



JAMES MITCHELL

THE
PIPE
ORGAN

A Composer's Guide

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James Mitchell

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Foreword by John Rutter

One of the many reasons for giving this book a resounding welcome is that nothing like it has appeared in print before. How to write for the organ is something every composer should know, but too many of us do not. We may think we do, but blunder into ineffectiveness or unplayability; we may fail to take advantage of the infinite resources of the instrument; or be so intimidated by its technicalities that we never write any organ music at all. A modern organ console looks as complex as an aircraft cockpit, but its mysteries are unravelled as you read the pages that follow. As with the harp and the classical guitar, most solo organ literature down the ages has been written by those who play the instrument, but in this concise and readable manual James Mitchell has shown us that this need not be so. He provides us, organists or not, with a practical and comprehensive guide to good organ writing in any style, explaining as much of the technique and workings of the instrument as is helpful to the composer—and enlightening to all who take an interest in the organ and its music. He is refreshingly clear but open-minded about what works on the organ and what does not, and the range of music he points us to is astounding: I expected Bach, Messiaen, and the French organist-composers—I did not expect Jimmy Smith, Bob Dylan, Hans Zimmer, or the Indian harmonium.

With this invaluable book at hand, no composer need ever again write badly for the organ. Many will find their repertoire knowledge greatly enlarged, and it is clearly the author's aim to encourage and inspire *all* composers to create new organ music, whether for the organ as a solo instrument, as part of an ensemble, or even in a concerto role—how sad that, as he points out, scarcely an organ concerto since Francis Poulenc's (1938) has gained a firm place in the repertoire. With so many talented organists and fine instruments available for composers to write for, the appearance of *The Pipe Organ: A Composer's Guide* could not be more timely. I have read it with pleasure and profit.

John Rutter

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This book would never have been possible without the love and support of my parents Lynette and Stephen. They have helped me through all the stages of this book, back from when it was just an idea conceived during the coronavirus pandemic lockdown through to proofreading the final manuscript. I hope this book makes you proud.

I am grateful to Michelle Chen, Sean Decker, Laura Santo, and the team at Oxford University Press for helping this book see the light of day. Stephen Farr and Pia Rose Scattergood, as an organist and composer, respectively, gave indispensable advice during the preparation of the manuscript. Anne Page kindly assisted with the section on the harmonium (as well as letting me record on her own instrument) and Tom Horton's guidance on the theatre organ was invaluable. Tiny Evans kindly allowed me to record one of his Hammond organs at the Hammond Hire Company. I must also thank Adrian Partington, Andrew Kirk, and Byron Jones for allowing me to photograph/record the organs at Gloucester Cathedral, St. Mary Redcliffe Church, and Eden Grove Methodist Church, respectively.

Finally, I would like to thank all the musicians, both teachers and collaborators, who have helped me develop into the person I am today. I am very lucky to be nurtured by such creativity and musicianship from the extraordinary performers and composers around me. Even having written this book, my entire perception of the organ continues to change as other people push the instrument beyond what I thought was possible. My wish is that, through this book, I may inspire people in the same way.


About the Companion Website

www.oup.com/us/ThePipeOrgan

The companion website contains many resources to supplement this book, including but not limited to:

- Print-off summaries of each chapter
- Video demonstrations of various instruments, stops, and playing techniques, complete with sheet music transcriptions and brief commentaries
- Sample organ specifications for each of the main national styles listed in the Appendix, including commentaries and links to recordings
- Extended case studies about adapting Howells's *Like as the Hart* and Messiaen's 'Joie et clarté' from *Les Corps Glorieux* for larger and smaller organs, respectively
- A list of major composers who have written for the organ, with a brief commentary about each one

It is generally recommended to start with the book first and refer to the companion website at the relevant points, although the chapter summaries can usefully be consulted at any time. The discussions for the video demonstrations are in-depth and rely on having read and understood the main concepts in the book first. The book also has a greater focus on the existing organ repertoire, while the video demonstrations aim to show the contemporary possibilities of the organ.

The reader can find connected material on the companion website when prompted by this icon: 

In the third century BCE, a Greek named Ctesibius invented what he named the ‘hydraulis’, an instrument where a set of pipes were fed by a mechanical water-powered wind supply. This instrument was the world’s first documented pipe organ, and over the past two millennia the organ has evolved into one of the most remarkable instruments in Western music. Organs are living history of past musical cultures: the organ at the Basilica of Valère in Switzerland, built in 1435, is still playable today. No other musical instrument is as connected to architecture as the organ: each organ is custom built for the building where it is situated, with the organ design exploiting the architecture to fill the building with sound. Anyone who has experienced the raw power of a large organ in a big church or cathedral is rarely left unaffected. Consequently, almost every major composer has required the organ in at least one of their most large-scale pieces, including works as diverse as Vaughan Williams’s *Sinfonia Antarctica*, Stephen Sondheim’s musical *Sweeney Todd*, and Hans Zimmer’s soundtrack to *Interstellar*.

Sadly, however, the organ is also one of regularly misunderstood instruments, even by other musicians. The poor quality of many organ keyboard patches and notation software playback makes the instrument appear more limited than it actually is. The traditional orchestration textbooks have been of little help when it comes to the organ. Walter Piston, notably conservative by modern-day standards, describes the organ as “too self-sufficient an instrument to become part of the symphony orchestra,” a dismissive attitude that is unfortunately still prevalent today. Samuel Adler’s account is better than Piston’s, dedicating three pages to the instrument and even providing musical excerpts. However, the advice Adler actually offers is limited, unhelpful, and sometimes even just straight-out wrong (for example, Adler is incorrect about higher-pitched stops being range extensions; see the Chapter 2 for more info). Blatter’s orchestration textbook, by contrast, has the reverse problem. It is the most extensive of the three, with twelve pages dedicated to the organ, and the information provided is the most accurate and best written by far when compared to Piston and Adler. However, the technical information Blatter provides is difficult to parse and, combined with a lack of musical examples, his advice is not especially useful in practice. This unhelpful situation has no doubt had a detrimental effect on organ writing, with

composers therefore choosing to avoid the organ due to the perceived learning curve in understanding and writing for the instrument.

By contrast, the organ is currently both at its most accessible, and with a higher standard of performance, than at any previous point in history. Pieces considered unplayable a century ago are now a part of the standard repertoire. Digital organs are gradually becoming more commonplace and now can have incredibly realistic sounds, bringing the instrument into many more venues beyond just churches or concert halls. The organ offers abundant performance opportunities for composers: organists are frequently looking for new repertoire, and many commissions for new music come from church, cathedral, or chapel choirs. In addition, software such as Hauptwerk brings the full capabilities of the organ not only to live performance but also as a plugin to digital audio workstations (DAWs for short), offering new possibilities in music production. There has never been a better time for new organ music, yet to many composers the instrument feels difficult to understand and limited in timbral options.

This book therefore aims to fix this situation. It provides all of the information needed to write good organ music, focussing on the practical side as much as possible. Technical jargon is kept to a minimum; not much terminology is needed to write good organ music, although more niche terms are explained in the Glossary should composers require them. Strong emphasis is also placed on reading and listening to the organ repertoire in all its diverse forms, and the music examples should help composers see exactly what good organ music looks and sounds like.

The first chapter provides a general introduction to the organ for those with limited or no experience of the instrument. This chapter will introduce the most common terminology associated with the organ, as well as going into detail about various important organ building trends, the most common mistakes composers make when writing for organ, and various extended techniques. For composers who do not know where to begin when writing for the organ, this chapter is the place to start.

The second chapter deals with the complex art of registration (i.e., controlling the organ timbre). Organ layouts are often more standardised than may be expected and so, with some experience and by consulting Table 2.1, it is possible to be surprisingly specific with registrations without hindering the performability of the work. This chapter therefore explains the typical layout of the organ and function of each sound, as well as how to best specify registrations in a score.

Chapters 3 and 4 deal with writing for the manuals (the keyboards) and pedals respectively. Both chapters focus on the practical performance aspects, using numerous annotated musical examples to immerse composers in idiomatic organ writing. Standard playing techniques and organ textures up to a virtuoso level are all covered, providing composers with a technical idiomatic grounding from which they can innovate.

Chapter 5 covers four instruments related to the pipe organ: the chamber organ, the harmonium, the theatre organ, and the Hammond organ. These instruments have been rather neglected in contemporary classical music. However, they each have their own unique sound and style, potentially offering valuable compositional resources. The foundation established in the previous chapters should provide a solid basis for understanding and writing for these

instruments; this chapter therefore deals with the particularities and intricacies of each instrument individually.

Finally, many composers will want to use the organ as part of a larger ensemble, requiring a slightly different approach compared to solo organ music. The sixth chapter, therefore, will cover the various specifics of ensemble organ writing, addressing issues such as balance with other instrumentalists or singers. It draws on examples spanning the whole history of organ music, providing a historical overview of the instrument in ensemble, as well as a jumping-off point for further exploration and listening.

In summary, this book intends to show just how underrated the organ has previously been. The instrument has so much to offer composers, with the instrument being ripe for exploration and with easy scope for original textures and timbres. This guide will therefore hopefully demonstrate exactly why the ‘king of instruments’ continues to deserve its famous reputation.

How to Use this Book

This book is intended to be an introduction and a reference guide to the organ for composers. It does not purport to be comprehensive, nor to replace collaboration with players. Score study is also incredibly beneficial, and even experienced organists can have their eyes opened by playing the music of Olivier Messiaen or Thierry Escaich, for example. Composers are therefore recommended to fully immerse themselves in as much organ music as possible, through analysing scores, watching and listening to organ performances either live or recorded, and surveying the vast range of educational resources about the organ; the ‘Extra Resources’ section provides more information about what is available. Where possible, experiment on a real organ, as there is no other substitute for truly understanding the instrument; see ‘Accessing an Organ’ for further advice.

As a reference guide, the book need not be read from start to finish. The reader should feel free to dip in and out, consulting the sections most relevant to the specific needs. Nevertheless, the book is structured so that any unfamiliar concepts or terminology are always introduced and defined before being used more regularly. Many topics also overlap with each other, so revisiting prior chapters is encouraged as later knowledge gained may offer new insights into old topics.

This book is written in relation to organs in the UK. By and large, however, most of the advice presented should be applicable to organs from every country. The ‘eclectic’ organ, capable of performing every kind of music equally well, is very common and largely standardised even internationally; a typical specification (i.e., list of stops) is given in Table 2.1. However, different countries tend to have slightly differing organ layouts, as well as specific features not always present on organs from other countries. A brief survey of these differences can be found in the Appendix.

A Note on the Musical Examples

The author believes that the fastest way for composers to learn about organ music is to immerse themselves in as much good organ music as possible. As mentioned earlier,

however, much of this music is unknown to non-organists. The musical excerpts in this book, therefore, are intended to not only back up each point but introduce the standard organ repertoire.

The excerpts come from the whole history of notated organ music, from the seventeenth through to the twenty-first centuries, and feature a mix of both well-known and more obscure examples. In all cases, while musical quality is an important factor, idiomatic writing, clarity of notation and relevance to the specific point have been the primary criteria for choosing the excerpts quoted. This book therefore does not apologise for featuring 'organ' composers, such as Vierne and Widor, as prominently as some of the more mainstream names. Registrations, when provided, are usually given as found in the score and in their original language (i.e., how an organist would encounter them).

It is highly recommended to listen to and closely study as many of the excerpts as possible, preferably comparing multiple recordings on different organs. As mentioned earlier, notation software playback is often a poor indicator of how the organ actually sounds and so listening to real organs as much as possible is strongly encouraged. The pieces mentioned in-text should be similarly studied, as they all offer interesting ways to think about the organ. This book hopes to highlight the best organ writing (and that which organists play most regularly) in order to raise the standard, quality and ambition of organ music more generally.

Getting Your Organ Music Performed

Organists are always looking for new music. Not only is the organ repertoire much smaller than for many other instruments, but organists perform more frequently than most other musicians (some cathedral organists perform every day of the week) so consequently always need new pieces. It can therefore be much easier to secure public performances of works on the organ compared to other instruments. Given this situation, the following advice will aim to help composers guarantee their music is played as much as possible.

Most solo organ music is played in the context of a church service. For recitals, organists tend to reuse pieces learned for services in order to economise practice time. Organists are therefore more likely to learn/play pieces which are appropriate for service use (see 'The Organ and Religion') over those which are not. Designating an organ piece for a specific liturgical season such as Christmas or Easter (by quoting a seasonally appropriate hymn/chorale/chant melody, for example) can make a piece more attractive to organists looking for liturgically-appropriate repertoire, although it can limit performances to a particular time of year.

More generally, pieces which are technically less demanding or which have simpler registration are more likely to get a wide transmission. It is true that requiring virtuoso-level technique and complex registrations is sometimes not only unavoidable but even desirable, pushing the organ to new forms of musical expression, and such complex pieces can become very popular or even infamous if executed well (such as Dupré's *Trois Préludes et Fugues*). However, simpler pieces are useful not only for amateur organists but also professionals who need to learn/sight-read a piece quickly for a service or recital. The faster a piece can be learned and the registration set up, the more likely it will be performed in general. Conversely,

the harder the piece or the more complex the registration preparation, the greater the musical payoff has to be to justify the time spent learning it.

Many commissions and organ composition competitions request composers to “take the specifics of the organ into account” or words to that effect. What this request means in practice is rather wide-ranging but essentially comes down to making the specific organ sound as good as possible. Make sure, if indicating specific stops, that the particular organ does have the requested ones available in some form. It is also important to know what registration aids are available (see ‘Registration Aids’ in Chapter 2 for a breakdown of the most common ones). Taking advantage of any particularities of design (see ‘Organ Building Trends’ in Chapter 1 as well as the guide to national styles in the Appendix) can make a composition really stand out from its competitors. Finally, there is the acoustic in the venue to consider: much traditional organ music is written with a large acoustic in mind, but a dryer acoustic allows for rhythmic precision and clarity at fast tempos unavailable in more reverberant spaces.

Otherwise, as with other types of new music, networking and visibility are crucial in making organists aware of any new compositions. Building a relationship with a specific organist will increase trust and respect between both parties and so increase the likelihood of performance, as well as often guaranteeing a specific organ to write for and explore. Many composers have had their reputations and even legacies established through their organ music; the organ therefore presents exciting opportunities, excelling those for other instruments and potentially guaranteeing a place in the canon for many years to come.

The Organ and Religion

More than any other instrument, the organ commonly bears connotations of religion and spirituality. While organs can be found in venues ranging from concert halls to private houses, they are most commonly located in churches or cathedrals. Since at least the time of St Augustine, organs have been an important part of Christian worship, and today the public perception of the organ is as a religious instrument, particularly associated with high church forms of Christian liturgy. Many of the most successful organ pieces make use of the instrument’s spiritual nature, even if the piece is not explicitly Christian. By taking into account the requirements of Christian liturgy, composers can ensure that their organ music is performed as frequently as possible.

Solo organ music for church services fills a very functional role. Different denominations of Christianity feature the organ to differing extents. Typically, organists have to play just before a service (normally quiet reflective music of up to about 5 mins) and directly after the service as a ‘voluntary’ as people leave (a piece generally lasting up to 7 mins, typically louder and more exuberant than pre-service music). Service music is usually relatively limited in dynamic range: music for before the service should not be too loud in case it disrupts the contemplative atmosphere; on the other hand, if the post-service music is too quiet, the organ may be drowned out by the congregation chatting. For longer works, consider splitting the music into multiple movements. Organists commonly excerpt single movements as voluntaries while performing the complete work in recitals, therefore making the music suitable for both service and concert performance.

Much of the organ repertoire is also based around Christian hymns, chorales, and plainchant. For composers wishing to follow suit or to analyse repertoire examples, there are a wide variety of hymnbooks and suchlike in circulation. The *New English Hymnal* is the traditional Anglican hymnbook; other common examples include *Hymns Ancient and Modern* and *Common Praise*. For plainchant, the *Liber Usualis* is still the standard reference resource and can be found online, although it has not been in practical use since Vatican II in 1961. The *Graduale Romanum* and *Graduale Triplex* have a smaller selection of chants but are more up to date and contain the post-1961 revisions. For German chorales, the main hymnbook in circulation is the *Evangelisches Gesangbuch*. Different regions of Germany have different editions with minor variations between them, although all share a core repertory of 535 chorales. Bachian harmonisations of older chorales can also be found (without lyrics) in the *371 Harmonized Chorales* edited by Albert Riemenschneider.

Accessing an Organ

As with any other instrument, practical playing experience is invaluable for learning the ins and outs of the organ. The easiest way to get access to an organ is to find an organ teacher and start taking lessons. This route is typical for many beginning organists, with teachers (who are usually organists at a local church or institution) often letting students practice on ‘their’ organ. Even just one or two lessons can transform one’s knowledge of the instrument and will help contextualise the concepts introduced in this book.

Without teacher connections, finding an organ to play can be more challenging. Some institutions can be unwilling to let anybody practice on their instrument, even other organists. On the other hand, some places can be very friendly and willing to lend access to the organ. In all cases, there is no harm with making a general enquiry to the church or organist in question. There are also many self-teaching resources for the organ; Anne Marsden Thomas’s and Frederick Stocken’s excellent book *The New Oxford Organ Method* is particularly recommended, focussing on organ technique in the context of proper organ pieces.

There are also alternatives for those not lucky enough to have easy access to an organ. High-quality MIDI-compatible virtual instruments do exist, allowing people to explore the full resources of an organ with just a MIDI keyboard; see ‘Software Instruments’ for more information. A piano or digital keyboard with an organ patch is a good substitute when learning about keyboard technique. Much can be learned from playing organ parts on a piano without using the sustain pedal; see Chapter 3 for some practical examples. There are many online organ forums if composers have any queries about organ writing. Organists are friendly people and are often willing to help out if asked, especially if it leads to better organ music. Offering services as a page-turner is a non-invasive way to get close to an organ, potentially including large cathedral organs, as well as experiencing the organ repertoire (and its performance) up close. The rise in music live-streaming and virtual recitals among other things makes it easier than ever to find online videos of organists performing. Many recitals film both the hands and feet simultaneously, enabling analysis of all aspects of organ playing in practice.

Software Instruments

As noted above, not all composers will be able to access a real organ. Additionally, beyond classical music, some composers and producers will want virtual instruments for use with DAWs or similar. In the past, organ patches have been very poor quality, giving a very distorted impression of the instrument (notation software playback still has this problem). However, there are an increasing number of high-quality sampled and software organs available in every price range. These virtual instruments can therefore offer much to both classical and non-classical composers and so are worth briefly discussing.

Hauptwerk is currently the best virtual organ software available. As it is primarily aimed at organists, it may not be straightforwardly intuitive to use for composers/producers. However, it offers the user complete control of every aspect of the organ and the sampled instruments often sound indistinguishable from their real counterparts. While it is a standalone program, it can also be integrated into DAWs as a plugin. Hauptwerk also offers a wide range of instruments in a variety of styles, from German Baroque to French Romantic to theatre organs, allowing composers/producers to choose the right organ for their needs. The main drawback is that the software is relatively expensive; individual organ sound sets also need to be bought separately from the main program (although Hauptwerk does include one free instrument by default). There are a range of prices and subscription models available, however, and for a professional composer/producer looking for total control there is no better option. For composers on a budget, GrandOrgue is a free alternative software that, while not having the range of organs or quite the level of sound quality of Hauptwerk, similarly offers total control of registration and the organs available can sound remarkably realistic.

Other companies also offer high-quality organ samples, such as Spitfire Audio's 'Symphonic Organ'. These are typically easier to set up and integrate into DAWs than Hauptwerk, as well as often being cheaper. They also usually offer inbuilt digital effects, making it easy to electronically modulate the sound. The common trade-off, however, is substantially less control of individual stops (see Chapter 1), instead having pre-set combinations such as 'All Stops Out'. In many situations, these presets may be all that is needed. Some of these libraries offer complete lists of stops of each preset, so these can be useful to see whether a certain sound is available.

In short, there is a wide range of organ software available, each with its own advantages and disadvantages. Composers/producers are urged to explore all the options and discover what would work best for them. The availability of sampled organs is greater than ever before, and so there is no better time to search around.

Extra Resources

Beyond this book, many resources have been created specifically to help demystify the organ, with specialist institutions dedicated to the instrument. The Royal College of Organists (RCO) in the UK, American Guild of Organists (AGO) in the USA and the Royal College of Canadian Organists (RCCO) in Canada each have dedicated websites with an extensive range of online videos and resources (although some of the content from these organisations requires paid subscription to access). There are also many smaller societies such as the British

Institute of Organ Studies (BIOS) and the American Theater Organ Society (ATOS). These not only offer online and print resources, but also put on many events throughout their respective countries.

Composers writing for a specific organ may want to consult the instrument's stop-list ('specification' in organ terminology). There are many dedicated websites which offer up-to-date organ catalogues, specifications and photos of the instruments. The main UK resource is the National Pipe Organ Register (<https://www.npor.org.uk/>); for the USA there is the Pipe Organ Database (<https://pipeorgandatabase.org/>); and for Australia there is the database provided by the Organ Historical Trust of Australia (<https://ohta.org.au/organs-ofaustralia/>). Specifications can also be found on the websites for individual churches/institutions, particularly if the instrument is well-known. Other more general websites such as Wikipedia may also contain organ specifications, but these are more infrequent and unreliable than the main databases.

Scores and recordings are plentiful online. IMSLP is the standard resource for sheet music of out-of-copyright composers. For composers still in copyright, digital platforms such as Nkoda offer a wide selection of scores, including some sheet music unavailable for purchase (e.g., large modern choral/orchestral works). While there is often a subscription fee for these platforms, many places own institutional licences allowing students/composers to access them for free. YouTube and Spotify both feature many classic CD recordings and live performances. YouTube in particular has many 'score-videos', displaying the score whilst playing a recording; these cover many of the major organ composers from Bach to Messiaen, as well as a wide range of composers in between.

- ▶ There are many other resources available both in print and online, covering every aspect of organ design, historical performance practice and every piece of organ terminology conceivable. With technology changing and new books, websites, and videos becoming available all the time, it is easier than ever to access these resources and learn about the organ. The Further Resources section of the Online Resources provides a non-comprehensive but regularly updated list of resources that may be of interest to composers in particular.