

Pat Metheny and Lyle Mays

The First Circle: transcription and analysis

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Submitted in partial fulfilment of the requirements
of the degree of Master of Music (composition)

March 1992

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INTRODUCTION

The First Circle is the title track from the 1984 album released by the Pat Metheny Group. No score was available to this piece at the time of writing and it is probable that *The First Circle* was not performed from a full score, although Metheny and co-composer Lyle Mays are known to write out specific individual parts for most of their compositions.¹ In addition, the available literature relating to this piece was mainly restricted to magazine interviews and record reviews, shedding little or no light on its composition or analysis. For instance, the review that appeared in *Down Beat* magazine in January 1985 gives the album a five-star rating but describes the title piece only in poetic terms.² This study will, however, make use of secondary sources relating to transcription, notation, structural function and analysis.

While *The First Circle* has been composed and recorded by musicians best known for their work in jazz, it does not necessarily conform to mainstream jazz styles; hence, the use of traditional terminology such as ‘exposition’ and ‘recapitulation’ in this study. This in itself is a contentious issue, since the piece does not easily fit within traditional classical forms either. These and other traditional terms, however, provide an immediate connection that is helpful in defining points of rhythmic segmentation. It is not intended that their use should automatically imply the operation of other factors, such as classical tonality.

The following study seeks to treat *The First Circle* aside of historical models in order to gain a fresh perspective of the piece ‘as heard’. This study is focussed on the rhythmic and metrical elements, because they have been developed to a greater degree than any other parameters. Harmonic structures will also be discussed along with some stylistic context. The first chapter of this study will outline the approach to transcribing the recording into a clear metrical framework and will be followed by the alternative possibilities (Chapter Two). The piece will then be divided up into its constituent rhythmic elements (Chapter Three) resulting in a chart that will become the basis for considering the function of the relative rhythmic levels within the whole structure. This focus will be seen to provide a deeper relevance to the overall structure. Chapter Four will consider harmonic structures and how these relate to

¹ Roberts, Jim ‘Interview with Pat Metheny’ in *Down Beat*, pg.17, Vol.56, No.8; Chicago; 1989.

² Roberts, Jim ‘First Circle’, record review in *Down Beat*, pg.29, Vol.52, No.1; Chicago; 1985.

the metrical framework. Chapter Five will present some comparison with selected works to place The First Circle in a stylistic context.

Some musical examples have been included in the course of the text. It is suggested, however, that the chapters be read in conjunction with referral to the transcription and Chart no.1, as well as listening to the music itself.

From this can be found a pattern of 22 quavers (see Ex. No.2) which is repeated three times with the guitar overlapping the final quaver.

Ex. No.2



Rather than notate this in 22/8 (which is not impossible but somewhat awkward) the 22-quaver cycle can be divided up into more than one bar. The only symmetrical division of the 22-quaver cycle (two bars of 11/8) seems unlikely as the ‘clap and rest’ formation of the 1st bar of 11/8 bears little resemblance to the 2nd (see Ex. No.3).

Ex. No.3

1



2



If a criterion is established that each bar must start on a clap and have the next rest as its last beat, then a pattern can be created which is comprised of groups of 2 or 3 quavers thus: 3+2+3+2+2+3+3+2+2.

This pattern is appropriate and is used throughout the piece. The guitar, however, does not enter on the last quaver of the third clapping pattern, but in the first quaver of the fourth pattern. This means that the clapping pattern (and therefore the whole piece) starts with a quaver rest and each subsequent bar of clapping (within the compound metre 22/8) will start with a rest followed by either one or two claps (see Ex. No.4).

Ex. No.4



This divides the 22 quaver pattern into nine groups; five groups of 2 quavers and four groups of 3 quavers. Between the grouping of 2 or 3 quavers and the pattern of 22 quavers, the pattern can be organised into bars in a number of ways. The first option could be to have four bars of 5/8 followed by a bar of 2/8 (see Ex. No.5). This would emphasize the joining together of a group of 2 quavers with a group of 3 quavers as such: (3+2) (3+2) (2+3) (3+2) (2).

Ex. No.5



Note that the third bar is an inversion of the first, second and fourth bars whereas the fifth bar does not complete the third bar.

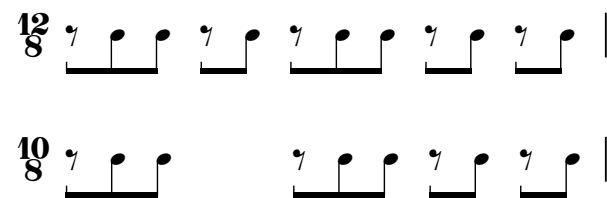
This metrical organisation, however, proves to be unsatisfactory, because there are melodic entries in the voice starting on the 13th quaver (of 22) which would emphasize the middle of the third bar of 5/8 (2+3) in an unlikely manner. A more satisfactory grouping would be to take one bar of 12/8 followed by one bar of 10/8, then the 22-quaver pattern will be divided up as such: (3+2+3+2+2) (3+3+2+2), (see Ex. No.6).

Ex. No.6



This grouping is more satisfactory in showing the melodic phrasing of the pattern as well as making structural sense from a purely rhythmical point of view. It is interesting to note that the second bar (10/8) is derived from the first bar (12/8) merely omitting the first grouping of 2 quavers from the first bar (see Ex. No.7).

Ex. No.7



It is also important to note that the 12/8 bar is a shorthand notation for 3+2+3+2+2/8 since the normal or default grouping of 12/8 is 3+3+3+3.

When the steel string guitar enters after three cycles of the 22-quaver pattern, it simply substitutes notes for the rests in the clapping part (see Ex. No.8). It articulates the 1st beat of every group of 2 or 3 quavers with a repeated and sustained C (the tonic), marking the accent stresses of the pattern - (3+2+3+2+2) (3+3+2+2).

Ex. No.8

7

st. guitar

clapping

This creates a simple hocket between the guitar and the clapping which continues for two patterns until the voice joins in with an initial melody at what will be bar 11 in the score. The melodic grace notes in the score from this point onwards have been notated as quavers for ease of reading, but their true value is shorter and unmeasured. These grace notes should also glissando (generally upwards) to the main note following. Some rhythmic shapes in the piece are better transcribed with the aid of directions, as attempting to use exact notation can be confusing and contrary to the original conception of the music. For example, in the piano solo at bar 211, the right hand is playing duplets in a bar of 12/8, but they gradually start to ‘swing’ back to a 2+1 crotchet and quaver formation (see Ex. No.9).

Ex. No.9

211

grad. un-evening -----

piano

To notate this exactly, without the direction ‘gradual un-evening’ would not only be inaccurate and awkward, but very difficult for the performer to learn, considering that it is actually quite simple in performance if one understands the effect.

Now that the initial 10 bars have been transcribed into a suitable metrical pattern, the rest of the metrical scheme can be defined in terms of recurrence and variation (see Table No.1). The 22–quaver cycle actually continues for the first 50 bars (25 times 12/8 + 10/8). Subsequent metrical variations will be looked at in detail in Chapter Three.

CHAPTER 2

Alternative notation of polymetric elements

The accepted notion of ‘the score’ in Western classical music is that the vertical alignment of parts should make sense at any given point. If a conductor wishes to rehearse from the 2nd crotchet beat of the 73rd bar, then the performers will be able to find that place in their respective parts. Over the last 300 years, the musical score has almost attained the status of a ‘bible’, and has increasingly contained every aspect of information that the performer needs in order to give a faithful interpretation of the composer’s intentions. In metrical terms, most Western music is conceived around the premise that the performers of a given piece will share the same time signature, even if the rhythmic patterns are accented against it. There is some ambiguity concerning the articulations, beaming patterns and barlines as to which are the most important controller of accents. For the purposes of this study, I will assume that the barline is the most essential accent, followed by the first value of the beamed pattern and lastly resorting to articulations that either add to or contradict the barlines and beam groups.

Much non-Western music is untroubled by these issues as much of it is un-notated, and to know the location of bar 73 is not necessary if the music is learned by rote and structures are open ended, since the same piece could be different lengths in different performances. There are a number of clear instances in *The First Circle* where different instruments do not share the same down beat. They always operate over the same subdivision of quavers, but the grouping into cells of two or three quavers is not always vertically uniform. As it is unlikely that the piece was conducted, it would therefore be the responsibility of the particular performer recording any given track to account for their location in the musical structure.

Kurt Stone, in his book *Music Notation in the Twentieth Century* contends that, “Particularly in ensemble music one must always keep in mind that the performer who has the cross rhythms must be able to relate his part to the ensemble and to the beats of the conductor (if any).”¹ In transcribing the score, the barlines have all been aligned, partly for the sake of removing confusion from the commentary and to potentially facilitate the possibility of a live ‘conducted’ performance of the piece.

¹ Stone, Kurt *Music Notation in the Twentieth Century*, New York; W.W.Norton and Co. Inc.; 1980.

Uniformly shared barlines, however, are not entirely satisfactory for some of the individual lines, and Stone also notes that “It is advisable to add rhythm cues wherever a part becomes unrecognisable even when equipped with accents and other articulation marks.”² This chapter will consider some alternative notations that are clearer and more likely for the individual performer, but would have created undue complications in a full score.

At bar 55 the bells and piano enter in bi-metrical fashion, pitting brief motives in a traditional 12/8 (3+3+3+3) metre against the 22-quaver cycle in the guitars and bass. This is the first clear instance of two different metres being played simultaneously. What appears to be a complicated displacement in the score is actually a rhythmically quite simple melody in its own right (see Ex. No.10).

Ex. No.10

Alternative metrical scheme for bells from b.55

55

bells

This use of two simultaneous time signatures creates a kind of metrical counterpoint because the bells and piano have strong beats where the guitars and bass have weak beats and vice versa. This also creates a flexibility of perspective for the listener who can tune into the 22-quaver pattern (comprised of groups of 2 or 3 quavers) or the simple triple pattern, which is occasionally offset by a 2/4 bar of rest. There are also strong beats where both metres come together, the counterpoint creating areas of metrical hocket where the listener may hear both metres interacting contrapuntally with each other.

At bar 61 (in the score) there is a momentary rest from this as the guitars and bass reinforce the 22-quaver cycle. At the end of bar 63 (or bar 68 in the alternative individual part) however, the piano

² Stone, Kurt *Music Notation in the Twentieth Century*, New York; W.W.Norton and Co. Inc.; 1980.

and bells return with a second bi-metrical section. This continues to bar 69 (or bar 75 in the individual part) where the guitars and bass join in with the bells and piano in playing a traditionally stressed 12/8 (3+3+3+3) metre. This ‘coming together’ can be seen as the climax and reconciliation of the two competing metrical schemes.

The second instance of polymetric music to be considered is the cabassa part in the Piano Solo (bars 143 to 230). When the cabassa enters at bar 141 it simply repeats the quaver pulse over and over. The shifting of accents, however, is more sophisticated. In relation to the rest of the score, these shifting accents are written out as syncopations, but again, for the individual performer, there is an easier notation from which to play (see Ex. No.11).

Ex. No.11

alternative metrical scheme for cabassa

139 repeat 12 times

cabassa

145

The cabassa plays 9 bars of 3/8 followed by a bar of 5/8, accenting the first quaver of each bar. This 32-quaver pattern is repeated 12 times (although the first 3 bars of the first repeat are tacet, the cabassa commencing 4 bars into the cycle). Against the 3/4 or 6/8 in the other instruments, all this will do initially is to shift the accent from the first quaver beat (of three) back to the third quaver beat (as a result of the 5/8 bar), back to the second beat and then back to the first quaver beat to complete the cycle of displacement (see Ex. No.12).

Ex. No.12

displacement effect of 5/8 accent grouping

1st beat 3rd beat 2nd beat 1st beat

At bar 167 in the score, there is a 4/4 bar that would disrupt this scheme. The cabassa, however, continues its 32–quaver cycle unaffected by the overall metrical scheme. In this instance it is likely that the alternative metrical scheme would have been used by the percussionist for the cabassa track (without a conductor), using only the common quaver pulse as the guide track. This results in a counterpoint of different downbeats in a similar fashion to that used by the bells and piano in the Introduction.

Considerable use of the ambiguity, between 3/4 and 6/8, can be found in the Piano Solo. Not only do the different instruments stress duple or triple groupings simultaneously, but the piano often changes stress in mid–bar unexpectedly altering the flow the music. The right hand at bar 165 is an example of this (see Ex. No.13).

Ex. No.13



Whilst the music is in 12/8 according to the flow of the metrical scheme, Lyle Mays (pianist) accents the first half of the bar in duple time and the second half in triple time. This can, in theory, be attributed to simple syncopation (as it is scored for convenience), but so much else in the construction of the score (like the 22–quaver cycle) reaches beyond syncopation that such an interpretation is less convincing.

The guitars also occasionally accent against the established grouping. At bar 37, they accent the 12/8 bar (3+2+3+2+2) as if they were in 3/2 (4+4+4) and the bass also supports this grouping (see Ex. No.14).

Ex. No.14



The 3/2 grouping is never structurally developed or extended, but it is used as a small-scale braking device to hold back the rhythmic momentum before pushing the music forward again. This device can also be found in the piano solo at bar 171 (see Ex. No.15).

Ex. No.15



In addition to the subversion of the metrical scheme with alternative simultaneous time signatures, *The First Circle* is sometimes ambiguous in the actual point of the change of metre. For example, from bar 107, the metre alternates between bars of 4/4 and 12/8. The steel string guitar, from bar 107, is playing off-beat quavers in 4/4 until bar 111 where the metre changes to 12/8 and the guitar then plays on the beat (see Ex. No.16).

Ex. No.16



Half way through bar 112, however, the guitar plays a syncopated rhythm that establishes the offbeat quaver pulse at bar 113 when the metre returns to 4/4 (see Ex. No.17).

Ex. No.17



This dovetailing does not create problems in transcription since it can easily be accounted for in syncopated rhythm, but it is an excellent example of rhythmic modulation as the guitar (and also the bass) appear to change to the new metre before the other instruments.

It is important to look at alternative notation and simultaneous metrical patterns in order to understand how the music was conceived and how it is played in practice.

CHAPTER 3

Heirarchy of rhythmic elements

This chapter aims to break down *The First Circle* into its constituent elements. Although it will not be entirely neutral, the relevant criteria will be stated in the course of determining particular points of separation or grouping. In so doing it also seeks to observe a number of statistical phenomena whose examination will be dealt with in the concluding chapter.

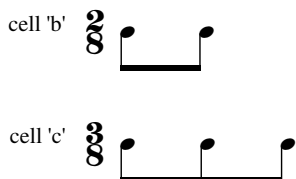
The approach to establishing a viable hierarchy of rhythmic elements in *The First Circle* is worth some consideration. A ‘top to bottom’ dissection starts by dividing up the piece into its main sections and works downwards to the most minute cell. This type of approach tends to be more instinctive and is akin to tracing through a maze. If one comes to a dead end, one retraces one’s steps back up to the next level until one can successfully divide up the units eventually working one’s way to the bottom. A ‘bottom to top’ construction, on the other hand, seeks to find enough cells to account for any passage and tends to prescribe the general structure by systematically linking elements of a sufficiently similar nature until the largest groupings have been achieved. Different pieces will respond more successfully to one of these approaches, depending on the type of material and the method of composition used.

For *The First Circle*, a top to bottom dissection has initially been considered. This has provided an intuitive or psychological basis for more in–depth analysis and encourages results that correlate with the piece ‘as heard’. Both methods have been incorporated in a similar way to cross–referencing the clues and answers in a crossword puzzle. Some structural aspects tend to fall out easily within the one approach while other aspects, particularly the metrical ambiguities, need to be ‘tried out’ for their most relevant function.

The following commentary will involve a ‘bottom to middle’ construction (elaborating the initial metrical transcription of the 22–quaver cycle already covered in Chapter One) that progresses from the smallest rhythmic unit up to the level of the melodic phrase. Once at this ‘middle level’, however, the systematic linking of smaller elements will be suspended. Work will then be directed from the top back down to the middle with the intention of connecting the two ‘middle points’ at the level of the melodic phrase. The reason for this is that the ‘middle level’ between top and bottom is perhaps the most easily comprehended for anybody listening to the piece for the first time.

The metrical structure, as we have already seen, is dictated by groups of quavers. Since the quaver is the fundamental (though not the smallest) rhythmic element, it will be referred to as unit **a**. There are 2872 quavers (or unit **a**'s) in the piece including the final chord. The two essential cells that are built out of quavers are **b** and **c** (see Ex. No.18). The grouping of two quavers (2/8) is represented by **b**, while **c** represents the grouping of three quavers (3/8).

Ex. No.18

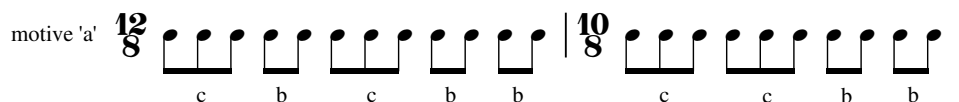


The entire piece can be divided up into cells of **b** (duple time) and **c** (triple time). It is interesting to note that both cells occur in approximately equal proportions. Cell **b** occurs 524 times and cell **c** occurs 512 times (see Table No.2).

This excludes 288 quaver beats that are ambiguously in either 3/4 (**b**x3) or 6/8 (**c**x2). While both cells appear to be given equal attention on paper, it must be remembered that cell **c** is 1^{1/2} times longer than cell **b**. Of the 2872 quavers, cell **c** accounts for 54% of the total duration compared with only 36% for cell **b**. The remaining 10% is ambiguous.

Cells **b** and **c** can be combined in various formations to make four basic rhythmic motives. Motive **A**, which opens and ends the piece, can be considered as the basic rhythmic shape for the whole work and is a composite of the two cells as such: **cbcb** - **cb**, adding up to 22 quavers (see Ex. No.19) in the following metre:


Ex. No.19





While there are five **b** cells (duple meter) and only four **c** cells (triple meter), the **c** cells account for 55% of the 22 quavers, compared with the **b** cells that make up the other 45%.

Motive **B** is made up entirely of **b** cells and is consequently a duple metre, 4/4. There are two variations of this motive; **B¹** is the metre 3/4 and **B²** is 2/8 (also cell **b**), (see Ex. No.20).

Ex. No.20


motive 'B' $\frac{4}{4}$ 

motive 'B1' $\frac{3}{4}$ 

motive 'B2' $\frac{2}{8}$ 

Motive **C** is made up entirely of **c** cells and always takes the form of the metre 12/8 in its standard grouping (see Ex. No.21).

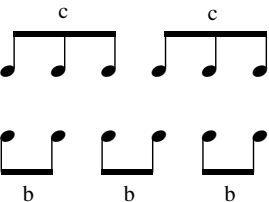
Ex. No.21

motive 'C' $\frac{12}{8}$ 

Motive **D** is more complicated. It accounts for the 288 quavers not attributed directly to either cell **b** or cell **c**, since both cells are happening simultaneously. This super-imposition of duple and triple metres results in a bi-metric effect and the resultant rhythmic ambiguity is exploited in the Piano Solo.

Both Motives **A** and **D** combine cells **b** and **c** in a way that creates rhythmic dissonance and therefore propulsion; Motive **A** juxtaposes the cells horizontally (refer back to Ex. No.19), while Motive **D** superimposes them vertically (see Ex. No.22).

Ex. No.22

motive 'D' $\frac{6}{8}$ 

Motives **B** and **C**, respectively, are used to build and relax the tension. Their alternation can be viewed as a large scale augmentation of the alternation of cells **b** and **c** in Motive **A**. Motive **D** is used as a development technique to create rhythmic ambiguity between the instruments which may be simultaneously in either duple or triple metres.

These four Motives are joined together to form 66 phrases (see Table No.3). At this point the criteria for grouping is altered. The main factor is still the metre and its variation; but it is necessary to consider the melodic shape and more importantly, the rests between melodic activity. The function of the cells and motives keep the sense of structural proportion and direction intact, but that which the listener is initially aware of is melodic length and the space between the adjacent melodies. The phrases are most often of 4 bars length but some of them are as short as 2 bars and some are as long as 7 bars. Generally, the longer phrases result from melodic augmentation, whereas the shorter phrases (particularly the four 2 bar phrases) tend not to be melodic. Rather, they tend to be spaces following melodies that could not be justified as the tail end of the previous phrase.

This study will consider melody as being a synthesis of rhythm and pitch. The pitch element, however, is grafted on to the rhythmic cell structure and adheres to it closely in all sections except the Piano Solo, which is improvisatory by nature. For the first 6 phrases, the following discussion will consider pitch in order to demonstrate the rhythmic expansion of the melodic material. This will facilitate an easier referral to the transcription (Appendix No.1).

The first 15 phrases exhibit some of the general techniques of melodic recurrence and variation that mark the whole piece. Phrase 1 is clearly denoted by the first 6 bars of unaccompanied clapping (see Ex. No.23).

Ex. No.23

clapping $\frac{12}{8}$ ||:  | $\frac{10}{8}$  :|| ^{x3}

While there is no melodic contour in this whatsoever, it provides the rhythmic motive over which pitch material is fashioned. Phrase 2 (bars 7-10) also has no pitch contour but is marked by the introduction of the Tonic ‘C’ repeated in the steel string guitar. The first melodic shape appears in Phrase 3 (bars 11–15), (see Ex. No.24).

Ex. No.24

11

voc.1

13

To the tonic, it adds the 4th, 5th and 6th degrees of the major scale and reinforces the 1st beat of the cell structure of the 22-quaver cycle, already outlined by the guitar.

Phrase 4 (bars 16-20) elaborates Phrase 3 by adding the 2nd, 3rd and 7th degrees, thus completing the C major scale and also reaching the upper tonic. Rhythmically, it reinterprets the melodic phrasing by starting mid-cycle on the 10/8 bar, giving it considerable momentum through unexpected note length, and particularly the A in bar 17 (see Ex. No.25) which comes a quaver earlier than in bar 12 of Phrase 3 (refer back to Ex. No.24).

Ex. No.25

16

voc.1

18

This is the only instance in the entire piece where a melodic phrase enters mid-cycle within the 22-quaver pattern (see Chart No.1).

Phrase 5 outlines a harmonic cadence but has no melodic shape. A more complicated example of melodic amalgamation and augmentation can be perceived in Phrase 6 (bars 25-30), (see Ex. No.26).

Ex. No.26

25

voc.1

28

Bars 25–26 correspond to bars 11–12 in phrase 3; Bars 27–28 represent an augmentation of Bar 18 in phrase 4 and Bars 29–30 correspond to Bars 19–20 in phrase 4.

It should be noted that the synthesis of Phrase 6 out of Phrases 3 and 4 is primarily an expansion resulting from rhythmic augmentation and amalgamation and secondarily a filling out of the C Major scale.

Phrases 8 to 11 develop the earlier melodic contours by filling in the quavers with arpeggiated figures in the guitars. Phrases 12 to 15 correspond to Phrases 8 to 11; Phrases 12 to 15, however, are not as clearly defined because of the entry of the piano and bells (refer back to Ex. No.10, Chapter 3) with melodies that overlap the phrase boundaries delineated clearly in phrases 8 to 11. While this bi-metric technique results in a counterpoint of phrasing, the melodic structure in the guitars and bass provide the fundamental phrasing and the piano and bells embellish this.

Phrases 16 to 66 can be defined in terms of the first 15 phrases. Generally speaking, however, the development of phrases in the Exposition incorporates some use of augmentation, whereas the Piano Solo reverts to simpler 4-bar phrasing for the larger part of its duration. The Recapitulation is modeled on the Exposition, in terms of its phrasing, though the final phrase (66) repeats a 2-bar climax three times and can be considered as a Coda.

This study has thus far progressed from the 2872 quaver units up to the level of 66 melodic phrases (whose average length is approximately 44 quavers). It will now return to the top of the piece (in its entirety) and work back downwards. *The First Circle* can easily be divided up into two roughly equal halves. The middle of the piece is principally defined by a sudden reduction of texture and dynamics that have been building since the clapping at the outset of the piece. The second half then proceeds (from bar 143) to build up the texture and dynamics in a similar fashion until the climax at the end of

the piece. This mid-way point is also marked by the resolution of the subdominant chord (C) in the key of G Major to the relative minor (E).

These two halves can be further divided up into four main sections; Introduction (1), Exposition (2), Piano Solo (3) and Recapitulation (4). Perhaps the most unusual aspect of the division (stated below) is that the longest section is the Introduction, which accounts for 27% of the total duration of the piece. The Recapitulation is appropriately the shortest section accounting for 22% and the Exposition and Piano Solo account for 26% and 25% respectively. Generally, however, the four sections are of relatively equal length (see Chart No.1).

As already stated the 2nd and 3rd sections are therefore divided according to criteria employed to bisect the entire piece. The 1st and 2nd sections are divided primarily by rhythmic criteria, however, as are the 3rd and 4th sections. The 1st section is based almost exclusively upon the 22-quaver cycle (12/8+10/8) – the only aberrations being the minimal use of a regular 12/8 bar (3+3+3+3) and the extension of the final 10/8 bar (71) by the addition of an extra crotchet (3+3+2+2,+2). This is the first time in the piece that we can find three crotchets (Cell **b**'s) in a row. This augmentation device separates it from the 2nd section (Exposition) which is also based around the 22-quaver cycle. This small but essential feature is supported by the instrumental texture which employs the tom-toms and cymbal roll to build up to the entry of the synthesizer at bar 72, which is the start of the Exposition. The 4th section (Recapitulation) is separated from the end of the 3rd (Piano Solo) by a return to the 22-quaver cycle after a long absence.

These four sections can be divided up into sentences or theme areas. This is achieved using the same criteria as in Chapter One where the 22-quaver cycle was established out of the initial clapping; that is in finding a point of recurrence where what has been is repeated and to determine how far that repetition holds. The main difference here is that we are dividing up sections of around 700 quavers in length as opposed to the initial clapping, which was only 66 quavers in length (including the first rest).

It is at this stage that intuition, based upon repeated listening, can save some time. Objective trial and error is fine when dealing with 66 simple quavers but for a large area, it is helpful to make connections that are audibly obvious and check them through with the score to confirm the exact points of segmentation. Having done this, it is then possible to draft up a basic paradigmatic chart (see Chart No.2 and Table No.3) which defines the points of repetition of variation.

The chart reveals 16 sentences, 8 of which can be classified as theme areas 1 or 2. All but one of these theme areas are found, naturally, in the Exposition and Recapitulation sections. The other 8 less-thematic sentences are all, but one, found in the Introduction and Piano Solo sections. As to the exceptions, the Piano Solo contains a statement of the 2nd Theme (varied by Lyle Mays, but strong enough for the connection to hold) which is Sentence 12. The 9th sentence is merely a non-thematic bridge built on to the end of the Exposition.

The first four sentences are built almost exclusively upon Motive **A** (the 22-quaver cycle) and can be regarded as moving towards the declaration of the 1st Theme, although the pitch material is still in its embryonic state. Sentence 5 (phrases 16 to 19) represents the first full statement of the 1st Theme supporting the previous criteria for the beginning of the Exposition. This statement of the 1st Theme is then repeated in Sentence 6 (phrases 20 to 23) although the final phrase (23) is an augmentation of the corresponding phrase (19) in the previous sentence.

The 2nd Theme first enters at bar 107 and is the 7th of the 16 sentences (see Ex. No.27).

Ex. No.27

107



Melodically it starts with the first 5 notes of a rising scale (discounting the initial grace note) which is derived from the 1st Theme but can be detected as early as bars 18–19 in the Introduction.

That which makes it stand in contrast to the 1st Theme, however, is the alternation of Motives **B** (4/4) and **C** (12/8). In character, it is concerned with the building and relaxation of tension within a short space of time – in contrast with the 1st Theme that has a more floating and continuous momentum. The 1st Theme returns at the end of the Exposition (sentence 8) and corresponds exactly to the original statement of the 1st Theme (sentence 5). This creates a kind of A - A' - B - A structure for the Exposition. There is also a short, non-melodic bridge (before the beginning of the Piano Solo) which is sentence 9 and is comprised of only the one phrase (31).

The Piano Solo also has a kind of A - A - B - A structure relating to the 1st and 2nd themes. The three sentences that relate to the 1st Theme are 10, 11 and 13 and can be compared to the 1st Theme in the Exposition because they share the same harmonic progression (although the melodic material is improvisatory and the metrical scheme is completely different). Sentence 12 can be compared to the 2nd theme more accurately as it not only shares the same harmonic progression but also the same metrical scheme. It has exactly the same amount of quavers (140) as Sentence 7 in the Introduction.

The Recapitulation at bar 231 (Sentence 14) is marked by the dramatic return of the 22-quaver cycle (Motive A). It is not a full statement of the 1st Theme as the harmonic progression is still in turmoil and the only pitch material is a rising scale (whole tone followed by octatonic) in the synthesizer. In fact, the foreground of the music is dominated by a solo for the tom-toms, and yet there is no doubt when listening to the piece that this is the 'point of return'. Also, the next full statement is the 2nd Theme (Sentence 15), which returns in exactly the same form as its first appearance in the Exposition (Sentence 7).

The 16th and final sentence is much longer than any of the others and is 288 quavers in length. The reason for this is that the first full return of the 1st Theme is grafted onto the Coda (Phrase 66) in such an unbroken fashion, that to split them up into two separate sentences would be misleading.

These 16 sentences are then quite easily broken up into phrases (already defined) which are mostly separated by melodic rests, and this connects the 'top to middle' dissection back to the 'bottom to middle' construction. In terms of the whole piece then, there are eight levels starting with the entire duration which is split up into 2 halves, 4 sections, 16 sentences, 66 phrases, 216 motives, 1036 cells and finally 2872 units or quavers (see Chart No.1). This provides a workable hierarchy that can be viewed as a rhythmic structure in itself and can also be used as a framework for other parameters (such as harmony).

CHAPTER 4

Harmonic structures

The First Circle presents some ambiguity in analysis, since it does not operate entirely within any one mode. Merely counting the flats and sharps in the score is neither adequate nor indeed accurate. It is likely that the vertical harmonies would have been conceived and notated using relatively standard jazz nomenclature of chord symbols based around stacked 3rds with extensions (as far as 13ths) and chromatic alterations. The piece makes particular use of added 9th chords and chords with altered bass notes. The nature of these chords and their progressions is clearly emancipated from the traditional function of classical tonality, though the nature of modulation in the piece is such that analysing the piece purely from chord symbols does not reveal all. The chord symbols have been added to the transcription and they create a particular harmonic idiom that helps to define the piece, but alone they do not reveal larger structural harmonic relationships. They tell us more about the vertical ‘flavour’ of the harmony than its large-scale horizontal function. The following discussion, therefore, takes a slightly alternative approach by considering horizontal pitch sets (or modes), together with more traditional jazz chord symbols. Sometimes these pitch sets are referred to as ‘major’ or ‘minor’ though this is not intended to imply ‘tonality’ as found in the Common Practice era. Certainly, there are aspects of chords and voice-leading which relate to this, but such aspects are integrated into a more overt presence of jazz chords which are not necessarily resolving to tonic centres (see Table No.4).

The entire Introduction (bars 1-71) is in a sort of C major. It starts simply with repeated C’s (after the initial untuned clapping) and gradually fans out melodically to complete the rest of the scale. The 7th degree, however, presents an element of ambiguity. This degree is avoided and only used as a grace note (B natural) in the melody at bar 18. This B natural is barely heard as it lasts only for the value of a semi-quaver (see Ex. No.28).

Ex. No.28

17

voc.1



At Bar 21, however, there is a prominent entry of B^bmaj⁷ in the bass, piano and synthesizer.

The B^b does not signify a move to F major, for although it resolves to an F^{add9} chord, that F chord still sounds like a sub-dominant in C major. This entry of B^b occurs once more at bar 31. Within a smaller context, these two entries of B^b could be analysed as a modulation. Since the whole Introduction is in C, however, it is simpler to view this as modal alternation or harmonic colour. The first overt B-natural comes on the 5th quaver beat of bar 36 in the guitars and is subsequently exploited as the leading note of C Major (see Ex. No.29).

Ex. No.29



The Introduction (which originally presented a Mixolydian flavour) settles into a definite Ionian mode. This second half of the introduction (bars 35–71) is harmonically stable in terms of its harmonic centre – C – but the actual rate of harmonic change, chordal, is actually very fast. Sometimes it changes up to 5 times a bar (at the speed of a crotchet or dotted crotchet). The effect of this is to create great propulsion within an overall context of harmonic stability. Stripped of its instrumentation and rhythmic variety, these chord changes are actually very ‘Classical’ in type and progression – somewhat comparable to the music of Mozart. These features include standard triads with only occasional added notes, a strong mixture of root position chords and first inversions – and a melodic bass line that often moves in stepwise motion.

The only chromaticism in this second part of the Introduction is the use of C[#] in bars 50 and 68 where it is simply a passing note between D and C natural (see Ex. No.30). This chromatic feature foreshadows the approaching change of metre in both instances.

Ex. No.30



The harmony in the Exposition employs a more volatile progression than in the Introduction. It makes use of modulation by parallel shifts as opposed to conventional voice-leading. This is typical of modern jazz harmony, and may also be compared with the technique of ‘planing’ – where all notes in a chord are shifted by the same interval.

The first of these juxtapositions occurs at bar 76. After four bars of C^{add9} the harmony simply shunts up a major 3rd from E minor to $G^{\#min7}$, using motivic sequence as the binding ingredient (see Ex. No.31).

Ex. No.31

75

synth

bass

There is a slight point of ambiguity in that the new harmonic centre is not fully confirmed until the cadence into E major at bar 80. The motivic sequence into bar 76, however, is so obvious in its shift up a major 3rd that to analyse it differently would be to ignore the larger harmonic plan.

The next modulation is again achieved by juxtaposition. The harmonic shift is up a minor 3rd from E major to G (via C^{maj7}) at bar 84 where the metre also changes into a conventional 12/8.

Again the new centre is not confirmed until the cadence into bar 88. When the harmony does cadence, however, it only rests for one bar before moving back into C^{add9} at bar 89. The progression from bar 72 to bar 88 is repeated from bar 89 to bar 106. The modulation by juxtaposition, coupled with a delayed cadence results in a great sense of chromatic propulsion as each dissonance is prolonged and resolved. This also creates a particular contrast with the relatively stable harmonic flow of the Introduction.

The modulation into E minor (from G Major) at bar 107 is pivotal and smooth as the $D^{\#}$ is not introduced until the following bar (see Ex. No.32).

Here the bass line falls from C down a minor 3rd to A and again down a minor 3rd to F#. This diminished structure can be accommodated within a jazz or classical analysis, and does not result in modulation; but it is important because it points toward the harmonic sequencing that will mark the start of the Recapitulation which is defined by the return of the 22-quaver cycle (Motive A).

The harmonic sequencing by rising minor 3rds begins formally at bar 239, eight bars after the start of the Recapitulation. Melodically, these rising minor 3rds are filled in by the synthesizer which rises by a tone followed by a semitone and repeats this, forming a complete octatonic scale (see Ex. No.34).

Ex. No.34

239

synth.

242

245

This happens in the middle of a sequence of minor 9th chords and the effect of parallel shifting is strong. By bar 247 this upward harmonic propulsion flattens out as the bass line rises only a semitone (instead of a sequential minor 3rd) to D# and again up to E at bar 249 at which point the metre changes and the harmonic progression has reached its target (see Ex. No.35).

Ex. No.35

239

bass

243

246

The Recapitulation started with G^{min}/B^{\flat} - harmonically distant from E minor, which is the resolution of 18 bars of dissonant progression. From bar 249 to bar 273 the harmonic material is all direct repetition of the Exposition although the ordering of phrases is slightly different. At bar 274, however, the harmony takes an unexpected turn from E up to G but retaining the C^{\sharp} which has a Lydian quality (see Ex. No.36).

Ex. No.36

272

This can be seen as a bridge into the Coda which starts at bar 276 which returns to the tonic note C in the bass but retains the Lydian flavour with an F^{\sharp} in the second voice part. The Coda is derived from the opening of the Exposition. In both cases the note G in the first voice is used as the common note between the 1st and 2nd bars of the phrase and the 3rd and 4th bars. In the Coda, however, the note G acts as a harmonic pivot between $C^{\text{maj}7}$ and $A^{\text{bmaj}7}/E^{\flat}$, to which it rises at bar 278 (see Ex. No.37).

Ex. No.37

277

The pitch set for G minor (3 flats) is the final destination for the end of the piece. Before it arrives, however, the flats are dropped at bar 280, and the bass returns to C, which is held as a pedal point. This is held for three bars, the third of which sees the re-introduction of B^{\flat} and E^{\flat} pivoting back towards a

3-flat pitch set. This in turn arrives firmly on $A^{b\text{maj}7}/B^b$ at bar 283, poised for a potential cadence into the new key (see Ex. No.38).

Ex. No.38

281

283

The new harmonic centre is G, however the modal pitch set is alternating rapidly with numerous resultant cross-relations caused by parallel chords shifts. This creates a critical synthesis between the speed of harmonic change from the second half of the Introduction (every crotchet or dotted crotchet), and the parallel shifts from the Exposition. The resultant effect elevates the resolution, giving it more excitement and interest.

The First Circle changes either harmonic centre or mode 54 times from the beginning through to the end. If a comparison were made with the metrical scheme, which changes time signature 44 times (discounting the breakdown of the 22-quaver cycle into 12/8 + 10/8), then points can be located where they change together or independently (see Table No.5). On average, the harmonic centres change just over every five bars (there are 290 bars altogether) and the metre changes approximately every six and a half bars on average. Between them, there are 72 points of change throughout the piece. Out of these 72, there are 26 points where the metre and harmony change together and almost half of these 26 points occur in the 2nd subject area, which can be regarded as the most concentrated amalgamation of these elements.

CHAPTER 5

Analytical conclusions

The division of *The First Circle* into 16 sentences reveals an interesting pattern of recurrence and variation. Charts No.1 and No.2 show two theme areas that are located almost exclusively in the Exposition and Recapitulation. It is aurally obvious that the thematic sentences (which have been defined by rhythmic criteria) also represent the melodic material in its most complete state. The apparent function of ‘melody’ does not significantly inform the global structure; it is symptomatic of the rhythmic structure onto which the original pitch material has been grafted.

In previous chapters, it has been noted that the entire piece can be divided up into cells of either 2 or 3 quavers. The dialectical structure of *The First Circle* comes not from the proportion of cells **b** and **c** used, but in their dramatic interaction. This interaction of cells **b** and **c** is *always* taking place either within the hierarchical level of the motive or within the level of the sentence (see Chart No.1).

The first example of this interaction is Motive **A** (22–quaver cycle). In this motive, cells **b** and **c** are horizontally juxtaposed, initially seeking to break the expectation of where the next main beat will fall. Since this 22–quaver cycle takes up most of the Introduction, however, by the time the Exposition is reached, this cycle has become the ‘norm’; that is, that the listener grows to expect the initially unexpected. This cycle is entirely absent from the Piano Solo and so, its return at the Recapitulation produces a mixture of recognition and surprise.

Motive **D** (3/4 over 6/8) alternatively superimposes cells **b** and **c** vertically and is found only in the Piano Solo (and the bridge leading into it). Aesthetically, Motive **D** has an entirely different function to the 22–quaver cycle. On the surface, its presence is barely felt, but it tends to catch the listener somewhat unaware, since there is more than one pulse operating at the same time. In the same way that the eye will blink at a perceptually ambiguous drawing by Dutch artist, M.C.Escher and see it back to front, the ear may suddenly find that it is being drawn to a different metre as one pulse gets weaker or stronger. In this way, not every listener will hear these sections in the same way, and indeed the same listener may later hear it differently. This is the second example of the interaction of cells **b** and **c**.

The third example of this interaction takes place within the level of the sentence. Motives **B** (4/4, 3/4 or 2/8) and **C** (12/8), which contain exclusively duple or exclusively triple cells, are horizontally juxtaposed

mainly within Sentences 7 (In the Exposition), 12 (Piano Solo) and 15 (Recapitulation). These three sentences (also classified as 2nd Theme areas) can be considered as an augmentation of Motive **A**. This augmentation is evident by referring to Chart No.1, where the rapid alternation of blue (duple, cell **b**) and red (triple, cell **c**) highlights the 22–quaver cycle. Sentences 7, 12 and 15, however, display a slower rate of alternation.

These three examples highlight rhythmic motives **A**, **B** and **C** as juxtaposing cells **b** and **c** horizontally and Motive **D** as being a verticalization of this duple–triple dichotomy. This dichotomy may, in turn, be recognised as the life–blood of the whole rhythmic structure. It is curious to note that the longest incident within the piece of the same cell (**b** or **c**) in a row, is 22. This appears to be no more than coincidental with the 22–quaver cycle, but it underlines the fact that the piece never allows either the triple or duple groupings to dominate for too long at any one time. The triple grouping is the dominant one, but duple variation is never far away.

The elements of basic song form (AABA), at the level of the melodic sentence, disguise the underlying complexity of the rhythmic phrasing, as well as the division of the entire piece into the presence and absence of the 22–quaver cycle (represented in Chart No.1). The application of recurrence and variation within the multi–level hierarchy of rhythmic elements, creates a strong sense of dialectical function. *The First Circle*, therefore, is a work of appreciable sophistication in the application of rhythm as a primary structural determinant.

CHAPTER 6

Style and context

The effects of communication technology on the musical world have been both rapid and far-reaching. Electronic devices have found their way into the most unlikely geographical regions around the globe and it seems that soon there will be precious little musical culture that isn't available on compact disc. We are headed irrevocably towards a 'world-music'. Initially this means that African drumming is fair game for any computer-based musician who wants to load it onto a sampler and merge it into their 'own style'. This kind of exoticism has been going on for centuries, but limited by the difficulty of travel, manual transcription and availability of unusual instruments. If Bizet wanted to incorporate Spanish elements into his own French music then he probably had to go to some trouble to get to the heart of it and even then its incorporation into his pieces is noticeably distinctive from his own language. Particularly since the 1980's, however, we have no longer needed to seek much further than the suburban record mega-store in order to be in touch with world culture.

Ultimately, stylistic plagiarism is not a great problem. There always has been and always will be people who will create music whose worth will outweigh the stylistic influences upon it. This does not make the practice of contemporary musicology particularly easy, since the cross-pollination of style is not only rapid but multi-directional. Not only are rap artists absorbing tribal musics, but the 'tribes' are playing electric guitars. Certain pockets of folk music may still be played as they were a thousand years ago, but much of it has assimilated popular world music with relative ease.

The world of jazz music has probably been at the forefront of this cross-pollination because it was born out of a genuine geographical transplantation of one culture (African) into another (American). Initially, this is historically traceable. By the time that African jazz musicians are influenced by Gershwin (who was influenced by Afro-American music), however, the thread of musical evolution starts to turn back upon itself creating a 'chicken or the egg' type of labyrinth that is difficult to unravel with any great accuracy.

From this brief perspective *The First Circle* may be considered. Both Pat Metheny and Lyle Mays have grown up in a culture that takes much world music for granted. This is not to say that either of them is unaware of the general origins of particular musical practices, but that these practices have been available to them within the sphere of jazz that is prevalent in America. Unlike many rock musicians, jazz

musicians tend to play with different musicians on a more regular basis. For them, the stylistic interaction with other players is a constant and varied input to their total musical knowledge and taste. What separates jazz musicians like Metheny and Mays from many others, however, is that they have also been brought up with the practices of Western classical music and particularly the ability to read and write music, to orchestrate and to conceive structure in an abstract or dialectical manner.

To illustrate the emergence of the cross-over between jazz and classical music, it is relevant to discuss Metheny and Mays in relation to Steve Reich. As a young music student, Reich played as a jazz drummer before becoming a percussionist in his own ensemble. He was particularly influenced by the famous tenor saxophone player, John Coltrane, but also studying under Berio and Milhaud. The simplest difference between Reich and The Pat Metheny Group is that Reich's CDs are found in the contemporary classical section of record stores, whereas the Metheny Group's CDs are found in the jazz section. Despite this simplistic categorisation, the musical results are not worlds apart. This is symptomatic of the rapid growth of musical eclecticism.

One of the positive aspects of artists such as Reich, Metheny and Mays is that the elements of folk music that find their way onto their recordings are listed appropriately in the sleeve notes. They might be "based on an ancient Indian folk melody from a tribe located in the northeast corner of Argentina"¹, as is the case with the Pat Metheny Group's *Vidala*. Or, in the case of Reich's *Electric Counterpoint*, he "uses a theme derived from Central African horn music that I became aware of through the ethnomusicologist Simha Arom"². For them, the assimilation of 'world music' is something that bears the responsibility of the tradition of the appropriated culture. As a consequence, integration of non-Western music in their own composition goes beyond the superficial level of mere exoticism.

Electric Counterpoint (1987) was specially commissioned for Pat Metheny and is scored for ten guitars and two electric bass guitars prerecorded against one live guitar. This is the first actual collaboration between the two artists, although it is highly possible that they have both heard some of each other's recordings or concerts over the last 20 years. Before Pat Metheny and Lyle Mays wrote *The First Circle* in 1984, it is probable that they had heard Steve Reich's *Tehillim*, which was released in 1981. There is no specific evidence to support this; there are a number of factors, however, that would suggest that Metheny and Mays could well have been influenced by *Tehillim*. The principle technical similarity is

¹ Pat Metheny, *Letter From Home*, Geffen, 924 245-2.

² Steve Reich, *Electric Counterpoint*, Nonesuch, 9 79176-2.

that the rhythmic construction is based around cells organised into groups of either two or three quavers, forming compound metrical structures. In the sleeve notes for *Tehillim*, Steve Reich writes that, “There is no fixed metre or metric pattern in *Tehillim* as there is in my earlier music. The rhythm of the music here comes directly from the rhythm of the Hebrew text and is consequently in flexible changing meters”³. The organisation of rhythm into groups of two or three quavers comes from the technique of Hebrew cantillation, although it can also be found in traditional African drumming, which Reich has also studied.

In *The First Circle*, Metheny and Mays do have a more structured metrical pattern than is found in *Tehillim*; however, the bar to bar construction and use of melodic augmentation is very similar. Reich’s music, though tonally quite traditional, has always been unique in using rhythm as the primary structural determinant. In *Tehillim*, however, he also makes a move towards more traditional structure, in fact, almost to a kind of Sonata form. In the sleeve notes he comments that,

“The fourth and final text resumes the original tempo and key signature and combines techniques used in the preceding three movements. It is, in effect, a recapitulation of the entire piece which then, in a coda based solely on the word Halleluyah, extends the music to its largest instrumental forces and its harmonic conclusion. This last movement affirms the key of D Major as the basic tonal centre of the work after considerable harmonic ambiguity earlier”⁴.

While the small bar-by-bar detail is constructed in Reich’s highly original manner, the larger sense of form is actually quite traditional, and this is also the case with *The First Circle*.

Tehillim is perhaps the first Reich piece that is not strictly minimalist – the likely reason being that the structural flow of the piece is subservient to the text. Reich still employs minimalist techniques, however, in constructing *Tehillim*. In the sleeve notes, he points out that, “I use repetition as a technique when that is where my musical intuition leads me, but I follow that musical intuition wherever it leads”⁵. Metheny and Mays use minimalist techniques in *The First Circle* and particularly in their use of the 22-quaver cycle. Also, in the opening hocket between the clapping and the steel guitar, there is a substitution of

³ Steve Reich, *Tehillim*, ECM, 827 411-2.

⁴ Steve Reich, *Tehillim*, ECM, 827 411-2.

beats for rests to which Reich refers in many of his writings. The overlaying of 6/8 against 3/4 in the Development section is also a technique on which Reich frequently comments;

“The ambiguity as to whether you’re in duple or triple time is, in fact, the rhythmic life–blood of much of my music. In this way, one’s listening mind can shift back and forth within the musical fabric, because the musical fabric encourages that. But if you don’t build in that flexibility of perspective, then you wind up with something extremely flat–footed and boring”⁶.

Despite the use of Minimalist technique in several ways, *The First Circle* is not a Minimalist piece. The structural impact is dialectic in its development of opposing material, in the disturbance of expectation and the resolution of conflict. These latter elements are things that we can associate with Sonata Form, not with Minimalism which is generally static in its outward flow. We should remember, however, that in *The First Circle*, the height of conflict comes at the beginning of the Recapitulation, which is not normal for traditional Sonata Form. This is also the case with *Tehillim*, which has its fastest and most turbulent rate of harmonic change mid–way through the final section before leading into the coda. It is important to note that there are no tempo changes or any use of rubato in *The First Circle*; the dialectical ebb and flow of the music is achieved by the thwarting of expectation caused by the rhythmic arrangement of the groups of 2 or 3 quavers.

Despite the intricate and multi–directional web of influences that have resulted in the composition of *The First Circle*, some caution is prudent before categorising it under the heading of ‘eclecticism’ or ‘post–modernism’. If we consider George Crumb’s *Makrokosmos 3* or Edgar Varese’s *Poeme Electronique*, there is a deliberate juxtaposition of obviously different stylistic matter in a way that invites instant comparison. This is eclecticism in its most vivid state and *The First Circle* clearly does not invite stylistic comparison between its adjacent sections. While the technique of construction reveals a number of varied stylistic influences, its audible impression is homogenous, as is also the case with *Tehillim*. These two pieces have in common a great sense of euphoria and they achieve this through some remarkably similar musical approaches. In time, perhaps both pieces may be seen as clear examples of 1980’s post–minimalism.

⁵ Steve Reich, *Tehillim*, ECM, 827 411-2.

⁶ Steve Reich, *The Desert Music*, Nonesuch, 979 101-2.

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TABLE No.1

Metrical Scheme for *The First Circle*

	<u>Metre</u>	<u>Quantity</u>	<u>Quaver beats</u>
INTRODUCTION:	12+10/8	25	550
	12/8	2	24
	12+10/8	8	176
	12/8	1	12
	12+12/8	1	24
EXPOSITION:	12+10/8	6	132
	12/8	4	48
	4/4	1	8
	12+10/8	6	132
	12/8	4	48
	3/4	2	12
	4/4	4	32
	12/8	2	24
	4/4	4	32
	12/8	3	36
	4/4	2	16
	12+10/8	6	132
	12/8	4	48
	4/4	1	8
	3/4 or 6/8	4	24
SOLO:	3/4 or 6/8	20	120
	12/8	4	48
	4/4	1	8
	12/8	4	48
	3/4 or 6/8	16	96
	12/8	4	48
	3/4	2	12
	4/4	4	32
	12/8	2	24
	4/4	4	32
	12/8	3	36
	4/4	2	16
	12/8	4	48
	3/4 or 6/8	4	24
	12/8	4	48
	3/4 or 6/8	4	24
	12/8	4	48
	4/4	2	16
RECAPITULATION:	12+10/8	9	198
	4/4	4	32
	12/8	2	24
	4/4	4	32
	12/8	3	36
	4/4	2	16
	12+10/8	13	286
	2/8	1	2
INTRODUCTION			786
EXPOSITION			732
PIANO SOLO			728
RECAPITULATION			626
TOTAL			2872

TABLE No.2

Proportion of duple and triple metres

<u>Metre</u>	<u>quantity</u>	<u>quavers</u>	<u>Triple</u>	<u>Duple</u>	<u>Ambiguous</u>
22/8	74	1628	888	740	-
12/8	54	648	648	-	-
4/4	35	280	-	280	-
3/4	4	24	-	24	-
2/8	2	4	-	4	-
3/4 or 6/8	48	288	-	-	288
TOTAL		2872	1536	1048	288
cell b	524				
cell c	512				

TABLE No.3

Phrase No.	Bar No.	Total bars in Phrase	Total quavers for Sentence
Introduction			
1	1-6	6	
2	7-10	4	110 (Sentence No.1)
3	11-15	5	
4	16-20	5	
5	21-24	4	
6	25-30	6	
7	31-34	4	264 (Sentence No.2)
8	35-40	6	
9	41-44	4	
10	45-50	6	
11	51-52	2	200 (Sentence No.3)
12	53-58	6	
13	59-62	4	
14	63-68	6	
15	69-71	3	212 (Sentence No.4)
Exposition			
16	72-75	4	
17	76-79	4	
18	80-83	4	
19	84-88	5	188 (Sentence No.5)
20	89-92	4	
21	93-96	4	
22	97-100	4	
23	101-106	6	192 (Sentence No.6)
24	107-112	6	
25	113-118	6	
26	119-121	3	140 (Sentence No.7)
27	122-125	4	
28	126-129	4	
29	130-133	4	
30	134-138	5	188 (Sentence No.8)
31	139-142	4	24 (Sentence No.9)

Phrase No.	Bar No.	Total bars in Phrase	Total quavers for Sentence
Piano Solo			
32	143-146	4	
33	147-150	4	
34	151-154	4	
35	155-158	4	
36	159-162	4	
37	163-167	5	
			176 (Sentence No.10)
38	168-171	4	
39	172-175	4	
40	176-179	4	
41	180-183	4	
42	184-187	4	
43	188-193	6	
			204 (Sentence No.11)
44	194-199	6	
45	200-206	7	
46	207-208	2	
			140 (Sentence No.12)
47	209-212	4	
48	213-216	4	
49	217-220	4	
50	221-224	4	
51	225-228	4	
52	229-230	2	
			208 (Sentence No.13)
Recapitulation			
53	231-234	4	
54	235-238	4	
55	239-242	4	
56	243-246	4	
57	247-248	2	
			198 (Sentence No.14)
58	249-254	6	
59	255-260	6	
60	261-263	3	
			140 (Sentence No.15)
61	264-267	4	
62	268-271	4	
63	272-275	4	
64	276-279	4	
65	280-283	4	
66	284-290	7	
			288 (Sentence No.16)

Table No.4: harmonic reduction

INTRODUCTION

C Bbmaj7 Fadd9 C Bbmaj9 Amin F G (no 3rd) Cadd9 Dmin Emin F G Amin(add9) F G

bar nos: 1 21 23 25 31 35 36 37 38

G/B C F C/E G/B F/A Dmin Dmin/F G (no 3rd) C F (no 3rd) G/B C Fmaj7 G (no 3rd) F

39 40 41 42 43 45

G Fadd9/A G/B C Dmin C/E Fmaj7(#11) F G Fadd9/A G/B C Dmin C/E Emin7 F

46 47 48 49

G Fadd9/A G/B C Dmin Dmin(maj7) Dmin11 C C(no 3rd)/B Amin7 C/G Fmaj7 C6 F Cmaj7/G C

50 51 52 53

Dmin Cmaj7/E Fmaj7 G Amin11 F G G/B C F C/E G/B F/A Dmin Dmin/F G (no 3rd)

54 55 56 57 58 59

C F6 (no 3rd) G/B C Fmaj7 G (no 3rd) F G Fadd9/A G/B C Dmin C/E Fmaj7(#11) F G

60 61 63 64 65

Fadd9/A G/B C Dmin C/E Emin7 F G Fadd9/A G/B C Dmin Dmin(maj7) Dmin11 C Fmaj7

66 67 68 69 70

EXPOSITION

Cadd9 Emin G#min7 F#min7 Asus4 E Emaj7 Esus7 D/E Cmaj7 G Cadd9 Emin G#min7 F#min7 Asus4

72 74 76 78 79 80 81 82 83 84 88 89 91 93 95 96

E Emaj7 Esus7 D/E Cmaj7 G Bmin Emin D#dim/E C/E D/E Cmaj7/D Cmaj7 Bmin7 Emin Emin

97 98 99 100 101 105 106 107 108 109 110 111 112 113

D#dim/E C/E D/E Cmaj7/D Cmaj9/D F/G Cadd9 Emin7 G#min7 A6/9 Asus4 E Emaj7 Esus7 Cmaj7 G Cmaj9

114 115 116 117 119 120 122 124 126 128 129 130 131 132 134 138 139

PIANO SOLO

Emin G#min11 F#sus9 Aadd9 Emaj9 D/E Cmaj7 Gmaj9 Cmaj7 Emin G#min11 F#min7 Amaj9 Emaj9 D/E

143 147 151 153 155 159 163 167 168 170 172 176 178 180 184

Cmaj7 Amin9 C/D G Bmin Emin D#dim/E C/E D/E Cmaj7/D Cmaj7 Bmin7 Emin Emin D#dim/E C/E D/E

188 190 191 192 193 194 195 196 197 198 199 200 201 202 203

Cmaj7/D Fmaj7/G Cmaj9 Emin Emin(b6) Emin6 Emin7 G#min7 Amaj9 (#11) A#dim Emaj7/B D/E Cmaj7 Amin7 F#7 Fmaj7 Dmin9 F/G

204 207 209 211 212 213 217 218 219 221 225 226 227 228 229 230

RECAPITULATION

Gmin/Bb Dmin9 F#min Bbmin9 Fmin9 Abmin9 Bmin7 Dmin Cmin/Eb Emin D#dim/E C/E D/E Cmaj7/D Cmaj7

231 233 235 237 239 241 243 245 247 249 250 251 252 253

Bmin7 Emin Emin D#dim/E C/E D/E Cmaj7/D F/G Cmaj7 Emin G#min7 Aadd6,9 E Emaj7

254 255 256 257 258 259 262 264 266 268 270 272 273

G Cmaj7 Abmaj7/Eb C Abmaj7/C Abmaj7/Bb Gmaj9 Fmaj9 Cmin9 Ebmaj9 Asus4 Gmaj9 Ab6/9 Fsus4 Bb6/9 Gmin

274 276 278 280 282 283 284 285 290

TABLE No.5
Bar numbers of harmonic and rhythmic changes

	Harmony	Rhythm
INTRODUCTION	21	
	25	
	31	
	35	
		51
	53	
	69	
	70	
EXPOSITION	72	
	76	
	8 4	8 4
		88
	8 9	8 9
	93	
	1 0 1	1 0 1
		105
	1 0 7	1 0 7
	1 1 1	1 1 1
	1 1 3	1 1 3
	1 1 7	1 1 7
		120
	1 2 2	1 2 2
	126	
1 3 4	1 3 4	
	138	
	139	
DEVELOPMENT	143	
	147	
	1 6 3	1 6 3
		167
	1 6 8	1 6 8
	1 7 2	1 7 2
	1 8 8	1 8 8
		192
	1 9 4	1 9 4
	1 9 8	1 9 8
	2 0 0	2 0 0
	2 0 4	2 0 4
		207
	2 0 9	2 0 9
	2 1 3	2 1 3
		217
	218	
	219	
	221	
2 2 5	2 2 5	
227		
228		
	229	
RECAPITULATION	2 3 1	2 3 1
	233	
	235	
	237	
	239	
	241	
	243	
	245	
	247	
	2 4 9	2 4 9
	2 5 3	2 5 3
	2 5 5	2 5 5
	2 5 9	2 5 9
		262
	2 6 4	2 6 4
	268	
	274	
	276	
278		
280		
282		
284		
	290	

Chart No.1: Hierarchy of rhythmic elements in THE FIRST CIRCLE (1984)

SECTION 1: INTRODUCTION

SENTENCE 1		SENTENCE 2					SENTENCE 3					SENTENCE 4			
phrase 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
22/8											12/8	22/8		12/8	22/8

SECTION 2: EXPOSITION

SENTENCE 5 (theme 1)			SENTENCE 6 (theme 1)				SENTENCE 7 (theme 2)			SENTENCE 8 (theme 1)			S. 9		
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
22/8			12/8	4/4 22/8		12/8		3/4	4/4	12/8	4/4	12/8	4/4	22/8	
												12/8	4/4 3/4+6/8		

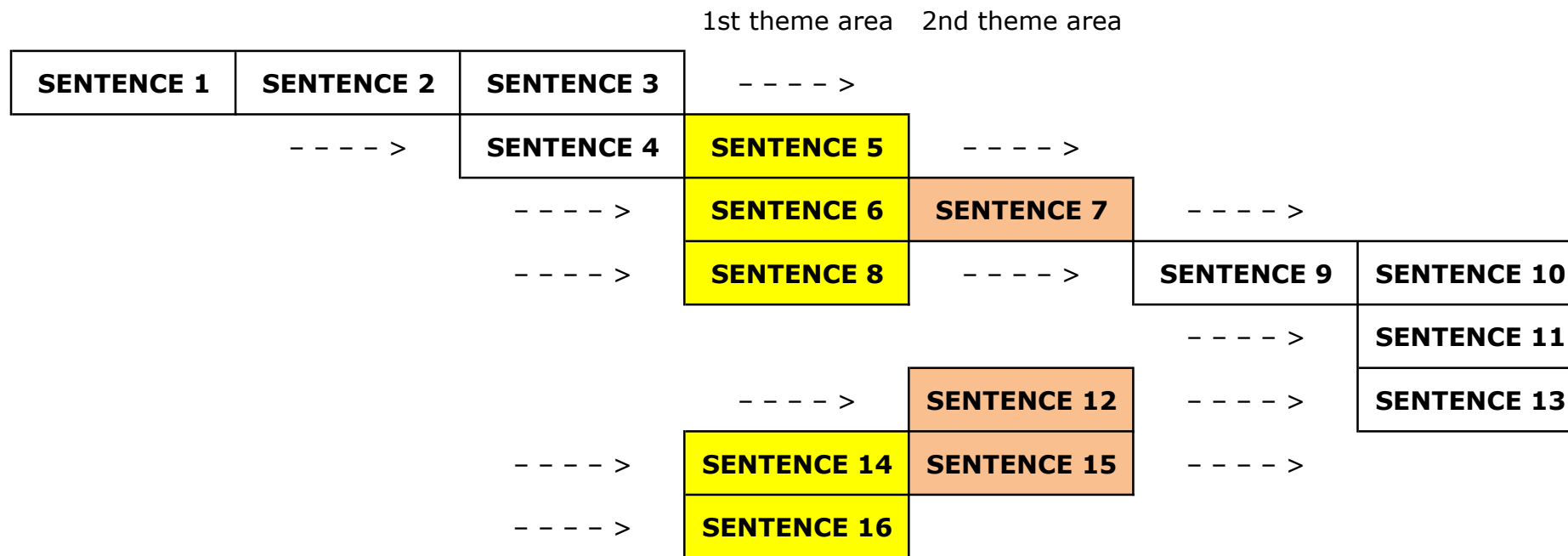
SECTION 3: PIANO SOLO

SENTENCE 10						SENTENCE 11							SENTENCE 12 (theme 2)			SENTENCE 13					
32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	
3/4+6/8						12/8		4/4 12/8		3/4+6/8			12/8		3/4	4/4	12/8	4/4	12/8	4/4	12/8
																3/4+6/8	12/8	3/4+6/8 12/8		4/4	

SECTION 4: RECAPITULATION

SENTENCE 14 (theme 1)					SENTENCE 15 (theme 2)				SENTENCE 16 (theme 1)						
53	54	55	56	57	58	59	60	61	62	63	64	65	66		
22/8					4/4	12/8	4/4	12/8	4/4	22/8					

Chart No.2: Paradigmatic view of sentences in THE FIRST CIRCLE (1984)



analysis © Stuart Greenbaum, 1992

Appendix No.1

THE FIRST CIRCLE

COMPOSED BY
PAT METHENY AND LYLE MAYS
1984

TRANSCRIBED FROM THE RECORDING (ECM1278) BY

STUART GREENBAUM

Notes:

The First Circle is just over nine minutes in duration and is co-composed by Pat Metheny and Lyle Mays. The sleeve notes list the five players contributions as follows:

Pat Metheny: Acoustic Guitar (Steel String)
Lyle Mays: Piano, Synthesizers
Steve Rodby: Acoustic Bass
Pedro Aznar: Acoustic Guitar (Nylon), Voice, Bells, Percussion
Paul Wertico: Drums

The transcription in this study is metrically complete, however some harmonic and instrumental detail has not been attempted. For instance, the piano and synthesizer parts have sections missing (that are not vital to this study) as do some of the drum and cymbal parts. Most of the piano solo has been rendered, though some of the detail is not clear enough in the mix for this author to transcribe within the scope of this study. The vocal parts, acoustic bass, clapping and tom-tom parts, however, are complete (to the best of this author's knowledge), as are most of the nylon guitar, steel string guitar, tambourine and cabassa parts.

In the score, there are two vocal parts presumably multitracked by Pedro Aznar, the group's singer. The upper line (Voice 1) is in the counter-tenor range while the lower line (Voice 2) is in the tenor range. The two sometimes overlap in terms of pitch; the vocal quality, however, is always distinct since the upper line is sung falsetto. The mix on the recording makes use of 'double tracking' to thicken the orchestration, particularly in the lower line in the final Coda, which gives the effect of having a chorus. The vowel sounds and consonants sung are for purely phonetic effect; there is no actual text as such and so these have not been entered in the transcription.

The synthesizer part has a number of different timbral settings including an 'organ' sound, however these have generally not been included in the transcription for this study. It is also interesting to note that there is no bass drum included in the drum kit for this piece.

The tempo for the piece remains consistent throughout at dotted crotchet = 104. There is no use of silence during the piece and there is no use of global rubato. There is some license taken in 'feel' particularly by Lyle Mays in the Piano Solo, though the underlying metrical framework remains precise. There is no conductor listed and it is certain that the piece was multi-tracked as there are more instrumental lines (at least 11) than there are players (5). There are also some points of over-dubbing on the same instrument that would not have been possible for the one player. Artificial reverberation has been used on the recording in varying degrees for the different instruments.

Some articulations have been entered in the transcription, though this author has been mindful of the problems in notating 'acoustic' dynamics for a piece that has been electronically balanced through the mixing process.

The First Circle

Pat Metheny / Lyle Mays
transcribed by Stuart Greenbaum

♩ = 104

clapping

clapping / cabassa

7

voc. I

n. gtr

st. gtr

clap / cab

13

voc. I

n. gtr

st. gtr

clap / cab

19

voc. I

n. gtr

st. gtr

keys

bass

clap / cab

tamb.

25

voc. I

n. gtr

st. gtr

clap / cab

31 **Bbmaj9**

n. gtr

st. gtr

keys

bass

clap / cab

tamb.

cym.

grad. decresc.

piano + synth

tambourine

soft mallets

36

n. gtr

st. gtr

bass

cym.

41

n. gtr
st. gtr
bass
cym.

This system contains measures 41 through 45. The notation includes five staves: n. gtr (naked guitar), st. gtr (steel guitar), bass, and cym. (cymbal). The n. gtr and st. gtr parts feature a rhythmic pattern of eighth notes. The bass part provides a steady accompaniment. The cym. part has a complex rhythmic pattern with various note values and rests.

46

n. gtr
st. gtr
bass
cym.

This system contains measures 46 through 50. The notation includes five staves: n. gtr, st. gtr, bass, and cym. The n. gtr and st. gtr parts continue with their rhythmic patterns. The bass part has a more active line. The cym. part features a series of rhythmic patterns with rests.

51

n. gtr
st. gtr
keys
bass
cym.

piano + glock

This system contains measures 51 through 55. The notation includes six staves: n. gtr, st. gtr, keys, bass, and cym. The keys part is mostly silent, with a short melodic phrase in measure 54 labeled "piano + glock". The other instruments continue their respective parts.

56

n. gtr
st. gtr
keys
bass
cym.

This system contains measures 56 through 60. The notation includes five staves: n. gtr, st. gtr, keys, bass, and cym. The keys part has a more active line, playing a series of notes. The other instruments continue their parts.

61

n. gtr
st. gtr
keys
bass
cym.

Detailed description: This system contains measures 61 through 65. The notation includes five staves: n. gtr (naked guitar), st. gtr (steel guitar), keys (piano), bass (bass guitar), and cym. (cymbal). The time signature is 12/8. The n. gtr and st. gtr parts feature a rhythmic pattern of eighth notes. The keys part has rests in measures 61-62 and 64-65, with some notes in 63. The bass part has a steady eighth-note line. The cym. part has a pattern of eighth notes with some sustained chords.

66

n. gtr
st. gtr
keys
bass
cym.

C Fmaj7

grad. cresc.

Detailed description: This system contains measures 66 through 70. The notation includes five staves: n. gtr, st. gtr, keys, bass, and cym. The time signature is 12/8. The n. gtr part has a melodic line with a sharp sign in measure 69. The st. gtr part has a rhythmic pattern with some chords. The keys part has a melodic line. The bass part has a steady eighth-note line. The cym. part has a pattern of eighth notes with a 'grad. cresc.' marking in measure 69. Chord markings 'C' and 'Fmaj7' are present above the n. gtr staff in measures 69 and 70 respectively.

71

n. gtr
st. gtr
keys
bass
tamb.
cym.
toms.

Cadd9 Emin synth

Detailed description: This system contains measures 71 through 75. The notation includes seven staves: n. gtr, st. gtr, keys, bass, tamb. (tambourine), cym. (cymbal), and toms. The time signature is 12/8. The n. gtr part has a melodic line with chord markings 'Cadd9' and 'Emin' above it. The st. gtr part has a rhythmic pattern. The keys part has a melodic line with a 'synth' marking. The bass part has a steady eighth-note line. The tamb. part has a rhythmic pattern. The cym. part has a pattern of eighth notes. The toms part has a rhythmic pattern.

76 G#min7 F#min7 Asus4 E

n. gtr
st. gtr
keys
bass
tamb.

81 Emaj7 Esus7 D/E Cmaj7

n. gtr
st. gtr
keys
bass
tamb.

86 G Cadd9

voc. 2
n. gtr
st. gtr
keys
bass
tamb.

91 Emin G#min7 F#min7 *gliss.*

voc. 2

n. gtr

st. gtr

keys

bass

tamb.

96 Asus4 E Emaj7 Esus7 *gliss.* D/E

voc. 2

st. gtr

keys

bass

tamb.

101 Cmaj7

voc. 2

st. gtr

keys

bass

tamb.

105 G Bmin Emin D#dim/E C/E D/E

System 105-110: Vocals 1 and 2, electric guitar, keys, bass, and tambourine. The system starts with a 3/4 time signature and changes to 4/4 at measure 107. Chords are G, Bmin, Emin, D#dim/E, C/E, and D/E. The electric guitar part features a rhythmic pattern of eighth notes and chords. The bass line is a simple eighth-note accompaniment. The tambourine has a consistent eighth-note pattern.

111 Cmaj7/D Cmaj7 Bmin7 Emin Emin D#dim/E C/E D/E

System 111-116: Vocals 1 and 2, electric guitar, bass, and tambourine. The system starts with a 12/8 time signature and changes to 4/4 at measure 113. Chords are Cmaj7/D, Cmaj7, Bmin7, Emin, Emin, D#dim/E, C/E, and D/E. The electric guitar part continues with a similar rhythmic pattern. The bass line is an eighth-note accompaniment. The tambourine has a consistent eighth-note pattern. A glissando is marked in the second vocal line at measure 113.

117 Cmaj7/D Cmaj9/D F/G

System 117-122: Vocals 1 and 2, electric guitar, bass, and tambourine. The system starts with a 12/8 time signature and changes to 4/4 at measure 119. Chords are Cmaj7/D, Cmaj9/D, and F/G. The electric guitar part continues with a similar rhythmic pattern. The bass line is an eighth-note accompaniment. The tambourine has a consistent eighth-note pattern.

122 Cadd9 Emin

voc. 1

st. gtr

keys

bass

tamb.

piano

126 G#min7 A6/9 gliss. Asus4 gliss. E

voc. 1

st. gtr

keys

bass

tamb.

131 Emaj7 Esus7 Cmaj7

voc. 1

voc. 2

st. gtr

bass

tamb.

136 G Cmaj9

voc. 2

st. gtr

keys

bass

clap / cab

tamb.

piano

cabassa

143 Emin G#min11

st. gtr

keys

bass

clap / cab

tamb.

gliss.

151 F#sus9 Aadd9 Emaj9

keys

bass

clap / cab

tamb.

159 *8va* *D/E* *Cmaj7*

keys

bass

clap / cab

tamb.

166 *Gmaj9* *Cmaj7* *Emin*

keys

bass

clap / cab

tamb.

172 *G#min11* *F#min7* *Amaj9*

keys

bass

clap / cab

tamb.

180 Emaj9 D/E

keys

bass

clap / cab

tamb.

188 Cmaj7 Amin9 C/D G Bmin

st. gtr

keys

bass

clap / cab

tamb.

194 Emin D#dim/E C/E D/E Cmaj7/D Cmaj7 Bmin7 Emin

st. gtr

keys

bass

clap / cab

tamb.

200 Emin D#dim/E C/E D/E Cmaj7/D

st. gtr.

keys

bass

clap / cab

tamb.

205 Fmaj7/G

keys

bass

tamb.

209 Cmaj9 Emin Emin(b6) Emin6 Emin7 G#min7

keys

bass

tamb.

215 Amaj9 (#11) A#dim Emaj7/B

keys

bass

220 D/E

keys

bass

225 Cmaj7 Amin7 F#o7 Fmaj7

keys

bass

tamb.

229 Dmin9 F/G Gmin/Bb Dmin9

st. gtr

keys

bass

tamb.

toms

235 F#min Bbmin9 Fmin9

st. gtr

keys synth

bass

toms

240 Abmin9 Bmin7

st. gtr
keys
bass
toms

245 Dmin Cmin/Eb Emin

voc. 1
st. gtr
keys
bass
toms

250 D#dim/E C/E D/E Cmaj7/D Cmaj7 Bmin7 Emin

voc. 1
voc. 2
st. gtr
bass

255 Emin D#dim/E C/E D/E Cmaj7/D

voc. 1
st. gtr
bass

261 F/G Cmaj7

266 Emin G#min7 Aadd9

271 gliss. E Emaj7 G

276 Cmaj7 Abmaj7/Eb

280 C Abmaj7/C Abmaj7/Bb

voc. 1

voc. 2 *gliss.*

st. gr

bass

284 Gmaj9 Fmaj9 Cmin9 Ebmaj9 Asus4 Gmaj9 Ab6/9 Fsus4 Bb6/9 sim.

voc. 1

voc. 2

st. gr

bass

287 Gmin synth

voc. 1

voc. 2

st. gr

keys

bass

clap / cab *clapping*