed in Chapter 3, features such as the stratigraphic layout of scores, cued-in string entries and the organ's doubling of string parts seen in sources from amateur contexts were all tools that assisted the organist in directing the music.

Exactly how this direction was accomplished is less well supported by the surviving evidence. It may be imagined that establishing or changing tempi, directing the humouring of contrasting sections or movements, filling in for missing string parts, and cueing individual entries in polyphonic works were frequent requirements. North noted that 'in solemn consorts, it would scarce be possible to proceed without some one director of the time; who is comonly the composer or some that knows the composition, and with a proper agency of the hand shews not onely the gross down and up strokes, but the very subdivisions also.'²⁴ That the organ's role was one of leadership rather than mere accompaniment is suggested by Mace's statement that the '*Performers Themselves ... cannot well Perform, without a Distinct Perceivance Thereof.*'²⁵ Its importance is also demonstrated by its independent

²³ Although Peter Holman has suggested that the directors of ensembles in the eighteenth century 'read from continuo parts rather than full scores, often looking over the shoulder of the organist', and this may be relevant to the practice in professional circles here. Peter Holman, 'With a Scroll of Parchment or Paper in Hand: The Baroque Composer as Time-Beater', paper given at the conference *Crossing Borders: Music, Musicians and Instruments 1550-1750* (Cremona, Italy, 10-15 July 2018)

²⁴ Wilson, *Roger North* p.105

²⁵ Mace, *Musick's Monument* p.242

obligato function in many works, especially in solo preludes and interludes or passages in which it supplies essential material to maintain the texture of the work. Indeed, the commonly used contemporary terminology of consorts 'to' the organ, as opposed to 'with' or 'and' the organ, is indicative of this crucial role: the fact that we do not encounter consorts described as 'to' the harpsichord, virginals or lute is perhaps an acknowledgement that contemporary musicians saw the organ in a different light to other instruments in this context.

With this in mind, it is worth examining the most frequently quoted contemporary remark regarding the role of the organ in consorts, which has often be used to perpetuate the idea of a purely accompanimental role, namely Mace's description from *Musick's Monument* of the organ '*Evenly, Softly, and Sweetly Acchording to All.*'²⁶ The terms 'softly' and 'sweetly' in particular have been seized upon by many modern performers to relegate the organ to a subservient, background role in the ensemble.

The term 'sweet' was one of the most frequently applied positive epithets used in conjunction with music in the seventeenth century. As Michael Fleming pointed out, it was also widely used in a large variety of other contexts.²⁷ As an example, Sir Francis Bacon used it in relation to a description of the tone of a wire string in his essay *Sylva Sylvarum* of 1627,²⁸ but in the same work also applied it to over a dozen other circumstances ranging from tastes and smells to physical textures, feelings and visual stimuli. It is subjectively the case that the sound of the extant consort organs is not readily identifiable with the modern concept of 'sweet': it might more aptly be described as 'bright', 'edgy', 'scratchy' or even 'rough' compared to the more refined tone of later chamber instruments,²⁹ and much the same might be said of viols set up in the manner of seventeenth century examples, with narrow-gauge gut strings and the higher pitch standards represented in the extant organs.³⁰

²⁶ Ibid. p.234

²⁷ Michael Fleming and John Bryan, *Early English Viols: Instruments, Makers and Music* (Oxford: Routledge, 2016), pp.330-1

²⁸ Francis Bacon, *Sylva sylvarum: or A natural historie in ten centuries* (London: William Rawley, 1627), p.63

²⁹ Vincent Rioux and Daniel Västfjäll, 'Analyses of Verbal Description of the Sound of a Flue Organ Pipe' *Musica Scientiae* 5:1, 62-3

³⁰ For an example, see the recording by L'Acheron: *Orlando Gibbons: Fancies for the Viols*, CD recording Ricercar RIC 384, 2017. Here the set-up of the viols was inspired by the 'full, pure, bright, deep and large' sound of the organs at Knole, Smithfield and Staunton Harold (Ibid.,

Fleming concluded that the best that could be said of the term 'sweet' therefore was that it was one expressing general approbation.

The word 'soft' was widely used in the seventeenth century in the sense of 'quiet' in musical as well as general contexts: Orlando Gibbons appears to have been the first to use it in the context of consorts to the organ in the dynamic directions found in Och.732-5, and it is also encountered in some later sources.³¹ It may be that Mace had the literal meaning of the term in mind, but the context in which he used it in *Musick's Monument* tends to suggest that he intended it to mean 'not excessively loud' rather than actually 'quiet' as such. Mace was particularly vexed by the imbalances created at the Cambridge music meetings by the introduction of the violin, not just because it was a louder instrument than the treble viol but also because its popularity caused it to out-number the lower-pitched viols.³² The '*High-Priz'd Noise, viz. 10, or 20 Violins &c.... to a Some-Single-Soul'd Ayre; it may be of 2 or 3 Parts*' was '*rather fit to make a Mans ears Glow, and fill his Brainsfull of Frisks, &c. than to Season, and Sober his Mind,*'³³ whereas in the ideal consort '*no one Part was any Impediment to the Other; but still (as the Composition required) by Intervals, each Part Amplified, and Heightened the Other*'.³⁴ This latter statement immediately precedes the '*softly, sweetly*' quotation, which suggests that Mace was seeking to stress that the organ should balance dynamically with the consort rather than to play quietly *per se*.

It is suggested therefore that '*Softly*' may best be taken to mean 'in dynamic balance' with the viols, '*Sweetly*' indicated a general approbation of the overall effect of the organ sound, and the two together enabled the '*Acchording to All*' that epitomised the homogenous ensemble created by the complimentary voices of consort organ and viols. The organist's role was central in coordinating both the musical elements of the consort and also its participants, the latter often being, especially in amateur contexts, of disparate social backgrounds and musical abilities.

liner notes p.11), in the light of which it is regrettable that an organ was not employed in the recording.

³¹ For a discussion, see Wendy Hancock, 'Thomas Mace and a sense of 'humour': the case for expression in 17th-century English instrumental music' *VdGSJ* 6, 1-33

³² Further implications of this trend for the later development of the consort organ are discussed in Chapter 5

³³ Mace, *Musick's Monument* p.238

³⁴ *Ibid.* p.242

4.2 Amateurs, professionals and social hierarchies

The difficulties inherent in people of differing social classes seeking to indulge in a shared interest in public consort music-making were reflected in Thomas Mace's unease at '*Persons of Quality, being sometimes Crowded up, Squeez'd, and Sweated among people of an Inferiour Rank, &c.*' at the post-Restoration Cambridge music meetings.³⁵ Similar hierarchical tensions occurred within the musicians at the Oxford meetings, as illustrated by the resistance to the violin described by Anthony Wood, which had 'not hitherto been used in Consort among Gentlemen, only by common Musicians', and whose presence was therefore resisted by the professionals 'for feare of making their meetings seem to be vaine and fiddling'.³⁶ Mace's solution for audiences was to provide separate galleries for different classes in the suggested design for the music room described in *Musick's Monument*, whilst at Oxford the musicians, who included professionals, gentleman amateurs and local tradesmen, were 'literally obliged to harmonize their differences in the act of making music together.'³⁷ In exercising the role of consort director, an organist would often have encountered social interactions that required tact and sensitivity to manage.

At court and in the larger aristocratic households, consort music was mainly supplied by professional musicians, despite the occasional recreational participation of royals and aristocrats in their private apartments. Of financial necessity, the lesser gentry were obliged to provide much of their consort personnel themselves. Their households embraced consort and vocal music as a social recreation, particularly during the Civil War when, as North vividly put it, 'many chose rather to fiddle at home, than to goe out, and be knockt on the head abroad.'³⁸ North's account of the music-making at his grandfather's house at Kirtling Hall, Cambridgeshire in the post-Restoration period describes a context in which the fluidity of interaction between individuals of differing gender, social status and musical experience must

³⁵ Ibid. p.238

³⁶ Nicolas Kiessling, (Ed.) *The Life of Anthony Wood in his Own Words* (Oxford: Bodleian Library, 2009), p.50

³⁷ Penelope Gouk, 'Performance practice: music, medicine and natural philosophy in Interregnum Oxford' *The British Journal for the History of Science* 29:3, 282

³⁸ Wilson, *Roger North* p.294

have led to some interesting social dynamics given the conventional hierarchies of the day.³⁹

Like many amateur gentleman musicians, North had acquired his skills from ‘A musicall family, conversation with the best masters of the time, and a pittance of formall teaching’, the latter supplied by John Jenkins who had been employed at Kirtling from the mid 1660s.⁴⁰ Under Jenkins, he had acquired ‘the use of the treble and base viol’⁴¹ and later in life had ‘a ready thro-base of plaine notes’ on harpsichord or organ.⁴² The household at Kirtling was ‘seldome without a profes’t musick master’ and he also ‘kept an organist in the house’;⁴³ from 1653-1662 this post was held by Henry Loosemore, organist of King’s College, Cambridge.⁴⁴ In the early 1700s Roger North himself employed François de Prendcourt, an organist on the periphery of the court, in a similar capacity at Rougham Hall, even though ‘his behaviour (for he could not shake off greatness)... rendered... his entertainment short-lived.’⁴⁵

As a family activity, the North’s consort playing at Kirtling in the 1660s encompassed three generations: ‘He [3rd Baron North] play’d on that antiquated instrument called the treble viol, now abrogated wholly by the use of the violin; and not only his eldest son, my father, who for the most part resided with him, play’d, but *his* eldest son Charles and younger son [Francis] the Lord Keeper, most exquisitely and judiciously.’⁴⁶ The thirteen extant consort manuscripts from Kirtling later purchased by the Oxford Music School through the auspices of Anthony Wood⁴⁷ confirm North’s description that ‘The consorts were usually all viols to the organ or harpsichord. The violin came in late, and imperfectly. When the hands were well supply’d, then a whole chest went to work, that is 6 violls, musick being formed for it.’⁴⁸

³⁹ Ibid. pp.33-48

⁴⁰ Lbl Add. MS. 32,533 ff1-181 (North: *The Musical Grammarian*)

⁴¹ Lbl Add. MS. 32,506 f81 (North: *Notes of Me*)

⁴² Wilson, *Roger North* p.36

⁴³ Ibid. p.10

⁴⁴ Ibid. p.4

⁴⁵ Ibid. p.54

⁴⁶ Ibid. p.10

⁴⁷ See Andrew Ashbee, Robert Thompson and Jonathan Wainwright, *The Viola da Gamba Society Index of Manuscripts Containing Consort Music II* (Aldershot: Ashgate, 2014)

⁴⁸ Wilson, *Roger North* p.11

The women of the North household were also included in the music, as were senior servants: 'gentleman ushers, and the steward, and the clerck of the kitchen also play'd, which with the yong ladys my sisters singing, made a society of musick, such as was well esteemed in those times.'⁴⁹ One servant mentioned by name was a Mr. White who 'could dance, sing and play very neatly on the violin, was good company, and served as a gentleman waiter, and was most acceptable in his musicall capacity.'⁵⁰ The North's practice was to have 'solemne musick 3 days in the week, and often every day, as masters supply'd noveltys for the entertainment of the old lord. And on Sunday night, voices to the organ were a constant practice, and at other times symphonys intermixt with the instruments.'⁵¹

Family participation was also evident at Hunstanton Hall, the seat of the L'Estranges, where Hamo L'Estrange and his three sons, Roger, Hamo the younger and Nicholas, had all received tuition on the viol at home, school and university.⁵² The L'Estranges had also employed Jenkins as a resident musician earlier in his career during the 1640s, and a substantial body of the family's consort repertoire survives in his hand, as does their consort organ (the Smithfield organ), which is examined in detail in chapter 5. It seems likely that Thomas Brewer, employed at Hunstanton between 1627 and 1636, fulfilled the role of organist as well as composer and arranger for the household.⁵³

It is difficult to imagine any other contemporary circumstance in which such an eclectic mixture of genders, generations and social classes might have interacted on such equal terms as in the consort playing in domestic households. The North and L'Estrange repertoire, and especially its polyphonic content, required an interaction of parts equal in terms of both difficulty and musical importance: servant and master, grandfather, father and son, men and women were required to interact as musical equals within the consort for as long as the music lasted.

⁴⁹ Ibid. p.10

⁵⁰ Ibid. p.10 n.2

⁵¹ Ibid. p.10

⁵² Andrew Ashbee, "'My Fiddle is a Bass Viol': Music in the Life of Roger L'Estrange' in Anne Dunan-Page and Beth Lynch (Eds.), *Roger L'Estrange and the Making of Restoration Culture* (Aldershot: Ashgate, 2008), pp.149-52

⁵³ Jane Whittle and Elizabeth Griffiths, *Consumption and Gender in the Early Seventeenth-Century Household* (Oxford: OUP, 2012), p.200

The one exception to this was the organist who, being the most likely member of the ensemble to have professional status, enjoyed musical authority over the other members of the consort, regardless of their social rank. Whilst many resident organists were evidently highly regarded by their employers, their role must nevertheless have required careful navigation of complex social waters.⁵⁴ Christopher Marsh pointed out, for example, the perceived undesirability of aristocratic amateurs acquiring too great a proficiency on their instrument because, paradoxically, by raising themselves musically towards the standard of a professional, they lowered themselves, in an implied social sense, towards the lowly status of their employed servant.⁵⁵ The Norths and the L'Estranges were therefore unusual in letting their musical ability develop to its full extent.

This may perhaps be the reason why, although many amateur musicians are recorded as playing the viol and lute, there are relatively few references to amateur organists from within domestic contexts. The organ was the domain of the professional servant, and was not therefore a suitable instrument for a gentleman⁵⁶ despite its potency as a status symbol reflecting sophisticated practices associated with the court and as an overt statement of wealth.⁵⁷ An exception, again, was Roger North, who practised the 'miraculous art, brought entirely by the twice five digits of a single person, sitting at his ease before the mighty machine' made for him at Rougham Hall by Bernard Smith.⁵⁸ Others were members of the Ferrar family who, at their devotional community based at Little Gidding Manor, Cambridgeshire, had a master to teach the children 'to sing, & play upon Virginalls Violl & Organ'.⁵⁹ Whilst organs were rarely found lower down the social order due to their expense, John Bevill, 'arms-painter' of Bristol and Anthony Gore, magistrate of Lutterworth,

⁵⁴ See Christopher Marsh, *Music and Society in Early Modern England* (Cambridge: CUP, 2010), pp.198-205

⁵⁵ *Ibid.* p.199

⁵⁶ Hulse notes that the similar unpopularity of the violin in aristocratic circles was due to its association with professionals. Her analysis of instrumental skills among the members of the 26 families in her study reveals that, of the 39 noble instrumentalists recorded between 1600 and 1660, only two were violinists and none were organists. Hulse, *Musical Patronage* p.150

⁵⁷ Many of the families who possessed a consort organ had only been recently ennobled, e.g. Petres (1603), Sackvilles (1604), Cecils (1605), Cavendishes (1618), L'Estranges (1629)

⁵⁸ Wilson, *Roger North* p.135

⁵⁹ Bernard Blackstone (Ed.), *The Ferrar Papers* (Cambridge: CUP, 1938), p.29

Leicestershire, were both recorded in their probate inventories of 1678 and 1689 respectively as possessing organs, and presumably played them themselves.⁶⁰

North encouraged the amateur organist regularly to exercise his keyboard skills in consort 'for it is found that persons who delight much to play by themselves never keep with the time in consort, but will be either too fast or slow, and in spite of their teeth, run into time and manner of their own practice, whatever it is.'⁶¹ Generally, however, whilst the wealthy appear to have been willing to try their hand at the viol and to emulate court practices through the purchase of a consort organ, few of them appear to have played their expensive acquisition themselves. As at court, the organ largely remained the preserve of the professional servant: perhaps the situation would have been different if Prince Charles had exercised his musical skills on the organ instead of the bass viol.

4.3 Gender and the consort organ

Some degree of accomplishment in the art of music had been a respected social grace among the aristocracy since at least the early Tudor period, and in the seventeenth century it was still regarded as a desirable skill for both men and women, provided it did not develop to an unseemly extent.⁶² As Robert Burton observed, 'Tis part of A Gentlewoman's bringing up, to sing, to daunce, and play on the Lute or some other instrument.'⁶³ In addition to their contribution to vocal music, women took part in instrumental consorts, at least in the privacy of domestic music-making, as is demonstrated by a passage from an eulogy for Susanna Perwich (1636-1661) published by John Batchiler after her untimely death from illness: 'When She played on *this* Instrument [the viol], though singly, as She used it, it gave the delight of a *full* Consort; but when in *Consort* with other Viols, or a *set* of *Lute* only, or Viols and Lutes *together*, or with the *Harpsicord* or *Organ*, still her

⁶⁰ Edwin George and Stella George (Eds.), *Bristol Probate Inventories 1657-1689* (Bristol: Bristol Record Society, 2005), p.89 and

<https://www.victoriacountyhistory.ac.uk/explore/sites/explore/files/explore_assets/2013/07/06/lutt_anthony_gore_1689.pdf> accessed 26 May 2018

⁶¹ Wilson, *Roger North* p.137

⁶² Marsh, *Music and Society* pp.201-3

⁶³ Robert Burton, *The Anatomy of Melancholy* (Oxford: Henry Cripps, 1621) p.586

Instrument was *Queen* of all.’⁶⁴ Perwich took keyboard lessons from Albertus Bryne, the erstwhile organist of St Paul’s Cathedral who possessed an organ in his house at Battersea,⁶⁵ but it is not certain she tried her hand at the organ herself: ‘Had *leisure* given leave, that She could have spared time from her *other* Instruments and employments, Mr. *Albertus Brian*, that famously *velvet* fingered *Organist*, would *gladly* have done the same for *her*, which he hath done for one of her *Sisters* yet living, in making her as *rare* at the *Harpsecord*, as She was at any of her *other* sorts of Musick.’⁶⁶

Eulogising the musical proficiency of a gentlewoman amateur in this manner was unusual, but Perwich is unlikely to have been unique in seeking to develop her talent. When Thomas Baskerville, writing in around 1662, described a visit to Coberly Hall, Gloucestershire, he observed: ‘Madame Castleman ... [is] I believe well skilled in music, for in the parlour was a fair organ, viols, and violins,’⁶⁷ and Dr. John Worthington, Master of Jesus College, Cambridge and a pupil of Thomas Mace, ‘sometimes diverted himself by playing on the viol... whilst his wife played on the organ’, but similar references are otherwise rare.⁶⁸

Society held definite opinions on the merits of certain instruments as appropriate subjects of study by men or women, and North’s views on the suitability of consort instruments for each gender reflected the general late seventeenth-century approach:⁶⁹

For men the viol, violin, and the thro-base-instruments organ, harpsichord, and double base, are proper; for weomen the espinnett, or harpsichord, lute, and guitar; for voices both... And the harpsichord for ladys, rather than the lute; one

⁶⁴ John Batchiler, *The Virgins Pattern: in the Exemplary Life, and Lamented Death of Mrs Susanna Perwich...* (London: Simon Dover, 1661), p.10

⁶⁵ Terence Charlston, ‘The Life of Albertus Bryne’. Programme note to CD recording *Albertus Bryne: Keyboard Music Deux-Elles DXL1124*, 2008

⁶⁶ Batchiler, *The Virgins Pattern* p.10

⁶⁷ R. Ward (Ed.), *Thirteenth Report Part II: The Manuscripts of His Grace the Duke of Portland, Preserved at Welbeck Abbey, England Vol. 2* (London: Historical Manuscripts Commission, 1891), p.296

⁶⁸ James Crossley (Ed.), *The Diary and Correspondence of Dr. John Worthington Vol. II* (Manchester: The Chetham Society, 1855), p.207

⁶⁹ Rita Steblin, ‘The Gender Stereotyping of Musical Instruments in the Western Tradition’ *Canadian University Music Review* 16:1, 134-6

reason is, it keeps their bodies in a better posture than the other, which tends to make them crooked.⁷⁰

In this regard, it seems likely that widely-held censorial views on organ-playing held in the middle decades of the century, coloured by society's perception of the church organ as a symbol of unpopular or unlawful liturgical practices, could be extended also to the consort organ, despite it being a secular instrument.⁷¹ The participation of women in liturgical music would have been unthinkable at this period, and this censure may have passed over the secular boundary to render the consort organ a similarly unacceptable instrument for a woman to play. Furthermore, it would have been socially controversial for a woman to assume the role of authority associated with the organist in instrumental consorts when men also played, even in the privacy of the home. The other environments in which consort organs were encountered outside the sphere of domestic music-making, such as the chorister schools, theatres, taverns, music meetings, universities and the court, were exclusively male preserves as far as active participation was concerned.⁷²

Despite the well-documented association of women with plucked string keyboard instruments, particularly during the Elizabethan and Jacobean periods, there is therefore much less evidence to suggest that, in England at least, they transferred their keyboard skills to the organ.⁷³ One notable exception was Queen Elizabeth I: Frederick, Duke of Württemberg noted that Elizabeth I was 'particularly fond of... organs and other keyboards',⁷⁴ and Thomas Platter, a German visitor to London,

⁷⁰ Wilson, *Roger North* p.16

⁷¹ Ironically, by the end of the century the organ's secular associations were being used as a reason to prevent its reinstatement in church. See Anon., *A Letter to a Friend in the Country Concerning the Use of Instrumental Musick in the Worship of God...* (London: A. Baldwin, 1698), p.53

⁷² See Barbara Gravey Jackson, 'Musical Women of the Seventeenth and Eighteenth Centuries' in Karen Pendle (Ed.), *Women and Music: A History* (Bloomington: Indiana University Press, 2001), pp.98-9

⁷³ Regula Trillini, *The Gaze of the Listener: English Representations of Domestic Music-Making* (Amsterdam: Rodopi, 2008), p.18. For an iconographic study of women organists in sixteenth to eighteenth-century domestic music making on the continent, see Kimberly Marshall, 'Symbols, Performers, and Sponsors: Female Musical Creators in the Late Middle Ages' in Kimberly Marshall (Ed.), *Rediscovering the Muses: Women's Musical Traditions* (Boston: Northeastern University Press, 1993)

⁷⁴ Katherine Butler, *Image and Influence: The Political Use of Music at the Court of Elizabeth I*. Unpublished PhD thesis, Royal Holloway, London, 2011, p.259

was shown a '*schöne Positiff*' on which the queen was said to play.⁷⁵ It must be remembered, however, that Elizabeth's status as queen allowed her to assume roles traditionally associated with men in a number of other contexts, and her approach to playing music generally was certainly atypical for a woman of her time.⁷⁶

4.4 The physical deployment of the organ in consorts

A number of basic practical issues concerning the use of consort organs in conjunction with instrumental ensembles remain uncertain and, as is often the case, contemporary sources shed little light on what, at the time, would have been unremarkable everyday practice. As Fleming and Bryan observed, 'there is still much to understand about the unwitting contributions that the physical surroundings and listeners make to the experience of the [viol consort] music being performed.'⁷⁷

Whilst much English music of the late sixteenth and early seventeenth centuries was written or published in table-books, including many of the interchangeable collections of vocal music 'apt for voices or viols', there are only a very few extant sources of instrumental consort repertoire in this format, none of which involves a keyboard.⁷⁸ English iconographical sources depicting viol players reading from part books are surprisingly uncommon, but those that exist suggest that the books were usually placed on a table, with the musicians sitting around it on three or four sides.⁷⁹ The only depiction of an unbroken English viol consort appears within the posthumous narrative portrait of Sir Henry Unton (d.1596),⁸⁰ and although the positions of the players themselves have probably been adjusted for artistic reasons, the part books distributed around the table are clearly visible.⁸¹

⁷⁵ Peter Razzell (Ed.), *The Journals of Two Travellers in Elizabethan and Early Stuart England: Thomas Platter and Horatio Busino* (London: Caliban, 1995), p.26

⁷⁶ The queen's musical activity is assessed in Katherine Butler, "'By Instruments her Powers Appeare": Music and Authority in the Reign of Queen Elizabeth I' *Renaissance Quarterly* 65:2, 353-84

⁷⁷ Fleming and Bryan, *Early English Viols* p.337

⁷⁸ *Ibid.* pp.23-6

⁷⁹ See the English Viol Images website: <<http://www.hud.ac.uk/viol/database>>

⁸⁰ An analysis of the painting is found in Roy Strong, 'Sir Henry Unton and his portrait' *Archaeologica* 99, 53-76

⁸¹ For an image, see National Gallery website

<<https://www.npg.org.uk/collections/search/portrait/mw06456/Sir-Henry-Unton?>> For

The 'table board and 6 joyne stools' that appeared in conjunction with the organ in the 1629 inventory of the parlour of John Holmes, master of the choristers at Salisbury Cathedral, were probably used by violists in this way, and similar furniture is frequently recorded in inventories of rooms associated with music-making.⁸² Such an arrangement was well suited to amateur domestic ensembles: the players, facing inwards to the table, were ideally placed both to see and hear each other's contribution such that 'no one *Part* was any *Impediment* to the *Other*; but still (as the *Composition* required) by *Intervals*, each *Part Amplified*, and *Heightened the Other*; *The Organ Evenly, Softly, and Sweetly Acchording to All*.'⁸³

The addition of a keyboard part, however, inevitably created practical problems for the physical integration of that instrument into the consort, and the inward-looking layout of the table-based ensemble also posed difficulties in contexts where the music was intended to be projected outwards to auditors. A virginal could perhaps be placed on one side of a table of musicians, but a consort organ, compact though it was, could not. North, writing at the turn of the eighteenth century about the ubiquity of harpsichord continuo in domestic music, observed, 'I cannot but wonder the organ-makers are so dull not to tempt an advantage to their trade by experiments of portatile or cheap hand-organs that may be taken out or set aside at pleasure.'⁸⁴ Instead, the fact that the extant cabinet and table organs have simple, undecorated backs to their cases indicates that they were intended to be placed against a wall, where they would inevitably stand apart from the rest of the consort (Fig. 4.1).⁸⁵

further discussion of part book use see Richard Rastall, 'Spatial effects in English instrumental consort music, c.1560-1605' *EM* 25:2, 269-88

⁸² Ian Payne, 'The Will and Probate Inventory of John Holmes (d.1629): Instrumental Music at Winchester and Salisbury Cathedrals Revisited' *The Antiquaries Journal* 83, 369-96

⁸³ Mace, *Musick's Monument*, p.234. For further discussion of this layout, see Rastall, *Spatial Effects* and Richard Rastall, 'William Byrd's String Fantasia 6/g1' in Warren Drake (Ed.), *Liber Amicorum John Steele: A Musicological Tribute*, 139-70 (New York: Pendragon Press, 1992), p.156

⁸⁴ Wilson, *Roger North* p.248

⁸⁵ Similar arrangements are often found in English harpsichords in which the spine is left undecorated. Edward Kottick, *A History of the Harpsichord* (Bloomington: Indiana University Press, 2003), p.368

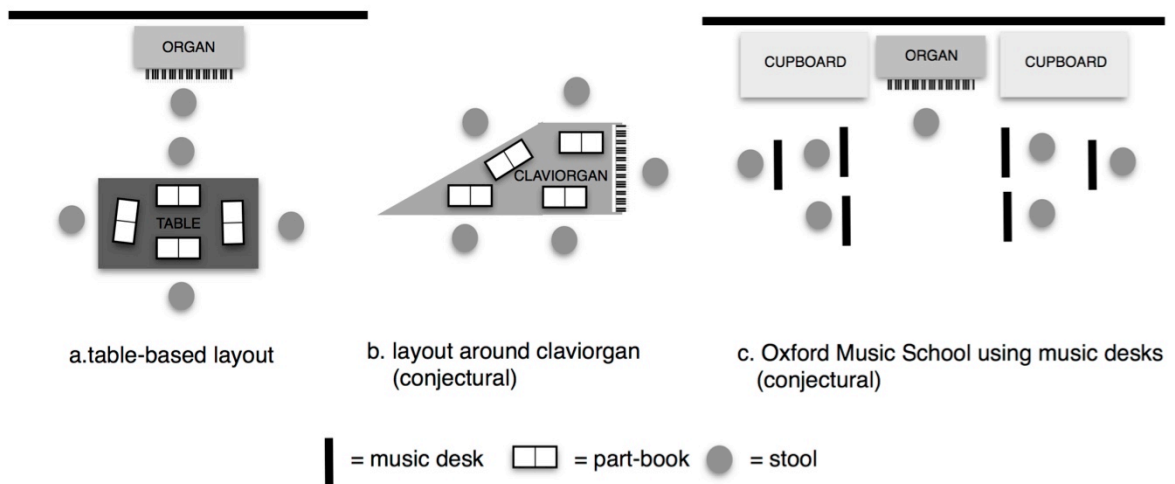


Fig.4.1 Physical dispositions of consorts to the organ

Mace described the difficulties caused by this arrangement in the crowded context of the Cambridge music meetings, in particular

...the constant *Standing of Upright Organs* (at a *Distance* from the *Table*, and much *Company* usually *Crowding* between the *Organ*, and *Table of Performers*), some of *Those Performers*, who sit farthest off, are often at a loss, for want of *Hearing* the *Organ*, so *Distinctly* as they should, which is a *Great Inconvenience*. And if it be so to the *Performers*, It must needs be alike *Inconvenient*, or more, to *Those Auditors*, who sit far from the *Organ*.⁸⁶

Even in a domestic context, it was still essential that 'in *This Service* the *Organ* should be *Equally-Heard* to *All*; but especially to the *Performers Themselves*, who cannot well *Perform*, without a *Distinct Perceivance Thereof*.'⁸⁷

Mace's 'Table Organ' discussed in Chapter 1, with music desks built into its upper surface, met this need by sending 'forth its *Notes* so *Equally* alike, that *All*, both *Performers*, and *Auditors*, receive their just, and due *Satisfaction*, without the least *Impediment*; the *Organ* in *This Service* not being *Eminently* to be *Heard*, but only *Equal* with the other *Musick*.'⁸⁸ Despite the existence of similar instruments on the continent (of which Mace was apparently unaware), the design was not otherwise found in England, and its nearest equivalent, the early chest organ at Knole, is too high to allow the placement of part books for seated string players on its upper

⁸⁶ Mace, *Musick's Monument* p.242

⁸⁷ *Ibid.*

⁸⁸ *Ibid.*

surface. The possibility remains, however, that claviorgans may have answered this role in the first half of the century. The title page of *Parthenia* shows a harpsichord with part-books placed on its closed lid, and the top of a claviorgan might similarly have served such a purpose (Fig. 4.1b). The extant Theewes example is low enough to be placed in the middle of an instrumental ensemble without impeding sight lines between the players, and such a layout is illustrated in the lid painting of the German Behaim von Schwartzbach virginal of 1619 where four viol players are grouped around a claviorgan, although here none of the players is reading from music.

Although the organ necessarily stood apart from a consort grouped around a table, interaction between the organist and string players would nevertheless have been essential, especially if the organist was directing. In contexts where an audience (in the modern sense) was present, such as the Oxford Music School performances and the more formal occasions at court, this inward-facing, table layout would seem to have been even less suitable, although there is little contemporary evidence to suggest what the alternatives may have been.⁸⁹ The extant Worcester organ, built by Dallam in 1665 for the Oxford Music School, was clearly made to stand against a wall, where it was originally flanked by music cupboards (Fig. 4.1c).⁹⁰

With reference to a plan of the university schools from 1665, it may be inferred that the organ stood against one of the shorter walls of the rectangular room - probably the east wall, which was furthest from the door.⁹¹ The cupboards obliged the instrumentalists to sit in front of the organ, rather than either side of it for performances, where they may perhaps have formed two opposing rows facing each other, side-on to the audience (Fig. 4.1c), using the '7 desks to lay the books on for the instruments and organ, bought of John Wild...' in 1665.⁹² It is interesting to note that the organ desk is not distinguished from those for the viols, and appears therefore to have been a separate, free-standing item of furniture. Edward Lowe, as Heather Professor of Music, was often recorded as playing the organ for such

⁸⁹ This study has hitherto carefully avoided terms such as 'perform' and 'audience' that have modern meanings often inappropriate to the circumstances of instrumental consort usage, but here they are now employed with those meanings in mind.

⁹⁰ Hake's catalogue of the Music School collection, Ob Mus. AC. 2, makes this clear.

⁹¹ Printed in Andrew Clarke, (Ed.), 'The Life and Times of Anthony Wood' II *Oxford Historical Society* 21, 64-5

⁹² Ob Mus. Sch. C204*(R) (Oxford Music School catalogue)

occasions, and it may be reasonable to assume that he directed from the keyboard.⁹³ If the desks were floor-standing examples, however, such items are rarely, if ever, identified in domestic inventories or court accounts elsewhere,⁹⁴ nor are they depicted in contemporary illustrations, although table-mounted music rests appear in several continental paintings.⁹⁵

The provision of music rests attached to the front of the extant organs is also a matter of some uncertainty. Several of the organs possess them, or retain evidence that they once existed, but it is not clear if they are original features. In the case of those organs with doors, the music rest often needs to be removed to allow the doors to close. Unlike the music desks of contemporary church organs, which are mounted below the level of the impost of the pipe-front, the consort organ desks are fixed in front of the pipes. This would be particularly intrusive on organs with *trompe l'oeil* perspective fronts, such as the Smithfield and Mander instruments, although neither of these two actually has, or appears to have had, a music rest fitted.

Contemporary iconographical information from English sources is again lacking, but a few continental illustrations of domestic organs show music books with their base resting on a horizontal surface at the back of the keys and their top leaning against the front pipes.⁹⁶ The backs of the keys of the extant English consort organs are so close to the base of the pipe-fronts, however, that there is insufficient horizontal surface to accommodate a partbook, and uncertainty therefore remains about how this very basic requirement was met on these instruments (Fig. 4.2).

⁹³ Ob Wood MS D 19 (3) fol. 24 (Diary of Anthony Wood)

⁹⁴ The probate inventory of John Bevill, arms-painter of Bristol (1678) included two organs, a virginals and 'two desks' in the hall, but this term was also applied to writing desks and a musical connection cannot always be established: George and George, *Bristol Probate Inventories* p.89

⁹⁵ E.g. the painting *Hearing* from Jan Brueghel the Elder's series *The Five Senses* (Prado Gallery, Madrid)

⁹⁶ An example is found on the title page of C. Michel, *Tabalatura ... uff das Clavir Instrument gesetzt* (Leipzig, 1645)



Fig.4.2 Keyboard and pipe front of ex-Finchcocks consort organ (Photo: The author)

The earliest extant organs have keyboards set high (110cm on the Theewes claviorgan⁹⁷ and 115cm on the Knole chest organ) suggesting that the players either stood, in the manner seen in contemporary paintings of virginalists, or used high stools. The later instruments have a keyboard height of around 75cm, similar to a modern piano, for which lower stools are suitable. Whereas the post-Restoration organs appear mainly to have had integral bellows operated by the player via a foot pedal, the earlier table organs, such as the Smithfield and Canterbury instruments, bear evidence of external bellows operated by an assistant. Extra space for these would have been required at the side or rear of the organ, and the importance of the role of the bellows operator in the music is discussed further in Chapter 5.

4.5 Auditors and their impact on consort music settings

Whilst, in domestic contexts, it is likely that consort music was pursued as much, if not more so, for the benefit of its players as for any auditors, it seems probable that some of the furniture listed in inventories of rooms used for music, such as the '25

⁹⁷ Howard Schott, *Catalogue of Musical Instruments in the Victoria and Albert Museum. Part I: Keyboard Instruments* (London: V&A Publications, 2002), pp.40-2

green stools' in the Parlour at Tawstock Court in 1638,⁹⁸ or the '2 dozen of back chairs' of its Great Chamber in 1639,⁹⁹ would have been used by listeners to the music played there. The inventories, descriptions and dimensions of such spaces demonstrate that most were relatively small, amply furnished, often wood-panelled rooms that were likely to be acoustically dry.¹⁰⁰ This applied also to the chambers of the privy gallery at court and even to public spaces such as the Oxford Music School, which at 17m by 6m was actually smaller than the great chambers at several of the larger aristocratic houses.¹⁰¹ As noted in Chapter 1, the harmonically rich sound of the viol and the consort organ were well-suited to supplying a vibrant sonic presence in what, for many instruments, would be an unflattering acoustic environment.

Whilst the recreational function of consorts to the organ in domestic contexts is well documented through the writings of North and others, their role in the context of court music is not so easy to discern in relation to its consumption by auditors.¹⁰² Nevertheless, one service fulfilled by the Private Musick was the provision of what might today be perceived as 'background music' for formal occasions, particularly whilst visitors awaited their audience with the king or queen. The 'cabinet organ' placed in the Withdrawing Room at Denmark House in the 1630s would probably have been used for the entertainment of guests waiting for an audience with Queen Henrietta Maria in her adjoining Great Bedchamber,¹⁰³ and the organ recorded in Charles I's Privy Gallery would have served a similar function.¹⁰⁴ Charles's noted enthusiasm for, and ability in, music probably also resulted in its use in conjunction with members of the Lutes, Viols and Voices in his private recreation.

In the more public spaces, audiences to performances (in the modern sense) became an increasingly regular feature after the Restoration. Mace's proposed music room

⁹⁸ MA U269/A518/5 p.226 (Tawstock inventory)

⁹⁹ MA U269/A518/5 p.219 (Tawstock inventory)

¹⁰⁰ Raf Orłowski, 'Assessing the Acoustic Performance of Small Music Rooms: a Short Introduction' in Deborah Howard and Laura Moretti (Eds.), *The Music Room in Early Modern France and Italy: Sound, Space and Object* (London: The British Academy, 2012)

¹⁰¹ Bruce Smith, *The Acoustic World of Early Modern England* (Chicago: University of Chicago Press, 1992), pp.90-1

¹⁰² Smith, *Acoustic World* pp.83-95

¹⁰³ Simon Thurley, *Somerset House: the Palace of England's Queens 1551-1692* (London: London Topographical Society, 2009), p.51

¹⁰⁴ Simon Thurley, *Whitehall Palace: An Architectural History of the Royal Apartments, 1240-1698* (New Haven: Yale University Press, 1999), p.83

contained audience galleries, which were designed to separate the players from the ‘Talking, Crowding, Sweating, and Blustering’ listeners, who were otherwise ‘Ill at Ease, or Unhandsomly Accommodated, and Mixt’.¹⁰⁵ The provision of conical ‘conveyances’ which piped the sound to the galleries was intended to enable the audience to hear the music in the central space more clearly. A similar demarcation between performing and listening spaces is found in the description of the music room at the Mitre Tavern, Wapping, quoted in Chapter 2, where a railed enclosure separated the musicians from the audience, who sat facing them in pew-like seats rather in the manner of a modern concert hall.¹⁰⁶ At the Oxford Music School there was an audience gallery, which was often occupied by women.¹⁰⁷ In these contexts, listeners were indeed expected to listen: Sir Nicholas L’Estrange’s jest book records an anecdote told to him by John Jenkins about a Mr. Saunders who, being disturbed by the chattering of a group of ladies during a ‘meeting of Fancy Musick, only for the violes and Organ’ rebuked the women by saying ‘This Musicke is not vocall, for on my Knowledge, These Things were never made for words’. Suitably chastened, ‘they had not one word to say.’¹⁰⁸ As the trend for larger spaces, served by larger instrumental ensembles, progressed through the latter decades of the century, the modest tonal output of the consort organ, scaled for the intimacy of the domestic environment, ceased to meet the needs of the new theatres and public music rooms.

4.6 Affection and expression

When Francis Bacon observed in 1627 that ‘There be in Musick, certain *Figures* or *Tropes*; almost agreeing with the Figures of Rhetorike; And with the *Affections* of the Minde, and other Senses,’¹⁰⁹ he was acknowledging the contemporary interest in the connections between musical affection and literary rhetoric that manifested itself in the pursuit of expression in both vocal and instrumental music. Mace’s description of the subjective effect of the consort repertoire played at the Cambridge music meetings reflected this interest:

We had for our *Grave Musick*, *Fancies* of 3, 4, 5, and 6 *Parts* to the *Organ*; Interpos’d (now and then) with some *Pavins*, *Allmaines*, *Solemn*, and *Sweet*

¹⁰⁵ Mace, *Musick’s Monument* pp.240-1

¹⁰⁶ Edward Ward, *The London Spy Compleat* (London: John How, 1703), p.329

¹⁰⁷ Clark, *Anthony Wood* p.316

¹⁰⁸ Marsh, *Music and Society* p.217

¹⁰⁹ Francis Bacon, *Sylva sylvarum: or, A Naturall Historie* (London: William Lee, 1627), p.38

*Delightful Ayres; all which were (as it were) so many Pathetical Stories, Rhetorical, and Sublime Discourses; Subtil, and Accute Argumentations; so Suitable, and agreeing to the Inward, Secret, and Intellectual Faculties of the Soul and Mind; ... That They have been to my self (and many others) as Divine Raptures, Powerfully Captivating all our unruly Faculties, and Affections, (for the Time) and disposing us to Solidity, Gravity, and a Good Temper; making us capable of Heavenly and Divine Influences.*¹¹⁰

The mention of 'stories' and 'discourses' illustrates the fact that the seventeenth-century English ideal of 'affection' embodied the desirability of a musical narrative involving change and variety, as opposed to the single mood per movement approach that was characteristic of eighteenth century thinking. As Mace put it, 'too much of the same *Humour* ... is *Nautious*, and *Tiresome*.'¹¹¹ The concept of 'humour' as presented in *Musick's Monument* demonstrated awareness of the doctrine of the affections and also drew to some extent on classical ideas regarding the physical effects of the four humours on emotional states. It was divided into two main areas, one being a perception of character or emotion communicated by key (for example, 'C-fa-ut-Key' is 'the most *Noble, Heroick, and Majestical Key* in the *whole scale*'),¹¹² and the other being the use of expressive devices, such as variations of tempo, ornamentation and dynamics. The latter were employed at the discretion of the player, although more rarely they are specified in the music, either by the composer (as in the instance of Gibbons's fantasia suites as seen in Och.732-5) or by the players (as in the markings added by Sir Nicholas L'Estrange in Och.1005).

Unlike players of the lute and viol, who benefitted from a succession of treatises on their instruments published over the course of the century, English organists had little assistance regarding technical or interpretative matters from printed or manuscript works until the introductory paragraphs to Locke's *Melothesia* of 1673.¹¹³ Perhaps one reason for this omission lies in the largely professional nature of consort organ playing: professional organists learned their art from each other, and there was little demand from auto-didactic players for a printed tutor for the organ, unlike for the lute or viol that were popular among amateurs across a wider social spectrum.¹¹⁴ Most of what we know today regarding keyboard, and especially

¹¹⁰ Mace, *Musick's Monument* p.234

¹¹¹ *Ibid.* p.117

¹¹² *Ibid.* p.196

¹¹³ Matthew Locke, *Melothesia* (London: J. Carr, 1673)

¹¹⁴ Michael Gale, *Learning the Lute in Early Modern England*. Unpublished PhD thesis, University of Southampton, 2014, pp.33-50

organ, technique of the pre-Restoration period has therefore to be gleaned from more generalised works on music theory, such as those by Morley and Playford, or from annotations to the musical sources.¹¹⁵ There was also some common ground in performance practice between keyboard and other consort instruments, particularly the lute and viol, and especially in the use of ornamentation, tempo and dynamics as an aid to expression.

Christopher Simpson's guidance on the execution of divisions outlined in *The Division-violist*, for example, applied as readily to the organist, who was instructed to take his part in the process, as to the violists.¹¹⁶ The ornaments described in Simpson's work, and indeed in others such as the chapter relating to the lute in Mace's *Musick's Monument* and more generally in Playford's *Introduction to the Skill of Musick*, also have many parallels in contemporary keyboard repertoire; they demonstrate that there was a common vocabulary of ornamentation¹¹⁷ that was shared among those instruments of the consort 'capable of performing Duplicity of Parts', as Locke put it in the introduction to *Melothesia*.¹¹⁸ Ornamentation was viewed by the lutenist Thomas Robinson as an essential ingredient of 'affection' ('you shall have a generall rule to grace it, as with pashionate play, and relishing it... either a strong relysh for loudnesse or a milde relysh for passionate attencion.').¹¹⁹ and Mace described the 'Adorning of your Play' as a 'Beatifying, and Painting of your Fabrick' that was added once 'your Foundations being surely Laid, and your Building well Rear'd'.¹²⁰ Contemporary solo organ music was often as liberally embellished with ornamentation as the repertoire for virginals, even in slow-moving polyphonic works. The fact that consort organists also elaborated their part in a similar fashion is alluded to in the passage from North's *Essay of Musicall Ayre* relating to thorough-bass realisation in which he complains that players 'are so habituated in misrule of placing the upper notes crowding for noise... that they never gaine a smooth stile.'¹²¹

¹¹⁵ Thomas Morley, *A Plaine and Easie Introduction to Practicall Musicke* (London: Lownes, 1608)

¹¹⁶ Christopher Simpson, *The Division-violist* (London: Henry Brome, 1659), pp.57-9

¹¹⁷ A common system of notating such ornaments, however, was not in place at this period.

¹¹⁸ For a concise survey of seventeenth-century English ornamentation, see Mary Cyr, 'Ornamentation in English Lyra Viol Music Part II' *JVdGSA* 35, 16-34

¹¹⁹ Thomas Robinson, *The Schoole of Musick* (London: Simon Waterson, 1603), p.9

¹²⁰ Mace, *Musick's Monument* p.102

¹²¹ Wilson, *Roger North* pp.248-9

Variation of tempo also had its part to play in achieving expression. Thomas Mace viewed keeping a steady tempo as '*the One half of Musick*', and even devised a metronome-like device for achieving this end,¹²² yet 'when we come to be *Masters*, ... Then *take Liberty ... to Break Time; sometimes Faster, and sometimes Slower*, as we perceive, the *Nature of the Thing Requires*, which often adds much *Grace and Lustre* to the Performance.'¹²³ North similarly observed in his essay on *Sociall Musick* that 'with slow and quick, soft and loud, duple and tripla, there is unlimited scope for variety... with these cautions, that the same carracter be not spun out too long, for then without an extraordinary genius it will grow dull, which is the worst effect musick can have.'¹²⁴ The organ evidently fulfilled its consort role as the '*Holding, Uniting-Constant-Friend*' in the context of an approach that was flexible with regard to tempo and encouraged variety: the frequent indications of 'slow' and 'away' added by Gibbons in the 1620s to Och.732-5 represent an early example of this practice.

Robinson's *Schoole of Musick* demonstrates that the dynamics employed by lutenists in the first decade of the century were also linked to concepts of 'affection': 'Passionate play is to runne ... first loud, then soft, and so in a decorum, now louder, now softer, (not in extremetie of either) but as companie of other instruments'.¹²⁵ Mace echoed this 73 years later in *Musick's Monument*:

The next ... [grace] is to Play some part of the *Lesson Loud*, and some part *Soft*; which gives *much more Grace, and Lustre to Play, than any other Grace whatsoever...* You will find it very *Easie, to Humour a Lesson*, by Playing some *Sentences Loud*, and others again *Soft*, according as they best please your own *Fancy*, some very *Briskly*, and *Couragiously*, and some again *Gently, Lovingly, Tenderly, and Smoothly*.¹²⁶

The continuo instrument of choice to achieve dynamic effects was, according to Mace, the pedal, essentially a harpsichord with a device for adding courses of

¹²² Mace, *Musick's Monument* p.124

¹²³ Ibid. p.81. There is not space here to explore the relationship of these statements to contemporary ideas on musical rhetoric in relation to Classical texts, but it seems likely that the tempo relationships were not simply a fast-slow binary, in much the same way that Quintilian says, in relation to the tempo of oratory, 'sed his ipsis media interiacent multa (many intermediate gradations lie between the extremes)'. Harold Butler (Ed.), *Quintilian, Institutio Oratoria* XI 3 18 (London: Heinemann, 1922), p.252

¹²⁴ Wilson, *Roger North* p.260

¹²⁵ Robinson, *Schoole of Musick*, p.9

¹²⁶ Mace, *Musick's Monument* pp.109 and 130

strings to create dynamic contrasts. This instrument, which Mace claimed was invented by John Hayward, ‘Excels all Harpsicons, or Organs in the world, for Admirable Sweetness and Humour, either for a Private, or a Consort use.’¹²⁷ Mace is unique in describing the pedal and, even though Sir Robert Bolles reputedly owned two examples, the idea did not take off. The point to note here, though, is that Mace clearly expected the keyboard continuo to participate in the dynamic contrasts employed by the other instruments. The fact that this was indeed achieved by organists, even to the point of executing *diminuendi*, is demonstrated by Roger North’s observation in his essay *Of Soft and Loud* that ‘... organs and espinetts doe not so well soften by degrees; but with a skillful hand and variety of stops, [the instrument] performs it tolerably.’¹²⁸ The way in which the stop controls of the extant organs are set up to facilitate easy changes of dynamics by varying the registration is discussed further in Chapter 5. In consorts, however, North cautioned that ‘in many parts each must conforme, so that some are not loud when others soft’, and that ‘this must be declared by the master.’¹²⁹ Subtleties of dynamic contrast were also applied to harmonic features such as discords and dominant sevenths at cadences, which were to be emphasised but with their resolutions played softer, ‘as if to say, Be content all is well.’¹³⁰

North’s writings on music occasionally let slip some rare glimpses into aspects of late seventeenth-century organ technique that have hitherto been overlooked. In *The Theory of Sounds*, he describes how ‘It is the common practise of organists, instead of the grace they call the beat-up, upon the low keys, to put downe two to sound together in semitone, which, in the same design, hath a better effect.’ (Ex. 4.1)¹³¹



Ex.4.1 Example from Roger North: *The Theory of Sounds*

¹²⁷ Ibid. p.236

¹²⁸ Wilson, *Roger North* p.218

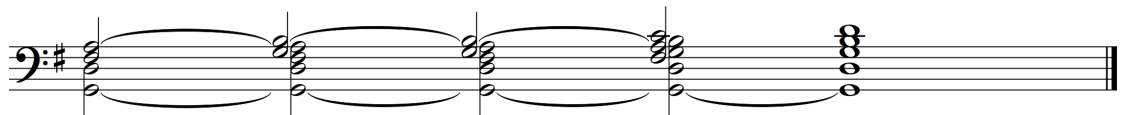
¹²⁹ Ibid. p.219

¹³⁰ Ibid. p.219

¹³¹ Ibid. p.171

This technique, which may be a development of the early seventeenth-century Italian note-cluster form of *acciaccatura*,¹³² was observed among English organists as late as 1799 by the German A.F.C. Kollman, organist of the Chapel Royal, St James's, who stated that 'One particularly unharmonious and melodious Bass Grace (being that of holding the lower semitone down with the Bass note, instead of a Beat on it,) seems to have been invented for the purpose of rendering the Bass more strong than otherwise.'¹³³ On the consort organ this technique had the potential to compensate for the relative weakness of tone in the bass when the bottom octaves of a short-compass Open Diapason were supplied by the Stopped Diapason. Similarly, the use of consecutive thirds low in the left hand compass, such as those frequently encountered in Lawes's keyboard writing, may have fulfilled a similar role: although somewhat cloying in terms of clarity of texture, the proximity of the pitches serves to strengthen the bass.

Another technique described by North involving dissonance consisted of the chords of the dominant and tonic being superimposed on each other, either at the start of a piece or at the concluding cadence, with the former gradually released to leave 'the accords of the proper key in full and clear sound, more pleasing than if it had never been so embarrassed.' (Ex. 4.2)¹³⁴



Ex.4.2. Example from Roger North: H MS R.11.xlii
(North does not tie all the notes, although this is to be assumed in performance)

This technique was used by North's domestic organist, Prendcourt, who employed such an 'affected disorder - I might say confusion of sounds' in his playing but 'always cleared them by degrees'; a similar idea was recorded still in use in harpsichord continuo by Geminiani in 1749, where it was described as a 'combination of chords'.¹³⁵ Such a technique was probably more effective on a

¹³² See Peter Williams, 'The Harpsichord Acciaccatura: Theory and Practice in Harmony, 1650-1750' *The Music Quarterly* 54:4, 503-23

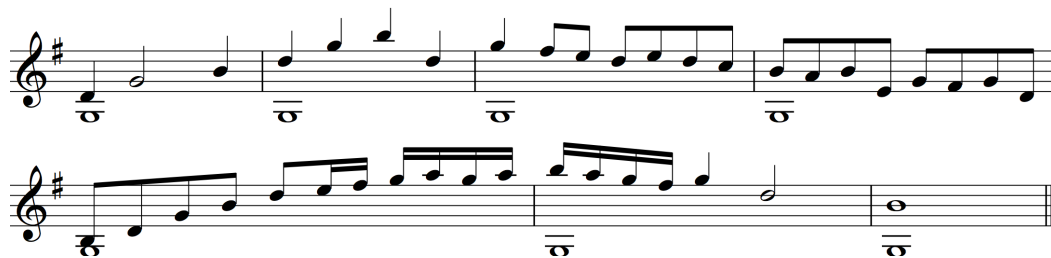
¹³³ A.F.C. Kollman, *Essay on Practical Musical Composition* (London: Kollman, 1799), p.98

¹³⁴ Wilson, *Roger North* p.170

¹³⁵ Francesco Geminiani, *A Treatise of Good Taste in the Art of Musick* (London, 1749), Examples of the Acciacature [sic]

church organ in a resonant acoustic, but may have been used on the consort organ to add richness, particularly in the bass.

Before a consort work was played, North described how the 'masters take a liberty... to possess the audience with [the] key whereof the scale is used in the succeeding harmony... [by] sounding the proper accord-notes of an assumed key successively, and then breaking or mixing those notes as may best be done *dividendo*, *consonando* or *arpeggiando*... sometimes slow and often very swift and coming off slow, allways observing a proper consonance with the key note.'¹³⁶ North's example gives a flavour of this practice:



Ex.4.3. Example from Roger North: *An Essay of Musicall Ayre*

This technique, which is reminiscent of the art of preluding on a figured bass practised by late seventeenth and eighteenth-century keyboardists, may provide an insight into the methods by which an organist constructed improvised interludes between the movements of consort works, as discussed in Chapter 3.¹³⁷

Many of the techniques for achieving affection described in treatises and essays are supported by evidence from the extant manuscripts, particularly in the 'humouring' or interpretative annotations that were applied to a number of the sources. As noted above, the sources for Gibbons's consort suites contain the earliest examples of tempo markings, and their authority rests in the fact that they are in the hand of the composer. In the case of the sources from the L'Estrange collection, many of the markings are in the hand of Sir Nicholas L'Estrange himself.¹³⁸

¹³⁶ Ibid. p.143

¹³⁷ David Rowland, *Early Keyboard Instruments: A Practical Guide* (Cambridge: CUP, 2001), pp.69-72

¹³⁸ Andrew Ashbee, 'A Further Look at some of the Le Strange Manuscripts' *Chelys* 5, 24

Of greatest interest is Och.1005, a score that includes 84 dance-based movements corresponding exactly to two (of an original three) extant part-books (US-Cn MS VM 1.A18J52c).¹³⁹ Most of the works are 'of Mr Jenkins his new composing in 1644'. The annotations provide detailed insight into the performance practices followed at Hunstanton Hall. Most of the directions concern the structuring of repeats, and the tempo and dynamics applied to the various sections or strains. Many of the movements consist of three strains, and a typical direction for repeats instructs 'I and 2d strai[n]: twice apeece then the Tripl[e]: thrice'. Dynamics are indicated by 'LO' (loud) and 'SO' (soft) below the stave, with dotted lines joining the annotations to the note to which they first apply. Most dynamic changes occur at the beginning or mid-point of strains, but occasionally the change is intended to occur part-way through a long note, in which case an arrow meticulously indicates the exact point at which this is required.

In other instances, the dynamics are specified in detailed prefatory notes, such as 'I and 2d straine twice over, then the Triple twice, the Repet soft (unrepeated the first time) Repeat lowd at last. The I halfe of the Triple but slow. play it but twice. as it is Humourd. then Repeat lowd at last.' Tempo indications include 'very lively', 'Lively time', 'slow Time' and 'DR' (drag), whilst others include relative tempi such as 'Slow measure, betwixt galliard and coranto time.' With such detail in evidence, it is very unfortunate that L'Estrange's comments regarding the 'Through Basse' have been struck through so darkly as to be illegible, but concordances elsewhere indicate that a keyboard part was indeed required in these works: how this may have been rendered on the L'Estranges' organ, the extant Smithfield instrument, is discussed further in Chapter 5.

It is significant to note that, whilst the score of these works, Och.1005, is liberally adorned with annotations, the Newberry part-books contain only a few dynamic indications, up to a maximum of three per movement. The implication of this is that the responsibility for direction of the expressive content of the music lay primarily in the hands of the organist rather than the string players. This further supports the evidence presented above suggesting that it was the organist who led such

¹³⁹ For a detailed discussion of these sources, see Jane Johnson, 'How to "Humour" John Jenkins's Three-Part Dances: Performance Directions in a Newberry Library MS' *JAMS* 20:2, 197-208

ensembles, despite him being, in this case, merely a ‘Mus[ic] servant.’¹⁴⁰ The L’Estranges were unusually able amateur players, and Sir Nicholas’s annotations suggest that he had firm views on the interpretation of the repertoire, yet in performance they nevertheless appear to have looked to their organist to provide them with the actual direction for the humouring of the music.¹⁴¹

4.7: Conclusion

The foregoing evidence raises a number of issues that are relevant to modern day performance practice on the organ in conjunction with string consorts. Perhaps the most significant relates to the sound of the consort organ and the manner in which it blends with the string ensemble. Chapter 1 demonstrated that the unusual voicing and scaling methods employed in these organs, which are distinct from those found in contemporary church organs, contemporary continental chamber organs and later English chamber instruments, enabled them to achieve a tonal balance specifically designed to complement and integrate with the sound of the string consort. This desire for blend is supported by the many contemporary references to the organ ‘acchording,’ ‘uniting’, or being ‘Equal with the other Musick’. The majority of modern continuo organs used in this context by present-day performers, by contrast, are voiced along very different lines, often based on tonal practices originating from continental schools of building from the eighteenth century. Their tonal spectrum and dynamic output is at odds with the distinctive sound of the viol consort, causing them to stand out both tonally and dynamically. This has a number of consequences for the placement and use of the instruments that are discussed further below. The current paucity of modern reproductions of consort organs, and the practical difficulties of accessing original examples, hinder performances and recordings involving suitable instruments, but the interest shown in recent years by some ensembles in exploring the higher pitches represented in the extant organs and matched consorts based on early English viols is an encouraging sign. Perhaps an enterprising organ builder might one day find a market for instruments based on

¹⁴⁰ Ashbee, *My Fiddle is a Bass Viol* p.151

¹⁴¹ For a description of the musical activity of the L’Estrange household, see Andrew Ashbee, ‘“My Fiddle is a Bass Viol”: Music in the Life of Roger L’Estrange’ in Anne Dunan-Page and Beth Lynch (Eds.), *Roger L’Estrange and the Making of Restoration Culture* (Aldershot: Ashgate, 2008)

consort organ voicing practices, but packaged in the compact and easily transportable form of the modern box continuo organ.

The seventeenth-century sources emphasise the need for the organ to be in physically close association with the strings, despite the introspective table-based layout adopted in many domestic contexts. The aural interaction between the organ and the string players who, as Mace observed, 'cannot well Perform, without a *Distinct Perceivance Thereof*', is reiterated in a number of sources.¹⁴² The present-day difficulties in achieving a satisfactory tonal and dynamic balance with modern organs often leads performers to place the organ behind or away from the strings, or for recording engineers to adjust its prominence artificially when editing recordings. The relatively intimate environments in which the consorts operated also pose difficulties in relation to the spatial and acoustic characteristics of the modern concert-hall in which such music is often publicly consumed today. The requirement for present-day consort players to fill a large space with sound imposes demands on their playing which can, for example, reduce the potential to realise the more subtle nuances of the music or, conversely, if the introspection suited to the intimacy of the domestic interior is essayed in the concert hall, an unsatisfactory experience can result for the audience.¹⁴³

Much of the evidence discussed above supports the hypothesis that the organist usually directed the ensemble, certainly in domestic contexts, and quite probably also at court and other professional environments. This contrasts with typical present-day practice, where the expectation is for the organist to follow the lead established by the string players, functioning in an essentially accompanimental manner. This method of playing may be appropriate to the later post-Restoration works, especially those that focus on the rhetorical role of virtuosic solo instrumentalists or singers, but it is not consistent with the evidence presented by contemporary sources and performance materials of the organ's function in the

¹⁴² Mace, *Musick's Monument* p.242

¹⁴³ A recent review of a concert at Wigmore Hall observed: 'Occupying three sides of a square, facing one another directly, theirs was a private musical conversation the audience was permitted to overhear'. Coghian, A., *Phantasm, Elizabeth Kenny, Wigmore Hall*, Artsdesk.com website, 10 June 2015 <<https://theartsdesk.com/classical-music/phantasm-elizabeth-kenny-wigmore-hall>> retrieved 1 July 2018

majority of the seventeenth-century English string consort repertoire.¹⁴⁴ Again, the tendency to move the organ to the periphery of the ensemble makes direction by the organist impractical and thus alters the dynamic operating within the ensemble.

Finally, contemporary sources make it clear that the art of 'humouring' and expression were important in the rendition of consort music. Dynamic contrasts, variations of tempo and ornamentation played their part alongside an expectation of improvisatory skill in division-based genres to bring the written page to life. This important aspect of the repertoire is yet fully to be embraced by string players, and is even more rarely essayed by organists who, perhaps, are reluctant to draw any further attention to their unsuitable modern instruments. Despite the lack of a contemporary English treatise on organ playing, the inferences to be drawn from writing on other instruments, supported by the observations of Mace and North, together with the evidence from the manuscript sources, all demonstrate that the organ was used in a more imaginative and expressive manner than is currently the case, and the annotation of the organ sources once again point towards the organist guiding this aspect of the music.

¹⁴⁴ Holman's choice of title for his seminal essay on the subject was perhaps an unfortunate one, therefore, as it may have helped to influence a generation of players to consider the organ's role as a subservient one: Peter Holman, "'Evenly, Softly, and Sweetly Acchording to All": The Organ Accompaniment of English Consort Music' in Andrew Ashbee and Peter Holman (Eds.), *John Jenkins and His Time* (Oxford: Clarendon Press, 1996)

Chapter 5: Performance practice: evidence from extant organs

Writing in 2005, Dominic Gwynn observed that ‘When a gentleman set up a musical establishment, he set out to engage musicians, collect manuscript music, buy viols and an organ, and find as good a music master as he could inveigle into his service... What is particularly exciting about present studies of the music of aristocratic and gentry households of the seventeenth century is that these connections are starting to be revealed.’¹

Having examined the organology of the consort organ, the contexts in which it was used, its repertoire, and the performance practice evidence from historiographical sources, this chapter seeks to combine these elements by examining four of the extant instruments closely in relation to their original contexts and the musical sources known to have been associated with them. Sections 5.1 – 5.3 describe the contexts of the Smithfield, Mander, Worcester and Knole organs, and section 5.4 discusses performance practice issues raised by considering the individual characteristics of the instruments in relation to their contexts and repertoire. Comparative evidence is also drawn from the twelve other organs used in this study.

5.1 The consort organ in a domestic context: the L’Estranges of Hunstanton Hall

The provenance of most of the extant consort organs is not often recorded prior to the nineteenth century, but in the case of the Smithfield organ it is possible to link the instrument not only with its original location, but also with a substantial body of repertoire that was played on it there, and with the musicians who used it in the seventeenth century. Such a fortuitous concordance of information provides a rare insight into the context in which a consort organ operated.

The organ currently at St Luke’s Church, Smithfield, Virginia can be traced to its original location at Hunstanton Hall, near King’s Lynn in Norfolk,² where a substantial extant corpus of consort and other music was acquired by Sir Hamon L’Estrange (1583-1654), MP for Norfolk and a staunch Royalist, together with his

¹ Dominic Gwynn, ‘The Chamber Organ in Stuart England’ in John Watson (Ed.), *Organ Restoration Considered: Proceedings of a Symposium* (Warren, Michigan: Harmonie Parke Press, 2005), p.120

² The process of association is documented in Barbara Owen, ‘Reflections on a Chamber Organ’ in Watson, *Organ Restoration Considered*.

sons Nicholas (1604-51), Hamon (1605-60) and Roger (1616-1704).³ Alice, the wife of the elder Hamon, kept extensive and detailed accounts of the household which include many references to expenditure on music and thus provide an insight into the domestic musical activities of the family during a period from c.1610 to 1654.⁴

Alice's accounts for 1630 record the outlay of £11 'for a payer of Organs' within the context of an extensive series of purchases that appear to represent a substantial re-furnishing of the house to mark the grant of a baronetcy to Nicholas in 1629.⁵ A comparison with the prices of consort organs listed in Chapter 1, Table 1.13 reveals that this sum is by far the lowest recorded price for such an instrument, being exactly half the amount paid for the very similar Dean Bargrave organ in the previous year. This suggests either that the £11 represented in Alice's accounts was only a part payment, or that the instrument was purchased second-hand. If the latter, the organ could therefore be of an earlier date than 1630: a number of features of the mechanism and soundboard suggest an element of experimentation in its construction, which may indicate either an early example of the maker's output or a transitional design (table 5.1).⁶

Table 5.1: The Smithfield organ

Anon. c.1630 or before

Specification

Left side stops:	Principal Bass [4' C-b ⁰]	Right side stops:	Principal Treble [4' c ¹ - c ³]
	Fifteenth Bass [4' C-b ⁰]		Fifteenth Treble [2' c ¹ - c ³]
	Stop Diapason Treble [8' c ⁰ - c ³]		
	Open Flute [8' c ⁰ - c ³]		
	Stop Diapason Bass [8' C-B]		

Compass: C AA D-c³

The maker is unknown, but the distinctive perspective *trompe l'oeil* design of the façade closely resembles that found on the 1643 Christianus Smith organ. The organ was purchased in 1957 on behalf of St Luke's Church, Smithfield, Virginia, a church forming the centrepiece of a museum recording British colonial history in America.

³ For an account of the L'Estrange household, see Elizabeth Griffiths and Jane Whittle, *Consumption and Gender in the Early Seventeenth Century: The World of Alice Le Strange* (Oxford: OUP, 2012)

⁴ NRO LEST P7 (L'Estrange account book)

⁵ Griffiths and Whittle, *Consumption and Gender* p.226

⁶ An organological account of the organ may be found in James Collier and Dominic Gwynn, *The 1630 Consort Organ from Hunstanton Hall, Norfolk, England now in St Luke's Smithfield, Virginia, USA* (Smithfield: Historic St Luke's Restoration, 2002)

The instrument's importance lies in that it is the earliest largely complete consort organ, and its association with the L'Estrange manuscripts.

A 1675 inventory of Hunstanton Hall listed a music room adjoining the library containing '1 organ, 1 pedal Harpeicon [sic], 3 Presses with viols & musick books'.⁷ By 1700 the library contained an impressive collection of some 3000 books, sermons and manuscripts, with more than half of these having been published before 1645; among them was a significant collection of music scores and part books.⁸ Alice L'Estrange's accounts include numerous entries from 1611 onwards for the purchase of viol strings, bows and music.⁹ Sir Hamon's sons began their music education at home, and pursued it further at Eton College, Cambridge, and Lincoln's Inn.¹⁰ When Sir Nicholas set up his own household at Hunstanton in 1629, the accounts record the purchase of a number of viols, cases and strings. It is Sir Nicholas's input that is most obvious in the acquisition of the music manuscript collection through his connections with other local households and associates in London.¹¹

Nicholas's younger brother Roger also cultivated a widespread network of musical contacts. Roger North described him as 'an expert violist',¹² and the sets of divisions that he added in manuscript to a copy of the 1659 edition of Simpson's *The Division-Viol* suggest that he possessed an impressive technique.¹³ As a patron of the arts he promoted the violin virtuosi Thomas Balthzar and Nicola Matteis, wrote prefaces to the 1665 edition of *The Division-Viol* and to the 1678 edition of Simpson's *Compendium of Practical Musick*, and was the dedicatee of several published collections by Banister, Lowe and Locke among others, including the latter's *Melothesia*.¹⁴ The activities and associations of the two L'Estrange brothers thus connected the remote Norfolk house closely to contemporary musical activity in London at the court, in the theatre and in the music societies.

⁷ Lna: PROB 4/3988

⁸ Griffiths and Whittle, *Consumption and Gender* pp.196-8

⁹ NNRO L'Estrange P.6

¹⁰ NNRO L'Estrange P.7

¹¹ Ibid.

¹² John Wilson (Ed.), *Roger North on Music* (London: Novello, 1959), p.355

¹³ Bodleian Library printed book Mus. 184.c.8

¹⁴ Ashbee, *My Fiddle is a Bass Viol*, pp.155-9

A 1636 entry in the accounts 'to Thomas Brewer for teaching of Roger on the voyall: £2 0s 0d'¹⁵ is the first reference to the presence of the L'Estranges' 'Mus[ic]: servant'.¹⁶ Born in 1611, Brewer was educated at Christ's Hospital where he learned the viol before being apprenticed to Thomas Warner. His collections of catches and glees were published by Hilton and Playford,¹⁷ and his works for viol consort and organ are preserved in both the Oxford Music School manuscripts in the Bodleian Library and Oxford sources in the Marsh Library, Dublin.¹⁸ Brewer's keyboard skills are demonstrated by the works he contributed to Elizabeth Rogers's Virginal Book (Lbl. Add. MS 10337).¹⁹ His role at Hunstanton included acting as a copyist, and he has been identified as the Hand B in the L'Estrange manuscripts (Table 5.2).²⁰

Table 5.2: Organ sources from the L'Estrange MSS

Source	Scribe(s)	Contents (Tr=treble A= altus T=tenor B=bass Vn=violin O=organ)
Lbl.10444	Nicholas L'Estrange Anon	164 masque tunes by English composers written before c.1630, Tr B
Lbl.23779	John Jenkins Nicholas L'Estrange Hand B	Compressed score and organ part for the two sets of Coprario fantasia suites, copied 1640s, Vn B O and Vn Vn B O
Lbl.31428	John Jenkins	Score of 21 fantasias for Tr Tr B, 1640s.
Och.1005	John Jenkins	Score of 122 two-part (Tr B) and 84 three-part airs (Tr Tr B), 1644-5

¹⁵ Ibid. p.155

¹⁶ L'Estrange's *Merry Passages and Jeasts* (Lbl Harley MS 6395) story no. 578

¹⁷ e.g John Hilton, (Ed.) *Catch that Catch Can* (London: Benson, 1652, and 2nd Ed. Benson & Playford, 1658)

¹⁸ These include 28 dance-based works and six fantasias for four viols and organ, organ parts for the former being found in Ob.E346 and for the latter in Ob.C100a

¹⁹ Candace Bailey, 'Blurring the Lines: "Elizabeth Rogers Hir Virginal Book" in Context' *ML* 89:4, 510-46. Works by Lawes and Wilson are also found within.

²⁰ The evidence is presented in Andrew Ashbee, 'A Further Look at Some of the Le Strange Manuscripts' *Chelys* 5, 24-41

String parts with a missing organ part:

Lbl.39550-4	Anon Hand B Nicholas L'Estrange	Works by for Tr Tr A T B [B] [O], copied 1630s
Lcm.921	Nicholas L'Estrange John Jenkins Hand B	Tr part for works by Jenkins for Tr B O and B part for works for B B O. Copied 1640 - c.1655
Lcm.1145	Nicholas L'Estrange John Jenkins Hand B	Tr A T partbooks from a set of 5. Includes Coprario's five-part fantasias which require an organ. Copied c.1630-40

Brewer was joined at Hunstanton in around 1644 by John Jenkins.²¹ Six of the extant L'Estrange manuscripts are wholly or partly in Jenkins's hand, and there is evidence to suggest that the eight sets of Ayres for two trebles, two basses and organ date from Jenkins's time at Hunstanton.²² Andrew Ashbee also considered that 'most, if not all' of Jenkins's fantasia suites were composed for use by the household.²³

Much of the L'Estrange repertoire involved the organ. Six of the eight extant manuscripts contain works for combinations of up to three viols and organ. Lbl.23779 incorporates an organ part, whilst Lbl.31428 and Och.1005 consist of scores from which an organist could have played. Lcm.921 comprises works in which the organ is specified in the title (although the L'Estrange organ book has not survived), and over half of the works in the incomplete set Lbl.39550-4 are also found in contemporary organ books. As discussed in Chapter 3.8, the two-part arrangements of masque tunes in Lbl.10444 were probably augmented by an improvised keyboard part in performance. In addition to the works in these manuscripts, the sets of ayres for two trebles, two basses and organ by Jenkins found in Lbl.27550-4 have been attributed by Ashbee to the composer's Hunstanton period on stylistic grounds.²⁴

²¹ Ibid. p.25

²² Andrew Ashbee, *The Harmonious Musick of John Jenkins: Volume One: The Fantasias for Viols* (London: Toccata Press, 1992), pp.59-60

²³ Ibid.

²⁴ Andrew Ashbee, (Ed.), *John Jenkins: Consort Music of Four Parts* MB 26 (London: Stainer & Bell, 1969), preface

5.2 The Knole organ

The earliest extant organ is the Knole House chest instrument of c.1600 (Table 5.3).²⁵ Knole, near Sevenoaks, Kent, was the principal country residence of Thomas Sackville, first Earl of Dorset, who extensively enlarged and refurbished the house between 1605 and 1608, thus creating one of the largest private residences in the country.²⁶ A long-standing tradition at Knole is that the organ was used in a dual secular and liturgical role by virtue of being placed in a chamber that was positioned at first floor level adjacent to the west end of the chapel, communicating with it via an open arch in the north wall and a staircase to the ground floor.²⁷ The chamber may have originated as an oratory for Archbishop Bouchier, who constructed the chapel wing in the 1460s, doubling as a private pew with access to the liturgy within the main chapel.²⁸

The first reference to this chamber as the 'Organ Room' occurred in an inventory of 1706;²⁹ the earliest specific mention of the organ itself in 1839 noted that it was placed in the arch such that 'in olden time' it was possible for the organist to 'observe the altar below, assist with sweet music at its service, and still remain unseen by those engaged in it; while a small door near to a fire-place ... communicating immediately with the chapel, gave ready admittance to those belonging in the choir.'³⁰ The original chamber is now divided into two rooms and a corridor, the part that contained the arch to the chapel now being in the room adjacent to that currently called the Organ Room. The arch was concealed by being converted into a cupboard, and in 1971 the organ was moved to the ground floor of the chapel, where it remains.

²⁵ An organological account may be found in Dominic Gwynn, *Knole House Anon ca1600/ca1660 Chest Organ* (Welbeck: The Harley Foundation, 2005)

²⁶ Edward Town, *A House 'Re-edified' – Thomas Sackville and the Transformation of Knole 1605-1608*. DPhil thesis, University of Sussex, 2010

²⁷ Anon., *Ambulator: or, A Pocket Companion in a Tour Round London, within the Circuit of Twenty-Five Miles* (London: Scatcherd and Whitaker, 1794)

²⁸ Alden Gregory, *Knole: An Architectural and Social History of the Archbishop of Canterbury's House, 1456-1538*. DPhil thesis, University of Sussex, 2010, p.194

²⁹ Gwynn, *Knole House* p.3

³⁰ John Brady, *The Visitor's Guide to Knole in the County of Kent...* (Sevenoaks: James Payne, 1839) p.137.

Table 5.3: The Knole organ

Anon., c.1600

Original specification	Current specification
Diapason C-c ⁰ [stopped pipes] Principal Principal Twelfth Fifteenth	Stopped Diapason [C-c ⁰ = original Diapason] [slide houses late C17 Stopped Diapason treble, c# ⁰ -c ³] Principal Twelfth [bass converted to stopped 4ft] Fifteenth
Compass: C E-c ³ short octaves	C-d ³ [c.1871]

As originally built, the organ was a 4ft instrument possessing two open Principals together with an octave of stopped sub-unison Diapason pipes. This disposition demonstrates a close similarity with the specification of the early sixteenth-century soundboard from the Wingfield liturgical positive organ, (see Chapter 1, Table 1.1) and underlines the close links between the positive and early consort organs discussed in Chapter 1. Unlike contemporary liturgical organs, however, the Knole instrument is not a transposing organ in F but, in common with the other extant consort instruments, is pitched in C. Later in the seventeenth century one of the Principals was replaced with stopped 8ft pipes that continued the Diapason rank up through the full compass of the keyboard, thus providing the organ with a more usual 8ft-based specification.³¹ Due to the lack of any contemporary physical or documentary evidence, it is impossible to know whether the original specification, combining elements of both the earlier positive and later consort organs, was a common disposition for Elizabethan chamber organs, or whether it was a particular response to the dual liturgical and secular use to which the organ was put in the Sackville household.

In the final decades of his life Thomas Sackville established one of the most ambitious domestic musical establishments of its time at Knole. In his will of 1608 he left generous provision for ‘divers musicians some for the voice and some for the instrument...’ eleven of whom were named (Table 5.4).³² In addition to players of the viol, violin, and lute, three of these are known as composers of instrumental and vocal works (Gill, Myners, Symmes), and at least two were professional singers (Baxter, at that time probably a treble, and Myners). Given the flexibility of many

³¹ Gwynn, *Knole House* p.5

³² Lna 11/113/1

professionals in turning their hand to more than one instrument as well as singing, the Sackville musicians would have had the ability to supply several different combinations of vocal and instrumental ensembles for secular as well as liturgical purposes. There is a dearth of information on the repertoire performed in private chapels in the Elizabethan and Jacobean periods, but Symmes's verse anthems, for example, such as *Ryse, O my Soul* and *Awake Fond Thoughts*, scored for voices and viols, are found with other early seventeenth century works in a set of parts dated to c.1620 (Och. Mus.56-60) that are believed to have originated in the Fanshawe family.³³ Such a collection may well represent the kind of repertoire the Sackville musicians employed at Knole.

Table 5.4: Musicians in the employment of the 1st Earl of Dorset, 1608

Bonaventure Ashby	?b.1584		
Robert Baxter		Voice	Chapel Royal chorister 1600/01
Christopher Beaufort			
William Fregosie		Lute	Royal court musician in 1595
Arthur Gill		Viol	Composer of two in nomine settings
Baptist Larkin	b. c.1584		
Horatio Lupo	1583-1626	Violin	Joined the King's Musick in 1611/12
John Myners	d.1615	Lute Voice	Joined the court of Prince Henry in 1612
William Symmes	c.1575-c.1625	?Viol	Composer of viol fantasias and anthems
Henry Webb			
Thomas White			Employed at the court of King Sigismund III of Poland from 1617
Jonas Wrench	d.1626	Lute	Later served in the establishments of Prince Henry, Prince Charles and the King's Musick

Sackville's appreciation of secular music is reflected in his addition of a musicians' gallery to the great hall, and in the numerous musical motifs incorporated into the 1603-08 redecoration of the principal rooms, such as the carved Dining Room fireplace with its viols and violins, and the painted panelling of the great staircase.

³³ For an account and inventory see John Aplin, 'Sir Henry Fanshawe and Two Sets of Early Seventeenth-Century Part-Books at Christ Church, Oxford' *ML* 48, 11-24

The earl's will stated that his musicians 'have often given me after many longe laboures and paynefull travels of the daye, much recreation and contentation with their delightfull harmonye...'.³⁴ From its position in the Organ Room arch, the organ was placed to allow it to contribute both to the liturgy in the chapel below and also to secular music making in the chamber itself. Fig.5.1 demonstrates that both the Organ Room and the private gallery of the chapel communicated closely via a corridor with Thomas Sackville's Privy Chamber, allowing the elderly earl ready access to the music in either space.

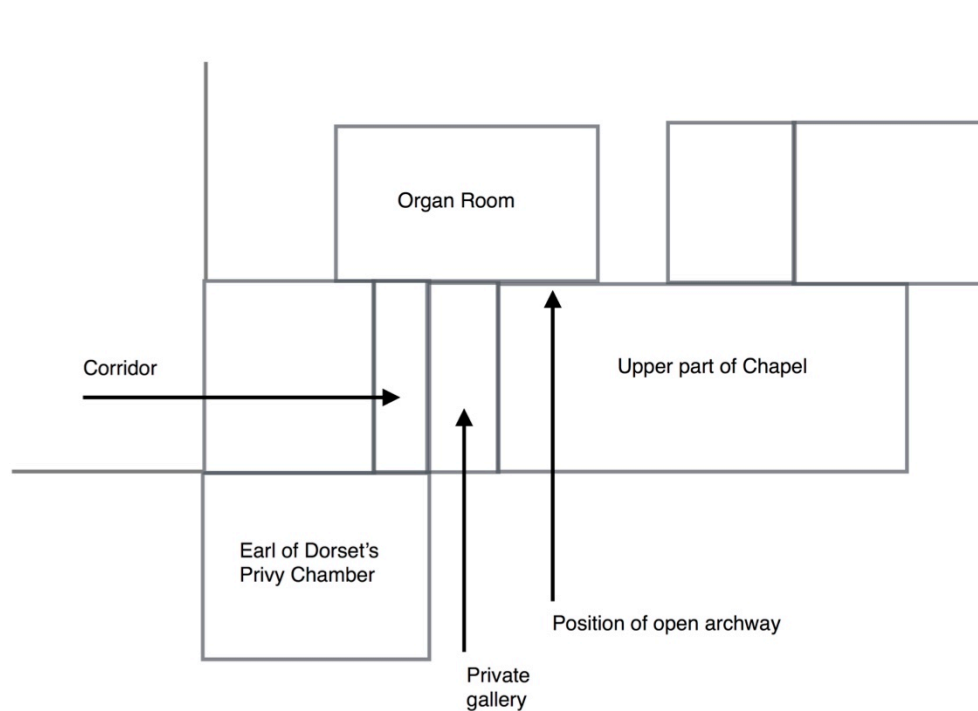


Fig.5.1: Diagrammatic plan of the south-eastern corner of Knole House, Kent c.1608

The 1631 account of the music at the chapel of Fawley Court, Buckinghamshire, quoted in Chapter 2.6, demonstrates that the Knole organ's placement in an adjacent room to the chapel was not unique. The 'rare, diffused & aery' effect of the Fawley organ's concealment behind a curtain was deemed 'delightful to the auditors,' and one might imagine how a similar result was achieved at Knole via the Organ Room archway. It is notable, too, that the Fawley instrument was also recorded as being used with secular lutes, viols and harp.³⁵ None of the seventeenth-century secular repertoire survives from Knole, but Sackville's position as Lord High Treasurer provided his household with close connections to the court, from which music may

³⁴ Lna PROB 11/113/1

³⁵ WMI, Whitelocke Papers, v24 f239. (Miscellaneous family papers)

have been procured, and it may also be noted that two of his musicians, Arthur Gill and William Symmes, were composers of consort works.

The subsequent appointments of members of the first earl's musical establishment suggest that it was gradually run down after his death in 1608, but the modernisation of the organ with a full-compass Stopped Diapason later in the century indicates that it continued in use. The third earl's wife, Lady Anne Clifford, was a capable amateur violist who employed Henry Lawes as a resident musician at Knole in the 1620s,³⁶ and references to chests of viols in the household there continued into the 1640s.³⁷

5.3 Non-domestic contexts in Interregnum and post-Restoration Oxford

A third context from which evidence linking instruments, repertoire and personnel may be drawn is the city of Oxford. The city played a significant role during the Civil War as the temporary seat of Charles I's court (1642-1646), although little information survives regarding secular music making during this time.³⁸ The city suffered as a consequence of the subsequent Parliamentary onslaught, but consort music continued to be practised during the Interregnum in the context of the music meetings held in several colleges and at the premises of William Ellis, erstwhile organist of St John's College. At the Restoration, the Oxford Music School was restored and became the focus of secular music-making in the city. A substantial body of consort repertoire associated with these activities survives, as do two extant organs used in conjunction with them.

The diaries and journals of the Oxford-based historian Anthony Wood (1632-95) are a useful source of information on the Oxford music societies during the Interregnum.³⁹ His writing records regular meetings held in chambers at Exeter, Wadham, Queen's, Oriel and New Colleges. He also documented the similar

³⁶ U269/A1/6 (Knole House accounts)

³⁷ Lna PROB 11/202/41 (Will of 3rd Earl of Dorset)

³⁸ See Jonathan Wainwright, *Musical Patronage in Seventeenth-Century England: Christopher, First Baron Hatton (1605-1670)* (Aldershot: Scolar Press, 1997), pp.169-74. Wainwright's research suggests that most of the surviving Oxford sources are vocal, although ongoing work to the Hatton 'Great Set' during the Civil War suggests the likelihood that instrumental repertoire was also played in this context. For a list of the sources, see Jonathan Wainwright, 'Images of Virtue and War' in Andrew Ashbee (Ed.), *William Lawes 1602-1645* (Aldershot: Ashgate, 1998), Appendix 1

³⁹ Nicolas Kiessling (Ed.), *The Life of Anthony Wood in His Own Words* (Oxford: Bodleian Library, 2009)

subscription meetings held at the establishment of William Ellis situated on Broad Street (Fig. 5.2).⁴⁰ Wood attended Ellis's meetings regularly until 1669. The musicians present were a diverse mix, listed variously as Fellows and students of the colleges, university musicians, including 'Musick Masters', organists and choristers, and 'common musitians' from the town. Ellis himself 'alwaies play'd his part either on the organ or virginal'.⁴¹

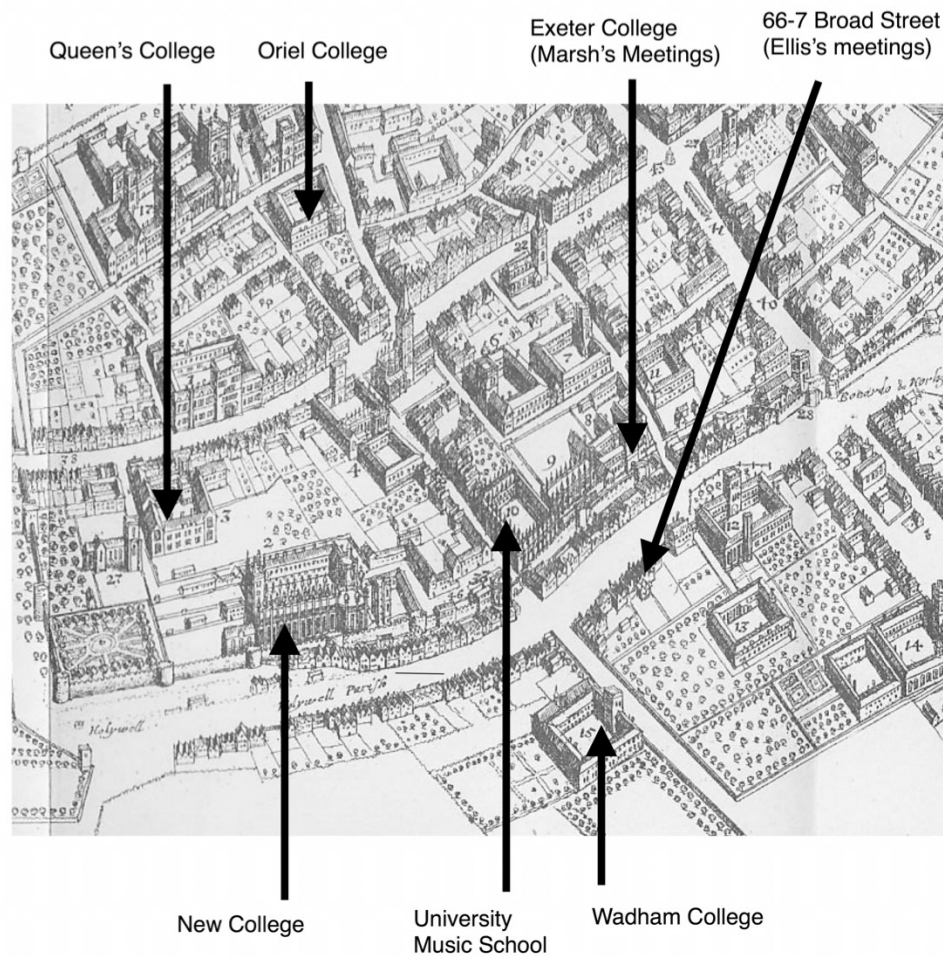


Fig.5.2: Locations of Oxford music meetings (map: Wenceslas Hollar, 1643)

Wood provided two lists of the musicians, from 1656 and 1658, and together they provide evidence for the changing instrumental context in which organs were being used. The 1656 list is summarised in Table 5.5:

⁴⁰ Ibid. p.64

⁴¹ Ibid. p.48

Table 5.5: Members of William Ellis’s music meetings, 1656

Director	Keyboard	Theorbo	Viol	Violin	Singer
Wilson	Ellis Lowe	Curteys Janes Stradling Wilson	Ellis Flexney Haselwood Jackson	Parker Proctor Wood	Flexney
Unknown			Proctor Sheldon Westcott Wood		

The viols included consort, division and lyra instruments, with the consort instruments, where specified, being roughly equally distributed among trebles, tenors and basses.⁴² A significant feature was the presence of the violins. The rise in popularity of the violin was acknowledged by Wood, who was himself a player:

The Gentlemen in privat Meetings ... play’d three, four and five Parts with Viols, as Treble-Viol, Tenor, Counter-Tenor and Bass, with an Organ, Virginal or Harpsicon joyn’d with them: and they esteemed a Violin to be an Instrument only belonging to a common Fidler... But before the Restoration of K.[ing] Ch.[arles] 2. and especially after, Viols began to be out of Fashion, and only Violins used, as Treble-Violin, Tenor and Bass-Violin.⁴³

The trend towards the usurpation of the treble viol by the violin is already apparent in Wood’s second list of musicians at Ellis’s meetings, dating from 1658 (Table 5.6).

Table 5.6: Members of William Ellis’s music meetings, 1658

Director	Keyboard	Viol	Violin	Singer
Wilson	[Ellis] Jeffryes	Bull Coward Crow Harrison Hutton Langley Parry Perot Taylor Vincent Woodford	Bull Crow Digby Rhodes Wood	Ken Langley Parry

⁴² For a description of the various viol types, see Bettina Hoffman, *The Viola da Gamba* (Oxford: Routledge, 2018), pp.206-8

⁴³ Kiessling, *Anthony Wood* pp.47-8

Here, the popularity of the meetings has seen the number of viols increase, but the number of violins has grown by a larger proportion. This trend was later reflected in the catalogue of the Oxford Music School where a number of the sources dating from the Civil War and Interregnum acquired from the North household at Kirtling specify the violin whereas the part-books themselves specify the treble viol.⁴⁴

Another series of music meetings was held around the corner from Broad Street in the Exeter College chambers of Narcissus Marsh (1638-1713), a onetime visitor to Ellis's meetings and later Principal of St Alban's Hall.⁴⁵ Between 1666 and 1678 Marsh compiled an extensive collection of consort music for his meetings that is now housed in the library he later founded in Dublin in 1704 following his tenure as Archbishop of that city (1694-1703).⁴⁶ A significant proportion of the works contains an organ part, suggesting that Marsh had an instrument in his chambers. Richard Charteris demonstrated that most of the more progressive, contemporary continental repertoire from the collection was subsequently removed by persons unknown,⁴⁷ such that the contents now consist largely of pre-Civil War works by English composers.⁴⁸

Among the copyists of the organ parts in the collection there have been identified William King, organist of New College from 1662-80, George Jeffreys, and Benjamin Rogers, organist of Magdalen College from 1664-85 (Table 5.7)

⁴⁴ For a discussion of the Music School catalogues see Margaret Crum, 'Early Lists of the Oxford Music School Collection' *ML* 48:1, 23-34 and Wyn Ford, 'The Oxford Music School in the Late 17th Century' *AMSJ* 17:2, 198-203

⁴⁵ Marsh's account of these meetings is published in Raymond Gillespie (Ed.), *Scholar Bishop: the Recollections and Diary of Narcissus Marsh 1638-96* (Cork: Cork University Press, 2002)

⁴⁶ See Muriel McCarthy, 'Archbishop Marsh and His Library' *Dublin Historical Record* 29:1

⁴⁷ Richard Charteris, 'Consort Music Manuscripts in Archbishop Marsh's Library, Dublin' *RMARC* 13, 27-57

⁴⁸ Richard Charteris, 'Music Manuscripts and Books Missing from Archbishop Marsh's Library, Dublin' *ML* 61:3, 310-17

Table 5.7: Organ sources from the Marsh Library⁴⁹

Source	Contents (all compiled between 1666 and 1678)
DM Z2.1.12	Includes a score to Ferrabosco II: 20 four-part fantasias Tr Tr T B
DM Z3.4.13	A miscellany of organ parts, scores and thorough-basses to various four- and five-part works by Coprario, Ferrabosco II, C. Gibbons, Ives, Jenkins, Simpson, Ward, bound in 1889.
DM Z4.2.16	Score to C. Gibbons: two-part works V B O; figured thorough-bass to Lupo: five- and six-part fantasias; White: five-part fantasias; Cranford: five-part In Nomine.

An extant instrument that was associated with the university during this period is currently in the possession of N.P. Mander & Sons of Bethnal Green (Table 5.8). The claim of a nineteenth-century inscription inside the organ that ‘This organ was built by Father Schmidt’ is certainly incorrect.⁵⁰ The only organ builders represented in the accounts at New College from the 1660s until the 1730s are members of the Dallam/Harris dynasty and the attribution of the organ to a Dallam on organological grounds is supported by the fact that the largest pipe of the Fifteenth is inscribed ‘Cart’ (an Anglicisation of the French *Quarte de Nazard*, a 2ft stop), a distinctive fingerprint of the Dallam/Harris school that represents a legacy of the family’s exile in France during the Civil War.⁵¹ Whether Robert or his son Ralph was the maker is difficult to say, but its construction would have coincided with an extensive programme of restoration and building at New College after the neglect suffered during the Interregnum, which work included the re-establishment of the song school in anticipation of the resumption of choral services.⁵² The claim of the nineteenth-century inscription that the organ ‘was used at New College Oxford for many years to teach the choristers to sing with’ may therefore contain some truth.

Three sources of consort organ parts (Och.3, Och.620 and Och.1174) containing scores or through-basses to works by Purcell and Christopher Gibbons are in the

⁴⁹ Compiled from Charteris, *Consort Music Manuscripts* pp.35-6

⁵⁰ C. Hilary Davidson, *Sir John Sutton: A Study in True Principles* (Oxford: Positif Press, 1992), p.70

⁵¹ Stephen Bicknell, *The History of the English Organ* (Cambridge: CUP, 1996), p.132

⁵² H.E. Salter and Mary Lobel, ‘New College’ in *A History of the County of Oxford III: The University of Oxford* (London: Victoria County History, 1954), p.150

hand of Richard Goodson, organist at New College from 1682 to 1692, which may suggest some of the repertoire played on this organ.

Table 5.8: The Mander organ

Robert or Ralph Dallam, c.1660

Specification

Stopped Diapason
Principal
Fifteenth
Mixture

Compass: C AA D-d³

This instrument is typical of many of the smaller post-Restoration organs in that it lacks divided stops and omits the Open Diapason in the interests of space and portability. Similar traits may be seen in Dallam's c.1665 organ for the Oxford Music School (Table 5.10), and in the original specifications of the ex-Finchcocks, Nottingham and Russell Collection instruments, all c.1680 (Table 5.9).

Table 5.9: Three organs of c.1680

<u>Ex-Finchcocks (Anon)⁵³</u>	<u>Nottingham (Dallam)⁵⁴</u>	<u>Russell Collection (?Smith)⁵⁵</u>
Stopped Diapason	Stopped Diapason	Stopped Diapason (b/tr)
Principal	Principal	Principal (b/tr)
Fifteenth (now missing)	Fifteenth	Fifteenth
	Mixture (tr)	Mixture (now missing)
C-c ³	C AA D-c ³	C AA D-d ³

After the Restoration the main focus of secular music-making in Oxford shifted to the University Music School, which soon re-established its Thursday series of public concerts.⁵⁶ In 1661 Edward Lowe, Heather Professor of Music, set up a fund-raising campaign to re-equip the building after the neglect of the Interregnum. Hawkins

⁵³ Richard Burnett, *Company of Pianos* (Goudhurst, Finchcocks Press, 2004), p.33

⁵⁴ Dominic Gwynn, *St George in the Meadows, Nottingham: Late 17th Century Chamber Organ* (Welbeck: Harley Foundation, 1994), p.4

⁵⁵ Sidney Newman and Peter Williams, *The Russell Collection of Early Keyboard Instruments* (Edinburgh: Edinburgh University Press, 1968), p.59

⁵⁶ For a description of this trend in Oxford, see Bruce Bellingham, 'The Musical Circle of Anthony Wood in Oxford During the Commonwealth and Restoration' *VdGSAJ* 19, 6-70

quoted a notice at one time displayed there that listed donations made between 1665 and 1675, including

One upright organ with four stops, made by Ralph Dallans, for which he received £48 (abating £10 for materials of the old organ) and for painting and gilding to Mr Taylor, painter in Oxford, £1 10s, in all £51 10s 0d.⁵⁷

Since 1937 this organ has been housed at Worcester Cathedral;⁵⁸ Samuel Green altered it in 1774, incorporating most of the pipework, soundboard and pipe front into a typical late eighteenth-century case, adding a new Fifteenth and Mixture together with a new keyboard and action (Table 5.10).⁵⁹

Table 5.10: The Worcester organ

Ralph Dallam c.1665; rebuilt by Samuel Green 1774

Original Specification	Current Specification
Stopped Diapason [8 wood]	Stopped Diapason [8 wood, original]
Principal [4 wood]	Principal [4 wood, original]
Twelfth [2 2/3 wood]	Twelfth [2 2/3 wood, original]
Fifteenth [2 wood]	Fifteenth [2 metal, Green]
	Sesquialtera III Bass [17.19 only remain, metal, Green]
	Sesquialtera II Treble [12 only remains, metal, Green]
Compass: C AA D-d ³	GG AA D-d ³

The other acquisitions made by Lowe inform the musical context in which Dallam's organ operated. They included:

Sets of choice books for instrumental music, ii, whereof are the compositions of Mr John Jenkins, for 2. 3. 4. 5 and 6 parts for the organ and harpsecon, and 6 sets more composed by Mr. Lawes, Coprario, Mr. Brewer, and Orlando Gibbons, all bought of Mr. Wood... [largely from the North family collection]

2 violins with their bowes and cases, bought of Mr. Comer in the Strand...

⁵⁷ Sir John Hawkins, *A General History of the Science and Practice of Music* IV (London: Payne & Son, 1776), p.375

⁵⁸ Vernon Butcher, *The Organs and Music of Worcester Cathedral* (Worcester: Worcester Cathedral, 1981), p.32

⁵⁹ David Wickens, *The Instruments of Samuel Green* (Basingstoke: MacMillan, 1987), pp.107-8

1 set of books, the composition of Mr. Baltzar (commonly called the Swede) for violins, viol and harpsecon; as also the compositions of Dr. Christopher Gibbons, his famous Ayres and Galliards for violins, viol, and organ...

7 desks to lay the books on for the instruments and organ, bought of John Wild at 2s apiece...

Mr. Henry Lawes, Gent. of his majesty's chappell royal and of his private music, gave to this school a rare Theorbo for singing to ... with its case... ⁶⁰

The pre- and post-Restoration consort manuscripts were listed in catalogues dating from c.1627⁶¹ and 1683,⁶² and much of this material is currently housed in the Bodleian Library (Table 5.11).

Table 5.11: Organ sources from the Oxford Music School

Works from each source not involving the organ are not listed

Types: P=organ part S=score TB=through-bass

Instrumentation: Tr=treble V=violin T=tenor L=Lyra B=bass O=Organ BC=basso continuo

Source	Type	Contents and instrumentation
		Treble viol in original MS changed to violin in the catalogue in works marked *
Ob.C.44	S	Benedetti Cello Sonata; sonatas by Gascon and Pierkin Tr Tr Tr B O
Ob.C.57	TB	Simpson: the Months and Seasons Tr B B O
Ob.C.58	S	Simpson: the Months Tr Tr B O
Ob.C.81	P	Jenkins: 17 fantasias, almaines and airs Tr B O (Ex North)*
Ob.C.82	P	Jenkins: 10 fantasias, almaines and airs Tr Tr B O (Ex North)*
Ob.C.83	P	Jenkins: six-part fantasias etc Tr Tr T T B B O (Ex North)
Ob.C.89	P	Lawes: 24 fantasias, almaines and airs for Tr Tr B O (Ex North)*
Ob.C.90	P	Lawes: 24 fantasias, almaines and airs for Tr B O (Ex North)
Ob.C.91	-	Lawes: 12 fantasias for B B O, organ part in Lbl.31416 (Ex North)
Ob.C.98	P	Jenkins: 32 airs Tr Tr B B O (Ex North)
Ob.C.99	P	Jenkins: 17 fantasias, 2 pavans Tr A T B O (Ex North)
Ob.C.100a	P	Brewer: 6 fantasias Tr Tr T B O (Ex North)
Ob.C.101	P	Coprario: 14 fantasia suites Tr B O (Ex North)
Ob.C.102	S/P	Gibbons: fantasias, Baltzar: suites V V B O
Ob.D.211	S	Hingeston: suites and dance-based works for strings or wind and O
Ob.D.229	P	Lawes: 8 suites V B O

⁶⁰ Hawkins, *A General History* pp.376-7

⁶¹ Listed in Crum, *Early Lists*

⁶² Ob MS Mus. Sch C204*(R)

Ob.C.102	S/P	Gibbons: fantasias, Baltzar: suites V V B O
Ob.D.211	S	Hingeston: suites and dance-based works for strings or wind and O
Ob.D.229	P	Lawes: 8 suites V B O
Ob.D.231	TB	C. Gibbons: consort works for Tr Tr T T B B O
Ob.D.261	P	Jenkins: dance-based works Tr Tr B O and Tr B B O
Ob.E.382	P	Hingeston: suites and dance-based works for varied instrumentation and O
Ob.E.406	P	Cooke: 4 fantasias Tr B B O, Jenkins: pavane Tr B B O (Ex North)
Ob.E.430	TB	Simpson: 'Little Consort' Tr L B BC
Ob.E.451	TB	Various English consort and English/Italian devotional works (Lowe)
Ob.F.567	P	Jenkins: 14 fantasia suites Tr Tr B O
Och.3	S	Purcell: Sonatas 7, 8, 9 of four parts V V B O
Och.620	S	Purcell: Sonatas 9, 10 of four parts V V B O

5.4 Performance practice issues

5.4.1 The relationship of consort organ pitch and temperament to viols

Consideration of these instruments in relation to their repertoires and contexts allows a number of issues relating to performance practice to be explored in greater depth. The question of the pitch standards employed by English viols has been discussed at considerable length without firm conclusions.⁶³ A feature that has caused much speculation is the survival of instruments of differing sizes among each voice of the consort, leading some to suggest that two pitches a fourth or fifth apart were employed.⁶⁴ The issue is complicated by the fact that the bass viol was made in three distinct versions (lyra, division and consort) which often varied in size, and is clouded yet further by varying survival rates among the various types, although it is now recognised that this is due more to post seventeenth-century factors than contemporary popularity.⁶⁵ As Bryan and Fleming observed, therefore, for a variety of reasons 'we can neither use viols to determine pitch standards, nor can we use pitch standards to determine the sizes of viols.'⁶⁶

⁶³ see John Catch, 'Our Orthodox Viol Sizes: The Historical Evidence Re-Examined' *Early Music Performer* 16, 14-17

⁶⁴ This theory is discussed in Ian Harwood, 'A Case of Double Standards? Instrumental pitch in England ca.1600' *EM* 9:4, 470-85

⁶⁵ Discussed in Ephraim Segerman, 'The Sizes of English Viols and Talbot's Measurements' *GSJ* 48, 33-45

⁶⁶ Michael Fleming and John Bryan, *Early English Viols: Instruments, Makers and Music* (London: Routledge, 2016), p.320

As Bruce Haynes's wide-ranging study of pitch demonstrated, however, wind instruments such as organs provide more reliable evidence,⁶⁷ and as such the trend observable in the data recoverable from the extant consort organs (see Chapter 1, Fig 1.8) is significant in revealing a gradual rise from the low pitches of the Smithfield and Staunton Harold organs (a422 and a442 respectively) towards a mean of approximately a480 among the organs from the 1680s.⁶⁸ The roughly contemporary Staunton Harold organ is also relatively low at around a442. Most notably, none of the organs (with the exception of the very early Knole instrument) is pitched as low as the commonly used present-day 'Baroque' standard of a415, and most are considerably higher. This fact has important implications for modern viol players that so far only a relative few have embraced. Whilst it may be possible to argue a case for the use of low pitches in some areas of the consort repertoire, the extant organs demonstrate that consorts to the organ, at least, were played at relatively high pitches throughout the seventeenth century.⁶⁹ Annette Otterstedt suggested that smaller viol sizes were first introduced in England at the court in the early decades of the century; whilst the evidence supporting this is slim, the contemporary appearance of repertoire incorporating the (relatively high-pitched) consort organ as an obbligato instrument in the same context may not therefore be coincidental.⁷⁰

It is interesting to speculate whether viols were made to conform to the pitch of pre-existing organs or vice-versa. The evidence of the 'Organ Violl' found in a 1636 inventory of Welbeck Abbey⁷¹ and the 'Cremonia vyolin to play to the Organ' purchased in 1638 for 'Coperario's Musicke' suggests that luthiers tailored their instruments in some way to suit organs, and the most likely reason for doing this would be to meet a pre-existing pitch standard at a particular establishment.⁷² But given that the L'Estranges had been playing their viols for at least two decades prior

⁶⁷ Bruce Haynes, *A History of Performing Pitch* (Lanham, Maryland: Scarecrow Press, 2002), pp.15-18

⁶⁸ For further data from a wider selection of organs, see Goetze and Gwynn, *The Chamber Organ in Stuart England* p.113

⁶⁹ The case for low pitch is made in Harwood, *Double Standards*. See also Johnstone, A, "'As it was in the beginning": Organ and Choir Pitch in Early Anglican Church Music', *EM* 31 (2003), 506-25

⁷⁰ Annette Otterstedt tr. Hans Reiner, *The Viol: History of an Instrument* (Kassel: Barenreiter-Verlag, 2002), p.177

⁷¹ Lynn Hulse, 'The Duke of Newcastle and the English Viol' *Chelys* 29, 29

⁷² Ashbee, *RECM* III p.154

to the purchase of the Smithfield organ, one might wonder if it was made, or altered at the time of its purchase, to match the existing stringed instruments. The wide variety of pitches recorded among the extant organs suggests that once a chest of viols and an organ had been matched with each other at a particular location or within a household, it would have been practically expedient to keep them together. How contexts such as the Oxford music meetings reconciled their organ's pitch with that of instruments brought in from elsewhere by a large and constantly changing membership is not certain.

There is no evidence for secular organs using the transposed liturgical F pitch, but as transposing from choir to organ pitch was an essential daily skill for the professional liturgical organist, the possibility remains that transposition at other intervals might also have been employed in consort music to accommodate pitch variations between organs and strings.⁷³ If so, no trace of the practice exists in contemporary accounts or in any of the secular manuscript sources. An incident at the Oxford Music School in the 1670s recorded that a Baltzar suite in G was performed using the Music School stringed instruments and a keyboard from elsewhere evidently pitched a tone lower: the solution was to write out the keyboard part in A.⁷⁴

Another example from the same context is found within Och.E450 where an organ part is noted as 'prikt a note higher for ye violins sake'. Holman has suggested that this work, by a 'Mr. Crispion', was performed on the Music School strings at an Oxford Act ceremony using a lower-pitched organ,⁷⁵ possibly Smith's instrument at the Sheldonian Theatre. It is interesting to find such examples of the practical problems created by a variety of pitch standards operating at different institutions within the same city, and the expedient of the written-out transpositions seems to suggest that even professional post-Restoration secular organists were reluctant to transpose. It may perhaps indicate that it was not an expected part of their skill set by this point in the century.

⁷³ For a discussion of this practice see J. Bunker Clark, *Transposition in Seventeenth Century English Organ Accompaniments* (Detroit: Detroit Coordinators Inc., 1974)

⁷⁴ Peter Holman, 'Thomas Baltzar (?1631-1663), The "Incomperable Luciber on the Violin"' *Chelys* 13, 18

⁷⁵ *Ibid.*

Conclusive evidence for temperament is elusive from both viols and organs alike. The addition of metal tuning flaps and the transposition of pipes to accommodate later pitch standards are common alterations to the extant organs that obscure any remaining physical evidence: most of the extant organs have undergone one or both of these alterations to some extent. As discussed in Chapter 1.5, empirical experimentation combined with reference to contemporary tuning instructions suggests that a mildly unequal temperament such as 1/5 or 1/6 comma meantone can work well in practice,⁷⁶ and the evidence for viol frets ‘eslongues par intervalles de semytens exgaus (set out in intervals of equal semitones)’ from Saloman de Caus at the court of Prince Henry suggests that experiments in nearly-equal temperaments were being essayed in London from as early as the 1600s.⁷⁷ Works such as the *Ut re mi fa sol la* keyboard fantasia written by Bull in this context, and Ferrabosco I’s response for viols on the same theme, provide corroborating evidence for this insofar as they would have required a very flexible temperament to render them successfully.⁷⁸ For practices employed later in the century, the repertoire itself also provides the most useful evidence.

Christopher Kent’s analysis of Jenkins’s use of key signatures in his Hunstanton works of the 1640s observed that his use of shifting tonal centres within movements was advanced for its time.⁷⁹ Jenkins’s tonal language embodied a developed sense of modulation that is underlined by Sir Nicholas L’Estrange’s meticulous preferences regarding the grammar of key signatures and accidentals embodied in the ‘house style’ applied throughout the Hunstanton manuscripts.⁸⁰ Although the modulations are often far-reaching, the clear sense of tonal centre is expressed through the changes of key signature found in nearly all of the fantasias in Lbl.31428, with some, such as those in E minor (nos. 10-12), fluctuating between both sharp and flat signatures within the same movement to avoid the need for extensive accidentals. Furthermore, Lbl.23779, partially in the hand of Jenkins,

⁷⁶ Stephen Bicknell, ‘The Organ in Wollaton Hall’ *BIOSJ* 6, 43-57 and Gwynn, *St George in the Meadows*

⁷⁷ Salomon de Caus, *Institution Harmonique...* (Heidelberg, 1615)

⁷⁸ Christopher Field and David Pinto (Eds.), *Alfonso Ferrabosco the Younger: Consort Music of Five and Six Parts MB 81* (London: Stainer & Bell, 2003), xxix. This assumes that a deliberate exploration of the effect of playing such works in meantone temperament was not the intention of the composers – although it may have been.

⁷⁹ Christopher Kent, ‘“...Softly, and Sweetly Acchording to All.” The Historic St. Luke’s Organ and Its Contemporaneous Repertoire’ in Watson, *Organ Restoration Considered*

⁸⁰ A survey is provide by Christopher Field ‘Jenkins and the Cosmography of Harmony’ in Ashbee and Holman, *John Jenkins*

contains Coprario's fantasias for violin, bass viol and organ in which the modulation and transition keys include Eb and B majors, and F# and C# minors.

Such works placed considerable enharmonic demands on the Smithfield organ that could not satisfactorily have been met by meantone temperaments. The eight Fancies, Airs and Corants for two trebles, two basses and organ by Jenkins, also dated by Ashbee to his Hunstanton period, are even more adventurous, employing, *en passant*, 21 major and minor keys.⁸¹ The earliest extant source for these works is a set of partbooks from the Oxford Music School collection (Ob.C99) that Crum suggests were originally copied by the composer for the North family at Kirtling in around 1654. They also appear in six other contemporary sources, demonstrating that the L'Estranges and the Norths were not alone in requiring an organ with a very flexible temperament (Table 5.12).⁸²

Table 5.12: Sources for Jenkins's eight Fancies, Airs and Corants for two trebles, two basses and organ

Source	Date	Owner	Location
Och. Mus. 517-20	Before 1650	?	
Ob.C.99	c.1654	North family ⁸³	Kirtling, Cambridgeshire
Ob Mus. Sch. F.568-9	1657	Oxford Music School ⁸⁴	Oxford
Lbl. Add. MS 29290	1650s	North family ⁸⁵	Kirtling, Cambridgeshire
D-Hs, ND VI 3193		Sir Gabriel Roberts ⁸⁶	London
F-Pc MS Rés F.770		?	
US-NH Beinecke, Osborne 515		Sir Robert Filmer ⁸⁷	East Sutton Park, Kent

Perhaps the most audacious example of harmonic daring from the pen of Jenkins comes from the seventh of the 17 Fantasias à 4 to the organ, for which the organ part

⁸¹ For an analysis, see Kent, *Softly, and Sweetly* Table 8.2 p.100

⁸² see Ashbee, *John Jenkins: Consort Music* Introduction

⁸³ Margaret Crum, 'The Consort Music from Kirtling Bought for the Oxford Music School from Anthony Wood, 1667' *Chelys* 4, 3-10

⁸⁴ Cunningham, *William Lawes* p.129

⁸⁵ Andrew Ashbee, Robert Thompson and Jonathan Wainwright (Eds.), *The Viola da Gamba Society Index of Manuscripts Containing Consort Music I* (Aldershot: Ashgate, 2001), p.48

⁸⁶ *Ibid.* Vol II, p.15

⁸⁷ Robert Shay and Robert Thompson, *Purcell Manuscripts: The Principal Musical Sources* (Cambridge: CUP, 2000), p.293

also survives in Ob.C99. It contains a transition passage that includes chords for the organ notated as Eb and Ab minors and Fb major (Ex. 5.1).



Ex.5.1 John Jenkins: *Fantasia à 4 No 7*, bars 63-72, organ part (Ob.C99)

If the organ were to achieve the ‘Well-keeping the Instruments in Tune’ espoused by Mace in works such as these, practical expediency would have required both it and the viols to have been tuned to the same temperament,⁸⁸ and the harmonic demands of Coprario, Jenkins and Lawes led Kent to suggest that ‘irregular systems of meantone temperament of considerable versatility’ were employed in these contexts, and even that ‘equal temperament might have also been used for the present [Smithfield] organ when played... at Hunstanton Hall.’⁸⁹

Further evidence is provided by the fact that reconciling the flexible temperaments achievable through the movable frets of viols with the fixed temperament of organs was discussed by a variety of seventeenth-century commentators, and elements of the debate support the hypothesis that empirical approaches to flexible, and maybe even roughly equal-tempered, tunings were not uncommon.⁹⁰ Examples occur throughout the century. Bull’s chromatic hexachord fantasia and De Caus’s description of equidistant viol fretting at the Jacobean court provide evidence from the 1600s. Mersenne, writing in 1637, acknowledged that ‘l’Orgue & l’Epinette estans temperées selon le manche des Luths & des Violles, les concerts que en reussiront, paroistront plus justes, raison de la conuence de leiurs accords (if the

⁸⁸ Thomas Mace, *Musick’s Monument, or a Remembrancer of the Best Practical Musick...* (London: Early English Books Online print edition, 2013), p.236

⁸⁹ Kent, *...Softly, and Sweetly* pp.103 and 102

⁹⁰ See Mark Lindley, *Lutes, Viols and Temperaments* (Cambridge: CUP, 1984), pp. 43-66

organ and harpsichord were tempered according to the fretting of lutes and viols [i.e. a well-tempered tuning], performances in which they are combined would seem more in tune, because their tuning would agree).⁹¹ John Pell's manuscript, Lbl. Add. MS 4388, c1635-66, offered the advice that

I am sure, and will prove it by any Organ, or Harpsichon, that is tuned only by the Eares of a well practized Musitian, that there will be found a greater difference between such an Organ, and this Pythagorean Scale [a previously quoted tuning with a wolf fifth between G# and Eb], than between the same Organ, and a Scale which divideth an Eighth into twelve equall Semiton's, which division all our Violls, Lutes, Gitares, and the like instruments doe follow.⁹²

From the very end of the century, North's instructions for tuning 'clavicall' instruments (probably gleaned from Prendcourt, his German-trained organist, or possibly from Father Smith, who built his consort organ)⁹³ stated that 'some very good tuners will help a little, by robbing Peter to pay Paul; as by making #G over sharp... for that reason they call that note the wolf'.⁹⁴ The result of following North's formula is, essentially, the same as the flexible modified 1/5th comma meantone that was derived from empirical observation and experimentation on the pipework employed by Goetze and Gwynn during their restoration of the Nottingham organ.⁹⁵

Whilst it is difficult for an untrained person to achieve an accurate equal temperament without artificial aids, it still holds true that a reasonably 'practized Musitian' can approximate a perfectly serviceable well-tempered tuning satisfactory to the listener (if not necessarily to the theoretician) by ear, as many harpsichord players will attest.⁹⁶ The process of tuning organs in provincial households would largely have had to rely on empirical methods, involving various degrees of tempering of the fifths and thirds to produce workable solutions, probably along the lines of the mildly 'irregular' temperaments that were the subject of much

⁹¹ Marin Mersenne, *Harmonie Universelle* (Paris: Cramoisy, 1636) Translation from Lindley, *Lutes, Viols and Temperaments* p.45

⁹² John Pell, *Portions of Treatises &c Relating to Music* (Lbl Add MS 4388)

⁹³ See Wilson, *Roger North* pp.203-12

⁹⁴ *Ibid.* p.211

⁹⁵ Gwynn, *St George in the Meadows* p.5

⁹⁶ The methods of doing so are explored in Owen Jorgensen, *Tuning the Historical Temperaments by Ear* (Marquette, MI: NMU Press, 1977)

discussion in musical treatises of the second half of the century.⁹⁷ Given the inherent pitch stability of wooden pipes (*vis-à-vis* metal), tuning would, in practice, have been required relatively infrequently. Indeed, with the fixed-length open pipes originally found in the Smithfield organ, there would have been little need for tuning at all: the pitch and temperament was effectively set in the workshop and was presumably expected to last for the life of the instrument.

The implications of the foregoing evidence for present-day performance practice are two-fold. Firstly, the issue of pitch in consort music involving the organ needs to be revised in the light of the available evidence from the extant organs. The trend line illustrated in Chapter 1, Fig.8 suggests a gradual rise in pitch from about a440 in around 1640 to approximately a485 by 1690. The latter is a tone and a quarter above the modern 'Baroque' pitch of a415 so often used for this music today - which standard, it must be noted, is not represented in a single one of the 12 organs in this study from which reliable pitch data is recoverable. Unfortunately, it is rare to find modern continuo organs that can accommodate these higher pitches: of the eleven organs available for hire listed by members of the IBO in 2018, for example, only two were transposable above a440, and those only by one semitone.⁹⁸ The implications of this evidence for viols are beyond the scope of this study to discuss, except to say that the frequently used pitch of a415 for consorts to the organ cannot be supported on the basis of the organological evidence.

Secondly, it is clear that a number of the popular unequal temperaments used in continuo keyboard instruments today are unsuitable for playing many of the mainstream consort works by prominent composers such as Coprario, Jenkins and Lawes. This applies particularly to the period from c.1630 to c.1670 during which the majority of consort works to the organ were composed and played. The evidence from the repertoire, supported by contemporary theoretical sources, indicates the need for a flexible tuning not very far removed from equal temperament to accommodate successfully the tonal demands of consort music.⁹⁹

⁹⁷ These are discussed in Tim Eggington, *The Advancement of Music in Enlightenment England: Benjamin Cooke and the Academy of Ancient Music* (Woodbridge: Boydell Press, 2014)

⁹⁸ IBO website <<https://www.ibo.co.uk/resources/organHire.php>> accessed 18 August 2018

⁹⁹ The operative word being 'consort': the possibilities for the use of unequal temperaments on both string and keyboard instruments remain alive for their respective solo repertoires.

The empirically practical seventeenth-century method of combining movable frets with a flexible, nearly-equal-tempered tuning system for consort keyboard instruments meets the needs of the most harmonically adventurous repertoire successfully.¹⁰⁰

5.4.2 The Open Diapason

The specifications presented in Chapter 1, Table 1.4 demonstrate that all but one of the extant consort organs consulted for this study share a core specification of Stopped Diapason, Principal and Fifteenth. In addition, seven of the sixteen instruments possess an Open Diapason, the earliest being that of the Smithfield organ (labelled Open Flute, though a diapason in construction),¹⁰¹ whereafter the stop appears regularly through to the end of the century. It is a characteristic feature of the English seventeenth-century consort organ that the chorus consists of open principal-toned pipework, and that a principal-toned stop of 8ft pitch is provided on a relatively large proportion of the surviving instruments. Given the very compact dimensions of these organs, the inclusion of an 8ft open stop (even if of treble-only compass) is a surprising feature for a variety of reasons: such stops are comparatively bulky, and consume a relatively high volume of wind; they are very rarely found in contemporary continental organs of similar size; and in contemporary church instruments they are invariably constructed of metal, rather than employing the wooden pipes universally used in secular instruments. It may be noted, however, that full-length open wood diapasons were found on the sixteenth-century English liturgical positive organ, which fact strengthens the evolutionary link between this instrument and the early consort organ. Nevertheless, to have remained in the specifications of consort organs until the end of the century, this technically challenging and expensive provision must have been driven by a real musical need rather than by mere reference to tradition or fashion.

See David Dolata, *Meantone Temperaments on Lutes and Viols* (Bloomington: Indiana University Press, 2016), pp.226-8

¹⁰⁰ For discussion of viol versus keyboard tunings, see Dolata, *Meantone Temperaments*; Field, *Jenkins and the Cosmography of Harmony*; Lindley, *Lutes, Viols and Temperaments*; Annette Otterstedt, 'The Compatibility of the Viol Consort with the Organ in the Early Seventeenth Century' *Chelys* 25, 32-52

¹⁰¹ The label is an eighteenth or nineteenth-century replacement

The Smithfield organ is unusual in that it incorporates an attempt to make the 8ft open tone available throughout the keyboard compass. As now standing, the 8ft open rank begins at C⁰, with the bass supplied by the bottom octave of the Stopped Diapason. The layout of the windchest, however, suggests that the original intention was to allow the bottom octave of the Principal also to be selected with the Stopped Diapason bass; the effect here would have been to simulate the tone of an open 8ft bass by means of the combination of the 8ft pitch of the stopped rank and the harmonic content of the open 4ft rank, the two coalescing to provide the aural effect of a single 8ft rank. Such a technique was later widely used in the eighteenth-century English chamber organ.¹⁰² Unfortunately, the mechanical complexity involved in achieving this in combination with the use of the Principal pipes divided into C and C# sides in the pipe front defeated the builder in this instance, but it is interesting to see that it was at least desired.

In common with the majority of the other organs incorporating an Open Diapason, the Staunton Harold example is a treble-only stop, originally starting at c¹. Here the bass is again supplied by the Stopped Diapason. On such organs the 8ft principal tone is therefore only discernible in the treble, although 8ft pitch is available throughout the compass. This desire to reinforce the treble of the musical texture may have had two musical reasons. In the polarised treble and bass textures of dance-based repertoire, such as the masque tunes of Och.10444 from the L'Estrange collection or the dance tunes in the Shirley partbooks, the Open Diapason could be used to emphasise the melody line of the music above a chordal left-hand accompaniment. Additionally, in music employing the treble viol as the top-line instrument, the relative weakness of the treble's tone could be compensated for by the right hand on the Open Diapason. This latter technique would have been as equally effective in polyphonic textures as homophonic ones.

In later repertoire employing violins, it might be thought that the provision of a full-compass 8ft stop of principal tone would be useful in providing extra weight in the bass to balance the treble-heavy effect of the violins, but the extant organs provide little evidence of such a practice.¹⁰³ The narrow scales and relatively light wind

¹⁰² John Norman, *The Organ in Britain* (Newton Abbott: David & Charles, 1984), p.79

¹⁰³ The exception is the Dallam organ now at Compton Wynyates, which has a full-compass wooden Open Diapason.

pressures employed in consort organs would, in any case, have produced very light-toned basses to such stops. North was clearly aware of this when he wrote that 'It is found that no pipes will make a sufficient base to an organ, but a double viol conjoined supplies what the faint blast wants, force.'¹⁰⁴ In practice, the 8ft tone provided by a Stopped Diapason combined with the harmonic complexity of a bass viol played at the same pitch had the ability to merge to provide a bass line that was aurally perceived as greater than the sum of its parts. The bass viol augmented the relatively weak bass of the organ, whilst the Open Diapason treble strengthened the relatively weak tone of the treble viol; organ and viols thus interacted in a musically symbiotic relationship. In the Italianate, chordal continuo manner essayed in post-Restoration Oxford in conjunction with violins, the reinforcement of the treble was less important than the provision or augmentation of inner harmony parts, and this is reflected in the absence of Open Diapasons in the later Worcester and Mander organs.

Nevertheless, it is important to note the significance placed on the provision of the treble of the 8ft Open Diapason in so many of the extant consort organs, especially those from provincial domestic contexts. Any attempt to recreate such an instrument would not be complete without the inclusion of this characteristic and most useful tonal resource.

5.4.3 The use of divided stops

Whilst divided stops are found on consort organs throughout the century, it is noticeable from Chapter 1, Table 1.4 that the provision of division on all the stops of an organ was more frequent prior to the Restoration, whereas afterwards it was mainly applied to the higher-pitched stops only. In the eighteenth century, divided stops were provided on single-manual chamber organs (and also on church organs of one or more manuals) to allow flexibility of registration by permitting different sonorities to be used in the left and right hand parts. Such polarised, solo-and-accompaniment textures were indeed a hallmark of later Baroque English solo organ music, where they may be seen to have had their origins in the double organ

¹⁰⁴ Wilson, *Roger North* p.274

voluntaries of the seventeenth century which, themselves, owed much to contemporary French organ repertoire.¹⁰⁵

It might be supposed, therefore, that the principal function of divided stops on the consort organ was similarly to allow the performance of the English double organ repertoire on their single manual. Closer inspection reveals, however, that divided stops do not in fact allow this possibility. From the earliest examples by Orlando Gibbons through to the voluntaries of Purcell, a distinctive feature of these works is a very wide tessitura in the solo voice that extends well beyond the dividing point of the keyboard. This characteristic is even more frequent in solos for the left hand than the right, and renders nearly all of the double organ voluntaries from any point in the century unplayable on the consort organ. There must, therefore, have been another compelling reason for the inclusion of the divided keyboard, particularly as it complicated the mechanism, and consequently increased the price of the instrument. Once again, it seems most plausible that the reason is found within the organ's consort role.¹⁰⁶

The dividing point of the L'Estranges' organ, and indeed the original dividing point of the contemporary Staunton Harold and Dean Bargrave organs, is between b and c¹ (see Chapter 1, Table 1.5). It is significant to note that, in the organ parts of many of Jenkins's Hunstanton works, the right hand rarely descends below c¹ and the left hand even less frequently ascends above it. Given also that the treble viol parts in consort (as opposed to solo) music also do not often descend below the compass of the third string, tuned to c¹, the treble half of divided stops was perfectly placed to double the treble viol parts of consort works, with a contrasting left-hand registration supporting the lower voices. Such a registration would be particularly effective in melody-dominated homophonic textures, such as the Lbl.10444 repertoire. It seems very likely therefore that there was a particularly close connection between the polarised two-part writing found in many consort organ parts and the provision of divided stops of this kind.

¹⁰⁵ David Smith, 'Continuity, Change, and the Emergence of Idiomatic Organ Repertoire in the Seventeenth Century' in Ian Quinn (Ed.), *Studies in English Organ Music* (Abingdon: Routledge, 2018), pp.135-6

¹⁰⁶ There remains the possibility that divided stops may have been used in playing the virginal repertoire on the organ, although the contemporary virginals and harpsichords for which the repertoire was primarily intended did not, as far as is known, incorporate such devices.

By contrast, the later organs (from the 1643 Christianus Smith instrument onwards) all have a dividing point a semitone higher, between c^1 and $c\#^1$. This is most probably a response to the increasing use of the violin in consort repertoire, on which the d string was the lowest one commonly used for consort purposes (the split point accommodated the $c\#$ lower leading note that was occasionally called for in melodic writing). This development is ably illustrated by the many sources among the Oxford Music Collection that were acquired from the North family by Anthony Wood and subsequently sold to the university in 1667.¹⁰⁷ Roger North related how Dudley North 'play'd on that antiquated instrument called the treble viol' when the manuscripts were in use at Kirtling Hall, but by the time they were employed at Oxford the treble was 'now abrogated wholly by the use of the violin.'¹⁰⁸ This claim is supported by the evidence of Lowe's catalogue of the Music School collection, which ascribed the upper parts of several of these consorts to the violin rather than to the treble viol, even though two trebles were still available as part of the School's collection of instruments.

The effect of the violin in consort is very different to that of the treble viol: it is capable of a louder *forte* than the viol, and its dynamic range is greater. It would seem from contemporary accounts that the violin's more assertive presence in the consort was amplified by players who were not always sensitive to matters of balance and blend. Thomas Mace was particularly scathing about the resultant effect:

Then, what *Injury* must it needs be, to have *such Things Played upon Instruments, Unequally Suited, or Unevenly Numbred? Viz. One Small Weak-Sounding-Bass-Biol [sic], and 2 or 3 Violins; whereas one (in Reason) would think, that One Violin would bear up Sufficiently against 2 or 3 Common-Sounding-Basses; especially such as you shall Generally meet with, in their Ordinary Consorts.*¹⁰⁹

The situation was exacerbated by the fact that the number of performers was dictated by whomever happened to be present rather than by questions of musical balance:

¹⁰⁷ See Crum, *Music from Kirtling*

¹⁰⁸ Lbl Add. MS. 32,506 f.69 (Roger North: *Notes of Me*)

¹⁰⁹ Mace, *Musick's Moument* p.233

Nay, I have as yet but suppos'd a *Small matter of Unequalness*, in respect of what I have heard, and is still *very Magnanimously Endeavoured* to be *Daily Performed*, viz. *Six Violins*; nay *Ten*; nay *Twenty* or more, at a *Sumptuous Meeting*, and scarce *Half so many Basses*; which (as I said before) were more *Reasonable*, sure, to be the *Greater Number*.¹¹⁰

Mace dismissed the argument that the presence of a keyboard instrument could mitigate against such imbalances:

But it has been Objected, There has been an *Harpsicon*, or an *Organ* with It; what then? Has not the *Harpsicon*, or *Organ*, *Basses and Trebles Equally mixt*? and must not still the *unequalness* be the same? or suppose a *Theorboe-Lute*; the *Disproportion is still the same*. The *Scoulding Violins will out-Top Them All*.¹¹¹

The Worcester organ does indeed have 'basses and trebles equally mixt' in the sense that there are no divided stops of 8ft or 4ft pitch as found in the earlier consort organs, nor are there any treble-only 8ft diapasons. Many of the extant post-Restoration instruments follow a similar pattern, including the Mander organ, which may have been used in conjunction with the stringed instruments played by the choristers,¹¹² and possibly also in the context of the secular music meetings held at the college during the Civil War.¹¹³ With the increased strength of the melodic line as played by violins in consorts, the need for the organ to support the melody was greatly reduced, and divided stops became redundant.

The adoption of chordal continuo technique was doubtless another reason for their demise: as noted in Chapter 3.11, Oxford sources are particularly rich in thorough-bass parts. Many of the works in the Lowe catalogue were newly provided with a thorough-bass part in the 1660s, and the repertoire from Narcissus Marsh's Oxford music meetings held at Exeter College between 1666 and 1678 also contains a relatively high proportion of them among its keyboard parts.¹¹⁴ The diversity of influence, eclecticism of outlook and concentration of talent found within the

¹¹⁰ Ibid.

¹¹¹ Ibid.

¹¹² Daniel Carey, *Edmund Hakluyt: New College Singing Man, Tutor, and Youngest Brother of Richard Hakluyt*. New College Oxford website
<<https://www.new.ox.ac.uk/sites/default/files/4NCN7%20Edmund%20Hakluyt.pdf>>
accessed 3 June 2016

¹¹³ Kiessling, *Anthony Wood* pp.47-9

¹¹⁴ Catalogued in Charteris, *Consort Music Manuscripts*

clientele of the music meetings, all focussed within a few hundred square yards of the city, resulted in a rapid pace of change that saw the established practices of consort music evolving in terms of instrumentation, texture, types of repertoire and notation.¹¹⁵ The mainly homophonic, chordal-based textures of the new Italianate style of accompanying, together with the reduction of the independent, obligato role of the organ in post-Restoration consort works, were symptoms of North's 'grand metamorphosis of musick'¹¹⁶ which reduced the opportunities for employing contrasting sonorities or dynamics between the hands on the consort organ.

It would appear, therefore, that the most compelling reason for the inclusion of divided stops in consort organs was to support their role in instrumental ensembles, particularly of pre-Restoration repertoire. The division allowed extra support for the treble viols and emphasis of the melody line, and the division point was originally placed to coincide with the usual tessitura of that instrument in such music. The advent of the violin at first caused the division point to be moved upwards, and then eventually to be removed altogether as the role of the organ changed towards providing a more generally chordal continuo in the Italian manner. Once again, divided stops are a feature that is not always included on modern continuo instruments, or if it is, is rarely employed by players due to the comparatively assertive nature of the upperwork on such organs. It would seem likely that divided keyboard textures were a feature frequently applied to the keyboard parts of consort works, particularly in the lighter works with polarised treble and bass textures, and that they also had a part to play in the rendition of the expressive 'humouring' found in the L'Estrange repertoire. The possibilities such textures offer for enabling a more imaginative contribution from the organ in present-day performances remain to be rediscovered.

5.4.4 Stop controls and registration

The provision of divided stops greatly increased the number of tonal combinations available on the consort organ, and even those instruments without this feature could provide a variety of registrations. Before examining the registrational

¹¹⁵ This process is discussed in Penelope Gouk, 'Performance practice: music, medicine and natural philosophy in Interregnum Oxford' *The British Journal for the History of Science* 29:3, 257-88

¹¹⁶ Wilson, *North* p.349

possibilities available on these instruments, it is worth considering the role of their stop mechanisms in effecting changes of sonority.

Reference to Chapter 1, Table 1.5 reveals that the majority of the extant organs in this study originally had very simple sliding stop-lever mechanisms. Where push-pull stop knobs mounted on the front of the organs occur, they represent later alterations. The early Smithfield and Staunton Harold instruments had the simplest arrangement, with the stop controls being simple extensions of the sliders emerging horizontally at the sides of the case. The later organs have vertical levers mounted at the bass and treble ends of the keyboard. There is evidence for stop levers of both these types on sixteenth-century English church organs, and similar mechanisms are also found on seventeenth-century chamber organs from northern Europe.

The stops of the Smithfield organ are mounted on the side of the case, and may therefore have been operated by an assistant during play. The two stops most likely to have been added or subtracted are the Open Flute and Principal Treble, and these are both found on the same side of the case. The draw of the stops is just 8mm and 5mm respectively, allowing them to be selected or cancelled very quickly. The 1629 Dean Bargrave organ at Canterbury has sliding levers mounted on the front of the case just above the keyboard, and here the levers were readily accessible to the player. At Staunton Harold, the original side-mounted stops were moved to the front of the case in 1686.

From the 1643 Christianus Smith organ onwards, vertical levers in the keyboard jambs became the standard provision in the extant organs, including the two Oxford organs in their original form. These employ leverage such that, whilst the distance the handle needs to move (typically 50mm) is slightly greater than that of a knob attached directly to a slider, the force required to operate it is considerably less. This lightness of operation, coupled with the fact that the levers are directly adjacent to the keyboard, enables registrational changes to be made quickly and easily both before and during the music. Two or more levers can be operated simultaneously, and those most likely to be added or subtracted (upperwork and the treble halves of divided stops) are placed on the right, allowing the left hand to continue playing whilst changes are effected.

In contrast with this ease of operation, the stop mechanisms of liturgical organs discouraged alteration by the organist during play. Church organ stops were usually mounted in vertical columns either side of the music desk, and had a relatively long throw to compensate for the force required to transmit the action through longer distances and via less direct mechanical connections. Registrations were pre-set before playing and not changed during individual movements. On double organs, solos and dynamic contrasts were effected through the use of the two manuals rather than by changing registration.

The nature of English organ voluntaries, influenced (especially in the latter half of the century) by French practices, did not require tonal changes during movements. The accompaniment of liturgical vocal music was also suited to static registrations, with, for example, the soloists in verse anthems accompanied by the Chair manual and the full choir by the Great.¹¹⁷ Secular consort music, by contrast, encompassed the possibilities of dynamic and other expressive contrasts of 'affection' as discussed in chapters 3 and 4. Consort organs, with their readily accessible stop levers, were provided with the means to extract the maximum tonal variety from their resources quickly and easily. As North observed, 'organs and espinetts doe not so well soften by degrees; but with a skillful hand and variety of stops, performe it tolerably.'¹¹⁸

North's reference to the 'espinett' prompts a comparison with the register controls on contemporary harpsichords. Flemish and German instruments had registers which usually protruded through the right-hand cheekpiece of the instrument (equivalent to the side-mounted stop knobs of the Smithfield organ), whereas French harpsichords generally used levers or stop knobs mounted above the keyboards.¹¹⁹ There is not enough evidence from extant English harpsichords of the seventeenth century to be able to draw any definitive conclusions about contemporaneous English practice, but James Talbot mentioned front-mounted levers or knobs in the late 1600s,¹²⁰ and this was certainly the usual provision in eighteenth-century English instruments.

¹¹⁷ Rebecca Herissone, *'To Fill, forbear, or adorne': The Organ Accompaniment of Restoration Sacred Music* (Aldershot: Ashgate, 2006), pp.45-7

¹¹⁸ Wilson, *Roger North* p.218

¹¹⁹ Edward Kottick, *A History of the Harpsichord* (Indiana: Indiana University Press, 2003), p.371

¹²⁰ Och MS 1187 (Talbot MS)

Given the Gallic characteristics evident in other areas of the Dallams' work, it is interesting to wonder whether the provision of stop levers in their consort organs also reflects French influence. Whilst no harpsichords by the Dallams themselves are known, Ralph Dallam was in partnership with the harpsichord maker James White,¹²¹ and indeed a number of other English builders made both organs and stringed keyboard instruments, including John Loosemore,¹²² Thomas Thamar¹²³ and John Hayward.¹²⁴

Despite their small size, consort organs were capable of producing a wide range of sonorities for consort playing. The possibilities for a typical pre-Restoration consort organ with a treble Open Diapason and divided Stopped Diapason and Principal are given in Fig 5.3.¹²⁵ The combinations given here use only the 8ft and 4ft stops, but it is quite probable that the 2ft Fifteenth was used too, especially in more vigorous movements, or in contexts such as music meetings where larger numbers of players were present, which would provide several more possible registrations.

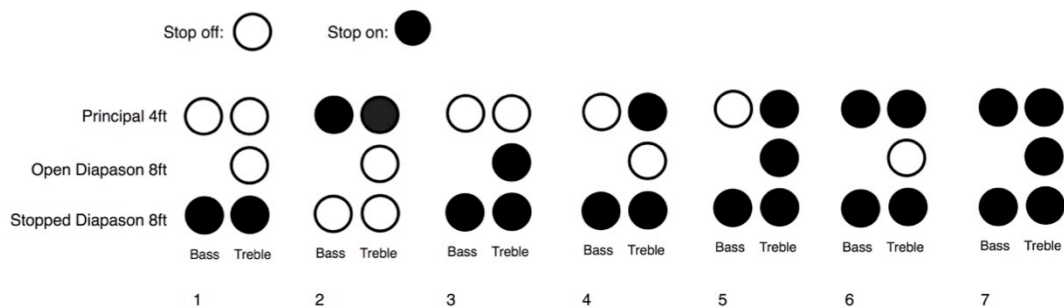


Fig.5.3: Consort organ registrations, 8ft and 4ft stops.

Even restricting the combinations to the 8ft and 4ft stops, it may readily be seen that a variety of dynamic and tonal nuances is achievable, comprising both divided and full-compass registrations. A particular feature of the voicing of the consort organ's wooden pipework was the manner in which the upperwork blended with the 8ft

¹²¹ Bicknell, *History* p.119

¹²² William Loosemore, *Loosemore of Devon: an Outline Family History website* (1987) <<http://www.loosemore.co.uk/Chapter6/Chapter6.htm>> Accessed 30 August 2016

¹²³ Boalch, D., *Makers of the Harpsichord and Clavichord 1440-1840* 2nd Ed. (Oxford: Clarendon Press, 1974), p.178

¹²⁴ Oxford University Archives N.W.3.4 pp.185, 204, 227

¹²⁵ These are the combinations that would be most musically useful, as opposed to all that are possible. The layout of the stops is diagrammatical only.

Stopped Diapason in such a way as to enhance the harmonic content of the chorus without adding substantially to the overall dynamic output of the instrument.¹²⁶ This was particularly useful in allowing the resources of the organ to be exploited without overwhelming the sound of the strings in ensembles.

This is another contrast with the typical modern continuo organ, which, being designed for use in a variety of general-purpose roles, usually employs ranks of pipes that are of greater dynamic output as they ascend in pitch. The 4ft and 2ft stops on such organs are generally too assertive to balance with a viol consort, requiring the player to limit registration to the 8ft flute alone. The inability of such organs to contribute to the realisation of the 'humouring' discussed in chapters 3 and 4 through use of registration is a significant handicap compared to the flexibility displayed by the consort organ.

Sir Nicholas's L'Estrange's annotations in the Hunstanton manuscripts were discussed in Chapter 4.6. Considering them specifically with reference to the Smithfield organ raises some interesting questions. It is evident from the manuscripts that attempts to enhance the 'affection' or mood of the music were essayed within the consort at Hunstanton, particularly in the lighter dance-based repertoire where repeats and contrasting sections were characterised by changes of dynamics and articulation. It is especially interesting that the 1675 inventory of the house mentions a 'pedal', being a type of harpsichord with foot pedals that allowed dynamic contrast to be achieved. The only other source of information for such an instrument is Thomas Mace's *Musick's Monument*, in which it was claimed to be an invention of John Hayward, a resident of nearby Norwich, where we may imagine the L'Estranges encountered him.¹²⁷

Mace's instrument had four pedals, each of which brought into play a '*Various-Stop*' – seemingly meaning a rank of strings, as 'without the *Foot* so used *Nothing Speaks*'.¹²⁸ The various combinations of these four pedals provided gradations of dynamics and an '*Admirable Sweetness and Humour, either for a Private, or Consort*

¹²⁶ Dominic Gwynn, 'The sound of the seventeenth century English chamber organ' *Chelys* 25, 25

¹²⁷ Hawkins, *General History* p.464

¹²⁸ Mace, *Musick's Monument* p.235. Mace describes the *pedals* as being enclosed in a '*Cubbord, or Box*' behind a pair of doors, which has led to the misunderstanding that it was the *strings* that were enclosed and that the doors achieved the dynamic changes.

use.¹²⁹ The only other known owner of a pedal outside the court was, according to Mace, his former pupil Robert Bolles of Scampton Hall, Lincolnshire. Although Sir Nicholas (d.1651) cannot have purchased the pedal ('of a *Late Invention*' in 1676) himself, the combination of such a rare instrument and the unique expressive annotations of the L'Estrange manuscripts within the same household are unlikely to be a coincidence. We may note that Roger L'Estrange and Thomas Mace were, briefly, contemporaries at Cambridge in 1635.¹³⁰

The Smithfield organ has the typical consort organ complement of Stopped Diapason, Principal and Fifteenth, augmented by an Open Diapason extending unusually low to c^0 , and is one of the first recorded organs with divided stops. These resources could be manipulated to provide a wide spectrum of combinations ranging from the Stopped Diapason on its own to the full plenum of five stops, with much gradation in between, particularly if the potential of divided textures was exploited by means of the split compass. The short draw of the side-mounted stop knobs enabled changes to be made quickly. Like the Hunstanton pedal, the Smithfield organ could be exploited to 'humour' the music in the ways prescribed by Sir Nicholas.

A problem arises, however, when the physical layout of the organ is considered. Unlike all of the extant organs dating from after 1640, which were provided with stop levers close to the keyboard, the Smithfield stop controls are mounted on the sides of the case as extensions of the sliders. Even in this more remote position they would yet be within reach of the player were it not for the presence of the case doors, which, when open, effectively block the player's access to the knobs. Their manipulation during play must therefore have been effected by an assistant, perhaps being the person charged with operating the rear-mounted bellows. Such a person would have needed a good understanding of the ebb and flow of the music to operate the bellows effectively and also to manipulate the stop knobs at the right moment. Was this person was a musician or a specially trained servant, and if the latter, did the doors fulfill a secondary purpose of screening the activity of the assistant from the gaze of the gentlemanly L'Estranges on the other side?

¹²⁹ Ibid. p.136

¹³⁰ Peter Holman, *Life after Death: the Viola da Gamba in Britain from Purcell to Dolmetsch* (Woodbridge: Boydell & Brewer, 2010), p.67

No contemporary source provides guidance on the registration of seventeenth-century English organ music, but some empirical suggestions may be made as to how the stops might have been employed.¹³¹ The importance of the Open Diapason in complementing the timbre of viols has been noted above. It is not clear whether full-compass diapasons like that on the Smithfield organ were very common, but the other extant instruments, together with practical considerations of space, suggest that probably they were not. The treble-only Open Diapason was the more usual provision, and required the Stopped Diapason to be drawn to provide its bass. As the majority of the surviving stopped ranks are undivided, the sonority of both ranks was thus deployed in the treble.

The combination of stopped and open diapason tone was a characteristic colour of English organ music from the seventeenth to nineteenth centuries, and was especially associated with slow movements of gravity. On the consort organ, the 'stringy' harmonic content of the open rank, designed to homogenise with viols but lacking depth of tone or definition of speech, complemented the stronger fundamental and more articulated speech of the stopped rank to provide the ideal partner to the string consort. This combination would have been the ideal one to use in slow, polyphonic works such as the '*Grave Musick*' employed by Mace at his music meetings.¹³²

For melody-dominated movements, or where a treble viol required reinforcement, the addition of the treble of a 4ft Principal would provide extra support. The full compass of the Principal would suit homophonic accompaniments to the livelier dance-based movements, and it seems entirely possible that the extra brightness of the 2ft Fifteenth might also be considered. The pre-Restoration Fifteenths were often divided, perhaps indicating that they were also used in the treble-strengthening role, but later stops were of full compass. It is possible that the higher-pitched stops might have been added at points where the organ undertook its solo obbligato role,

¹³¹ For an overview of English organ registration from this period see Barbara Owen, *The Registration of Baroque Organ Music* (Bloomington: University of Indiana Press, 1997), pp.35-40. Instructions from English and continental treatises of the seventeenth century all refer to liturgical organs only.

¹³² Mace, *Musick's Monument* p.234

as in the preludes or interludes to works such as Coprario's fantasy suites, or when it took its part in supplying divisions in semi-improvised works.

It is also possible that registrations may have been based on the 4ft Principal as the lowest sounding stop. That such a practice was common on the continent is demonstrated by the number of extant 4ft-based positive organs (with no 8ft stop at all), and also by octave virginals and spinets.¹³³ There is also good evidence to suggest that the 4ft rank on contemporary harpsichords was used without the 8ft.¹³⁴ In England, the sixteenth-century church positive had been based on the Principal rank with the diapasons as a sub-unison pitch, and this approach may have persisted into the seventeenth century on the consort organ in some quarters.¹³⁵ The extant c.1600 Knole organ, for example, appears to have had two 4ft Principal stops as originally built,¹³⁶ and it is interesting to note in this context that the 1622 Hasard harpsichord also at Knole (regarded as the earliest surviving English example) also had two 4ft ranks but only one 8ft.¹³⁷ The use of a 4ft stop alone could account for the otherwise curious octave transpositions seen in some consort organ parts, such as those of Lawes and Jenkins from the L'Estrange MSS discussed in Chapter 3.6. One advantage of using the 4ft Principal was that it supplied open-pipe tone throughout the compass, unlike the treble-only Open Diapason. Unfortunately, the 4ft stops on many modern continuo organs are unsuitable for this role as they are more assertively voiced than the consort organ examples and do not balance in dynamics or tone with string ensembles.

The Staunton Harold organ, in common with several of the other pre-Restoration organs, was provided with a Twelfth, which has the function of 'binding' together the chorus by means of its extra harmonic content, but the later organs more frequently had Mixture stops, the use of which is discussed in section 5.8 below.

¹³³ Grant O'Brien, *Ruckers: A Harpsichord and Virginal Building Tradition* (Cambridge: CUP, 1990), pp.223-4. A contemporary description may be found in Michael Praetorius, 1615. *Syntagma Musicum* III (Wolfenbüttel, 1615), Chapter 38

¹³⁴ Peter Mole, 'Seventeenth-Century Harpsichords: Playing the 4ft Stop' in Andrew Woolley and Peter Kitchen (Eds.), *Interpreting Historical Keyboard Music* (Abingdon, Ashgate, 2016) and R.T. Shann, 'Flemish Transposing Harpsichords – An Explanation' *GSJ* 37, 62 and 65

¹³⁵ See Dominic Gwynn, 'Lost Worlds: The English Organ before 1700' in Thomas Donahue (Ed.), *Music and its Questions: Essays in Honor of Peter Williams* (Richmond, Virginia: OHIS Press, 2007)

¹³⁶ Martin Renshaw, 'The Organ at Knole, its History and Significance' *Organists' Review* December 2015, 13

¹³⁷ John Koster, 'The Importance of the Early English Harpsichord' *GSJ* 33, 63

5.4.5 The art of organ blowing

Due to the stresses placed on the mechanisms and the fragility of leather parts, none of the extant organs retains anything but a vestige of its original blowing apparatus. All have been replaced at least once by systems of later design. Due to the very precise nature of the pipe voicing, however, the new systems of necessity replicate the wind pressure and volume of supply of their predecessors. The early table organs retain evidence of external pairs of single-fold bellows, which would have been placed to the rear or side of the organ and connected to it by a wooden wind trunk. The Smithfield organ had a single pair, whereas the Dean Bargrave instrument appears to have had two. An assistant would have raised the individual leaves of the bellows alternately, and allowed them to fall under gravity to provide air for the windchest. The later cabinet organs had multifold bellows mounted inside the lower half of the case, with cords or straps connecting to the leaves.¹³⁸ In some cases a mechanism operated by the player via a pedal has been installed, allowing use without reliance on another person. It is not certain that this system was common in the seventeenth century, although Thomas Mace's 'Table Organ' of the 1670s had such a device,¹³⁹ and the Compton Wynnyates organ retains evidence of a dual hand or foot operated system.¹⁴⁰ Several of the organs now have electric fan blowers. The provision of external bellows on the early organs, and of an organ blower in the later ones, had to be accounted for in the spatial layout of consorts. The rear-mounted position of the Smithfield bellows would have required the instrument to stand away from the wall, unlike the later instruments. The Compton Wynnyates bellows appear to have been constructed so that the hand lever could be operated from either side, which would have increased the flexibility of its use in different locations.

The involvement of a second person in the operation of the organ creates a dynamic which is a largely lost aspect of performance practice today, and even the operation of the bellows by the player himself involves skills that are not often required in the age of electricity. Just as a singer needs to co-ordinate breathing to accommodate the phrasing of the music, so the organ blower needs carefully to anticipate the points at

¹³⁸ Collier and Gwynn, *The 1630 Consort Organ* p.112

¹³⁹ Mace, *Musick's Monument* p.244

¹⁴⁰ Dominic Gwynn and Martin Goetze, *Compton Wynnyates: Late Seventeenth Century Chamber Organ* (Welbeck: Harley Foundation, 2005), p.15

which the bellows are refilled. Although the wind systems are contrived such that ‘the blast is always the same, which is a great perfection to the sound of the flutes there’ as North observed,¹⁴¹ there is nevertheless a tendency for the dynamics produced by the pipes to be subtly louder when the bellows are full which can be used to expressive effect. It is also possible to effect a small diminuendo at the end of phrases or movements by careful timing of the bellows to run towards empty at that point: such a technique may also be linked to the use of reduced textures in organ chords at the conclusion of pieces to reflect the diminuendo in the strings, as discussed in Chapter 3.8.

Conversely it is possible to effect a small *sforzando* by a short additional pressure on the bellows, either by hand or by foot. Again, there is no direct evidence to suggest that such a technique was employed, but the ease and effectiveness with which it may be done means that the possibility remains open. The presence of tremulants on consort organs, as considered in Chapter 3.9, remains uncertain, but it is also possible to recreate the effect of such a device by appropriate manipulation of the bellows. Christophe Deslignes’s research has pointed to similar techniques being employed in the late medieval organ¹⁴² and William McVicker’s exploration of eighteenth-century English organ performance practice has led him to believe that such techniques may also have been used in the later Baroque solo repertoire.¹⁴³

The ability to manipulate bellows whilst playing is a skill that is rarely required by modern organists due to the ubiquity of electric blowers on continuo organs. The lifeless, relentless flow of air provided by these devices is at odds with the ‘live’ and dynamic supply of the hand- or foot-operated systems. These enable the instrument literally to breathe in sympathy with the music, and allow the player to respond to the nuances of phrasing in a subtle and expressive way. If the organ in consort is truly to ‘acchord’ to the subtleties employed by string players, the re-introduction of mechanical blowing would therefore offer many advantages.

¹⁴¹ Wilson, *Roger North* p.233

¹⁴² Kimberly Marshall, ‘From Modules to Music: Recreating Late-Medieval Organs in the Last quarter Century’ *BIOSJ* 42, 87-8

¹⁴³ Personal conversation, 12 September 2017

5.5 The consort organ and vocal music

It is, unfortunately, beyond the brief of this study to consider the full context of the consort organ's role in the accompaniment of vocal music, and for the purposes of the present chapter the discussion will therefore be limited to the relationship between the organological nature of the instruments and the demands of domestic vocal music accompaniment. There is much work yet to be done to explore the wider role of the consort organ in secular, devotional and liturgical vocal music at the court, in choir schools and in private households.

Contemporary references to organs in seventeenth-century domestic chapels are relatively uncommon, although the compact dimensions of the consort organ would have made it suitable for such use when required. The 'one payer of little orgaynes, wth a board w^h they stand on' in the chapel recorded at Hengrave Hall in 1602¹⁴⁴ and the 'paire of organs upon a frame' in the chapel at Salisbury House in 1624¹⁴⁵ both suggest the use of small table organs of the Smithfield type. The one extant organ that can be associated with such use is the c.1600 instrument at Knole. Unlike most church organs of the late Elizabethan period, the Knole organ was pitched in C, but like the liturgical positive it was originally based on stops of 4ft Principal pitch rather than an 8ft diapason.¹⁴⁶ Modern practice tends to assume the use of unison pitch for keyboard accompaniment but, as noted above, the frequent provision of 4ft-based instruments in the seventeenth century demonstrates that this was not necessarily the case. In the accompaniment of choral music, where the voices themselves provide the unison pitch, a 4ft stop provides a perfectly satisfactory support, especially in the Elizabethan repertoire where solo passages for the organ rarely occur.

The frequency with which liturgical organ accompaniments written out in C are found at this period may perhaps suggest that in some instances such parts were designed to be used with C instruments like the Knole organ: as an example, John Harper has proposed that 'a 'public' context of cathedral or Chapel Royal cannot be assumed for Morley's First Service: the possibility cannot be excluded that it was

¹⁴⁴ Gage, *Hengrave* p.32

¹⁴⁵ MA MSS Box C/4 (Bourchier accounts (London))

¹⁴⁶ Renshaw, *The Organ at Knole* p.13

written originally for service in a household, and that an instrumental consort was used rather than (or perhaps with support from) an organ'.¹⁴⁷ Such resources were, as we have seen, readily available within the Sackville musical establishment in the 1600s.

Whereas organs in domestic chapels were comparatively uncommon, there are numerous references to the use of instruments in the singing of both devotional and secular vocal repertoire in domestic apartments, as well as in more public contexts such as music meetings and the Oxford Music School.¹⁴⁸ At Kirtling Hall, for example, 'on Sunday night, voices to the organ were a constant practice',¹⁴⁹ and much of the Norths' repertoire is extant in the Oxford Music School manuscripts, where it was used with the Worcester organ. The custom of the Ferrars of Little Gidding was to gather each morning in the great chamber for 'a short Hymne sung, and the organ playing to it'.¹⁵⁰ There is little evidence for vocal music-making within the L'Estrange household, although Jenkins wrote at least two songs whilst at Hunstanton and had composed a body of devotional works immediately prior to his arrival there.¹⁵¹ The only vocal source from Staunton Harold is US-NYp Drexel MS4041 (the 'Earl Ferrers MS'), which contains 150 solo songs and part songs mainly from theatrical works,¹⁵² but the organ's removal to the estate church in 1663 suggests that it would have accompanied vocal repertoire. It is probable that organs were also used in solo vocal as well as choral works.

The Oxford sources provide a wealth of information regarding the vocal music employed at the Music School, which included madrigals and other secular part

¹⁴⁷ John Harper, 'Continuity, Discontinuity, Fragments and Connections: The Organ in Church c1500-1640' in Emma Hornby and David Maw (Eds.), *Essays on the History of English Music: Sources, Style, Performance, Historiography* (Woodbridge: Boydell Press, 2010), pp.215-31

¹⁴⁸ See Susan Treacy, *English Devotional Song of the Seventeenth Century in Printed Collections from 1638 to 1693: A Study of Music and Culture* Unpublished PhD thesis, North Texas State University, 1986

¹⁴⁹ Wilson, *Roger North* p.10

¹⁵⁰ Bernard Blackstone (Ed.), *The Ferrar Papers* (Cambridge: CUP, 1938), p.44

¹⁵¹ Kathryn Smith, 'To Glorify Your Choir': *The Context of Jenkins's Sacred Vocal Music* in Ashbee and Holman, *John Jenkins*

¹⁵² See John Cutts, 'Drexel Manuscript 4041 Earl Ferrers' MS, A Treasure-House of Early 17th-Century Song and Dramatic Lyric' *Musica Disciplina* 18, 151-202

songs as well as devotional settings, a number of which are specified 'to ye organ'.¹⁵³ No doubt the Oxford practice was similar to Mace's at Cambridge where

after such *Instrumental Musick* was over, we did *Conclude All*, with some *Vocal Musick*, (to the *Organ*, or (for want of *That*), to the *Theorboe*).

The *Best* which we did ever *Esteem*, were *Those Things* which were *most Solemn*, and *Divine*, some of which I will (for their *Eminency*) Name, viz. Mr. *Deering's Gloria Patri*, and other of *His Latin Songs*; (now lately *Collected, and Printed*, by Mr. *Playford*, (a very *Laudable, and Thank-worthy Work*) besides many other of the *like Nature, Latin and English*, by most of the above-named *Authors*, and *Others*, *Wonderfully Rare, Sublime, and Divine*, beyond all Expression.¹⁵⁴

Dering's Latin motets, scored for one to three voices and a thorough bass, were evidently very popular: they are also mentioned by Pepys,¹⁵⁵ and were even performed for Cromwell in the Cockpit theatre at Whitehall during the Interregnum.¹⁵⁶ Although many were probably composed for the Convent of Our Lady of the Assumption in Brussels where Dering served as organist, Jonathan Wainwright believes that at least some were written for the private chapel of Queen Henrietta Maria at Denmark House where, as discussed in chapter 2.2, there was a consort organ for the accompaniment of the choir. Their publication in three volumes by Playford between 1652 and 1674 assisted their dissemination and they were probably a staple of the devotional music making in many households.¹⁵⁷

The Worcester organ is recorded as being used in a number of specific vocal performances at Oxford, such as that in September 1685 when it was moved to Jesus College to accompany the choristers of Christ Church at the funeral of Sir Leoline Jenkyns,¹⁵⁸ and in May 1669 Wood's diary recorded a performance in honour of a visit by Cosimo de Medici when 'the last School they went into was the Musick where they had a consort of the organ and a set of viols, and a Latin song.'¹⁵⁹ On 16 November 1665 the Music School saw a performance of Locke's motet *Ad te levavi*

¹⁵³ For a full description see Crum, *Early Lists* and Ford, *The Oxford Music School*

¹⁵⁴ Mace, *Musick's Monument* p.235

¹⁵⁵ Robert Latham and William Matthews (Eds.), *The Diary of Samuel Pepys* 11 vols. (New York: Harper Collins, 2010), 22 November, 1662

¹⁵⁶ Hulse, Lynn 'John Hingeston', *Chelys* 12, 28

¹⁵⁷ For a modern edition, see Jonathan Wainwright, *Richard Dering: Motets for One, Two or Three Voices and Basso Continuo* MB 87 (London: Stainer & Bell, 2008)

¹⁵⁸ Kiessling, *Anthony Wood*, pp.161-2

¹⁵⁹ Ob. Wood MS D 19 (3) fol. 24. (Diary of Anthony Wood)

oculos meos, which contained four bass parts: two unfigured basses, one two-stave bass, partially-figured and with instrumental and vocal cues in the right hand, and a single-stave, partially-figured part. It may be supposed that the last two of these were performed respectively on the organ and a plucked string instrument.¹⁶⁰ Similar works were performed at the Music School for concerts and degree ceremonies until the construction of the Sheldonian Theatre where a large liturgical-style organ by Bernard Smith was installed in 1671.¹⁶¹

The interchangeability of vocal and instrumental resources seen in the polyphonic consort works from early in the century had already required the consort organ to work with both voices and strings, and this continued in the varied repertoire practised in domestic households and the various music meetings.¹⁶² The fact that consort organ voicing was specifically designed to blend with strings has been discussed elsewhere above, and the distinctive tone colour of wooden consort pipework raises the question as to whether the tone of singers was modulated in any comparable way.

There is evidence that where vocal music was an especially important ingredient in an organ's repertoire, some specific provision was made in its specification. One such feature is the presence of a 4ft Flute. The organ built by Loosemore for Exeter Cathedral chorister school in 1665¹⁶³ had such a stop, as does the extant Compton Wynyates instrument. Their provision is a parallel to the appearance of the various 'anthem' and flute stops recorded on contemporary liturgical chair organs (as discussed in Chapter 1.1), which were often wooden ranks associated with vocal accompaniment. When John Aubrey was contemplating setting up a school in his essay *Idea of Education* (1669) he sought to have 'a small organ of these three stops, *silicet* the diapason, the flute and the fifteenth; they follow one another and are stops enough for a chamber organ, and to sing to.'¹⁶⁴

¹⁶⁰ Holman, *Life after Death* pp.41-2

¹⁶¹ Bicknell, *History* p.127

¹⁶² The practice is examined in Craig Monson, *Voices and Viols in England, 1600-1650: the Sources and the Music* (Ann Arbor: UMI Research Press, 1982)

¹⁶³ Edward Hopkins and Edward Rimbault, *The Organ: Its History and Construction* (London: Robert Cocks & Co., 1855), pp.51-2

¹⁶⁴ J.E. Stephens (Ed.), *Aubrey on Education: A Hitherto Unpublished Manuscript by the Author of Brief Lives* (London: Routledge and Kegan Paul, 1972), p.43

The alterations made to the Staunton Harold organ illustrate the approach to instruments associated with vocal accompaniment. The organ has been dated to c.1630,¹⁶⁵ and given that the chapel within the main body of the house appears to have been out of use until the time of a refurbishment recorded in the household accounts in 1662, it was most probably originally intended for secular purposes in the domestic apartments.¹⁶⁶ There it was associated with the contemporary Shirley partbooks (BM Add. MSS 40657-61), compiled for the household by the young William Lawes,¹⁶⁷ of which 54 of the 105 works have an organ part in concordant sources. The repertoire suggests an ambitious secular instrumental musical establishment was in place at the hall. In 1663, however, the organ was moved to the estate church, built in 1653, where it may currently be seen on the west gallery (Fig. 5.4).

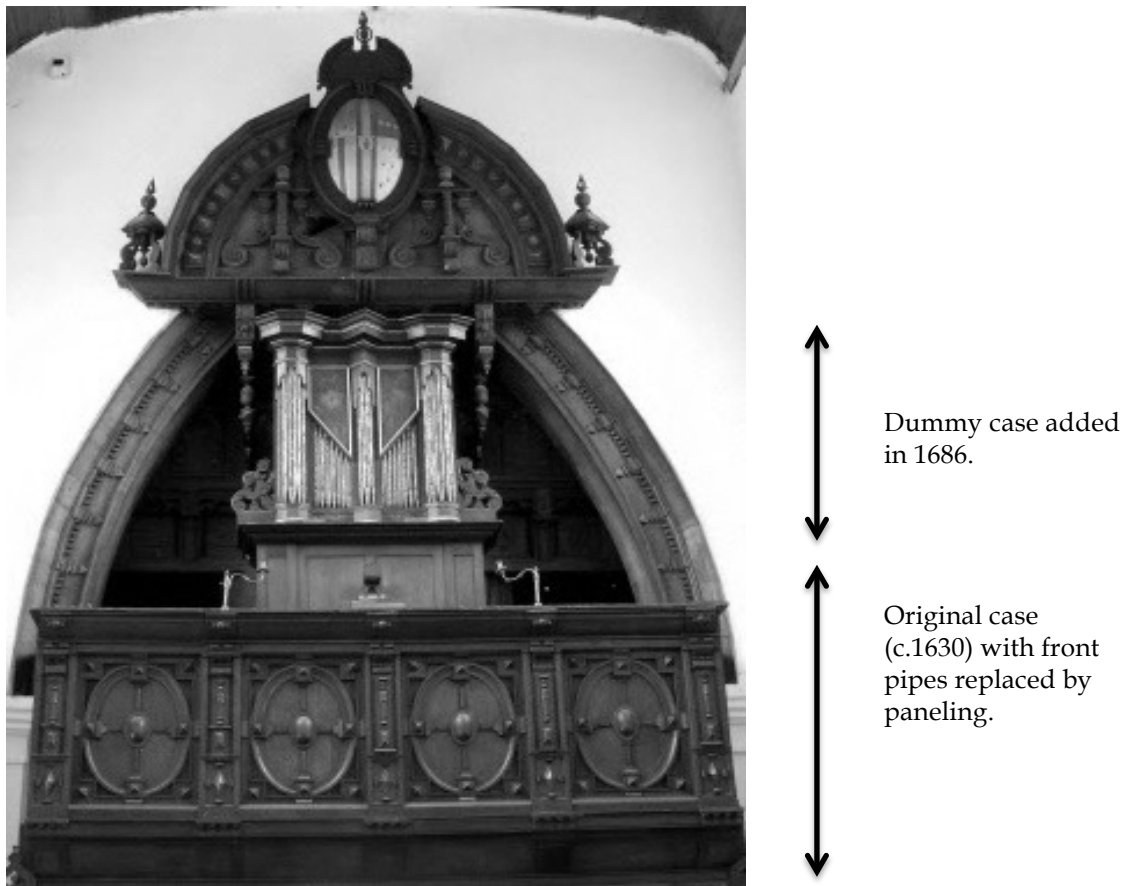


Fig.5.4: Staunton Harold church, west gallery (photo: the author)

¹⁶⁵ Dominic Gwynn, *The Organ in the Church at Staunton Harold, Leicestershire* (Welbeck: The Harley Foundation, 1998), p.2

¹⁶⁶ LRO 6D61 (Shirley account book)

¹⁶⁷ For an analysis of the Shirley partbooks see John Cunningham, *The Consort Music of William Lawes 1602-1645* (Woodbridge: Boydell and Brewer, 2010), pp.31-47

The alterations made to the organ at this time are informative in demonstrating the requirements of an organ intended for vocal accompaniment. (Table 5.13). Most notably, they included the conversion of the original Stopped Diapason into a 4ft Flute. The provision of a new, wider-scaled Stopped Diapason and Twelfth was doubtless a response to the larger space the organ was required to fill. A new dummy church-style front was placed on the roof of the original case, the secular front of which was initially hidden from below by the gallery front, and subsequently removed. The original stop action was also replaced with church-style knobs placed either side of the keyboard, rather than on the case sides as before.

Table 5.13: The Staunton Harold organ

?Christianus Smith c.1630; rebuilt Anon. 1686; enlarged Anon. c.1800; Lloyd & Co 1869

c.1630 Specification	1686 Specification	Current Specification (1869)
Stopped Diapason	Stopped Diapason (new)	Stopped Diapason [8 wood]
Open Diapason treble	Flute (St. Diap. remade)	Open Diapason treble [8 wood]
Principal	Open Diapason treble	Principal [4 wood]
Twelfth	Principal	
Fifteenth	Twelfth (new)	Fifteenth [2 wood, metal treble]
	Fifteenth	Sesquialtera/Cornet [III c.1800]
Compass: GG, AA, C, D-c ³		GG, C-c ³

During the Interregnum, Staunton Harold became a refuge for priests who had either lost or left their livings and the church served as a centre of Laudian Anglicanism, but there is no indication as to what repertoire the organ served.¹⁶⁸

It is likely that consort organ Mixture stops found a role in accompanying voices, making the instrument 'sprightly lusty and strong', as Mace described his Table Organ, 'like a Little Church Organ'.¹⁶⁹ The specification of the sole extant two-manual consort organ from the Dallam/Harris school, now at Compton Wynyates, Northamptonshire, illuminates this aspect further (Table 5.14).¹⁷⁰

¹⁶⁸ Andrew Lacy, 'Sir Robert Shirley and the English Revolution in Leicestershire' *Transactions of the Leicestershire Archaeological and Historical Society* (LAHS) 58, 32-3

¹⁶⁹ Mace, *Musick's Monument* p.244

¹⁷⁰ Gwynn and Goetze, *Compton Wynyates* pp.3-5

Table 5.14: The Compton Wynyates organ

Dallam/Harris school c.1670

Specification (stop labels modern)

Lower Manual	Stopped Diapason [wood] Open Diapason [wood] Principal [wood]	Upper Manual	Stopped Diapason [wood, from lower] Flute [stopped metal] Fifteenth [metal] Mixture [metal, 2 ranks]
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Manual coupler

Compass: C AA D-c³

The lower manual contains a typical consort organ provision of 8ft Diapasons and 4ft Principal, all of wood, ideal for use with instruments. The upper manual by contrast contains metal pipework in the manner of a church organ, including a 4ft flute and Mixture, and these features together may indicate the intention for this section to be used mainly with voices. This arrangement is unique and it is not known whether the Dallams or others made any other similar instruments, but the flexibility of the specification for consort music (lower manual), vocal music (upper manual) and solo repertoire (either manual or both coupled) is readily apparent. Because the very small mixture pipes are difficult to voice, especially when made of wood, and are vulnerable to loss or damage, most stops of this kind have undergone changes or complete replacement. It is possible, however, to recover some information even if details such as breaks higher in the compass have been obscured over time (Table 5.15).

Table 5.15: consort organ mixtures

Canons Ashby c.1650	divided, II ranks, remodelled C19, original label 'SESQ'
Thornton c.1660	divided, II ranks, now using C18 metal pipes
Compton Wynyates c.1670	II ranks, modern disposition reusing original metal pipes
Mander c.1660	12.17, now using C19 metal pipes
Nottingham c.1680	treble, 12.17, modern reconstruction with wood pipes
RCM 1702	treble, 12.15

It would seem that mixtures incorporating a 17th rank for part, if not the whole, of the compass were employed. These correspond to the Sesquialter and Cornet stops found on liturgical instruments in which the contribution of the 12th and 17th ranks reinforced the 2nd and 4th harmonics of the fundamental 8ft pitch, strengthening the chorus and adding piquancy of tone colour. Whilst these stops had a role to play in forming a solo sonority for use in the solo repertoire in works such as the early

double voluntaries and the later Cornet voluntaries, they were also employed in the liturgical organ chorus. In the consort organ, the 12th and 17th ranks reinforced the prominent 2nd and 4th harmonics present in Stopped Diapason tone, and it seems possible that one of their functions therefore was to help create the impression of open 8ft tone in conjunction with the Principal. This would usefully strengthen the bass where a treble-only Open Diapason was present, or compensate for the absence of an 8ft open stop. Of the seven sampled extant organs with Open Diapasons, five also have a Mixture (the exceptions being the early Smithfield and Staunton Harold instruments), and of the twelve organs built after 1640, all but two have such a stop. Like the many Cimbells¹⁷¹ encountered in sixteenth century secular organs, the frequency of the mixture in the compact and minimally specified consort organs demonstrates that their provision was clearly considered important, and that they must therefore have been used with some regularity.

Given the similarities between the organ parts of secular devotional vocal repertoire and contemporary works for liturgical use, the demands made on the consort organ for vocal accompaniment were similar in many respects to those made on the church organ. The differences in accompanimental style manifest themselves within such organ parts mainly in the variety of textures employed, and these have close parallels in consort keyboard parts as discussed in Chapter 3.¹⁷² There are, however, registrational implications enshrined within vocal accompaniments, which are mainly related to the changes in the number of voices employed at any moment.¹⁷³ The most significant of these is found in the repertoire contrasting verse and chorus sections where there was a need to alternate between fuller registrations for the plenum and lesser combinations for solo voices. This is especially pertinent for the consort organ given that much of the verse repertoire was primarily composed for domestic use, even if it was subsequently available in versions for church use.¹⁷⁴ On the church organ, registrational contrast within movements was achieved mainly by the alternation between the Great and Chair divisions, but on the consort organ the

¹⁷¹ The majority of the organs in the 1547 Henry VIII inventory contain such high-pitched stops: see Chapter 1.1

¹⁷² See Herissone, *To Fill, forbear, or adorne* pp.62-7

¹⁷³ Herissone does not explore the question of liturgical registration, despite a brief discussion on pp.45-7.

¹⁷⁴ For an overview of the repertoire, see Peter Phillips, *English Sacred Music 1549-1649* (Oxford: Gimell, 1991), especially chapters 3 and 4

ability to change registration rapidly with the aid of closely-positioned stop levers enabled similar contrasts to be effected on a single manual.

The question of whether the organ was used conjointly with both viols and voices in domestic devotional music requires more research. Much of the verse anthem repertoire enjoyed currency in both the church and the home, with organ scores of works originally conceived for viols existing among the sources of several composers.¹⁷⁵ The similarity between, for example, some of the organ scores to Gibbons's verse anthems (which are clearly derived from (often lost) instrumental parts)¹⁷⁶ and the scores to his contemporary instrumental consort works suggests that the arguments for including an organ with viols in domestic contexts holds good in both areas of repertoire. A similar case might also be made with respect to consort songs where the organ may have either supported or stood-in for the viols.¹⁷⁷ Several keyboard versions of such works survive, such as Tallis's *When shall my sorrowful sighing* in the Mulliner Book.¹⁷⁸

In terms of modern performance practice, the evidence for the use of the consort organ in seventeenth-century devotional vocal music principally intended for domestic consumption challenges the widespread employment of church organs or modern church-style chamber instruments in the realisation of such repertoire in the present-day church or concert hall. The consort organ is a more appropriate partner than the church organ to small ensembles of voices (with or without viols) both in terms of its dynamic balance and tonal blend. Whilst instrumental ensembles together with the church organ were recorded in a few liturgical contexts, such as at Exeter Cathedral in the 1630s, they were very much the exception and appear to have been used infrequently.¹⁷⁹ In the one specialised context where such practices were regularly employed, namely the post-Restoration court where strings were used in the liturgy in Whitehall chapel and the Catholic royal chapels, it may be noted that consort organs were present as well as the larger liturgical organs. Thus

¹⁷⁵ John Morehen, 'The English Consort and Verse Anthems' *EM* 6:3, 381-4

¹⁷⁶ Phillips, *English Sacred Music* pp.120-45

¹⁷⁷ See Philip Brett, 'The English Consort Song 1570-1625' *Proceedings of the RMA* 88th session, 80

¹⁷⁸ See Denis Stevens, *The Mulliner Book: A Commentary* (London: Stainer & Bell, 1952), p.54

¹⁷⁹ Ian Payne, *The Provision and Practice of Sacred Music at Cambridge Colleges and Selected Cathedrals, c.1547-c.1646* (New York: Garland, 1993), p.151

in Denmark House chapel Locke had his 'small chamber organ by',¹⁸⁰ and similar provision was made for the polychoral works with instrumental forces introduced by Innocenzo Fede at Whitehall's 'Popish' chapel in the 1670s.¹⁸¹ Similarly, in the present-day performance of the domestic devotional vocal repertoire of seventeenth-century England, the distinctive character of the consort organ provides a more appropriate (if less familiar) sound than the church or modern continuo instrument.

5.6 The consort organ and the solo repertoire

A comprehensive catalogue of the extant seventeenth-century sources for solo keyboard is found in the work of Virginia Brookes,¹⁸² and a succinct analysis of the styles represented within the organ works, viewed mainly from the perspective of the church organ, has been provided by David J Smith.¹⁸³ The following discussion therefore focuses on the practical realisation of such works specifically on the consort organ.

Unlike consort sources, solo keyboard manuscripts can rarely be associated with specific locations or instruments: whereas, in the domestic sphere, sets of consort parts were in a sense the communal property of a household or institution, solo keyboard manuscripts were usually personal compilations for a musician's own use and were thus more closely identified with the individual than with the place. This was one reason for Thurston Dart basing his classification of English keyboard sources from this period on eight categories distinguished by their use by various types of individual.¹⁸⁴ Another was that such sources often comprise a wide variety of genres and types of music: many combine obviously secular repertoire (e.g. dance-based pieces, secular song arrangements and masque tunes) with works that may also have seen service in the church, whilst others contain a mixture of music for virginals and organ, or a combination of accompaniments to consort or

¹⁸⁰ Mary Chan and Jamie Kassler (Eds.), *Roger North's 'The Muscicall Grammarian' 1728* (Cambridge: CUP, 1990), p.260

¹⁸¹ Peter Leech, 'Music and Musicians in the Catholic Chapel of James II at Whitehall, 1686-1688' *EM* 39:3, 393-6

¹⁸² Virginia Brookes, *British Keyboard Music to c.1660* (Oxford: OUP, 1996)

¹⁸³ Smith, *Continuity, Change*

¹⁸⁴ Thurston Dart, 'An Early Seventeenth-Century Book of English Organ Music for the Roman Rite' *ML* 52.1, 27-8

devotional repertoire alongside solo works. It is often difficult to draw clear distinctions between liturgical and secular organ writing, and there was often considerable stylistic crossover between music for virginals and organ, especially prior to the Restoration.¹⁸⁵ The cumulative result of all these factors was that, in practice, the consort organ found itself the vehicle for the playing of solo repertoire that included much music written for the church organ and the virginals, and there remains scope for further work to see if it is possible to identify a specifically secular English organ style.

One possible avenue of research in this area may lie in the tessitura of keyboard music. The usual keyboard compass of pre-Restoration church organs was C-c³ or d³,¹⁸⁶ but the provision of the low AA, played from the C# key, was unusual until after the Restoration.¹⁸⁷ The typical consort organ compass of C AA D-c³ is seen from 1630 onwards in the extant consort organs, and AA is found even earlier in several of Orlando Gibbons's organ works, such as the *Fantazia of foure* parts of which the earliest extant version, a reworking for virginals published in *Parthenia* (1612), appears to be based on an even earlier organ source.¹⁸⁸ Given that English virginals typically had a short octave compass of C F D G E-c³,¹⁸⁹ the virginal repertoire, together with all works written for the single-manual organ, is therefore readily playable on the consort organ.

Registration indications in seventeenth-century English organ music are practically non-existent prior to the Restoration, and rare after it. There is, additionally, no English treatise mentioning registration until the mid-eighteenth century.¹⁹⁰ The most informative contemporary sources in this regard are Blow's later works, which include directions such as 'Ecco organ', 'soft organ', 'loud' and 'Cornett'.¹⁹¹ Otherwise, registrational practices have to be inferred indirectly in three possible ways: firstly, by extrapolation back from early eighteenth-century sources, where

¹⁸⁵ For an overview, see John Caldwell, *English Keyboard Music Before the Nineteenth Century* (Oxford: Blackwell, 1973) or Alexander Silbiger, *Keyboard Music before 1700* (New York: Routledge, 2004), pp.23-89

¹⁸⁶ Bicknell, *History* p.79

¹⁸⁷ *Ibid.* p.115

¹⁸⁸ See Gerald Hendrie, (Ed.), *Orlando Gibbons: Keyboard Music* MB 20 3rd ed. (London: Stainer & Bell, 2010), p.102

¹⁸⁹ Plucked string keyboard compass is discussed in Koster, *The Early English Harpsichord*

¹⁹⁰ Johnson, *Historical Organ Techniques* pp.19-24

¹⁹¹ Mp MS BRm370Bp35 (a Purcell MS)

directions for solo stops (Cornet, Trumpet) contrast with indications for various two-handed registrations ('Gt: organ', 'Diapasons', 'Eccho');¹⁹² secondly by referring to much later eighteenth-century English organ treatises;¹⁹³ and thirdly, given the similarities in specification and keyboard style between English and French organs and organ music, especially after the Restoration, by consulting contemporary French practice.¹⁹⁴ None gives a wholly satisfactory result, and translating such practices on to the economically-specified consort organ requires some adaptation.

The characteristic English 'Diapasons' effect of both Open and Stopped Diapasons sounding together can only be achieved on consort organs that have both stops, and even then the effect is only possible in the upper half of the keyboard with a treble compass Open Diapason. One solution might be to add the Principal to produce a more homogenous open-pipe sound across the keyboard. Later English treatises discouraged the use of one diapason without the other, but this was unavoidable on many consort organs. For full 'Great organ' registrations, the use of the 8ft, 4ft and 2ft stops, together with the Mixture when present, produces a suitably brightly-toned plenum, if on a small scale. 'Gapped' registrations with an intervening pitch missing, e.g. 8ft with 2ft, do not appear in English treatises until the late eighteenth century and were probably not part of the seventeenth-century tonal palette, but it is impossible to discount them entirely.¹⁹⁵ Changes of registration during movements are not generally found in English church organ music of this period, and where contrasts of dynamic were required this was achieved on two-manual organs by alternating between the Great and Chaire divisions. The consort organ can replicate this by the addition and subtraction of stops, which can be done relatively quickly and smoothly due to the proximity of the stop levers to the keyboard.

Changes of dynamic can also be used to enliven secular dance-based works at repeats or at the start of new sections. Whilst virginals had only one rank of strings, and contrasts were therefore achieved through textural changes, the organ's tonal palette could be used to add colour and contrast. In some works for the virginal

¹⁹² These examples from Cu EL MSS 2 and 4

¹⁹³ e.g. John Marsh, *Eighteen Voluntaries for the Organ... To which is prefix'd an Explanation of the Different Stops* (London: Bland, 1791)

¹⁹⁴ For a discussion of French influence on the English organ see Bicknell, *History* pp.91-103

¹⁹⁵ The earliest example dating from 1766, see Johnson, *Historical Organ Techniques* p.16

there is a textural gap between the right-hand melody and left-hand accompaniment, and this may have prompted the use of the divided stops when played on the organ, provided that one or the other hand did not stray beyond the dividing point. Most of the later seventeenth-century church organ works for a solo stop with contrasted accompaniment were intended for the double organ and are problematical on the consort organ because the hands cross the dividing point. For the same reason, the double voluntary, with its wide-ranging solos in both hands, cannot be played on a single manual. The existence of divided consort organ stops cannot be explained adequately by means of the solo organ repertoire, and their provision appears to have been intended principally to enhance the organ's role in consort music.

Contemporary references to the consort organ as a solo instrument are infrequent, although Roger North wrote passionately about the 'wonderful, I had almost say'd miraculous art, brought entirely by the twice five digits of a single person, sitting at his ease before the mighty machine' installed in his gallery at Rougham Hall,¹⁹⁶ and Pepys recorded several examples of voluntaries played in secular contexts, such as when 'Lord Brereton very gentilely went to the organ and played a verse very handsomely' in his apartments,¹⁹⁷ or the performance of 'a fine voluntary or two' by the organist Arundell at a London music house in 1663.¹⁹⁸

It is interesting to note that in his essay *The Excellent Art of Voluntary* North placed great emphasis on the ability of the organist to improvise: 'It may now be demanded by what inspiration any person at the same instant, without stop or hesitation, can invent, judge and execute; that is, to conceive in his mind a subject, and then to furnish a series of musick... by full imployment of the hands and fingers performe it gracefully, to the content of a learned and unlearned audience'.¹⁹⁹ The key to this skill, North revealed, is a thorough knowledge of keys, cadences, ornaments and counterpoint combined with a repertoire of pre-prepared motifs that are 'in his memory and habituall to him'.²⁰⁰ John Butt has argued that Purcell's organ works are the result of an improvisational process, and this may well account

¹⁹⁶ Wilson, *Roger North* p.139

¹⁹⁷ Pepys, *Diary* 5 January 1668

¹⁹⁸ Ibid. 21 August 1663

¹⁹⁹ Wilson *Roger North* p.140

²⁰⁰ Ibid. p.141

for some of the widely variant readings of the same works by other composers in the sources.²⁰¹ The proliferation of solo organ works after the Restoration may therefore not represent a flowering of the genre, but a shift away from an improvised to a notated repertory. It is certainly the case that improvisatory skills would assist an organist in many of the *ex tempore* duties required in consort playing, as discussed in chapter 4.

It is clear that the *raison d'être* of the consort organ was not the rendition of solo organ music, even though it could, and undoubtedly was, often used for this purpose, especially by organists without access to a church instrument. Its primary role was as a consort instrument, and its use in the accompaniment of voices or as a vehicle for solo repertoire was very much secondary to this. It was that primary role that principally shaped its specification, tonal colour, and the provision of such devices as divided stops, thus forming the distinctive character identified in this study. This point is important to bear in mind in present-day performance, where modern organs are employed that are designed to be as adaptable to as wide a variety of demands as possible. Despite the many uses to which it was put, the consort organ was not intended to be a jack-of-all-trades, but instead the master of one.

5.7 Conclusion

The Knole, Smithfield and Staunton Harold organs are important survivals that provide invaluable evidence for the type of instruments used in consorts prior to the Restoration. They demonstrate that the quintessential features of narrow-scaled wooden pipework, flexible specifications and compact dimensions characteristic of all the extant instruments were established early in the consort organ's development. The post-Restoration instruments represent the final stage of the development of the consort organ before its popularity began to wane in favour of the harpsichord; they still retain many features traceable to the early 1600s, but also illustrate ways in which the influence of composers, players and contexts prompted builders to adapt instruments to new circumstances in a gradual process of evolution. Taken together, the extant organs provide good evidence for the

²⁰¹ John Butt, 'Purcell's organ music: a tercentenary tribute' *RCOJ* 3, 51-69

demonstrable links between organology, repertoire, performing contexts and performance practice.

Considering these organs in relation to their original contexts and repertoire reveals a number of important points for performance practice that contradicts present-day approaches. Perhaps the most significant is the evidence for high pitch in all of the extant organs, with a trend rising gradually from about a440 in around 1630 to approximately a485 by the end of the century, with several of the individual organs somewhat higher even than this. Most notably, none of the organs is pitched as low as the widely used standard of a415 employed today.

Secondly, the evidence of the harmonically-adventurous repertoire composed for Hunstanton Hall and elsewhere, considered in combination with the historiological evidence for tuning, points towards the contemporary employment of flexible temperaments, possibly even approaching equal temperament, in many of the organs. These contrast with the more unequal and characterful temperaments, often derived from eighteenth-century continental formulae, that are often used on continuo organs today.

Thirdly, the distinctive narrow-scaled open wooden pipes, voiced specifically to blend with strings and available at three or more pitches, combined with stop controls positioned conveniently to hand adjacent to the keyboard, allowed a flexibility of registration that enabled the organ to take its full part in 'humouring' the music through dynamic and tonal contrasts. The provision of divided stops enhanced the possibilities for tonal variety yet further, and enabled the organ to provide varying levels of lead or support to the ensemble, depending on the requirements of the musical texture. In this regard, the provision of the open 8ft diapason tone seen at Hunstanton, Staunton Harold and in many of the other extant organs was a quintessential tonal feature that was at the heart of the consort organ's ability to 'acchord' with the string ensemble. The mild voicing of the stops of all pitches allowed their full use without overwhelming the string ensemble.

Fourthly, the use of manual blowing mechanisms, now an almost lost art, allowed life to be breathed into the music in a way that enabled the organ to reflect the ebb

and flow characteristic of the bowing of stringed instruments, thus permitting a further dimension of expression and interpretation that is largely unavailable today.

The seventeenth-century English consort organ was a distinctive and finely honed instrument carefully developed to execute its particular role in the repertoire. It was employed in a wide variety of contexts ranging from the rarified privacy of the court to the rowdy public rooms of the tavern, but most notably in the rich repertoire for domestic string chamber consorts, in much of which it was regarded as an essential constituent of the music. Its tonal and organological qualities had no direct equivalent in contemporary European traditions, and, until continental continuo practices were established in post-Restoration England, its musical use was similarly distinct. It represented an integral and quintessential feature of English instrumental consort repertoire for much of the century.

The role of the organist was similarly specialised, transcending the literal rendition of a part to encompass a diverse range of skills that are now rarely called for in modern performance. Among them were the realisation of organ parts from compressed or open scores, or figured and unfigured thorough-basses; the filling-out of textures; the improvisation of divisions, preludes and interludes; the extemporisation of contrapuntal inner parts from given cues; the addition of appropriate ornamentation; and the realisation of the expressive 'affection' of the music through skillful manipulation of the instrument's resources. Additionally, as musician-in-residence, tutor, scribe, technician and director of the ensemble, the domestic organist fulfilled a complex role that, in many contexts, required a set of social and personal skills that extended well beyond the merely musical.

Today, too few musicians are aware of the particular qualities the consort organ possessed, or of the central role it and its player fulfilled in the repertoire. The contrasts between it and the typical modern continuo organ are so numerous and significant that they discourage the player from the exploration of performance practice techniques of the period and distance the listener further from the sound-world of the seventeenth century. The organ is thereby prevented from fulfilling its vital role as the 'holding, uniting-constant friend' of the consort. It is hoped that this thesis has demonstrated that both the consort organ and the role of its player

represent aspects of performance practice that are worthy of better informed attention and further study from modern editors, players and listeners.

Appendix 1: Extant organs used for organological evidence

Date	Current Location	Original Location	Builder	Type
c.1600	The Chapel, Knole House, Kent	The Organ Room, Knole House, Kent		Chest organ, purchased by the 1 st Earl of Dorset
1629	Canterbury Cathedral Archives Office	The Deanery, Canterbury Cathedral		Table organ (remains), built for Dean Bargrave
c.1630	Smithfield, Virginia, USA	Hunstanton Hall, Norfolk	? Dallam	Table organ, purchased by the L'Estrange family
c.1630	Staunton Harold Church, Leics.	Staunton Harold Hall	?C. Smith	Cabinet organ, moved to the estate church in 1686
1643	N.P. Mander organ works, London		C. Smith	Table organ
c.1650	Canons Ashby House, Northants.		? Dallam	Cabinet organ
c.1660	N.P. Mander organ works, London	New College, Oxford	? Dallam	Cabinet organ, possibly for the Chorister School
c.1660	St Wilfred's Church, Thornton, Lincs.	? Magdalen College Choir School, Cambridge		Cabinet organ, some C18 alterations to case and compass
1665	Worcester Cathedral	Music School, Oxford University	R. Dallam	Cabinet organ, partially altered by Green c.1777
c.1670	Compton Wynyates, Warwickshire			Cabinet organ, uniquely a two-manual with some metal pipes
c.1670	Private owner, location unknown			Cabinet organ, formerly in the Finchcocks collection, sold 2016
c.1680	St George's Church, Nottingham		? Dallam	Cabinet organ
c.1680	Dingestow Court, Monmouthshire	? Forest House, Leyton, Essex		Cabinet organ
c.1690	Belchamp Walter Hall, Essex			Cabinet organ
c.1690	Russell Collection, Edinburgh		B. Smith	Cabinet organ
1702	Royal College of Music, London	Frewen House, Northiam, East Sussex	B. Smith	Cabinet organ, built for the Frewen family

Information regarding the organ builders is drawn from evidence from the following sources:

Smithfield: James Collier and Dominic Gwynn, *The 1630 Consort Organ from Hunstanton Hall, Norfolk, England now in St Luke's Smithfield, Virginia, USA* (Smithfield: Historic St Luke's Restoration, 2002)

Staunton Harold: Dominic Gwynn, *The Organ in the Church at Staunton Harold, Leicestershire* (Welbeck: Harley Foundation, 1998)

Mander I: Michael Wilson, *The Chamber Organ in Britain, 1600-1830* 2nd Ed. (Aldershot: Ashgate, 2001)

Canons Ashby: Dominic Gwynn, *Canons Ashby House Northamptonshire: Anonymous 17th Century Chamber Organ Restoration Report* (Welbeck: Harley Foundation, 1990)

Mander II: Michael Wilson, *The Chamber Organ in Britain, 1600-1830* 2nd Ed. (Aldershot: Ashgate, 2001)

Worcester: Sir John Hawkins, *A General History of the Science and Practice of Music IV* (London: Payne & Son, 1776)

Nottingham: Dominic Gwynn, *St George in the Meadows, Nottingham: Late 17th Century Chamber Organ* (Welbeck: Harley Foundation, 1994)

Russell Collection: Sidney Newman and Peter Williams, *The Russell Collection of Early Keyboard Instruments* (Edinburgh: Edinburgh University Press, 1968)

RCM: Elizabeth Wells (Ed.), *Royal College of Music Museum of Instruments Catalogue Part II: Keyboard Instruments* (London: Royal College of Music, 2000)

Appendix 2: Secular chamber organs at court

	Palace	Location	Date	Builder	Description	Source
JAMES I						
1	Whitehall	Secret Jewel House	Seen in 1598 and 1612.		'on which two may play duets'	Waldstein Diary Hentzner Itinerary
2	Whitehall	-	Seen in 1598		'made of mother-of-pearl'	Waldstein Diary
3	St James	-	Purchased in 1611	from Dordrecht		D-Kl ms68 f70
4	St James	-	1622	Cradock	for Coprario's Musicke	C6/Jas.I/1685
CHARLES I						
5	Denmark House	Privy Apartments	Pre 1629	?Burward	Tuned by Burwood 1629	Pro SC6/ChasI/1694
6	Whitehall	Privy Gallery	Pre 1640			Pro SC6/ChasI/1704
7	Denmark House	Withdrawing Room	Pre 1640	?Robert Dallam	'Newe cabinet organ' tuned 1640	Pro SC6/ChasI/1704
INTERREGNUM						
8	Hampton Court		1649 Inventory		'Paire of Portaves broke to peeces'	Millar, <i>The King's Goods</i> p.178
9	Hampton Court		1649 Inventory		'Regalls in an old case' 10s.	Ibid.
10	Hampton Court		1649 Inventory		'paire of Portaves covered with sattine' 2s.	Ibid.
11	Hampton Court	Kitchens	1649 Inventory		'pr of broken Organs' £2	Ibid. p.184
12	Wimbledon House		1649 Inventory		£6. Sold in May 1650	Ibid. p.296
13	Whitehall	Jewel House	1649 Inventory		'One old Clocke to make an Organ goe' 10s.	Ibid. p.385
14	St James	Major Legg's quarters	1649 Inventory		£20	Ibid. p.364
15	St James	Col. Hamond	1651 Inventory		£10. Sold in November 1651	Ibid. p.419

16	Denmark House		1650		Sold for £10	Needham & Webster, Somerset House
17	Whitehall	Cockpit Theatre	c.1650		Used to entertain Cromwell	Wood Diaries

CHARLES II

18	Whitehall	Privy Gallery	1660		'new Cabinet Organ'	Pro E351/546 f.25r
19	Whitehall	Chapel Royal choristers music room	1661		Seen by Pepys 1667	Pro LC 5/137 Pepys Diaries
20	St James	Chapel/Music Room/Chapel	1662		One of two organs and a hpschd. bought for £155	Pro LC 5/137 Pro LC 5/138
21	St James		Pre 1663		Moved from Richard Mico's.	Pro LC 9/375
22	St James	Music Room	Pre 1663		Brought from Whitehall	Pro LC 9/375
23	Whitehall	Privy Lodgings	1667	?Robert Dallam	Cost £40	Ob MS. Malone 44 f105v
24	Whitehall	Banqueting Hall	1674	B. Smith	Temporary hire	Pro LC 5/141

Notes

(6): Possibly the 1622 Cradock organ (4): 'Coprario's Musicke' continued to function at Whitehall after Charles I's accession.

(8-11): The condition and description of these remnants suggest that they may have been among the organs and regals listed in the 1547 Henry VIII inventory.

(13): Apparently a clockwork (barrel?) mechanism to play an organ mechanically. The Dallams are known to have made a number of these.

(14-15): These appear to have been privately owned by the individuals named rather than being part of the court instrument collection.

(16): This may represent the sale of (5) or (7).

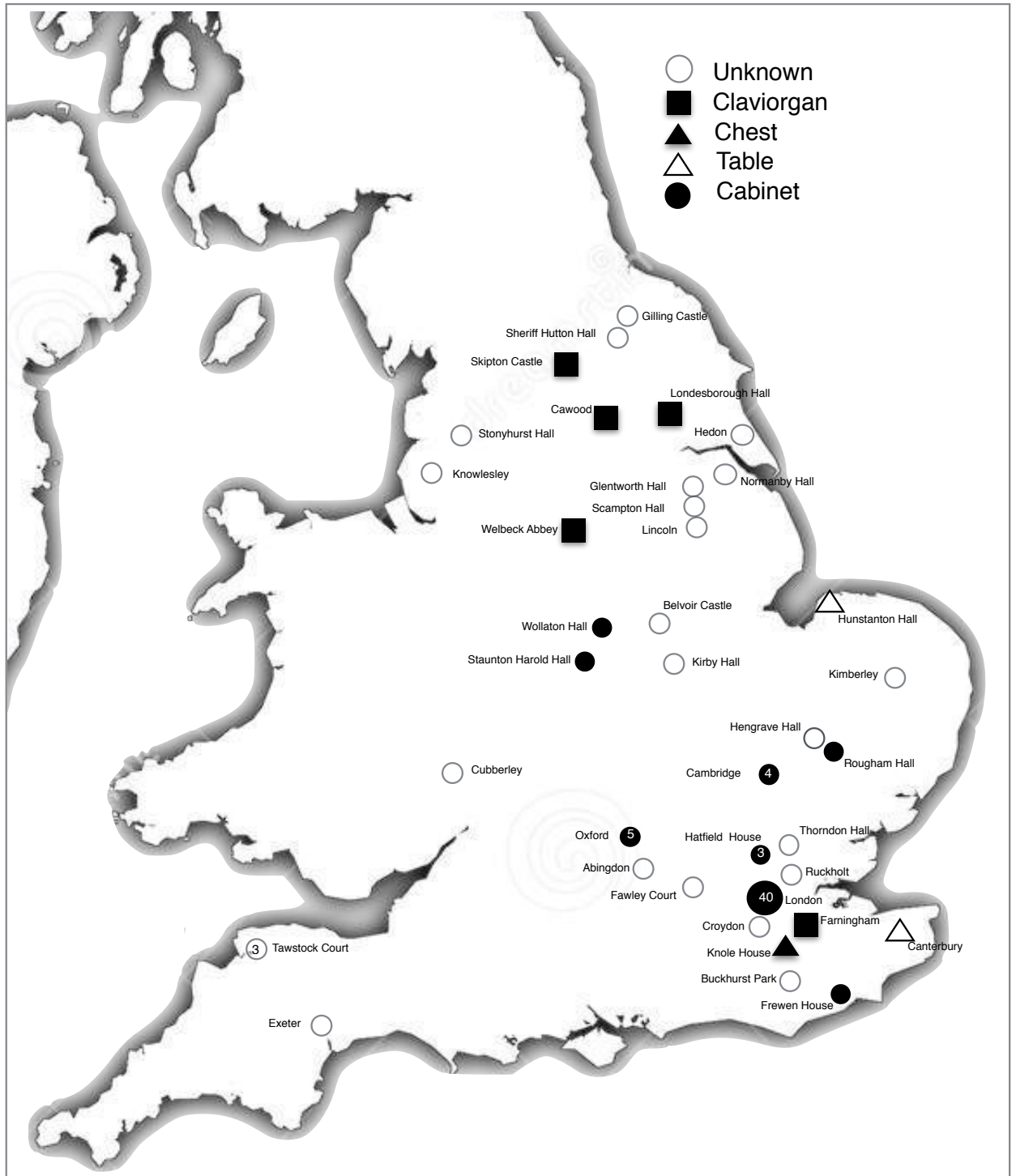
(17): Given that the entertainments presented in the Cockpit in the reign of Charles I do not appear to have employed an organ, this may represent a Whitehall or Denmark House organ moved here for the Interregnum.

(20): This organ was temporarily used in the Music Room prior to the arrival of (22).

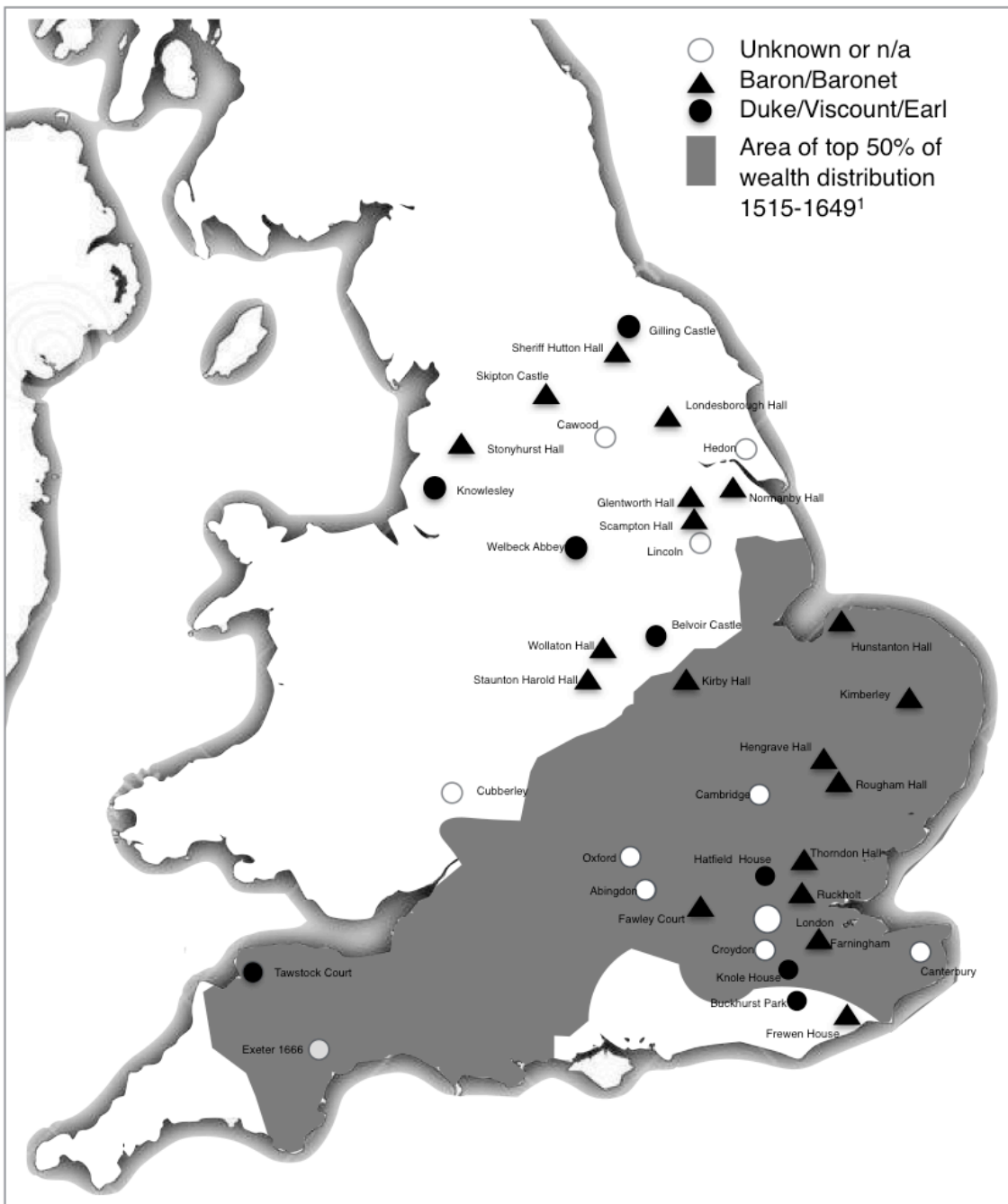
(21): This may represent a Denmark House instrument (5) or (7) that had been moved to safety by Mico during the Civil War now being returned to the court.

(22): This may represent the removal of (18) to St James's.

Appendix 3.1: Geographical distribution of secular organs

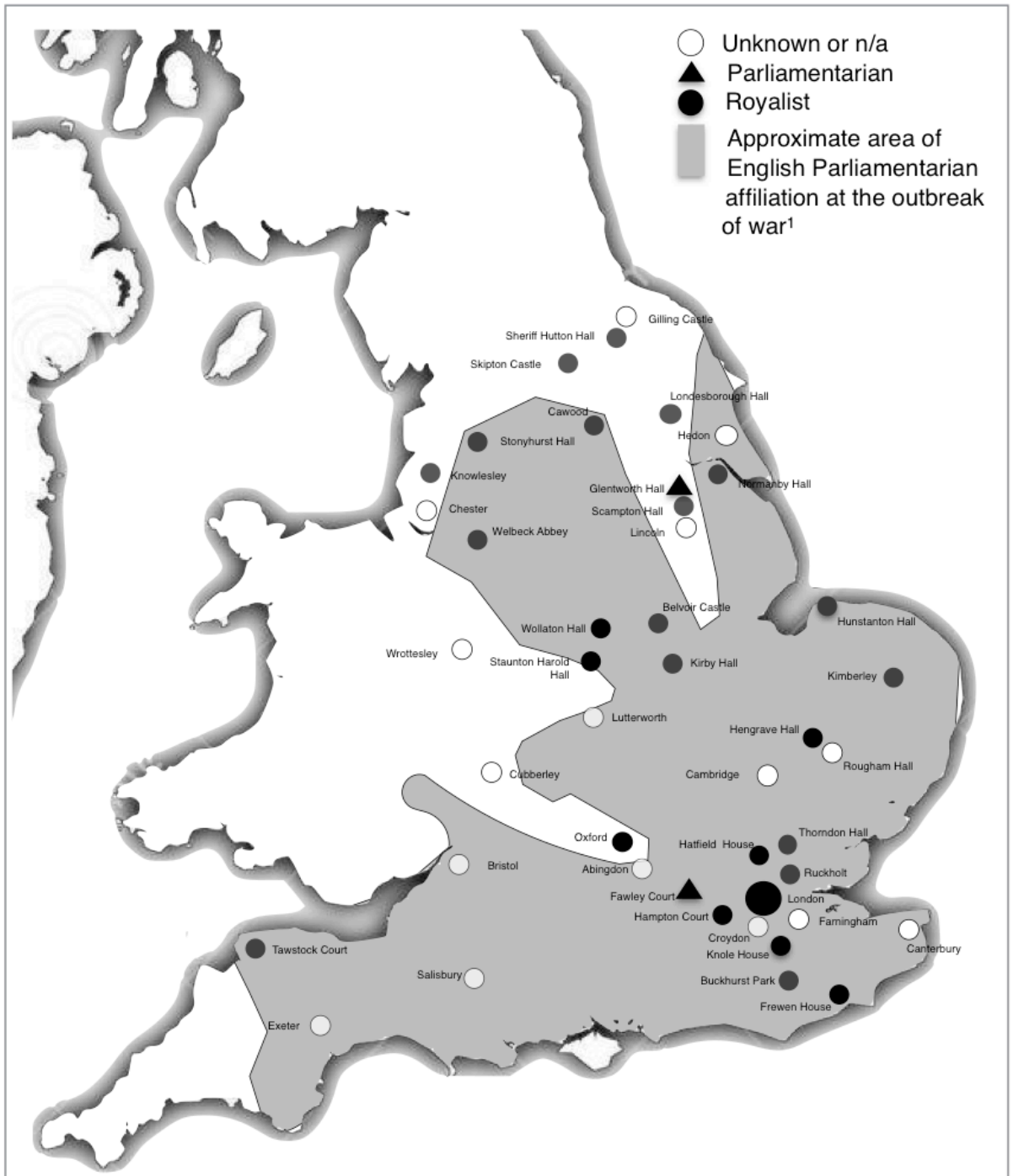


Appendix 3.2 Wealth distribution of consort organ owners



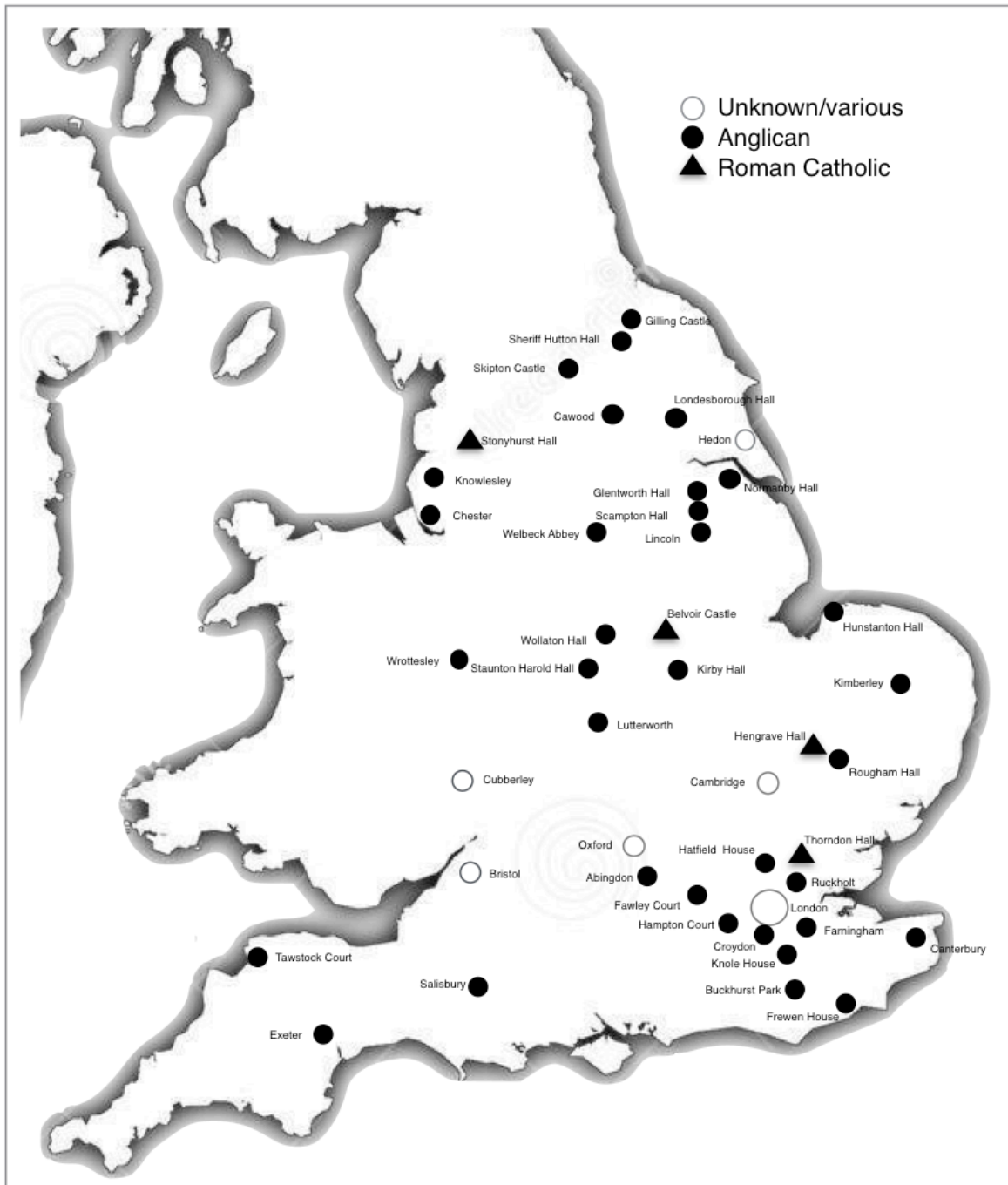
1. Derived from R.S. Schofield, 'The Geographical Distribution of Wealth in England 1334-1649'. *Economic History Review* 18 (3), pp.483-510

Appendix 3.3: Political affiliation of consort organ owners



1. Derived from <http://internal.hist.cam.ac.uk/maps/tudor-england-&-civil-war-17th-century.jpg> accessed 17 March 2017

Appendix 3.4: Religious affiliation of consort organ owners



Appendix 4: Manuscript sources for the organ in seventeenth-century English instrumental consorts

MS ¹ and date	Abbr. in main text	Type ²	Associated parts/remarks	Composer ³	Owner ⁴
Och Mus. MS 67 c1620	Och.67	P (C)	Och Mus. MSS 61-6	Coprario Ferrabosco Lupo Simmes Ward White	Anon Myriell
Och Mus. MS 21 1620s	Och.21	S		Coprario Gibbons	Playford Rogers
Och. Mus. MS 44 before 1625	Och.44	S	ff46-7 stratigraphic	Coprario Jenkins Lupo Ward White	
Lbl Royal Mus. Lib. MS 2.4.k.3 c1625	Lbl.k.3	P	Och Mus. MSS 732-5	Coprario Gibbons	Charles I
Lbl Add. MS. 10444 c1625	Lbl.10444	S		Various	L'Estrange
Och Mus. MSS 732-5 1630s	Och.732-5		String parts contain organ cues	Gibbons	?Charles I
Och Mus. MS 436 Mid 1630s	Och.436	P	Och Mus. MS 2 (Score) Och Mus. MSS 397-408 The Hatton 'Great Set'	Coprario Ferrabosco Gibbons Jenkins Lupo Mico Ward	Hatton Aldrich OMS
Ob Mus. Sch. MS D.229 1630s	Ob.D229	P	Ob Mus. Sch. MS D.238-40 Ob Mus. Sch. MS B.2	Lawes	
Ob Mus. Sch. MS B.2 1630s	Ob.B2	S	Ob Mus. Sch. MS D.229 Ob Mus. Sch. MS D.238-40	Lawes	
Ckc Rowe MS 113A Late 1630s	Ckc.113A	P	Ckc Rowe MSS 112-13 Ckc Rowe MSS 114-17 Och Mus. MSS 423-8	Coprario Ferrabosco Mico	Browne
Och Mus. MS 430 c1636-42	Och.430	P	Violin I part in private collection (Layton Ring) Browne added musical annotations in red ink	Lawes	Browne Packer
Och Mus. MS 432 c1638-42	Och.432	P	Och Mus. MSS 612-13	Coprario Jenkins Mico Ward	Hatton

¹ For all sources the prefix GB may be understood except where otherwise stated.

² P = Partbook, S = Score, T = Thorough Bass part, (C) = contained within a binding with other parts. The scores listed are for works known by virtue of titles or concordances to have had organ parts. Other scores exist that may also have been used to improvise organ parts but are not included here (see Chapter 3.3 and 3.10)

³ Where sources also contain vocal or other types of repertoire, only the composers of the consort works are listed.

⁴ Only seventeenth-century owners are listed. OMS = Oxford Music School

Eire-DM MS Z3.4.13 ff.47-59 Late 1630s (see 1660s entry for later layers)	DM.Z3.4a	S (C)		Jeffreys		Jeffreys
Och Mus. MS 1004 c1630-45	Och.1004	P	Ckc Rowe MSS 114-17 Och Mus. MSS 423-8 Och Mus. MSS 473-8	Coleman Coprario Dering Ferrabosco Jenkins White	Browne	Hilton
Lbl Add. MS 10338 1640-1662	Lbl.10338	S (C)		Jeffreys		Jeffreys
Lbl Add. MS 23,779 1640s	Lbl.23779	P&S		Coprario	Le Strange	Anon Le Strange Jenkins
Lbl Add. MS.31428 1640s	Lbl.31428	S		Jenkins	L'Estrange	Jenkins
Lbl Egerton MS 2485 Late 1640s	Lbl.2485	S	Closely related to Och Mus. MS 436	Coprario Ferrabosco Gibbons Lupo Mico Ward White		Lilly
Och. Mus. 1005 1640s	Och.1005	S	US-Cn Case MS-VM 1.A18 J 52c	Jenkins	Le Strange	Jenkins
Och Mus. MS 1185 c1650	Och.1185	P		Coprario	?Hatton Goodson	Bing Goodson
Lbl Add. MS 27,554 c1650	Lbl.27554	T (fig)	Lbl Add. MSS 27,550-3	Jenkins		4 Anon Bing Lilly
Lbl Add. MS 17,801 Early 1650s	Lbl.17801	S	Och Mus. MSS 772-6	Locke	Locke Charles II	Locke
Och Mus. MS 778 ?1650s	Och.778	P (C)	Not associated with the parts with which it is bound	C Gibbons		Jenkins
Lbl Add. MS 29,290 ?1650s	Lbl.29290	P		Jenkins Lawes Mico	North	3 Anon Jenkins G. Loosemore
Ob Mus. Sch MS C.81 ff.46- 94 ?1650s	Ob.C81	P (C)		Jenkins	North OMS	North family
Ob Mus. Sch MS C.82 ff.93- 128 ?1650s	Ob.C82	P (C)		Jenkins	North OMS	North family
Ob Mus. Sch MS C.83 ff.133- 61 ?1650s	Ob.C83	P (C)		Jenkins	North OMS	North family
Ob Mus. Sch MS C.89c ff.38- 57 ?1650s	Ob.C89c	P (C)	Ob Mus. Sch MS C.89a-b	Lawes	North OMS	'Mould' scribe
Ob Mus. Sch MS C.90d ff.31- 48 ?1650s	Ob.C90d	P (C)	Ob Mus. Sch MS C.90a-c	Lawes	North OMS	'Mould' scribe
Lbl. Add. MS 31,416 ?1650s	Lbl.31416	P	Ob Mus. Sch MS C.91	Coprario	North	North family

Och Mus. MS 730 1650s	Och.730	T	Och Mus. MS 728-9	Withy	Aldrich	Withy
Ob Mus. Sch MS C.101a ?1650s	Ob.C101a	P	Ob Mus. Sch MS C.101b	Coprario	North OMS	North organist North family
Ob Mus Sch. C.79 ?1650s	Ob.C.79			Anon	North OMS	
Ob Mus. Sch. MS E.382 ?1650s	Ob.E382	P	Ob Mus. Sch. MSS D.205-11	Hingeston	Hingeston OMS	Hingeston
Ob Mus. Sch MS E.406 1654	Ob.E406	P	Ob Mus. Sch MS E407-9	Jenkins Cooke	North	North family
Ob Mus. Sch MS C.100a c1655	Ob.C100a	P	Ob Mus. Sch MS C.100b	Brewer	North OMS	Anon
Ob Mus. Sch. MS E.436 c1657	Ob.E436	T	Ob Mus. Sch. MS E.431-5	Brewer Carwarden Coleman Jenkins Lawes Rogers Simpson	?OMS	Jackson
Ob Mus. Sch MS C.98a Late 1650s	Ob.C98a	P	Ob Mus. Sch MS C.98b	Jenkins	North OMS	North family
Ob Mus. Sch MS C.99a Late 1650s	Ob.C99a	P	Ob Mus. Sch MS C.99b	Jenkins	North OMS	North family
Och Mus. MS 1006 c1660	Och.1006	T	Och Mus. MSS 1007-9 Also contains theorbo continuo; companion lyra and hpschd volume lost	Gibbons	Oxford	Anon Goodson
Ob. Mus. Sch. C.44 c1660	Ob.C.44	S		Benedetti	OMS	
US-R MS ML96 L814f 1661	ML96	S (C)	Organ cues	Coprario		Anon Jefferys
Lcm MS 871 1662	Lcm.871	P		C Gibbons		Playford
Ob Mus. Sch. MS C.102b c1662	Ob.C102b	S P	Ob Mus. Sch. MS C.102a	C Gibbons		Lowe
Ob Mus. Sch. MS D.261 ff.39-76 1660s	Ob.D261	P (C)		Jenkins	Lowe	Anon
Eire-DM Z2.1.12 mid 1660s	DM.Z2.1.1 2	S		Ferrabosco Lupo	Marsh	3 Anon Marsh
Eire-Dm Z2.1.13 mid 1660s			Ff1-2 and 5-6 stratigraphic	Coperario C Gibbons O Gibbons King	Marsh	
Eire-DM Z3.4.13 ff.7a-12b ff.33a-46b ff.61-74b ff.72a- 103b mid 1660s (see also 1630s entry for Jeffreys layer)	DM.Z3.4.1 3	P (C) T (C) T (C) S (C)	Eire-DM Z3.4.1-6	Coprario Ferrabosco Ives Jenkins Simpson Ward	Marsh	4 Anon Marsh Rogers

Eire-DM Z4.2.16 mid 1660s	DM.Z4.2.1 6	S (C) T (C)	Eire-DM Z3.4.1-6	Cranford C Gibbons Lupo White	Marsh	2 Anon Marsh
Och. Mus. 15 ff86r-87r 1660s	Och.15	S		Gibbons	Aldrich	Aldrich
Y MS 20 S 1667	Y.20S	S		Jenkins	Hutton	Hutton
Ob Mus. Sch. MS C.57 1668	Ob.C57	T	Ob Mus. Sch MSS C.54-6	Simpson	OMS	Lilly Anon
Ob Mus. Sch C.58 1668	Ob.C58	S	Ob.Mus.Sch.C54-7	Simpson	OMS	Hutton
DRc MS Mus. D4/3 c1670	DRc.4	T	DRc MS Mus. D4/1-2	Jenkins Poole Young Schults	Falle	Anon
DRc MS Mus. D5/3 c1670	DRc.5	T	DRc MS Mus. 5/1-2	Butler Jenkins Zamponi	Falle	Anon
DRc MS Mus. D10 c1670	DRc.10	S		Various	Falle	Anon
Ob Mus. Sch. MS E.430 c1672/3	Ob.E430	T		Simpson	Withey OMS	Withey
Y MS 56 S 1673	Y.56S	S		Simpson	Hutton	Hutton
Ob Mus. Sch. MS E.451 mid 1670s	Ob.E451	T	Ob Mus. Sch. MSS D.233-6 Ob Mus. Sch. MSS D.241-4	Baltzar Cooke Hudson Jenkins Lawes Locke Rogers Young	Lowe	Lowe
DRc MS Mus. D2/3 1670s	DRc.2	T	DRc MS Mus. D2/1-2	Various	Falle	Anon
Ob MS Mus. Sch. F.567 1670s	Ob.F.567	P	Ob MSS Mus. Sch. 564-6	Jenkins		Anon
Ob Mus. Sch. MS D.231 1670s	Ob.D231	T		C Gibbons		Lowe
Ob Mus. Sch. MS D211 1670s	Ob.D211	S		Hingeston	OMS	Hingeston
US-NYp Drexel 5061 1670s-c.1685	NYp.5061	S		Isaack Locke Purcell Smith	Isaack?	Anon
Och Mus MS 422 ff50r-51v Post-Restoration	Och.422	P	Och Mus MS 419-21 Organ book Incomplete	Coprario	Aldrich	Aldrich
Och Music MS 15 ff1-43 Post-Restoration	Och.15	P		Coprario Gibbons	Aldrich	Aldrich
Lbl Add. MS 30,930 1680	Lbl.30930	S		Purcell		Purcell
Lbl Add. MS 33,236 Early 1680s	Lbl.33236	S		Locke Purcell		Anon

Lbl. Add. MS 31,435 Early 1680s	Lbl.31435	T (C)		C Gibbons Locke Purcell		Anon
Ob Tenbury MS 1011 1683	Ob.1011	S		Purcell		Jeffreys
D-HS MS ND VI 3193 1683-4	HS.3193	T		Jenkins Lawes Rogers Simpson	Roberts	Anon
Ob Mus. Sch. MS E.403 mid 1680s	Ob.E403	T	Ob Mus. Sch. MSS E.400-2	Purcell		Anon
Och Mus MS 8 1680s	Och.8	S	Annotations in red	C Gibbons Locke	Aldrich	Withy Goodson Sr
Och Mus. MS 1180 1680s	Och.1180	P	Incomplete; intended replacement to missing organ book to Och Mus. MSS 416-16	C Gibbons		Aldrich
Och Mus. MS 3 ff.47r-53r 1680s	Och.3	S		Purcell	Goodson OMS	Goodson Sr
Och. Mus. MS 620 pp.102-33 1680s	Och.620	S		C Gibbons Purcell	Goodson OMS	Goodson Sr
Och Mus. MS 1174 Late 1680s	Och.1174	S		Purcell	Goodson OMS	Goodson Sr
Lbl Add. MS 31,424 ff45-84 Late 1680s	Lbl.31424	T (C)		Anon		Anon
HAdolmetsch II.c.25 Late 1680s	Had.c25	T	DRc Mus. D2 Lbl Add. MS 31,423	Various		3 Anon
Lbl Add. MS 31,423 ff.114-23 1688-92 ff.138-53 ff.254-63	Lbl.31423	T (C) P (C) T (C)		Jenkins	North	Anon
Och Mus. MS 39 c.1690	Och.39	S	Six-line staves	Purcell		Hull
US-Cu 959 c.1690	Cu.959	T (C)		Finger Purcell	?James II	Anon
Och Mus MS 411 1690s	Och.411	P	Copied from Ckc Rowe MS 113A	Coprario		Hull

Extant parts for consorts to the organ with no known organ book

Och Mus. MSS 459-62 c1620				Gibbons Jeffreys Lupo Mico Ward		Myriell Anon
Och Mus. MS 517-20 1630-50				Ferrabosco Jenkins Mico Ward		
Och Mus. MSS 419-22 1650-75				Coprario Gibbons		
Och Mus MSS 777, 779 1650s				Jenkins		Jenkins

Bibliography

Primary Sources

Manuscript Sources

The manuscripts of consort music with organ discussed in the text are listed in Appendix 4. Records relating to the court are referenced in the text according to their entry in *RECM*, but with the siglum 'PRO' when used therein updated to the current 'Lna'. Other manuscript sources referred to are listed below.

Cambridge University Library

Cu EL MSS 2 (C18 keyboard MS)

Cu EL MSS 4 (C18 keyboard MS)

Chatsworth House: Trustees of the Chatsworth Settlement

WC Bolton MSS bk. 97 (Estate papers of William Cavendish)

WC Bolton MSS bk. 99 (Estate papers of William Cavendish)

WC Bolton MSS bk. 100 (Estate papers of William Cavendish)

Colchester: Essex Record Office

COLro D/DP A6 (Accounts of Sir William Petre's London household)

COLro D/DP A20 (Thorndon Hall general accounts)

COLro D/DP E2/1 (Ingatestone inventory of music books)

Hatfield House

Salisbury MSS Box C/4 (Cecil family papers)

Hereford Cathedral Archive

H-MS. R.11.xlii (Roger North: *Musical Grammarian*)

Lincolnshire Archives Office

Lla Worsley MS. viii (Worsley family papers, 1675-79)

London: British Library

Lbl Egerton 3665 (Tregian MS)

Lbl Add. MS 4388 (John Pell, *Portions of Treatises &c Relating to Music*)

Lbl Harley MS 6395 (Nicholas L'Estrange: *Merry Passages and Jeasts*)

Lbl R.M. 24.d.2 (Baldwin Commonplace Book)

Lbl Add. MS 29427 (Altus partbook transcribed by Thomas Myriell)

Lbl Add. MS 29996 (mid-16th century organbook)

Lbl Add. MS 30485 (Weelkes MS)

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