The Art of Composing: How Steve Reich's music has influenced Pat Metheny's and Lyle Mays' The Way Up

A research into the history of composition techniques

By Benjamin van Bruggen

August 2014

Supervisors:

Prof. Dr. Emile Wennekes

Dr. Eric Jas

Contents

Table of Illustrations

Table of Tables

Abstract

In addition to the connection that minimalist composer Steve Reich and jazz guitarist Pat Metheny have in Reich's 1987 *Electric Counterpoint,* the CD's booklet of Metheny's and Mays' 2005 sixty-eight minute composition for jazz sextet specially thanks Reich. How is this atypical jazz piece proportioned, and what is the connection with Steve Reich? This study looks into whether and how the music of Steve Reich influenced *The Way Up* on the level of compositional techniques. A music theoretic analysis of *The Way Up*'s components shows a transformed application of two Reichian compositional techniques: (1) the use of pulsing repetitive notes to structure the piece and (2) the use of the phase shifting technique. However, *The Way Up*'s harmonic language diverges from Reich's harmonic techniques in e.g., *Electric Counterpoint*, *Six Pianos*, and *Music for Eighteen Musicians*.

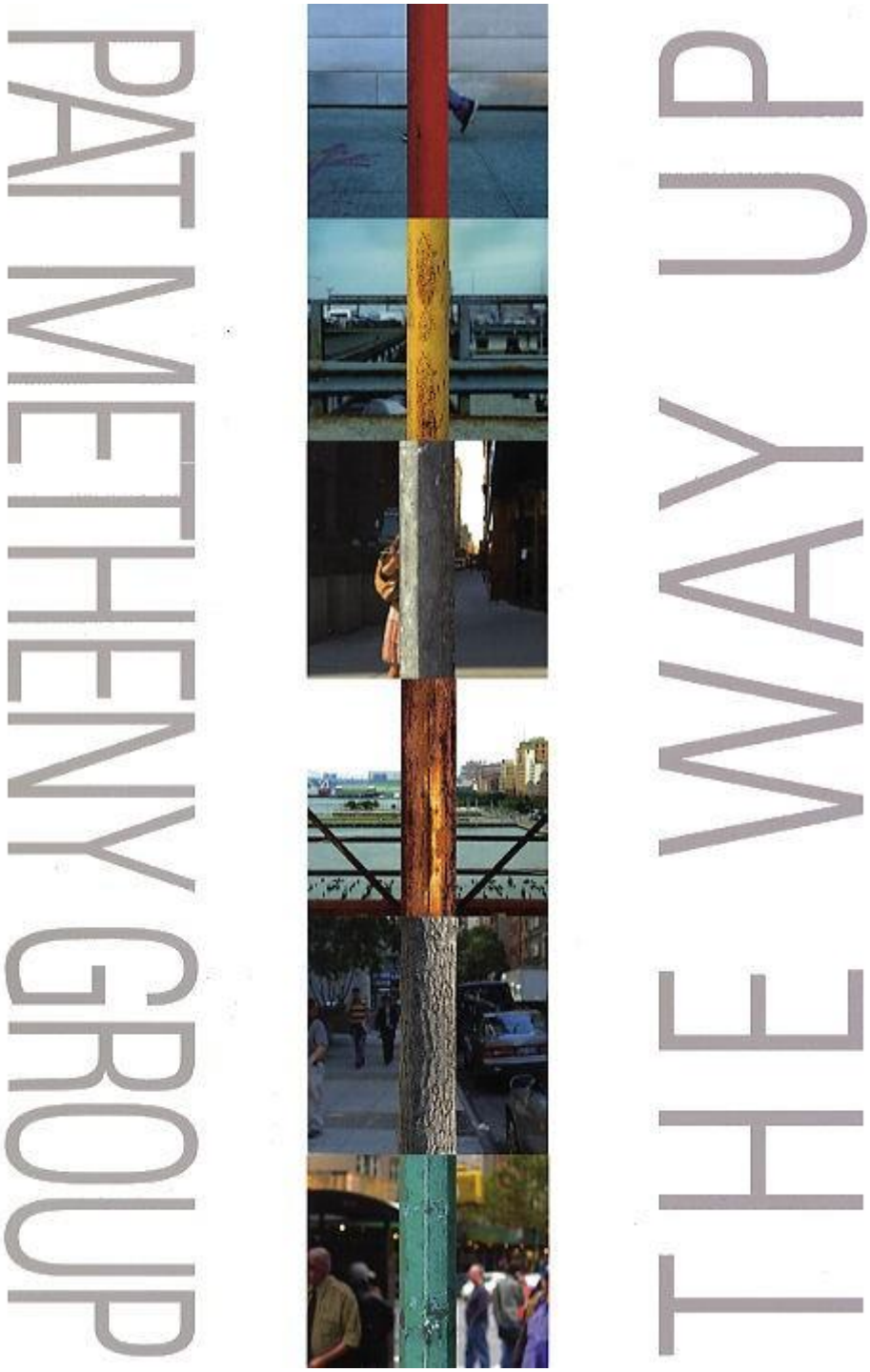


Figure 1: The Way Up's lead-sheet's cover (Forsyth n.d.).

\\\\\\\\\Introduction

In general, this study gives a perspective on jazz composition in the late-twentieth and twenty-first centuries, as it analyzes parts of the musical form of Pat Metheny's and Lyle Mays' *The Way Up*. In particular, the study seeks to do so by analyzing how the music of Steve Reich, especially the latter's 1987 *Electric Counterpoint*, has influenced structural aspects of *The Way Up*. *The Way Up* is a sixty-eight minute jazz composition for sextet, which was written in 2005 by jazz guitarist Pat Metheny and jazz pianist Lyle Mays. Metheny and Mays play it with the Pat Metheny Group (hereinafter PMG), a band that originated in 1977 and has consisted of different members, with Metheny and Mays at the helm of the group. A CD recording of *The Way Up* was released in 2005, and thereafter PMG toured for six months performing the piece around the world.[1] Their 2005 performance in Seoul was recorded on film and is available on DVD. Furthermore, as Metheny has done with several of his works, he also published *The Way Up*'s lead-sheet.

What is it like listening to *The Way Up*? On the aforementioned CD and DVD releases, PMG perform *The Way Up* with six musicians. Each musician plays more than one instrument. Succinctly put, one hears drums, bass guitars, guitars, keyboards, vocals, a piano, a harmonica, and a trumpet.[2] In *All About Jazz* journalist John Kelman reviews in 2005 *The Way Up* and notices a definite presence and continuity of PMG's musical signature characteristics (Kelman 2005). Kelman lists: "cinematic scope, evocative melodies, telepathic improvisational interplay and the broadest of sonics" (Kelman 2005). Kelman also observes changes in the PMG sound. The vocals and Metheny's signature Roland GR-300 guitar synthesizer tone are of minor importance compared to previous PMG releases (Kelman 2005). The 2005 review by Thomas Conrad in *Jazz Times* magazine, similarly describes *The Way Up* as a sonic vastness, in which Metheny operates a veritable guitar orchestra (Conrad 2005). These two music critics thus claim *The Way Up* to be typical of PMG, yet, paradoxically, also representative of PMG's musical evolutions. Kelman and Conrad make it irrevocably clear that *The Way Up* is of monumental

[1] I have tried contacting record label Nonesuch for more details on this tour, but never got a response. My personal correspondence with David Sholemson, executive producer of *The Way Up*'s DVD release, did not lead to any more information on the touring schedule. He, however, did summarily tell me of high school arrangements of *The Way Up*'s first section.

[2] Pat Metheny plays guitars. Lyle Mays plays keyboards and the piano. Steve Rodby plays the acoustic and electric bass. Antonio Sanchez plays the drums and electric bass. Cuong Vu plays the trumpet, percussion, guitar, and sings. Gregoire Maret plays the harmonica, guitar, percussion, electric bass, and sings. Richard Bona sings on the CD release. Nando Lauria, who sings and plays guitar and a miscellaneous group of percussion instruments, replaces Bona on the DVD release.

proportions, and as such deserves our attention.

Two listeners' accounts of *The Way Up* likewise steer our attention to its formal proportions. Their comments on a YouTube video of *The Way Up*'s DVD, show that *The Way Up*'s compositional structure is distinctive. jerry boogaloo [sic] writes: "This video represents only the first part of a sixty-five minute *magnum opus divided into four movements*" (VIDEOBOXMUSICLIVE, Sep 22, 2013, my emphasis). And Skane Canyon comments: "I saw this show at Orchestra Hall in Minneapolis. It was for the Way Up tour [sic]. *The whole album is one song*" (ibid., my emphasis). jerry boogaloo's classification of *The Way Up* as Metheny's magnum opus, expresses its formal structure as a commendable feature. Skane Canyon seems to implicitly attribute a similar importance to *The Way Up*'s compositional form. Much like these listener's accounts of *The Way Up*, I experienced it as hearing a symphony. I recognized recurring themes, variations, and an Afro-Cuban 6/8 feel somehow permeating the piece. *The Way Up* seemed to envelop an organic development of themes characteristic of classical symphonies. I figured the improvisations to be the classical developmental sections. When traditional song structures do not readily present themselves, what else can I do but to tap into my classical listening mode? Consequently, *The Way Up* stands out. It is different from other music Metheny has released, and different from other jazz, and classical music I have heard. This interest in its performance stirred an interest in *The Way Up*'s composition.

Figure 2: The Way Up's CD release has six different cover designs (AIGA Design Archives n.d.).

This study will focus on *The Way Up* as a composition. The analysis of its musical form is done by looking into whether and how Steve Reich's music influenced *The Way Up*. Reich's use of pulsing repeated notes to delineate a work's structure, his use of the canon and the phase shifting technique it often incorporates, and finally the harmonic qualities these former musical aspects engender, are compared with their analogous counterparts in *The Way Up*. Pulsing repeated notes are a characteristic texture of *The Way Up*. As well as appear both at the work's opening, finale, and in the interstices between sections, the pulsing repeated notes are also an accompaniment figure. What is the structural function of pulsing repeated notes in *The Way Up*? What is their melodic and harmonic content? In addition to the pulsing repeated notes, a section of *The Way Up* envelops an elaborate step-wise metrical and temporal phasing or modulation. Can this be compared with Reich's phasing technique, who often used it to create the entire note-to-note content of his works? Finally, both the phasing technique and the pulsing repeated notes inherently engender a specific harmonic language, which is either a secondary derivative, a meta-structure, or a pliable modal nonfunctional chord cycle. These harmonic qualities that the pulsing repeated notes, and the use of canons engender in Reich's music, have no correlate in Metheny's and Mays' *The Way Up*. The latter implements the Reichian composition techniques in a florid tonal language, which envelops a varied arsenal of candential constructions and manifests a plethora of foreign modulations.

Next to jazz bassist Eberhard Weber, Metheny thanks the minimalist composer in the sleeve notes to *The Way Up*'s CD release. The booklet reads: “Very special thanks to Steve Reich and Eberhard Weber” (Metheny 2005). Just as *The Way Up*'s sleeve notes acknowledge Reich, Reich in return, in his *Writings on Music 1965-2000,* acknowledges Metheny when discussing his composition *Electric Counterpoint*. The latter was commissioned by the Brooklyn Academy of Music's Next Wave Festival for Metheny (Reich 2002, 145). *Electric Counterpoint* is a piece in which a live guitarist plays against a prerecorded tape of himself that contains up to eleven tracks. In his *Writings*, Reich thanks Metheny for “showing [him] how to improve the piece in terms of making it more idiomatic for the guitar” (Reich 2002, 147). A video of a recent lecture held by Metheny at the Monterey, Canada EG conference for “innovators in media, technology, entertainment and education”, attests to the impact Reich's *Electric Counterpoint* has had on Metheny's 2010 orchestrion project (eg May 14-16, 2015). Metheny had always been interested in orchestrions, as they seemed to him a viable alternative to the electronic samples and synthesizers for delivering musical sounds (eg May 14-16, 2015, Oct 26, 2012). Performing *Electric Counterpoint* on the anniversary concert at Carnegie Hall at Reich's seventieth birthday,

Metheny received a standing ovation. After realizing that audiences had already accepted a musician playing along with a tape since the 1980s, he directly commissioned for the building of instruments using the orchestrion as a model (id.). This apparently musical relationship between Reich and Metheny makes a research and explication of the presence of Reichian compositional techniques in Metheny's and May's *The Way Up* both pertinent and enlightening.

In offering composition techniques as a way to comparatively ascertain certain aspects of *The Way Up*'s musical form, this study seeks to heed musicologist Scott DeVeaux's call "for an approach that is less invested in the ideology of jazz as aesthetic object and more responsive to issues of historical particularity" (DeVaux in Porter 2012, 16n6). DeVeaux is cited in musicologist Chris Porter's *Incorporation and Distinction in Jazz History and Jazz Historiography*, in which Porter describes how this essentialist ideology of jazz is both advantageous and disadvantageous to listeners, musicians, and scholars alike (Porter 2012, 22-23). Writing on the methodology of jazz studies Porter believes musicians and music encourages scholars:

> "to explore musical phenomena that cannot be contained within a paradigm of jazz studies but whose analysis could still be significantly informed by jazz studies. In other words, rather than placing jazz and invocations of jazz into a larger framework of something like "jazz culture" or expanding the circle of what counts of jazz or who counts as a jazz musician, we might identify and write about various spheres of musical activity that intersect with but are not coterminous with jazz but whose existences are still determined, at least in part, by the idea of jazz and the political economy of the jazz world" (Porter 2012, 25).

It is in this vein that this study takes up the subject of jazz composition, and seeks to find out how *The Way Up* intersects particularly with aspects of Steve Reich's music.

The most audibly apparent similarity between Reich's music and *The Way Up*, the use of pulsing repeated notes, is treated in this study's first chapter. In Reich's *Electric Counterpoint* e.g., pulsing repeated notes manifest a chord cycle that functions introductorily and reappears in a section's finale, thus structuring the composition. In the first movement of Reich's *Music for Eighteen Musicians* the same technique of pulsing repetitive notes is used to introduce the harmonies upon which the subsequent movements are built. *The Way Up* likewise envelops the musical phenomenon of pulsing repeated notes. The underlying musical process is partly similar, and partly dissimilar to Reich's employment of this technique. The notes that are repeated in a pulsing manner are no longer part of a more or less autonomous chord cycle. Instead the repetitive pattern is incorporated in harmonic progressions that have their own

development. Notwithstanding its harmonic heteronomy, the musical phenomenon of pulsing repeated notes is still applied as a harbinger of form, as it introduces and closes midsections of the piece, accompanies solos and themes, and also frames *The Way Up* as a whole.

This study's second chapter discusses the phase shifting technique. The latter is Reich's primary way of composing. His early tape pieces *It's Gonna Rain* (1965) and *Come Out* (1966), and his 1967 *Piano Phase*, e.g., largely exist as a gradual synchronization and desynchronization process of a pattern played against itself. Similarly, Reich's 1973 *Six Pianos*, and the aforementioned *Electric Counterpoint*, e.g., are compositions that germinate from the canonic treatment of one, two, three, maybe four melodic patterns. *The Way Up* does not contain any canonic treatment, rather it contains a somewhat altered realization of the phase-shifting-technique's appearance in e.g., *It's Gonna Rain*, *Come out*, and *Piano Phase*. Furthermore, the phase shifting technique is rather a local musical event in *The Way Up*, whereas in Reich's aforementioned compositions it often is the piece in its entirety.

This study's final chapter discusses Reich's, and Metheny's and Mays' harmonic language to be a differentiating factor between Reich's music and *The Way Up*. As a result of the primacy of the canon, Reich's harmonic language is one of stases. Furthermore, when a harmonic progression does occur, take e.g., *Electric Counterpoint,* the harmonies all relate to the similar pitch selection and are therefore diatonic. In addition, the relation of one chord to its preceding and

Figure 3: The Way Up's CD release's booklet (AIGA Design Archives n.d.).

succeeding chords is never a functional one. The chord progressions of *Electric Counterpoint* e.g., never contain climaxes by way of cadences. This latter characteristic of chord relationships is however prominently present in e.g., *The Way Up*'s main theme which harbors authentic, plagal, and deceptive cadences, as well as the typically jazz supertonic-dominant-tonic cadence. Similarly differentiating Reich's music from *The Way Up*, is *The Way Up*'s use of a modal harmonic language instead of the diatonic harmonic language of Reich. The analysis of *The Way Up*'s main theme shows that it contains many foreign modulations to non-diatonic keys.

To preface this study's research into *The Way Up*'s compositional techniques that can be related to Steve Reich's compositional practices, the study's preamble relates journalist Richard Niles', journalist John Kelman's, journalist Thomas Conrad's, and Pat Metheny's accounts of *The Way Up*'s musical form, in which this study's approach to musical form is embedded. Subsequently, in relation to works of musicologists Ingrid Monson and Nicholas Cook, and philosophers Roger Scruton and Karl Marx, it explicates this study's analytical and theoretic approach to composition and musical form as a historiographical tool *par excellence*. Then the preface turns to its sources, and especially to music notation and what the score and the lead-sheet have to offer in ascertaining musical form. Here the study turns to a work of philosopher Ernst Cassirer on science, objectification and symbolic forms of knowledge.

\\\\\\\\\Preface

But then nobody without a taste for the impossible should become a musicologist.
Nicholas Cook in *Music as Performance* (Cook 2003, 205).

In his 2007 interviews with Pat Metheny for BBC Radio 2, musician and journalist Richard Niles summarizes *The Way Up*'s musical form as one undivided piece based on a pair of three-note motifs, and extensive exploration of the pedal point (Niles 2009, 67). Niles furthermore notes that *The Way Up*'s CD release only divides the composition into four parts for ease of navigation (Niles 2009, 67). When *The Way Up*'s complete structure would be organically embedded in a pair of motifs, Niles' observation can be read as ascribing a deep structural unity to *The Way Up*'s musical form. This opens up a rather traditional analysis of musical form that seeks to find out the constituent parts of a material whole, and to differentiate what is structurally central to what is structurally peripheral in *The Way Up*. Instead of this analytical approach to musical form, this study opts for a descriptive approach to musical form.

A descriptive approach is evidently present in John Kelman's and Thomas Conrad's aforementioned reviews. Kelman and Conrad metaphorically describe the formal structure of *The Way Up* as a novel. According to Conrad, *The Way Up* resembles a major epic novel that as such contrasts with former PMG albums that were rather more like short stories (Conrad 2005). Conrad writes e.g.,: “This long work is also remarkably successful in sustaining narrative interest, through multiplicities of subplots and myriad shifts of mood and tempo and texture. Passages of reflective lyricism escalate to keening crescendos, then the music falls away, to reconfigure itself and build again” (Conrad 2005). Kelman similarly describes *The Way Up*'s musical form as a narrative. “[P]revious PMG records”, he writes, “have been collections of discrete compositions that still manage to tell a complete story” (Kelman 2005). Where Conrad writes of a 'major epic novel' and of 'narrative interest', Kelman writes of a 'complete story', and of a “remarkable sense of drama, and a keen visual sense that makes the entire piece, (...), truly feel like a single composition, rather than a series of interconnected segments” (Kelman 2005). Conrad's and Kelman's narratological approach to musical form is especially pertinent as Metheny himself, also speaks of narrativity when addressing *The Way Up*'s compositional structure.

In his interview on the 2006 DVD *The Way Up - Live* he described the guitar as a textural

element and a narrative voice in the music (Metheny 2006, see appendix 1 for a verbatim transcript of this interview). Instead of relating this narrative quality to that of books he relates it to film. Metheny mentions *Eternal Sunshine of the Spotless Mind* (2004) and *Amores Perros* (2000):[3]

> (...) And there's also a kind of new, sort of narrative storytelling, that I feel is emerging from this. I mean, I think *The Way Up* is of that, but I also see some movies now... I mean, there's a whole new kind of way of just spreading out the details, with movies like *Amores Perros,* or *Eternal Sunshine of the Spotless Mind.* I mean, there's this whole sense of time being thought of in a kind of different way. And I think, as we were writing the piece, we were thinking of that. There's, like... an influence of that, of, like, showing little things and then revealing more about them later as time goes on. (...) (Metheny 2005).

To take Metheny's example of *Amores Perros*, he is referring to how the three different panels of the film's triptych are linked to each other at a certain point in the story, or perhaps better formulated, their stories. Each panel focuses on its own central characters, and as the story of these individual panels progresses, the viewer encounters moments when the three panels converge in specific narrative events. The narrative structure of *Amores Perros* thus envelops different perspectives on the same events. And, as Metheny suggests to be true of *The Way Up*, thus reveals more of one single event as time continues. Metheny's observation makes a narratological analysis of *The Way Up*'s musical form especially inviting. Nonetheless, because a music theoretic approach to musical form makes for readily intelligible comparisons between musics, this study chooses a music theoretic approach over a narratological approach to musical form.

Niles', Kelman's, Conrad's, and Metheny's descriptions of *The Way Up*'s formal construction, all illustrate different approaches to the analysis of musical form. The traditional music theoretic categories (like motifs and pedal points) Niles uses to account for musical form, contrast with Conrad's and Kelman's. Their use of adjectives (keening crescendos and reflective lyricism, and a sense of drama) makes Conrad's and Kelman's approach seem more psychological, in the way that they write of musical form as a listener's subjective experience (compare with Cook 2007, 1-7). With his reference to *Amores Perros* and *Eternal Sunshine of the Spotless Mind* Metheny's narratology already implies a broader approach to musical form, than Kelman's, Conrad's, and Niles'. In Metheny's description of *The Way Up*'s musical form,

[3] *Eternal Sunshine of the Spotless Mind* stars Jim Carrey and Kate Winslet, and is directed by Michel Gondfry. *Amores Perros*, starring among others Gael García Bernal, Emilio Echevarría, Álvaro Guerrero, Vanessa Bauche, and Goya Toledo, is directed by Alejandro González Iñárritu.

form analysis is the correlation of several cultural artifacts. Such an analytical approach in which we are no longer dealing with one individual object on itself, but with a web of objects, and their connections, transforms music analysis into a musicological tool for the cultural study of music. In this study, I suggest a music theoretic analysis to do the same. By explicating how the music of Reich musically connects with Metheny's and Mays' way of composing *The Way Up*, the study analyzes specific aspects of *The Way Up*'s compositional structure, as well as doing that in a way that enables hypotheses about the broader musical field, and the musical language of the composers in question.

So far, the study has explored both listening to *The Way Up*, and analytical approaches to its musical form. We have also discussed the study's aim of using the traditional categories of music theory to describe *The Way Up*'s musical form through its relationship with Reich's music. What does this music theoretical, and comparative methodology presuppose to be true of the nature of the composer, the composition, musical form, and the score, which is this study's primary source? Alas, the impossible task of speaking about music! Musical form presents human creativity, and is therefore a preeminent musicological concern. Furthermore, music notation makes it possible to analytically describe certain aspects of musical form, i.e. harmony, rhythm, and melody.

The basic premise of this study holds that musical form is a reflection of human agency. Firstly, this is the case when considering the subjective listening experience. In his 1987 article *Musical Form and the Listener,* musicologist Nicholas Cook, for instance, defined form as the intentional object of the listening process (Cook 2007, 2). Form is something one listens for, and constructs anew with every listening from his or her perceptions of all the parameters of musical design. Musical form is the "totality of experienced relationships between local events within a composition" (id., 5). In addition to the subjective experience engendering musical form, the latter is founded in the activity of the composer – a biographic fact, something which Cook maintained as well in his aforementioned 1987 article (Cook 2007, 1). Cook's argument resounded in philosopher Roger Scruton's 2012 article *The Space of Music: Review Essay of Dmitri Tymoczko's A Geometry of Music*. At first Scruton defines musical form much like Cook from a listener's perspective. 'Beauty is in the eye of the beholder', thus, argues Scruton, music is intentionally organized sound (Scruton 2012). "Sounds become music as a result of organization, and this organization is something that we perceive and whose absence we

immediately notice, regardless of whether we take pleasure in the result" (ibid.). In my opinion Scruton defines music(al form) as an artifact, in which both the listening subject and the composer's and musicians' craft can be seen as the harbingers of musical form. This study's music theoretic analysis is aimed to research musical form as the composer's work.

What does the composer do exactly? The answer to this question should dispel the notion about this study harboring certain Romantic predilections towards the master and his score. In addition to the hypothesis that musical form reflects human creativity, the study also holds musical form to envelop 'simply the act of making and receiving music', i.e. Cook's approach to music as performance, which he described in his 2003 chapter *Music as Performance* (Cook 2003, 208). Cook's hypothesis of music as performance holds that composition and performance are on the same horizontal plane.[4] Therefore, score and performance are not hierarchically related. However, simultaneously with the score not representing an original instantiation, theorizing music as performance still envelops the study of music as writing, or composition (Cook 2007, 135-136). Interested in the performative aspects of music, Cook argued in his 1995-1996 article *Music Minus One: Rock, Theory and Performance* that "there is no clear line between composition and performance, and that we therefore have an opportunity to transfer much of what we have learnt about music as composition to music as performance. For instance, insights into compositional choice and strategy, the extent to which a given choice entails others, the defining and solving of problems, the contribution of conventional schemata towards such definition – all these approaches are as applicable to performance as they are to composition" (Cook 2007, 136). The idea of composition and performance to be somehow one and the same also appeared in musicologist Ingrid Monson's 1996 book *Saying Something: Jazz Improvisation and Interaction*, when she argued that text and performance mutually define each other (Monson 1996, 186). Their relationship is not one of autonomy but of simultaneity (id., 186, 190). Instead of being of primordial importance, the composer's work is thus of relative importance. But important still! The formal aspects of his work are elements 'by virtue of which that work is received as a representation of the same

[4]Perhaps I am not fully explaining the fundamental reorganization of the score and the performance, which the theory of music as performance really entails. According to me, the drastic turn of the study of music as performance, lies in the substitution of a linear genealogical conception of music with a circular interactive notion of music. I found chapter 1.3 of Paul Watzlawick et al.'s *Pragmatics of Human Communication* especially enlightening in this regard (Watzlawick, Beavin & Jackson 1987). Writing about human communication Watzlawick et al. describe the scientific shift from the monadic psychoanalytic paradigm on human behavior to the paradigm of feedback loops. This interactive phenomenology is also apparent in Monson's account of music's structural relationships, which is described in the main text.

abstract entity, such that what is heard derives meaning from being heard in that context' (Cook 2007, 136). Monson illustrates the exchange, or connection between composition, performance and musical form, and their cultural meaning, when she writes that "[s]tructural relationships must, of course, be included within the discussion of how music communicates, but they do not operate independently of-and in fact are simultaneous with-the contextualizing and interactive aspects of sound" (Monson 1996, 190). "Rather than being conceived as foundational or separable from context", Monson writes, "structure is taken to have as one of its central functions the *construction* of social context" (id., 186, italics in original). When the composition of music is classificatory of human agency, musical form becomes an excellent historiographic tool.

Musical form naturally reflects 'the biographical fact of a composition' as we mentioned earlier (Cook 2007, 1). In addition to Cook's and Monson's accounts of the historiographical abilities of musical form, Marx's historic materialism also buttresses the case in point, i.e. that culture ultimately subsides in nature.[5] Marx's materialism takes neither matter nor ideals as explanatory of reality (Fromm n.d., 15-19). Instead, reality is explained by human's actions. Consequently, reality is explained by what people *can* do. To explain ever so succinctly, Marx argues: 'the way in which people produce their means of existence depends on the nature of these means themselves. Production is not just a reproduction of human nature. It is already a defined production or expression of people's lives' (Marx cited in Fromm n.d., 19, my translation). "The way individuals express their lives is the way they are. What they are thus overlaps with their production, both with *what* they produce as well as with *how* they produce. The individual's being, thus depends on the material preconditions of their production" (ibid., my translation).[6] Marx's approach to being human is meant to account for all human creations. In the field of musicology we can thus transpose and apply Marx's argument. In addition to musical form being a biographical fact, there is also the matter of its preconditions. Music both

[5]Marx's materialism is an interesting addition to Christoph Cox's 2011 article *Beyond Representation and Signification* on sonic materialism, which seems to do away with human agency all together (Cox 2011). In my opinion Cox's materialist paradigm, on itself, opposes Cook's and Monson's ideas on music as performance.

[6]The text from which I cite is a Dutch translation of psychologist Erich Fromm's *Marx's Concept of Man*. In Dutch, Marx is cited as follows: "De wijze waarop de mensen hun middelen van bestaan produceren hangt allereerst van de aard van de middelen van bestaan af die zij hebben aangetroffen en willen reproduceren. Deze wijze van productie moet men niet alleen zó zien dat zij een reproductie zou zijn van het fysieke bestaan van de mensen zoals het is. Het is eigenlijk al een bepaald soort activiteit van deze individuen, een bepaalde manier om uitdrukking te geven aan hun leven, een bepaalde *levenswijze*. Zoals de individuen hun leven tot uitdrukking brengen, zo zijn zij. Wat zij zijn valt dus samen met hun productie, zowel met *wat* zij produceren als met *hoe* zij produceren. Wat de individuen dus zijn hangt af van de materiële voorwaarden van hun productie" (Fromm n.d., 19, emphasis in original). The footnote to Fromm's citation of Marx reads: *Deutsche Ideologie*. MEGA I, 5, p. 10-11.

germinates music, and is also explained by other music. It is therefore only logical to trace how Reich's music influences *The Way Up*. But how are these matters made perceivable by a music theoretic analysis of music notation?

The musical score and recordings of music are means to speak about music. They are an objectification of music's sounding manifestation. In his 1954 *An Essay on Man: An Introduction to a Philosophy of Human Culture* philosopher Ernst Cassirer discusses the function of science and its place in the system of symbolic forms, in a chapter called "Science" (Cassirer 1954, 207). He writes of human knowledge that it results from objectification. Cassirer points out that objectification creates a symbolic language which has symbols referring to objects. For Cassirer there are different forms of objectification. He describes the linguistic and mythic forms as complex, teleologic, representative languages of ordering sense data, which furthermore take shape unconsciously. Rather contrarily, the scientific form is simple, and envelops definite classification that is methodical and with conscious intent. Science seeks to give a comprehensive view of the sense data, whereas language and religion exist of detached descriptions of isolated facts (Cassirer 1954, 209, 211-212). Inherent to Cassirer's account of the function of science, is a definition of human knowledge as objectification. When knowledge germinates from objectification, knowledge of music necessarily includes objectification in order to speak of it at all. The score and the CD recording offer this objectification, and are therefore symbolic languages.[7] It also follows that the score and the recording are no scientific languages, but more akin to everyday language. Like "[e]very single linguistic term", e.g., every symbol on the music score, "has a special "area of meaning." It is, as Gardiner says, "a beam of light, illumining first this portion and then that portion of the field within which the thing, or rather the complex concatenation of things signified by a sentence", or a performance, "lies." (Cassirer 1954. 211). This idea of the score as an everyday language of music, makes it possible to use music notation to describe the form of music. Music theoretic analysis is the scientific evaluation of the score, of which, however, the material attributes are *a priori* conceived as symbolizing the music's sounding.

This study's primary sources are CD and DVD recordings, scores, and lead-sheets. In respect of Reich's music the study largely makes use of secondary sources. Namely,

[7]Whether the CD recording and the score differ in this account is hardly clear. We perhaps take the CD recording to be closely related to the actual performance, more so than the score, however, the CD is still a recording and representation of the actual performance. The exact differentiation between CD recordings and scores is something to be discussed elsewhere. As evidences of musical form, this study sometimes refers to music notation as well as a CD recording.

musicological studies on different aspects of Reich's oeuvre, interviews with Reich, and writings of Reich himself (i.e. Potter 2000; Schwarz 1980-81, 1981-82, 1990; Fox 1990; Dennis 1974; Nyman 1971; Reich 1974, 2002). However, as Reich's *Electric Counterpoint* is an evident joint which musically and professionally connects Reich and Metheny, and as this study's secondary sources are quite dated, this study incorporates the analysis of its musical score as a primary source. In the latter case the study uses a traditional score which in this way perhaps opposes *The Way Up*'s lead-sheet.[8] However, because *The Way Up*'s lead-sheet is published under the composers' authority as *The Way Up*'s lead-sheet, and because lead-sheets are generally taken as representing the music of their specific tunes and germinating their performance, this study intends to use the lead-sheet as indicative of part of *The Way Up*'s musical phenomena, i.e. melody, harmony, rhythm, meter, and tempo. This study's illustrations of music notation are handmade reproductions of either *The Way Up*'s lead-sheet (i.e. Metheny n.d.) or the score of Reich's *Electric Counterpoint* as published by Hendon Music (i.e. Reich 1987). The discussion of *The Way Up*'s musical elements at times also refers to specific moments of *The Way Up*'s CD release (Metheny 2005). In these cases the track is indicated by its number of the CD's track list (i.e. track 1, track 2, track 3, track 4). A specific time within a certain track is indicated by referring to the minutes and seconds at which the musical section under discussion occurs on *The Way Up*'s CD release (i.e. Metheny 2005a).

In sum, based on the premise that musical form reflects human agency and social context, the study's hypothesis maintains that *The Way Up*'s musical form bears witness to Metheny's and Mays' musical language. The premise that human agency is rooted in material preconditions presupposes that other compositions and music play a determining factor in *The Way Up*, and music in general. It is therefore possible and also desirable, to analyze one musical work in comparison to others. Thus instead of simply delving into the compositional elements of *The Way Up* on itself, the study seeks to explicate how it originates from Steve Reich's music. The final theoretic perspective of this study's inquiry holds that the score is a symbolic language that describes sounding music, and therefore a viable point of departure for an analysis of musical form, as well as musical sound in general.

[8]One can, of course, argue on the precise differences between the lead-sheet and the traditional score (see e.g., Cook 2007 321-342).

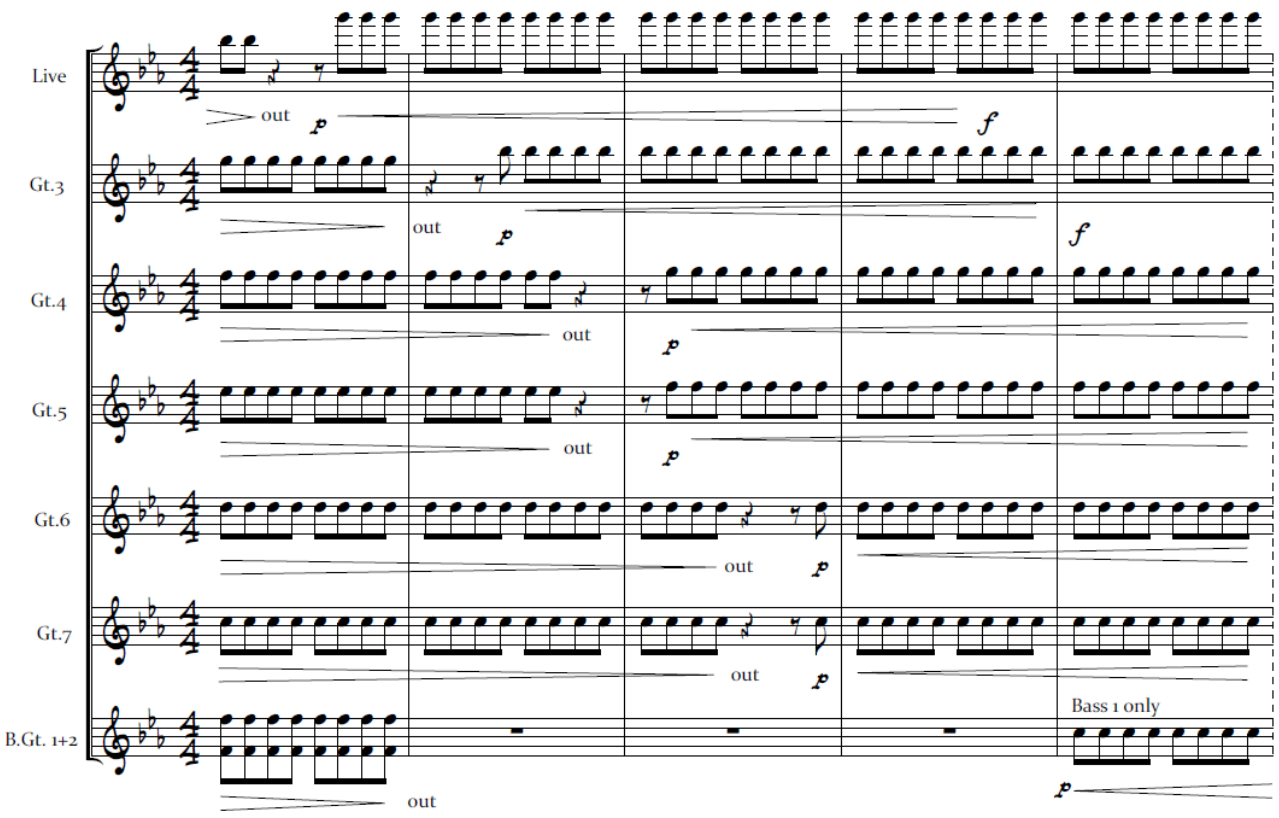


Figure 4: Excerpt from Electric Counterpoint's score: bars 63-67 (silent parts not incorporated) (Reich 1987).

Chapter a) pulsing repeated notes

Electric Counterpoint and Reich's compositional practice

As was mentioned in this study's introduction Steve Reich's 1987 *Electric Counterpoint* was commissioned for Pat Metheny by the Brooklyn Academy of Music and The Brooklyn Philharmonic (Reich 1987). Metheny premiered the work November 5th, 1987, at the Brooklyn Academy of Music Opera House in Brooklyn, New York (Reich 1987). The 1989 CD release *Different Trains* envelops a recording of Metheny performing *Electric Counterpoint*. The work *Electric Counterpoint* represents a point of contact between Reich and Metheny. Therefore, the comparison of *The Way Up* with Reich's music starts with extrapolating *Electric Counterpoint*'s musical elements.

In *Process Vs. Intuition in the Recent Works of Steve Reich and John Adams* (Schwarz 1990) and *Steve Reich: Music as a Gradual Process* (Schwarz 1980-1981, 1981-1982) the musicologist K. Robert Schwarz argues that Reich's compositional practice evolved, from the systematic modernistic application of musical processes on predetermined sets of musical patterns, that is present in Reich´s work up to 1971, to a more intuitive application of the same compositional devices in works after 1971 (Schwarz 1980-81, 376; 1990, 250). Schwarz´s articles envelop an extensive summary of Reich´s career and analyze many of the latter's works. This study will therefore often refer to Schwarz´s texts. One of Reich's compositional ideals was to have a musical process determining the note-to-note musical output. Reich described this in his 1968 essay *Music as a Gradual Process* (Reich 1974): “Though I may have the pleasure of discovering musical processes and composing the musical material to run through them, once the process is set up and loaded it runs by itself” (Reich 1974, 9). This doctrine of impersonality, as Schwarz calls it (Schwarz 1990, 246), is readily apparent in Reich's 1967 *Piano Phase* (more on this below). *Electric Counterpoint* is a later work of Reich and its pulsing chord cycle can plausibly be taken to represent Reich's turn to “the beauty of sound as an end in itself”, which Schwarz identifies to be the case in relation to Reich's 1976 *Music for Eighteen Musicians* (Schwarz 1981-82, 239). The augmentations and diminutions of *Electric Counterpoint*'s chord cycle's durations, and its harmonic qualities do not occur autonomously, but due to the composer's intuitive choice that, in my opinion, 'favors a richness of content and texture, a beauty of sound' (Schwarz 1980-81, 376), over a “musical process determining all the note-to-note (sound-to-sound) details” (Reich 1974, 9).

However a later work of Reich, *Electric Counterpoint* harbors many of Reich's traditional

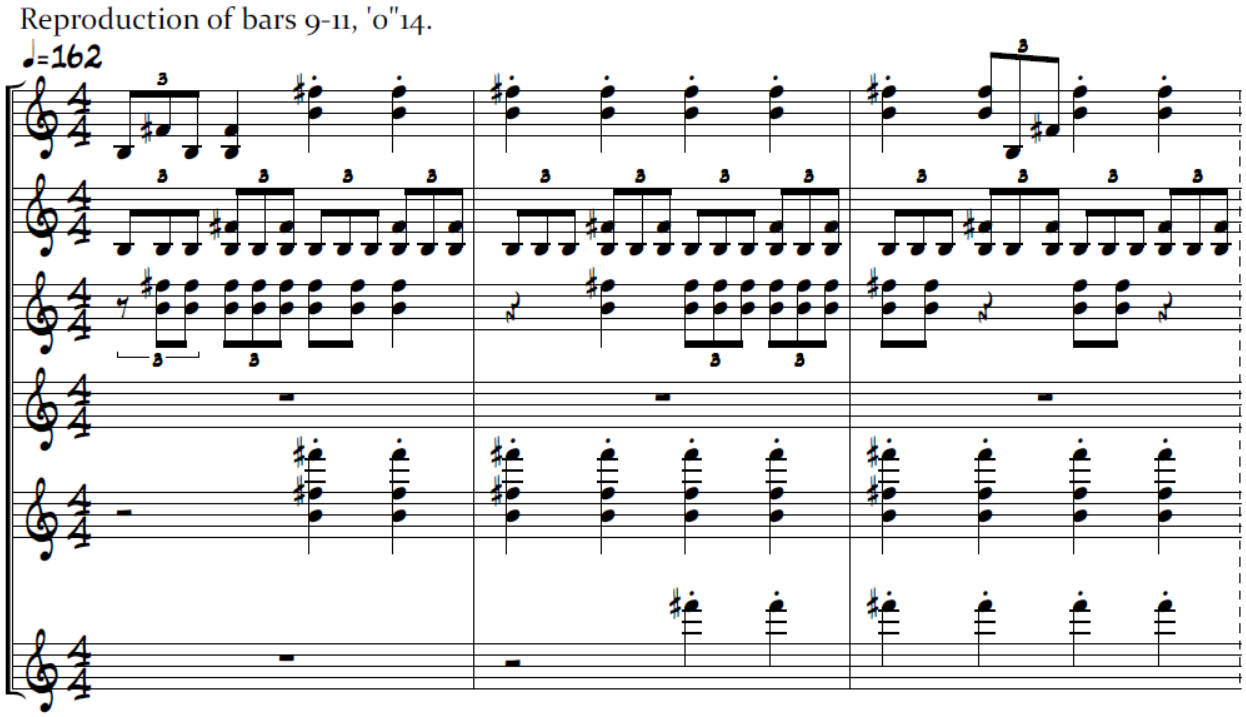


Figure 5: Pulsing repeated notes in The Way Up's opening measures (Metheny n.d.)

compositional procedures. For instance, rhythmic construction by which a musical pattern is constructed one note at a time, the canon as primary generator of a composition's musical substance, the explication of patterns that result from the canon or phasing process, symmetry of form, and finally, a chord cycle determining the form of a work as a whole: its "skeletal underpinning for the counterpoint" as Schwarz calls it (Schwarz 1990, 250-251). These compositional elements are central to Reich's music, and as part of *Electric Counterpoint* plausible elements Metheny is familiar with.

Surveying Reich's stylistic traits Schwarz notes that *New York Counterpoint* (1985), *Sextet* (1985), and *The Desert Music* (1984), "share similar methods of delineating overall form. Tempo, harmonic cycle, and timbre all contribute to defining the symmetrical structure. Yet it is the cyclic return of pulsing repeated notes that has the most apparent form-delimiting function. Rising and falling in volume like the ebb and flow of the tide, these pulsing eighth notes serve as immediately audible structural markers" (Schwarz 1990, 247). Structurally, *New York Counterpoint* is laid out in a very similar way as *Electric Counterpoint*. They are arranged symmetrically in three movements called: Fast, Slow, Fast. In both compositions pulsing repeated notes delineate the overall form. Both *Electric Counterpoint* and *New York*

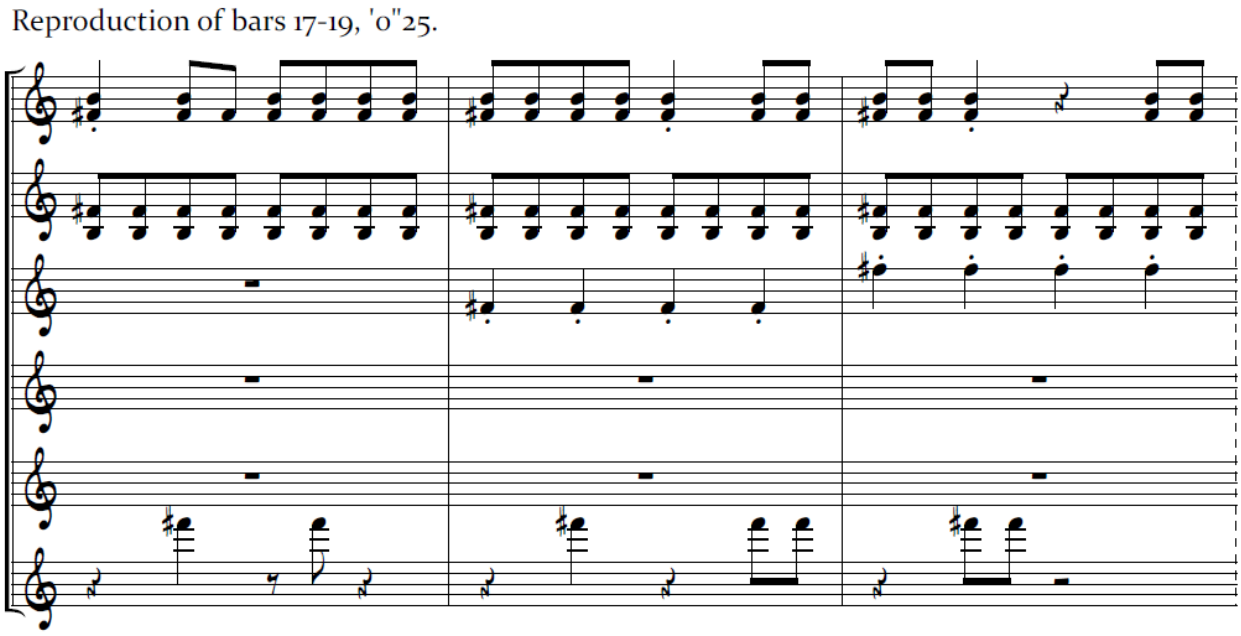


Figure 6: Pulsing repeated notes in The Way Up's opening measures (Metheny n.d.)

Counterpoint commence in the first movement with these pulses manifesting a chord cycle followed by the introduction of a canon, upon which the chord cycle fades away (see figure 4 on page 20). The compositions' first movement end with the chord cycle being recapitulated underneath the canon. The second movement of both compositions begin with a new canon and ends with a new chord cycle accompanying the canon in the form of pulsing repeated notes. Much like their second movement, the compositions' third movement starts with constructing a canon. Halfway, a bass-line is placed underneath it, which recapitulates the harmonic ideas of the first movements' chord cycle. Notwithstanding the third movements' coda displaying the final instantiations of the canon, the pulsing chord cycle structures both *Electric Counterpoint* and *New York Counterpoint*, either by creating a specific texture of pulsing repeated notes, or by manifesting specific harmonic material. In this way the pulsing chord cycles represent the works' anchors. As Schwarz writes in his discussion on Reich's *Sextet, The Desert Music*, and *New York Counterpoint*: “Despite the striking timbral effect of these rising and falling pulses, they possess an importance beyond mere coloristic appeal. They serve as the purveyors of each movement's harmonic cycle-the principal structural underpinning in all of Reich's recent works” (Schwarz 1990, 248). Rather than providing a harmonic underpinning, *The Way Up*'s pulsing repeated notes serves to delineate the work's form to the extent that they stick out as a texture.

Reproduction of bars 22-24, '0"32.

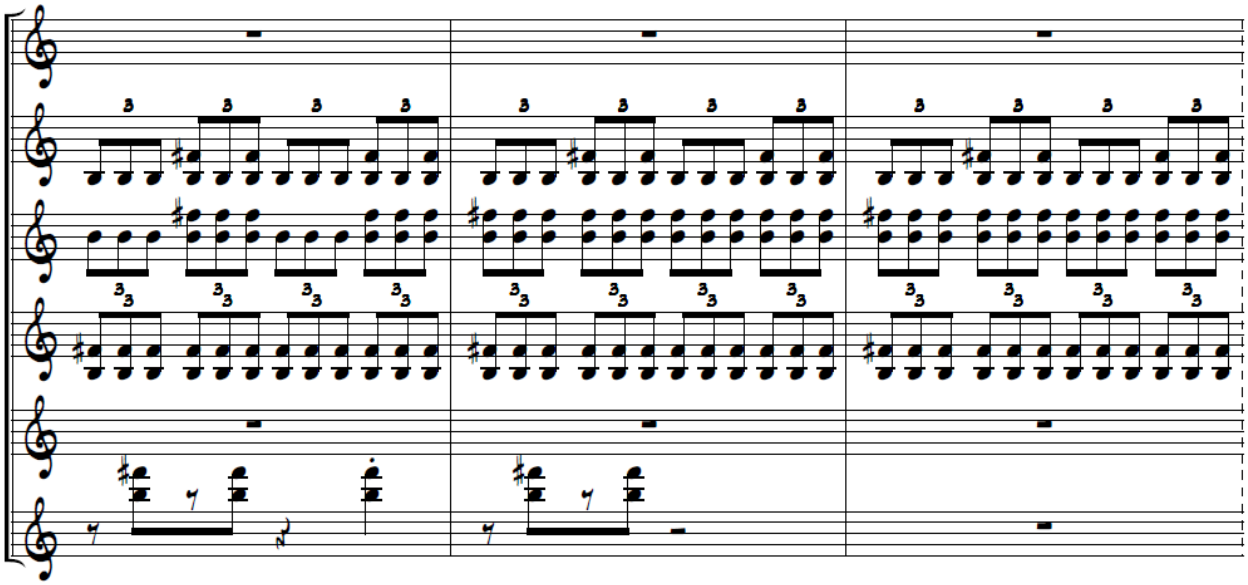


Figure 7: Pulsing repeated notes in The Way Up's opening measures (Metheny n.d.)

As characteristic of The Way Up

The structural delineating device of pulsing repeated notes are also discernible in Metheny's and Mays' *The Way Up*. They audibly demarcate the work as a whole. On either side of *The Way Up* there appear pulsing repeated notes, thus marking the beginning and finale as such. Because it precedes the first statement of the composition's principal theme, this study's analysis takes what *The Way Up*'s CD booklet names "Opening" as a separate entity and sees it as the work's first movement. This first movement commences with triplets incessantly repeating b-f♯ at one hundred sixty-two beats per minute in simple quadruple meter (see figure 5-7). The latter illustrations also show how *The Way Up*'s repetitive pitch pattern envelops a two-against-three polyrhythmics (note e.g., bar three of figure 5 as well as the duple beat division of figure 6 against the triple beat division of figure 5 and 7). (Not illustrated is the three-against-four polyrhythmics in measure 14-16). This texture of pulsing repeated notes returns in the finale's recapitulation of *The Way Up*'s main theme (discussed in chapter C), starting at '7"12 on the CD's fourth track (bar 2123). The texture of pulsing repeated notes, rather than the harmonic and melodic material, also returns in *The Way Up*'s final coda (track 4, '9"36). In both the recapitulation of the main theme, and the coda, the pulsing repeated notes are embedded in a texture that in addition to the repeated notes pattern itself, envelops both an ostinato arpeggio of a major triad, and long sustained harmonies. The coda furthermore envelops the harmonica, trumpet, and guitar thickening the texture with improvisations that transform the texture into a multifarious soundscape. As a whole, *The Way Up* is thus framed

by a texture that capitalizes on pulsing repeated notes. This compositional technique also returns in what comes between *The Way Up*'s beginning and end. The pulsing repeated notes' appearance in *The Way Up*'s introduction, and their return in the recapitulation of the main theme, and the work's final coda, characterize the transformed implementation of pulsing repeated notes. They are a component of a texture that variably envelops an arpeggiating figure, and sustained harmonies. Examples of the rest of *The Way Up* illustrate how pulsing repeated notes, and the aforementioned texture, operates as both separating musical sections and accompaniment figure.

A	B	C	A'	Coda
Bar 1-63.	Bar 64-87.	Bar 88-147.	Bar 148-167.	Bar 177-204.
(AB)	(AB)	ABA	(AB)	
(Bar 1-24, 25-63).	(Bar 64-79, 80-87).	(Bar 88-107, 108-125, 126-147).	(Bar 148-166, 167-176).	
Musical description:				
Binary introduction. Tempo: 162 bpm Meter: simple quadruple	Theme 1 (clean electric guitar, Ibanez PM1000). Accompaniment figures reminiscent of introduction.	Theme 2 (slide guitar). Tempo: 243 bpm. Meter: compound duple, and compound triple, simple quintuple. Accompaniment repeated note pattern and arpeggios.	Recapitulation introductory musical figures (clean electric guitar, Ibanez PM1000). Tempo: 162 bpm. Meter simple quadruple.	Theme 3 (amplified acoustic guitar). Tempo: 122 bpm. Meter: simple quadruple.

Table 1: Tentative division of The Way Up's first movement.

For instance, *The Way Up*'s first movement's coda, in a relatively slower one hundred twenty-two beats per minute quadruple meter, only repeats G^4 in eighth-notes (track 1, '4”24). This coda's finale, a *ritardando*, envelops the augmentation of this pattern to quarter notes, then half notes, and eventually a whole note (measure 177-204). Gradually, the pulse is thus brought to a halt. Consequently, *The Way Up*'s first movement has come to its end. In this way the pulsing repeated notes provide structure. In *The Way Up*'s first movement the pulsing repeated notes are also a continuing presence. The opening's pattern of relatively fast repeated perfect fifths (or its compound the perfect fourth) shown in figure 5-7, is continued in bars 25-46 where it accompanies its own metamorphosis into a scalar, and/or arpeggiating accompaniment figure (see figure 8 on the next page). In bar 48-63 this arpeggiating figure totally replaces the pulsing repeated notes, which then returns in bar 64 to accompany the first

Excerpt: bars 39-42; '0"57

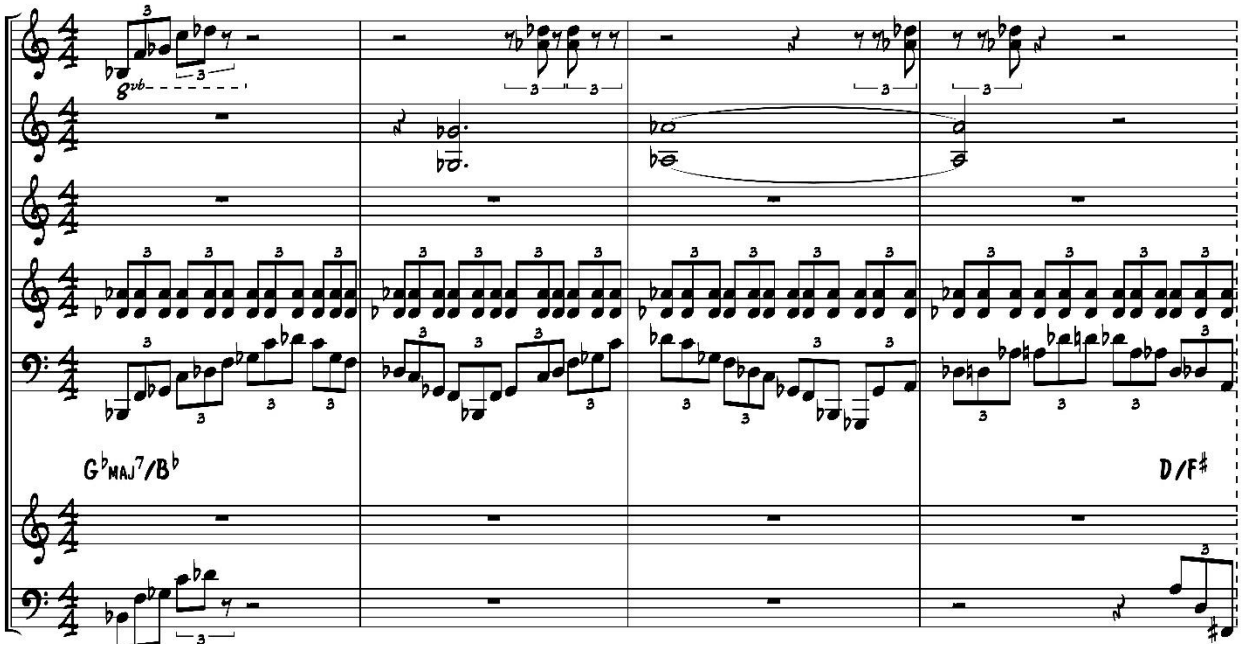


Figure 8: A scalar arpeggiating figure in the piano is added to the pulsing repeated notes played by the guitar (Metheny n.d.).

movement's first proper melodic theme, in tandem with the melodic accompaniment figure (see table 1, bar 64-78, '1"34-'1"58). The first movement's third part is in a two hundred forty-three beats per minute compound duple meter (see table 1 on the previous page, measure 88, '2"12). In this metrical transformation the pulsing-repeated-notes pattern is able to continue unabated, its metrical value of triplets in the simple quadruple meter is simply transformed into eighth-notes in the new compound duple meter. In measure one hundred the pulsing repeated notes disappear, only to return in measure one hundred and fifty-one signaling the first movement's fourth part, which partially recapitulates the melodic ideas of the first movement's first part (see table 1, bar 151, '3"46).

Thus, in addition to delineating the composition as a whole, pulsing repeated notes also frame the outer limits of *The Way Up*'s first movement. In this way it resembles how Reich's *Electric Counterpoint* uses pulsing repeated notes to structurally organize the composition. However, *The Way Up*'s implementation of Reich's technique also bears dissimilarities to Reich's employment. Illustration 1 showed how Reich's *Electric Counterpoint* envelops pulsing repeated notes that manifest a chord cycle, in which each harmony consists of more pitches than one or two, as we often see in *The Way Up*. In *The Way Up* the repeated-note figures do not envelop the exposition of a chord cycle, but rather always provide a rhythmic energy. *The Way Up*'s first movement's midsection shows how the pattern of pulsing repeated notes is

subordinated to harmonic progressions, and therefore becomes more of a heteronomous accompaniment figure, which also becomes part of a texture that variably envelops an arpeggiating figure, and sustained harmonies. In *The Way Up*'s subsequent movements pulsing repeated notes reappear much the same way, i.e. both as accompaniment figure and introductorily, thus differentiating sections.

A	B	Pulses	C	D	Pulses	E	D'	F
Bars 205-405	Bars 406-426		Bars 435-562)	Bars 563-621		Bars 628-943	Bars 944-964	Bars 965-1210
(ABA')	(AA')		(ABA')	AB		(A†BB')	AB	(AB*C†)
(Bars 205-297, 298-368, 369-405)	(Bars 406-426, and its repeat: 406-426)		(Bars 435-496, 497-524, 525-562)	(Bars 563-590, 591-621)		(Bars 628-822, 823-882, 883-943)	(Bars 944-952, 953-964)	(Bars 965-1046, 1047-1086, 1087-1210)

Table 2: Tentative division of The Way Up's second movement.

A	B	C	D
Bars 1211-1323	Bars 1323-1679	Bars 1680-1747	Bars 1748-1795
(ABA)	(ABC)	(ABCD)	(AB)
(Bars 1211-1284, 1285-1299, 1300-1323)	(Bars 1323-1436, 1437-1664, 1665-1679)	(Bars 1680-1700, 1701-1721, 1722-1730, 1731-1747)	(Bars 1748-1755, 1756-1795)

Table 3: Tentative division of The Way Up's third movement.

In this analysis I take what the CD release and the lead-sheet call "Part One" as *The Way Up*'s second movement, and what they call "Part Two" as the third movement. The second movement begins and ends with a statement of *The Way Up*'s main theme and can therefore be treated as a separate entity.[9] Table 2 illustrates a division of the second movement. The vertical columns that say "pulses" indicate how, twice, the texture of pulsing repeated notes are

[9]Here I say 'ends with a statement of the main theme', meaning that at the end the theme's harmonic progression is restated (part B of letter F in table 2). The melody, however, does not reoccur and is replaced by a guitar solo. After the recapitulation of the main theme's harmonic progression, another segment is recapitulated (part C of letter F hearkens back to part A of letter E, see table 2). By leaving out the melody the recapitulation of the main theme is not only veiled, but also thwarted through the recapitulation of other musical material. In doing so the full-blown recapitulation of *The Way Up*'s main theme is postponed till the composition's final movement. Eventually, as this recapitulation is only a partial one table 2 denotes *The Way Up*'s second movement's last part with the letter F instead of A.

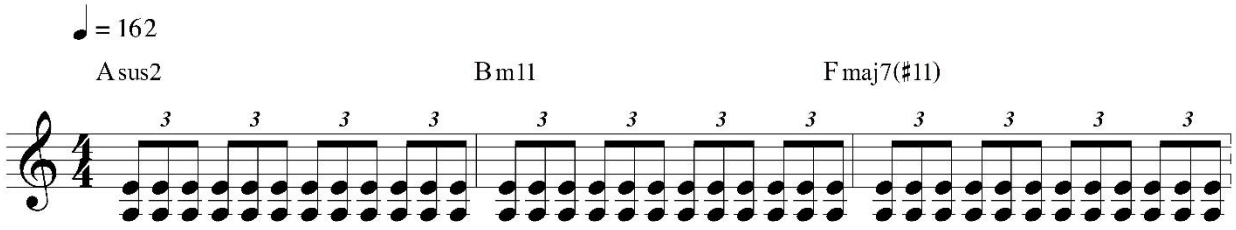


Figure 9: Reduction of harmonies and pulsing repeated notes in measures 1445-1516 (Metheny n.d.).

used to venture from one section into the next. In *The Way Up*'s third movement the pulsing repeated notes do not appear as structural differentiation, but rather as a prominent accompaniment figure. Firstly, it is part of a five-and-half minute trumpet guitar double solo (see table 3 on the previous page, bar 1437-1664. Track three: '6”30-'12”02). Much like *The Way Up*'s first movement the pulsing repeated notes here consists of triplets in a one hundred and sixty-two beats per minute simple quadruple meter, which constantly reiterate a perfect fifth, its compound, and in two instances a major third (bar 1571 and 1575). Sustained harmonies underpin the pattern. The pattern's pitches sometimes stay the same over different harmonies, thus representing different scale degrees in each of these harmonies. For instance, in the first part of the solo (bar 1445-1516) the perfect fifth A^3-E^4 is reiterated over an A suspended triad, a B minor eleventh chord, and an F Lydian major seventh chord (see figure 9). In the subsequent parts of this section the pitches change to fit the diatonic pitch collection of the respective harmonies it accompanies (see e.g., bar 1517-1528).

After this trumpet solo, a harmonica theme and solo get accompanied through momentary interjections of the repeated notes pattern. In a simple quadruple meter with fifty-fives beats per minute, quarter notes repeat the perfect fifth E^4-B^4 over a first inversion E major triad, an A major seventh chord, and a C♯ minor seventh chord, etc. (see figure 10 on the next page). The quarter note value then changes to sixteenth-notes. In bars 1688-1696 this pattern alters back to quarter notes again, and the use of crescendi and decrescendi have the result that the pulsing repeated notes gradually appear and disappear. This dynamic phenomenology by which the pulsing repeated notes accompanies the harmonica theme and solo returns in later bars (bars 1709-1714, 1719-1720). Subsequently, the pulsing repeated notes become more prominent as it discards the decrescendi (from bar 1722 on). In summary, the pulsing repeated notes are, as an accompaniment figure, a catalyst feature in *The Way Up*'s third movement's

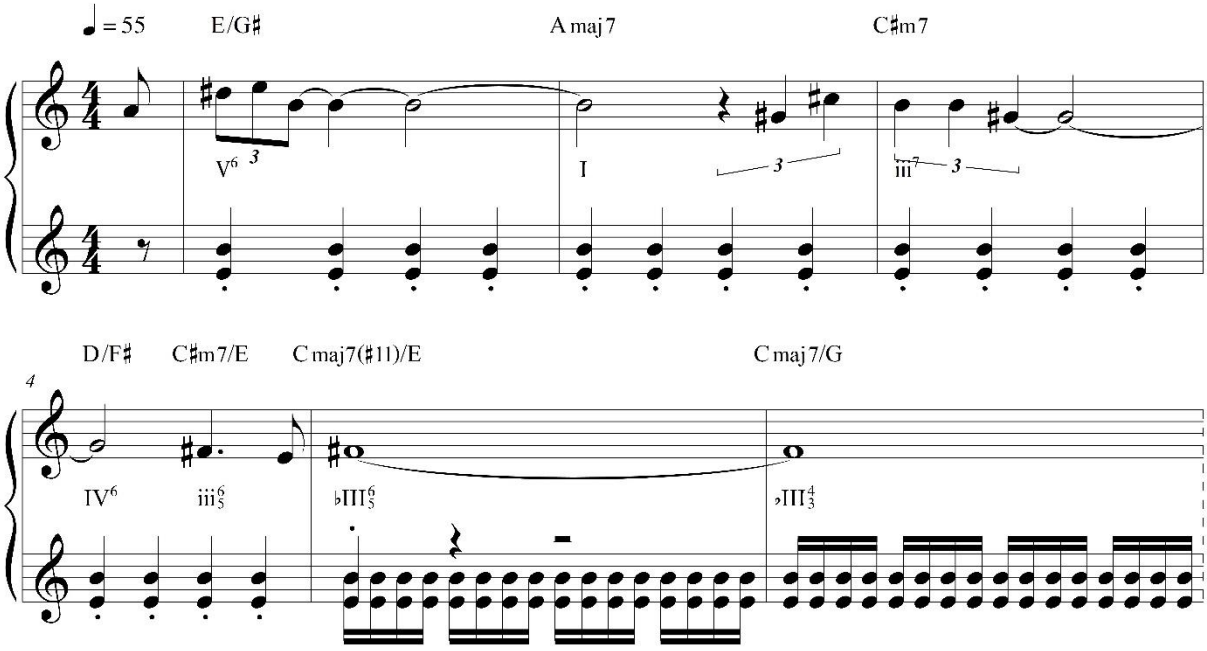


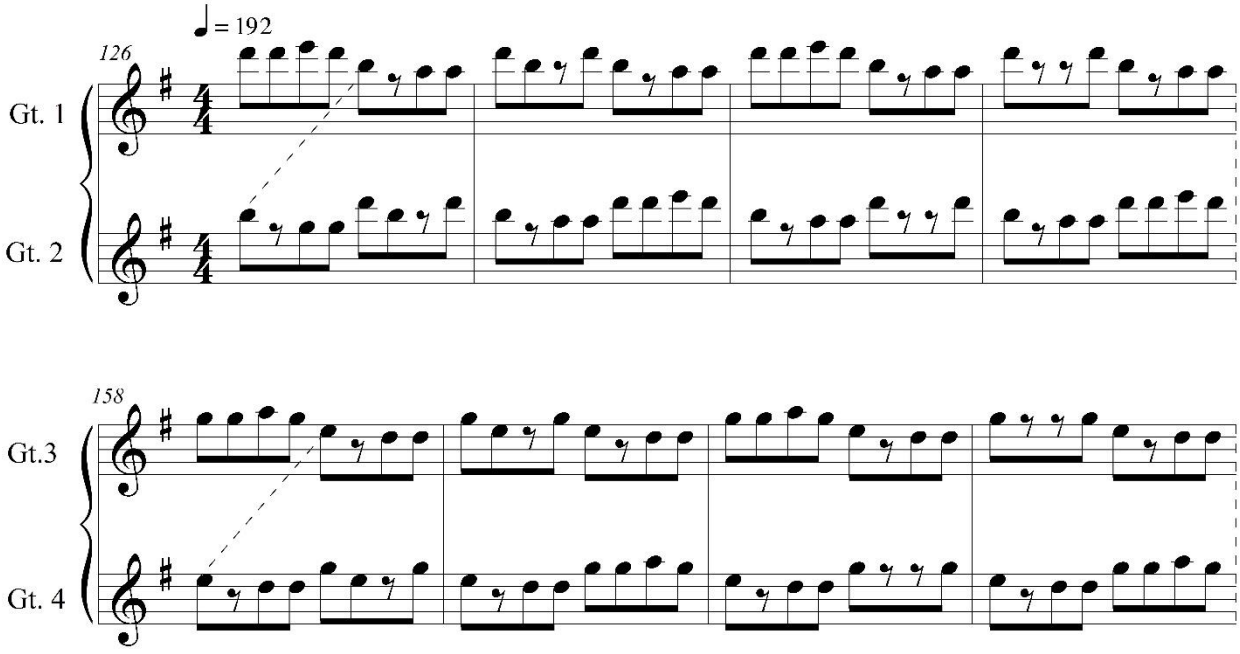
Figure 10: The Way Up's third movement's harmonica theme, which uses pulsing repeated notes as accompaniment figure (measure 1682-1687, Metheny n.d.).

guitar and trumpet solo, and harmonica theme and solo. Which envelops, in addition to repeating mostly fifths and fourths, both rhythmic and metric alteration, and dynamic inflections.

The observations on the implementation of pulsing repeated notes in *The Way Up* lead to the following preliminary conclusions about the latter composition imitating Reich's pulsing repeated notes. Though the musical phenomenon of pulsing repeated notes often audibly reminds us of Reich, its compositional application, however, differs to some degree. Although, as in e.g., the first movement of Reich's *Electric Counterpoint*, the pulsing repeated notes occur at the front and back of the composition as a whole, and *The Way Up*'s first movement individually, it is also an integral part of a musical texture, which envelops an arpeggiating figure and sustained harmonies in addition to the pulsing repeated notes. Furthermore, as an accompaniment figure in *The Way Up*'s third movement, and as short interjections in *The Way Up*'s second movement, the pulsing repeated notes are also more of a continues presence. Eventually, the pulsing repeated notes is therefore part and parcel of other musical parameters, rather than a relatively separately conceived musical element. As an accompaniment figure, for instance, the exact pitches repeated are determined by the harmonic progression, instead of Reich's way in which the pulsing repeated notes determine the harmonic progression. In *Electric Counterpoint*, for instance, the pulsing repeated notes create a chord cycle that

harmonically underpins the canon. In relation to this is the fact that *The Way Up*'s pulsing repeated notes do not exceed a limit of two pitches, which, moreover, most often repeats a perfect fifth, or fourth. Only through the relation of the pulsing repeated notes to the underlying (sustained) harmonies does the pattern resemble the, you might say, close harmony as they e.g., do in *Electric Counterpoint* (see figure 4). Secondly, *The Way Up*'s fourth movement shows how the pulsing repeated notes appear embedded in an arpeggiating major triad, of which it here only repeats the harmonies' tonic. In this way the pulsing repeated notes are not just harmonically heteronomous, but also reduced to a component in its own texture. Finally, a remarkable aspect of *The Way Up*'s pulsing repeated notes are its temporal, metric, and rhythmic transpositions. The pulsing repeated notes appear in a variety of tempi and meters, as triplets, as quarter-notes, as sixteenth-notes, or as eighth-notes. The amount of contrast and modulation of *The Way Up*'s pulsing repeated notes cannot be connected to the strictness of Reich's minimalism. The dynamic phenomenology of the pulsing repeated notes in *The Way Up*'s third movement's harmonica theme and solo, however, is something immediately retrievable from Reich's *Electric Counterpoint*.

Figure 11: In Electric Counterpoint's first movement the canon consists of a pattern being played two beats ahead of itself. Furthermore, part 1 and 3, and 2 and 4, relate to each other in perfect fifths (reproduction of Reich 1987). (Note the measure numbers of the shown systems).



Chapter b) the phase shifting technique

So far we have discussed *The Way Up*'s implementation of Reich's compositional application of pulsing repeated notes. In Metheny's and Mays' *The Way Up* this technique is modified. The pulsing repeated notes have no harmonic autonomy. Merely their rhythmic element remains. In that capacity the pulsing repeated notes conclude and introduce *The Way Up* both as a whole and sections of the work, while also accompanying solos and themes. The pulsing repeated notes take up different tempi, and envelop triplets, eighth-notes, and quarter-notes. In some instances the pulsing repeated notes also harbor a definite polyrhythmic character, in which it is remarkably dissimilar to Reich's application of pulsing repeated notes in *Electric Counterpoint*. Nonetheless, by way of these pulsing repeated notes *The Way Up* is audibly connected to the Reichian sound world. Furthermore, as a device that demarcates structure *The Way Up*'s has implemented pulsing repeated notes in comparison to Reich's way. This study's second chapter will discuss another technique of composing that is characteristic of Reich: the canon, or phasing, and will suggest a section of *The Way Up* to consist of a musical phenomenon that is analogical to Reich's phase shifting technique.

In the aforementioned article *Steve Reich: Music as a Gradual Process* Schwarz defines Reich's phase shifting techniques. He writes: “In phasing, two or more identical melodic and/or rhythmic patterns very gradually change in their rhythmic relationships to one another during the course of the work. Eventually, as the process progresses, new patterns evolve of their own accord” (Schwarz 1980-81, 384). In addition to Schwarz musicologist Christopher Fox in his article *Steve Reich's 'Different Trains'* maintains that the musical process of phasing “remains Reich's primary means of achieving proliferation within a musical texture” (Fox 1990, 4). This is attested to in Schwarz's other previously mentioned article *Process vs. Intuition*, in which Schwarz describes the phase shifting technique as a specific form of counterpoint and maintains it to be one of Reich's central compositional techniques. He writes: “Counterpoint, and specifically canon, has permeated Reich's entire musical output. The earliest phase works, whether for tape or live performers, are no more than a personalization of canonic procedure. Phasing itself consists merely of the construction of canons at the unison; the only difference from conventional canonic procedure is the irrational rhythmic transition between phase positions, where one voice gradually moves out of synchronization with another” (Schwarz 1990, 250). The use of canons, and phasing is attested to in many works of Reich. *Piano Phase* (1967), for instance, consists of two piano players individually repeating short melodic

sixteenth-note patterns. While one player maintains a steady tempo, the other gradually speeds up until he is one, two, three sixteenth-notes ahead, and eventually returns to the patterns' original synchronicity (see Reich 2002, 22-25). In relation to *Piano Phase*, as well as Reich's *Violin Phase* (1967), and *Drumming* (1971), Fox describes the musical product of this phase shifting as "the gradual appearance of a second version of a musical figure at a rhythmically discernible distance from its first appearance" (Fox 1990, 4). Instead of the irrational rhythmic transitions between phase positions present in the just mentioned works, *Electric Counterpoint* attests to the application of canons that consist of, and emanate from rational rhythmic transitions.[10] In the first movement, for instance, the canonic subjects enter two beats ahead of each other (see measure 126 and 158 in figure 11 on page 30). Instead of a contrapuntal phenomenon, Fox argues that *Electric Counterpoint*'s eventual canon is a rhythmic exercise and phenomenon. He writes: "In the more complex textures of *Electric Counterpoint* one is aware not so much of the workings of voice against voice as of the elaborate cross-rhythms that result from their combination" (Fox 1990, 4). In this way *Electric Counterpoint*, the phase shifting technique and the canon, and for that matter the pulsing repeated notes of the previous chapter, all characterize how Reich's compositions often germinates from rhythmic processes, which Reich attests to in his *Music as a Gradual Process* (Reich 1974).

Schwarz points out that the canon and phasing process are very successful compositional techniques for attaining Reich's ideal of music as a gradual process. "Canons determine all the note-to-note details and the overall form simultaneously", as Schwarz writes in his previously mentioned *Steve Reich: Music as a Gradual Process*. "A canon works itself out in a predetermined, impersonal manner; once the distance between canonic entries is selected, the pitch content "is set up and loaded" and "runs by itself" (Schwarz 1990, 250). In addition to Reich's "neutral" and meticulously composer-controlled praxis of writing music, the e.g., earlier mentioned *Drumming*, *Piano Phase*, and *Electric Counterpoint* also encompass the minimalist characteristic of emphasizing musical aspects that usually go unnoticed.[11] Schwarz cites Reich saying: "By restricting oneself to a single, uninterrupted process, one's attention can become focused on details that usually slip by" (Schwarz 1980-81, 376). In his article *Repetitive*

[10]*Electric Counterpoint* also harbors two subsidiary techniques which are part of Reich's composing of canons: explication of resulting patterns, and rhythmic construction. The latter consists of the almost note-by-note real-time fruition of a canonic subject, before integrating that rhythmic transition into the, thus gradually growing, canonic framework. Melodic patterns that result from the eventual canon, that differ from the canonic subject, are explicated in the leading voice and is played on top of the canon.

[11]Schwarz also maintains that "many aspects of Reich's early minimalist period can be viewed as direct rebellions against the various factions of the post-war avant-garde, as reactions against serialism, free atonality, and aleatory" (Schwarz 1980-81, 376).

and Systemic Music musicologist Brian Dennis describes this Reichian (and minimalist) way of composing as encouraging "the *active* aural exploration of harmonies, harmonics and their interaction" (Dennis 1974, 1036, emphasis in original). Thus I would state, what musicologist Fox argues to be the case for "Reich's major works with text from the 1980s" (Fox 1990, 8), that Reich's treatment of the canon causes an awareness of the very act of making music. In a way, hearing one of the piano players speed up, makes one imagine, or better yet, pinpoint a specific musical character of the material. Similarly, *Electric Counterpoint* emphasizes guitar picking, and space, as in the space between consecutive eighth-notes. The impersonal way with which Reich's phase shifting technique magnifies specific musical phenomena, paradoxically leads to that stated musical element to become particular, personalized, and differentiated. As Reich writes himself: "Focusing in on a musical process makes possible a shift of attention away from *he* and *she* and *you* and *me*, outwards towards *it*" (Reich interviewed in Nyman 1971, 230, emphasis in original). Specifically, this end-result, the attention to *it*, is present in *The Way Up*.

Figure 12: First position of the temporal and metric phase shift in The Way Up's third movement. Reduction of measure 1324-1325 (Metheny n.d.).

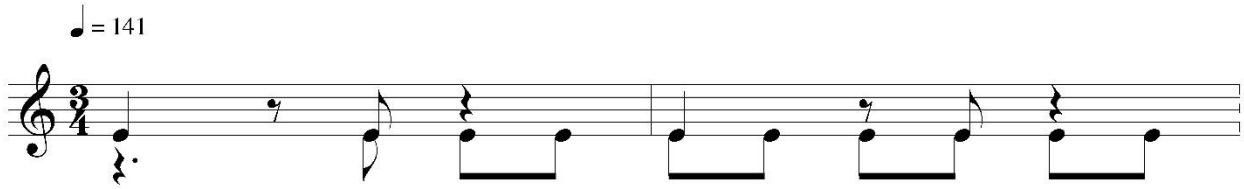


Figure 13: Alternate position of The Way Up's phase shift. Measure 1340-1341 (Metheny n.d.)

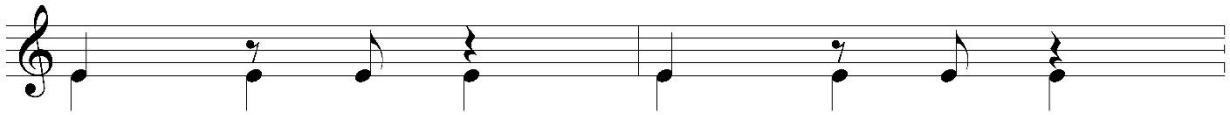


Figure 14: Phase shifting in The Way Up. Rhythmic augmentation to 5:6 ratio. (Metheny n.d. measure 1365-1366).

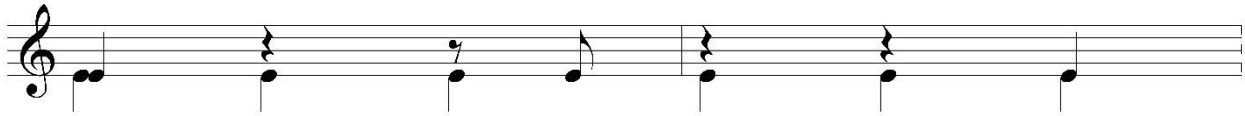


Figure 15: Second phase position: simple quadruple meter at 112 bpm. Measure 1380-1381 (Metheny

n.d.).

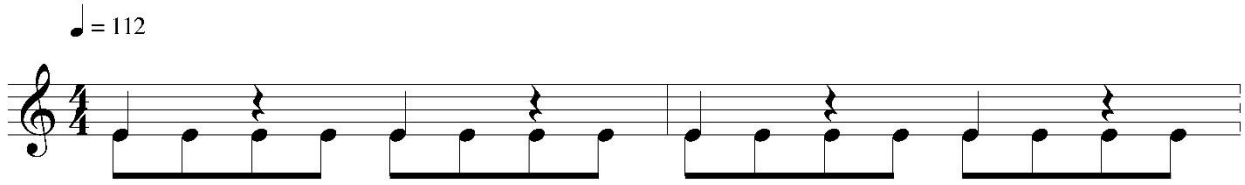


Figure 16: Dotted quarter-notes manifest a 2:3 polyrhythm (measure 1386-1387, Metheny n.d.)

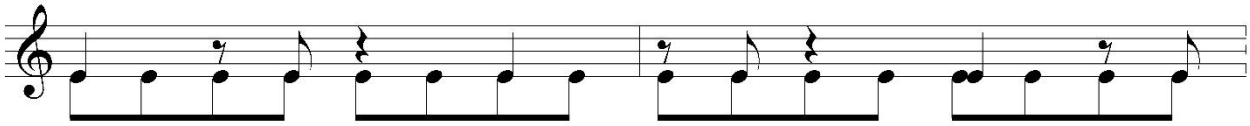


Figure 17: Dotted eighth-notes manifest a 2:3 polyrhythm on the level of the eighth-note. Shown are measures 1392-1393 (third guitar part not indicated) (Metheny n.d.).

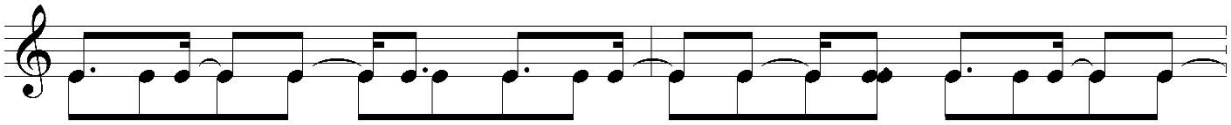
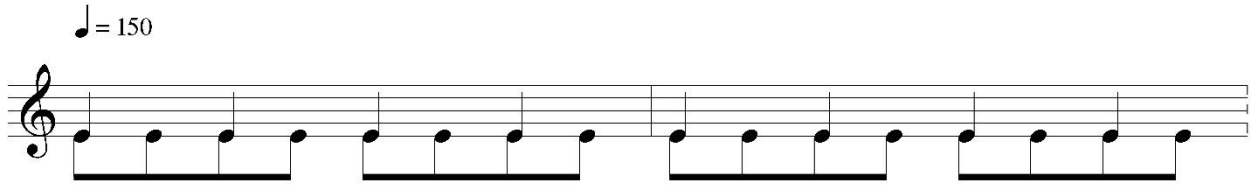


Figure 18: Third phase position: simple quadruple meter at 150 bpm. Measure 1398-1399 (Metheny n.d.).



The Way Up's third movement contains a modified application of Reich's phase shifting technique, which similarly brings certain aspects of music-making front and center. Figure 12 on the previous page, shows a reduction of the guitars' accompaniment figure for a piano solo, which is however not indicated in the lead-sheet as a piano solo. The lead-sheet indicates an unabatedly repeated E^4 in different rhythmic patterns on two, sometimes three individual staffs. The section's beginning also envelops an arpeggiating figure that we leave out of consideration here. At one hundred and forty-one beats per minute the E^4-pattern at first envelops the simultaneous sounding of six eighth-notes, against two dotted quarter notes in simple triple meter (see figure 12). After six measures only the dotted quarter-notes remain, which after ten bars are joined by plain staccato quarter-notes (see figure 13 on the previous page). This opening part thus explicates a polyrhythmic ratio of 2:3 at the level of the quarter-note. When, in measure 1365

the dotted quarter notes pattern is augmented to notes that equal five eight-notes in length, the 2:3 ratio phases into a 5:6 ratio at the level of the eighth-note (see figure 14 on page 33). The quarter-notes then stop and only the 5:6 division of the triple meter remains. As a result the sense of this triple meter fades away. In bar 1380 this remaining 5:6 division of the triple meter has manifested a gradual metric and temporal transformation as the old 5:6 pattern phases into the downbeats of a simple quadruple meter at one hundred and twelve beats per minute (see figure 15 on the previous page). A pattern of eight eighth-notes in the latter metric and temporal order, solidifies what was previously the 5:6 division of a simple triple meter into the downbeats of a simple quadruple meter at one hundred and twelve beats per minute. In bar 1386 the quarter-notes change into staccato dotted quarter-notes, again creating a 2:3 ratio at the level of the quarter-note (see figure 16 on the previous page). When a pattern of dotted eighth-notes occurs in bar 1392 this ratio changes into 2:3 at the level of the eighth-note (see figure 17 on the previous page). After four measures the simple eighth-note pattern fades out, leaving the dotted eighth-notes to create a new temporal order in the same manner as previously illustrated in the transformation from the simple triple meter to the simple quadruple meter (indicated in figure 12-14 to 15). In bar 1398 the dotted eighth-note division of the one hundred and twelve beats per minute simple quadruple meter, phase to be the quarter-note division of a one hundred and fifty simple quadruple meter (see figure 18 on the previous page). This new temporal order is again solidified by playing eight eight-notes in this new tempo (see figure 18).

Thus far, meter and tempo has phased from simple triple meter to simple quadruple meter, and from one hundred and forty-one quarter-notes per minute to one-hundred and twelve, and then to one hundred and fifty quarter-notes per minute. These metrical and temporal modulations were all achieved with step-wise motion by either introducing a duple beat division in simple triple meter, or a triple beat division in simple quadruple meter. Every time a new metric and temporal system is introduced in this way, the new downbeat is locked by playing the eighth-note division of a complete measure (as shown in figure 15 and 18). However, the subsequent temporal transformation, happening in bar 1418, is handled differently. The downbeat of the previous one hundred and fifty simple quadruple meter section continues into the new temporal order of this section. The old tempo thus lingers on in a pattern of quarter-notes, which each equals the length of five quarter-notes in the actual temporal system (see the first two measures of figure 19 on the next page). The downbeats of illustration 18 thus transform into the quintuple division shown in figure 19. Through this

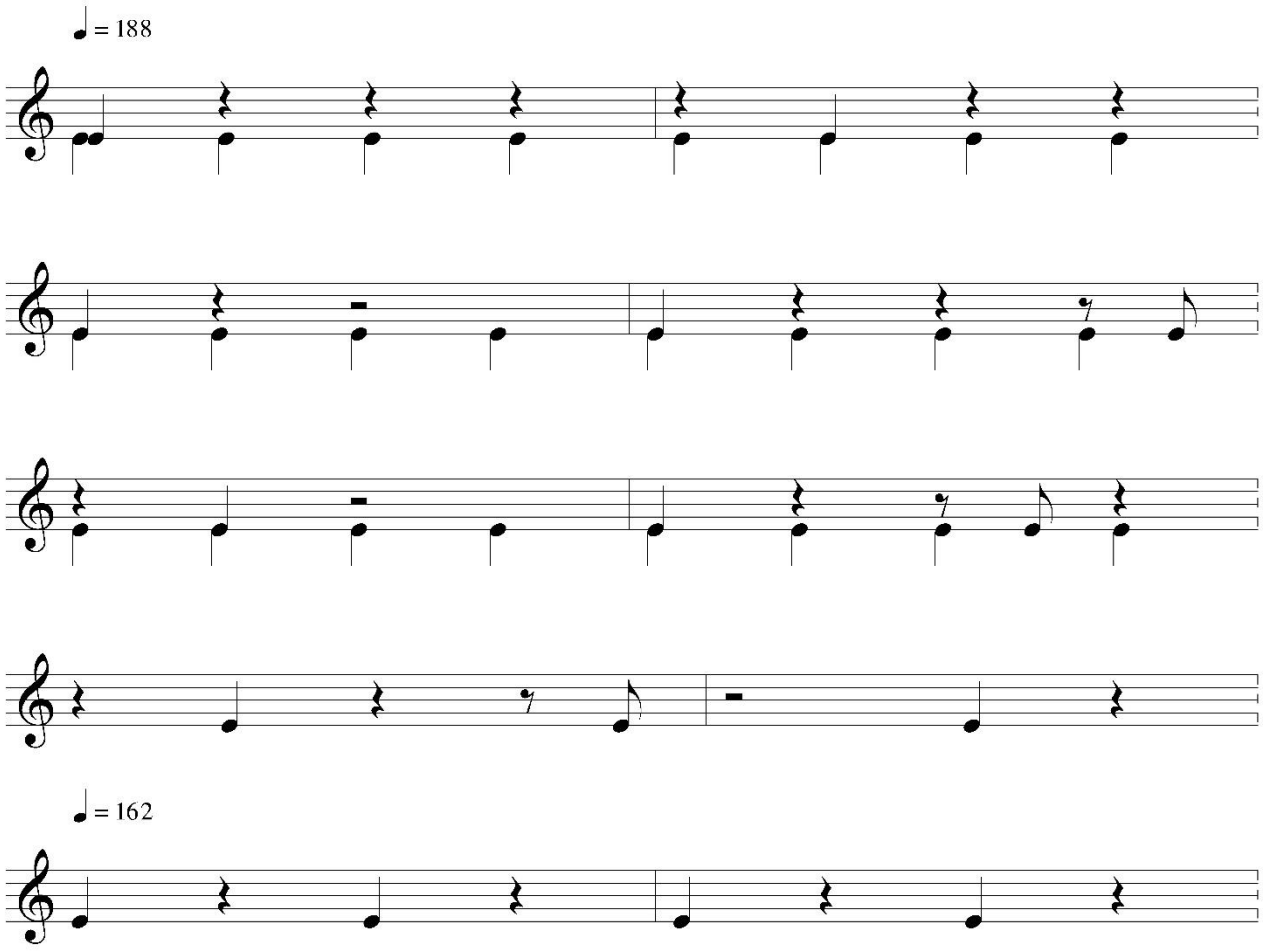


Figure 19: Fourth phase position: simple quadruple meter at 188 bpm. The dashed bar lines indicate that the shown measures are not subsequent to each other. In this way the illustration shows a reduction of measure 1418-1438 (Metheny n.d.).

rhythmic dissonance the tempo gradually transforms to one hundred and eighty-eight beats per minute (see figure 19). The quintuple division is then gradually diminished in metric length. Quarter-notes that at first equal the length of five quarter-notes (i.e. ten eighth-notes), morph into the duration of whole notes, then seven eighth-notes, then six eighth-notes, and finally five eighth-notes (see the up-stemmed notes of the first eight measures of figure 19). With this final pattern, reached in bar 1335, the phase shifting section has ended and germinates a one hundred and sixty-two simple quadruple meter (see measure nine of figure 19).

However, part of the underlying structural device of the pulsing repeated notes, *The Way Up* implements the phase shifting technique as only a local, demarcated event. Besides the phase shifting technique, there is no use of the canon. In sum, the musical example described above shows a new application of the phase shifting technique. In reference to Christopher Fox' aforementioned definition of the phase shifting technique, there gradually

appear new versions of the same musical figure, yet not at a rhythmically discernible distance from its first appearance, but rather at a metrically and temporally discernible distance from its previous appearances. The plural *appearances* indicates that the phase shifting technique is also expanded. It is not limited to musical products that result from the specific synchronization of pattern B against pattern A, but rather of pattern B against A, then C against B, then D against C, etc. In doing so, it moreover relatively diminishes the role of synchronicity. Due to the maximization of limited materials and concepts that is characteristic of minimalist art, and Reich's employment of the phase shifting technique in particular, Schwarz argues that minimalism is an art "in which contrast and change, and even the progression of time itself, can only be appreciated at a much slower rate than that to which we are normally accustomed" (Schwarz 1980-81, 376). In the phase shift that is placed underneath a piano solo in *The Way Up*'s third movement, *The Way Up*'s use of the phase shifting technique perhaps increases the rate in which one appreciates contrast, change, and time to un-minimalistic proportions. Metheny's and Mays' employment of the phase shifting technique still envelops the use of an impersonal musical process that results in the differentiation and personalization of time and meter progressing. In this perspective *The Way Up*'s phase shifting technique reproduces a musical effect much like Reich's application of this technique in *Piano Phase*, *Drumming*, and *Electric Counterpoint* as well.

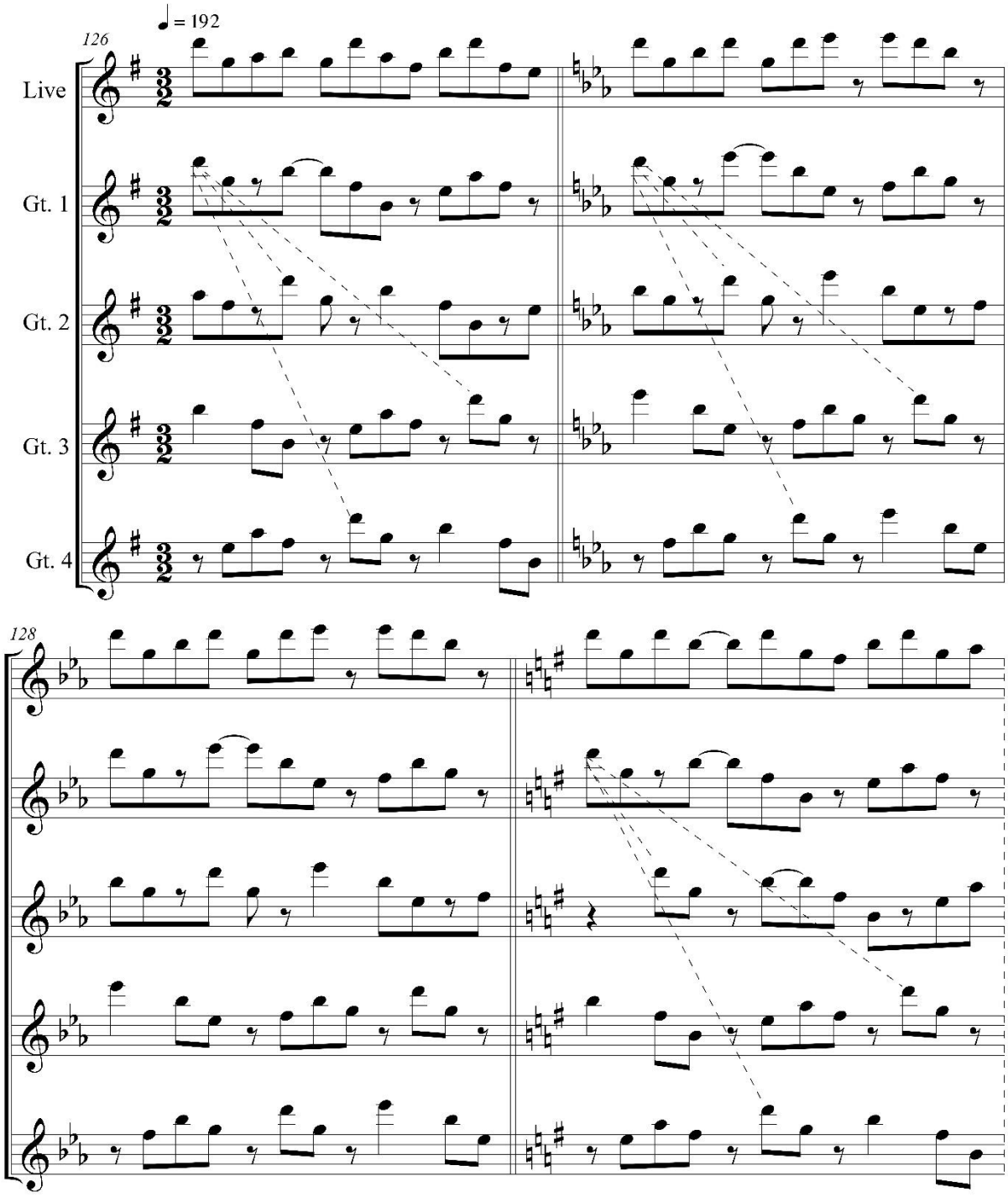


Figure 20: An example of sectional modulation in Electric Counterpoint's third movement (Reich 1987). The Dashed diagonal lines indicate canonic positions. Note how the canonic subjects remain almost the same during the modulation from A Dorian to E ♭, and back again. Also note how Gt. 2 skips an eighth-note in the example's final measure.

Chapter c) harmonic language

In order to evaluate both the musical form of *The Way Up* and to capture part of its compositional genealogy, the previous chapters compared Steve Reich's employment of pulsing repetitive notes and the phase shifting technique, with the analogical appearance of these musical phenomena in Metheny's and Mays' *The Way Up.* Albeit in a transformed way, this study maintains that the aforementioned Reichian compositional techniques do present themselves in *The Way Up.* This final chapter compares Reich's harmonic language to *The Way Up*'s main theme, and the harmonic schemes of a piano solo and trumpet solo from *The Way Up*'s second movement. A comparison of the harmonic language is pertinent, because the Reich's pulsing repeated notes and canons integrally manifest a distinctive harmonic language. The two instrumental solos illustrate how *The Way Up*'s harmonic language is much like Reich's modalism in *Electric Counterpoint*. However, *The Way Up*'s main theme illustrate how Metheny and Mays make extensive use of functional harmonic cadences, which is irreconcilable with Reich's harmonic language when using the phase shifting technique and pulsing repeated notes.

Because the harmony of minimalist music often results from nondevelopmental pattern repetition, K. Robert Schwarz, in his already mentioned article *Process vs. Intuition*, maintains minimalism's harmonic language to be static (Schwarz 1990). Harmonic progressions often lack any functional context and modulation is limited to block-like constructions. In part two of *Steve Reich: Music as a Gradual Process* Schwarz, for instance, writes of Reich's 1973 *Six Pianos*: "harmony is established by repetition alone without any semblance of functional harmonic progression, the new key simply being juxtaposed alongside the previous one" (Schwarz 1981-82, 239). Much like Schwarz's analysis of Reich's *Six Pianos*, the harmony of the latter's *Electric Counterpoint* is nondevelopmental, nonfunctional, and modulations only happen through direct modulation (see figure 20 on the previous page). The chord cycles of *Electric Counterpoint* often envelop root movements in minor and major thirds. *Electric*

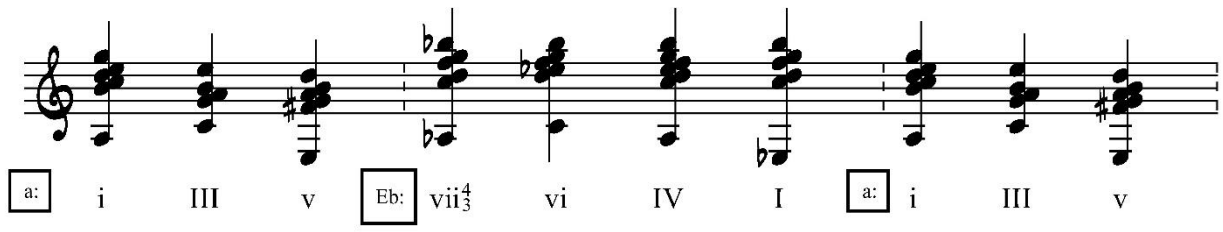


Figure 21: Reduction of Electric Counterpoint's first movement's chord cycle.

Counterpoint's first movement is in A Dorian, and consists of the harmonic progression from a tonic root position minor seventh chord with an added ninth and eleventh ($i^{9,\ 11}$), to a root position mediant major seventh chord with an added sixth (III^{13}), which then moves to a root position dominant minor seventh chord with an added eleventh and ninth ($v^{11(9)}$) (see figure 21 on the previous page). After this the key abruptly shifts in measure 35 by way of a direct modulation to E♭. An analysis with roman numerals of this section is shown in figure 21. Subsequently another direct modulation brings the music back to the A Dorian mode and recapitulates the harmonic sequence of the first section (see illustration 21). Similarly, the chord cycle of *Electric Counterpoint*'s second movement displays triadic root movement when progressing from F♯, to A, to c♯. An E major seventh chord is built on F♯ (I^{13sus}). And then an A major seventh chord with added ninth and thirteenth follows ($III^{\Delta 11,\ 13}$), which is then succeeded by a C♯ minor seventh chord with an added ninth and eleventh ($v^{7(9,\ 11)}$). Albeit euphoniously, in *Electric Counterpoint*'s first two movements harmony has existed rather separately, in the chord cycle on the one hand and the canon on the other. As the cycle progressed via pulsing repetitive notes, the canon continued unabated. In *Electric Counterpoint*'s third and final movement there is no chord cycle providing a harmonic progression. Instead the canon itself makes direct modulations from the tonal field of a Dorian, to that of E♭, thus recapitulating the tonalities of the first movement (illustration 20 on page 38 can be seen illustrating the case in point). The direct modulations of the third movement's canonic subjects appear rather haphazardly, harmony does not seem to fulfill a structural purpose other than reminiscing the tonal juxtapositions of the first movement.

In Reich's *Music For Eighteen Musicians* the first movement introduces a chord cycle of nine chords, upon each of which a subsequent movement is based (Schwarz 1981-82, 246). In sum, in *Music For Eighteen Musicians* (1976) Reich's harmonic language operates as a meta-structure, rather than the harmonic development from measure to measure, or the tonal development of a section. In *Six Pianos* harmony is merely a byproduct of pattern repetition, and secondary to the rhythmic process (see Reich 2002, 73). In *Electric Counterpoint* a modal harmonic cycle underpins section's beginning and endings (see Schwarz 1990, 248).

Piano and trumpet solo

The harmonic language Metheny encountered in Reich´s *Electric Counterpoint* envelops harmonies with rich diatonic embellishments. Furthermore, the harmonic progressions do not

envelop cadences, and the modulations are direct modulations. Yet, the different harmonies that occur within one tonal center always belong to a diatonic pitch collection. In this way *Electric Counterpoint*'s harmonic language is not so much static, but rather is to be found, as if floating, in diatonic harmonic areas of a tonal center. This phenomenon of floating-harmony resonates in musicologist Keith Potter's description of the harmonic language of Reich's *Piano Phase*. In respect of the latter work, Potter identifies four discoveries that Reich made in his experimentation with musical material that culminated in *Piano Phase* (Potter 2000, 182). One of these discoveries was "a *viable*, and *pliable*, *modal* material which would give the vital extra dimension necessary to allow the composition of instrumental music based on rhythmic processes (but lacking the added emotional layer of speech and everyday sounds offered by tape)" (ibid., my parentheses and emphasis). This pliability of Reich's harmonic language is evidenced by the rhythmic augmentations and diminutions a chord cycle is subdued to in *Electric Counterpoint* (cf. e.g., measures 215-224 with 290-299 of *Electric Counterpoint*'s first movement). *Electric Counterpoint*'s use of nondevelopmental diatonic harmonic progressions attest to Potter's identification of Reich's modal language.

Phrase:	Phrase length in number of bars and meter:	Key:	Analysis of harmonic progression:								
1.	9x9/8	G	iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	ii^{7}
2.	9x9/8		iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	VI	
3.	8x9/8	Bb	(V^{sus})→[V]								
4.	8x9/8		(V^{sus})								
5.	9x9/8		iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	ii^{7}
6.	9x9/8		iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	VI^{add2}	
7.	8x9/8	Db	(V^{sus})→[V]		I^{sus}		♭VII^{sus}		(V^{sus})→[iii]		

Table 4: Harmonic analysis of The Way Up's second movement's piano solo (track 2, '16'58, measure 823-882 in Metheny n.d.).

The modal character present in *Electric Counterpoint* is comparable with two solo schemes of *The Way Up*. Table 4 shows the harmonic analysis of the piano solo in *The Way Up*'s second movement. Despite the secondary dominant in the fourth phrase, the harmonies progress without cadences merely accenting different harmonic areas of a tonal center. Table 5, on page 42, shows the harmonic analysis of the trumpet solo that succeeds the piano solo in *The Way Up*'s second movement. The harmonic progression is very similar to the piano's solo

scheme. Despite the authentic cadence to the neapolitan supertonic, here the harmonic motion largely consists as well without any cadences and swings from one harmonic area to the next. However, the harmonic language of these solo schemes diverge from Reich's modal language in *Electric Counterpoint*, in respect of *The Way Up*'s use of mixture chords, and more importantly a strict harmonic rhythm, instead of Reich's pliable treatment, as a groove factor.

Phrase:	Phrase length in number of bars and meter:	Key:	Analysis of harmonic progression:								
1.	9x9/8	Db	iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	ii^{7}
2.	9x9/8		iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	VI^{add2}	
3.	8x9/8		I^{sus}				(V^{sus})				
4.	8x9/8		♭II^{sus}				VI^{sus}			(V^{sus})	
5.	11x9/8		iii^{7}	I$^{\Delta}$	IV$^{\Delta}$	iii^{7}	♭VII$^{\Delta}$	iii^{7}	I$^{\Delta}$	VI^{add2}	
6.	8x9/8		I^{sus}				(V^{sus})				
7.	8x9/8		♭II^{sus}				VI^{sus}			D:(V^{sus})→[iii]	

Table 5: Harmonic analysis of The Way Up's second movement's trumpet solo (track 2 '18"31, measure 883-943 in Metheny n.d.).

The harmonic aspects of *The Way Up*'s main theme

The harmonic setting of The Way Up's main theme also illustrates a point of divergence with Reich's harmonic language. For the purpose of brevity the analysis limits itself to theme's first manifestation and recapitulation in The Way Up's second movement (measures 205-267, 369-405). An analysis of The Way Up's main theme's harmony serves to illustrate the work's use of functional harmonics. The theme's first statement is constructed in the simple song form AABA. A short twelve-bar guitar solo succeeds the first statement of the theme. Subsequent to the guitar solo follows an interrupted recapitulation of the main theme, which is succeeded by an interlude, and then a seventy-two bar guitar solo. This section then ends with a full recapitulation of the main theme. The just mentioned interlude and seventy-two bar guitar solo will be left out of consideration.

The main theme's first A's each comprise eight measures which are shown in figures 22-

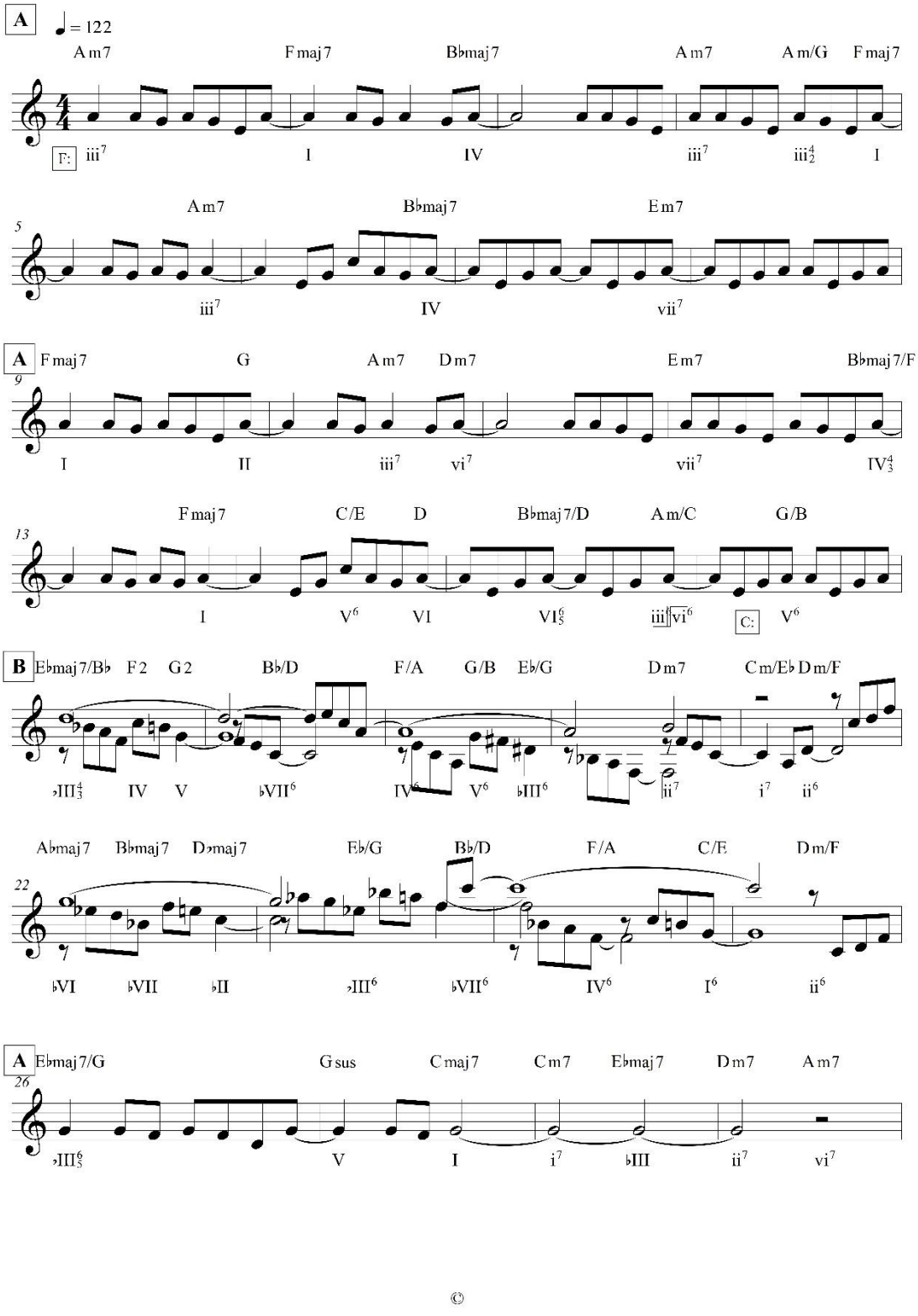


Figure 22: Reduction of The Way Up's second movement's main theme. Shown are melody and harmony (Metheny n.d. measure 205-267). Note that the illustration continues on the following pages.

24. The tonality of F is substantiated by the consequent use of harmonies that belong to the diatonic pitch collection of the key of F -except for both the E minor seventh tonality in

measure seven of figure 22, and the major submediant triad in measure 14 of figure 22. Harmonic progression envelops root motion in thirds, fourths, seconds, and diminished seconds. The roman numerals of figure 22 show that the main theme's first A never envelop cadences.[12] There is no harmonic ambivalence, but the absence of dominant, and subdominant to tonic motion, as well as the mediant that serves as the theme's first harmonic underpinning, illustrate the harmonic language to be more modal than diatonic. It is only in the theme's second A, that the dominant chord occurs. However, figure 22 shows that this dominant first-inversion triad deceptively leads to the major submediant, which progresses to the subdominant -anything but the tonic occurs after this dominant first-inversion triad (see measure 14 in figure 22). The second A also envelops a plagal cadence prior to this deceptive cadence (see measure 12-13 of figure 22). The bridge is a modulatory section which envelops both an increase in harmonic rhythm, and an extensive use of mixture chords. The bridge eventually modulates to the dominant C. Twice a perfect authentic cadence is thwarted. In measure 18 of figure 22 the eventual tonic is displaced with an inverted lowered subtonic. Subsequently, in measure 19 of figure 22 the eventual tonic is displaced with an inverted lowered mediant. After a change-of-mode modulation in measure 21 of figure 22, measure 22 features three consecutive nondiatonic keys. In measure 24 of figure 22 the eventual tonic C is reached through a plagal cadance.

The theme's final A continues on this path of a varied use of cadential constructions and mixture chords. Akin to the theme's first statement the lowered mediant appears in the first measure (measure 26 of figure 22). The second measure contains an authentic cadence to the tonic. An immediate change-of-mode modulation prepares the return to the lowered mediant (measure 28 of figure 22). An F minor seventh chord acts as a pivot chord to the lowered submediant (measure 30 of figure 23, shown on the next page). Through a plagal cadence the tonic C then reoccurs (measure 31-32 of figure 23). In the subsequent five measures the tonic is prolonged by way of alternating the tonic with the mediant. In sum, the harmonic language of *The Way Up*'s main theme's first statement envelops an exponentially increasing presence of mixture chords and cadential constructions.

The short twelve-bar guitar solo that follows after this initial AABA envelops a direct modulation to the major relative minor, i.e. the key of A major (wrongfully indicated as a

[12]The stepwise motion in measure 4 of illustration 22 is perhaps the exception that proves the rule. However, harmonic motion from the mediant to the tonic can hardly be conceived as a cadence.

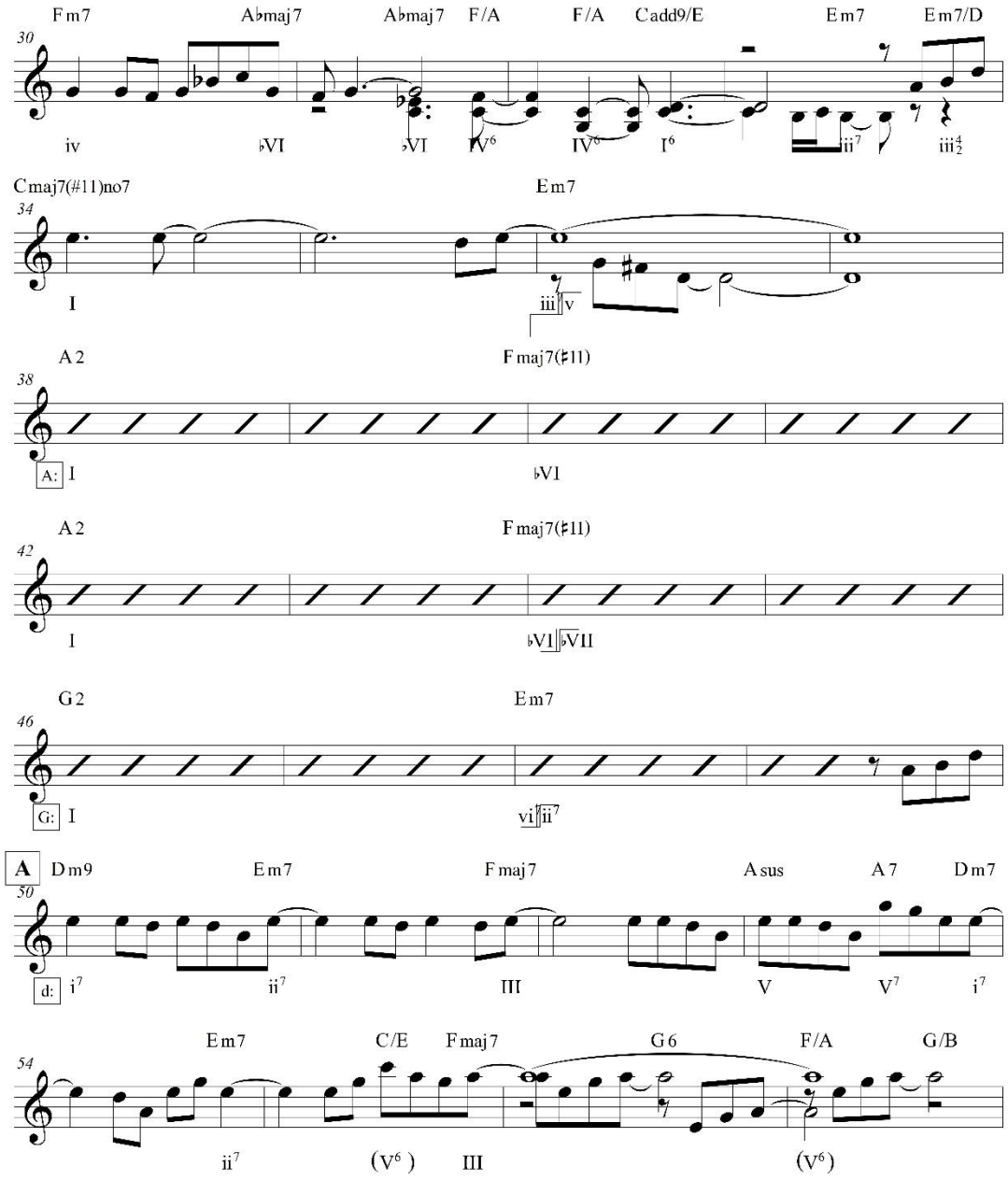


Figure 23: Continued from previous illustration.

modulation by pivot chord in measure 36-38 of figure 23). The first eight measures alternate the tonic with the flat submediant (I-♭VII$^{\Delta}$). The final four measures envelop a modulation by

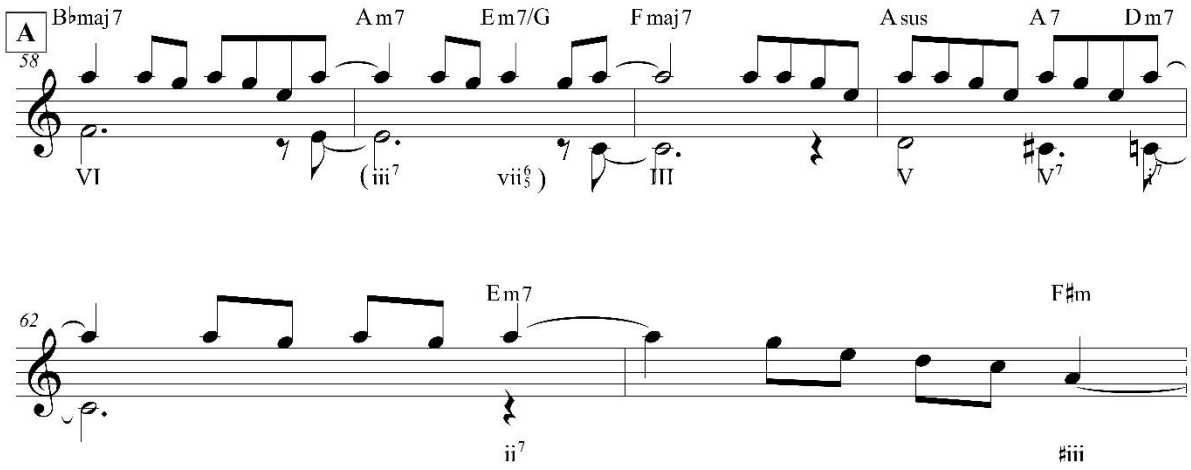


Figure 24: Continuing previous figure.

pivot chord to G (see measure 44-46 of figure 23). In these final measures of the guitar solo, the tonic leads to the submediant, which acts as a pivot chord to the tonality of D minor. In the latter key the theme's first two A sections recur (measure 50-63 of figure 23-24). Before an authentic cadence to d minor occurs, an E minor seventh chord oscillates to the mediant. The previous step-wise oscillation to the mediant F, now interjected with a first-inversion secondary dominant C/E, is repeated subsequent to the authentic cadence to the tonic (see measure 50-55 of figure 23). The mediant F then transforms into a first-inversion secondary dominant, which, together with upper-structures on F, thus tonicize the submediant B♭ (see measure 56-58 of figure 23-24). After an upper-structure on the tonic, i.e. the A minor seventh chord, the first-inversion E minor seventh chord restates the oscillation to the mediant (see measure 59-60 of figure 24). After another authentic cadence to the tonic, the E minor seventh chord resolves to an F♯ minor triad thus bringing about a change-of-mode modulation (see measure 61-63 of figure 24).

D major is the tonic of the subsequent interlude, which together with the consecutive seventy-two bar guitar solo following this interrupted recapitulation of *The Way Up*'s main theme (shown in measures 50-63 of figure 23-24) are left out for the purpose of brevity. Of our interest is the full recapitulation of the theme's AABA structure and its use of cadences (measure 369-405, '5”07-'6”15, see figure 25-26 on the next pages). The recapitulation starts in the key of A♭. Of special interest is the secondary ii-V tonicizing the relative minor in measure 4 of figure 25. In measure 6 of figure 25 an authentic cadence leads back to the tonic. A secondary dominant to the relative minor follows immediately, and effectuates a modulation

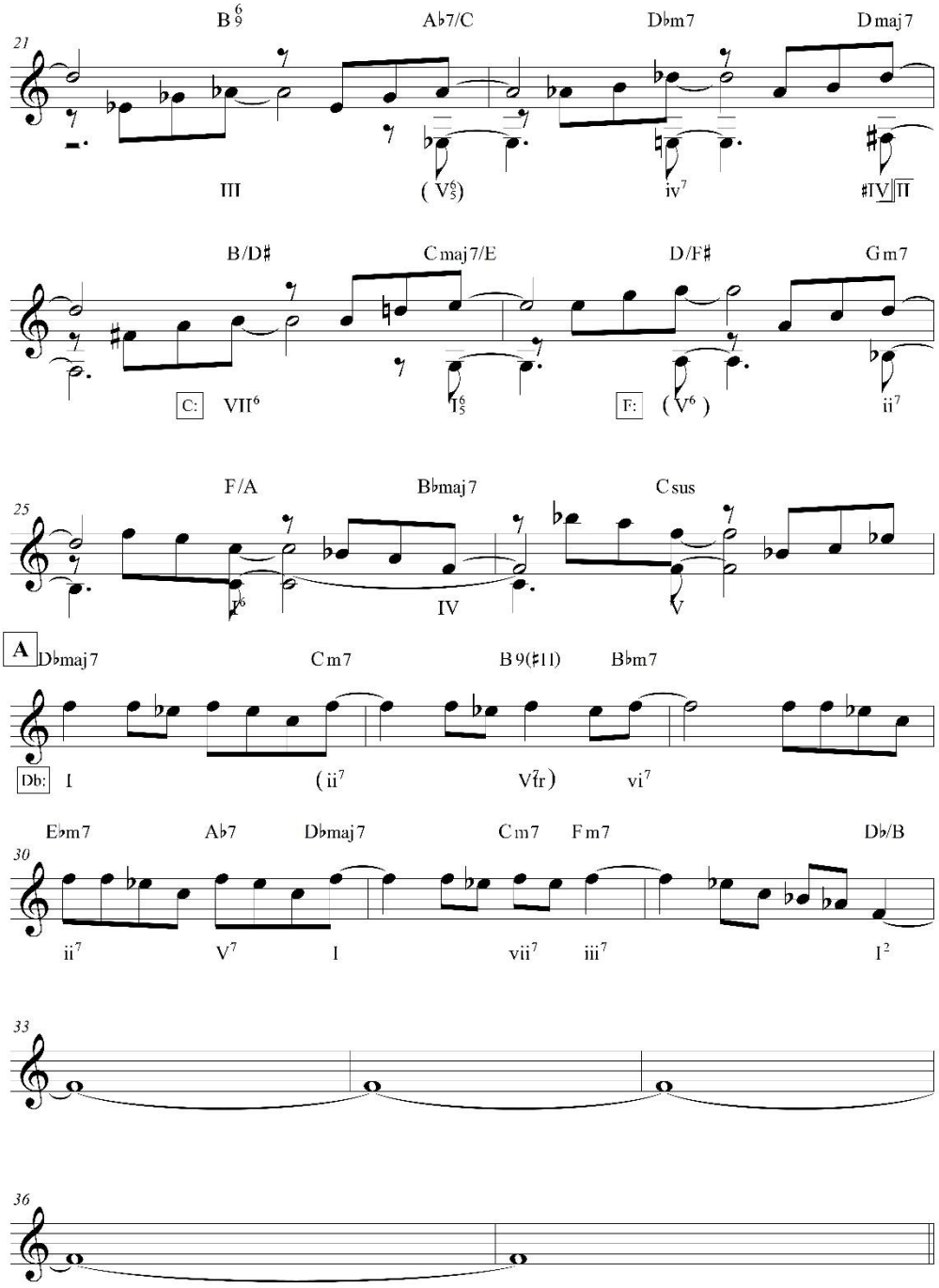


Figure 25: Reduction of The Way Up's second movement's recapitulation of the main theme. Shown are the harmony and melody. Track 2, '5'07-'6'15, measure 369-405 (Metheny n.d.). The illustration continues on the next page.

to F minor. In measure 11 of figure 25 an authentic cadence modulates the music to A♭ minor. A second authentic cadence to the minor tonic (a♭) is preceded by a secondary dominant tonicizing the submediant F♭ (written as E in measure 12 of figure 25). In measure 15-16 of figure 25 the mediant is reached by a chain of tritone substituted secondary dominants.

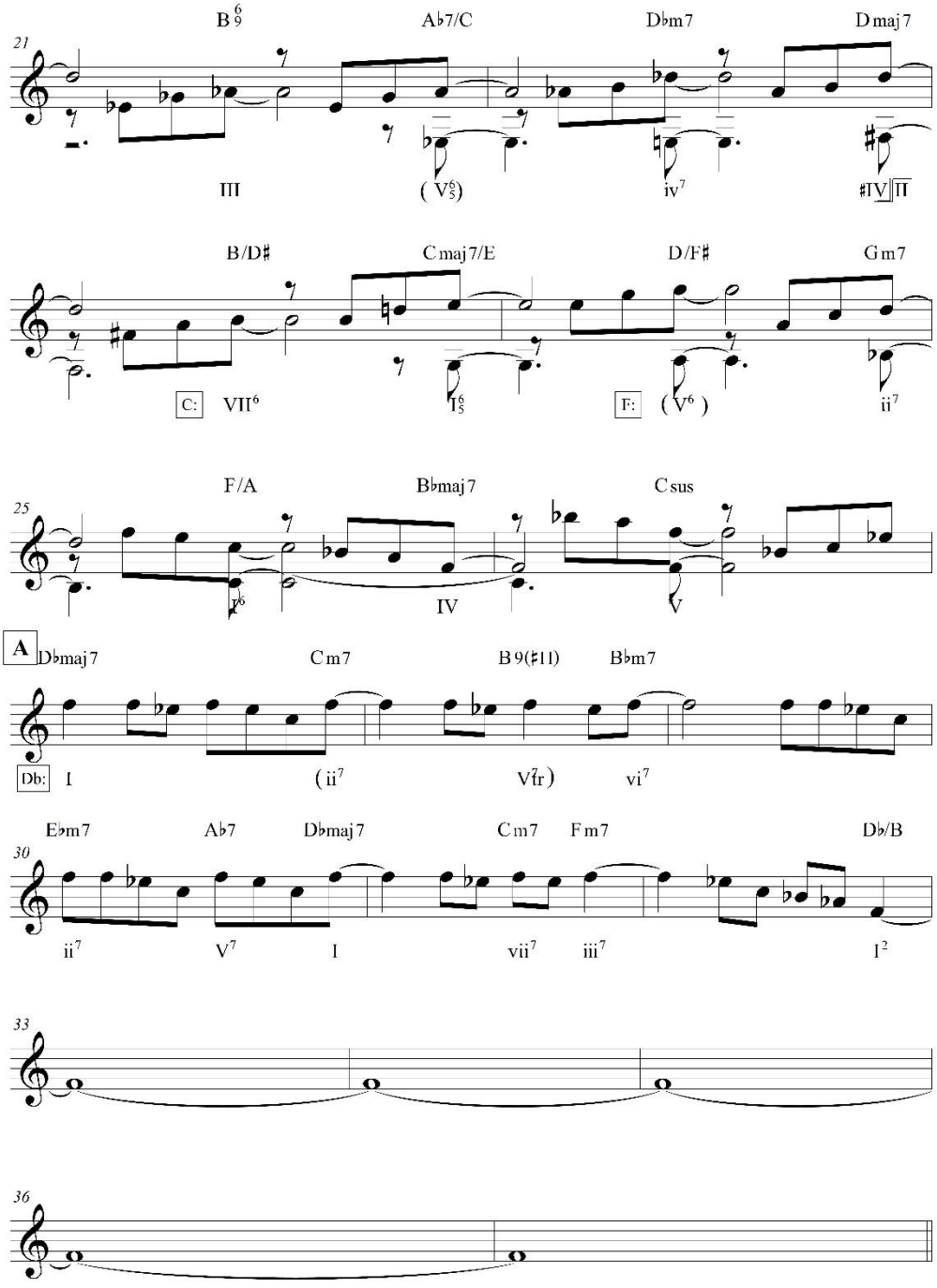


Figure 26: Continuing the previous illustration.

The bridge starts with a transient modulation to the relative minor (f). In measure 19-20 of figure 25 an authentic cadence leads back to the original tonic A♭ minor. Similarly, the minor subdominant is tonicized using an authentic cadence in measure 21-22 of figure 26. Then,

in measure 22 of illustration 26, a D major seventh chord acts as a pivot chord to the key of C major. The main theme's final A is the reached using a deceptive cadence in measure 25-27 of figure 26). Of further interest is the secondary ii-V^{tr} to the submediant in measure 27-28 of figure 26, and the ensuing authentic cadence to the tonic, and the subsequent interrupted iii-vi-(ii-V-I) cadence in measures 30-31 of figure 26.

In sum, *The Way Up*'s main theme envelops a plethora of cadential procedures. The main theme envelops authentic, plagal, and deceptive cadences. Modulations happen by common chord, through direct modulation, or by change-of-mode modulation. In addition to transient modulations to the relative minor mode, there is an extensive use of mixture chords. This varied harmonic language stems from Metheny's and Mays' adaptation of the tonal language typical of jazz, and appears in earlier PMG compositions. Consider for instance the foreign modulations in two ballads written by Metheny for PMG, *The Road to You* from the 1993 album of the same name, and *Letter from Home*, which is similarly the title track of a 1989 album release. *The Road to You* is a ternary ABA'. *Letter from Home* is a ternary ABC. To just name a few resembling harmonic constructions present in these two songs. *Letter from Home*'s A section starts with a plagal cadance to the tonic (see figure 27 on page 51). In measure 6 of figure 27 a neapolitan supertonic leads to the tonic. Furthermore, a perfect authentic cadence brings about a modulation to the key of A♭, which serves as the tonic of the song's C section (see measure 16-17 of figure 27). *Letter from Home* also makes use of both deceptive cadences (see measure 21-22, 10-11 of figure 27) and mixture chords. *The Road to You*, shown in figure 28 on page 52, illustrates how every other measure a non-diatonic key (such as the lowered subtonic, lowered submediant, and lowered supertonic) is reached by way of secondary supertonic-dominant cadences, and tritone substitutes. In addition to comparing the harmonic output of pulsing repeated notes and the phase shifting technique in Reich's music to the harmonic embedding of these musical phenomena and compositional techniques in *The Way Up*, harmony offers a way to link and compare *The Way Up* with earlier PMG works, sadly this could not be achieved in this study's allotted time and scope.

Secondly, this chapter's conclusion maintains that *The Way Up*'s tonal language is nothing like the meta-structure of Reich's *Music for Eighteen Musicians*. Neither is it a secondary derivative of a rhythmic process, as in Reich's *Six Pianos*. Notwithstanding, an audible resemblance stemming from triadic root movements, *The Way Up*'s operationalization of harmony is also unlike Reich's temporally and modally pliable chord cycles of *Electric*

Counterpoint. Instead, *The Way Up*'s tonal language manifests a metrically locked harmonic rhythm, a variation of cadential constructions and many foreign modulations. These harmonic techniques can also be detected in two earlier PMG compositions, and, in my opinion, probably more.

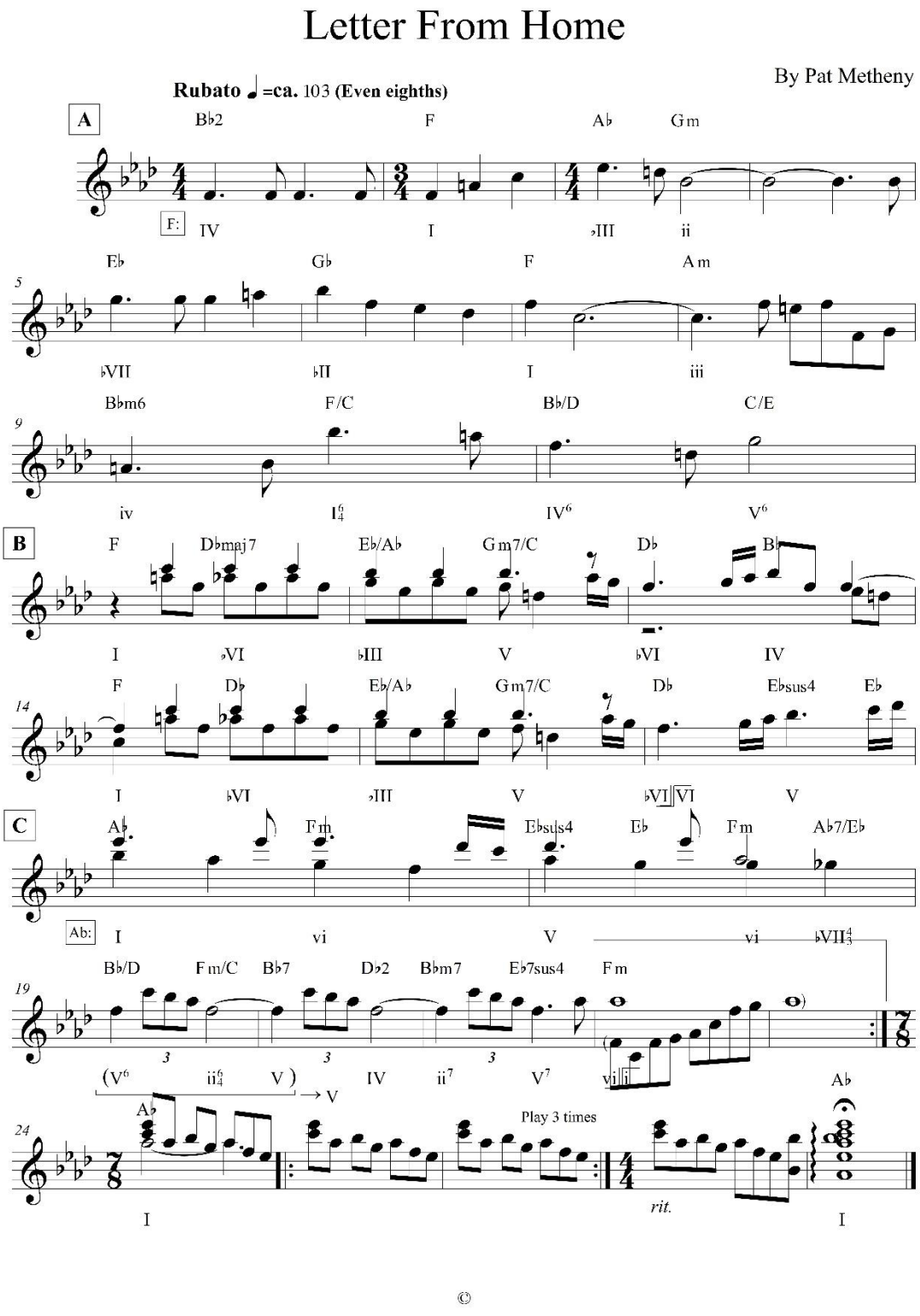


Figure 27: Reproduction of the lead-sheet of Metheny's Letter From Home (Metheny n.d.2). The roman numerals are not shown in the source.

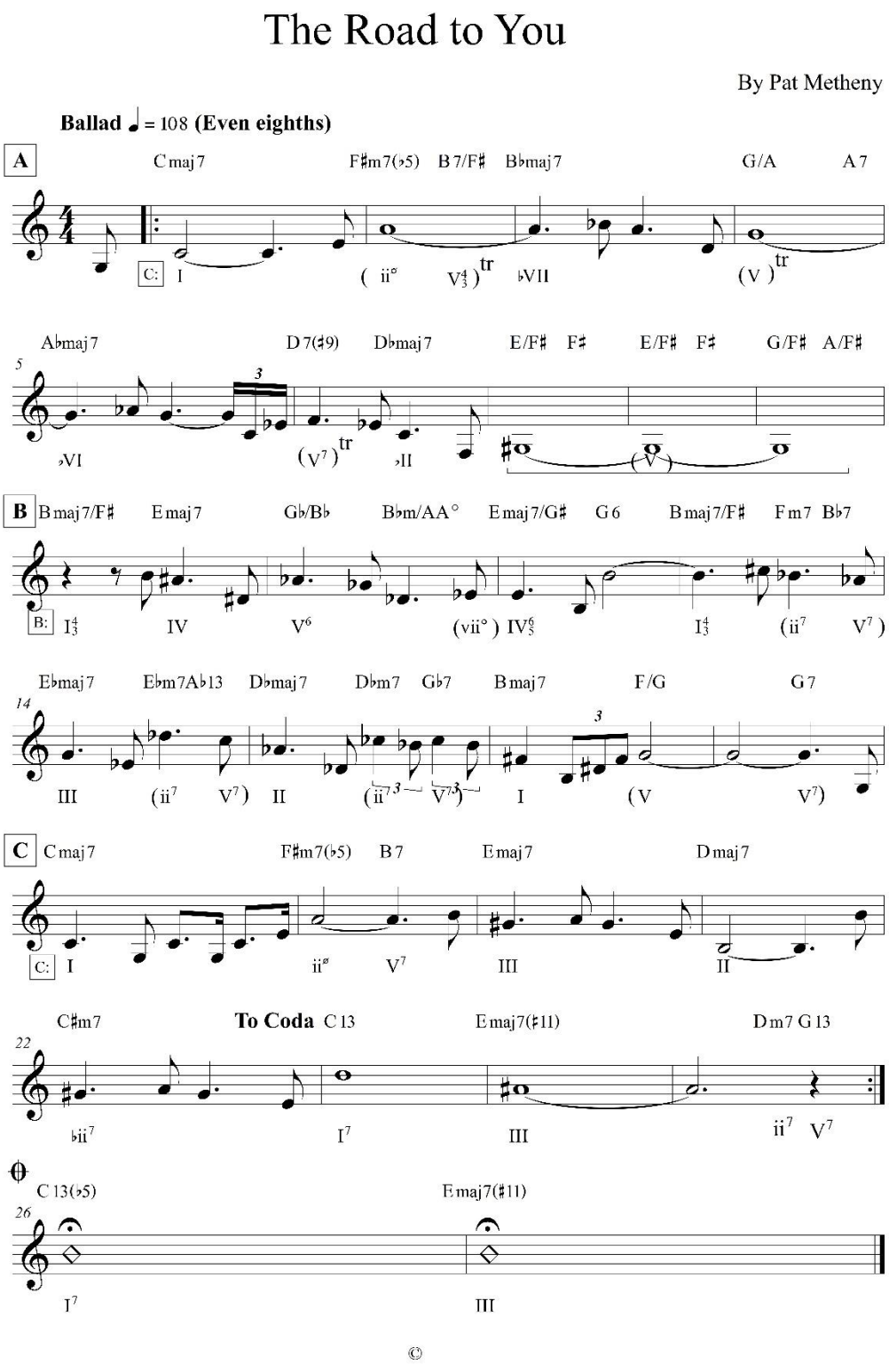


Figure 28: Reproduction of Pat Metheny's The Road to You lead-sheet. Roman numerals are not present in the source (i.e. Metheny n.d.2).

Conclusion

This study has sought to compare compositional techniques employed in *The Way Up* and Steve Reich's music. *The Way Up*'s pulsing repeated notes are not merely audible reminders of the Reichian sound world, they also share a similar compositional function. Much like, Reich's use of pulsing repetitive notes in e.g., *Electric Counterpoint*, the pulsing repetition of notes is used to both separate and frame musical sections, and the work as a whole. The resemblance of the pulsing repeated notes' structural function, is contrary to their dissimilar harmonic and melodic characteristics. Albeit euphoniously, Reich's pulsing repeated notes appear rather autonomously. The chord cycle of e.g., *Electric Counterpoint* is temporally augmented or diminished, perhaps not in complete disregard of the canon, but a separate entity nonetheless. The pulsing repeated notes in e.g., *Electric Counterpoint* engendered a dense embellished harmonic setting underneath the harmonically static canon. *The Way Up*'s pulsing repeated notes, however, are a textural coloring of a harmonic scheme which is devised for its own reasons. Furthermore, the pulsing repeated notes are an element of a texture which variably envelops an arpeggiating figure and sustained harmonies. The device of pulsing repeated notes thus comes to incorporate a thematic characteristic, which is perhaps to be understood in Metheny's narratological account of *The Way Up*. This is especially apparent in the rhythmic augmentation and diminution of the pulsing pattern that happens in the first movement's coda, the harmonica solo in the second movement, and, finally, in the temporal and metric step-wise modulation in the third movement.

The Way Up's phase shifting section can also be taken as a particular outgrowth of the pulsing repeated notes texture. This interconnection between these two musical phenomena is perhaps already apparent in Reich's music, at least theoretically, as the phase shifting technique revolves as much around repetition as the pulsing repeated notes do. However, *The Way Up*'s phase shifting technique is a step-wise metric and temporal linear transformation, whereas Reich's phase shifting technique is often a circular phenomenon, which furthermore is only temporal. Secondly, a point of divergence is *The Way Up*'s local use of phase shifting, which contrasts with Reich's use of the phase shifting technique as organizing and manifesting a work in its entirety. The harmonic result of Reich's pulsing repeated notes, and phase shifting technique is either a meta-structure, modal, nondevelopmental, or even secondary. This study has shown that in regards of its context, *The Way Up*'s pulsing repeated notes and phase shifting section are embedded in a harmonic language that extensively uses mixture chords,

and plagal, authentic, and deceptive cadences.

The main conclusion of this study, however, pertains to what these resemblances and divergences entail. This study was primarily interested in comparing Reich's music with *The Way Up* to ascertain the latter's musical form, and to use musical form historiographically for hypotheses on the evolution of compositional languages. In this way, it would also have been rewarding to compare the composers' philosophies, which are attested to in interviews and the composers' writings on their own music. This philosophical perspective is very promising, because this study's music theoretic analysis has shown that two parameters of *The Way Up*'s musical design are modified implementations of Reichian compositional techniques. The harmonic analysis entails, however, that *The Way Up* does not subscribe to a minimalist ethos, which aims to capitalize on minute musical elements as the foundation and sounding phenomenology of an entire work. For Reich this was achieved by constructing canons, or phasing patterns against each other. And secondly, by pulsing repeated notes emphasizing rhythm, or e.g., in *Electric Counterpoint* the sound of the guitar. Yet, in *The Way Up* both the pulsing repeated notes and the phase shifting section, are part of a bigger whole, which consists of instrumental contrasts, harmonic contrasts, themes, metric changes, etc. This study has only begun analyzing *The Way Up*'s pulsing repeated notes and phase shifting section in relation to the work's total musical framework. A narratological account of the timbral and instrumental qualities could offer further analytical insight into *The Way Up*'s musical form.

This study's observations might tempt the question whether *The Way Up* is or is not indebted to and built on Reich's music. It should be clear by now, that the cross-fertilization is more complex. This study's music theoretic analysis indicates that Metheny and Mays ingeniously incorporate distinct elements of Reich's music into their own musical praxis. Yes, *The Way Up*'s pulsing repeated notes provide structural reference points. But it does not provide the harmonic underpinning of the work. Nor is it an autonomous musical parameter. Yes, *The Way Up* manifests a phase shift. But it is not the sole compositional technique for development and a work's phenomenological substance. In the latter respect, *The Way Up* relies on thematic and harmonic material, and timbre as well. To compare *The Way Up*'s use of pulsing repeated notes and the phase shifting technique, to both previous and subsequent works of Metheny and Mays, could show whether these musical phenomena characterize *The Way Up* or the composers' compositional methods. To my knowledge, the former would be the case. This study's analysis of *The Way Up*'s pulsing repeated notes and the phase shifting

technique, indicate a musical interaction between the latter work and the music of Reich. In respect of the many modifications *The Way Up* makes in its use of pulsing repeated notes and the phase shifting technique, it is better to speak of an implementation of musical ideas, than of compositional techniques.

\\\\\\\\\Bibliography

Dennis, B. (1974). Repetitive and systematic music. *The Musical Times, 15*(1582), 1036-1038.

Cook, N (2007). *Music, performance, meaning: Selected essays*. Aldershot: Ashgate.

__(2003). Music as performance. In M. Clayton, T. Herbert, & R. Middleton (Eds.), *The cultural study of music: A critical introduction* (pp. 204-214). New York & London: Routledge.

Cox, C. (2011). Beyond representation and signification: Toward a sonic materialism. *Journal of Visual Culture, 10*(2), 145-161.

Fox, C. (1990). Steve Reich's 'Different Trains'. *Tempo*, New Series, No. 172, 2-8.

Fromm, E. (n.d.). *Marx' visie op de mens* (3rd ed.). (P. Rodenko Trans.). Den Haag: L.J.C. Boucher.

Metheny, P (n.d.). *Pat Metheny Group: The Way Up*. S. Rodby (Ed.). Milwaukee: Hal Leonard

Monson, I. (1996). *Saying something: Jazz improvisation and interaction*. Chicago & London: The University of Chicago Press.

Niles, R. (2009). *The Pat Metheny interviews: The inner workings of his creativity revealed*. R.S. Schiff (Ed.). Milwaukee: Hal Leonard.

Nyman, M. (1971). Steve Reich. *The Musical Times*, *112*(1537), 229-231.

Porter, E. (2012). Incorporation and distinction in jazz history and jazz historiography. In D. Ake (Ed.), *Jazz/not jazz: The music and its boundaries* (pp. 13-30). Berkeley: University of California Press.

Potter, K. (2000). *Four musical minimalists: La Monte Young, Terry Riley, Steve Reich, Philip Glass*. Music in the twentieth century series. Cambridge: Cambridge UP.

Reich, S. (2002). *Writings on music 1965-2000*. P. Hillier (Ed.). Oxford: Oxford UP.

__(1974). *Writings about music*. K. Koenig (Ed.). Halifax: The Press of the Nova Scotia College of Art and Design.

Schwarz, K.R. (1990). Process vs. Intuition in the Recent Works of Steve Reich and John

Adams. *American Music*, *8*(3), 245-273.

__(1981-1982). Steve Reich: Music as a Gradual Process Part II. *Perspectives of New Music*, *20*(1/2), 225-286.

__(1980-1981). Steve Reich: Music as a Gradual Process: Part I. *Perspectives of New Music*, *19*(1/2), 373-392.

Watzlawick, P., Helmick Beavin, J., & Jackson, D.D. (1978). *De pragmatische aspecten van de menselijke communicatie* (5th ed.). (G.R. de Bruin, Trans.). Deventer: Van Loghum Slaterus' Uitgeversmaatschappij. (Original work published 1967)

Digital sources:

AIGA Designs Archive (n.d.). CD, *The Way Up,* Pat Metheny Group. Retrieved from: http://designarchives.aiga.org/#/entries/%2Bid%3A1148/_/detail/relevance/asc/0/7/1148/cd-the-way-up-pat-metheny-group/3

Conrad, T. (March, 2005). Pat Metheny Group: The Way Up. Jazz Times. Retrieved from: http://jazztimes.com/articles/15316-the-way-up-pat-metheny-group

Forsyth (n.d.). Pat Metheny: The Way Up (Score). Retrieved from: http://www.forsyths.co.uk/music/songbooks-sheets-poprock/artist-group-collections-a-z/m/31749-pat-metheny-the-way-up-score-073999892659.html

Kelman, J. (Jan 20, 2005). Pat Metheny Group: The Way Up. All About Jazz. Retrieved from: http://www.allaboutjazz.com/pat-metheny-group-the-way-up-by-john-kelman.php#.U2-IJliJd1Y

Metheny, P. (2005). *The Way Up* [recorded by Pat Metheny Group]. On *The Way Up* [CD]. New York, NY: Nonesuch Records Inc. (Recorded in 2003-2004).

__(2006). *The Way Up – Live*. On *The Way Up – Live* [DVD]. Eagle Vision. (Recorded in 2005).

__(n.d.2). *The Pat Metheny Song Book*. Retrieved from: http://urbaniak.com/public/pdf_docs/realbooks/Pat%20Metheny%20song%20book.pdf

Reich, S. (1987). *Electric Counterpoint: For guitar and tape or guitar ensemble: Full score and live solo guitar part*. Hendon Music Boosey & Hawkes. Retrieved from: http://www.4shared.com/web/preview/pdf/YlNlEP5c

\\\\\\\\\Appendix 1

Transcript of Pat Metheny's interview on the DVD *The Way Up – Live* (Metheny 2006).

Q *Going on tour ...*
METHENY: Going on tour is always sort of the third step in a process that begin with kind of an idea. A conception of what the band can be, and, you know, kind of reinventing the basic premise of the group each time out. Which is then followed by a recording which is then followed by the tour. And the tour is always the most fun part, because you get this immediate reaction from all these great people that come and listen. And there's a real spirit of sharing that the musicians have with the audience, that kind of informs the music and gives the music this sense of having wings to fly with. That is just the best part of it for me. But this a special tour, because it's so fundamentally built upon the piece *The Way Up*, which of course was written by me and Lyle together, that is something that we've kind of been shooting for really from the beginning. As you look at the band's long history, from very early on, there was an interest in trying to kind of reinvent the whole idea of what a jazz group can be in the modern era. And there are some real obvious top-level issues that are there. You know, the electronic aspect of it, the whole way that we use the guitars themselves as a kind of textural element, as well as the sort of narrative voice in the music, but... . And lots of other things. The singing, the percussion, the whole idea of using synths and everything as an orchestral element. All of those things are kind of on the top level. But sort of underneath that, right from the beginning there's been this very strong interest in form itself. And if you look at even the early group records, we always had tunes that were ten and twelve minutes long. And there's always been this goal of trying to, even if at the core of the music there was a sort of song-like element, there was some other stuff around it that set it apart, that kind of took it out of the whole idea of just being like a jazz quartet, which of course it kind of is at its centre. But we always wanted to try to push that further by having other things going on, whether it's some kind of weird tuned guitar, or something built into the structure of the song that takes it some place else. And as the group has evolved over the years that thing has been a constant, of trying really to look at form in an extended way. And I kind of keep this list of things that I wanna do, that I keep tucked away someplace. And for about ten or twelve years now, one of the goals for me was to eventually do a record where there was sort of one piece, there was one idea, it was one continuous, straight thing. And it seemed like when Antonio joined the band, when Cuong joined the band, finally we had really this ensemble that merited that kind of attention, and it seem like a very natural place for us to go after *Speaking of Now,* which was our last group record. And so Lyle and I got together in a room for about six weeks, and in a way that was quite unlike any of our previous writing encounters over the years, we sort of hammered out every detail of every aspect of the piece together, really working on each little idea of it, to create this whole thing. And the way that we were operating that was to kind of come up with something that we thought we could use the studio as way to manifest. We weren't ever really thinking about how we would do it live. So, I mean, here that we are now, in the process of playing it live each night and presenting it in the form a DVD, it is really something that we... I almost really have to say, we kind of tricked ourselves by saying, “Okay, we're never gonna play this live so we don't have to worry about it.” But, in fact, it has been quite a challenge to mount this tour, to get the music to be what it is now. It required many, many hours of memorisation work from all of us, because it's just the amount of stuff that you have to remember each night is enormous. But also, I think, as we've

been playing it now for several months we've all found that the piece itself was designed to really showcase each one of us doing the things that we all really love to do, that we're good at, or that we think we're good at, that we try to be good at. And it's been very, very satisfying to play it each night. The reaction from the audience has been kind of spectacular in terms of just the kind of thing that we feel from them each night. There's a real genuine understanding and appreciation of what it is and what makes it unique, I think, in this musical environment that we live in.

Q *At the core the band is ....*
METHENY: At the core, the band is still kind of a quartet. There's this guitars, piano, bass, and drums thing that has been central to what we do right from the beginning that is in itself challenging. I mean, the whole idea of guitar and piano together has been a challenging issue for guitar players and piano players from the very beginning. And I think Lyle and I have a very unique kind of way of blending our sounds, and as much we acknowledge it and as much as people talk about it was kind of there from the first note that we played together. It was just kind of an instant way of thinking about music, that we were very compatible in terms of the way we could make our instruments speak and the way they would, then, ultimately blend together. As the band kind of progressed we were able to expand it. And I have to say that so much of the expansion has been driven by the realities of the time that we're finding ourselves living in. I mean, the whole idea of kind of orchestration within a small group was something that was very limited kind of prior, to like 1970, or so. I mean, it was... I mean not that was any bad sense to that limitation but there was just only so much you could do with the instrument of a quartet, say. Suddenly, things started to change when there was this whole possibility of having polyphonic synthesis, having lots of different kinds of guitars, that have very different kinds of sounds. Even the drum set itself changed quite a bit to have all these textural possibilities. And I think that we kind of intuitively responded to that and that then causes to have to make some other adjustments. I mean, as we started to go more into electricity, it seemed like we needed other things to balance that, that were more acoustic. And the first kind of impulse into that area was to add percussion. And we, about that time met Nana Vasconcelos, a great Brazilian musician, who was kind of the perfect antidote to this additional level of electric sound that we were adding to the band. And that whole thing of kind of balancing things has always been a major issue for what the group is, and that kind of continues into this edition of the band.

Q *Korea is such a surprise to us ...*
METHENY: Korea is such a surprise to us, and it's a recent thing.. It's a recent thing on our radar, the whole connection to Korea. We never came here at all, for the first twenty, twenty-five years or so of the band's history. Or, we came here one time, and then there was a long period of time that we didn't come back. The last time we played here at the LG Arts Centre, I have to say, we were all just in shock at the level of intense enthusiasm and knowledge and .. Just the whole kind of rare, powerful, beautiful enthusiasm that we felt in the audiences here. And we're lucky. We get to travel around the world and we get to not only play, we have this very rare privilege. As much as people come to see us, we get to see them. And it's very interesting in the course of a tour where we play everywhere, we're often playing like we are now, a lot of the same music, and of course, there is no language issue with us. We have no text. So we're able to kind of feel things from people that are really unique. And, man, the spirit of the audiences in Korea just kind of stands apart from other places. It's very unique. It's that rare combination of when you're playing quiet, everybody's very quiet. But then you

wanna feel this kind of rush on intensity as the music builds, you feel the audience going with you with that. And it's just a perfect balance for us of the kinds of things that we like to get from audiences. And when the possibility came up of coming back here to play for five nights, it just seemed like such a perfect place to do the DVD of this piece, which we knew we wanted to do somewhere. And as it's turned out it's been just fantastic. I mean, everybody here is just great for us. The audiences are great, the place itself is fantastic and we've just had a great time. And we're very happy that we've been able to share this time with the Korean audience and that they'll be represented on our DVD.

Q *Well, for me, music itself is kind of a mysterious thing ...*
METHENY: Well, for me, music itself is kind of a mysterious thing, and mysterious in the best possible way, in the sense that it has a real kind of fringe benefit of not only allowing you to engage every aspect of you brain and of your spirit and your soul and everything in it, but it also teaches you things and it keeps you very humble as I think you look at the face of music and the incredible ways that music has provided a very deep and intimate form of expression for so many wildly different kind of musicians. I think that every time, for me personally, that I'm able to involve myself in music, whether it's playing a gig or writing a tune or rehearsing or just playing in my room or whatever, it's something that to me is a real gift, and it's something I feel unbelievably lucky and privileged to be able to spend my time doing. And I think that there are many other ways throughout one's life on earth that you can address a lot of the same things that you address as a musician. I think that ultimately you can find them almost anywhere, doing almost anything. But, for me personally, music has been this incredibly deep well of learning, and I think that it continues to be more and more. It is, as any musician will tell you, the kind of thing that the more you learn about it the more you realize you have so much more to learn. And that's kind of one of the great things about it, that it keeps you endlessly engaged.

Q *The whole issue of complexity vs. simplicity ...*
METHENY: Well, the whole issue of complexity versus simplicity is a very interesting one as it comes to music, because, ultimately, I don't think one necessarily wins over the other as an aesthetic pursuit. I think they both have kind of endless challenges in terms of what it is... Which story you wanna tell. And, for me, I would say, actually, coming up with things that area really powerful and really simple is actually harder than coming up with things that are really complicated. I mean... On the other hand there's a certain kind of expression that the kinds of details that I think that this particular community of musicians is really good at discovering. There's a certain story that we can tell with that material, that we couldn't tell without the kind of energy that we use to address complexity. And... I think, ultimately, as time goes on, for me the specifics of the material become less important than, in fact, the things that you put inside the envelop of that material. And that ultimately is your humanity, your spirit, who you are as a person, what you love, what you believe in. And, you know, there's an endless to be told through music. And for me, this band is so great, because, I think we all have this curiosity about, “How many angles can we look at this from?” I mean, “What else can it be besides what it's already been for us?” And, yes, we have a sound, and, yes, we also have a history. I mean, it's a band that has been around for a long time. But what has been so great about this experience, not only *The Way Up* but everything about this band is that it's an area of research that has proven to be really enlightening in a lot of ways, not only for the musical side of it, but for what it offers us through the experiences we've had of traveling around the world, through the sound itself, through the different ways that we've learnt how we have to face ourselves to play it each night. I mean, there are so many different

ways that the group has provided things of value in our lives. So that just seems to keep going on and on.

Q *Underneath all the stuff that makes* The Way Up *what it is ...*

METHENY: Underneath all of the stuff that make *The Way Up* what it is, there is a sense for me of really wanting to have a band that is really of the time that it's in. You know, that we're really like living in the moment that we're actually involved with as people, too. And before Lyle and I wrote anything on this particular part of our story, we just sat around and talked for a few days, kind of about exactly that, this world that we find ourselves living in right now. And as Americans, it's a strange time right now. We have a strange political thing going on that's been going on for a while, and, like most artists, we're not really that comfortable with the profile America has right at the moment. As we travel around the world and we see the impact of technology, and the way that it's affecting people's time management, it seems like everybody's in a hurry and everybody's, like, on their cell phones and... There's this sense of everything kind of needing to get shorter and shorter, and faster and faster and faster, and all that, and I think that our reaction to that, from our perspective, is that the kinds of things that we've found that have importance and value to us are actually the kinds of things that take a really long time. To get good on the guitar, to become a good improviser, to become a musician at a level that everybody on the stage is at, are not something that happens quickly. And I think that just in terms of the specifics of music, there is a whole range of things that have happened in the last few hundreds years of all of the incredible musicians that have addressed music that are not about things that happen in three bars or four bars. They have to do with the way things develop over time. And I think a big part of what *The Way Up* is is in fact our relationship to current events, to the time that we're finding ourselves living in. And jazz itself is very, very well suited to do that. And there is a tendency in the jazz world to kind of keep looking back, because there has been this... There are so many great musicians, there are so many things to still learn about what those musicians discovered. But my feeling has always been that that's great, but we've to also keep moving things forward based on the reality that we find ourselves living in. Because the truth is, it's really different now than it was even when the band started in 1977, and it was certainly different in 1977 than it was in 1958, and 1958 was different than 1932. And as much as we admire what happened before, we can never really capture that the same way we can capture the things that are real to us, that we're actually kind of having to live with ourselves in our lives. So that's been also a thing about this music. And there's also a kind of new, sort of narrative storytelling that I feel is emerging from this. I mean, I think *The Way Up* is of that, but I also see some movies now... I mean, there's a whole new kind of way of just spreading out the details, with movies like *Amores Perros,* or *Eternal Sunshine of the Spotless Mind.* I mean, there's this whole sense of time being thought of in a kind of different way. And I think, as we were writing the piece, we were thinking of that. There's, like... an influence of that, of, like, showing little things and then revealing more about them later as time goes on. And all of those kinds of things affect us, too. So I guess, for me, I love playing straight ahead and I'm always gonna wanna do that. By that, I mean more traditional kinds of jazz forms. But I think also this whole idea of continuing our research into these other areas is an important part of our mission, too.