Rehearsal and performance practices of minimalist music, specifically related to music for eighteen musicians by Steve Reich

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This dissertation serves to give an exposition of the origins, rehearsal and performance practices for minimalist music with particular attention paid to Music for Eighteen Musicians by Steve Reich. It contains interviews with performers of this work and attempts to define the underlying principles of minimalist music with particular reference to concentration and tempo. Rehearsal procedures are discussed as well as issues such as stamina and acoustics. The final section is dedicated to common mistakes and a reflection on the work from those who have performed it.
DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

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INTRODUCTION

The purpose of this dissertation is to present a set of rehearsal and performance practices for the performance of minimalist music. The set does not attempt to be complete, nor is it implied that this is the only way to perform this style of music. The studies that have been undertaken here can be used as a guide.

In late 2005, there was a rumour that the Classical Music Department at the WA Academy of Performing Arts (WAAPA) was going to perform Steve Reich's seminal work *Music for Eighteen Musicians* (also referred to simply as 18). This created quite a lot of excitement among the percussion students! Unfortunately the work was not scheduled in 2006. Towards the end of that year some of the members of the percussion department decided to undertake this task. With this promise the work was scheduled for 2007.

Thus began the process to rehearse and perform *Music for Eighteen Musicians*. During this period I decided to write my Honours dissertation on this work and what is involved in performing it. I soon discovered that there had not been very much written about performing minimalist music even though there is a significant corpus of works about the genre.

It was clear that there was a need to research the origins of the rehearsal and performance practices. I reasoned that one of the most efficient methods to gain information was through interviewing performers who have played minimalist music. I was fortunate enough to be able to speak with some of the
most experienced performers of this music in the world, including Russell Hartenberger and Steven Schick.

Russell Hartenberger is one of the original members of the Steve Reich and Musicians ensemble. He is also a founding member of the distinguished percussion ensemble, Nexus. Hartenberger was involved in two years of rehearsals while the piece was being composed and the subsequent world premiere of 18. He has since performed the work over 100 times internationally. Russell was very helpful throughout the interview process and added some truly inspirational insights into the performance of the work.

Steven Schick is one of the leaders in contemporary percussion performance, especially in the area of multi-percussion. He has performed Steve Reich's works many times and readily agreed to be of assistance. His book, The Percussionist's Art: Same Bed, Different Dreams, published in 2006¹, provides valuable insight into the performance of minimalist music, centred mainly upon Steve Reich's first large ensemble work, Drumming. It is also relevant to the performance of 18. Steve has performed Drumming countless times, including a performance in Perth in 2004, and his knowledge of the intricacies of the rhythms that Reich uses is unparalleled.

Most of the other performers interviewed were members of the WAAPA ensemble. This included a number of senior staff as well as students.

The main performance issues that are addressed in this dissertation are concentration and tempo. There is also a background given on minimalist music and the piece, Music for Eighteen Musicians. Some rehearsal techniques for this

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piece are also covered. These performance issues are relevant to other styles of music as well but in this forum they are treated specifically in reference to minimalism in music. The work is heralded as one of the greatest ever written in this genre. In this context it is important to understand the affective reactions of the performers to the experience. Thus, an opportunity for this is found in the final section reflecting upon the nature of 18.
MINIMALISM

Minimalism in music, like most styles and periods of music finds its genesis in visual art and intellectual movements. In the case of minimalism initially the influence came through sculpture and thence painting, extending as far as advertising.

Minimalism came from the loft apartments and studios of New York City in the early 1960s. Some historians say that there were four fathers of minimalism in music, La Monte Young, Terry Riley, Steve Reich and Philip Glass.\(^2\) They are listed here in chronological order. There are now many contemporary composers that could be added to the minimalist school including, John Adams, John Luther Adams, Michael Nyman as well as Australian, Nigel Westlake.

In the beginning this small community of composers performed in each other’s ensembles and premiered each other’s works. The pool of players was quite small for the performance of this new type of music. All of the composers were learning mostly from each other, sharing ideas and consulting each other when composing new works.

The basic principles of minimalism are based upon gradual processes and repetitive rhythms. Steve Reich wrote an essay in 1986 entitled 'Music as a Gradual Process'.\(^3\) This essay served to confirm and also to codify some of the early processes of minimalist music. This essay is often referred to in present


day discourses on minimalist music. Two points that Reich made are particularly relevant to *Music for Eighteen Musicians*:

1. "I am interested in perceptible processes. I want to be able to hear the processes happening throughout the sounding music".

2. "To facilitate closely detailed listening a musical process should happen extremely gradually". 4

The first of these points means that the music must move slowly, not so much in regards to tempo but in relation to the harmonic pace. Most of Steve Reich's works prior to 18 have very little harmonic movement. This means that it is very easy for the listener to perceive changes.

The second phrase quoted from Reich's essay is linked closely to the first idea that in order for the listener to hear the changes in the music they must happen gradually.

Minimalism was a very important phase of popular culture for only a brief period. The artist Andy Warhol built on the ideas first born through minimalism to create his Pop Art works using items from the grocery list against plain coloured backgrounds. In his book, *Repeating Ourselves: American Minimal Music as Cultural Practice*, Robert Fink writes that minimalist music is "the most protean, popular, and culturally significant music to arise within the last half century". 5 He

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also believes that minimalist music became popular at the same time as minimalist advertising did.⁶

While its influence has been sustained, true excitement in Minimalism lasted for a relatively short time in its basic formulation. Minimalism was arguably one of the most influential movements in music and art because it showed composers and artists that it was acceptable to strip a painting or a piece of music back to its bare essentials. In so doing artists were able to work outwards from the canvas and add new layers and textures. It was revelatory to observe that art could be presented without excessive layering.

Music for Eighteen Musicians

"Music for Eighteen Musicians is a masterpiece" (Appendix B – Interview 1 - Hartenberger).

The work succeeds on many levels - aesthetically pleasing for audience, performer and historian alike. Exemplifying Reich’s style, the work is one of the simplest yet most challenging of his pieces to perform. The structure is quite straightforward. It begins with an opening Pulses section where eleven different repeated chords are played in slow moving progression. These chords become the harmonic basis for the entire work. The chords are then each treated to a movement of their own in Sections I to XI. The formal structure for each of the movements is mostly the palindromic ABCDCBA. The piece ends with a closing Pulses section, where all of the repeated chords are heard again in succession.

The instrumentation for Music for Eighteen Musicians is two clarinets doubling bass clarinet, four pianos, three marimbas, two xylophones, a vibraphone, maracas, a violin, a cello and four female voices. The work can be performed with eighteen musicians, as the title suggests, or it can be performed with up to twenty two players. For the performance at the WA Academy of Performing Arts on Sunday September 2 the work was performed with twenty musicians. This was to accommodate as many players as possible who wanted to be a part of the performance. When the work is performed with only eighteen musicians there are a number of players responsible for more than one part, e.g.,
the vibraphone player, who plays piano and maracas also. There is no exact way to divide up the parts and each performance of this work is therefore unique.

The piece is performed without a conductor. It is based more upon the Master Drummer of West African music or Balinese Gamelan. Reich studied the music of both of these countries and became intrigued by some of their concepts. Both the Master Drummer role and the Balinese Gamelan are operated under a system of aural cues. Music for Eighteen Musicians also operates under this system. The vibraphone and the first clarinet give cues throughout the Pulses and the Section movements to indicate changes in patterns, changes in harmony and the changes between Sections (See Example 1).

![Example 1: Vibraphone cue from Section I, indicating change to Section II.](image)

Due to the nature of the work and the ensemble skills involved the clarinet cues sometimes need to be visual as well. It is made more difficult by the fact that a great deal of the clarinet cues are played on the same notes or on similar patterns.

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Steve Reich, Music for Eighteen Musicians (UK: Boosey & Hawkes, 1999), full score 28 – 29.
An example of the clarinet cues can be given from the opening Pulses movement of the work. The piece begins with the marimba and piano playing on the beat. This opening section is in the time signature of $\frac{4}{4}$ and the players can repeat the opening bar between 10 and 28 times. The second bar contains the commencement of the second marimba and piano, playing off the beat. This bar can be repeated between 16 and 48 times and, in fact, it is up to the performers to decide how many times they would like to play the repeated measures. This device is used through the entire work. The pulses then begin in the violin and voices before the clarinets' first entry. The pulses consist of repeated quavers from soft to loud to soft again. For the singers and the clarinettists the length of these is determined by their breath capacity while they maintain an even rise and fall in volume. It follows then that this becomes the basic length for the other instrumentalists who perform the pulses.

Next begin the cues. The clarinet directs each chord change after two pulses. The chord is then meant to change gradually across all parts. The vibraphone player's cues work in a more structured manner. The cues given by this player indicate that changes happen during the repeated patterns. The vibraphone also cues the changes between each Section (except Sections V and X which are cued by the clarinet). To give an example of the vibraphone cues, Section I of the work has been explained in relation to the changes that the cues trigger.

This part begins with the Marimba 3 and Piano 3 playing the first of the moving patterns in the work. The time signature is $\frac{3}{2}$, $\frac{6}{8}$ or $\frac{12}{8}$ depending upon
upon how the pulse is felt. The rhythm is the same as in one of Reich's earlier works, *Clapping Music*. The first clarinet player cues the strings and Voice III to begin a repeating one bar pattern. This measure is repeated until the vibraphone player plays their first cue. Once this cue is played the clarinets, strings and Voice 1 and 2 augment their pattern with a two-bar pattern. This is then repeated up to four times until the vibraphone player plays another cue. The pattern changes in the clarinets, strings and voices again, into a four-bar pattern. The clarinets play four pulses while the rest of the instruments continue with their four-bar pattern. The clarinets crescendo joining the others playing the four-bar pattern. The vibraphone cues a diminution in the pattern and again moving to a two-bar repeated pattern. The vibraphone cues again and the pattern becomes a one-bar pattern. The next cue from the vibraphone signals for the clarinets, strings and voices to fade out. The next cue of the vibraphone indicates to the entire ensemble to change to Section II (see Example 1). This is the structure for many of the Section movements in the work. It is quite easy to see here how the ABCDCBA form can apply.

There is also a sense of layering of the sounds and of what instruments are playing the main musical lines in *Music for Eighteen Musicians*. The pulsing instruments, those playing the on and off beats continuously, are the bottom layer. The marimba and piano playing the one bar moving pattern are the next layer, providing a sense of time and rhythm that the other instruments can latch onto when playing their own patterns. The instruments playing longer held notes, in the case of Section I, the violin, cello and Voice 3 and 4, are contributing to the
harmonic structure of the movement. The last layer is the one that is cued by the vibraphone to change pattern lengths, the clarinets, strings and Voice 1 and 2. By adding the moving lines to the texture these instruments create the most obvious interest by providing the melodic element.
REHEARSALS AND PERFORMANCE

There is no rule of thumb for the rehearsal time required to prepare a piece of music. In the case of 18 the original Steve Reich and Musicians ensemble rehearsed for two years before its premiere performance. When the ensemble first began rehearsing there was no score or parts: “Steve wrote it out week by week, and would sketch a section and then write parts. From the performer’s input, or from ideas that worked or didn’t work at a rehearsal, he would change things”. 8

The work was composed from May 1974 to April 1976. 9 However, musicians in the twenty first century are more familiar with minimalist music and do not require the same amount of rehearsal. Steven Schick believes that about two months of rehearsal time is sufficient while Russel Hartenberger, a member of the original Steve Reich ensemble, prefers three months (Appendix B – Interview 1 – Hartenberger). This is a very subjective issue but as Schick says: “I’ve never been in a Reich piece where I haven’t either been very grateful that we had all the rehearsals or that I didn’t wish we had any more” (Appendix B – Interview 2 – Schick).

The method of rehearsal is also open to debate. Hartenberger feels that one rehearsal each week leading up to the performance is ideal (Appendix B – Interview 1 – Hartenberger). However, Schick prefers more intensive rehearsals

9 Steve Reich, Music for Eighteen Musicians(UK: Boosey & Hawkes, 1999), full score: Notes by the composer.
closer to the concert. Schick says: "given that it was one [rehearsal] every week there was no way to get momentum because we needed to start fresh every week" (Appendix B – Interview 2 – Schick). The WAAPA performance was rehearsed more in this way due to a lack of rehearsal space and the busy schedules of the performers.

It is important that all performers are aware of the music as a whole. In a performance of 18 it is not sufficient to know only the part that you are performing, e.g., performers need to know what all of the cues trigger. Due to the nature of the work it is relatively easy to shift out of time by a quaver. If players are aware of who is performing on the beat then it is much easier to correctly re-align.

Additionally, Schick believes that sectional rehearsals are beneficial. This was something that aided the WAAPA performance as well. By dividing the ensemble into percussion, pianos, and ‘other’ (clarinets, strings and voices) each group gets an opportunity to work on the nuances of their parts together without the pressure of the larger ensemble. This means that technical issues are addressed on a smaller scale, i.e., fingerings and mallet choices for the percussion instruments. Sometimes mallet choices change when all the instruments are present and the ensemble is rehearsing in the performance venue.

All interviewees agreed that an ensemble should not rehearse for more than two hours at a time. Daniel Hall stated that “one play-through is enough” (Appendix B – Interview 9 – Hall and Webster). This opinion could change based
on what part was being played but the ensemble should not over-extend the players that have constant parts otherwise injury could result. During the WAAPA rehearsals one of the percussion players was unable to continue rehearsing and subsequently withdrew from the piece due to muscular tightness in their arms.

While this issue could be solved through an adjustment of technique, it was prudent of the performer to withdraw to prevent further injury. For Graham Wood slightly adjusting the way the hands were positioned over the keys alleviated stress (Appendix B – Interview 5 – Wood). Both Daniel Hall and Joshua Webster changed their techniques for this performance. By playing more from the elbows they were able to lessen the stress on their wrists whilst also giving more of a visual cue to any other players who may have been following them for the beat (Appendix B – Interview 9 – Hall and Webster). Emma Blake mentioned that it is very important for the singers to conserve their energy throughout the performance as the Voice parts are very physically demanding (Appendix B – Interview 3 – Blake).

It is worth noting that with a piece as mesmerising as 18 it is easy to rehearse without stopping to fix errors. This can easily become a "paradigm of bad rehearsal" (Appendix B – Interview 2 – Schick) and should be avoided.

Given the nature of minimalist music, each performance is unique in length. However, the generally accepted time for 18 (based on the opinions given in the interviews) is approximately one hour and twenty minutes.

Russell Hartenberger believes that it is very important for the entire ensemble to be able to hear the pulsing marimbas; "it is important to have well-
placed monitors so that everyone can hear instruments and singers who might be quite a distance from each other” (Appendix B – Interview 1 – Hartenberger).

Graham Wood disagrees, however, “In my opinion, the louder it gets the worse it gets for acoustics” (Appendix B – Interview 5 – Wood).

It depends on the individual acoustics of the venue.
CONCENTRATION

"It is important to maintain concentration in the sense that your hands mechanically repeat patterns without mental attention while your mind is occupied with issues such as time and synchronization" (Appendix B – Interview 1 – Hartenberger).

The issue of concentration is clearly an important one. Despite the slow moving pace of the changes in Music for Eighteen Musicians intense concentration is essential. Based on my own experience I believe that there are two different types of concentration needed in the performance of 18. The first is the form of concentration for the repetitive marimba, piano and xylophone parts. These players execute the chords that provide the underlying rhythmic drive of the work. Player 1 plays on the beat and player 2 plays off the beat, in this case on every second quaver. They must concentrate on maintaining a steady tempo whilst also keeping their parts together with their opposing instrumentalist (i.e. Marimba 1 and 2). There is an ossia pattern provided but even if the players choose to use this they must still synchronize with the other player. This seems to be the more intense type of concentration of the two. Often they play for prolonged periods, of up to a half an hour without pause. Tiredness makes this form of concentration even more difficult. This problem will be discussed later.

The second type of concentration relevant to all players is awareness of cues and changes. Most of the cues are auditory. Nevertheless, visual cues are
utilised. The most successful cues were those seen and heard given by the first clarinet. The vibraphone cues worked effectively as audible cues only.

Concentration on these cues is paramount to the success of the piece. Failure to recognise cues results in upsetting the flow and forward movement of the work. Concentration on cues is easier due to the relatively slower pace of these events. Cues are only given once or twice every minute and the resulting changes need not always be immediate. Sequential clarinet cues are critical moments in concentration. Graham Wood (Piano 1) said that it isn’t absolutely “cattle stations” if you get lost, due to the slow moving pace of some of the changes (mostly in the Piano 1 and 2 part) but he did stress that if he lost concentration it was easy to find himself out of phase with the Piano 2 player resulting in both playing exactly the same music instead of a synchronized alternation.

Ensemble concentration is another issue. As the work is performed without a conductor it is similar to the Master Drummer of West African music and the Balinese Gamelan. Reich studied the music of both and became intrigued by them conceptually. He visited Ghana in the summer of 1970 and recorded bell patterns of the music of the Ewe tribe. \(^{10}\) Through these patterns he discovered the versatility of the number 3 in music, specifically in the time signature \(\frac{3}{8}\). There are many permutations in division of this time signature and this is precisely what the African musicians were doing. This work became the

basis of Drumming, composed in 1971. Reich continued to use this technique in many of his compositions.

Both the Master Drummer role and Balinese Gamelan operate within a system of aural cues. *Music for Eighteen Musicians* uses this system. The vibraphone cues the Sections to indicate changes in patterns and the changes between Sections. The first clarinet also gives multiple cues throughout the Sections and the Pulses section. With the nature of the work and the ensemble skills required the clarinet cues must be visual as well.

Every cue by either the vibraphone or the clarinet indicates that something must change. This is sometimes very small such as a piano player changing from a moving rhythmic pattern to pulsing the quaver or the voices and strings fading out. A missed cue can result in the work being unable to proceed. During the WAAPA performance of *18* one of the marimba players missed a cue to change their pattern. The cause was either due to concentration on their own playing or failure to watch the clarinettist. In this particular situation the opposite marimba player realised that they were supposed to be playing something else as their pattern is mirrored in one of the piano parts. The player then changed the pattern and the other marimba player followed. The changing of pattern length happens in most of the other parts in this work.

Many times the patterns change from a one-bar pattern to a two-bar pattern and then to a four-bar pattern. These changes are always cued by the vibraphone. If one of the players is not concentrating on these cues they can
miss the change to a different pattern and in the case of the pattern reducing, can find themselves performing an unexpected solo.

Concentration is imperative during the pulses. This is the actual repetitive pattern that Reich names pulses as opposed to the first and last movements of the work, also named ‘Pulses’. The pulses are repeating quavers rising and falling in volume. The length of the pulses depends on the instrument. The pulses are indicated by repeat signs with various numbers above them (for example 6x – 12x. See Example 2). The real length of the repeats is based on the technical abilities of each player. The clarinets are informed that they are to play their pulses within the length of one breath. This is the same for the voices. The score indicates that the player must be able to perform a smooth increase in volume followed by a smooth decrease. The strings, percussion and piano players are told that they should follow a similar shape to that of the clarinet’s pulse, due to the fact that it is easier to perform a much longer rise and fall in volume on these instruments.

Example 2: a bass clarinet pulse from the Opening Pulses.¹¹

Concentration seems to become an issue during the diminuendo. In the WAAPA performance it was found that the decrease in volume was often rushed and not as long as the increase. The tempo also seemed to waver during the

¹¹ Steve Reich, *Music for Eighteen Musicians* (UK: Boosey & Hawkes, 1999), full score, 3.
decrease. This had a tendency to negatively influence the tempo of the entire ensemble, even though the cause was due to a small number of instrumentalists. Strict care must be taken during any of the pulses to avoid these errors. It could also easily be said that this is an issue of stamina as the problem seemed to become more prevalent towards the end of the work. Tiredness and stamina were not mentioned during the interviews, however, as being heavily influential factors in any lack of concentration.

Of the interviewed performers, more than half were professional musicians or lecturers at a university level. An issue that was mentioned was that of confidence. While this issue is not specifically one of concentration, the lack or loss of confidence can have a direct effect on concentration. In the case of *Music for Eighteen Musicians* confidence takes on a different meaning. It is not so much the confidence in the ability to play the notes but more the confidence of where the performer is within the music at any given time. Additionally there is the confidence in the beat, or more specifically, where the first beat of the bar is. Both Anthony Maydwell and Gary France mentioned confidence, Gary said, “we all lose our place sometimes but professionals know how to get back on” (Appendix B – Interview 10 - France).
TEMPO

Tempo is a major factor in this work. The tempo indicated in the score is \( \text{\textbf{j}} = 204 - 210.\)\(^{12}\) This is a relatively fast tempo and during the WAAPA performance of 18 the starting tempo was around \( \text{\textbf{j}} = 184.\) In this performance it seemed to be a more comfortable tempo for the ensemble to play. It gave the work a sense of groove rather than a sense of rushing. Most of the performers interviewed felt that the tempo the work is performed at is best determined by what ‘feels’ best with the players in the ensemble.

On various occasions during rehearsals of the WAAPA performance the piece was attempted at a faster tempo, “The faster it got the more out of control it got. And not because it was any harder to play at that speed but it just felt as if it had an additional feeling of anxiety at that higher tempo” (Appendix B – Interview 6 – Maydwell). The term ‘groove’ was mentioned often throughout the interview process yet it is a difficult word to explain. Indeed it isn’t mentioned in dictionaries in a musical sense. When a piece of music is being performed and there seems like there is no friction within the rhythm and everyone is smiling, this is groove. Tempo shifting can be attributed to a number of factors, including concentration.

Concentration – or lack thereof – is relevant initially to the instrument playing the constant quaver patterns. When one performer is playing on the beat and the opposing performer is off the beat there is a certain amount of give and take between the players. This means that if the ‘on beat’ player pushes the

\(^{12}\) Steve Reich, *Music for Eighteen Musicians* (UK: Boosey & Hawkes, 1999), full score.
take between the players. This means that if the ‘on beat’ player pushes the tempo forward slightly the ‘off beat’ player must accommodate this or they will be out of phase with each other (another of Reich’s concepts – though not a welcome one in this context) and end up playing the same thing. This is disastrous for the ensemble as it can distort the perception of the beat, not to mention the intentions of the composer! Graham Wood mentioned that on a number of occasions he was forced to play his right hand twice to get back around to the beat as he and the other piano part had phased together (Appendix B – Interview 5 – Wood). Both Piano 1 and 2 were playing the ossia pattern.

Concentration can also affect tempo in the ensemble as a whole. There must be a conscious effort to not rush or retard the tempo. However, if the tempo does change is it necessary to correct it? Most players that were interviewed suggested that this is not really possible. If one player tries to fix the tempo by speeding up, it is more than likely to unsettle the feeling of time in the group. There are certain points in the music that feel as if they should go slightly faster. None of the players are sure why the work is speeding up slightly but they don’t really mind. An example of this was of Steve Schick remembering Section VI being driven forwards by the Piano 3 and 4 parts. There is something about the way that the piano part is written, with the two principal chords in this repetition changing in the middle of the bar. The parts are following the harmony provided by the cello part. The rhythm is also off the beat which tends to push the music a little.
Section VI also has a tendency to speed up due to the entrance of the maracas. It is as if this instrument breathes a new life into the music and revitalises all of the performers. Gary France names this moment as his favourite in the work (Appendix B – Interview 10 – France). In the WAAPA performance, however, the maracas caused the tempo to slow down. The problem is due to an inexperience on the part of the player of the instrument. The maracas are played by shaking them back and forth. This creates a slight time delay for the player between shaking and producing the sound. It is impossible to see the actual beads that you are playing with inside the maracas. As an inexperienced player, you have less control of when the sound is produced. On a number of occasions during the WAAPA rehearsals and performance of 18 the maracas had a tendency to slow down the Sections in which they were playing (VI, VII and VIII). This meant that the maraca players had to concentrate on almost playing ahead of the beat.

Concentration is required not only on the tempo but also on the other performers. Daniel Hall (Marimba 1) was conscious that all of the other performers that were able to see him would look to him to follow the beat. However, it can be frustrating for the Marimba 1 player if they can see others not playing in time. Hall also noted that at times it was difficult to keep the tempo steady as when players entered with new patterns their tempo was not exact. Even as early as the pattern leading into Section I. It is very important to have the exact tempo in mind before commencing a new pattern (Appendix B – Interview 9 – Hall and Webster).
Stamina is a seemingly obvious factor in maintaining tempo. As a performer becomes tired they will struggle to play at the original tempo. Most of those interviewed felt that stamina is an issue that is closely related to concentration but did not feel that it was actually a significant separate issue. In a performance most players felt that the adrenalin boost from performing and the way that the music is written did not allow them to become tired.

The changes in tempo produced strong opinions from all of those interviewed. Gary France mentioned that it is a trait of Western music to keep a very strict tempo, he said that “music needs to breathe” (Appendix B – Interview 10 – France). Steve Schick referenced Beethoven and how many tempos the great composer’s works are performed at. “I think if you put those musicians on a click track and had them play the first movement from the Beethoven Fourth Symphony, it would sound wrong. So I think that we need to have a certain latitude, maybe a little less in the minimalist music but nevertheless it does shift, its like a breeze” (Appendix B – Interview 2 – Schick). Anthony Maydwell, on the other hand, would prefer to ensure that the tempo is steady and strong so that more time can be spent on appreciating the notes and the changes in the music (Appendix B – Interview 6 – Maydwell).
COMMON MISTAKES

Mistakes occur in music. The performers were asked if they could think of any that related to minimalism with particular reference to *Music for Eighteen Musicians*.

Steve Schick provided a succinct answer when asked about common problems or mistakes in minimalist music. He spoke about the basic rhythm of 18 and also *Drumming*. There will be times when a player will want to rush certain parts of the rhythm and of the bar. When the rhythm is displaced, if the same part of the rhythm is rushed it can make things unstable if another player is playing the original form of the rhythm at the same time. In all of Reich’s works the rhythm must be played as accurately as possible and with no inflection, or swing. In the same way that pushing a certain part of the bar, playing any rhythm with too much swing can cause problems when performers are playing together because every person will swing differently (Appendix B – Interview 2 – Schick).

Gary France mentioned that the history of these rhythms comes from the West African tradition where the players will play continuously for six hours or more. It is important to be relaxed and natural when playing them, especially when playing for an extended period of time (Appendix B – Interview 10 – France).

Another recurrent issue is that of tuning. While this may not be an issue in a professional ensemble, nevertheless it is something that all members must be constantly aware of. It was mentioned by a number of the performers interviewed
that the tuning was chiefly a problem for the singers. There are a number of reasons for this: spatial difficulties with hearing, the amplification of the voices and also a lack of effective rehearsal time. Most of the issues could be avoided quite easily. Emma Blake mentioned another possible reason for these difficulties which related to stamina. She was careful to conserve energy during rehearsals and performance. If a singer did not it would be easy for their intonation to suffer.

The repetitive nature of minimalist music makes it easy to get lost. When performing any minimalist work, the performer can easily find themselves wondering if they have played the repeat 56 or 57 times.

There are bound to be more problems but the aforementioned played a significant role in the WAAPA rehearsals and performance of *Music for Eighteen Musicians*. 
REFLECTION

The most interesting question on the interview list was that which gave the performers a chance to reflect on their emotional responses. This proved to be a difficult thing to explain but provided for novel and varied replies.

The piece, *Music for Eighteen Musicians*, is infectious in its groove and seems to permeate the listener with the drive of the repeating rhythms and pulses in the music. "The ensemble makes interesting and fascinating sounds ... I think about it like an interesting landscape, and we actually paint the room with this landscape and it sounds beautiful" (Appendix B – Interview 10 – France).

When Steve Schick was asked to reflect on what it is that makes 18 such an amazing work he replied in typically eloquent fashion: "I guess if we could quantify what makes music great, that would be the answer to that question, we could talk about what we like about it but there is something beyond that" (Appendix B – Interview 2 – Schick).

For some of the members of the WAAPA ensemble it was the sense of achievement of performing in a work such as this. Others felt that it was the music itself that made it so exciting. The ending of the work seemed to strike a chord with a number of those interviewed. Personally, the moment that the final Pulses began was when I felt my heart rate was at its highest in the entire piece.

"Moreover, *Music for 18 Musicians* plugs into the human psyche through pulse, the rises and falls which are clearly and deliberately connected to human breathing, and to a spirit of community among the players that is essential for the
success of the performance and which connects with the listener in a direct way"
(Appendix B – Interview 1 – Hartenberger).
CONCLUSION

The original idea of this dissertation was to provide something of a guide to the rehearsal and performance practices of minimalist music. After researching this and interviewing a number of performers it is possible to conclude that most of these practices for minimalist music can be found within the performance practices of music in general.

In minimalism there are expected to be high levels of concentration, or perhaps it would be more correct to say different levels.

There is also the issue of tempo, an aspect of the music that seems to breathe and move and create the live element within it. Is this not a part of all chamber music? This kind of view of tempo would end in the realm of current popular music where much of the tempo is now dictated by computers but it is alive and well as the classical genre, as well as other contemporary arenas like folk and world music. However, there appears to be something special about the tempo in a piece where patterns are repeated for extended periods of time. “Tempo is a central issue with this kind of music because it is music with a steady pulse throughout” (Appendix B – Interview 1 – Hartenberger).

Hartenberger mentions that the tempo will change between the different sections of Music for Eighteen Musicians but that they will feel correct from a human standpoint. It was a key point in all of the interviews that time and pulse can never stay exactly the same but that this is part of interpreting significant music. If the tempo didn’t change it wouldn’t be human.
Stamina was one of the original concerns with this dissertation but throughout the interview process it became clear that there is something special in minimalist music, in particular, that of Steve Reich, that seems to empower it's performers to rise above any physical effects of playing for long periods of time. Aside from minor aches and pains, most of the interviewed performers felt that after the performance they were exhilarated. So much so that they claimed they could have performed the entire piece again!

To conclude, it is the essence of minimalist music that makes it so appealing. The fathers of minimalism were visionaries who saw that the simple things about music could be extended and made to be pleasing in their simplicity. To be able to perform minimalist music successfully the performers must have an understanding of these ideals.
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APPENDIX A

Dissertation Interview Questions

PERSONAL INFORMATION
Can you please say who you are and when and where you have performed
*Music for Eighteen Musicians*?
What instruments and parts have you played in *Music for Eighteen Musicians*?

PRACTICE:
Did you physically prepare to perform in *Music for Eighteen Musicians* or did
regular technical practice prepare you enough?
Did the technical aspects of minimalist music (repetition, build-ups) present any
problems for you in personal practice?

REHEARSAL:
What do you believe would be the ideal amount of rehearsal on a work such as
this?
Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?
Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?
During rehearsals, did you find that there was a particular section of the piece
that caused more errors among the players?

PERFORMANCE:
Did you find that maintaining strict concentration and focus was essential in your
performance of *Music for Eighteen Musicians*?
Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

If the tempo does move, is it necessary to fix this?

Do you remember the tempo moving at any specific section of the piece?

Does this (the tempo moving) come down to concentration or stamina?

**REFLECTION:**

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?
When in the music have you felt the most excitement or anxiety?

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?
APPENDIX B – INTERVIEW 1

The questions were sent to Russell Hartenberger by email and he replied with his own typed answers.

PERSONAL INFORMATION

NAME: Russell Hartenberger
DATE: September 17, 2007 (email was received on this date)

Dissertation Interview Questions

Can you please say who you are and when and where you have performed

Music for Eighteen Musicians?

Russell Hartenberger
I performed the premier performances of Music for 18 Musicians, and have performed the work over 100 times in North America, Europe and Asia.

What instruments and parts have you played in Music for Eighteen Musicians?

I play the off-beat pulse marimba part, the on-beat xylophone part, and a melody marimba part.

I have also directed a performance of the piece.

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

I don't do any special preparation physically to perform Music for 18 Musicians. Regular technical practice is enough.
Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

When I am learning a new piece of Steve Reich’s, I usually work with a midi-version of the piece. This enables me to familiarize myself with the composition and to practice any concerns I might have with endurance and concentration.

However, this was not the case with *Music for 18 Musicians*. Regular rehearsal over a long period of time imbedded the piece in my mind and body.

**REHEARSAL:**

What do you believe would be the ideal amount of rehearsal on a work such as this?

Ideally, a work such as *Music for 18 Musicians* should be rehearsed over a long period of time. The concert I directed was rehearsed over a period of 3 months with a rehearsal once a week. This enables the musicians to become comfortable with the main issues of the piece which are cueing, sequence of events, endurance, concentration, and time feel.

When Steve Reich was composing *Music for 18 Musicians*, we rehearsed regularly once a week for several months while he was writing it. Each week he would bring in the next section he had composed and we would rehearse it and connect it with what we had learned earlier.

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

No, I feel exhilarated.

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?
No.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

One of the central concerns in learning the piece is dealing with spatial issues. It is essential that the pianos hear the pulse marimbas; it is important for the pianos to hear each other, especially when they are using grand pianos, during the piano quartet section; it is important for everyone in the ensemble to hear the pulse marimbas for time, and the melody marimba for synchronization of build-ups, melodic elements, etc; it is important to have well-placed monitors so that everyone can hear instruments and singers who might be quite a distance from each other; it is important to have an understanding of the tempo relationships and how the ensemble ebbs and flows with the tempo.

PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

It is important to maintain concentration in the sense that your hands mechanically repeat patterns without mental attention while your mind is occupied with issues such as time and synchronization.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

No.
What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

The most common mistake is not a mistake per se, but is a lack of understanding of the music. Some extremely talented musicians have trouble with this music because its technical demands are different from those of standard classical music or previous new music. To play the music with the correct feel and spirit, the players must have control of their own parts but have a sense of the whole.

The virtuosity in this music is in; having control of your own part; thorough time sense; repetitive consistency; the ability to make minute adjustments in time; and in fitting in with what you hear and having your part become a part of a greater whole.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

The main problems in performance, if the group is well-rehearsed and in touch with the music, are in hearing each other in the spatial environment.

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

No

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

No.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?
It hasn't fallen completely apart because it has always been well-rehearsed by musicians who have an overall sense of the piece. There have been occasions where the time sense has not been solid or where the synchronization has not been exact.

Do you think that the tempo given in the score for Music for Eighteen Musicians is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

Any tempo marking that is indicated in the score was added after I had already learned the piece and established the tempo and overall time sense for the piece. The ideal tempo for the piece depends on the acoustical environment.

In your performances of Music for Eighteen Musicians did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

The tempo sometimes changes from section to section, but, if performed musically, these tempo shifts feel correct from a human standpoint.

Tempo is a central issue with this kind of music because it is music with a steady pulse throughout.

If the tempo does move, is it necessary to fix this?

If it feels incorrect musically when the tempo changes, then it should be fixed.

Do you remember the tempo moving at any specific section of the piece?

There are certain places the tempo traditionally shifts when the piece is played by Reich’s ensemble. I can't remember where these places are.
Does this (the tempo moving) come down to concentration or stamina?

I don't think it is concentration or stamina as much as the individual character of the sections of the piece.

REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

There have been many special moments with this piece. The last time I played it, in Carnegie Hall last fall on the occasion of Steve's 70th birthday, was a special moment.

When in the music have you felt the most excitement or anxiety?

As I mentioned earlier, the piece is exhilarating and exciting for me all the time. I especially like the section just following the piano quartet when the marimbas play the double-stop pattern moving first up the marimba and then back down. However each section has its own beauty and gives me a feeling of joy.

I have never felt anxiety playing *Music for 18 Musicians*.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

First of all, *Music for 18 Musicians* is a masterpiece. There are certain pieces in music that are just that, pure and simple. These pieces reach the soul.

Moreover, *Music for 18 Musicians* plugs into the human psyche through pulse, the rises and falls which are clearly and deliberately connected to human breathing, and to a spirit of community among the players that is
essential for the success of the performance and which connects with the listener in a direct way.
APPENDIX B – INTERVIEW 2

Dissertation Interview Questions

NAME: Steve Schick
DATE: September 20, 2007

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

Steven Schick. I've only played Music for Eighteen Musicians once and it was very recently, it was last May. I have played a lot of Reich's other music, but 18 came quite late.

What instruments and parts have you played in Music for Eighteen Musicians?

I played the vibraphone part. Basically some little piano parts and helping out here and there but the vibe part basically.

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

It's a pretty straight forward two mallet part so I didn't practice the part per se.

REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

We did something that I think was not ideal, we took a long period of time, had weekly rehearsals, ah, but it meant that the growth was slow. So
ideally what you want to do is say over a month or six weeks time, have some individual work with sections of the piece and then group rehearsals more and more frequently until you get to the end.

So do you think that you rehearsed for too long a period of time?

I think it's always nice to have lots of rehearsal but given that it was one every week there was no way to get momentum because we needed to start fresh every week.

I spoke with Russel Hartenberger and he prefers to have one a week for about three months?

That's kind of what we did and I didn't really like it. Of course Russ comes from that generation where Reich was very insistent on long rehearsal periods and I think that now we have a sort of notion of how hid music goes and we have had some experience playing it. So there is a lot that you don't need to teach from the start and I suspect that it's become closer to the normal rehearsals period that you would do for another piece.

So this style is something that people are exposed to a lot more?

Right

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

Well you know the vibraphone part so no.

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?

Always.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?
Every single joint is difficult. Basically any change. When the piano comes and then the other piano comes in with a different rhythm and it's very hard to tell where one is. There are a couple of moments like that that are quite scary!

PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

Absolutely. Here's my thought about Reich and that is that it's very unlike any other piece. If you rehearse a piece well but you don't feel like you've over rehearsed it. In many cases you can play better than your last rehearsal in a concert. And with Reich I feel like you have to be more prepared than you feel you need in order to be able to withstand the pressures of a performance. I've never been in a Reich piece where I haven't either been very grateful that we had all the rehearsals or that I didn't wish we had any more. It's never like a kind of thing you can take for granted, I think.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues ingrained in minimalist music?

Hmm...let's see, it's a very good question. I'm not sure I have a standard answer to what kind of problems are difficult. I think that because if we can talk about that piece or even Drumming there are some specific answers but they are tied to very particular rhythmic structures. I don't think that I have anything that you could generalise over the music of say Philip
Glass, Steve Reich, Terry Riley or Alvin Lucier, or whoever you might consider the minimalists to be. In 18 and in Reich in general there is the interesting issue of being out of phase with one another in rhythms which have pockets of tension in it, in other words, when you play a certain rhythm in Drumming you tend to rush a certain part of a bar but when that is no longer on the down beat then obviously those people playing that rhythm rush a different part of the bar and if you play them both at the same time, then they wobble against each other, do you know what I mean?

And so I think there are problems endemic to Reich or especially those two pieces that wouldn’t be able to be generalised and I think that one of them is a sort of a flat metric affect, in other words playing that piece without swinging it or pushing it or inflecting it too much, so that when other people are playing the same rhythm, starting it in different places in the bar you don’t have that kind of friction.

Were there specific sections in Music for Eighteen Musicians that caused problems in performance?

No, I think for me in the vibraphone part, one of the difficult things is keeping your head in the game when you’re not playing. Because there’s this interesting thing of being either in or outside of the stream, it’s very easy suddenly if you are not focused to simply not know where one is and have zero idea! Whereas the person sitting next to you who has been playing thinks its impossible not to know where one is! So I thought that
that was a difficult thing but nothing untoward happened but it’s a fairly intense experience.

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

Of course. Yeah.

More so than a rehearsal, do you think?

No, because there is the invigoration of performance which means that you leave kind of tired in that good way but also ready to do it again. It’s a very different kind of thing, it’s an exuberant piece.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

In a rehearsal? Yes. Well look I think this is this issue of when things go wrong maybe you could stop to adjust but the point of rehearsal is to fix those things. And I don’t know if you are going to ask me this question but one of the major dangers in rehearsal is that you get so much that you love playing it that you don’t stop to fix things and you kind of cope with them and then many times things don’t get fixed. Its easy to keep playing and you want to keep playing and all of a sudden a rehearsal that has been scheduled for an hour and a half consists of 55 minutes of playing where there are mistakes that don’t get corrected and twenty minutes of talking and people taking a break and then this is like one spot [that gets worked on]. That’s the kind of paradigm of bad rehearsal.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?
This is very much like every other piece of music, there is a tempo marking but that doesn't take into account anything to do with the acoustics or instruments or anything that radically effects tempo so I would never want to you know presume that the marked tempo is the only one that you could take.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

I think that the tempo moves and I know that when I have prepared *Drumming*, which I know better, and there is a similar situation and I have really tried to keep the tempo exactly the same, the piece sounds wrong. I think that the tempo needs to move a little bit. I think you have to be careful of things that spin out of control or obvious processes like for example rushing the maracas section, um, but I do think that the tempo should move. But this is the case with every piece of music. I am now the new conductor of the La Hoya Symphony so I am conducting an orchestra doing classical music as well now and I'm listening to different versions of a Beethoven symphony I'm about to conduct and the tempo span of a piece that seems to be always in tempo is amazing but the ear accommodates it and we expect it. And I think if you put those musicians on a click track and had them play the first movement from the Beethoven Fourth Symphony, it would sound wrong. So I think that we need to have a certain latitude, maybe a little less in the minimalist music but nevertheless it does shift, it's like a breeze.
If the tempo does move, is it necessary to fix this?

No, I think that what you want to avoid is something that accelerates out of the volition of the players and causes a problem. I mean I think that sections sit differently at different tempo and I think that people automatically make the maracas section just a little bit faster for example or maybe that piano Section V just a little bit slower just because of the figurations and I think that this is natural and as long as its not so extreme that it comes to the attention of the listener then I think its right.

REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

Well since it was just once. I guess...where was I before that....oh I was in New York, I played a...I had been travelling and so between the week-before’s rehearsal and the performance I had gone away and done a very intense project in NY and I came back and you know basically flew in and went to the dress rehearsal so my mind was, you know, I really just hadn't been thinking about it. All of a sudden to be zapped back into that world, you know, its like, it’s a place you want to be. I mean I have my favourite spots of the world to visit and that’s one of them...Yosemite and *Music for Eighteen Musicians*.

When in the music have you felt the most excitement or anxiety?

Well, they may also be at the same point. You know, I don’t think that there is, you know, its funny, we experienced this with *Drumming*, that you're in an organism and to some extent you lose an individual profile.
You are part of a kind of communal organism, so to speak. And so you
know how all of a sudden for some reason you get unsettled, you don’t
even know why, you just have a kind of mood, and that can happen in that
group too and I think that’s kind of unpredictable, you know, all of a
sudden you’ll go from it being spinning joyously to something that just
doesn’t sound right, like a click in the engine or something like that and I
don’t think that anyone outside of the organism knows it but those
moments cause really unbelievable anxiety like no one can fix it. No single
person can fix it, not even the vibraphone player who is not playing, you
just have to find your way back. So those are the anxiety moments, and
the joyous moments I think very often are the changes, even the little
ones.
I think that some of the vibraphone cues to signal the changes were, for
me, the best moments...
Well you know the other thing that we were just saying is that the
individual has very little control over the outcome, except for the
vibraphone player. You know, the vibraphone player has complete control
over those, when you move to the next moment. So there is this sort of
serenity of saying, ok, we’ll do it now.
What do think it is specifically about Music for Eighteen Musicians that makes it
such an interesting piece to rehearse and perform?
Well I mean, um, I guess if we could quantify what makes music great,
that would be the answer to that question, we could talk about what we
like about it but there is something beyond that. It is a great piece of
music, I mean its one of the greatest pieces of music in the Twentieth Century, in a top ten of fifteen list, for me it would be. I don't know what causes a piece to have that kind of timeless quality, it is joy from the beginning to the end. And I don't know if you could get eighteen people in a room for an hour and get everybody happy, I can't think of under what other circumstances you could do that?
APPENDIX B – INTERVIEW 3

NAME: Emma Blake
DATE: September 21, 2007

Dissertation Interview Questions

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

Emma Blake, I have performed the piece twice, once in 2004 at the Canberra School of Music, ANU and the second time this year 2007 at WAAPA.

What instruments and parts have you played in Music for Eighteen Musicians?

Voice one, both times

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

I think that regular technical practice prepares you enough, I did spend a bit of extra time every day leading up to the performances working on things like breathing and that sort of stuff because normal vocal classical technique that we learn here is sufficient but you do have to alter it so I had to work on breathing a bit more than I usually do but that’s about it actually.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?
The pulses I found really difficult actually and still do its just that keeping
the pulse going and I have such admiration for the woodwind players who
are doing it because it's really difficult. We are taught to do one thing and
then to suddenly to use your mouth and your tongue in a different way it
quite difficult.

The build ups I didn't find difficult at all except that I found as an ensemble
it was hard to keep in time but in terms of the preparation for it, it just
made so much sense when the build ups worked so I didn't find it difficult
at all.

REHEARSAL:
What do you believe would be the ideal amount of rehearsal on a work such as
this?

Until we performed it here I would've said a couple of months but I think
that the time that we had we managed to do such a good job that it sort of
shows that you don't need that much time if everybody's got their
individual part down it not as hard to put something together as we think it
will be.

Did you feel physically tired after a rehearsal of Music for Eighteen Musicians?

Yes, I did. When I first performed it in Canberra I was only rehearsing
once a week for two hours and at the end of rehearsals I had no voice left
at all and I had to go straight to teaching afterwards. It was a bit of a
learning curve for me because I really had to pace myself. It is physically
very tiring on the voice.

Did you feel mentally tired after a rehearsal of Music for Eighteen Musicians?
Mentally tired as well because you have to concentrate so hard, if you turn off for a split second you lose it completely. The other thing about the mental aspect of it is that it has this trance like effect of audience members, it just spins you out completely but you can’t let that effect you when you’re playing, so you have to have a really focused level of concentration and because I enjoy that trance like effect so much, I find it really hard not to get distracted and not to get lulled into that when I’m actually working on the piece.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

Section III. In both times that I have been involved in it. The way the pulses work and the way the build up of the motives in every part, it just. For me, I will hear the down beat to begin with but as it progresses I just start... its that whole effect of new melodies coming out, they are melodies that don’t exist, like no one is playing them, but the combination of everything you start to hear this new melody and you start focusing on that and the downbeat for that might be halfway through beat two so you start to get distracted and I actually found that in Section IV as well. I just constantly lost the down beat and for the same reason I just, I start to hear a different melody and a different pattern and structure and that’s just the acoustic effects of the piece so I really had to keep my hand beating the whole time.
Did you find that maintaining strict concentration and focus was essential in your performance of Music for Eighteen Musicians?

Absolutely, can’t be overstated how much you need to concentrate. I mean, if I switch off for one second I lose the down beat, I lose the place where beat one is, I forget to count and I’m constantly counting bass clarinet cues and I go in to panic mode because I have no idea what we are up to, I have no idea where my next bit is, especially if we are coming up to a solo thing where I have to cue someone. If you lose concentration you are letting everybody down. It’s so important to stay focussed.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

Yes it did. I think even though the four bar patterns are in some ways easier, because you can hear the beginning of the phrase and hear where it ends, because the little ostinato has many repeating patterns within itself I found often I would accidentally leave out a bar or add in a bar. And then everyone would be wondering where beat one was and I would say, I know where it is but then realise that I was actually a bar out. It definitely happened in four bar patterns than it did in any other.

What do you think are some common mistakes when playing minimalist music, in particular Music for Eighteen Musicians? Are these possibly caused by the technical issues of minimalist music?

I can’t speak for all of the instruments but I can say for the voice that the biggest mistake the singers make and what I really tried to avoid this time
around was using up your energy too soon. It's so important, technically, to pace yourself. It's not like singing Lied and it's not like opera. In opera you have to pace yourself but it's easier because you have an emotional background. This is just something that singers rarely do, just use their voice as an instrument not as a method of story telling, so it's very difficult to learn how to do that pacing, I had to learn that the hard way in Canberra and I think that has to do with minimalism and the way the voice is used in this particular piece because it's just so repetitive and so easy to have problems with tension and I know from some of what I overheard from the pianists as well that they were having the same sort of problems. Playing the same thing over and over again and having each bit be not be a build up of tension but rather be fresh every time you do it so that you are constantly pacing your energy.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

I think in terms of the performance the ones that felt for me that they were going to be the most problematic were the pulses. I think a lot of it had to do with people being uncertain... the fact that they had this freedom to come in whenever they wanted was one thing. I suppose ideally it would be an overlapping but in the rehearsals and the performance it was very much together and it sort of shows the sort of ensemble playing that these musicians are used to doing. I think it was a bit of a tricky thing to get around their heads that there was no set entry time it was just kind of whenever you feel it.
Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

Not so much, during the piece yeah because in both cases the performance was the first time that I sang through the whole thing. I did attempt to do it in rehearsals but I realised there was not much point I figured out where I need to pace myself and I found at times when I knew there was a lot going on in the sound and I knew I was begin doubled in the clarinet I would have to stop and just leave it for one repetition to sort of let my body relax, get rid of any tension and then I could come back into it so I was tired but not as much as I was in rehearsals, I think when you do the whole piece in one go and it has a different effect than even when you’re just rehearsing one section over and over again.

What is that effect do you think?

It’s being aware of the way the piece is moving. Instead of working on one section and working on the technical aspects of it, when you are in the performance mode and you are going from the beginning to the end you are aware of this journey that you are taking the audience on and I think that aspect of it, particularly where I was standing and I was able to feel the audience reaction, I just has such a different effect on you, its so much easier and you enjoy it so much more and your energy lifts and I think that knowing what your giving to the audience makes it a bit easier and makes you forget about being physically tired.

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?
No, I was buzzing. I had to concentrate and during the performance there were moments when I was anxious, and I was so worried that I had lost it but then realising that I hadn’t bit mentally tired. At the end of the performance, every time I have done it, the reaction from the audience and how moved they are. I love being there when people hear this piece for the first time. That’s what I love about it.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

Nearly in Canberra, it was Section VIII or IX I think, it was near the end of the piece, it was on our last performance as well (we did three performances). We nearly lost it but it didn’t fall apart completely but people were looking at each other anxiously over the top of their instruments. The person who was the most connected to the down beat and where it was had to start mouthing it.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

I think the tempo that they give in the piece is a little anxious and it’s exciting but I don’t think that that’s something that can be maintained for the length of the time and I think there is too much in the piece to let it rush by.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?
I do think it moves. I think it would be a bit pedantic to try and get it to not move. I think that there certain sections of it, like Section VII, if you just rush through that you lose so much, there are beautiful moments in Section III that I love, every time I listen to it it sends shivers down my spine, if they were rushed through...I think in those things that create those kinds of physical and emotional reactions in someone, its going to take on its own tempo anyway because it just has to it cant avoid it, that's something that's different and special about minimalist music, it has these effects on people and you don't want these effects to go away. Its always going to have that kind of subjective influence on the tempo.

If the tempo does move, is it necessary to fix this?

No, because I usually notice it at the time. Unless it really drags to do with something like stamina and you realise...unless it's a huge, huge shift I don't think it's necessary to change. I think that little nuances and pulses here and there are part of the piece.

Do you remember the tempo moving at any specific section of the piece?

I can't remember.

Does this (the tempo moving) come down to concentration or stamina?

I think in the times when it really really dropped, I think that's to do with stamina. Especially if it drops collectively then I think its stamina. If it drops to the point where people start being confused about where we're up to and where the pulse is going then I think that's a concentration thing.
REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

In performances it would have to be the guy in the front row in our performance because all of my favourite bits were his favourite bits and I there were a few moments of seeing his face and knowing that he was feeling what I was feeling...my favourite bits are when something happens and you can just see every performer just have a little smile, they realise that this is so phenomenal, this music is amazing, its so exciting to be part of it...those little ensemble moments are my favourite bits.

When in the music have you felt the most excitement or anxiety?

When the concentration goes. When I think about something totally random and lose where I am in the piece.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

I think that there is something about it which can’t be described. I know people who have listened to it who have said it made them feel so weird they had to turn it off but then I know other people who have listened to it and felt that they just had to go for a run, there’s a quality about it that I don’t think can be named. No one who listens to it can avoid it, every person who listens to it is affected in some way, it’s not the sort of piece you can have as background music. It completely draws people in and leaves them feeling completely changed. Especially if they have never been exposed to this sort of music before, even if you have been exposed
to it before, the live performance is so different to hearing it on a recording. It's such an amazing feeling to be moved the way this piece moves you.
APPENDIX B – INTERVIEW 4

NAME: Stewart Smith
DATE: September 21, 2007

PERSONAL INFORMATION

Dissertation Interview Questions

Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

Stewart Smith, I played Piano 4 recently at WAAPA

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

No, I had to put in quite a bit of practice. I had played some minimalist pieces before, specifically I remember a performance of Steve Reich's Four Organs, and sweating blood sweat and tears over that because the type of skills that were required for that type of piece simply were foreign to me. Most of my work is with older music but through the Royal Academy of Music I played a number of minimalist pieces, I played a quarter of Messiaen's organ pieces. I am an incredibly quick sight reader on piano but there is certain skills of this minimalism music that didn't gel with me naturally so I was a little bit reluctant to commit to this project, simply because I thought I wouldn't have the skills to do it.

What were some of the technical aspects of minimalist music that caused you that stress?
When I was involved in it, the things I find most difficult are maintaining the pattern when the sounds are constantly changing around you. When you start a pattern it starts off as an easy digital exercise and you are in complete control, your mind and your fingers are in complete control, however, the longer you keep this pattern going and when certain things are changing around you, you lose that mind and finger coordination and you go into a trance like state. The physical sensation is that you have no control over what your fingers are doing. With this piece there were two sections that I found incredibly difficult, the other Sections were easy, simply because of that phenomenon. It was Section IX and the pulses at the beginning. For the pulses at the beginning I used my good colleague David Wickham, so that's how I solved that one, and Section IX, for the first play of that I thought, I cannot do this, it was going through my head, I will get Cathy Travers in, I'll pay Cathy, out of my own pocket, because I don't want to let you guys down, but I actually played along with the CD for a couple of hours and that's how I solved it, it was just a case of telling myself I could do it and putting through myself through that experience of playing for ten minutes and in the last couple of rehearsals because I knew I could do it I was quite comfortable doing it.

REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

I thought what we had was fine. Obviously I can see that if we had more rehearsals we could have gone to another level but we played the piece.
Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

More mentally.

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?

It was a major mental workout for me. It was at the last rehearsal that I could calm down. For the first rehearsals of the difficult sections, the only way I could do it was simply stare at the music and not blink and read the patterns. What I didn’t do was to trust my ability to remember the patterns and look away and get into the groove. It was only after I had practiced with the tape and I thought, well, I’m not going to just read it, I’ll get into the groove and that’s when it really settled down for me but certainly those rehearsals my eyes were really sore from staring at the music, I was very tense and I was really not blinking. It was a major...because I have played incredibly difficult music in the past, but this was a major challenge for me.

**PERFORMANCE:**

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

Yeah, certainly in the Section IX, it took all my powers of what I am as a musician to get to the stage where I could play that properly.

But conversely, the other parts I found relatively interesting. The interesting thing to me was why that Section IX was the most difficult and I think I worked it out: a lot of it had to do with the fingering. In certain Sections you are basically using your hands as sort of claws or something, there is one idea repeating in the left hand and one in the right, it’s a left right oscillation, those things are quite easy. The difficulty is when you
have a pattern that goes against the groove and you divide it up between certain weak fingers in the left and the right hand. Some combinations are absolutely fine, no problem at all, other combinations are really difficult. And these are the things that when a composer writes it, he just wouldn’t know what are the difficult combinations from the easy ones, it’s the players. But I also think it depends on individual players, certain players have weaker left hand fours than other players, so that’s the thing that I found most difficult. But the interesting thing for me was that most of the piece was in fact very easy for me but those two sections were incredibly difficult. In the rehearsals I tried a number of different fingerings because I twigged onto it that I couldn’t play this and it’s probably because the fingerings not good. And I experimented with a number of different fingerings and the physical sensation is so completely different with all these different fingerings. Especially if you repeat some patterns for a long time, when you use different fingerings its like doing a completely different pattern. Getting a good fingering for me was the key. And just the mind over matter thing too.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

No.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?
With an ensemble piece like that the main problem in the ensemble, the ideal performance is a performance that everyone keeps together. Certainly from my point of view you get a good idea of how others approach this kind of music. You get a sense of panic, and when panic sets in you completely go into this other world, you lose the ability to relax and simply fit in with everyone else. To play that piece you have to use all that you have as a musician and you have to have the courage to just sit back and not panic and keep a clear focused mind.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

For me it was those sections I have mentioned.

The performance went well but I think that the strengths and weaknesses were the same as in the last rehearsal.

What do you think some of those weaknesses were?

It's back to specific sections I suppose…the pulses at the beginning and the end, because it's the first and the last thing you hear…and on the CD they are so well done, I mean, those things could've been better…

Again, at the end of the day, ensemble is everything with that particular piece, and I think we did a pretty good job with the rehearsal we had but we could always be tighter. Everyone knows when you play that piece, some moments lock in beautifully, whereas some moments don't.

Did you feel physically and mentally tired after a performance of *Music for Eighteen Musicians*? More so than the rehearsals?
Well, in the first rehearsals we were doing smaller chunks, so that didn’t take too much stamina, and then the last few rehearsals we were doing play throughs. It was pretty much the same level of exhaustion in performance as in rehearsals.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

We did perform chunks of it at 208 (the tempo in the score) because those were when you started us of at the fast tempo, and of course it sounded great for the first thirty seconds then it fell apart a number of times. I reckon that with that particular group, say with another six rehearsals we would have been very confident to play it at 208 and it would’ve been more exciting from a player’s point of view, more of a buzz. But again, it’s a tricky piece, it’s a difficult piece and I think we were right to do it at that tempo and I don’t think anyone felt it was a cop-out tempo, but it would’ve been a blast to have tried it at 208.

One thing that I didn’t mention before was something I noticed in performance that didn’t happen in rehearsal was the tuning of the singers. I think it may well have to do with the fact that we didn’t have all four singers together for many of those rehearsals and certainly from my vantage point, I may have been mistaken, but from my vantage point there was a lot of out of tune singing.

I certainly remember when I heard *Drumming* in the Music Auditorium, with all those big Reich pieces, I don’t know if they’re designed to do it but
they certainly play havoc with the way you perceive music and time. I remember during *Drumming* I was hearing glockenspiels, I was looking at the glockenspiels, no one was playing the glockenspiels but I was hearing these things and it really plays havoc with your hearing so I would imagine from a singer’s point of view, singers simply make the sounds by using their ears and singing that music, well, it would be pretty tricky, sometimes you just might not know if you were in tune of not.
The experience of playing 18 and listening to *Drumming* was so completely different because as a player you can never ever lose concentration. That’s what I felt but I felt that some of the percussionists probably could because a lot of that stuff is their bread and butter and they would certainly feel much more comfortable and confident in that time frame. For me I simply couldn’t lose concentration but listening to *Drumming* was different because I was involved as an audience member and then I just let my mind wander and it spooked me out because of the things I was hearing that weren’t being played! I don’t know how he did it but he did it!

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

I don’t remember it moving but certainly in the rehearsals I was aware that there was a certain fluidity of tempo and certain Sections seemed to fit and to sit at a slightly slower speed and some sections seemed to sit at a
slightly faster speed. Section VII is more up tempo and wants to go faster and there are other sections that are more laid back.

It's like any music really, as soon as you start saying oh, this piece goes only at crotchet equals 198, then it's the death to music. I think that the same thing is true with minimalism music, its wrong to think that one of the overriding things is that it must be exactly at the metronome mark you had right at the very beginning. The recording of 18 recording on electronic instruments, I thought it was going to be the ultimate performance because its going to be together and its got all these sampled sounds but it is incredibly disappointing, from the outset it is such a major disappointment when you've got the acoustic version. There's something about human beings playing that music and the foibles of human beings doing it that makes it so exciting, there's something unbelievable when you here the computer doing it. As human beings we like to listen to other human beings being pushed to the zenith of their ability. There's something really exciting about that.

Does this (the tempo moving) come down to concentration or stamina?

I think its both. Certain sections got slower simply because of the person that was holding the groove...if they didn't have the technical wherewithal to actually keep it at the correct tempo or groove and other sections naturally slowed down simply because that's where it sits musically and that's what everyone felt. It wasn't an intentional thing. These things happen, there's a lot of notes!
REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

No one particular moment, just the whole experience of doing it. For me, the sense of achievement, there are very few things that frighten me as a musicians. At this stage of my career I know my strengths and weaknesses. But with an ensemble piece like this because I had such difficulty with *Four Organs* before it was really a big test for me and I thought at the end of the first rehearsal, I can't do this I'm going to have to give this part to someone else because I don't want to let the group down but as a personal sense of achievement to work over the problems and to execute the performance quite well, that was a good buzz for me I thought, this is good. I love the piece as well, just to be part of making this monumental piece was a great blast!

When in the music have you felt the most excitement or anxiety?

Still Section IX for me! I knew I wasn't going to stuff it up because of the time I had put in to learning it but it was still the most tense moment.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

The first time I heard *Drumming* I had heard some of the big Steve Reich pieces on CD before but it's not quite the same, you have experience these pieces from beginning to end as a totality. Certainly Steve Reich and the way he makes music and the great minimalist, it's such a different thing to what has come before and the experience of hearing it is very
much like being part of some sort of ritual. The sensibilities that I use to play a Baroque sonata, it's a different type of making music. The sense of the musicians all, this community, coming together and playing this very raw, ritualistic music is...I think you can only get that sense of achievement and the sense of collectiveness from music like Steve Reich. There is something different about it. There is no doubt about it. After hearing Drumming it made a big effect on me and being involved in the sort of physical nature of 18 did a similar thing. I think when history comes back to look at the Twentieth Century with objective eyes these big minimalist pieces will be very serious defining moments of the century.
APPENDIX B – INTERVIEW 5

NAME: Graham Wood
DATE: September 21, 2007

Dissertation Interview Questions

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed *Music for Eighteen Musicians*?

My name is Graham Wood and I played *Music for Eighteen Musicians* on Sunday September 2 at 3pm in the Music Auditorium at WAAPA.

What instruments and parts have you played in *Music for Eighteen Musicians*?

I played Piano 1 on a Yamaha Concert Grand piano.

PRACTICE:

Did you physically prepare to perform in *Music for Eighteen Musicians* or did regular technical practice prepare you enough?

I didn’t do any specific technical preparation for 18 purely because I already play about 15 – 20 hours a week.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

In rehearsals I did experience some minor pain but I found that I was able to manage it due to the way the part was structured, it wasn’t a problem. A lot of that type of physicality on a repetitive part like that can be managed by altering the angle of the arms and changing the seating position slightly and so in without really effecting what you play.
REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

Two hours max. I found some of the three hour rehearsal calls were starting to get fatigued. Not just technical, a lot of it is psychological, just the shear repetition of it kinda does your head in a bit.

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

No more than a normal rehearsal.

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?

More mentally than anything. Sometimes it's like you walk out of a rehearsal and you are just in this sea of eighth notes. It was a bit hypnotic, it would take a little while to get over it, it wasn't devastating or anything but it was noticeable.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

The piano section was the most difficult. Section V where it has the build ups on Piano 1 and 2. There are a lot of things in there that are difficult.

PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

Yes.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?
Yes.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

Common mistakes I suppose would be letting your concentration wane and finding that you get out of phase with the other players. That would be the most common mistake. The next one would be missing or misinterpreting cues, essentially getting lost. But in the same time it is difficult to get lost in that piece because it doesn’t really matter, it does...you wouldn’t want to get that lost that the harmony had changed but if you miss a cue and you heard the chord change and then you changed it would be ok because that it the notion anyway. So it’s not absolutely crucial that you have to change all chords on the downbeat so if you come in a few beats later its not really cattle stations.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

I think it was just making sure that the eighth notes between the pianos and the marimbas were in phase.

Do you think that had something to do with the acoustics of the room? Would it have been easier if we had miked everyone up?

No, it would’ve got worse then. In my opinion, the louder it gets the worse it gets for acoustics.

Did you feel that this made it more difficult to play with the marimbas and other players in time?
Well, I think that everyone has to adjust sometimes. I was playing the ossia with the right hand on the beat and occasionally I had to play two right hands in a row to get back in phase. That was how I dealt with it. It happened numerous times in rehearsal and performance.

Did you feel physically and mentally tired after a performance of *Music for Eighteen Musicians*?

Not really, no more than normal.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

No.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

It was more difficult at a faster tempo. It’s the kind of thing that if you were playing the piece on a tour or something I’m sure you could manage it faster and faster the more you played it. But the simple fact is that if you are only performing it once it was a good tempo. If you get any faster it would’ve got worse.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

Yes. I think it’s just a weakness of the players in the particular group. Not use to playing those roles. The tempo did fluctuate quite frequently for my
ears. I was focusing on the pianos but obviously it was across the ensemble, the fluctuation.

If the tempo does move, is it necessary to fix this?

There's not much you can do as an individual, you just have to lock in with everything that is going on around you and rely on someone that is playing the longer melodic patterns.

Do you remember the tempo moving at any specific section of the piece?

Section IX, the very beginning of the piece, when the maracas came in...

Why do you think it was the maracas?

The maracas seemed to be dragging and I think it was a distance and sounds delay issue. It was probably about five metres away, which is significant when you're on a stage, it's enough to create sound delay, but it always felt like the maracas were too far back on the beat.

REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

The most memorable moment is after the huge marathon and the piece gets into the final 11 chords again. I think when that same section happens at the beginning of the piece it doesn't have nearly the same effect because you haven't been put through the tortuous repetition but when you get that tortuous repetition and it moves into some harmonic movement again it's really therapeutic. It's almost eerie, that last five minutes of the piece.

So you did find the repetition torturous? Why do you think that is?
I think there is a time about 30 – 50 minutes into the piece where some of the parts are long and tedious...I think too long. I think it becomes repetition for repetitions sake and I think it that piece would be better if it was about an hour or 50 minutes long. It would still be a fantastic piece but a couple of the sections in the middle it feels like it's going on and on and on.

When in the music have you felt the most excitement or anxiety?

Probably the most excitement would be in the last five minutes of the piece. I didn't really ever feel anxious at all. My part didn't make me feel anxious because there wasn't too much at stake, if you missed an entry it wasn't crucial or anything. Because there was so much weight of sound going on there was nothing to crucial. To make a mistake you have to hit a note outside of the A major scale!

What do think it is specifically about Music for Eighteen Musicians that makes it such an interesting piece to rehearse and perform?

Musically it is a powerful piece of music. Personally I think that some of the sections in the middle could be shorter but I think the notion of it is hypnotic, it's a very well thought out composition.
APPENDIX B – INTERVIEW 6

NAME: Anthony Maydwell
DATE: September 24, 2007

Dissertation Interview Questions

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed *Music for Eighteen Musicians*?

My name is Anthony Maydwell and I have played 18 recently with Callum as director. I did play it many many years ago....it would've been before I left Sydney.

What instruments and parts have you played in *Music for Eighteen Musicians*?

Always the piano parts.

PRACTICE:

Did you physically prepare to perform in *Music for Eighteen Musicians* or did regular technical practice prepare you enough?

The regular technical practice prepared me physically but clearly not mentally. I think that that's the issue here, its not technically difficult music but it is mentally difficult.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

Yes I did. I practiced them quite a lot. The build ups, I think I would’ve gone through them at least once a day for a couple of weeks before hand. That would have been maybe up to about half an hour spent in preparation. I'm really quite concerned with making sure that my pulse and
my rhythm are absolutely accurate. So things like that. When you have those changes from one chord to the next it’s very easy, because of the slight changes in hand position, to be uneven at the change. So I wanted to make sure they were as seamless as possible.

REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

I think it depends a bit on the musicians, that is, if people are working with this sort of music a lot, then they would require less time, because they’re into a sort of groove but if you are not used to it. We did seven or so rehearsals this time and I think just a couple more would’ve been perfect. We were just reaching a stage where we were coming out of just worrying about our own part and the cueing locks and getting into really listening to one another. I think that like all good chamber music it requires a great deal of really careful awareness of what people are doing. So that in a sense if there is a bit of ebb and flow in the basic pulse it doesn’t matter because everybody is aware of moving together. There were a couple of times I can remember in rehearsal, I think it was the second last one, I felt really in the groove with Josh (Webster) and with Holly (Norman) in one of the sections and it was just really flowing. And that was related to one of her repeated chord patterns with the crescendo diminuendo and the first time it was all over the shop, partly because every crescendo also accelerated and every decrescendo decelerated. But we started to listen more to one another and so there
was a tiny bit of give and take. So yeah, I think that two more rehearsals would've been absolutely optimal.

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

Yes, no, not physically, mentally. I could've played it for another three hours physically but definitely mentally.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

It was either V or IX.

**PERFORMANCE:**

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

Yes and no with this music, sometimes I literally phased out, once to my detriment because I completely left out a cue, or lost a cue in rehearsal.

But there were sometimes with the Piano 2 part when you’re just going for ages and ages and ages. I would literally close my eyes and zone out. I mean I didn’t zone out, it’s wrong to say zone out because obviously I’m still connected in with what’s going on. There was a sense in which I was going into a sort of different mental state. It’s different in a more conventional musical sense because you stop thinking in a more formal way but also you’re not thinking in terms of the natural and normal phrased musical conception so it’s these long gradual changes which are the essence of minimalism and they do tend to change the way that you process things.
Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

Yeah, the two and four bar patterns are automatically easier.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

Yeah, definitely, when we had sections that had the elements that we like phasing on some of his other works, where you've got a pattern and then he shifts it and you can get into this sort of mechanical mental moment where you really don't know what's going on and you can lose it. Where you don't know where beat one is, you've got yourself nice and neatly working through and everything's going fine and then suddenly you feel out of the emphasis of the meter, you replace the emphasis, even though you can see it on the page you are actually thinking of two or three instead of one as the beat. Of course if somebody gets out of the beat on top of that you have the added potential off getting on to the half beat as well. There were a couple of times in relation to myself and piano one, I was aware, just occasionally, that things would get completely skewiff and so the two parts were lining up. In rehearsal. It was interesting, in the last rehearsal it was the weakest moment in the relationship between piano one and two.

It also relates to how you hear the other parts. If you are confident about where you hear the first beat of the bar in relation to one of the build ups
then it's easy for you to maintain that sort of connection but if you lose that it is easy to wonder, where am I?

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

No, I don't think so. I think that there were general issues. If they weren't right in rehearsal then you are going to have the same problem in performance but the things that I worried about were chiefly making sure that Section V was right and worrying about how it was all going to connect together in Section IX. I think that that related to the fact that I wasn't right and never had been absolutely nailed and so we were at risk which is what we would be with any piece of music if we weren't confident with it.

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

No, mentally

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

No. There were a couple of moments but it didn't fall apart.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

Interesting. I actually think that I felt better at the lower end and not because it was slower, it just felt more at ease in relation to the different parts. The faster it got, the more out of control it got. And not because it
was any harder to play at that speed but it just felt as if it had an additional feeling of anxiety at that higher tempo. It was sort of worried when we started the piece because it was clear that is was fast. And then it was fast, we did it in the most amazingly short amount of time, I couldn't believe it!

I was wondering when I got off stage and looked at my watch and realised it had only taken 65 minutes if Steve Reich had actually ever meant for it to be that short. What does that do to the minimalist conception of the piece when typically you would expect the work to last an hour twenty to an hour and a half?

I was thinking also about whether we had decided to make the build up repeats five times instead of four. It would be really interesting because we are so used to thinking in those simple structures of four that it would give the piece a more sort of impelling feeling. I would've liked a bit more time in the build ups sometimes.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

Yeah, in some ways I don't want it to. When you think about *Music for Pieces of Wood* where the clave player has to stick on 180, oh I forget what the exact marking is, but it's not meant to change. And I think that's also true for *Clapping Music* and I think it's also true for *Four Organs*. I'm not sure that the intention is for there to be that elasticity but it happens. I think that my aim is to get it so that it didn't shift, that whatever happened
was not about changing pulse but it was just about the phasing and the actual notes, the changes to the structures.

If the tempo does move, is it necessary to fix this?

Fix is a difficult word but there are times when I think yes, there are times when it’s getting too fast, I’m worried that we are getting out of control. Also with those build ups and crescendo diminuendos that really bothered me when you could literally hear people either speeding up or slowing down. That was not comfortable and I don’t think it was Reich’s intention, I would prefer that it was stable.

Things like the maracas dragging and the singers too, they would start in time but by the end of any of their repeated patterns of notes they would tend to slow down. And it was tending to happen every time.

Does this (the tempo moving) come down to concentration or stamina?

I think it’s about technique. I think that people who haven’t practiced maintaining a regular pulse while crescendoing or diminuendoing are likely to do and so I think it’s something that has to be practiced individually. I reckon that a lot of people probably never sat down with a metronome. Just like any piece of music if you start getting into a groove and if you imagine that you are in time, until you sit down with a metronome to just hear how much you’re getting out. I think a lot of times people would do very well to practice those bits with a metronome.
REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

Well I actually have to say that I like the end, not because we’re getting to it, but I just love that series of chord changes and the way in which it flows. I think it’s quite a magical completion to a minimalist work. I really like that part of it a lot.

When in the music have you felt the most excitement or anxiety?

Greatest anxiety: Section IX, I just felt like we weren't there, there were some people who were struggling with their parts and it never settled and that was an issue. So you were always worried about tempo at that time. Invariably there was a problem with it and you were left wondering, well, who am I going to stay with? That was for me a big problem. For me, the very opening, making sure that my offbeats were in time. Josh and I should have practiced coming in together more, I should have organised it myself. Yeah we should have practiced it for maybe 15 minutes.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

I think that it’s the size of the ensemble, that’s one thing. It’s different from his earlier works because its not about true phasing, it’s about his own gradual organic evolution of sounds and motives and chords, he has obviously chosen a good basic chord progression to work with. I liked how he developed the idea of these motivic devices to the build ups. It was actually in a sense a deconstruction of his earlier ideas, instead of saying
alright here's a group of sounds and let's phase them and see what happens, he just does it by starting with single notes and gradually developing them. Which has nothing to do with phasing but they have a similar end result. The listener is drawn to particular notes and they're not about what the player is playing, they're just about the listener's own conception of place in relation to the players so in that sense it's really quite interesting, it's a spatial, psychological event.

And I like it because it is about time in a different framework to normal music concepts of time. It reminds me, for obvious reasons, of Balinese Gamelan playing and also the Indian subcontinent and the concept of the raga, not so much the structure of the raga but the idea of time as seen in a much longer view. Thus you tend to think in a different way.
APPENDIX B – INTERVIEW 7

NAME: Fiona Digney
DATE: September 24, 2007
Dissertation Interview Questions

PERSONAL INFORMATION
Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

My name is Fiona Digney and I played 18 at WAAPA on September 2007.

What instruments and parts have you played in Music for Eighteen Musicians?

Marimba 3

PRACTICE:
Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

Regular technical practice prepared me enough because its percussion and at the moment I have a lot of pieces that are repetitive in the same way that Reich is.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

Not in practice so much but in performance it did because once your muscles get a bit sore, because you are using the exact same muscles for twenty or thirty minutes at a time, the patterns get confusing, it’s like saying the same word a hundred times, you forget the meaning of it.
REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

I think with Reich the more practice the better because it really needs everyone to be bale to have really good ensemble skills and to listen to each other and those sorts of ensemble skills only come with time.

Did you feel physically tired after a rehearsal of Music for Eighteen Musicians?

Yeah, especially when you are doing two or three full runs because it require a lot of concentration and concentrating on your part for a full hour is quite unusual in music.

Did you feel mentally tired after a rehearsal of Music for Eighteen Musicians?

More mentally tired than physically tired.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

Probably but without the score on me I can’t tell you exactly where it was

PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of Music for Eighteen Musicians?

Definitely, there is so much going on that if you don’t have full concentration, it’s not going to stay together if you’re not concentrating 110%.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?
Yes and no, it still requires the same amount of concentration but I think that playing the longer phrases is sometimes easier than playing the shorter phrases over and over again.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

I think common mistakes are the group either speeding up or slowing down as a whole and also rhythmic irregularities between parts, like one person might do their quavers slightly shorter than someone else. With so many people playing the same pattern over and over again it's a lot easier to hear when someone makes that sort of mistake but with other music where one phrase is only repeated three or four times you can't hear it as much.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

I found that the problems that we had during rehearsals disappeared on the gig because we were concentrating a lot more than we were than when we were in rehearsals.

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

No because I have performed Reich before so I know how to mentally and physically prepare for it so I wasn't too bad.

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

No it was more of an exhilaration.
When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

It definitely had a few moments when it was a bit shaky but that was always going to happen given the short amount of rehearsal time.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

I think the tempo in the score is pretty much spot on for me but different people find different people find different tempos work better for their own sense of groove.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

Yeah I did think it moved a little bit. I think it is harder to keep Reich or minimalist music in time than it is to keep a string quartet in time. Because structurally the Reich is so different and the individual parts are so different to any other type of music it has more of a chance of speeding up or slowing down than other types of music.

If the tempo does move, is it necessary to fix this?

I think it is always disconcerting when someone comes in and tries to deliberately change the tempo because it disrupts the flow of the piece because I think the piece is quite meditative and the audience is sitting there chilling out and someone comes in really trying to push it then it just makes everything a bit tense. So I think it's very worth being acutely
aware of the tempo and yes you can try and speed it up or slow it down in a subtle way, go for it, but it can be very disruptive.

Do you remember the tempo moving at any specific section of the piece?

No

Does this (the tempo moving) come down to concentration or stamina?

Yes, I think so for sure. Sometimes when people aren't concentrating enough...for me, I've found that when I'm not concentrating enough it slows down and when I'm concentrating too much it speeds up.

In terms of technical abilities, if you have got something which is more technically difficult you are more likely to slow down and if you are going to a pattern which is a bit harder to a pattern which is a bit easier you tend to speed up when the pattern is easier to play.

REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of Music for Eighteen Musicians?

My most memorable moment was when Lara (Wilson – Marimba 2) was playing next to me on the marimba and it was in Section VIII where Lara was changing octaves and she moves her pattern up three times and then down three times and the pattern changes were just spot on, it was really fantastic, we locked in really well.

When in the music have you felt the most excitement or anxiety?

Anxiety probably towards the beginning before everyone had settled into the groove. Excitement when the maracas come in and also the part that I just mentioned
What do you think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

Because it is so different from the types of music that we as students usually perform and because for me Reich has such a huge sense of community that a lot of other works don't have and in Reich everyone has equal parts and equal importance in the group and it's all about communication with your ensemble members and it's very meditative and it's really interesting how all of the parts work together and how you get resulting patterns out of two or more parts.
APPENDIX B – INTERVIEW 8

NAME: Alex Roberts

DATE: September 24, 2007

Dissertation Interview Questions

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

I am Alex Roberts, Post Grad clarinet student at WAAPA. I performed 18 for the first time on Sunday September 2, 2007.

What instruments and parts have you played in Music for Eighteen Musicians?

I played the first clarinet, doubling bass clarinet

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

Regular technical practice usually does the job, however, I did need to do extra practice on the instruments just to make sure that I could get through endurance-wise. I also had to make a few changes to my reed set up for this, particularly for bass clarinet, just so I could get through the whole piece without losing the stamina.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?
Not so much in personal practice, it was when we were in the flow of it. At no point did I practice the entire piece in personal practice, which perhaps was an oversight but we got through it.

**REHEARSAL:**

What do you believe would be the ideal amount of rehearsal on a work such as this?

I think that it would have been nice to have another couple of rehearsals on top of what we had. There were things I started to realise at the end of the rehearsal process that I would've like to have thought about more through the whole thing. Things like controlling the harmonic movement, thinking more about where I wanted to slow down the harmony and hold back certain chords and keep it moving forwards. I know towards the end of the process that started to creep into my thinking and started to mark some things in but yeah...maybe another three to four rehearsals would've been nice. It would also be good to do another performance of it some time.

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

Yeah but I think it just because its in addition to a lot of other stuff I was doing...I was a little be tired but I wasn't disabled after it

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?

Not so much, I think it was ok, I mean, if I went in tired I would come out tired but I think it was fine.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?
Yeah, I think it was the one where the pattern changes....Section IIIb or something....I found that section just a little bit tricky at times because everybody seemed to get out in that section and I think the start of Section IX caused some problems but as far as I was concerned that was it.

PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

I think so yeah, I mean, it's not something you're actually conscious, you're there to play a piece but I guess just as much as in any other performance you've got to have that intent.

My part was pretty intense, there wasn't really any point where I could switch off. I guess in some of the other parts that would have been part of it for them.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

Good question...yeah it was more on the longer patterns. Partly just because that was reading thing, so you had more notes to play. It's in a sort of awkward key for B flat clarinet, I actually reckon if anyone else does it they should do it on A clarinet because its in B Major and it would be technically a lot simpler on A Clarinet. Actually it was be awkward changing keys to the bass clarinet.

There was a bit of concentration on the notes and because the pattern kind of looks similar from bar to bar. Like it's a fourth and not a third so that takes more concentration.
What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

Well, I guess something that can happen is that you can lose momentum. I think that’s a bit issue because I think the rhythm is pretty paramount. The constancy of it. I think that is caused by the technical issues, with the repetition there is going to be a tendency to lose energy, that’s something that obviously has to be maintained...

There are probably balance issues, these need to be considered. I’m not so sure of what it was like in this piece because of the miking but I think that that’s just because in a piece like this lots of people play at the same time and it difficult to know what to bring out, what’s really important. I mean, obviously things like the build ups have to come through. Aside from that it’s other technical things, like deciding how much of a certain voice you want in there. That’s partly how the music is written but I don’t think that’s how all minimalist music is written but it is something that need consideration.

I also think that for wind players and the singers tuning can go. I know with Philip Glass, *Music in Fifths*, by the end of that the tuning was pretty rank. It’s hard because they’re all perfect fifths so you can tell. Especially for the singers, as they get more tired their voice is going to go a bit sharper. So you get a bit tense. With instruments like clarinet, it’s warming up the whole time and there’s a slight tension issue it does tend to go sharper as
well. I tried to make some adjustments to it but I'm not sure how much you should do about that.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

I don't think so...it went pretty smoothly, the actual performance. I think we were all aware of where the spots were going to be if it was going to get out so we tried to stick together.

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

Yeah, a little...

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

Yeah, quite a bit.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

I think the tempo in the score...maybe because we didn't initially rehearse at that tempo...when I tried it, it did seem pretty fast. I think it can work but everybody really needs to be on top of things for it to work, otherwise things are going to get behind. Because if its unstable that fast, then it is going to sound bad and I think that the tempo that we eventually came to was stable for the level of technical achievement we had.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?
I thought it probably dipped a little towards the middle and picked up towards the end.

I think it's just because it's so long so it happened incrementally. In a shorter piece you will continually pick up the tempo but in this one the drop off happens so slowly that once you make the realisation that it has got slower, which is quite a long way into the piece, that's where people sub-consciously start to pick it up again. I think that is something characteristic of the music.

If the tempo does move, is it necessary to fix this?

I think there need to be a clear plan and there needs to be one person or two people who are designated to move the tempo, I mean, I would suggest the two marimbas because if you set one thing as the rock then...I mean there is not a great deal of hierarchy in the piece but that at least gives you something to work with, it means that people aren't trying to push their own separate tempos. Because if one person thinks it's going slow and pushes it, it's not going to help anybody.

Do you remember the tempo moving at any specific section of the piece?

I can't remember.

Does this (the tempo moving) come down to concentration or stamina?

Yeah, I think it does. Again I think that with a couple more rehearsal we might have been able to have less dips in the tempo but I think it is stamina and concentration, I think those two are kind of intertwined.
REFLECTION:

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

I think the final pulse section. It's got a real sense of arrival at that point. Also some of the other points where you realise that it's the home stretch...I do like the bit when the maracas come in because it feels a bit like a renewal to me. I think the other bit, on the last two pages or so, the last B flat bit where it goes [sings rhythm] and I know that once I have played that it is getting pretty close. It's not that I want it to end but it's just that the end is the kind of culmination of the piece, that's what gives the piece its actual shape. Once it ends, you realise what you've lost.

I also really like the stand up cue into V. I do like that a lot.

When in the music have you felt the most excitement or anxiety?

I was anxious at times. I thought in the dress rehearsal some things went really well and in the performance I didn't think those things worked as well for me. Sometimes my timing was a little bit off or it just wasn't in the right spot, it just wasn't in the place that I wanted it to be. So I was occasionally anxious in those sections, kind of wondering where I was going to put this bit etc.

Some really exciting moments were when I realised that the chord we were putting in was phasing in and out of the pattern so at times it has a different kind of harmonic meaning and eventually it gets back in and its kind of like some sort of cross rhythm kind of thing that I was really excited by.
For us, we (the clarinets) really feel the harmonic movement a lot of the times because we really try to underpin it.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?

I guess it's seeing the musical material in a lot of different lights. Its playing similar type of rhythmic things but coming back with different harmonies...different affect kind of thing. When it comes back in the minor key its just such a contrast as to how the material was presented before and for that reason it makes sense, you feel like it's a journey that you're on rather than just being an isolated bit of repetitive music, there really is a sense of growth and development through the whole thing.
APPENDIX B – INTERVIEW 9

NAME: Daniel Hall and Joshua Webster

DATE: September 24, 2007

Dissertation Interview Questions

PERSONAL INFORMATION

Can you please say who you are and when and where you have performed *Music for Eighteen Musicians*?

DH: I'm Dan Hall and I performed the piece at WAAPA

JW: I'm Joshua Webster and I performed the piece at WAAPA

What instruments and parts have you played in *Music for Eighteen Musicians*?

DH: I played Marimba 1

JW: and I played Marimba 2

PRACTICE:

Did you physically prepare to perform in *Music for Eighteen Musicians* or did regular technical practice prepare you enough?

DH: Regular technical practice prepared me enough

JW: yeah, I didn’t do any more practice.

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

DH: No

JW: I guess we had a pretty repetitive part so we just really needed to watch out for cues, so that was the main challenge
REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

DH: Rehearsal wise no more than an hour and a half without a break. Then no more than playing through it once. You can become quite tired otherwise and you don’t want to strain yourself. In terms of rehearsing and getting it up in the first place, maybe a bit longer than two months. Performance wise once you’ve got it, you can just keep performing it.

JW: I guess the same, probably an hour to an hour and a half of playing, especially for our part, which was constant and does get pretty tiring so that’s as long as you would want to push it. Preparation I guess a month or a few, depending on who often your rehearsing, its nice to have them pretty close together because then it stays fresh.

Did you feel physically tired after a rehearsal of Music for Eighteen Musicians?

DH: After a rehearsal yes, if we did lots of bits over and over again its not just physically but also mentally tiring, going back over the bits and hearing it again and playing it all standing up. Playing through it the whole way it’s not so tiring because when you finish it you get a boost of energy. But after a full length rehearsal it gets tiring.

JW: I would say the same. After rehearsals was definitely tiring and Dan made a good point about being mentally tired after hearing the same thing. I think it was only the concert when I didn’t feel tired after.

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?
DH: Not particularly, everyone had pretty much the same problems, most of the problems were ensemble as putting things together, it wasn't any particular section, it was just getting all the sections together. That was the most difficult part. Particularly between the pianos...and the pulses were difficult to get, keeping them in speed with everything else, particularly with my part I had to focus on not listening to them because I had to keep the pulse exactly as it was and sometimes, I had to keep my ears open to keep in time with other people but other times I had to block people out so I didn't get pulled in that direction.

JW: I would say probably the first pulse section and coming out of the first section when you lose the constant changes and it settles in to one idea for a lot time, especially when marimba three enters it seems to be a bit shaky, I don't know, the tempo seems to waver...

DH: Sometimes they would come in a bit fast and push everybody and it was difficult to know whether you should stick with where you are or maybe force them to come back to your rhythm to stop it falling apart.

JW: Yeah and once you get to the end of say the first Section it's pretty settled until the end, there are slight variations

**PERFORMANCE:**

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

DH: Yes, I rarely just sat back and played and listened because I was concentrating on keeping the tempo stable the whole making sure that
nothing changed because if I started thinking about other stuff the tempo would probably slow down, and that would cause problems

JW: Yeah, I didn’t really lapse too much because I was playing off beats, I had to basically stick with Dan and subdivide what he was playing.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

DH: Yes, I found the two bar ones easier if it was two different things in each bar it sort of gives you a longer period to play. When we had one bar every single note and beat was exactly the same, that was more difficult than doing a two bar pattern where you could get into the pattern more.

JW: I would agree, our pattern was only one beat most of the time and its easier for that pattern to waiver if its only one beat whereas with a longer pattern you can hear the phrase and the shape. It was enjoyable to play the longer ones after playing off beats for so long

What do you think are some common mistakes when playing minimalist music, in particular Music for Eighteen Musicians? Are these possibly caused by the technical issues of minimalist music?

DH: This piece is really different to all other pieces of music, it’s difficult to compare it to others. The most common mistakes in this would probably be people rushing their parts and not sticking to the exact tempo which would make things mess up most of the time. Cues tended to be ok but sometimes when people were coming in they would speed up.

JW: Mainly tempo mistakes, another thing is losing count of how many bass clarinet pulses you’ve heard. Losing concentration I guess, it does
happen and when it does its hard to get back in. Some of the other mistakes would be that it is not interesting. It's going for so long that it can lose interest so you have to make the phrasing within the longer sections interesting.

DH: Balance was an issue at some points when someone would try to fit it but you couldn’t hear them enough. There was one occasion when someone came in and I couldn’t hear them so I had to ignore them and lock in with everyone else.

JW: Singers intonation was also a bit of a problem

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

DH: I don’t think there were any massive things in the performance, it all worked out

JW: There were little things, that’s bound to happen, I think the sections we had trouble with in the rehearsal, all of those things ran smoothly. In performance it was just some little things like the singers intonation

Did you feel physically tired after a performance of *Music for Eighteen Musicians*?

DH: Not immediately after because it gives you energy but later on I did get tired, also because we had a rehearsal for something else. It gives you energy buy later it does take its toll when the adrenaline goes away, you realise that you have actually done a lot of work.

JW: At the end, I felt like I could do it again but then the rush goes away. It is the piece as well I think, it seems like the whole piece is one big set up
for the silence at the end which means your energy levels peak as you get to the end so it gives you that natural rush, but in time that rush subsides

Did you feel mentally tired after a performance of *Music for Eighteen Musicians*?

DH: Not so much after the performance because it was only once through.
A tiny bit but not so much particularly. Still nothing compared to the rehearsals

JW: I wasn’t tired, I was just amazed at the finish of the piece because the ending hadn’t hit me in the way that it did in the performance in any of the rehearsals. I just found the performance to be something else completely.
The rehearsals were just rehearsing and fixing mistakes but the performance was the piece.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

DH: No

JW: No

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?

DH: I think it’s around the right tempo, it had some leeway in either direction, probably not too much faster because it is quite fast, so if it is faster only the tiniest bit. Its probably good to start at that tempo, even if you want to get slower, because it’s bound to get slower as you go along anyway once people start coming in, its alright at the beginning pulses but
in the main section it begins to slow itself down as people start entering with patterns.

JW: I think the tempo is a good one to have in mind, to keep trying to pish for, as Dan was saying things will slow as people start to do things and once you start to repeat things it sort of tends to ease off a bit and not push and not try to sit right on the front of the beat and the piece seems to have its own natural tempo, I don't know if that's groove specific or if it's the piece but its funny how you start at one tempo and you notice that then we are playing at a different tempo.

DH: I think the tempo is good because it's not too difficult but if you go a little bit slower you sort of sit in the tempo. So the faster tempo keeps you active and you have to keep thinking about that speed and if you get slow you sort of relax a bit too much but part of the piece is the tension of trying to keep up with what's happening.

JW: Yeah, that energy

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

DH: Yeah, I think it did, I think it worked better in the performance than in any of the rehearsals. It got a bit slower in certain parts but we were able to push it back up in sections when something new started. I think it's unique, its odd because of how difficult it is to keep it at a specific tempo even though there is a consistent pattern happening, whereas usually if you are doing something specific you are able to keep it the same
because you have a sort of groove going on but with this sort of music every note is its own individual note.

JW: I think the tempo definitely moved, it sort of ebbs and flows, which is quite unique to this music. You may lose a few beats per minute over say ten minutes but then it may gradually speed up. It definitely moves, its just the fact that you have such a long time to play the music, you can't really hear or feel it moving, its only when you compare the start and finish tempo.

If the tempo does move, is it necessary to fix this?

DH: At certain points where it can be done but there are some points when if you try to push it, it will mess up. But there are some changes into new sections when things start to change quite a lot and somebody comes in with a very dominant pattern that's when they can start to push it back to the tempo that it was originally at, it may then slow but I think it is important to keep pushing it back upwards because otherwise by the end it's going to be way too slow.

JW: I know that Dan and I were pretty conscious to keep pushing and it was good because we were playing pretty much the whole time so we were in a position to try and do that. I don't think it is necessarily a bad thing for it to get slower but if it gets too slow its fine to try and push it back to where you started, just subtly.

Do you remember the tempo moving at any specific section of the piece?

DH: Nothing specific, it was only gradual. Its just happens naturally, I suppose people get more tired and their mind starts thinking about other
stuff after a while and that slows you don’t because you are not concentrating. For me, I personally changed my technique so that I wouldn’t slow down. I used my arms to send energy through my body and I was conscious of the fact that I needed to keep pushing it so that it didn’t slow down too much, I don’t know if it worked but that’s what I did. 

JW: I don’t remember any specific sections...maybe VI when we have the melody, I feel like I’m really pushing there because I’ve got something interesting and I feel like we are in more of a position to push, because it’s a dominant pattern and I think that we always tried to push it back up a bit because it was a bit slower at that point.

Does this (the tempo moving) come down to concentration or stamina?

DH: Yeah, as people go along they tend to...they still concentrate a lot but because you have been doing the same thing for so long you have moments when you try to listen to other people and especially when other people come in you try and follow them and you don’t know whether you want to join them or push the tempo. Over the course of it people tend to slow down, even when you’re consciously aware of trying to keep it up, I know for me I even slowed down because it gets more comfortable and when it gets more comfortable you get more relaxed so you start concentrating less and getting slower.

JW: I don’t know if it’s much of a stamina issue, it’s probably concentration as Dan was saying, you just sort of sometimes switch off a bit and stop pushing in you’re mind.
**REFLECTION:**

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?

**JW:** For me, definitely in performance it was the end, the silence. It’s funny that the best part of the piece was when we finished but yeah, that’s it.

**DH:** I don’t want to copy Josh but yeah, the same thing, I like the start as well because I start the piece with Graham [Wood], I like starting it off and solidifying the tempo. The best moments in rehearsal were when people stuff up. Yeah, the performance was the best, the start and the end, its good because it just starts full on too, its not like some pieces where it takes time to build up, it starts full on and stays full on! And then it ends the same way it starts, that silence, you can just feel that tension.

When in the music have you felt the most excitement or anxiety?

**DH:** Just coming up to the end, when we started the pulse at the end, when everyone began to cut out. Coming up to the end you started to feel that you have been playing for an hour now and it’s gonna be good at the end.

**JW:** Yeah, that part when everybody stops and you know it’s just going to be us and the violin and you try to keep it smooth, and I worried for Tara (violin player) because she had to finish it.

What do think it is specifically about *Music for Eighteen Musicians* that makes it such an interesting piece to rehearse and perform?
JW: It's just different to anything else that I have ever played, especially the part that Dan and I had because normally in other minimalism you have a pattern but we had like one note, the shortest pattern you can have. I guess the shear length of it is something that makes it so different. In performance it was nice to have an audience there and you feel like you are going on a journey with them.

DH: In rehearsals you come to appreciate the patterns and then it's really nice to show and audience and for them to enjoy them as well. The audience reaction at the end was really good, it was exactly what we wanted. I think because it is rare to be playing for that long without stopping, that's one of the best parts about this piece and the end, you have all this energy moving through your body and then the silence.
APPENDIX B - INTERVIEW 10

NAME: Gary France

DATE: October 2, 2007

PERSONAL INFORMATION

Dissertation Interview Questions

Can you please say who you are and when and where you have performed Music for Eighteen Musicians?

I am Gary France, I performed 18 in 2004.

What instruments and parts have you played in Music for Eighteen Musicians?

I played Marimba 3, I played piano and the maracas

PRACTICE:

Did you physically prepare to perform in Music for Eighteen Musicians or did regular technical practice prepare you enough?

No, I think any regular percussionist should be able to play it after you have had the usual training

Did the technical aspects of minimalist music (repetition, build-ups) present any problems for you in personal practice?

Not really. I play very relaxed and I encourage people to play in a very relaxed manner, I think what is really important is that you have a proper grip and that your fulcrum is relaxed. Burton is probably the better grip to use (for four mallets) because its great for playing chords, you know the physics involved are different.
REHEARSAL:

What do you believe would be the ideal amount of rehearsal on a work such as this?

We worked every week for about 16 weeks for about four hours so we would have a rehearsal every Friday afternoon from 1-5pm. And I think that when Steve did the work originally they rehearsed the work every Monday night for about a year. So it's important that the work be an organic work and that you come at it feeling very comfortably with the way that you play it, it should be really natural.

Did you feel physically tired after a rehearsal of *Music for Eighteen Musicians*?

Not at all, in fact I felt exhilarated, it's great music

Did you feel mentally tired after a rehearsal of *Music for Eighteen Musicians*?

Same as above

During rehearsals, did you find that there was a particular section of the piece that caused more errors among the players?

Well I think there is a Section when the pianos have this thing, I think its Section V, and I think the problem comes from the way they prepare. They don't work at rhythm the same way that percussionists do and I think they found that a little bit hard, but again, it's the kind of players that you work with, so if you are working with great players who are used to that kind of music it's a piece of cake. But you know the piece was not written for students, it was written for professional musicians.
PERFORMANCE:

Did you find that maintaining strict concentration and focus was essential in your performance of *Music for Eighteen Musicians*?

Not really, I think no more than anything else. To play music really well you need to be so comfortable with the product with the material that you working that you don’t get stressed about, to be able to focus on it. One of the things that is important about focusing is the ability to trust the people around you and when that is all working it helps.

Did your concentration change if you were playing two or four bar patterns as opposed to one bar patterns?

Yeah of course, when you are playing something tricky it’s like driving a sports car around the ‘s’ bends versus going along the straight you know you are going to need to pay attention a little bit more but no more than for example for playing a triangle in a Brahms symphony or a cymbal crash you know, you have to focus.

What do you think are some common mistakes when playing minimalist music, in particular *Music for Eighteen Musicians*? Are these possibly caused by the technical issues of minimalist music?

I don’t believe that the mistakes are caused by technical issues at all. I think that one of the biggest mistakes is when people don’t learn to get into a groove, the ostinatos have to become very relaxed and very natural feeling. This is the biggest mistake that people make, they think that because they can play it one time they can play it two hundred times but really this music is steeped in the West African tradition where you will
play one rhythm for six hours or something and the fact that you displace it, you have to be really comfortable with the rhythm to be able to displace it and have it in a lot of different places and hear what is going on around you.

Were there specific sections in *Music for Eighteen Musicians* that caused problems in performance? Were these the same as in rehearsal?

It was the same thing. There is no difference between rehearsal and performance. If you are playing in an honest manner it doesn’t matter whether you are in performance or rehearsal. The only difference between a rehearsal and a performance is that you don’t usually stop and talk about sections of whatever. I don’t approach them any differently. I think that I approach my practice in the same way so you know my practice sessions are just as much fun as performance.

When performing the work *Music for Eighteen Musicians* has it ever completely fallen apart, in a musical sense?

Well sure you know that will happen in rehearsals and that’s what I find interesting, you know we trace back what made it fall apart, you know usually somebody loses their confidence. When someone loses their confidence, younger players will just give up, strong players, professionals, we all lose our place sometimes but professionals know how to get back on and that’s also to do with the familiarity with the work.

Do you think that the tempo given in the score for *Music for Eighteen Musicians* is the best suited to the work? Have you found that the piece works better at different tempi? Slower or faster?
You know the tempo in the score is a range tempo, it's not like 'at this tempo'. So I think that it's wherever you find your groove with the people you're working with.

In your performances of *Music for Eighteen Musicians* did you feel that the tempo moved at all? Is this perhaps something unique and special about this type of music?

Yes of course, you know, we talk about how tempos shift but there are a lot of recordings of Miles Davis and the quartet where the tempos shift and it's normal for tempo to shift, it's a very Western thing that says that tempo shouldn't shift. You know, music should breathe.

Does this (the tempo moving) come down to concentration or stamina?

I think you have a collective whole, everybody needs to communicate very well and if you feel that people are dragging you down you need to have a conversation, a musical conversation about that. I always say let musical conversation eliminate musical complication. Right? Play your music and let that communication happen during the playing, let the musical conversation eliminate the complication. Often we use too many words to analysis and codify things. You know you can talk about music, you can write about music but that's not music. So I think less reflection, more playing is really what's important.

**REFLECTION:**

Do you have a most memorable moment in the rehearsals and performances of *Music for Eighteen Musicians*?
I think the highlight of the piece is when the maracas come in, that is clearly an amazing part there because the whole thing lifts because what we’re doing is we’re taking this wonderful rhythm that everyone was playing broken and all of a sudden we’re adding a dry secco groove to it and it just makes it groove harder, it’s like adding a drum set playing or something, all of a sudden its great.

When in the music have you felt the most excitement or anxiety?

Most excitement of course is when the maracas come in, I just love that part. Most anxiety I think was at the end for me when I moved over and played one of the piano parts at the end and I really had to practice that piano part. We did it with 18 musicians

What do think it is specifically about Music for Eighteen Musicians that makes it such an interesting piece to rehearse and perform?

You know, it sounds beautiful. The ensemble make interesting and fascinating sounds and it’s like, I think about it like an interesting landscape, and we actually paint the room with this landscape and it sounds beautiful. The open fifths, the octaves, the sixths, the pentatonic nature of a lot of it just sits really well and when you merge that with the voice and the clarinets it just all comes alive and it’s beautiful. I think one of the most difficult parts of the piece, absolutely, categorically is for the singers to sing their parts in tune. This is like the real singers who love to sing without vibrato, really clear beautiful pitches and I think that that is really very hard. The piano part was hard at V but it’s the singer’s parts that really put it to the test.
“The first sketches for Music for Eighteen Musicians were made in May 1974 and it was completed in March 1976. Although its steady pulse and rhythmic energy relate to many of my earlier works, its instrumentation, harmony and structure are new.

As to instrumentation, Music for Eighteen Musicians is new in the number and distribution of instruments: violin, cello, two clarinets doubling bass clarinet, four women’s voices, four pianos, three marimbas, two xylophones and metallophone (vibraphone with no motor).

There is more harmonic movement in the first five minutes of Music for Eighteen Musicians than in any other complete work of mine to date.

Rhythmically there are two basically different kinds of time occurring simultaneously in Music for Eighteen Musicians. The first is that of a regular rhythmic pulse in the pianos and mallets instruments that continues throughout the piece. The second is the rhythm of the human breath in the voices and wind instruments. The entire opening and closing sections plus part of all sections in between contain pulses by the voices and winds. They take a full breath and sing or play pulses of particular notes for as long as their breath will comfortably sustain them. The breath is the measure of the duration of their pulsing.

Changes from one section to the next, as well as changes within each section, are cued by the metallophone, whose patterns are played once only to call for movements to the next bar—much as in a Balinese Gamelan a drummer will audibly call for changes of pattern, or as the master drummer will call for changes of pattern in West African music. This is in contrast to the visual nods of the head used in earlier pieces of mine to call for changes and in contrast also to the general Western practice of having a nonperforming conductor for large ensembles. Audible cues become a part of the music and allow the musicians to keep listening.”

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