

An investigation into the process of transcribing keyboard works for guitar duet

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An investigation into the process of transcribing keyboard works for guitar duet

by

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Keywords

Transcription, arrangement, keyboard music, guitar duet, classical guitar, *scordatura*, transposition, idiomatic, polyphonic range

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1. INTRODUCTION

1.1 Motivation for the study

The issue of difficulties in writing for the guitar is a long standing one. As Berlioz (1981: 67) states,

It is almost impossible to write well for the guitar without being a player on the instrument. The majority of composers who employ it, are, however, far from knowing its powers; and therefore, they frequently give it things to play of excessive difficulty, little sonority, and small effect.

Throughout history, few of the most important and prolific composers were guitarists or ever wrote for the guitar. This has resulted in the need for guitarists to expand the repertoire by arranging and transcribing music, originally written for other instruments or ensembles, for guitar solo, duet, trio, quartet or even larger groups.

Transcriptions for guitar duet have been far scarcer than transcriptions for solo guitar (Adkins, 2015: 1). Due to the single line nature of works for string instruments, solo works for cello and violin can be relatively easily transcribed for solo guitar, however transcribing from keyboard to guitar will often require that an ensemble setting be used due to the superior capabilities of the keyboard in terms of density, range and ability to sustain. (Adkins 2015; Small 2018: 35)

1.2 Terms and definitions

Transcription and arrangement: Transcriptions and arrangements are often considered to be identical in their definitions, however many consider them to have quite different meanings. Boyd (1980: 627) defines arrangement as "the reworking of a musical composition, usually for a different medium from that of the original." In this broad definition, one could therefore easily consider any reworking of a work to be an arrangement. Boyd (1980: 627) does then go on to state that the distinction between a transcription and an arrangement is in no way universally accepted. According to Roznawski (2008), transcription can be defined as scoring a work from one medium to another whilst attempting to preserve, as far as possible, the original musical result. Roznawski (2008) states that arrangement, however, can involve new composition of entire sections and changes in the overall form of the piece. In Jackson et. Teicholz (2018), Sergio Assad notes that he attempts to copy what was



originally composed as far as possible. Assad goes on to say that he would change keys on occasion and have to remove several notes and choose only the notes necessary to keep the integrity of the original harmonies (Jackson et. Teicholz, 2018). Despite the changes that will need to be made, Assad still appears to consider any attempt at reproducing the musical intentions of the original composer to be transcription as opposed to arrangement (Jackson et. Teicholz, 2018).

Assimakopoulos (2018) gives a similar opinion that an arranger should be a competent composer as arranging can be considered a procedure which demands freedom of choice and should be enriched by fresh ideas. Assimakopoulos (2018) further says that by contrast, a successful transcription should remain faithful to the original writing and it should not alter the composer's creative conception, tonal and rhythmic values and should adhere to the aesthetic qualities of the original work.

It is therefore the present author's understanding that a transcription strives to adapt the new medium to suit the music whereas an arrangement would rather adapt the music to suit the new medium. For the purpose of this study, the term "transcription" will be used to define a work originally written for a specific instrument and then written to be played on a different instrument or instruments, whilst remaining as faithful to the original music as possible.

1.3 Objectives of the study

The main objective of this study is to investigate the process of transcribing keyboard music for guitar duet. Furthermore, it is my hope that this study can serve as a guideline for prospective transcribers.

1.4 Research questions

What are the key aspects that need to be considered when transcribing keyboard music for guitar duet?

In order to answer this question, sub-questions will also need to be answered:

• What are the specific attributes in an original composition which make it suitable to be transcribed for guitar duet?

• What are the musical and idiomatic choices that need to be made during the process of transcription?



• What are the aspects of existing transcriptions which make them viable?

1.5 Research methodology

This will be a qualitative study as it deals with the gathering and analysing of ideas of a specific group (guitar transcribers) to formulate a general way to solve a specific problem (transcribing from keyboard to guitar duet). Furthermore, the research is qualitative as it deals with the nature of the research problem as opposed to the extent of the problem. (Kumar 2014: 16)

The research entails the analysing and sampling of numerous scores of works which have been transcribed for guitar duet. These scores are both primary sources and secondary sources. Strydom et Delport (2011: 315) describes a primary source as the original written material of the author's own experience which applies to my own original transcriptions, while secondary sources use material derived from someone else as the original source which applies to the work of other transcribers.

Furthermore, a "research into practice" approach is followed which is described by Davidson (2015: 93) as adding new knowledge by posing questions to investigate such musical aspects as creating, learning and performing music. I feel this is an appropriate choice of design as knowledge of methodological strategies which are ascertained through analysis of existing transcriptions are applied into practice with the original transcriptions presented in this study. It is important to clarify that the existing transcriptions which are analysed are of different compositions to the three original transcriptions presented in this study and that the existing transcriptions chosen for analysis are only similar in style and/or texture to the pieces chosen to be transcribed by myself.

Collecting data involved finding scores of transcriptions of keyboard music for guitar duet. Factors which determined which transcriptions to analyse in this study include its musical resemblance to the original keyboard work, and its suitability in the guitar idiom. Existing transcriptions which are analysed in this study include the Prelude No. 2 in C Minor, BWV 862, by J.S. Bach, arranged for two guitars by Alexandre Lagoya; Impromptu in C Minor, Opus 90 No. 1, D 899, by Franz Schubert, arranged for two guitars by Abri Jordaan; and Nocturne No. 1 in E flat Major, H. 24, by John Field, arranged for two guitars by Abri Jordaan.



The sampling strategy is a judgemental or purposive strategy which is described by Kumar (2014: 244) as being a strategy whereby the researcher deems which samples will be most relevant to the study. The pieces chosen for analysis are pieces which I deem to be musically satisfying for both the performer and audience. The Presti-Lagoya duo, for example, has transcribed a number of Bach preludes and the prelude chosen for analysis in this study is the one that this writer deems the most viable. The motivation for the choice of three such contrasting composers of different styles is to address as many of the problems transcribers of keyboard music for guitar duet may face and to attempt to give solutions to said problems.

The analyses of existing transcriptions are used to show ways in which problems when transcribing keyboard music for guitar duet have previously been solved and compared with the solutions in the original transcriptions presented in this study. Areas in the music where deviation from the original pitch occurs, for example, are analysed and explanations of why I think that the transcriber had to change a pitch are provided. Some important aspects of transcription for guitar duet which are analysed include choice of key, octave displacement, *scordatura*, note omissions, ornamentation and fingering, and each of these aspects are systematically explored with regard to the existing transcriptions and the new transcriptions presented in this study.

1.6 Problems and delimitations

Due to its nature, the results of the study cannot be wholly objective. The opinions on the validity of a transcription differ on some of the most played and most critically well received transcriptions throughout history. Grier (1996: 180) notes that in humanistic studies, objectivity does not exist. This therefore applies to deciding which transcriptions to include as part of the study as it is also not possible to claim that any one transcription is the most viable. A further potential problem is the availability of scores of those transcriptions I would deem the best suited to be included in this study and therefore the data will be limited to what is available. The study will also not be able to explain in detail the reasons for the musical decisions made on every single note in the original transcriptions, and therefore will not be exhaustive.



1.7 Discussion of chapters

Chapter 1 of this study will be an introductory one and will focus on the background to the study, research methodology and problems posed by the study.

Chapter 2 will be a review of the existing literature, including a discussion of articles and theses on the subject of guitar transcription, a brief history of guitar transcription, as well as a discussion of general considerations when transcribing for the guitar.

Chapter 3 will present the original transcriptions by myself, with analysis into the process of the transcriptions, using examples of existing transcriptions to compare the choices I made with those made by renowned transcribers.

Chapter 4 will be a conclusion in which the research questions of this study will be answered and suggestions for further research presented.



2. LITERATURE REVIEW

2.1 Related literature

There are several dissertations on transcription where the main focus is the process of transcribing for the guitar, many of which include original transcriptions done by the authors themselves. These include Doctoral theses and Master's dissertations such as the following:

- Harb (2014), in which the author presents his own original solo guitar adaptations of works originally written for other instruments with the objective of expanding the guitar's repertoire.
- Crissman (2014), in which the author arranges five keyboard sonatas by Antonio Soler for guitar duet to expand the duet repertoire and give insight into the process of transcription.
- Adkins (2015), in which the author transcribes keyboard works by Erik Satie for guitar duet as well as an orchestral work by Camille Saint-Saens for guitar quartet with the objective of expanding guitar ensemble repertoire.
- Roznawski (2008), in which the author transcribes four keyboard sonatas by Christian Gotthilf Tag for guitar duet which once again expands the guitar duet repertoire and explores the process of transcription from keyboard to guitar duet.
- Röntsch (2011) in which the author compares two transcriptions of a keyboard work for solo guitar and explores the process of transcription.

Aside from the numerous theses on guitar transcription, there are a number of articles published in Classical Guitar Magazine and Soundboard Magazine which often include the opinions on transcription of some of the world's most renowned transcribers of music for the guitar. In the Spring 2018 issue of Classical Guitar, there is a special focus on transcribing and arranging which includes interviews with Carlos Barbosa-Lima, Manuel Barrueco, Bill Kanengiser, David Russell, and Sergio Assad, all leaders in the field of transcribing for the guitar. (Small 2018.) A May 2018 article for Classical Guitar Online features several opinions on arranging and transcribing for the guitar by Evangelos Assimakopoulos.



2.2 Guitar duet transcription

2.2.1 1800-1950

The first appearances of transcriptions for guitar duet can be seen in the early 19th century. Guitar composers Fernando Sor (1778-1839), Mauro Giuliani (1781-1829), and Ferdinando Carulli (1770-1841) based several of their fantasias and theme and variations on the music of the likes of Haydn, Mozart, Rossini and Beethoven. Carulli's transcriptions for guitar duet include of the first movement of Haydn's "London" symphony no. 104 (composed in 1795) in his Symphonie d'Haydn, Op. 152 and the variation set Andante varié et rondeau, Op. 155, which is based on a Beethoven theme. Giuliani's duet transcriptions include two overtures: Barber of Seville by Rossini and La Clemenza di Tito by Mozart. Many of the transcriptions during this time were in fact paraphrases, in which the composers just used themes or passages from the original work in order to create a new work. A number of these duet transcriptions were from orchestral works as opposed to keyboard works. Prominent transcriptions of keyboard works from Bach through to Albéniz seem to appear later in the 19th century with the Spanish guitarist Francisco Tárrega (1852-1909) (Wade 2018). Tárrega began his guitar studies at a young age but he also studied the piano. This influenced his future guitar transcriptions of major composers like Beethoven, Chopin, and Mendelssohn for solo guitar. Tárrega's output of transcriptions for guitar duet includes music by Beethoven, Bizet, Gounod, Haydn, Mendelssohn, Mozart, and Schubert (Wade 2017). Miguel Llobet, Tárrega's student, also transcribed several works for guitar duet including Mendelssohn's Lieder ohne Worte, Op. 62, no. 1, Albéniz's Evocacion from book one of Iberia, the Menuet from Mozart's Symphony no. 39, K. 543 and Tchaikovsky's Humoresque, Op. 10 no. 2. Another of Tárrega's students, Emilio Pujol, transcribed works by Bizet, Cervantes, Granados, Poulenc, Ravel and Rodrigo (Wade 2017). (Adkins 2015: 4-6; Loss Vincens 2009: 31.)

2.2.2 1950-present

Ida Presti (1924-1967) and Alexandre Lagoya (1929-1999) are considered to be the most important guitar duo in the popularisation of duet music. Presti was a child prodigy who had a flourishing career as a soloist in Paris before the formation of the



duo. Lagoya was born in Egypt and was largely self-taught on the guitar but his career as a solo performer was also well established before he moved to Paris in 1948, where he had classes with Andrés Segovia amongst others. The two met in Paris in 1951 and formed a duo within a year of this meeting. In order to provide their duo with sufficient repertoire to perform, Lagoya started transcribing music written for other instruments, primarily the piano and harpsichord. The duo chose not to perform much of the duet repertoire from previous centuries, performing either new works or transcriptions by Lagoya. The majority of these transcriptions were of harpsichord music by composers such as Johann Sebastian Bach, Georg Friedrich Händel, Francois Couperin and Domenico Scarlatti. (Zigante 2008: 9-12.)

The success of the Presti-Lagoya guitar duo provided a platform for duos such as the Abreu brothers, Assad brothers and the duo made up of John Williams and Julian Bream, all prominent duos in the 20th century and they all in turn influenced the current plethora of excellent guitar duos.

2.2.3 South Africa

Abri Jordaan is a South African guitarist, composer and transcriber. Jordaan was born in Port Elizabeth in 1956 and began formal guitar studies in 1972. Jordaan became established as one of the leading figures in classical guitar music, collaborating with the likes of Mimi Coertse, Werner Nel and Johanna Roos. He also played in ensembles such as the Rosamunde Quartet and the Villa-Lobos Ensemble. Jordaan formed a guitar duo with the Belgian guitarist, Yvon Syx and between 1985 and 1992 made successful tours of Southern Africa and Europe as part of the duo. Jordaan and Syx also made several recordings for the South African Broadcasting Corporation. (Kinsey 2009: 109, 110.)

Jordaan has since made several transcriptions of keyboard works for guitar duet and I believe it is his transcriptions that have set the standard for guitar duet transcription in South Africa.

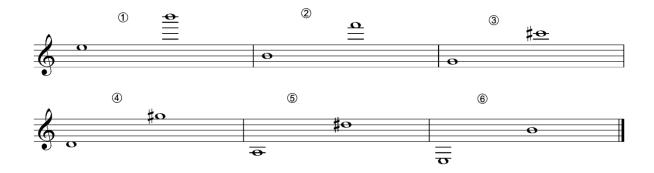


2.3 General considerations when writing for the guitar

Guitar music is notated on a single stave, in the treble clef. The guitar is a transposing instrument as the music sounds an octave lower than it is written. In parts with multiple voices, normal stem direction rules apply. As guitar music is notated on a single stave, the score can become quite dense and difficult to read. This is common and should not be too much of a problem for an accomplished guitarist. (Godfrey 2013: 8.)

In standard tuning, the guitar's range is from E2 to B5. The range of the strings is an octave and a fifth for the first and sixth strings and an octave and an augmented fourth for the other four strings. The transcriber should however avoid writing above each string's octave as it becomes difficult to play especially in the case of chords.

Example 1: Range of each string*



The transcriber should always consider the string or strings on which each note or chord should be played and should therefore consider the above.

Frets are strips of metal placed across the fingerboard of the guitar. The fingers of the left hand are used to depress the string in the fret and a specific pitch results when the string is plucked. The fret closest to the head of the guitar is called the first fret, the next closest is the second fret and so on. The frets proceed chromatically so that the first fretted note on the E string will be F, the next will be F# and so on. The distance between frets gets smaller as the pitches get higher to allow for an approximation of equal temperament. (Harwood 2001: 253, 254.)

Due to the guitar's multiple strings and the fact that a string will continue to vibrate for a short amount of time after it is plucked (unless it is specifically stopped), sustain becomes an issue in composition and performance. It is my opinion that more often



than not, the transcriber should make it clear when he or she wants a note to be stopped rather than make it clear when he or she wants a note to ring on. Take the following example:

Example 2: F. Sor, Study in B minor bars 1-4 (Sor 1999)



If it were notated it exactly as it would sound it would appear as follows:

Example 3: Sor study in B minor with literal notation*



The score becomes unnecessarily cluttered and difficult to read. Because each note is on a different string than the preceding note, the performer will let the notes ring over each other which produces a very guitaristic, musically pleasing effect.

In passages in which the notes following each other are on the same string, the notes will obviously not ring over each other and therefore any indication of sustain is unnecessary. Should the transcriber specifically wish for any tone to be stopped in the case of multiple voices, a rest will suffice whereas in the case of arpeggiated passages (especially with open strings as they require more attention to be stopped) a close bracket sign is enough for the performer to understand the composer's intention.

Example 4: how to notate stopping the string*



Passages such as single line melodic passages in which the composer wants notes to ring over each other as much as possible should include the marking "L.V" which means to let vibrate.



Example 5: "Lasciare vibrare"*



The most common method of sound production on the guitar is plucking the strings with the right hand nails. The normal position of the right hand is slightly to the right of the sound hole. The two most common alternate positions of the right hand are close to the bridge (written as "ponticello") and over the neck (written as "tasto"). This allows the transcriber to control large contrasts in colour. Ponticello playing produces a much brighter tone colour while tasto playing produces a darker tone colour. Transcribers often write "metallic" or "dolce" instead, in which case the guitarist will almost always play ponticello or tasto respectively. Performers will often contrast loud and soft sections by playing the loud section ponticello and the soft section tasto. While this relationship between dynamics and tone colour does often appear, it need not always be the case and the transcriber may score tasto sections forte and ponticello sections piano with great effect. (Godfrey 2013: 17-19)

Another way of producing sound on the guitar is by using slurs. On the guitar, the slur is a technique used when two or more notes are played consecutively on one string where only the first note is plucked by the right hand (Serrano Munoz 2016:52). The slurred notes are played by using the left hand fingers to hammer on or pull off on to notes on the same string (Serrano Munoz 2016: 52). This is an extremely idiomatic technique used in ornaments and is particularly useful in fast passages as the right hand does not need to pluck every note. Ascending slurs are performed by one of the left hand fingers hammering a fret above the initial note while descending slurs are performed by a left hand finger pulling off onto a lower fret or open string. Mixed slurs, such as trills, are combinations of ascending and descending slurs. The transcriber should be aware that when he or she writes a slur they should pay attention to the fact that the left hand finger which performs the slur should not be occupied with holding another note at the moment of the slur. (Aguado 1981: 35; Fernández 2001: 34)



There are a few keys which encompass almost all guitar music, especially before the twentieth century. This is due to the prominence of open strings in idiomatic guitar keys. If one considers the pitches of the three bass strings (E, A, D), it is apparent that A major and A minor would be the most popular choices for keys in tonal music due to the tonic, subdominant and dominant relations of the open strings. Bream (2003: 4) states that "the natural keys of the guitar are A, E, D, G, C, F and the tonic minors."

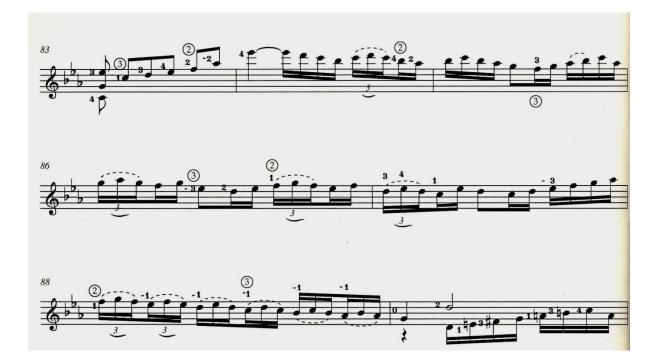
There are very few limits to monophonic guitar writing. Jumps of two octaves, for example, are very much possible. Due to the possibilities of slides (glissandi) and vibrato, single line writing for the guitar can be highly effective (Godfrey 2013: 28). The transcriber should however be wary if the melody requires a jump of several frets with the left hand, especially in a fast tempo. One such solution to this would be to place an open string note immediately before such a jump which will give the performer that little bit of extra time to get his or her left hand in position.

Example 6: Extremely difficult jump vs idiomatic jump*



Some of the most lyrical guitar music is found in the single line phrases of many a Spanish composer (Godfrey 2013: 28). The use of slurs, notated in the next example using dotted slur markings, is extremely important, especially in the fast runs. Guitarists find it quite difficult to play long, fast runs solely with the use of right hand plucking and it is advised that the composer uses some slurs in such a passage. A slurred note sounds slightly weaker than a plucked note therefore slurs should generally be used from a strong beat to a weak beat. It is also important to notice the freedom that is given to the transcriber in choosing the string on which a specific note should be performed in a monophonic section such as this. As will become clear later in this chapter, almost all notes on the guitar can be performed on different strings, and when it is idiomatic to do so, a lower string is generally preferred as it will give a richer tone colour. (Godfrey 2013: 28–29.)





Example 7: I. Albéniz, Suite Española, Sevilla, bars 83–89 (Albéniz 1999)

Perhaps the most prominent mistakes in guitar composition by non-guitarists occur in the writing of impossible chords and sonorities. In the next example three impossible sonorities are presented.

Example 8: Impossible sonorities*



Example 9: Solutions to example 9*





The first is impossible because both notes can only be performed on the sixth string. The second is impossible because it would require a stretch of six frets between three fingers. The third is impossible because it would require a stretch of nine frets. The first example could be solved by changing the octave of one or both of the notes. Writing two notes that can only be played on the sixth string is one of the only times a two note chord will be impossible because every note from the fifth string up has more than one string on which it can be played. The second example would require any one of the notes to be raised an octave. When writing chords of three or more notes the composer should be aware of large or impossible stretches that may occur. The third example could also be solved by changing the octave of one of the notes. Again, the sixth string is the one that causes this problem because the low F cannot be played anywhere else but the first fret of the sixth string. (Godfrey 2013: 33, 34.)

In the natural position of the left hand, if the first finger falls on the first fret, the second will fall onto the second fret, the third finger the third fret and the fourth finger the fourth fret. This is also called the first position and is shown in the score with a roman numeral I. The second position would be the position in which the first finger is placed on the second fret and so on for all nineteen frets. When the transcriber is also a guitarist, fingering will often be determined by what best suits their own technique (Betancourt 1999: 41.) As a general rule however, the transcriber should keep within a range of three frets between the first finger and the fourth finger (although four and even five fret stretches are possible, they can be very difficult in quick passages). As mentioned above, notes which are to sound simultaneously must be played on different strings and the composer should always consider on which strings the notes should be played and therefore also consider the frets on which the notes will be held and if it will be possible for the left hand to do this. (Godfrey 2013: 32.)

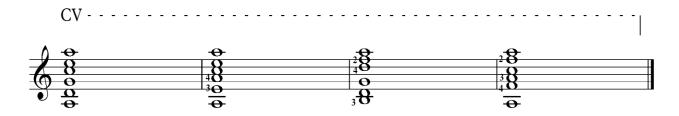
Example 10: Pitches produced by every fret up to the twelfth*





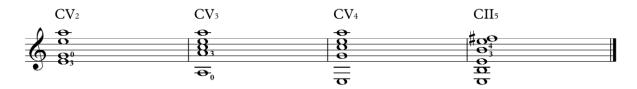
A common and important device in chordal structure on the guitar is the full *barré*. This is where the first finger of the left hand is placed flat over one fret of all six strings and is usually indicated with a C (*Capotasto*) followed by the Roman numeral of the fret on which the *barré* should be placed. A *barré* on the first fret would therefore yield the notes below the Roman numeral I in example 11. With a full *barré* held, the guitarist would still have three fingers free to alter up to three of the notes in that *barré*. In example 11, a full *barré* on the fifth fret will be presented with none of the notes altered next to three possible chords in the same position with the second, third and fourth fingers altering the chord. (Bream 2003: 5.)

Example 11: Full barré on fifth fret with possible chords*



Full *barrés* higher than the tenth fret should be avoided as they are virtually impossible to perform. Other useful devices include the two string *barré*, the half *barré*, four string *barré* and five string *barré*. This is performed by holding down the two highest, three highest, four highest and five highest strings respectively on the same fret with the first finger. This allows for the use of open bass strings in combination with barred notes. These are indicated with the number of strings forming the *barré* placed after the Roman numeral which indicates the fret. As with a full *barré*, the second, third and fourth fingers are free to depress frets within a three-fret range of the *barré*. (Godfrey 2013: 50.)

Example 12: Two string to five string barré*





An important factor to consider when writing chords that require the left hand to move up and down the neck is the use of a "guide finger". This is a technique whereby one finger remains on the same string between two adjacent chords which makes a change in left hand shape easier for the performer.

Example 13: Difficult shift vs easier shift due to guide finger*



Scordatura is the alteration of the pitch of one or more of the open strings. The most common *scordatura* on the guitar is the retuning of the sixth string a whole tone lower to D2. This retuning is extremely popular and has an idiomatic effect in that the three bass strings become D, A and D allowing for a strong open string tonal centre on D. With the open string tuned lower, the fretted notes are also all a whole tone lower than what they would be in standard tuning. (Lunn 2010: 57.)



3. ANALYSIS AND ORIGINAL TRANSCRIPTIONS

3.1 Bach WTC (The Well-Tempered Clavier) Book 1 No. 3, BWV 848

3.1.1 Choice of key and scordatura

As pointed out by Lang (2013), transcribers of works by Bach must first face the guitar's limitations regarding range and texture. The Prelude No. 3 is originally in C sharp major, a very rare key for guitarists. Keeping the transcription in this key would cause difficulties, the most problematic being that the guitar's open strings would be rendered almost unusable. When transcribing pieces in such rarely used keys, it is common for the transcriber to transpose the piece to a more idiomatic key. I have taken the decision to transpose the piece down a major third to A Major (a key used extremely often in guitar music).

Example 14: Original key and transposed key, Prelude 3, bars 1-4

Original: (Bach 1866)



Transcription*:



Considering the fact that the guitar is a transposing instrument (sounding an octave lower than what is written) I decided not to stay in the original key of C sharp major, as the first four bars would already present a problem with the guitar's range. While



the notes would all be playable, many of them would be at the very upper limit of the guitar's range and would be exceedingly difficult to play. The more comfortable key of A major allows for these arpeggio passages to be played mostly below the twelfth fret, making it much more playable. I chose not to use *scordatura* in this transcription as the key of A Major works well with the guitar's standard tuning due to the bass strings' pitches of E, A, and D which fittingly result in the dominant, tonic, and subdominant pitches respectively.

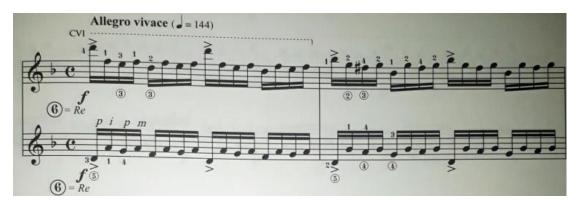
When we compare this with Lagoya's transcription of the second prelude from book 1 of Bach's WTC, we see the decision to transpose the music up a major second from C minor to D minor. Lagoya is able to do this as the original piece never goes higher than E5, and therefore even transposing the music up is not a problem. I believe that the reason for the transposition to D minor is that, once again, it is a key much more commonly used in the guitar repertoire. The E flat and A flat present in C minor makes the use of the guitar's open strings difficult. Lagoya chose to use a common *scordatura* to guitarists: by tuning the sixth string down a major second to D. Due to his transcription being in D minor, this *scordatura* adds a low tonic that becomes useful later in the prelude.

Example 15: Original key and transposed key, Prelude 2, bars 1-2





Lagoya: (Bach 2008)



3.1.2 Octave displacements and note omissions

There was no need for any octave displacements of notes nor was it necessary to omit any notes due to the suitability of the transcription being in A major.

3.1.3 Parts

It is my opinion that Bach's keyboard music, when transcribed for two guitars, lends itself well to the general idea that one guitar will play the right hand part while the other guitar plays the left hand part. This can be seen throughout most of my transcription and indeed through most of Lagoya's transcription.

Example 16: Right hand and left hand match with guitar 1 and 2 respectively, Prelude 3, bars 8-15





Transcription*:



Example 17: Right hand and left hand match with guitar 1 and 2 respectively, Prelude 2, bars 7-12





Lagoya: (Bach 2008)



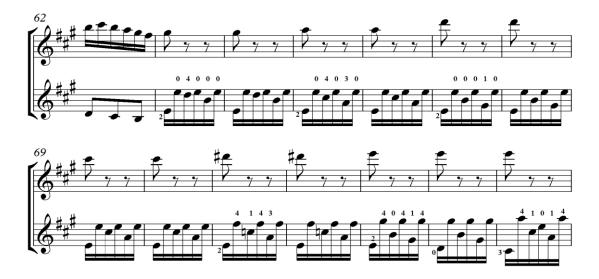
There are however a few bars near the end of the prelude where my transcription deviates from the principle of each guitar playing the part of each of the hands. The first of these deviations comes when the right hand plays syncopated semiquavers alternating with semiquaver rests which (while not impossible) could be quite tricky for the guitarist to perform. I realised that the second guitar would be able to play these syncopated notes whilst playing the quavers present in the left hand part with relative ease, as shown below.

Example 18: Exchanging of parts, Prelude 3, bars 62-75





Transcription*:



The next deviation from the right hand and left hand each receiving its own part comes in the final bars of the prelude. The original keyboard version becomes more monophonic as a single arpeggio line appears without accompaniment. I decided to spread this line between the two parts as it would be easier than if just one of the performers were to play it. Each two-bar rest gives the performer a chance to get into position to play the next bars of music. In the penultimate bar of the prelude, I exchanged some of the notes in the six-note chords for idiomatic purposes. I gave the low E on the first beat to the first guitar part as it would not be possible for the second guitar to hold that E for longer than the length of a quaver as the performer would need to play the A on the second beat of the bar on the sixth string. I also moved the open D string note on the third beat of the bar to the first guitar part because the second guitar would already be using the fourth string to play the E whereas the first guitar part is only using the three treble strings at that moment.

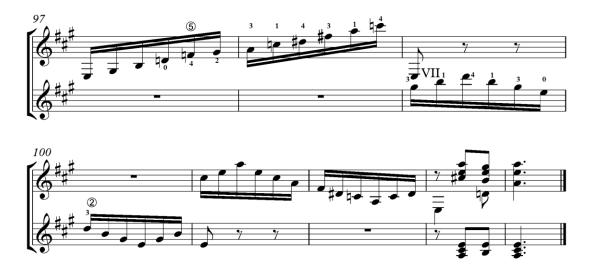


Example 19: Exchanging of parts 2, Prelude 3, bars 97-104

Original: (Bach 1866)



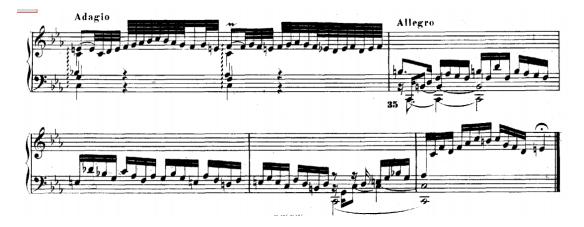
Transcription*:



In a similar passage at the end of the second prelude, Lagoya uses the two guitars in a similar way in order to ease the difficulty of an extended arpeggio passage.

Example 20: Exchanging of parts, Prelude 2, bars 33-38

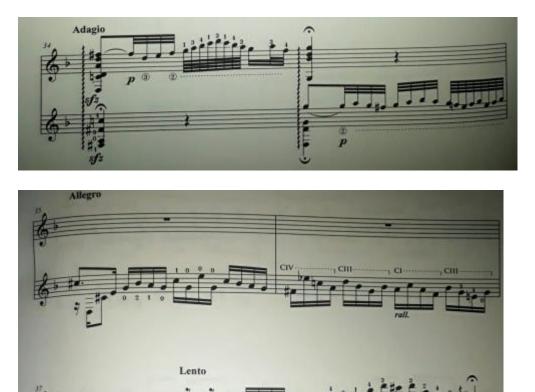
Original: (Bach 1866)



23



Lagoya: (Bach 2008)



3.1.4 Fingering

Right hand fingering will be left up to the performer in most cases, but it was taken into consideration when transcribing the prelude. Left hand fingering is given in cases where I thought it could prevent potential problems.



Example 21: Full original transcription of Prelude 3 with fingering*



25

















27



3.2 Brahms Intermezzo, Opus 118/2

3.2.1 Choice of key and scordatura

While transposition is always possible, it is preferable to remain in the original key of the work being transcribed. I decided to keep the transcription in its original key of A major although this was not a straightforward decision. There is only one instance in the piano version where the top of the guitar's range is exceeded. This occurs in bar 70 where a C sharp one whole tone above the guitar's highest note is present. A possible solution would have been to transpose the piece down a whole tone to G major which would also have solved the problems present throughout the piece of the music being in an extremely high register. This would however have caused a new problem with the lower range of the guitar as there are already several notes too low for the guitar present. I therefore made the decision to stay in A major and solve the exchanging of parts and thoroughly thought out fingering decisions. Furthermore, I made the decision to use *scordatura* for the second guitar part; retuning the lowest string down a whole tone to D. This allowed for some of the lower notes to still be present without impacting on the difficulty of the part.

Example 22: Remaining in the same key and indication of *scordatura*, Intermezzo bars 1-3

Original: (Brahms 1910)





Transcription:*



3.2.2 Octave displacements and note omissions

Due to the vast differences in range between the piano and the guitar, and the fact that Brahms uses a large amount of the piano's range in this Intermezzo, octave displacements occur regularly in my transcription. With that in mind, my goal was to avoid crossing voices where they would not cross in the original, with a few exceptions. The first octave displacements occur at the very beginning of the transcription. The original left hand part is often far too low for the guitar and thus entire passages are often transposed up an octave. As seen above in example 22, the bottom voice of the left hand is transposed up an octave to fit within the guitar's range. The upper voice remains in its original pitch, causing a brief crossing of the bottom two voices in order to maintain the descending line of the upper left hand voice. In example 22 there is also the first omission of a note. On the first beat of the third bar, the E played in the left hand is omitted for idiomatic purpose. In my opinion, it would be unnecessarily difficult for the guitarist playing the second part to play the D, E and G sharp simultaneously and considering the fact that the omitted note is in an inner voice and that there is another E present in the right hand/first guitar part, I took the decision not to include the extra note.

In the next example, numerous note omissions and octave displacements were necessary.



Example 23: Note omissions and octave displacements, Intermezzo bars 7-9

Original: (Brahms 1910)



Transcription*:



The first octave displacement above occurs on the first beat of bar 7. It would be impossible for the performer of the first guitar part to play the chord present in the right hand because of how high it is. Instead of moving the entire sonority an octave lower, I decided to keep the top melody note in the same octave as the original, to satisfy the original melodic line. It was however necessary to displace the rest of the right hand chord down an octave in order to make it playable for the second guitar part while keeping all of the notes of the original chord. On the second and third beats of bar 7, as well as the first beat of bar 8, some note omissions then occur in the left hand/second guitar part. The guitarist's left hand range becomes an issue when trying to play these sonorities and as such I took the decision to only include what I deemed the more important notes for the sake of the harmony in each of these instances, with the lower note generally being preferred in order to maintain the correctness of the outer voices.

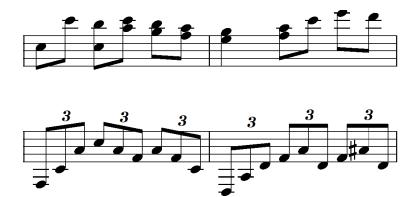
The following example features the octave displacement of an imitative run.



Example 24: Octave displacement, Intermezzo bars 70-71

Original: (Brahms 1910)

Transcription*:



The octave displacement of the right hand/first guitar part above was entirely necessary as the highest note in the piano version is out of range of the guitar. The top voice is transposed down an octave while the second voice is kept at the original pitch. This results in the crossing of voices which I feel could not be avoided in this instance. In order for the voices not to cross, the second voice would also have had to have been transposed down an octave, however this would result in crossing with the bottom voice. The result is such that the integrity of the melodic lines is maintained whilst being idiomatic for the guitarist.

Compared with Jordaan's transcription of Schubert's Impromptu, Opus 90 No. 1, we see more necessary transpositions of both parts.



Example 25: Octave displacement, Impromptu bars 6-8

Original: (Schubert 1888)



Jordaan: (Schubert 2016)



In the above example we see the music being transposed down an octave in order to better fit the guitar's range while maintaining the distance between voices.

3.2.3 Parts

While some passages remain true to the idea of each guitar part playing what each hand of the keyboardist would play, there are numerous deviations from this in the Intermezzo. This is mainly due to the extremes of the guitar's register being deployed, resulting in some difficult instances for this idea to be maintained. Example 25 below showcases a passage wherein each guitar part will play the same part as each hand in the keyboard plays.

Example 26: Right hand and left hand match with guitar 1 and 2 respectively, Intermezzo, bars 50-53

Original: (Brahms 1910)





Transcription*:



In Jordaan's transcription of the Impromptu, the transcriber adheres very prominently to the principle of each guitar part playing what each hand would play in the keyboard version.

Example 27: Right hand and left hand match with guitar 1 and 2 respectively, Impromptu, bars 53-55

Original: (Schubert 1888)



Jordaan: (Schubert 2016)



The exchanging of parts is prominent throughout the Intermezzo. The most common reason for this is that some chords present in either hand of the keyboard version would be impossible or unnecessarily difficult for a single guitarist to play, often due to how high the first guitar must play.



Example 28: Exchanging of parts, Intermezzo, bars 35-36

Original: (Brahms 1910)



Transcription*:



3.2.4 Fingering

As this is a slow tempo piece, I feel as though the right hand fingering is less important and can be left to the preference of the performer. Left hand fingering is given in passages where I suggest solutions to potential problems.



Example 29: Full original transcription of Intermezzo with fingering*:

Intermezzo



































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3.3 Scriabin Prelude, Opus 11/1

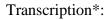
3.3.1 Choice of key and scordatura

I decided to remain in the original key of C Major. One option would have been to transpose the music up a major second to D Major, but this would have caused some difficulties in the upper range of the first guitar part. While this would have been possible, I took the decision to remain in C Major as I feel it is preferable for a transcription to be in the same key as the original. Furthermore, it presented an opportunity to show some more use of *scordatura*. With the wide range of notes used in the original piano version, it became necessary to expand the range of the second guitar part. The *scordatura* used in this transcription takes the fifth string down a major second to G, and the sixth string down a major third to C. This use of *scordatura* allows for the use of the low C pedal point that is used through much of the prelude.

Example 30: Remaining in the same key and use of *scordatura*, Prelude bars 0-3 Original: (Scriabin 1897)









3.3.2 Octave displacements and note omissions

I took the decision to transpose almost the entire right hand part down an octave as it is written too high for the guitar in many cases. The only exception is near the end of the prelude where I use the notes given in the original because the music would be quite clustered with the left hand part being transposed up an octave in that section.

Example 31: Right hand part at original pitch, Prelude bars 22-24

Original: (Scriabin 1897)



Transcription*:



As the left hand plays higher than the right hand at some instances in the original, and because the left hand part is mainly arpeggiated accompaniment, transposing the melody down an octave does not compromise the musical integrity.



Example 32: Transposing the melody of the right hand down an octave, Prelude bars 5-9

Original: (Scriabin 1897)



Transcription*:



In Jordaan's transcription of Nocturne No. 1 in E flat Major, H. 24, by John Field, we also see a transposition of the right hand part down an octave when the original would have been too high for the guitar. The transcription is transposed from E flat Major to A Major and for much of the transcription both parts are transposed down a tritone. In the following example we see the melody transposed down a further octave.

Example 33: Transposing the melody of the right hand down an octave, Nocturne bars 37-39

Original: (Field n.d.)



Jordaan: (Field 2016)





I transposed the entire right hand part of the Prelude an octave down and no notes are omitted. There are no notes omitted from the left hand part either, however some octave displacements were necessary due to some notes being too low. In some cases where the note which is too low immediately precedes a note which is an octave higher, I took the decision to displace both notes up an octave in order to preserve the octave leap and keep the perceived rhythm.

Example 34: Transposing notes which were too low up an octave, Prelude bars 5-7

Original: (Scriabin 1897)



Transcription*:



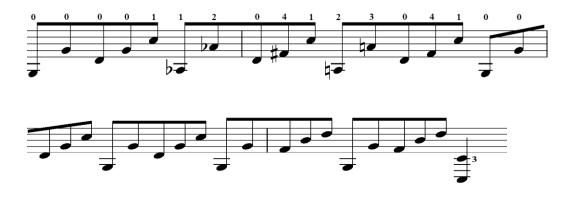
Example 35: Further octave displacements of the left hand part, Prelude bars 15-18

Original: (Scriabin 1897)





Transcription*:



3.3.3 Parts

There is no exchanging of parts in the Scriabin Prelude. The right hand part of the original is given entirely to the first guitar part and the left hand part is given entirely to the second guitar.

Example 36: Right and left hand parts separated, Prelude bars 15-17

Original: (Scriabin 1897)



Transcription*:



In Jordaan's transcription of Nocturne, we also see the separation of parts where one guitar plays the keyboard's right hand part while the other guitar plays the left hand part.



Example 37: Right and left hand parts separated, Nocturne bars 12-14

Original: (Field n.d.)



Jordaan: (Field 2016)



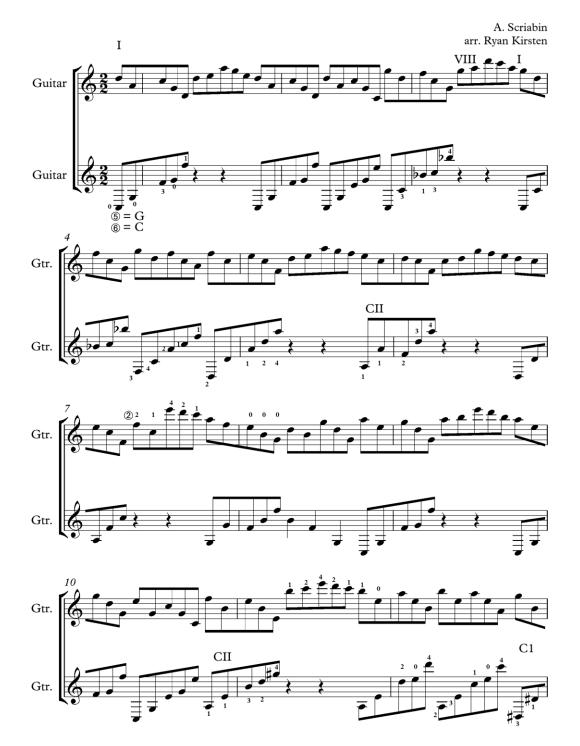
3.3.4 Fingering

As the first guitar part is mostly a single melodic line, the fingering I have included for that part is not overly comprehensive and the performer would be able to choose from a number of possibilities. The second guitar part includes more fingering due to the low tuning of the bottom two strings and due to nature of the accompanying arpeggios which ideally should be sustained more than the melodic lines.



Example 38: Full original transcription of Prelude no. 1 with fingering*

Prelude No. 1















4. CONCLUSIONS

The main objective of the study was to determine the key aspects that need to be considered when transcribing keyboard music for guitar duet.

Looking at other transcribers' work has provided me with much insight into the process of transcribing for the guitar and the key aspects of transcription became clearer as the transcribing process went along.

In order to accomplish the main objective, the sub-questions needed to be explored. Firstly, the specific attributes in an original composition which make it suitable to be transcribed for guitar duet had to be determined.

The first evaluation a potential guitar duet transcriber should make is whether or not a composition is suitable to be transcribed for guitar duet. During the process of deciding which compositions to transcribe for this study, I realised that some compositions were significantly more adaptable than others. I believe that the first thing to consider when trying to determine a composition's suitability for the guitar duet medium is its texture. A composition which prominently features a texture which is too dense could be exceedingly difficult to adapt due to the limited capability of the guitar to play many notes close together. Highly polyphonic textures should generally be playable in the guitar duet medium as guitarists are used to playing up to three voice baroque works which therefore means two guitars should have no problem playing, for example, a five voice keyboard work, as long as the range of the work fits in with the guitar's own range. It is also important that one understands the importance of knowing the polyphonic range of the guitar when writing for the instrument.

This brings me to the next most important aspect to consider when choosing a piece to transcribe, which is its range. While this study included a number of transcriptions of compositions which feature notes which fall out of the normal range of the guitar, it is still important to determine if it is viable to transcribe such a composition. In order to make this decision, one must consider if the problem of notes out of the guitar's range is easily solved. A keyboard work might feature large runs which span several octaves or it might prominently feature sections of extremely low or high notes, which are both aspects of a composition's range which would make it difficult to adapt to the guitar idiom.



The last crucial aspect of a keyboard work that needs to be considered before transcribing, is a combination of tempo and rhythm. I find that the keyboard allows for quicker playing in some instances than the guitar does. This need not be a general rule however, as a guitarist can usually play an arpeggio very quickly (due to the notes often falling on separate strings, allowing for the use of many right hand fingers) and a guitarist can also play repeated notes very quickly. Long scale like passages in a quick tempo (such as what one often sees in the first and third movements of Haydn and Mozart sonatas) would be quite difficult for a guitarist to replicate and are less seen in the guitar repertoire.

Other important musical aspects such as dynamics and timbre should be less consequential when determining a keyboard work's adaptability for guitar duet. While the keyboard probably does have more of a dynamic range than the guitar, the duet setting allows for a larger dynamic range which should encompass the dynamic indications of most keyboard works. The various ways in which a guitarist can alternate between different timbres might also allow for more expressive opportunity in the transcription.

The second sub-question had to do with the musical and idiomatic choices that need to be made during the process of transcription.

The musical and idiomatic decisions that needed to be made when doing my three original transcriptions in this study were narrowed down to choice of key, *scordatura*, octave displacements, note omissions, parts, and fingering, which I realised were the most important decisions that needed to be made during the process of transcribing myself.

Choice of key is the very first decision that needs to be made for some obvious reasons. Once the key has been chosen, this allows the transcriber to decide which octaves will be used, if *scordatura* is necessary, and which strings and fingers will be used at any difficult instances in the transcription. During my process of transcribing the Brahms Intermezzo, Opus 118/2, I had transposed most of the composition to G Major (as opposed to the original key of A Major which was used for the final version of the transcription) before I realised that it caused more problems than staying in the original key. It is therefore my suggestion that the transcriber look ahead as far as possible before deciding on a key, as changing the key results in a drastic change of



fingering and range used. My conclusion on the matter of choosing a key is that it is perhaps more satisfying to remain in the original key of the composition, however there are keys which are more suited to the guitar idiom than others, and the transcriber should always keep this in mind. The more common keys used in guitar music according to Bream (2003: 4), A, E, D, G, C, F and their tonic minors, should be considered alongside consideration of the original key and the range that will be used.

scordatura is an important tool available to transcribers and is often used by modern guitarists. It exists as a way for the guitarist either to extend the guitar's range or change the guitar's polyphonic range in a way that would be more suited to the music. Having used *scordatura* to an almost extreme degree in my transcription of Scriabin's Prelude no. 1, I found it to be an especially useful and indeed musically satisfying tool to which one can always revert if the opportunity presents itself.

Unless a keyboard work includes only notes that fit well in the guitar's range as well as the polyphonic range, octave displacements and note omissions will almost always be necessary. I came to the conclusion that when one is transcribing with the idea of being as close to the original composition as possible, it is generally best to attempt not to omit notes as far as the guitar duet's capabilities allow in terms of its range and the polyphonic range. There are various factors that lead one to change the octaves of some notes. I often found that changing the octave of an entire section is more musically satisfying than changing the octave of just a few notes within a section, in order to maintain the contour of the original work and avoid, for example, the melody going below the accompaniment when it did not do so in the original composition. Badea (1992) states that a large factor when transcribing for the guitar is choosing what to omit. This might often come down to a transcriber's own preferences, but musical factors and idiomatic factors should both be considered when making the decision.

The decisions on how to write each individual guitarist's part in a duet transcription of a keyboard work seem to be more straightforward than I had anticipated. Houghton (2017) states that when writing for a guitar duo, one should try to assign the melodic lines to one guitar for the melody to be properly articulated. It is apparent, when one examines the repertoire of keyboard works written for guitar duet, that the right hand



part is almost always largely given to the one guitarist and the left hand part to the other. While this often has brief moments wherein a note or two from the right hand is given to the guitarist who is mainly playing the left hand part and vice versa, it seems that the preference is to adhere to the above mentioned method of writing parts until it becomes absolutely necessary to exchange some notes.

Fingering is an aspect that must always be considered when writing for the guitar in order for the writer to be sure the music is playable. While most composers and transcribers will add fingering that they consider important or indeed add fingering for almost the entire piece of guitar music, some add very little or even no fingering at all and leave it entirely up to the performer to decide which fingers to use. It is however of great importance that one always considers fingering as it gives the composer or transcriber the knowledge that what is being written is playable on the guitar. Understanding the polyphonic range of the guitar, as discussed in chapter 2, is crucial to being able to consider fingering when writing for the guitar.

It is my hope that my transcriptions can be performed and enjoyed by guitarists and that my exploration of the process of transcribing can help those who wish to transcribe themselves. Transcription has been an important way for guitarists to expand the relatively limited guitar repertoire and I would suggest further research into transcribing keyboard works not only for guitar duet, but also for solo guitar, guitar trio and quartet. I would also suggest research into transcribing from other instruments and ensembles of instruments either for solo guitar or guitar ensembles. Lastly, in depth research into composing for the guitar is suggested, as I think the guitarist's repertoire needs as much expansion as possible and would benefit from having more people understand how to successfully write for the instrument.



Sources

Adkins, C.N. 2015. The Art of Transcription: Original Transcriptions of Erik Satie's Five Nocturnes for Two Guitars, Camille Saint-Saens' Danse Macabre, Op. 40 for Four Guitars. (Doctoral thesis). Tallahassee: Florida State University.

Aguado, D. 1981. In L. Bigwood & B. Jeffery (Eds.). *New Guitar Method*. London: Tecla editions.

Assimakopulos, E. 2018. 'A ÇG' Online Exclusive: Evangelos Assimakopoulos on Arrangement and Transcription'. *Classical Guitar Magazine*. May. Available at: classicalguitarmagazine.com. (Accessed: 29 March 2020).

Badea, O. 1992, January. Transcribing for classical guitar: why and what. *Classical Guitar Magazine*, 10(5): 14.

Bak, N. 2004. Completing your thesis: A practical guide. Pretoria: Van Schaik.

Berlioz, H. 1981. A Treatise upon Modern Instrumentation and Orchestration.London: University Microfilms International.

Betancourt, R.J. 1999. *The Process of Transcription for Guitar of J.S. Bach Chaconne from Partita II for Violin without Accompaniment, BWV 1004*. (Master's dissertation). Denver: University of Denver.

Bream, J. 2003. How to write for the guitar in J. Leathwood (Ed.). *Guitar Forum 2*. Winter 2003. Oxford: Alden Press.

Crissman, J. 2014. *Five Keyboard Sonatas: R. 48, 50, 60, 106 and 114 by Antonio Soler Arranged for Two Guitars.* (DMA dissertation). Tempe: Arizona State University.

Davidson, J. 2015. Practice-based Music Research: Lessons from a Researcher's Personal History, in M. Dogantan-Dack (Ed.). *Artistic Practice as Research in Music*. New York: Ashgate. 93-106.

De Vos, A. S. (Ed.), Strydom, H., Fouché, C. B., & Delport, C. L. S. 2011. *Research at Grass Roots: For the social sciences and human service professions*. (3rd ed.). Pretoria: Van Schaik.



Fernández, E. 2001. *Technique Mechanism Learning: An investigation into becoming a guitarist*. Ohio: Guitar Heritage Inc.

Godfrey, J. 2013. *Principles of Idiomatic Guitar Writing*. (Doctoral thesis). Indiana: Indiana University.

Grier, J. 1996. *The Critical Editing of Music: History, Method, and Practice*. Melbourne: Cambridge University Press.

Harb, T. 2014. *The Unlimited Guitar: Arranging Bach and Britten as Means to Repertoire Expansion*. (DMA thesis). Toronto: University of Toronto.

Harwood, I. 2001. Fret. In S. Sadie (Ed.). *The New Grove Dictionary of Music and Musicians*, 9: 253-254 (2nd ed.). London: Macmillan.

Houghton, M. 2017. Power in Numbers: Tips on Writing for Guitar Ensembles. *Classical Guitar Magazine*. July. Available at classicalguitarmagazine.com. (Accessed 30 March 2020.)

Jackson, B et. Teicholz, M. 2018. Sérgio Assad on Piazzolla, the Beatles, Ginastera, Transcriptions, and more. *Classical Guitar Magazine*, 37, (1). 33-37.

Kinsey, A. 2009. *Music for Classical Guitar by South African Composers*. (Master's dissertation). Cape Town: University of Cape Town.

Kumar, R. 2014. *Research Methodology: a step-by-step guide for beginners*. London: SAGE.

Lang, M. 2013. *Transcription of Baroque Works for Classical Guitar: J.S. Bach's Sonata in D Minor (BWV 964) as Model*. (DMA dissertation). Denton: University of North Texas.

Loss Vincens, G. C. 2009. *The Arrangements of Roland Dyens and Sergio Assad: Innovations in Adapting Jazz Standards and Jazz-Influenced Popular Works to the Solo Classical Guitar*. (DMA dissertation). Tucson: University of Arizona.

Lunn, R.A. 2010. *Extended Techniques for the Classical Guitar: A Guide for Composers*. (Doctoral thesis). Ohio: Ohio State.

Röntsch, M. 2011. *A Comparative Analysis of Two Guitar Transcriptions of Isaac Albeniz's Granada*. (Master's dissertation). Cape Town: University of Cape Town.



Roznawski, J.P. 2008. *Christian Gotthilf Tag: Four Sonatas transcribed for Guitar Duo*. (Master's dissertation). Wellington: New Zealand School of Music.

Serrano Munoz, J. R. 2016. *Guidelines for Transcribing Baroque Lute Music for the Modern Guitar, Using Silvius Leopold Weiss's Sonata 36 (From the Dresden Manuscript) as a Model.* (DMA thesis). Tucson: University of Arizona.

Small, M. 2018. Artful Arrangement: Carlos Barbosa-Lima, Manuel Barrueco, Bill Kanengiser, and David Russell On Translating Pieces to the Guitar. *Classical Guitar Magazine*. March. Available at classicalguitarmagazine.com. (Accessed 25 April 2019.)

Wade, G. 2018. Expanding Guitar Repertoire Through Arrangements and Transcriptions. *Classical Guitar Magazine*. April. Available at classicalguitarmagazine.com. (Accessed 30 March 2020.)

Wade, G. 2017. Historical Perspectives on the Guitar Ensemble. *Classical Guitar Magazine*. December. Available at classicalguitarmagazine.com. (Accessed 30 March 2020.)

Zigante, F. 2008. The Presti-Lagoya Collection, Volume 2. Ancona: Berben.

Scores

Albéniz, I. 1999. *Sevilla*, in S. Yates. *Isaac Albeniz 26 Pieces Arranged for Guitar*. Pacific: Mel Bay.

Bach, J.S. 1866. *Praeludium II*, in *Bach-Gesellschaft Ausgabe* and edited by F. Kroll. Leipzig: Breitkopf und Härtel.

Bach, J.S. 1866. *Praeludium III*, in *Bach-Gesellschaft Ausgabe* and edited by F. Kroll. Leipzig: Breitkopf und Härtel.

Bach, J.S. 2008. *Prelude 2*, in F. Zigante. *The Presti-Lagoya Collection*, Volume 2. Transcribed for guitar duo by A. Lagoya. Ancona: Berben.

Bach, J.S. 2008. *Prelude 3*, in F. Zigante. *The Presti-Lagoya Collection*, Volume 2. Transcribed for guitar duo by A. Lagoya. Ancona: Berben.

Brahms, J. 1910. *Intermezzo*, in *Klavierwerke*, *Band II*. Edited by E. von Sauer. Leipzig: C.F. Peters.



Field, J. n.d. *1er Nocturne*, in *Litolff's Akademische Ausgabe*. Edited by C. Schultze. Braunschweig: Litolff.

Field, J. 2016. Nocturne 1. Transcribed for guitar duo by A. Jordaan. Unpublished.

Schubert, F. 1888. *Impromptu No. 1 in C Minor*, in *Franz Schubert's Werke*, *Serie XI*. Edited by J. Epstein. Leipzig: Breitkopf und Härtel.

Schubert, F. 2016. *Impromptu Op. 90 no. 1. D.899*. Transcribed for guitar duo by A. Jordaan. Unpublished.

Scriabin, A. 1897. *Prélude No. 1*. In 24 *Préludes pour Piano, op. 11*. Leipzig: M.P. Belaïef.

Sor, F. 1999. Study in B minor. In D. Nadal. Guitar Classics. New York: Dover.

