

MODULE 11 - Instruments in worship II

This module looks at the skills required for arranging music for instrumental groups, voices and organ, and at presentation of your own compositions and arrangements using desk-top publishing software. The main headings are:

- instrumental groups, voices, and presentation of score and parts
- harmonisation
- descants and 'last verse' arrangements
- texture and colour
- arranging for the organ

Instrumental Groups

The combination of instruments we may have to arrange music for in a church can sometimes be a real mixed bag. Often those who volunteer to play will bring with them a range of instruments that would challenge any arranger and a combination of saxophone, tenor horn, 'cello, bongos and descant recorder might be fairly typical!

Knowing the limitations of both instrument and player (they may have just been for their first lesson or may hold a diploma), is an obvious first step. Knowing how instruments combine in an ensemble will also be useful. Getting hold of books on this subject is no problem and these take care of the conventional instruments in solo and combined roles. The more unconventional combinations that working with a church group will need some experimentation and experience.

If you have any tips or experience with strange combinations, share them with others on the website bulletin board. This is a quick way to get practical help or to share advice.

Given that you have discovered what the player is capable of, and this will mean listening to them and finding out about their level of technique and agility on the instrument, you will need to learn as much as you can about what the instrument is capable of, on its own and with other instruments.

A most useful book for all standard orchestral instruments is by Gordon Jacob and its title is '[Orchestral Technique – A manual for students](#)'.

Another useful book for beginners is '[In Tuneful Accord](#)' by James Whitbourn, Chapter 6, 'Musical Instruments' and Appendix A.

There are larger and more in-depth books, but these two provide a good start. Of course the best way to learn about arranging and 'orchestrating' is to do it, experiment and use your ears. You will probably know straight away what works and what does not. Reading up on the way instruments interact and blend will save you time in the long run but as mentioned, your group will be unique to you and no text book will have the last word.

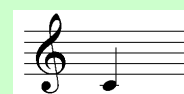
Transposing Instruments

We had a look at transposing instruments briefly in module 4. If you need to know more read on, if not [skip](#) this section. Transposing instruments are commonly the B flat clarinet, cornet and trumpet, the horn in F, the E flat saxophone and an array of brass instruments such as the Tenor Horn, the Baritone, the Euphonium, the E flat and B flat Bass. Knowing which clef to use for some of these instruments can be confusing and it is best to ask the player which clef they prefer as trombonists and euphonium players can use three including the c or tenor clef.

An easy way to remember how to write parts out for transposing instruments is to go through the following stages:

Put this note in front of your imagined player and ask them to play it.

The note they play will not be middle C, it will be transposed.



Find out what note they are playing.

Are they playing a B flat, an E flat or an F?

You need to write their note higher or lower for them to produce a middle C.

Let's look at the Bb clarinet. Give them middle C to play and they sound



You want them to sound a middle C so you need to write the note a tone higher.



write



The French Horn sounds the F below the middle C they are reading. And so, to 'tune them in', you need to write their part one fifth higher. Writing a G above middle C (one fifth higher), will make them sound middle C. It's like dragging them back to middle C. Their name gives you the note you need to drag them from, 'B flat clarinet', 'Horn in F' and so on.

When writing out parts that transpose more than a tone, it is helpful to imagine the piano keyboard and to count how many semitones each note should be written away from its original pitch. For E flat instruments, you would count (including the note being transposed) four semi-tones below the starting note, for middle C this would be: C - B - B flat - A, A being the note you write. Many minor thirds can be visualised quickly but some, and especially if the part is very chromatic, can be more difficult.

Should you be presented with a bass clarinet player to write parts for, you will need to transpose their notes up a whole ninth and use the treble clef! Not as bad as it sounds because you treat it like a B flat clarinet but add an octave.

For further information go to: http://wiki.youngcomposers.com/Transposing_instruments
Try the fun tutorials at: http://www3.northern.edu/wieland/theory/interval/trans_1.htm

The Dolmetsch Theory Online tutorials cover everything in more depth than you may need but, if you need more, go to: <http://www.dolmetsch.com/musictheory26.htm#top>

Saxophones

There are four main instruments that are known as soprano, alto, tenor and baritone. The transpositions required in written parts are:

Soprano – up a tone

Alto – up a sixth

Tenor – up a ninth

Baritone – up one octave plus a sixth

This means that all parts are written in the treble clef and range between B flat just below middle C to F sharp above the staff (written pitch).

The Strings

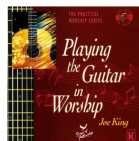
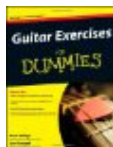
String players are very versatile and can play almost anything you put in front of them. However, if you begin to use ‘double stopping’, writing two notes at a time, you need to know what is possible and what is not. If in doubt, ask the player. As a general rule, get to know the notes to which the four strings are tuned and for safety, use one ‘open’ string (not stopped by the finger) and one stopped.

Pizzicato is very effective, especially on the double bass or ‘cello and can help to articulate a bass line giving it a more percussive feel. *Sordino*, or use of the mute, provides a contrast of tone often forgotten. Effects such as *col legno* (striking the string with the back of the bow) and *ponticello* (bowing the strings near to the bridge giving a thin, eerie sound especially when combined with a *tremolo*), are rarely used at this level.

The Guitar

Guitars are now commonly used as a principal instrument when instruments are used in worship. Both the acoustic and amplified versions need to be familiar to the arranger as well as the bass guitar. You will come across ‘strummers’ who rhythmically ‘strum’ a given chord and also players who are able to play from a written score, picking out individual notes on the strings. A good book for information about guitar playing is ‘[Playing the Guitar in Worship](#)’ by Joe King, Kingsway, 1995. Or go to the following website for further titles:

www.fetchbook.info/search_The_Exercise_Book_for_Guitar/startFrom_6.html



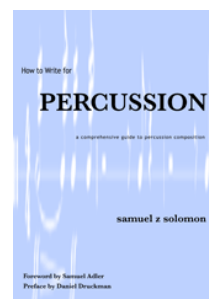
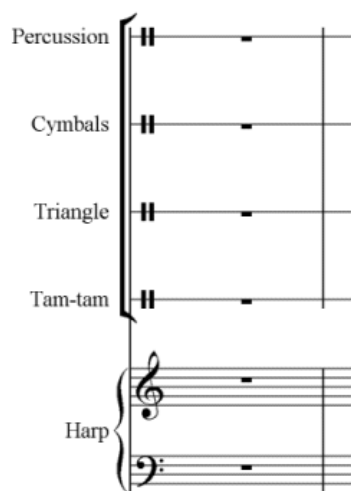
Also see: <http://www.dolmetsch.com/musictheory30.htm>

Percussion

The tambourine, that symbol of emancipation, can wreak havoc in the wrong hands. Treated as any other instrument, it can be a most effective part of your ensemble. Anyone who is going to ‘have a go’ without consulting a professional teacher first will produce a loud jangling as the bells are constantly in play. There is a code of strict discipline amongst percussion players and a good percussionist is of great value.

Badly played drum-kits can completely obliterate any other players and must be either damped (muted by linen) or controlled by mixing desk (if digital). The acoustic of most churches will enlarge any snare and bass drumming and a crisp rhythmical backing will become a booming blur. Again, regular lessons are needed and a professional attitude towards any percussion instrument stops any informal misuse.

Generally when notating parts for percussion, the tuned instruments (glockenspiel, miramba etc.), will use the normal five-line staff. Untuned percussion (snare-drum, cymbal etc.), may use an allocated line on a five-line staff, or a one line staff as below. Sometimes normal note heads are used or an x.



For details about a book on writing for percussion instruments go to:
<http://howto.szsolomon.com/>

Voices

One of the styles you might arrange for will use voices in different ways to a more formal choir and organ style. The 'backing vocals' that we are so used to seeing behind the lead singer use a close harmony to punctuate the rhythm of the song. Gospel singers are so good at this and arrangers should try to get to know how this is done.

The following website is a good source for inexpensive used copies and you are also able to view pages here: <http://www.rejoicemusic.net/index.cfm>

For some sound-clips of the Gospel style go to: <http://www.vocalworks.co.uk/index.html>

Using the voice as an instrument can be effective and fun for those involved. The voice need not be singing words all the time and can provide a range of textures to accompany a solo voice. Works by Bob Chilcott and Karl Jenkins might give you some ideas.

Have a look at these videos:

<http://www.youtube.com/watch?v=gjyWP2LfbyQ>

<http://www.youtube.com/watch?v=05ip-N0H1lg&feature=related>

Writing or arranging for children's voices requires some knowledge of how a child's technique and range differs from that of an adult's. Children who are singing regularly will have a greater range and ability to sing longer phrases than those who only sing on a 'casual' basis. Music with a strong feel of tonality and use of syncopation attract young

singers and will be easier to learn. You will learn very quickly what children like and dislike because they will tell you! However, what may seem at first to be doomed, can just as well become flavour of the month when learned and known.

A certain amount of experimentation and getting to know your singers will help to form your judgements as to what they are capable of and what they will most enjoy. Children are not afraid of hard work if they can see a reason for it and can also pick up your enthusiasm for the music. Rehearsing a new arrangement or composition in front of children is a good test of your own confidence in your work.

Presentation of Score and Parts

Hand-written scores are becoming a thing of the past. Updating such scores and replacing damaged or lost parts takes much time and effort and often such scores can be difficult to read. There are many cheap and easy to use software programmes available for your PC or laptop. Ask others in the group which ones they prefer and why.

Whichever programme you choose, guidance will be given as to how you input your music, how you manage the music on the page and how to export your scores either as printed sheet music or for use in other documents.

Sketches are a good idea using a pencil and manuscript paper. You can download and print free manuscript paper at <http://www.dolmetsch.com/manuscriptpaper.htm>

A recommended procedure for arranging music is to lay out your score on manuscript paper and decide what roles your instruments will take. Use a standard layout of woodwind at the top, brass, percussion, voices and strings at the bottom. A keyboard reduction will take the lowest staves

Don't forget that you are not limited to the notes that are printed in the hymn or chorus you are arranging. If you are changing the harmony, then make a simple sketch of this and then use it as a basis for any [arpeggiation](#) given to individual instruments. Because the players are able to produce a variety of rhythmical variations of the basic material, you are able to give them greater freedom in their parts. Counter melodies might not slavishly follow the original 'alto' or 'tenor' lines but can be freely composed within the given harmony. Introduction and linking material turn arranging into composition as you use motifs from the given material to base your work on.

When you are satisfied with your score, (and you will probably have used more rubber than lead), begin to enter the parts into your document in your computer programme. The first thing that you will need to do is to create a template – there will be some of these on the programme which may be adaptable. Lay out your staves and label them, inserting the clefs, key and time signature. Create the correct number of bars and insert any key or time signature changes.

Insert each part into the score and if parts are doubled, wait until you have inserted any text, slurs or ties before copying. You could either leave transposing parts in the key of C or write them in as they will be printed for the player. This score will be your working copy and so needs to be as clear as possible. Leave enough space between staves and group each instrumental 'family' with a bracket on the left of each page. You need to be able to read the score in rehearsal and to have room to make your own conducting comments/markings.

After the notes have been inserted, ties, slurs, articulation markings, dynamics and tempo indications will need working on. These will all be transferred to the instrument parts

when you 'extract' them. When all the information is in, check that the score is still readable and that any words are given enough room. Accidentals and ties may need checking as they sometimes require spacing.

Extracting parts is sometimes tricky as they can look a mess at first if using the same spacing parameters as the score. You will need to re-space the staves of each part and to transpose if necessary. A clear title and which instrument the part is for will help in rehearsal. Give players a bar rest at page turns if possible. Save your work as often as possible and make at least two backup discs.

Harmonisation

This is a big topic and not one that we can begin to fully address here. Depending on your current grasp of the subject, you may either need to begin working at an elementary level or to hone existing skills by referring to one or a number of the publications below.

[First Steps in Music Theory](#) by Eric Taylor, Grades 1-5 (1999), is published by the Associated Board and is described as: 'This introduction to the essential elements of music is ideal for students preparing for examinations, as well as an excellent resource for everyone learning to read music. In this book you will find:

- a step-by-step presentation of the basic facts of music theory
- a grade-by-grade format
- numerous music examples
- clear, easily-understood explanations
- vital information suitable for music students of all ages and abilities

[Harmony in Practice](#) by Anna Butterworth - Grades 6-8 (1999), is published by the Associated Board and is described as: 'A thorough exploration of the main elements of tonal harmony, in workbook format that enables students to acquire a secure knowledge of the basics of harmonic practice. Contains over 280 music examples, and over 180 exercises for working. Excellent preparation material for Associated Board Grade 6 to Grade 8 theory exams, A Level Music and Diploma exams, and university and college entrance papers.' There is a separate answer book to the given exercises.

Should you be further on than these books and want to pursue the theory of harmony, then you will need something like [Harmony](#) by Walter Piston published by Gollancz.

Other Titles:

[Arranging: Reharmonization Techniques](#) by Randy Felts, Berklee Press.

'Whether you write film scores, direct a band or choir, or play solo piano or guitar, you will find simple and innovative techniques to update your songs and develop exciting new arrangements.'

[Harmony, Counterpoint and Improvisation Books 1 and 2](#) by Benjamin Dale, Gordon Jacob and Hugo Anson, Novello. 'This textbook offers harmony, counterpoint and improvisation as one organic course of study.'

Descants and 'last verse' arrangements

Many church musicians produce arrangements for the last verses of hymns. These may be a re-harmonisation for the organ, they may provide a descant for the choir and may also include parts for additional instruments such as a trumpet or brass and percussion. Arrangers may find inspiration in the arrangements that are used on 'Songs of Praise', most of which are specially arranged for certain groups of instruments and choirs.

There are a growing number of such arrangements for choirs now on the market and books of last-verse arrangements have been produced, notably by Edward Bairstow, Eric Thiman, C.H. Lloyd, Charles Macpherson, Geoffrey Shaw, Sydney Nicholson, Christopher Gower, Noel Rawsthorne and Malcolm Archer. There is also a book of very good arrangements by a range of composers published by the RSCM and edited by Gerald Knight.

In the preface to this book is a word of warning. The book aims to 'discourage those who lack the considerable harmonic and contrapuntal ability from attempting what in the hands of a master appears effortless but is in fact a fairly rare and unusual skill'. This refers to impromptu harmonisations, the kind that are unprepared and can often fail to succeed. As an arranger, you will have time to prepare and try out your work and maybe get a second opinion before putting 'into service'.

A firm grasp of 'harmonic and contrapuntal ability' is however required in order to produce good work. Examples from published collections will show that new harmonies 'flow' well and compliment the hymn melody with harmonic and melodic material that retains a supportive and not too diverting role. When harmony is used that makes singing the melody by the congregation difficult, then the writer has lost the plot.

To begin with, make small changes to the harmony. To make the last verse seem different, only two or three changes may be needed. Work on the chords before cadences as starting a new harmonic sequence earlier can result in forcing your way back to the cadence. Retain strong cadential material that will be easily manoeuvred by the singers. Take care that cross-rhythms, canonic material and harmonic rhythms do not set-up a stronger pulse than the original. Use of these devices can be effective in small doses.

Remember that the original harmony may be used to produce descant material, either for the player or singers. Many players transfer the tenor part up two octaves and play it above the soprano part as a descant. Use of passing notes, chromatic movement, arpeggiation, repeated notes, can all create the feel that the player is producing something new and yet the original harmony is retained. With the small changes you have made to the original harmony, try writing an arrangement with a descant and organ part that is 'ornamented' by one or two figurations in the texture (repeated patterns often using semiquavers).

Learning from the masters is one very good way of improving your abilities in this area of arranging. Refer to the collection of [Bach's 371 Harmonised Chorales](#) published by Schirmer. Here you will find harmonic variants to the same chorale melodies. Many examinations in harmony require a harmonisation of a chorale in this style. It is always worth studying how Bach provided different versions of harmony that each seem to support the melody as strongly as the other.

Descants need not use a high *tessitura* throughout and often they may begin by using the opening part of the original melody. There are melodies to be had from using a

combination of material from the alto and tenor parts. Bold phrases that contain a convincing melodic line of their own will work well.

Provide enough breathing space for the singers, they will probably need it. Don't feel that the descant has to be present throughout. You don't always need to use the same text as that being sung, many successful descants use short segments of text or the word Alleluia. Two-part writing is effective going into the final cadence, especially if you have a strong top line.

Texture and colour

The composer or arranger needs to listen to and study scores in order to assemble a repertoire of ideas and techniques. Knowing the sounds of instruments in combination and how they change timbre in their different registers comes from listening to live musicians or recordings and noting details of scoring. How did Brahms or Stravinsky score for the trombone? How does Bernstein use a percussion section or how can Ravel produce such ravishing sounds from the strings?

An imaginative ear that is also informed by experience will be of great help in making decisions when it comes to deciding what to do with the instruments you have available. Messiaen wrote his [*Quartet for the End of Time*](#) while a prisoner of war in 1941. The instruments he had at his disposal (piano, clarinet, violin and cello), were not ideal.

"The cold was excruciating, the Stalag was buried under snow. The four performers played on broken-down instruments. Etienne Pasquier's cello had only three strings (a claim later denied by Pasquier) the keys on the piano went down but did not come up again. But never have I had an audience who listened with such rapt attention and comprehension."
Messiaen

We are often not working with ideal instruments or players and there is much skill in being able to produce arrangements that enable the players to feel comfortable with their part while contributing a part that is intrinsic to the score.

Given that time is always short and you will probably be working to a deadline, the niceties of texture and colour could well have to be shelved in favour of practicalities. However, by spending some time studying scores, and these could be chamber works, stage works or opera, you will pick up useful techniques that could be written straight into your arrangements without too much trouble.

Such techniques may include:

- writing parts in octaves when combining instruments
- using tuned percussion for melodic support
- use of pizzicato bass in strings and piano
- thinning the texture – less held notes
- providing rhythmical motifs – linking material at cadences
- use of voices as pure sounds without words

Arranging for the Organ

Often you may come across a piano arrangement of an orchestral score. These are difficult to play on the organ and much of the octave doubling is not as necessary as it is on the piano because of the use of four-foot and two-foot pipes (these play notes an octave and two octaves above the written pitch). Popular scores from oratorio works are very much a part of the repertoire in many places and organists tend to adapt the scores to their own instruments and abilities.

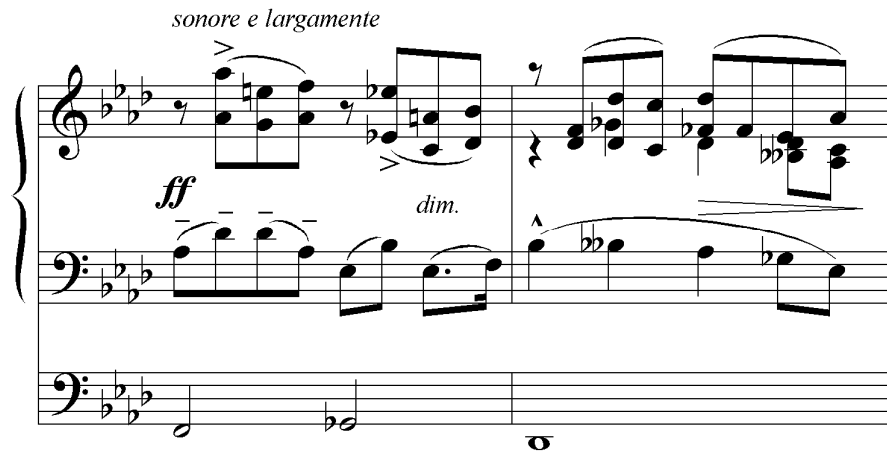
Scores for piano rely heavily on the sustaining pedal which enables the player to release chords once struck and to move around the keyboard with greater freedom. The organist must sustain chords without moving and is not able to move as freely. The organist does have two feet with which to play the notes given to the left hand on the piano and so can use this to their advantage.

Octaves are used frequently in piano arrangements interpreting doublings in the orchestral score. On the organ, octaves are provided for by the use of stops at different pitches in the pedals and on the keyboard. This also helps a player to 'thin down' a score and enable more fingers to be available.

The chorus *The Spirit of the Lord* by Edward Elgar from his Oratorio *The Apostles*, is a good example of a piano reduction from a full orchestral score. In the arrangement normally used, the following bar occurs between rehearsal figures four and five.

The image shows a musical score for organ, consisting of two staves: a treble clef staff and a bass clef staff. The key signature has three flats (B-flat, E-flat, A-flat). The time signature is not explicitly shown but appears to be common time. The score is marked with a forte dynamic (*ff*) and includes the instruction *sonore e largamente*. The right hand (R.H.) and left hand (L.H.) parts are indicated. The right hand part features complex chordal textures with many notes, including some with accents (>) and slurs. The left hand part consists of a simpler bass line with some chords. A *dim.* (diminuendo) marking is present towards the end of the bar. A *Ped.* (pedal) marking is located below the bass staff. The score is a single bar of music.

This bar would give a pianist mild cause for concern and is quite a challenge for many organists. The following arrangement reproduces the octaves by using the range of organ pipes and what is manageable in the second bar is left as it is. Its all a matter of what you are able to manage while producing a musical and secure accompaniment.



Many players are extremely good at arranging 'on the hoof' and produce wonderful colours and textures that are very close to an orchestral sound. There are players who can play and transcribe from sight from an orchestral score! For most lesser mortals, the interpretation of such scores as the Elgar require careful preparation and the ability to draw the essentials from a score whilst not being too literal in playing every written note. Remember that, for the organist, as well as playing the notes, there are stops to manage, the conductor to watch and often pages to turn.

Conclusions

The more practical work you do in this area, the better you will become. Managing notes on paper, transferring scores to desk-top publishing programmes, producing transposed parts and a working score all become easier in time. Being self-critical about arrangements and listening to your players is very important. Using an arrangement in worship that works for players, singers and your own satisfaction is a very worthwhile thing to do.

Your piece of work for this module can either be to arrange something for instruments or compose something yourself for a group of instruments. If you are able to email or post a recording of the work, that would be great, otherwise a copy of the score will do fine. You may find that others might wish to use your work and a place for sharing these could be made available on the website.

Reading List

[Orchestral Technique – A manual for students](#), OUP, 1977, ISBN 0-19-318201-7.

[In Tuneful Accord](#) by James Whitbourn, Chapter Six 'Musical Instruments' and Appendix A, SPCK, 1996, ISBN 0-281-04825-8.

The Worship Leader by Joe King in [Playing the Guitar in Worship](#), Kingsway, 1995.

Some demand a driving beat: Contemporary Worship Music in [Praying Twice](#) by Brian Wren, published by Westminster John Knox Press, U.S.A. 2000.

[Voices and Instruments in Christian Worship](#) by [Joseph Gelineau](#), The Liturgical Press, 1964.

Jazz – Lewd or Ludens? by Bill Hall in [Creative Chords](#), Gracewing, 2000.

Making Music by Richard Giles in [Re-pitching the Tent](#), Ch. 26, Canterbury Press, 1999

[Music and Worship: Principles to Practice](#), Peter Moger, Grove Worship Series No.27

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