

# Expanding the role of the jazz guitar

How can lower-set fifths tuning and two-hand touch technique be utilised in order to achieve greater independence in producing multiple voices using the entire range of the guitar.

Adam Taylor

MA jazz guitar

Improvisation domain

AR coach - Jarmo Hoogendijk

Main subject teacher - Franz Van Chossy

Codarts

2017

Abstract	3
Terminology	4
The story of the research	6
Documentation and description of the artistic result	10
First intervention cycle	10
Case study	12
Second intervention cycle	13
Third intervention cycle	15
Final intervention cycle	18
Reflection on process and artistic result	21
Conclusion	23
Reference list	24
Exercises	26
Network	30

---

## Abstract

---

The guitar and the piano perform similar roles and occupy overlapping frequency ranges in jazz and popular music.

However, the piano can produce two or more simultaneous voices at the extremes of its range using standard technique. The guitar cannot produce two or more simultaneous voices at the extremes of its range using standard plucking or finger-picking techniques.

Thus the two-hand touch technique was developed partially to emulate the right and left hand of a pianist. The tuning of the guitar was altered to provide an extended low range in order to facilitate bass voices more effectively.

The result is an overall method for playing the guitar which provides the ability to effectively perform counterpoint, melody, chord and/or bass accompaniment with an extended range of the guitar that is fully utilisable.

---

# Terminology

---

## Title

To begin, it is essential to clearly define the meaning and terminology used in the title and subtitle of this research report. The title of this thesis is: *Expanding the role of the jazz guitar*.

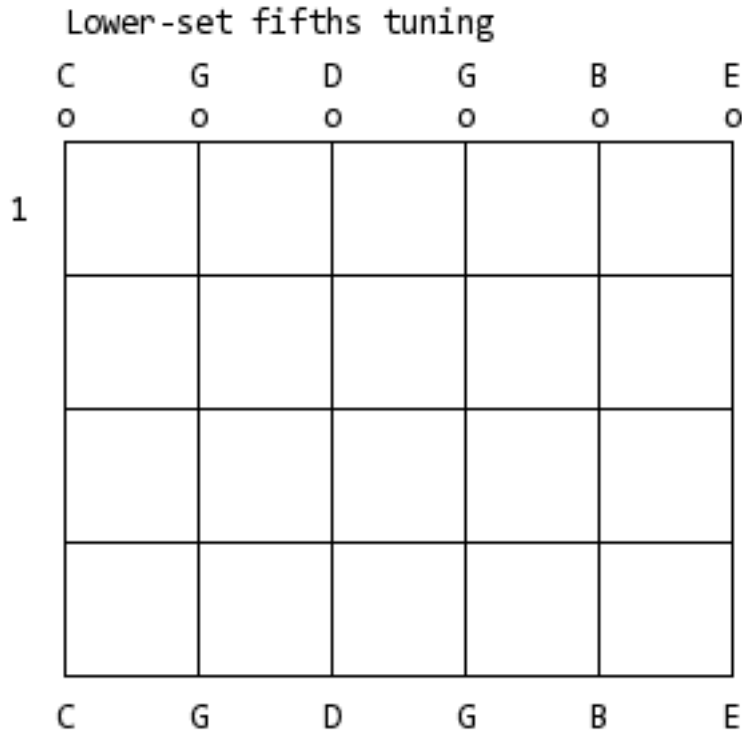
We take 'role' here to mean what is generally expected of a jazz guitarist and what is traditionally possible for them to do in solo and ensemble contexts. 'Expanding' this role means adding more possibilities to the role the guitar, not changing its role. The aim of this thesis is not to, for example, replace a piano player, but to contribute to the canon of techniques and creative possibilities available to jazz guitarists.

Jazz is defined in the title of this thesis due to the material chosen and the final artistic result, however the concepts expounded in this thesis will no doubt be of interest to any guitarist regardless of genre.

## Research question

The research question is: *How can lower-set fifths tuning and two-hand touch technique be utilised in order to achieve greater independence in producing multiple voices using the entire range of the jazz guitar.*

'Lower-set fifths tuning' is an original title given to the tuning I developed as part of this research. The tuning is as follows:



This tuning is also known as 'dropped C' tuning, however I use the term lower-set fifths to highlight the fact that the lowest three strings are consecutive fifths apart.

The tuning has been used previously, for example by Soundgarden on the songs "Mailman", and "Limo Wreck" and by Lindsey Buckingham of Fleetwood Mac on "Never Going Back Again".

'Two-hand touch technique' describes the technique of tapping a fret in order to produce a sound, which can be done with both hands simultaneously as it does not require any strumming or picking.

'Voices' in the context of this research means any monophonic (melody) or polyphonic (chord) voice played on the guitar. Thus, 'multiple voices' means one or more of these voices being played simultaneously. For example, chords in the left hand and a melody in the right hand.

'Entire range' of the guitar here is included as it differentiates the result of this research with what is traditionally possible on the guitar. It describes being able to play at either extreme (high and low pitch) of the guitar simultaneously.

'Jazz guitar' is used to describe a single-neck, 6-string hollow-body electric jazz guitar.

In the context of this research, knowledge of not only the technical aspects of the guitar but also the role of the guitar is essential. In short, the guitar is a member of the rhythm section. It is a chordal instrument and is generally used to accompany melodic instruments. In popular music, it has its closest relative in the piano. Therefore this is the comparison most suitable when discussing the basis of this thesis.

---

# The story of the research

---

## Motivation

### Discussing the motivation and impact of innovation through social context and mapping a path for progress

---

(See appendix D.2 for a diagrammatic depiction of the motivation for this research)

In order to rationalise the motivation and direction of this thesis, it is first important to look at the attitude to progress and innovation in the arts and more specifically, the musical world.

According to Wayne Shorter and Herbie Hancock, “The world needs new pathways”. In their *Open Letter to the Next Generation of Artists*, they encourage the “exploration of new sounds, rhythms, and harmonies or unexpected collaborations, processes and experiences”. Furthermore, they suggest the artist should “strive to create new actions both musically and with the pathway of your life”. (2016).

If Johann Sebastian Bach or Ludwig Van Beethoven were asked to pen an open letter to the next generation of artists, the sentiment would almost certainly be very similar. For it was through their innovation, lack of conformity and eternal exploration that western classical music developed as it did. Further, it was through Shorter and Hancock’s unexpected collaborations, exploration of new sounds and new pathways that jazz developed as it did.

This sentiment describes a mindset of innovation, dynamism, temporal relevance and progress that is essential in all walks of life. Thomas Edison gave us the Phonograph, Sir Walter Raleigh opened the path to America and Albert Einstein developed the Theory of Relativity. Just some examples of progress achieved due to a thirst for progress, innovation and adventure.

Being a musical creator is a combination of artistic excellence, creativity and perseverance. But also of knowledge, understanding and perspective. In order to be a relevant and artistically successful musician, one must harmonise one’s musical skill with a deep understanding of the world around them and the contemporaneous zeitgeist in which they find themselves.

As an instrumentalist, one must also understand the history and the context of one’s instrument to understand where it must go and how it can be developed. A quote from Lord Acton perhaps sums up this sentiment in a wider social context;

*"By universal history I understand that which is...not a rope of sand, but a continuous development, and is not a burden on the memory, but an illumination of the soul...Their story will be told...according to the time and the degree in which they contribute to the common fortunes of mankind. . . "* (Dalberg-Acton, 1898, Appendix 1)

This quote, though perhaps somewhat grandiose, illustrates the eternal process of change throughout human history, of which music is of course a part.

As creative musicians we look back throughout history for the fruits of musical excellence and we venerate and analyse them in order to learn all that can be learnt and to progress fully. In this process we find a great sense of unity, in so far that all musical progress and innovation has the ability to cross linguistic, temporal and social barriers.

It is within the context of progress that this thesis is to be viewed. It is as an emblem of a wider purpose, a human instinct for discovery. It is within a musical genre so young yet brimming with innovation, progress and dynamism.

Jazz, the broad term used by so many to mean so much. However, in essence jazz is not a genre but a process, an approach. A way of playing music and of creating that is in the moment and yet informed by all that has come. An approach to music which constantly looks forward and seeks new pathways, new sounds and new horizons. This thesis is meant as a humble offering to the oeuvre of musical innovation that occurs throughout history and around the world.

## Innovation and inspiration through observation and comparison

“Necessitie, the inuentour of all goodnesse.” (Ascham, 1545, 92)

When discussing concepts such as motivation, especially in relation to artistic development, one cannot ignore the personal, subjective element in decision making. There are many sociological reasons for this research and there are many that have meaning for the musical community. However the kernel of inspiration, the ultimate motivation, came from self-analysis and reflection.

During the initial formulation period of this research I truthfully examined my artistic capabilities and compared them with my artistic aspirations. Prior to beginning this masters degree I had been studying the music of Allan Holdsworth (1946-2017) for several years. Though fulfilling, this line of study had led me to a position of artistic imbalance. Due to Holdsworth’s obsession with the saxophone and his desire to make the guitar sound like a horn, I had emulated his approach and focused predominantly on single-line playing and the techniques associated with that.

Subsequently, my role as a harmonic, chordal player had been side-lined and as such I did not have the level of depth in relation to harmony that I felt was sufficient for myself as a creative, working jazz guitarist.

This desire to expand my harmonic expertise was the preeminent force in choosing the trajectory of this thesis. As I began to formulate my approach, I realised that if I were to explore harmony in greater depth, there was a major element that would inevitably become part of my research.

## The relationship between the guitar and the piano

The pianistic tradition contains many figures and repertoire which I take great inspiration from.

For example, the concept of weight processing as described by Bill Evans provides a wonderful method for effectively playing contrapuntal music. This is a concept similar to that which is found in a lot of classical piano methods. The focus upon each individual finger and the weight with which it is dropped onto the key and its relationship to the arm. And most importantly the balance between the separate fingers and being able to produce linear voices rather than just vertical stacks of music.

The music produced with these concepts is undeniable. Some prime examples are Bill Evans and the Goldberg Variations by J.S Bach, performed by Glen Gould.

This concept of each finger being independent so that layers of melodies can intertwine was ultimately an important factor in the development of the touch technique on the guitar. As I will demonstrate, touch technique is not new. However, the concept behind this research is unique. What I have begun to develop is an approach to the guitar which translates concepts until now reserved primarily for pianists onto the guitar.

To rebel against one’s own instrument as Allan Holdsworth did and attempt to distort its true nature is not the intention of this research and I fear an inefficacious endeavour for anyone who attempts it. I aim to integrate the new concepts of two-handed touch technique developed as part of this research with the traditional techniques and sounds of the guitar; picking, strumming, open strings, bending, sliding, vibrato, effects processing etc.

## Technical aspects

Through a love for the pianistic tradition I have grown to develop an appreciation for the distinction between the right and left hand of a pianist. The ability to accompany oneself, the ability to, at times, sound as two or

more separate and simultaneous voices are all abilities that the modern pianist has in his/her repertoire. However, for the modern guitarist, these techniques do not come so easily.

To fully understand the motivation behind this thesis an explanation of the similarities and, more importantly, the differences between the guitar and the piano need to be presented. See appendix V.1 for a demonstration to accompany this section. <https://goo.gl/4q9fKy>

Firstly, in order to produce one tone on the guitar, two hands are generally required. One to fret the note (generally the left hand), and one to pluck the string (generally the right hand). Whereas a pianist is only required to use one finger to produce one note. This means that the conventional set-up and technique of playing guitar makes effective counterpoint playing somewhat unnatural.

Secondly, the inherent lack of range of the guitar in comparison to the piano is also a key setback. In order to have a convincing bass voice, i.e one that supports other voices effectively, the register has to be close to that of a double bass. Moreover, not only the physical range of the instrument but the applicable range, that is, the range that is playable on the instrument is very important.

Instrument	Range
Guitar	E2 - D6
Piano	A0 - C8

Lastly, for a guitar to be played at both extremes of its range using conventional techniques is virtually impossible. In contrast, a piano contains no inherent hindrances to full-register playing.

In other words, a pianist has the ability to play a chord in the highest register of the piano with the bass note(s) eight octaves lower. In comparison, a guitarist would only be able to play a chord in the highest register with the bass note four octaves lower. In addition, the guitarist would find it virtually impossible to play this polyphony if the bass note were not open E (the lowest note of the guitar which is playable without any left hand fretting).

A key difference between the guitar and the piano is the use of the right and the left hand. A pianist may use both hands and all fingers on those hands to produce notes. This gives a pianist a possible polyphony of ten separate, simultaneous notes. In comparison, to sound one note on the guitar conventionally the right and left hand must be combined. Coupled with the fact that a standard guitar only has six strings, this gives the guitar a possible polyphony of six separate, simultaneous notes.

Another key difference between the guitar and the piano in the role of the right and left hand is largely conceptual. For a pianist, the right and left hand do not rely on one another and act independently. Thus, it is much more natural for a pianist to conceive of contrapuntal playing as there is a clear visual correlation between the concepts and their execution. For example if one wishes to be play higher on the keyboard, one simply plays a note to the right of the previous note.

On the guitar, playing higher or lower will not necessarily have a clear visual correlation. Thus, the execution of counterpoint is much more in the imagination of the guitarist than in their fingers.

Furthermore, one can say that the piano is a linear instrument. In contrast, the guitar is a semi-linear instrument. In other words, imagine playing the piano and instead of going from left to right (low to high), one can also go from up to down. If one wishes to play a higher note on the guitar, one can play the next fret to the right on the same string. However, one can also play the higher note on a higher string but lower on the fretboard.

## Conclusion

It is these limitations that I ultimately sought to overcome in the final artistic result. As the topic of this research is related to harmony, the relationship between the guitar and the piano, the two dominant harmonic instruments in jazz, was paramount to my decision making.

I realised by the second intervention cycle that the only way for me to truly have separate voices, play at both extremes of the guitar range simultaneously and extend the range of the guitar was through the implementation of two-handed touch technique and the lower-set fifths tuning.

However, there is no single technique that will expand the role of the guitar. Indeed, it is more accurately the combination of several techniques that will bring the guitar into a new paradigm as stated previously.

Thus, the artistic result of this thesis is not simply a list of techniques to practise or an exploration into the technology of the guitar but more a developed concept of the guitar. A paradigm shift; an amalgamation of techniques, imagination and experimentation. To develop a new, individual and distinctive artistic voice. To take all that has come before and from the fertile grounds of exploration develop a dynamic, versatile approach to the guitar. To be able to improvise, accompany, dictate, follow and contradict. To fulfil the potential of this fascinating instrument is the goal of this thesis.

## Research strategies

In order to sufficiently frame the content of this thesis, the contemporary discussion as to the nature and meaning of artistic research must be examined.

Henk Borgdorff defines the context of artistic research, stating that “neither the natural science model, the humanities model nor the social sciences model can serve as a benchmark for artistic research”. He even suggests that “in some quarters, one prefers not to speak of artistic research, but of ‘artistic development.’” (Borgdorff, 2006, 3-4).

The saliency of the debate, he continues, has arisen due to the “current institutional integration of research into professional art schools”. (Heckman, 2012, 10).

Relating to this thesis, it is important to look at the research goal and how this relates to the strategies employed. The aim of my artistic research is to develop a new, extended form of artistic performance. This approach is intimately linked with my personal preferences, aspirations, abilities and resources.

The immersion within a zone of experimentation, creation, discovery and self-guidance is the premier method used by many artists in their practise and was certainly the prime state in which I achieved the greatest results and still do as part of my artistic development.

Thus the artistic researcher/practitioner, in this case myself, requires a certain amount of heuristics in their methodology. Frank Heckman uses the term ‘decision latitude’ in his book *Flow on Stage: the art of sustainable performance* to mean “that the artist, teacher has the autonomy and skills to make an impact”. (2012, 10).

But instead of dismissing such a phenomenon as ‘the creative spirit’ or merely ‘inspiration’ and instead of trying to dilute this phenomenon by attempting to channel it into academic stringencies such as the scientific experiment model, a synthesis of approach is required to undertake, document and understand what is becoming recognised more and more as a distinct discipline, *artistic development*.

This synthesis draws elements and terminology from the academic canon and artistic language. For instance, when discussing research strategies in relation to practise-based research, the closest strategy is perhaps the experiment.

However, one must define the terms of the experiment, especially when concerning improvisation.

Anik Fournier, in her paper *Rudimentariness: a concept for artistic research*, proposes that “artistic research is far broader, arguably encompassing research as a basic, inherent facet of all artistic production.” (Fournier, 2016, 1).

Furthermore, as stated by Kathleen Coessens, “artistic performance...is but the visible manifestation of a long process of patient integration of multiple tacit dimensions, which can be considered as spaces within a broad zone of exploration.” (2014). This point highlights the role of experimentation as a process rather than as a distinct device. The act of experimentation is something which is occurring constantly and ineffably.

## The intervention cycle as a format for the thesis as a singular process

Through the implementation of several micro intervention cycles, the emergence of the macro cycle manifests itself through the ultimate artistic result. Namely, a fully-formed, unique, innovative artistic voice clearly originating from the processes previously discussed.

In effect, the intervention cycle proves itself to be a natural way for the creative mind to process information and progress artistically. Through the method of experimentation, analysis and progress a solid base is formed upon which a strong artistic voice can be formed. One that is informed and shaped through the implementation of intervention cycles, both micro and macro.

Below follows the documentation of the four intervention cycles which demonstrate the artistic development through reference recordings, analysis and feedback, data collection and intervention.

---

## Documentation and description of the artistic result

---



---

### First intervention cycle

---

#### Zero Recording

In order to form a baseline for research, an initial or “zero” recording was produced at the beginning of the research period.

The zero recording produced was a solo guitar arrangement of the jazz standard “In Your Own Sweet Way”. <https://goo.gl/i5q91Z>

A solo guitar arrangement was selected as it would provide an appropriate exemplar of my contemporaneous abilities in reference to the title of this thesis, *Expanding The Role Of The Guitar*.

### Assess and reflect

#### Feedback

#### External

---

The feedback received from tutors and peers served as useful data in order to shape the direction and outcome of the first intervention cycle.

Some salient points that arose were the implementation of structured tempi and the role of the bass voice.

#### Alessio Bruno

The next recording should include playing in time with a groove and possibly a bass player

Nice harmonic development

Good control of dynamics

Inner voice movement could be developed

## Alessio Bruno

Develop the role of the bass voice

## Self-analysis

On reflection, the zero recording had three key strengths and three key weaknesses:

Strengths	Weaknesses
Clear attempt to incorporate new techniques	Lack of momentum in reference to tempo and voice leading
Generally faithful rendition of material	Lack of counterpoint
Incorporation of improvisation	Overall artistic direction somewhat unclear

The overall effect is that of an unbalanced performance. Concerning the harmony, there are some interesting chord voicings and embellishments of the harmony. However, it is clear that there is a certain disparity in fluency between certain types of chords, areas of the neck and when playing in tempo or rubato.

I became aware that there was not a clear structure to my harmonic concept and I did not possess the necessary techniques in order to expand it. So I questioned what I needed to investigate as part of the data collection for the first intervention cycle.

The reflection upon the recording and the feedback received led to several key conclusions:

## Conclusions

A system needed to be created based on the implementation of open strings

The issue of counterpoint and the bass voice in particular needed to be addressed

The techniques used needed to be paired down and formulated into a holistic method

## Data collection

# Case study

## Chord voicings

The first sets of data that I began to analyse, audition and implement were all related to the study of chord voicings. I began to explore the possibilities and subsequently discover the limitations of chord voicings on the guitar. In order to document the voicings I compiled an enchiridion containing voicings categorised in: minor, major, dominant and diminished. See D.1.

There were six main variables all relating to chord voicings that were manipulated during the case study of the first intervention cycle:

Variable	Description
Harmonics	Natural, artificial
Open strings	Used within a chord voicing or scale
Left-hand thumb techniques	Used to play bass notes on the low E and A strings
Barre techniques	Standard barring as well as non-linear barring
Right-hand touch techniques	Used to extend chord voicing
Cluster voicing	Using extended reach/ open strings

## Open strings

A key element in extending my knowledge in relation to chord voicings was in understanding how to utilise open strings. The following videos will give some examples of chords I developed using open strings and exercises I developed in order to extend knowledge of open strings.

Open strings can be seen as a double-edged sword. They can offer one interesting and sonorous ways of playing voicings which would otherwise be impossible with just fretting. They also provide the guitar with a natural pedal function as an open string can ring out without the need for fretting.

However, they do not provide the same results for all keys. As the open strings are E-A-D-G-B-E, the keys with more of these notes (G, C, D) will be more suited to open string techniques. Whereas the keys with few (Gb, B, Ab) or none (Db) of these notes will not have many possibilities for open strings.

Thus it was clear that open strings would only play a part in a larger method. However, it was still useful to design exercises in order to exploit open strings to the maximum.

See appendix V.2 for a demonstration and explanation of the chord enchiridion. See appendix V.3 for a demonstration and explanation of the open string system developed during the case study. See appendix V.4 for a demonstration and explanation of the exercises developed dealing with scales using open strings.

## Right hand touch techniques

The first intervention cycle is where right handed touch technique was first used, however not in the exact same format as the final result. Touch technique was developed during the first intervention cycle purely to expand chord voicings as the working title of the research during the first intervention cycle was *Expanding the harmonic possibilities of the guitar through extended techniques*.

It was used to develop a concept I termed “dynamic chords”. This was a prototype of the layered voices concept mentioned earlier when discussing pianistic techniques. It meant having moving voices around a static chord shape. This was one of the first techniques with which I directly attempted to emulate piano techniques on the guitar. The concept of strumming with the right hand little finger whilst tapping with the same hand was a concept developed during my 1-1 lessons with Ronald Schmitz. See V.5 for an explanation and demonstration.

## Harmonics

As part of the chord enchainment that I was compiling, I was also exploring the ways in which harmonics can expand harmony. There are three main types of harmonics which I found had value to my research. The first being natural harmonics, the second being harped harmonics and the third being tapped harmonics. I worked on integrating harmonics into the arrangement for the second reference recording by developing a system for how to practise them. See appendix V.6 for an explanation and demonstration.

## Face to face interviews

### Ronald Schmitz

---

A lot of the initial face to face interviewing was conducted with my technique teacher, Ronald Schmitz. Due to his specialism in harmony he was a useful resource as an expert in the field of this case study. See Appendix E.1.

### Joe Cohn

---

Whilst conducting my first intervention cycle, I was lucky enough to study with the American jazz guitarist Joe Cohn, himself a master of chord voicings. I transcribed the lesson and made this exercise: See appendix V.7 and E.2.

## Intervention

A key element of developing these new voicings and concepts was seeing how they worked in all twelve keys. This played a key role in my choice for the second intervention cycle. The piece chosen for the second cycle was “Between Moons” which modulated through all twelve keys.

### Between Moons

---

In order to develop a convincing and effective arrangement, several recordings were used as reference material. “Nicolette” featuring Bill Frisell on guitar was chosen as reference material because of Bill Frisell’s effective use of open strings to form clusters and as a sustaining effect. See A.1. Two versions of “Between moons” exist on record. Both were used as reference material to produce an accurate arrangement of the piece based on other interpretations.

---

## Second intervention cycle

---

The result of the first intervention cycle was the second video, produced for the AR2 presentation.

The video was another solo guitar arrangement, this time of the John Taylor piece “Between Moons”. (<https://goo.gl/9a6BhR>).

## Assess and reflect

### Feedback

## Self-analysis

---

Reviewing the recording, I was able to come to several key conclusions:

The use of right-handed touch technique was effective in producing a distinct second voice. However, its use in “Between Moons” was somewhat cumbersome and needed to be developed and refined in order to achieve greater expressive possibilities.

The introduction of a consistent tempo helped to develop a flow in the arrangement and focused the technique. However, rhythmical freedom should be developed and the performance of two different rhythmic ideas occurring concurrently requires a more ‘pianistic’ technique.

The choice of repertoire was very informative. It showed me that the effectiveness of using techniques such as open strings and harmonics is wholly dependant on the key. As mentioned above, these techniques are more relevant to certain keys.

The outcome of this is that when modulating frequently, an imbalance can be felt on the guitar as each key has a unique set of possibilities and limitations. This was another factor in the decision to develop the two-handed touch technique. When tapping with both hands, every finger becomes independent, much like on the piano.

When comparing the zero recording with “Between Moons”, one can hear the development of artistic choices as a result of the first intervention cycle. The first intervention cycle made evident that there was a paucity in my system for creating harmony.

“Between Moons” demonstrates a more linear approach to harmony and voice-leading. The melody is given a more balanced treatment and more inventive ways are used to produce it. For example tapping at 01:10-01:20 and harmonics at 01:30-01:35.

On reflection the second reference recording was effective in achieving the goals set out in the initial intervention cycle. The exercise developed for dynamic chords was very useful as dynamic chords were used at 00:00-01:15 of “Between Moons”.

## Data collection

During the second intervention cycle I started to envision what would become the final artistic result.

The inability of open strings and harmonics to fully achieve my goals due to their key relativity meant I had to go further and develop a more far-reaching, universal approach. I began experimenting with two-handed touch technique. And here I came to a place technically where I could truly say I was starting again from scratch. Although I had used touch technique before and even in the previous reference recording, I had never attempted to create two, distinct simultaneous musical ideas with touch technique.

## Altered tuning

It was during the second intervention cycle that the issue of range limitation was tackled through the development of the lower-set fifths tuning. Instead of the conventional E-A-D-G-B-E, the new tuning was C-G-D-G-B-E. I first experimented with just a low C but quickly realised that with C-G-D as my lowest three strings I could play spread chords easily with one hand. This gave not only an extended low register but also the ability to accompany oneself or others more economically. Through effective three-note voicings harmony could be outlined with three strings still available.

This new tuning allowed me to play voicings on only the bottom three bass strings with the top three treble strings available for the right hand. In order to formalise this tuning I developed some exercises designed to gain fluency with the left hand. See appendix V.8 and E.3 for an explanation and demonstration.

## Two-handed touch technique

The inherent difficulty of counterpoint on the guitar was remedied with the implementation of right hand tapping techniques developed from the AR2 reference recording. In effect, the right and the left hand became more

egalitarian in their output. The left hand now had to 'hammer' notes in order to produce sound. The right hand had to do exactly the same but in the process became a separate voice in and of itself.

This technique, interestingly, also eliminated the issue of full-range playing. It was now possible to play a chord or note in the lowest register of the guitar and do exactly the same in the highest register of the guitar.

This is where the experimentation process began to come into its own. There was no real direct literature or theoretical precedent so I had to take raw data, for example an exercise designed for the piano, a piece written for the piano or a transcription and experiment to see if it worked on the guitar. This required a level of heuristic learning.

## Intervention

See appendix V.9, E.4 and for a demonstration and explanation of the exercises developed as part of the intervention for the second intervention cycle.

---

# Third intervention cycle

---

The result of the second intervention cycle was the third video, produced for the AR3 presentation.

For this cycle I decided to use an original composition, “Form, Space” in a trio format for the recording. (<https://goo.gl/EKBest>).

## Assess and reflect

## Feedback

### External

---

#### Kaori Neus

---

- More control in the tapping (some extra note sounding, for example approx 1:10/1:24) .
- More control of dynamics (there is not really a dynamic direction for each arpeggio).
- I miss some variation, especially in the left hand.
- I do see the sense of the tapping if you will not be doing the tapping technique you'll not be able to play what you were playing.
- About using the technique of tapping. I found it nice, as you are bringing something extra to the guitar repertoire/ approach.
- About the composition and the arrangements: I miss diversity in the repeated patterns and I miss the connection between one section to the other.
- Also I miss more use of using effects. I heard a couple of times the delay effect, and I was wondering why it was not repeated to give more coherence/unity to the piece.

#### Derrianne Dyett

---

- What I think is really great is the sound. The resonance is very rich but not too bright.
- I think you are on the right track for exploring a more adventurous left hand.
- Here you showed very little movement in the right hand.
- In the next cycle I guess you could explore more linear / arpeggiated soloing in the right hand as opposed to a more static ostinato-like playing shown in the solo section here.
- Very nice legato created in the sliding at the end of the video can also be a nice aspect to incorporate in the solos.

## Ed Verhoeff

---

- You are on the right way, you are developing a personal style.
- Watch out to be too limited - you have a bass player, let go of the bass.
- As it is a repetitive cycle, you can even let go of the left hand completely and focus on soloing freely. Maybe even in a more 'traditional' way.
- As it is repetitive you might want to use a looper.
- Use effects like limiter/compressor to make life a little easier.
- The music tends to be kind of 'sphere, ambient, soundscape' like...did you think of other effects?
- With a simple delay or reverb you can create more with less.
- You are constantly improving.

### Self-analysis

#### Reflection and comparison

---

From reviewing the reference recording, coupled with external feedback and pre-conceptions of the result, I was able to come to several conclusions and map the journey for the next cycle.

In comparison with the previous reference recording it is obvious that this cycle represented the most obvious development in terms of technique. The right and left hand had become separate entities and thus paved the way for the subsequent final intervention cycle.

The recording was devoid of single-line improvisation due to the right hand touch technique being so new. However it was something I planned to develop in this intervention cycle. Thus feedback such as "focus on soloing freely, Maybe even in a more 'traditional' way" coincided perfectly with my goals for the intervention cycle.

On reflection the material chosen was appropriate for the skills I had at that time. I was just beginning to internalise the new left hand voicings which meant that the harmony in "Form, Space" was very simple. The right hand technique was also in its infancy so the melody was very simple as well. These were choices as I wanted to produce an artistic result that was clear and not out of reach technically. However, for the next cycle I knew I wanted to explore more harmonically complex music and add more variation to the right hand playing as the new techniques were becoming more natural and the expressive possibilities were manifesting themselves concurrently.

### Data collection

In order to move towards the final artistic result, I developed exercises based on information gathered during interviews and during artistic experimentation.

### Media and practice review

A valuable part of formulating my final artistic result was conducting a media and practice review. Through extensive desk research I was able to gain an overview of the theoretical framework of my research. I was also able to discover some key sources and resources related to the topic of touch technique.

One of the first proponents of touch technique on the guitar and one of the first to publish on the subject was guitarist Jimmy Webster (1908-1978) with his 1952 method book *The Touch System for Electric and Amplified Spanish Guitar*. Touch technique has been used by many guitarists since then, as documented in the article *Tapping*.

In more recent times a 2011 app developed by Dimitrij Pavlov entitled *Two Handed Touch Guitar Chords HD* offered an interactive database of chords playable with touch technique.

There have been many speciality instruments produced specifically for the purposes of touch technique. The first notable example being in 1955 with the invention of the "Duo-Lectar" by Dave and Joe Bunker. This instrument is comprised of two necks, a guitar and bass neck.

In the 1974, Emmett Chapman produced the first single neck instrument dedicated to tapping known as the "Chapman Stick". The Chapman stick has 10 strings that are divided into a set of 5 melody strings and 5 bass strings.

The lowest pitched strings are found in the middle. The most common tuning for this instrument is as follows: (Melody: E, A, D, G, C. Bass: C, G, D, A, E).

Melody set (ascending)	Bass set (ascending)
E	C
A	G
D	D
G	A
C	E

These are just two notable examples of a plethora of instruments designed for touch technique.

However, several issues exist which have prevented these instruments from entering into the mainstream roster of musical instruments. They are the same issues that have prevented me from exploring the use of these instruments.

To begin with, these instruments are inherently inflexible technically. As they are designed specifically for tapping, they possess limited potential for combining various techniques e.g. strumming.

Another problem is with the sound produced from the instrument. Aesthetically, the sound produced from, say, a Chapman stick does not have comparable quality to that produced from a hollow-body jazz guitar thus would not serve as a suitable tool for my research.

There are several guitarists who use touch technique on standard guitars to achieve goals related to this thesis. Most notably, Stanley Jordan. Others include Adam Fulara, Balawan and Jon Gomm.

## Adam Fulara

---

Adam Fulara (1977-) is a polish guitarist who has transcribed several Bach inventions for solo guitar using the touch technique. He has also written an instructional book on touch technique entitled *Two-handed tapping. Guitar Workshop*.

## Balawan

---

Balawan (1973-) is an Indonesian guitarist who mostly uses a two-neck guitar with touch technique. In 2009 he released a CD and instructional DVD on 8-finger tapping entitled *See You Soon*.

## Jon Gomm

---

Jon Gomm (1977-) is an English acoustic guitarist and singer with an holistic guitar method. He incorporates tapping techniques, strumming, harmonics and percussive effects into his performance. His approach is best described in an article and a series of video lessons published in 2013 for *Total Guitar Magazine*.

## Stanley Jordan

---

Stanley Jordan (1959-) is arguably the most successful proponent of touch technique. According to David R. Adler, Jordan opened up “another contrapuntal avenue for the instrument” with his touch technique and in doing so set “a new standard of excellence for solo performance”. He is a prolific performer and educator in relation to touch technique. In 2009 he published an article in which he explained his approach to the technique entitled *Getting Started with the Touch Technique*. He has also produced a multimedia instructional method on his technique, entitled *Stanley Jordan: Star Licks*.

He is the closest point of reference in relation to the touch technique due to his jazz specialism, prevalence, skill and use of improvisation using touch technique.

## Intervention

### Interviews

---

Having a pianist as a main subject teacher meant I received direct information about how a pianist practises, how they visualise harmony and the specific techniques and methods they use. So I started to develop exercises emulating the pianistic approach.

The video V.10 demonstrates the process I went through of processing data such as recordings, transcriptions or exercises and developing an approach to practise from that. The example comes from the opening 8 bars of “Prelude to a kiss”, performed by Brad Mehldau. The step-wise movement and counterpoint drew me to this passage as the separate voices are so clearly defined that one can clearly hear the influence of the classical piano repertoire in the arrangement. The technique of linear harmony playing was something that I wanted to develop on the guitar. See appendix E.5.

I also studied with the dutch pianist Peter Beets. In our lessons we examined how to translate stride piano techniques onto the guitar in order to develop the left hand technique. This video demonstrates some of the exercises I transcribed from these lessons. See appendix V.11, V.12, E.6 and E.7.

---

## Final intervention cycle

---

For my final intervention cycle I wanted to produce a version of the finished result. One of the key elements missing from “Form, Space” was improvisation. This was due to the short time with which I had been using the touch technique. However by the time of the final intervention cycle I felt I could record a solo guitar arrangement of a jazz standard which contained improvisation and accompaniment.

For my final intervention cycle I went back to the solo guitar format. I chose the jazz standard “All the things you are” as it modulates through five keys and has functional harmony with lots of movement. (<https://goo.gl/iGkplr>).

## Feedback

### External

---

For my final intervention cycle I decided to reach out to the active yet niche community of touch technique guitarists around the world. There are several online sources and forums dedicated to guitar touch technique playing.

The feedback received from touch technique guitarists served to be some of the most useful information in the entire process of this research. I had a body of experts in a specific field and I was able to present a result to them which was within the canon of their expertise.

### Mark (Dragonfly Tapping Instruments)

---

- You've got some good things going on.
- Do you play in fifths?
- Its very good!
- I'm glad you're exploring the possibilities that double-handed touch style offers. I'm pretty sure it will open up new ways of 'seeing' your music and benefit your technique and vision on other instruments too.
- From what I can tell you're tuned in fifths from C2, but I'm not sure whether you are tuned in straight fifths all the way up or not.
- The lower register is lovely (personally I think that is where the tapping technique has the most to offer in sonic terms) so I think you are right on the nail in lowering the guitar tuning.
- I'm not sure about the tension you are using but the sound is great and I really like the way you use your bass triads.

- I've never really explored fifths tuning much beyond a couple of strings but from your playing I can see that there are some real benefits in having a greater interval separation between strings.

## Dave Celentano

---

- Very well played.
- Your technique is smooth.
- It sounds like the melody (right hand) is louder than the chords (left hand).
- I suggest trying to make the chord parts a little louder. Otherwise it's a very well played piece.

## Rafael Flores

---

- Wow Adam really makes me very happy to see your work, what good taste to move the chords. Good.

## Charles Berthoud

---

- Nice performance!
- I really liked the harmonies that you were creating.
- I can see that you have good technique and hand-independence.
- The only thing I would say is that I'd like to see the piece be more expressive.
- The dynamic was mezzo-forte most of the time - it would have been nice to see the dynamic range expand so that there were some *piano* moments as well as some *forte*.
- A limited use of vibrato in the right hand may also help to achieve a more expressive sound.
- Perhaps also some more intentional *rubato* would help.
- All of this should only be done after you have the notes 100% under your fingers, to the point where you barely have to think about them.
- Great job - the performance is already beautiful, and I think if you try out some of those things it could be enhanced even further.

## Christos Kalivas

---

- Thank you very much. This is a great honour for me.
- I like your multiple voices of your tapping technique but I think the six string guitar doesn't support your work!
- I believe if you play extended range guitars you'll have more options for your voices!
- I think 7string, 8string or 9 string guitar will give you a chance to experiment with new voices and sound.
- The sound of your guitar in that video reminds me a bit of Joe Pass guitar playing, great sound and voices!

## Andre Chalifour (DAMPS, Bfa) Worldwide-tapping administrator

---

- It always very nice to meet new tappers.
- It's good my friend.
- One of the first thing that hit me is that you seem to not use the 4th finger of your right hand ( the little finger) is there a reason?
- My opinion, you should treat your right hand the same way you treat your left. 4 fingers in each hand playing scales, chords, arpeggios, etc.
- If you use 4 fingers in your right hand, it is easier to develop melodic idea, since you don't have to constantly stretch your position.
- Have you ever tried to play on a double neck guitar?
- Or using 2 guitars?
- By having 2 full necks available, you can have brighter chords in your left hand and your right hand has a way more freedom for playing since you don't have to worry about muting your left hand.

- Try to have a left hand a bit more rhythmic and incorporate some walking bass from time to time.
- With that kind of chords progression, walking bass are easy.
- About the right hand, try to develop a bit more your musical phrases
- What is the tuning of your guitar?
- You are tapping for how long?
- For you master thesis, are you talking about other instruments related to tapping ( chapman stick, Megatar, Touch Guitar, etc ) ?
- I strongly recommend a book that Belge Daniel Schell wrote, it's called "My space" the textbook. It talks about all different tuning it is possible to have depending if your instrument has 1 or 2 regions of playing, If you play hand crossed, uncrossed or mirrored.

## Hanspeter Kruesi

---

- I liked the arrangement you worked out on “All the things you are” and as it looks you reached the goal of your thesis in your paper.
- From my point of view you achieved what you were aiming for.
- Personally I still miss the virtuoso playing automatisms which come from playing this technique over a longer period – but thats ok.
- Its a good work, well performed and the arrangement sounds interesting.

## Fabio Sirna

---

- Thanks for reaching out, and compliments for your master thesis paper.
- I found the way you tune your guitar very interesting, both for the cluster playing and for the general sonority regarding a six strings guitar employing touch style.
- I've tried in the past to use alternative and custom tunings, but I ended up adding the seventh string and keep standard tuning in fourths, in order not to lose all the familiar geometries learned on the fretboard.
- I've listened to your tune several times, and I think that touch style in jazz playing is really difficult, because of the "swing feel" and in general for the rhythmic management of the various voicings, but you're doing very well :)
- Have you got the chance to rehearse with a jazz drummer? I think that would help to balance the different guitar parts, and you can exploit the advantages of this kind of practise when you play a solo repertoire.
- Playing tapping is just like being in a minefield, and perfection is really hard to achieve..we all struggle, but i'm sure you're on your way.
- Send more material when you have it!

## Self-analysis

0:00-0:30 - The intro demonstrates the independence of the two hands well.

0:30-1:30 - The tempo is felt during the first head but it still has a flow. There are also some nice left hand voicings.

1:30-2:00 - The arrangement loses a bit of momentum due to the introduction of rubato.

2:00-2:30 - There is a nice passage here in which the right hand has a repeated note and alters the dynamics of the note a lot whilst the left hand arpeggiates the chords.

2:30-3:00 - There is a re-introduction of tempo which gives the improvisation more momentum.

3:00-3:40 - There is some good use of double-stopping in the right hand.

Overall I think the recording was an accurate picture of where my skills were at that time. Ultimately the right hand still lacks some expressive possibilities however the use of double-stopping and dynamics in the right hand was something I was pleased to see manifest in the recording.

There perhaps could have been more crossover between the two hands, for example playing the melody in the bass register for a section.

Comparing this final recording with the previous reference recording offers an interesting perspective on the journey of this research.

If we look at 02:14-02:34 in “All the things you are” which has some effective step-wise voice-leading in the left hand and compare to it to 03:20-3:40 in “In your own sweet way” which contains some leaps in the voicings which disrupt the voice-leading we can see a clear development.

Another comparison relating to harmony can be made between the two. In “All the things you are”, a system had been created for playing chords as demonstrated in the video “Left hand voicings”. This meant that the harmonic aspect of the playing had a continuity and could be followed by the listener more easily. Contrast this with “In your own sweet way” which had no definitive system for the harmony. Some of the voicings contain open strings, some of the voicings are four-note voicings, some are three-note voicings etc.

The zero recording was really just an initial presentation of information and skills with no clear artistic vision, which is why it lacks flow and continuity. The final reference recording, however, was the result of four cycles of interventions which in the end produced a result with a much clearer artistic vision which can be seen in the systematic use of harmony in the left hand.

If one looks at “Between Moons” one can see that a system was being codified for harmonic playing in reaction to the zero recording. The chords feel more balanced as they are now subject to the same parameters. They are generally four-note chords and use open strings for resonance. For example at 01:30-02:00 one can hear the voice-leading and the balance in the voicings clearly.

Looking at “Between Moons” one can also see that this was the first example of right-hand tapping in my playing. However as mentioned in the relevant intervention cycle, the form it took was not sufficient for the requirements so it was developed into the third reference recording.

In “Form, Space” one can observe the two-handed touch technique which became part of the final artistic result. A melody being played in the right hand with chordal accompaniment in the left hand. However the key difference between “Form, Space” and “All the things you are” is the lack of improvisation and variation in the former. The main motivation for the final reference recording was the dissatisfaction with “Form, Space” in these two areas.

## Intervention

On reflection upon the final reference recording, it became clear to me that there were still many possibilities to explore and advancements to make. However, the most salient was the technique of alternating the hands in their roles. The two-handed touch technique had been framed in the context of the left hand as the accompanying hand and the right hand as the melody hand. But as I started to develop more exercises working on arpeggios, poly-chords and a more free-flowing improvisatory approach influenced in a large part by the solo piano improvisations of Brad Mehldau, Keith Jarrett and Fred Hersch it became apparent that just as a pianist will on occasion cross over the two hands, for instance to continue a line whilst maintaining a repeated figure, I too could use this technique to great effect.

One of the great advantages I soon discovered when alternating the two hands was that I no longer had to think in terms of fixed positions for the two hands. They were free to continue any idea and go anywhere on the neck as the other hand would simply compensate. This co-operation meant that the two hands did not get in the way of one another, which was occasionally a problem with the two-handed touch technique, especially when playing close voices.

Although “All the things you are” is the final documented artistic result of this research report, if there were to be a further intervention cycle the topic of crossing over hands would be the focal point. Indeed this research will continue in my own practice and I will develop the concept of pure freedom for both hands further as this is another pianistic technique which provides even greater expressive opportunities.

---

# Reflection on process and artistic result

---

## Methodology

In assessing the dominant methodology used in this research, namely artistic development achieved through practise-based research, I can conclude several things:

The process of learning, creating and experimenting as a singular flow is perhaps the most natural form in which the artist exists. We can see other strategies such as literature research and analysis as vital yet ultimately auxiliary to the paragon of practical artistic development.

Practise-based artistic development is perhaps the most effective form of artistic research as by its nature it is semi-permeable and somewhat improvisatory thus dynamic to multifarious sources of stimuli, both internal and external.

The ultimate strategy which proved to be the most useful was the formation of exercises and the formalisation of material into audio, video or visual form based on a combination of literature research, transcriptions, experimentation and practise-based research.

The intervention cycle itself is another methodology that must be assessed as it forms the core to the content of this research report.

Ultimately, a similar conclusion can be drawn for the intervention cycle as can be drawn for practise-based artistic development. It is, in fact, one of the most natural and thus effective forms of artistic methodology.

What I have discovered is the role that both the micro and macro intervention cycle play in the processes of the creative artist. A micro intervention cycle is a process with a specific, limited purpose within a wider framework. A macro intervention cycle is a broader, more expansive process, usually concerning an artistic result and with a definitive progression between the reference recording and the intervention itself. The process of intervention is something that I will carry through into my further professional career as a creative musician.

## Goals/question

Ultimately, the ethos behind the research question and the title of the report never really changed although the language and specificity evolved throughout. This points to a consistency of approach and motivation which I think can be seen in the logical progression of the intervention cycles. The results of the case study conducted on chord voicings during the first intervention cycle can clearly be seen in the second reference recording. The use of open strings, harmonics and right hand tapping were all incorporated due to the exercises developed in the case study and documented in the video series.

The question of how lower-set fifths tuning and two-hand touch technique can be utilised in order to achieve greater independence in producing multiple voices using the entire range of the guitar was answered in the final artistic result. The result of all of the intervention cycles was a method informed by exercises developed during the research which overcomes the limitations of range and right and left hand independence of the guitar in comparison to the piano.

It is now possible to play three note chord voicings in the lowest register of the guitar with the left hand whilst simultaneously having the three high strings available for the right hand to play melodies or three note chords. Furthermore, the final stage of the research which was the amalgamation of these new techniques with traditional techniques led to an holistic method which is dynamic, flexible and ultimately contains many more expressive capabilities than were present in the zero recording.

## Context

The context of this research begins with the guitar and my relationship to it as a performer and creator. This report is in many ways the documentation of an highly personal journey. However, the artist exists in two realms. The first is the inner realm in which the artist conceives of new pathways, processes external stimuli and possesses the qualities of inspiration and motivation. The second is the outer realm of social responsibility, community, performance and feedback.

It is within both of these realms that this research has relevance.

It has great relevance to my own inner realm as an artist as I feel it has been a successful process and the artistic result is an outcome that will continue to drive me forward to further discoveries and artistic excellence. It presents an outcome which truthfully represents my aspirations. In analysing the zero recording I reflected upon my own abilities and how close they were to my goals. Through highlighting the points in my playing which were lacking I was able to achieve my goals through intervention. As each intervention cycle went on, this process became more profound as I became more comfortable and efficient with analysing my own artistic outcomes, drawing conclusions upon them and designing interventions in order to create a spiralling research process.

The relevance to the outer realm lies in the creation of knowledge. The artistic result serves as a valuable addition to the repertoire of the jazz guitar and will hopefully have wider implications for guitar playing in general. Especially the final stage, synchronising the touch technique with other guitar techniques, is the most valuable in terms of a new approach, an expansion, of the jazz guitar.

## Accuracy/Effectiveness

In conclusion the artistic result accurately ‘answers’ the question posed. Lower-set fifths tuning combined with two-handed touch technique do serve to expand the role of the guitar and achieve greater independence in producing multiple voices using the entire range of the guitar. The video series accompanying this report document the practical exercises and methods used in order to achieve this goal. They are hopefully clear in their content so that the link between the motivation, data collection and result can be seen.

---

# Conclusion

---

The implications for this research reach far beyond this research report. The potential for further research and development is self-evident on what is in fact an extremely far-reaching goal. The research done follows a narrative, namely expanding what is possible on the guitar and especially relating to harmony.

The media and practice review during the third intervention cycle helped greatly in framing the context of the development of the two handed touch technique. I learnt what had come before and what existed now and in doing so saw, in combination with my goals, a path for progress which was both unique and satisfied my artistic aspirations.

By questioning and attempting to develop the very fundamentals of how I as a guitarist approach my instrument I have tapped into a never-ending process within my own artistic practice and within the wider musical community.

---

## Reference list

---

### Internet sites

---

- Alternative Guitar Tuning Database (2017). *CGDGBE - Dropped C*. GTDB. Accessed 17-04-2017 <http://gtdb.org/cgdgbe>
- Chalifour, Andre. *Worldwide Tapping: The reference for tapping on the internet*. Accessed 17-04-2017 <https://goo.gl/0ObDXN>
- Pavlov, Dimitrij (2011). *Two Handed Touch Guitar Chords HD*. Fonexsis. Accessed 17-04-2017 <https://goo.gl/6D1x7w>

### Books

---

- Ascham, Roger (1545). *Toxophilus -The School of Shooting*. 92. Accessed 17-04-2017 <https://goo.gl/JZcyLJ>
- Cappelli, Frank (2007). "Guitar Timeline." In *The Guitar: An Illustrated Step-by-step Instructional Guide*, 107. Pittsburgh, PA: Eldorado Ink. See the year 1952 in text. Accessed 17-04-2017 <https://goo.gl/jsJl3X>
- Fulara, Adam (2009). *Two-handed tapping. Guitar Workshop*. ABsonic. Accessed 17-04-2017 <https://goo.gl/LwlvMb>
- Greene, Ted (1971). *Chord Chemistry*. Alfred publishing Co., Inc.
- Greene, Ted (1976). *Modern Chord Progressions Vol.1*. Alfred publishing Co., Inc.
- Heckman, Frank (2012) *Flow on Stage: the art of sustainable performance*. Codarts. 10. Accessed 17-04-2017 <https://goo.gl/KJY2tH>
- Kingstone, Alan (2006). *The Barry Harris Harmonic Method for Guitar*. Jazzworkshop productions.
- Ligon, Bert (1996). *Connecting Chords with Linear Harmony*. Hal Leonard.
- Mehldau, Brad (2002). *The Brad Mehldau Collection*. Hal Leonard.
- Overgaauw, Wim (1997). *The European Jazz Guitar*. Dannison Music.
- Pass, Joe (2006). *The Blue Side of Jazz*. Hot Licks.
- Pass, Joe (1986). *Guitar Chords*. Mel Bay Publications Inc. Pacific, M.O.
- Pass, Joe (1985). *Joe Pass Chord Solos: for Guitar, Vibes and all Keyboard Instruments*. Alfred Publishing Co., Inc.
- Pettinger, Peter (2002). *Bill Evans: How My Heart Sings*. Yale University Press. Ch.4.
- Reger, Max (1904). *Supplement to the Theory of Modulation*. Leipzig. C F. Kahnt Nachfolger.
- Schirmer, G (2013). *Bach Favourite Piano Works Vol. 2100*. New York. Hal Leonard.
- Van Bavel, Rob (ND). *Jazz Piano Essentials*. Rotterdam. Codarts.
- Van Epps, George (1939). *The George Van Epps method for guitar*. New York. Epiphone Inc.
- Wetzel, Pascal (1989). *The Artistry of Bill Evans*. Miami. CPP/Belwin, Inc.

### Articles

---

- Adler, David R. (2016). Stanley Jordan: "My Spirit Transcends Gender". *JazzTimes, Inc*. Accessed 17-04-2017 <https://goo.gl/LIX2yB>
- Bunker, Dave (ND). The History of the Touch Guitar™ Dual Neck. *Dave Bunker Guitars*. Accessed 17-04-2017 <https://goo.gl/KbII5j>
- Borgdorff, Henk (2006) The Debate on Research in the Arts. *Bergen: Bergen National Academy of the Arts*. 3-4. Sensuous Knowledge 2. Accessed 17-04-2017 <https://goo.gl/FjLRlX>
- Crispin, Darla; Gilmore, Bob (2014). Artistic Experimentation in Music: an Anthology. *Orpheus Institute. Leuven University Press*. Accessed 17-04-2017 <https://goo.gl/BK0RXQ>
- Dalberg-Acton, John (1898). Lectures on modern history. Appendix I. *Gutenberg*. Accessed 17-04-2017 <https://goo.gl/ti7jPA>
- Fournier, Anik (2016). Rudimentariness: a concept for artistic research. *Journal for Artistic Research*. Accessed 17-04-2017 <https://goo.gl/1Wxx0d>
- Jordan, Stanley (2009). Getting Started with the Touch Technique. *Guitar Player Magazine*, July ed. 1984. Manifold Music. Accessed 17-04-2017 <https://goo.gl/08kJ9m>
- Shorter, Wayne & Hancock, Herbie (2016). An Open Letter to the Next Generation of Artists. *NEST*. Accessed 17-04-2017 <https://goo.gl/SJ478R>
- The Disempowerment of the Hand and the State of Piano Technique Today. *Piano Technique Reviews*. Accessed 17-04-2017 <https://goo.gl/e6hVVr>
- Timeline of Stick Advancements. (2016) *Stick Enterprises, Inc*. Accessed 17-04-2017 <https://goo.gl/j0Vtmf>
- Various (2012). Guitar/Tapping. *Wikibooks*. Accessed 17-04-2017 <https://goo.gl/Allygh>
- Various (2017). Tapping. *Wikipedia*. Accessed 17-04-2017 <https://goo.gl/xSO5Wy>

## Recordings

---

Balawan (2009). *See You Soon*. Universal. <https://goo.gl/QqF1u3>  
 Brubeck, Dave (1955). *In Your Own Sweet Way*. Columbia.  
 Fleetwood Mac (1977). *Rumours*. Warner Bros. Accessed 17-04-2017 <https://goo.gl/MdZk04>  
 Hersch, Fred (2001). *Songs Without Words*. Nonesuch B000059QTS.  
 Jordan, Stanley (2000). *Stanley Jordan: Star Licks*. Hal Leonard.  
 Kern, Jerome & Hammerstein II, Oscar (1939). *All The Things You Are*. Universal. Accessed 17-04-2017 <https://goo.gl/nP3YZG>  
 Mehlau, Brad (1995). *Introducing Brad Mehlau*. Warner Bros. 46260.  
 Mehlau, Brad (2016). *Ten Years Solo Live*. Warner Bros.  
 Shakespeare, William (1609). *Sonnet 130*. Thorpe. Accessed 17-04-2017 <https://goo.gl/g0W2Gx> Music: Taylor, Adam & Naus, Vera (2016). *Sonnet 130*. Zuntz Music. Accessed 17-04-2017 <https://goo.gl/1MMCOK>  
 Simcock, Gwilym (2008). *SGS Group Inc Presents*. Music Centre.  
 Taylor, Adam (2016). *Wunderbar*. Zuntz Music. Accessed 17-04-2017 <https://goo.gl/hCt5rm>  
 Taylor, Adam (2016). *Volume*. Tr. 2. Zuntz Music. Accessed 17-04-2017 <https://goo.gl/nINtg1>  
 Taylor, John (2002). *Between Moons*. PRS/MCPS. Accessed 17-04-2017 <https://goo.gl/YIx5Se>  
 Taylor, John (2008). *Triangoli*. Astarte.  
 Wheeler, Kenny (1997). *Angel Song*. ECM 1607.

## Videos

---

Gomm, Jon (2013). *Jon Gomm Guest Lesson*. From *Total Guitar Magazine*, ed. 284. Future Plc. Accessed 17-04-2017 <https://goo.gl/S03i9r>

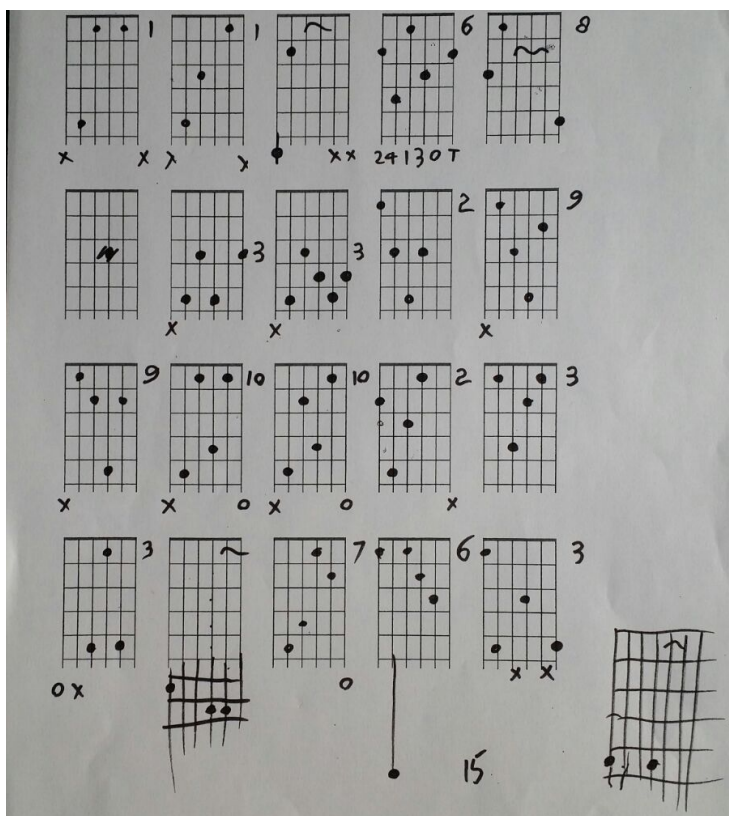
V1,2,3,4,5,6,7,8,9,10,11,12 and Reference recording 1, 2, 3 and 4. Are contained within a Youtube playlist. <https://goo.gl/4q9fKv>

---

# Exercises

---

E.1.



E.2.

## Joe Cohn sheet

From a workshop at Codarts, 2016.

Generally, when playing with a bass player and even a piano player they will be playing the root and/or the fifth.  
So as a guitarist, you don't need to play those notes, especially not at the bottom of a chord.  
So whenever you are about to play a voicing with the root and/or the fifth in simply substitute the 1 for 2 and 5 for 6.  
The example below uses Cmaj7 voicings:

*C<sup>Δ</sup>7 "Standard" voicings*

T	5	8	12
A	4	5	12
B	3	7	10

*5 C<sup>Δ</sup>7 Improved voicings*

T	5	10	12	15
A	4	7	9	14
B	7	9	12	14

These voicings come from arranging for three horns and they offer an attractive way to harmonise a melody yourself.

9

	1	3	6	8	6	3	1
T	3	6	8	11	8	6	3
A	5	7	10	12	10	7	5
B							

*"Horn section" chords*

E.3.

Cm Dm<sup>7(b5)</sup> Eb Fm Gm Ab Bb Cm C<sup>7</sup> F<sup>7</sup> Bb<sup>7</sup> Eb<sup>7</sup> Ab<sup>7</sup> Db<sup>7</sup> Gb<sup>7</sup> B<sup>7</sup> E<sup>7</sup>

8vb

E.4

Jazz Guitar

Major Lydian Altered etc.

E.5.

D13 G13 G9#5 C9sus C13 F#(maj7) Fmaj9

B13#9 E13#11 A7sus A7b9 Dm6

G13 G#° Am9 D13b9

Dm11 Dm(maj7) Dm7 Gmaj9#5 G9 C13 B7 Bb7 A7

E.6.

Jazz Guitar

C7 F7 E7 A7

3 D7 G7 C7 A7 D7 G7

J. Gtr.

E.7.

Jazz Guitar

3

J. Gtr.

5

J. Gtr.

7

J. Gtr.

The image shows a jazz guitar solo for E.7, consisting of four staves. The first staff is labeled 'Jazz Guitar' and contains measures 1-2 with chords C7, F7, E7, and A7. The second staff is labeled 'J. Gtr.' and contains measures 3-4 with chords D7, G7, C7, and A7. The third staff is labeled 'J. Gtr.' and contains measures 5-6 with chords C7, F7, E7, and A7. The fourth staff is labeled 'J. Gtr.' and contains measures 7-8 with chords D7, G7, C7, and G7. The notation includes various jazz guitar techniques such as triplets, slurs, and ties.

---

## Network

---

I chose in my second year of the masters programme to have as my main subject teacher a pianist, Franz Van Chossy. The lessons with Franz Van Chossy, and occasionally with the pianist Peter Beets, offered opportunities to directly translate the techniques used by pianists to my emerging approach.

My guitar technique teacher for both years of the masters programme was Ronald Schmitz. The methodology used in our 1-1 sessions was a mix of quasi-experiment and interview. I used him as an expert to answer certain questions I had. He would use me as a ‘test subject’. For instance, posing a question to me and seeing if I could find a solution in real time. This led to a plethora of new voicings, techniques and approaches. This was a process of exploration, development and exclusion.

Another key part of my research environment were the ensembles and playing situations which form a large part of my professional musical career. I was able to implement, test and develop the techniques and approaches I was researching in these practical scenarios in tandem with my personal practise-based research. These two elements, personal exploration and group playing, are mutually beneficial and thus integrating the two served to build momentum in expanding the role of the jazz guitar.

Two key projects in which I am creatively involved are *Neon and the Deons* and *Naus/Taylor*.

The first is a quartet with a repertoire of original, contemporary jazz music. I began writing music using the lower-set fifths tuning and touch technique for this project. An example of this is the piece “Wunderbar” (<https://goo.gl/NJ354k>).

The second is a duo with vocalist Vera Naus. The material is mostly co-written and features the touch technique and altered tuning heavily, particularly in the piece “Sonnet 130” (<https://goo.gl/Hkd7Pc>).

See D.3.



## DIMINISHED CHORDS

83  $D/C-$   $B^{\flat}13$   $B^{\flat}\Delta^{\sharp}9^{\sharp}11$   $A^{\flat}O$

J. GTR.

J. GTR.

7 7 7 6 8

3 1 3 2

4 6 7 6

4 6 5 4

87  $B^{\flat}7^{\sharp}9$   $F^{\sharp}7^{\sharp}9^{\sharp}11$   $B^{\flat}11^{\flat}5$   $B^{\flat}7_{ALT}/A$

J. GTR.

J. GTR.

10 7 8 9

4 4 5 8

7 6 7 7

10 0 8 10

5 5 5 5

91  $B^{\flat}7_{ALT}$   $E^{\flat}13^{\sharp}11$   $D^{\flat}13/A^{\flat}$   $F_{-}\Delta^{\sharp}9^{\sharp}11$

J. GTR.

J. GTR.

10 0 8 10

9 0 7 8

0 0 5 4

0 0 0 6

7 0 8 8

95  $E^{\flat}b_{-}\Delta^{\sharp}5$   $A^{\flat}b^{\sharp}7^{\sharp}11^{\flat}9$   $D^{\flat}b^{\sharp}13^{\flat}9^{\sharp}11$

J. GTR.

J. GTR.

10 0 0 7 6

4 4 7 7 9

4 4 7 7 4

6 3 4 3 4

3 3 3 3 3

4

50  $E7^{\flat 9}/8$   $B^9$   $A\flat^{13}\sharp^{11}/C$   $D^{13}/A$

J. GTR

J. GTR

54  $A^{13}\flat^9$   $D7^{\flat 9}/A$   $B7^{\flat 11}\flat^9$   $A\flat^{13}\sharp^{11}\flat^9$

J. GTR

J. GTR

58  $A^{13}\sharp^{11}\flat^9$   $D\flat^{13}/F$   $E7^{\flat 9}$   $G^{13}\flat^9$

J. GTR

J. GTR

62  $D\flat^{13}\sharp^{11}$   $E\flat^{13}$   $E\flat^{13}$   $E\flat^{13}\sharp^9\flat^{13}$

J. GTR

J. GTR

66  $E^{13}\sharp^{11}$   $B\flat^{13}\sharp^{11}$   $A^{13}\sharp^{11}$   $D7^{AL T}$

J. GTR

J. GTR

70  $E^{13}\flat^{13}$   $G^{13}\sharp^{11}$   $E7^{\flat 13}$   $E7^{\flat 9}$

J. GTR

J. GTR

74  $E\flat^{13}\sharp^9\flat^{13}$   $E\flat^{13}\sharp^9\flat^{13}\sharp^{11}$   $B7^{\flat 9}\flat^{13}$   $E7^{\flat 9}$

J. GTR

J. GTR

78  $E\flat^{13}\flat^9$   $D^{13}$   $A7^{\flat 9}\flat^{13}$   $D\flat^{13}\sharp^9\flat^{11}$   $B\flat^{13}\sharp^7$

J. GTR

J. GTR

## [MAJOR CHORDS]

3

23  $C\Delta\flat/E$   $C\Delta\flat/G$

J. GTR.

J. GTR.

28  $E\flat\Delta/C$   $G\sharp2$   $C11$   $C\Delta\sharp5$

J. GTR.

J. GTR.

32  $E\flat\Delta\sharp13$   $G\flat\Delta9$   $D\flat\Delta\sharp11$   $G\flat\Delta13$

J. GTR.

J. GTR.

36  $E\Delta9/G\sharp$   $E\Delta\sharp11/G\sharp$   $C\Delta\sharp7\sharp11$   $F\Delta\sharp11/A$

J. GTR.

J. GTR.

40  $E\flat\Delta\flat/B\flat$   $G\Delta\flat$   $G\Delta\sharp11$   $G\Delta\flat\sharp11$

J. GTR.

J. GTR.

44  $A\Delta\sharp11$   $F\Delta\flat$   $B\flat\Delta\flat$   $C\Delta\flat\sharp11$   $A\flat\Delta7\sharp11\sharp5$   $F\Delta\sharp\sharp11$

J. GTR.

J. GTR.

98

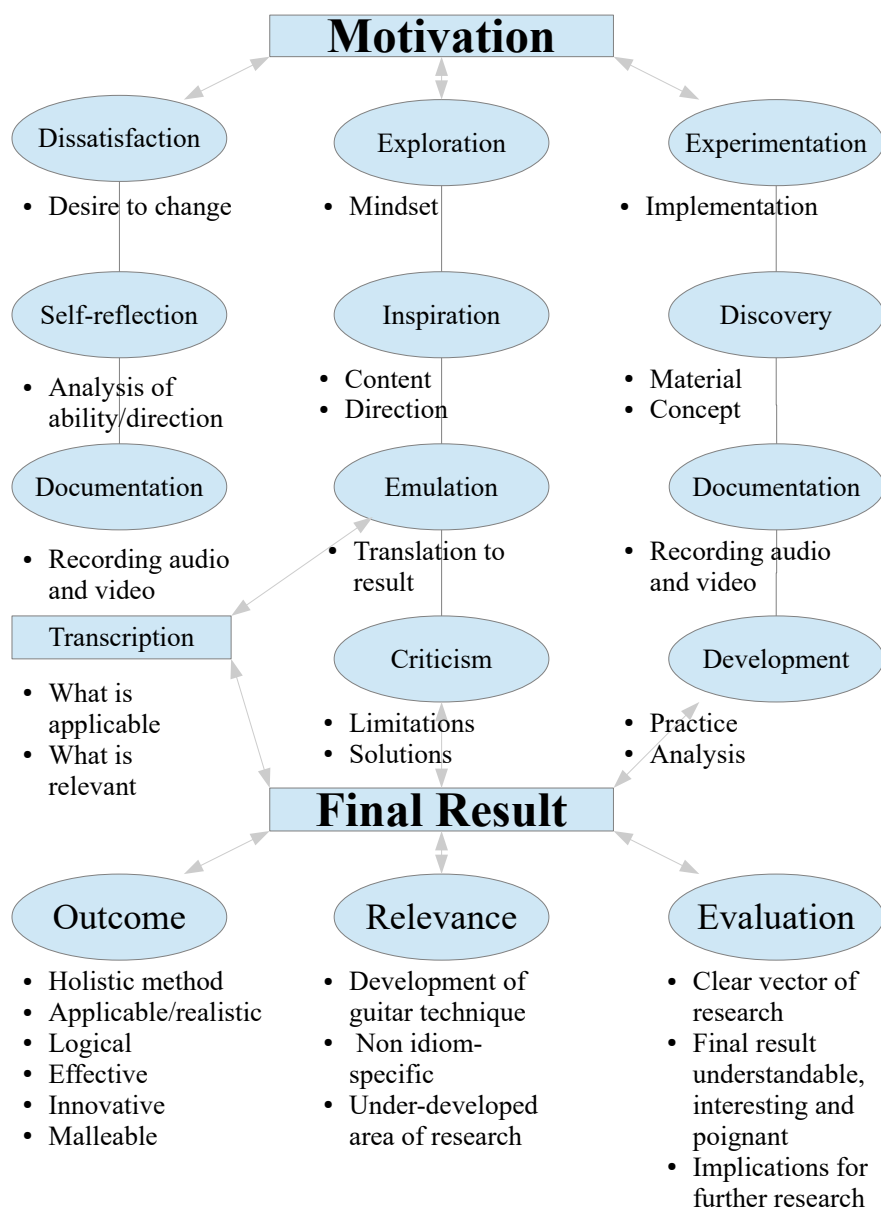
J. GTR.

J. GTR.

HARM.1 HARM.1

HARM.1 HARM.1

## D.2



## D.3

