HAIRY DRUMS, LIVE SAMPLING: ETHOS PERCUSSION GROUP COMMISSIONS OF 2004 AND THEIR "EXTRA-CONSERVATORY" ELEMENTS

by

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Abstract

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Advisor: Professor Shaugn O'Donnell

Since 1999 Ethos Percussion Group has commissioned more than two dozen works for percussion quartet. The majority of these commissions incorporate instruments and musical vocabulary not commonly found in the Western chamber music tradition. This aspect of Ethos's commissioned repertoire reflects the ensemble's collective personality, as its members have augmented their conservatory training and "classical" performing experiences with extensive forays into popular and non-Western idioms.

Gaby Kerpel's *Charangueando* and Michael Markus's *Suli Ti Nani*, the two compositions commissioned and premiered by Ethos in 2004, exemplify the ensemble's efforts to integrate its members' experiences with popular and folk music into a chamber music setting. The pieces incorporate a variety of "extra-conservatory" elements, including hand drumming, folk instruments from Argentina and Guinea, improvisation, ethnic rhythmic concepts, and electronic sampling via a laptop and MIDI controller. The extra-conservatory nature of these compositions extends to the manner in which Kerpel and Markus presented them to Ethos, as they relied heavily on sample recordings or rote transmission. Although these methods were supplemented with limited notation, neither

composer produced a traditional score.

Many of Ethos's commissions have been published and are often performed by collegiate ensembles. However, the lack of scores for *Charangueando* and *Suli Ti Nani*, coupled with a general unfamiliarity with many of the instruments and techniques necessary for their performance, has rendered them inaccessible to other performers. This unfortunate situation has troubled me for years, as the works' musical and pedagogic merits certainly justify inclusion in the percussion ensemble canon.

The purpose of this dissertation is to facilitate and promote the performance of *Charangueando* and *Suli Ti Nani* by ensembles other than Ethos. The written portion includes scores for each piece, biographical information on the composers, descriptions of how the scores were developed, and examinations of analytical and performance issues designed to help classically-trained performers address the extra-conservatory elements found in each piece. This text is accompanied by a data disc containing a variety of supplemental media that may also be found on the following web pages: http://www.treyfiles.com/charangueando.html and http://www.treyfiles.com/sulitinani.html.

Supplemental Media:

- Video from live performances of each piece
- A screencast tutorial for Kerpel's "live sampling" process
- Templates for the use of Ableton Live software (versions 7 or 8) and a Korg NanoPad with *Charangueando*
- Audio recordings of the sample solos found in Chapter Six
- Demo mp3's for *Charangueando* created by Gaby Kerpel for Ethos

Acknowledgements

I would like to thank my advisors, Professors Jonathan Pieslak and Shaugn O'Donnell, as well as my readers, Professors Stephen Blum and Norman Carey, for their generosity with both time and expertise. Many thanks to Ethos Percussion Group for commissioning *Charangueando* and *Suli Ti Nani* based on my recommendations to the ensemble, and to the Jerome Foundation for funding the commissions. I would also like to gratefully acknowledge the enthusiastic support given to this project by Gaby Kerpel, Michael Markus, M'Bemba Bangoura, Famoro Diaboute, Michael Lipsey, the Queens College Percussion Ensemble, Andrew Beall, and Bachovich Music Publications.

Finally, my deepest thanks go to my wonderful wife Lisa, my daughter Romy, my parents, and my grandmother; I could not have completed this dissertation without their patient support and encouragement.

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Introduction

General Statement

As a member of Ethos Percussion Group, I have been privileged to commission more than two dozen works for percussion quartet. The majority of these commissions incorporate instruments and musical vocabulary not commonly found in the Western chamber music tradition; this aspect of Ethos's commissioned repertoire reflects the ensemble's collective personality, as its members have augmented their conservatory training and "classical" performing experiences with extensive forays into popular and non-Western idioms. *Charangueando* and *Suli Ti Nani*, the two compositions we commissioned and premiered in 2004, exemplify the ensemble's efforts to bring technical skills and musical discoveries from our "extra-conservatory" experiences into a chamber music setting.

Gaby Kerpel's *Charangueando* uniquely juxtaposes folk and modern practices, with traditional Argentine instruments such as the *bombo leguero* and *chas-chas* accompanied by electronically sampled rhythms that are recorded and manipulated during performances using a laptop and MIDI controller. The work also features melodic material provided by electronic samples of a traditional *charango* guitar as well as the decidedly non-Argentine marimba and vibraphone. Kerpel's "live sampling" process, which is detailed in chapters one and three, facilitates the transposition of a thematic rhythm in a manner quite reminiscent of Lou Harrison's rhythmic modulations of a percussive melody in his *Fugue* from 1943 (though it should be noted that Kerpel was unfamiliar with Harrison's work). Kerpel's vivid recontextualization of Argentine folk elements in *Charangueando* results in contemporary music with a distinctly ethnic

character, furthering a practice espoused by, among others, Lou Harrison ("American Gamelan" in *La Koro Sutro*) and Iannis Xenakis (West African djembe in *Okho*).

Suli Ti Nani, by Michael Markus, is a five-movement work featuring instruments and rhythms from Guinea, West Africa. An intermediate to advanced level of hand-drumming skill is required of three players, and all four must improvise extensively on instruments such as *djembes*, *dunduns,* and *kyrin*. Markus modeled *Suli Ti Nani*'s arrangements of traditional rhythms after the performance style of Guinea's national ballets, while also incorporating original passages and orchestrations. Although African percussion is fairly well-represented in American collegiate programs through both traditional ensembles (such as the excellent student groups at Wesleyan University and UC Berkeley) and popular arrangements for Western instruments (including Mattias Schmitt's *Ghanaia* and Nigel Westlake's *Kalabash*), the field is dominated by Ghanaian styles and Guinea's rich musical heritage has yet to establish a significant presence in university or conservatory curricula. With its effective balance of composition, arrangement, and improvisation for Guinean instruments, *Suli Ti Nani* serves as an excellent introduction to the music of Guinea for Western performers and audiences alike.

The extra-conservatory nature of these compositions extends to the manner in which Kerpel and Markus presented them to Ethos. Although each composer had received some degree of formal musical training, neither had worked with notated music for years when the pieces were commissioned. Kerpel writes in popular music style using recording gear and a laptop, while Markus favors the Guinean traditional practice of learning by rote. Further challenges were presented by the fact that the composers

were unaccustomed to creating music that would not be performed by themselves or musicians steeped in their respective styles; this necessitated the explanation of broad contextual information in order for Ethos to properly interpret the pieces. These factors had been considered before the works were commissioned (in fact, Ethos found them appealing), and all parties embraced the idea of developing the commissions largely through interaction between the composers and the ensemble. While notation derived from Kerpel's exported MIDI files or Markus's written outlines supplemented the learning process, the works were largely rehearsed and performed without music and no complete score was created for either piece.

Ethos's preparation of *Charangueando* and *Suli Ti Nani* required several meetings with each composer featuring both experimentation and learning by rote. These rehearsals were augmented with recorded examples provided by the composers of the traditional musics upon which the pieces are based, helping Ethos members to acquaint themselves with various stylistic norms and practices. As Kerpel's commission began to take shape, he shared insights into the technical and practical aspects of laptop/sampler usage as well as helpful demonstrations of the proper feel for *Charangueando*'s folk rhythms. Markus also addressed culture-specific rhythmic nuances in his time with the ensemble, along with proper playing techniques for each Guinean instrument. Once this foundation was established he coached individual members on their respective solos, offering both sample phrases and advice on structuring the larger form of each solo.

The unique learning experience afforded by such close work with the composers allowed Ethos members to gain a respectable degree of familiarity with the instruments and rhythmic concepts introduced to them through these commissions. In addition, the

challenges posed by correctly realizing each work's use of a metric structure common to many ethnic percussion traditions proved to be of broader pedagogic value. *Figures i.1* and *i.2* show repeated patterns from each piece that are remarkably, though coincidentally, similar and which were taught to Ethos by rote. The rhythms are notated in 12/8, as a quaternary meter is most appropriate according to each composer. However, while the rim or bell sounds ("x" noteheads) emphasize or play off of the 4-beat pulse, the notes struck on actual drumheads (regular noteheads) seem to suggest a 3-beat duple meter; ethnomusicologist David Locke refers to this phenomenon as "simultaneous multidimensionality."[1] Listeners unfamiliar with Argentine or West African traditions could quite naturally misinterpret the heavy drum beats as metric pulses; indeed, every member of Ethos made this error when first exposed to *Figure i.1*'s rhythm in the absence of accompanying notation. With time and practice the group was able to embrace the seeming conflicts between actual and suggested pulses, and the effort expended by Ethos members to "recalibrate" their metric interpretations of these rhythms has yielded tangible dividends in their further studies of various percussion traditions.

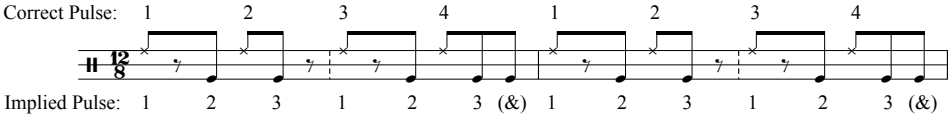

Figure i.1: Repeated Pattern from *Charangueando*

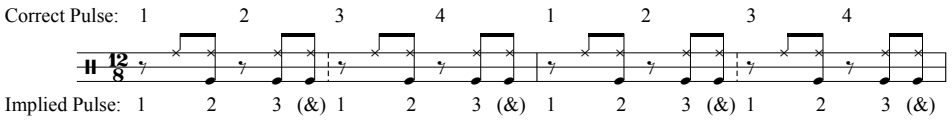

Figure i.2: Repeated Pattern from "Gbada" in Suli *Ti Nani*, Movement 4

[1] David Locke, "The Metric Matrix: Simultaneous Multidimensionality in African Music." *Analytical Approaches to World Music Journal* 1, No. 1 (2011). http://aawmjournal.com/articles/2011a/Locke_AAWM_Vol_1_1.pdf (accessed September 15, 2011).

Many of Ethos's commissions have been published and are often performed by collegiate ensembles, thanks in large part to interest generated through the group's regular national touring. Since their premieres in 2004, *Charangueando* and *Suli Ti Nani* have been performed by Ethos numerous times throughout the United States; in spite of their warm reception by percussionists and general audiences, the lack of scores for these commissions and a general unfamiliarity with many of the instruments and techniques necessary for their performance have rendered them inaccessible to other ensembles. This unfortunate situation has troubled me for years, as the works' musical and pedagogic merits certainly justify inclusion in the percussion ensemble canon.

The purpose of this dissertation is to facilitate and promote the performance of *Charangueando* and *Suli Ti Nani* by ensembles other than Ethos. In addition to the scores that are of course central to this objective, I have developed a variety of supplementary writings and media resources in order to help classically-trained performers address the extra-conservatory elements found in each piece. The written portion is divided into two parts, with each part following the same three-chapter format: chapters one and four establish context through composer biographies and descriptions of the commissioning and editing processes; chapters two and five contain the newly created scores; and chapters three and six provide information regarding interpretive analysis and performance issues. This material is accompanied by a data disc containing video from performances of each piece[2] along with audio and video clips demonstrating concepts

[2] The performance videos include a full, unedited performance of *Charangueando* and an edited performance of *Suli Ti Nani*. I chose to include only an edited version of *Suli Ti Nani* because I strongly feel that the archival nature of a dissertation inherently implies that any associated recordings embody the author's desired interpretation of a work. While this is true of the *Charangueando* performance, any such classification runs

discussed in chapters three and six. At the time of this writing, a tentative agreement has been reached with Bachovich Music Publications to publish the scores, which will be enhanced with much of the information from chapters three and six as well as the material from the data disc. I am naturally very excited by this opportunity to further the objectives of this dissertation.

In the fall of 2010 I coached and performed *Charangueando* and *Suli Ti Nani* with a student group from the Aaron Copland School of Music at Queens College using drafts of the scores (this is the source of the performance videos featured on the data disc). As college ensembles are the most likely candidates for future performances of the pieces, this experience provided invaluable "real-world" insights into how to best present the scores to ensure a future beyond Ethos. My work with the excellent Queens College students resulted in numerous edits and improvements to each score. It also significantly informed my approach to writing about the pieces, preventing any overly broad surveys of Guinean, Argentine or sample-based music by clarifying the specific issues related to these topics whose examination would be of the greatest benefit to future performers of *Charangueando* and *Suli Ti Nani*. Finally, coaching the students for these performances validated my opinion regarding the works' pedagogic value, as their emphasis on extra-conservatory techniques, ethnic rhythmic concepts, memorization, and groove-oriented timekeeping effectively complemented the solo and ensemble repertoire being studied in the department at that time.

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contrary to the improvisatory nature of *Suli Ti Nani*. I therefore edited the performance to avoid the inclusion of full solos; this allows the performers' excellent execution and feel to be referenced while preventing any impression that their solos represent templates that should be followed by future performers.

"Extra-Conservatory" Instruments in *Charangueando* and *Suli Ti Nani*

Familiarity with a variety of ethnic and electronic percussion instruments is integral to the performance of *Charangueando* and *Suli Ti Nani*. Brief descriptions are in order, as they are rarely studied in a conservatory setting. It should be noted that these instruments, their playing techniques, and the musical styles associated with them are worthy of dissertations in their own right, but the scope of this dissertation is limited to information relevant to the performance of *Charangueando* and *Suli Ti Nani*.

Bombo Leguero: A deep, rope-tensioned drum from northern Argentina that is played with sticks. The low, mellow sound of its unshaven goatskin heads is contrasted with brighter "clicks" made on the wooden rim. Kerpel calls for two bombo legueros in *Charangueando,* and the work's rhythmic vocabulary is derived from traditional bombo leguero patterns.

Figure i.3: Bombo Leguero

Caxixi: Small basket shakers used in many styles of Brazilian music that greatly resemble Guinean kese-kese (see page 12) in both construction and sound. Michael Markus assigns caxixi to the shaker soloist in *Suli Ti Nani* because virtuosic passages would be difficult to realize on the larger and relatively unwieldy kese-kese.

Figure i.4: Caxixi

Charango: A small, 10-string guitar used in the folk music of northern Argentina. The charango is closely identified with indigenous Argentine identity and with nationalist artists such as Atahualpa Yupanqui. For *Charangueando*, Gaby Kerpel created recorded samples of a charango that are triggered via a MIDI percussion controller (see page 14).

Figure i.5: Charango (Image used with permission of Sergii Shcherbakov)

Chas-chas: Traditional northern Argentine shakers made from bundles of goat hooves. They are often struck against a small bowl-shaped drum called a *cultrun*. In *Charangueando*, one player strikes a set of chas-chas against a snare drum covered with a towel to mimic this sound while another plays a second set mounted on a foot pedal (seen later in *Figure 1.5*, page 33).

Figure i.6: Chas-chas

Djembe: A goblet-shaped wooden hand drum of the West African Maninka people commonly associated with the folk music of Guinea, Mali, Senegal, and Cote D'Ivoire. The shaved goatskin head produces three principal sounds (bass, tone, and slap) and is generally played by the soloist in an ensemble of drummers accompanying rituals or recreational activities. The djembe is utilized in both *Charangueando* and *Suli Ti Nani*. For *Charangueando*, only rudimentary sounds are required (bass, open, and muted) and the sound of a contemporary synthetic drum may well be preferable to that of a traditional wooden djembe. For *Suli Ti Nani*, at least a moderate degree of proficiency in traditional sound production is required of three players; some preparatory study with a qualified djembe teacher is recommended, as are traditional wooden drums.

Figure i.7: Djembe

Dunduns: A family of cylindrical wooden drums with unshaven cowhide or goatskin heads. These Maninka drums are commonly used in conjunction with 2-4 djembes to create intricate polyrhythmic music. The individual drums are called *dundunba* (largest), *sangban* (middle), and *kenkeni* (smallest); there are numerous variations on these names and spellings. When worn or mounted on a stand (as in *Figure i.8*), a small metal bell (also called a *kenkeni*) is mounted on top of each drum. The drum is played with a stick in one hand while the bell is played with a metal object, often a large bolt, in the other. In smaller ensembles, several *dunduns* may be played by one performer using a vertical setup commonly referred to as "ballet style" (*Figure i.9*). *Suli Ti Nani* incorporates both ballet style and mounted dundun setups, though it is possible to perform the piece with only one set of drums.

Figure i.8: Dunduns on stands with kenkeni bells attached

Figure i.9: (L-R) Kenkeni, dundun, and sangban in “ballet style” setup

Kese-kese: Conical basket shakers with long handles originally played by the Maninka people in the Faranah region of Guinea. Movement one of *Suli Ti Nani* calls for three pairs of kese-kese in graduated sizes to accompany a caxixi soloist with polyrhythms usually played by djembes.

Figure i.10: Kese-kese

Kyrin: Featured in *Suli Ti Nani*'s "Sinte" movement, the kyrin is a two-pitched cylindrical log drum originally played by the Susu people of Guinea's lower coastal region. Guinea's Nalu people traditionally play Sinte with several players on one large (up to 10 feet long) log drum; Michael Markus substituted three of the much smaller kyrin for the sake of portability.

Figure i.11: Kyrin

Live: A software program created by the German company Ableton, Live is used principally by DJ's and pop musicians to record and process audio or MIDI data. Though the software is powerful enough for use as a recording platform, it was originally designed as a software performance "instrument." Live is well respected for its ease of use and stability, and its performance-oriented features have influenced most contemporary DAW (digital audio workstation) software programs. Kerpel's "live sampling" process, described in chapters one and three as well as a screencast on the data disc, relies heavily on Live's ability to easily record, edit, and manipulate audio samples.

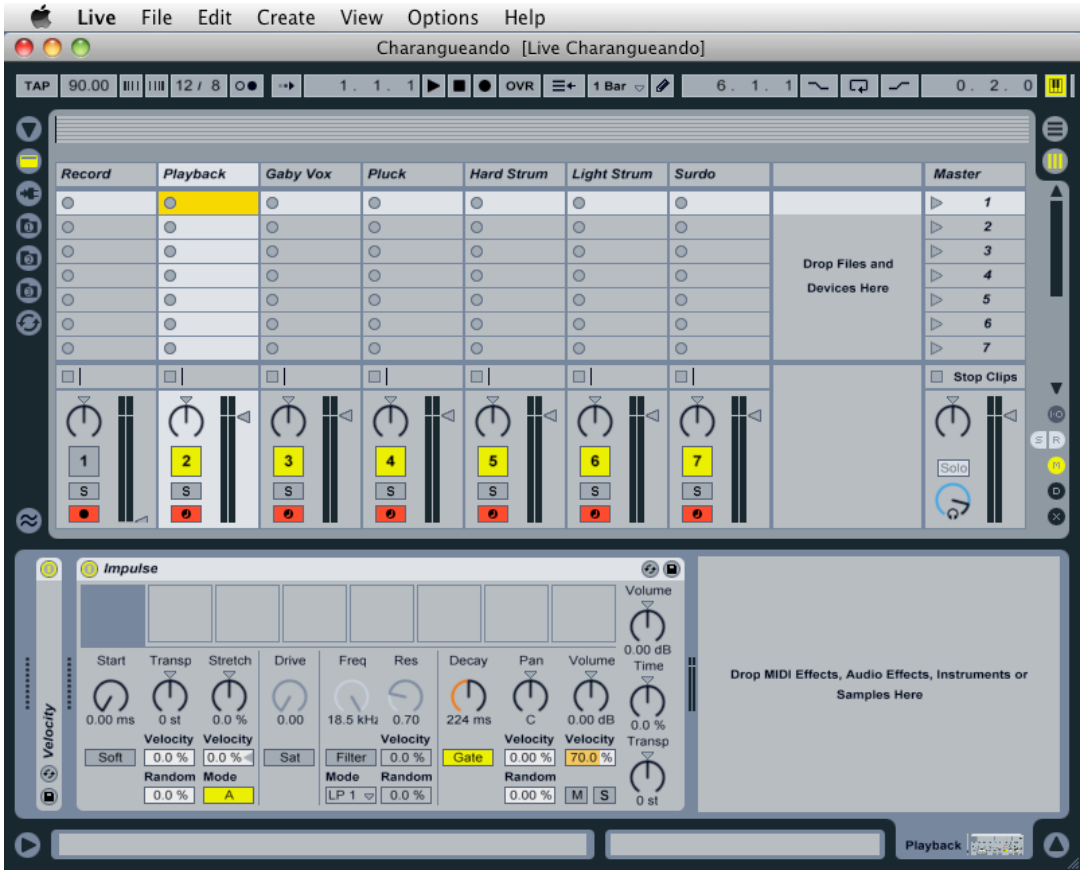

Figure i.12: Screenshot of the Live template for *Charangueando*

MIDI Percussion Controllers: Like MIDI keyboards, these devices are used to transmit MIDI information to a digital sound source such as a sound module or software program. Rather than receiving input through keys, however, MIDI percussion controllers commonly feature a number of velocity-sensitive rubber pads that are struck with drumsticks or fingers. Controllers designed for sticks, such as the Roland Octapad or the Alternate Mode DrumKAT, are generally preferred by percussionists; finger controllers such as the Akai MPD series or the Korg NanoPad are very popular among DJ's and popular music (especially rap and hip-hop) producers. The MIDI percussion parts in *Charangueando* were premiered using a DrumKAT, but the smaller and less expensive NanoPAD has proven a better fit for the piece.

Figure i.13: DrumKAT (top) and NanoPad (bottom) MIDI percussion controllers

CHAPTER 1

PART ONE: Gaby Kerpel's Background

PART TWO: Creating the *Charangueando* Score

PART ONE: Gaby Kerpel's Background

Gaby Kerpel and Technology

> "I believe the composer of the future will create his sounds directly in tone by means of electrical-musical instruments which will record his idea exactly." – Leopold Stokowski[3]

In 1931, conductor Leopold Stokowski foresaw with surprising accuracy the compositional process used by artists of today such as Argentinian composer Gaby Kerpel. Kerpel's music incorporates folk instruments and mores from which he draws great inspiration, not unlike composers of Stokowski's time such as Béla Bartók, Percy Grainger, and Lou Harrison.[4] However, Kerpel has used electronic means to create and perform his works since he began composing, forsaking music notation for a process resembling that used by popular musicians in the modern recording studio. Like most popular musicians, Kerpel is also the principal performer of his works; his unique solo presentations feature intricate layers of synthesizers juxtaposed with melodies and rhythms performed on his beloved Northern Argentine folk instruments. Kerpel is able to single-handedly create rich polyphonic textures during live concerts through his mastery of electronic techniques such as "live sampling" (the real-time recording, playback and manipulation of musical phrases) and DJ-type sound processing. With electronics playing a decisive role in his compositions and performances, Kerpel's music embodies

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[3] Oliver Daniel, *Stokowski: A Counterpoint of Views* (New York: Dodd, Mead and Co., 1982), 311.

[4] While Grainger and Bartók are known for their arrangements of European folk songs and occasional use of folk instruments, Harrison's early exposure to gamelan and other Asian styles inspired him to use unusual or original instruments (automobile brake drums, "American Gamelan," etc.) to bring their distinctive textures into non-traditional music. Kerpel's adoption of Northern Argentine folk music elements has embraced both of these approaches.

what musicologist Albin Zak refers to as "technological mediation as an element of musical style."[5]

Gaby Kerpel was born on March 18, 1964 in Buenos Aires, Argentina.[6] Inspired and encouraged by his older brother Anibal (who is now a successful recording engineer in Los Angeles), he began playing piano at age three. He took lessons throughout his youth, advancing to serious study of theory and jazz by the age of fourteen. As he grew older his interests gradually shifted from classical music to more popular and experimental styles, and he ended his formal musical training at the age of seventeen. In the early 1980's he became intrigued by the use of technology in performance and composition, teaching himself how to use synthesizers, drum machines, cassette multi-track recorders, and effects pedals designed for electric guitars.

One guitar pedal in particular, the Boss DD-2 (*Figure 1.1*), had a profound impact on Kerpel's compositional approach. Released in 1983, the DD-2 was the world's first digital delay pedal.[7] Inspired by analog tape delay units that had been created in the 1960's, the DD-2 was designed to create an "echo" effect by instantly recording and repeating 200-800ms of audio material with an adjustable decay[8] (this is different from a "reverb" effect, which simulates "multiple echoes produced by sound reflecting randomly off of surfaces in an enclosed space"[9]). Guitar players such as U2's The Edge used this

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[5] Albin J. Zak, *The Poetics of Rock: Cutting Tracks, Making Records* (Berkeley: University of California Press, 2001), 9.

[6] Gaby Kerpel, interview with the author, New York, NY, September 12, 2008.

[7] *Boss DD-2 Digital Delay Instructions* (Osaka: Roland Corporation, 1984), 2.

[8] Ibid., 4.

[9] Zak, *Poetics*, 76.

type of pedal to create thick, pulsing guitar textures that became a signature sound of 1980's pop music.

Kerpel re-imagined the use of the DD-2, applying it to vocals, drums, and percussive synthesizer sounds to create short, repeating rhythmic gestures, or "loops." The "looping" process demands precise interaction between the performer and the looping device, requiring both solid rhythm and extremely accurate timing when recording and activating the loop. The concept of rhythmic manipulation via electronics, introduced to Kerpel through creating loops with the Boss DD-2, has remained a key element of his compositions and performances throughout his career.[10]

Figure 1.1: The Boss DD-2 effect pedal (Image courtesy of Roland Corp.)

Looping devices and practices have of course evolved significantly since 1983, and Kerpel has regularly adopted new technology into his composing process. By the late 1980's, hardware "samplers" enabled the recording, editing, and manipulated playback of long phrases from pre-recorded sources. Whereas looping pedals had only

[10] Kerpel is certainly not the only composer or popular musician to create loops. He was, however, innovative in his use of the DD-2 for this purpose.

allowed a recorded phrase to be played back in its original form, MIDI-controlled hardware samplers provided the processing power needed to alter the recorded phrase and play it back at any pitch, play it backwards, add effects such as reverb or distortion, and edit the length of the phrase if desired (although not in real time, so any use of samplers in live performance involved only the playback of previously modified phrases, or "samples"). Sophisticated sampling processes became a mainstay of studio recording in the 1990's, while new digital delay pedals, such as the Digital Echoplex, enabled not only the recording of very long loops (the Echoplex was upgradeable to a maximum of 198 seconds[11]) in live performance, but also for multiple additional phrases to be layered on top of the original looped phrase.[12]

With the arrival of affordable, stable computer recording software in the first years of the 21st century, the potential length of digitally sampled material increased from the Boss DD-2's tiny 800ms capacity to literally days due to a computer's massive potential hard drive space. Musicians soon began incorporating laptop computers into live performances, and in so doing found themselves on stage with digital recording capacity and processing power not available to the most expensive studios a decade earlier. Inspired by the possibilities these developments presented, Kerpel sought to bridge the conventional recording/performance divide between sampling and looping. His use of "live sampling" in *Charangueando* (discussed later) pushed the boundaries of the looping concept to the limit of what was technologically possible at the time of its composition.

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[11] Warren Sirota, *Echoplex Digital Pro: User's Guide* (Oakland: Oberheim Corporation, 2001), A-2.

[12] Ibid., 1-4.

A presentation by Kerpel for an Argentine television station in 2008 provides an excellent example of how he merges recording techniques with live performance.[13] Behind a jumble of keyboards, a bombo leguero drum, a laptop, microphones, and various interfaces and converters, Kerpel begins his performance of *Herias Sin Herer* by playing brief passages on three Argentine *quena* flutes. Their sounds are picked up from his headset microphone (he cleverly uses the hood on his jacket to isolate the microphone in the manner of a studio "baffle" wall) and processed with harmonization and ambience effects on his laptop. The first phrase is sampled and looped, then a second phrase is layered on top of it using a different quena. Before the final flute is played, the loop containing the first two is instantly slowed to half-speed (thus transposing the already pitch-enhanced material down an octave), creating a warped background for the third quena phrase that bears almost no resemblance to the quena's natural acoustic sound. Kerpel then initiates the playback of prerecorded charango (guitar) loops and drones from the laptop. Before singing and adding his own bombo accompaniment to these loops, he quickly edits the quena phrases that were just sampled so that they will be in sync with the prerecorded material when he later triggers their playback via a MIDI keyboard. Throughout *Herias Sin Herer* he adjusts levels and records new samples as he is singing, drumming or playing the MIDI keyboard; in one sense, he isn't so much performing the piece as succinctly reenacting its creation (especially considering that it was created/recorded using predominantly the same instruments and equipment). By placing a single musician simultaneously in the roles of composer, recordist, sound engineer, and

[13] "Gaby Kerpel Live @ CM Music Channel, Herias Sin Herer," YouTube video, 7:42, from a performance broadcast online by CM Music Channel in August 2008, posted by "gabytok," August 17, 2008. http://www.youtube.com/watch?v=bnHh4WFRIJw (accessed 10 December 2010).

performer, this typical performance by Kerpel realizes and surpasses the electro-acoustic symbiosis imagined by Stokowski.

Collaborative Influences

Gaby Kerpel's distinct compositional style was refined through a series of collaborations with performance artists and folk musicians over two decades. In 1984 Kerpel was introduced to members of La Organización Negra, an experimental theater company that was developing visceral, interactive performances that were often staged in public spaces and dance clubs. Formed as Argentina was just emerging from years of the harsh military dictatorship's internal Dirty War against those it considered leftist, the work of La Organización Negra sought to reflect the chaos and anger that accompanied the country's difficult transition to democracy. In a society that had long been subjected to fear and suppression, "the aim of the group was to shock audiences out of complacency, often by using displays of demolition and destruction."[14]

La Organización Negra's performances consisted of intensely physical vignettes without dialogue; they were designed to evoke strong emotions and audience interaction rather than portray a traditional narrative arc. When asked to compose for La Organización Negra, Kerpel sought to create music that fit the group's unique aesthetic and performance settings. He developed a pseudo-minimalist style (a natural fit given his fascination with looping) that served to establish and intensify the particular emotive state of each vignette. By incorporating synthesized sounds and repetitive rhythms familiar to

[14] Victoria Young, "Defying Urban Ennui, and Gravity," *New York Times,* July 2, 1998, http://www.nytimes.com/1998/07/02/theater/defying-urban-ennui-and-gravity.html (accessed October 15, 2010).

the club-savvy spectators, Kerpel's music also helped unprepared audiences relate to La Organización Negra's deliberately unsettling performance style.

The pre-recorded music for the company's first long-form presentation, called *U.R.O.C.*, was produced in 1984 using a Micromoog synthesizer, a drum machine, the Boss DD-2, a Yamaha MSX music computer, and a Tascam multitrack cassette recorder. For the group's 1989 production entitled *La Tirolesa*, Kerpel began adding live percussion accompaniment to his pre-recorded tracks. Inspired by the work's industrial setting, he used found objects such as oil drums and garbage cans to create rhythmic counterpoint to the recorded track's drum machine and sampler loops. This combination of recorded and live music allowed Kerpel to utilize sophisticated effects processing facilitated by recording technology on some sound sources while preserving the intensity and immediacy of live performance for others.

In 1992, Kerpel partnered with singer Silvia Iriondo and her ensemble of folk musicians to create a multimedia performance in tribute to the renowned Argentine musician Atahualpa Yupanqui. Yupanqui was a seminal figure in the mid-20th century Latin American folk music movement known as "nueva canción;" he dedicated over thirty years of his life to exploring the folk songs and poetry of rural Argentina, and his large body of original works often incorporates their rhythms and structures.[15] He identified strongly with Argentina's poor indigenous population (born Héctor Roberto Chavero, his adopted pseudonym combines the names of two legendary Incan kings[16]),

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[15] *Grove Music Online,* s.v. "Yupanqui, Atahualpa," by Pablo Vila. http://www.oxfordmusiconline.com (accessed 15 November 2010).

[16] Andreas Exarheas, "Profile of Atahualpa Yupanqui-Pioneer of South American Indigenous Music," *Sounds and Colors,* August 16, 2010 (accessed January 20, 2011).

and his communist political activities resulted in exile on three occasions. Yupanqui had recently died in Paris, his home since his final exile in 1967.

Titled "El Escuchado," the tribute concert took place at Buenos Aires' Teatro General San Martín[17] with an ensemble comprised of electronic and folk instruments, including synthesizers, guitar, quena, sikus (a pan-type flute), and an octapad MIDI percussion controller. Working with the Northern Argentine folk instruments and rhythms had a profound effect on Kerpel's music. Thanks to a recently acquired hardware sampler with large (for the time) memory capacity, he was now able to record and manipulate relatively long passages of music. Using phrases played on traditional percussion instruments as source material, Kerpel developed an innovative method for creating rhythmic patterns that gave his electronic music a uniquely human feel:

> I started to look at Argentinian folk music as part of my experiment. Together with the sampler I was able to find a way to mix technology with a real performance [because] I was able to make patterns that were four bars long… With the sampler, depending on the key you played it would be a different speed, and suddenly I discovered a new way to create drum patterns. It was a new way of making music that inspired me… I then started applying it to the theater pieces I was working on.[18]

Just as Kerpel began experimenting with this new method of creating music, La Organización Negra disbanded. He soon joined with Pichón Baldinu and Diqui James, two other former members of La Organización Negra, to form a new group called De La Guarda. Baldinu and James were interested in applying the interactive style developed

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http://www.soundsandcolours.com/articles/argentina/profile-of-atahualpa-yupanqui-pioneer-of-south-american-indigenous-music (accessed January 20, 2011).

[17] "Silvia Iriondo," King's Place Music and Arts Venue (London), http://www.kingsplace.co.uk/music/artists/silvia-iriondo (accessed January 12, 2011).

[18] Kerpel interview.

by La Organización Negra in radical new ways, with performers around, within, and even above the audience:

> Anxious to continue the spirit of experimentation, …they teamed up with rock climbers who taught them how to use ropes and harnesses to fly above an audience. “We wanted to test the limits," said Mr. Baldinu, "to have the audience inside the show, to give them strong emotions without using violence, which was the tool we used to use.”[19]

The group’s name, derived from “angeles de la guarda” (guardian angels), reflected both the aerial dimension of their work and their intent to inspire joy rather than rage.

De La Guarda developed episodes in the same manner as La Organización Negra, eventually combining several of them into a production called *Villa Villa* (*Figure 1.2*). Dressed in anonymous suits and skirts, the show’s performers represented “people of a city… people who are trying to fly, to get into another atmosphere, the same people that you can see in the street walking to their job."[20] Kerpel’s pre-recorded tracks incorporated sampled phrases played on instruments from several global traditions, including kalimba, gamelan-type gongs, and a variety of percussion instruments; he creatively altered these samples as per his recent “experiments” while juxtaposing them with synthesized harmonic and percussive accompaniments. As with *La Tirolesa*, these pre-recorded tracks were augmented with live performers, now on vocals, bombo leguero, and other drums. The result was distinctly electronic music with an engaging, folk-ish quality that perfectly suited *Villa Villa*’s otherworldly aesthetic.

Villa Villa enjoyed international success, with long-running productions mounted in Buenos Aires, London, Moscow, Madrid, Mexico City, Las Vegas, Tokyo, Seoul, and

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[19] Young, “Defying Urban Ennui, and Gravity.”

[20] Ibid.

Tel Aviv. The New York City production opened off-Broadway in 1998 and ran for over six years. Island Records released Kerpel's music for the show in 1995, and a CD of dance remixes by British producer Howie B was independently released in 2001 (both are now out of print). Baldinu and James amicably parted in 2004, and James began work with Kerpel on a new show titled *Fuerza Bruta*. The first production of *Fuerza Bruta* opened in London in 2006; Kerpel's music for the show was released by Warner Music's South American division at the same time. *Fuerza Bruta* has since had successful productions in New York, Miami, Sao Paulo, Lisbon, and Buenos Aires.

Figure 1.2: A scene from De La Guarda's *Villa Villa*
(photo courtesy of Simon Franklyn)

In 2003 Kerpel released his first solo recording, *Carnabailito*, through the Nonesuch label. The CD's twelve tracks represent several years' worth of continued development of his "techno-folk" style, ranging from songs incorporating folk structures to abstract soundscapes. Produced by Gustavo Santaolalla, a prominent figure in the

nueva canción movement, Carnabailito earned considerable praise from critics. Ben Ratliff in the *New York Times* commended Kerpel's "mesmerizing, …spaced-out intellectualization of cultural roots"[21] and the *Boston Globe*'s Steve Greenlee pronounced it "the freshest disc we have heard in a long time." [22]

Kerpel's current projects continue to refine his signature folk/electronic hybridization. He has created a DJ alter-ego, named King Coya, who performs live sets of dance music infused with signifiers of Cumbia, a Columbian folk style. "Coya" is "a term used in Northern Argentina, referring to a local in a yarn cap… reserved in nature and small in stature, playing an instrument like the charango."[23] By assuming a DJ pseudonym that imparts a humble indigenous archetype with royalty, Kerpel brings Atahualpa Yupanqui's populist aesthetic into twenty-first century dance clubs. Kerpel also continues his collaboration with Gustavo Santaolalla (who, shortly after producing *Carnabailito*, won back-to-back Academy Awards for film scoring) through Terraplén, a collective of producers, singers, and instrumentalists.[24] In early 2010 Kerpel wrote the music for a song featuring three prominent Andean pop singers: La Tigresa del Oriente, Little Wendy Sulca, and Delfín Hasta el Fin. Titled "En Tus Tierras Bailaré," the lyrics

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[21] Ben Ratliff, "Dreamy Sounds From The 'De La Guarda' Guy," *New York Times*, August 31, 2003 http://www.nytimes.com/2003/08/31/arts/music-playlist-dreamy-sounds-from-the-de-la-guarda-guy.html (accessed October 15, 2010).

[22] Steve Grenlee, "Hot tunes for these cooler days," *Boston Globe*, September 5, 2003, http://www.boston.com/ae/music/articles/2003/09/05/hot_tunes_for_these_cooler _days (accessed October 15, 2010).

[23] "King Coya," ZZK Records (Buenos Aires), http://www.zzkrecords.com/artist/King_Coya (accessed January 12, 2011).

[24] Robin Perkins, "Gaby Kerpel - The Man Behind The Music," *Fly Global Music*, August 1, 2009, http://www.flyglobalmusic.com/fly/archives/latin_america_features/gaby_kerpel_the_man_behind_the.html (accessed February 2, 2011).

praise Israel and express the desire of the singers to dance there. The artfully bizarre accompanying video[25] went viral on YouTube (with millions of hits) and inspired a number of deconstructive essays, including one on the *New York Review of Books* website.[26] At the time of this writing, *Charangueando* remains Kerpel's sole composition intended for chamber musicians and audiences.

[25] "EN TUS TIERRAS BAILARE. Wendy, Delfín y La Tigresa. Juntos por primera vez," YouTube video, 4:22, posted by "micalatina," April 19, 2010. http://www.youtube.com/watch?v=xzMUyqmaqcw (accessed October 12, 2010).

[26] Alma, Guillermoprieto, "What is that Monkey Doing Behind the Rowboat?" *New York Review of Books*, June 9, 2010, http://www.nybooks.com/blogs/nyrblog/2010/jun/09/what-monkey-doing-behind-rowboat/ (accessed October 15, 2010).

PART TWO: Creating the *Charangueando* Score

The Composing Process, Original Parts

I met Gaby Kerpel upon joining the New York production of De La Guarda's *Villa Villa* as music supervisor in 2001, and I approached him with the idea for an Ethos commission in September of 2003. Having never composed for musicians other than himself, Kerpel was intrigued by the idea and gladly accepted. Ethos knew that Kerpel did not normally notate his music, and a process involving the use of demo mp3 files and notation derived from the MIDI input in his computer programs was conceived to relay the commission to Ethos in lieu of a traditional score. Kerpel began work on *Charangueando* in November of 2003, with the premier planned for June of 2004.

Understanding that Ethos wanted the piece to reflect his personal style even though it differed greatly from the group's previous commissions, Kerpel incorporated significant folk and electronic elements into the piece. He decided early in the process to utilize the *chacarera* rhythm from Northern Argentina, along with traditional Argentine percussion instruments such as the bombo leguero and chas-chas. For melodic and harmonic content, Kerpel chose to feature standard keyboard percussion instruments (marimba and vibraphone) as well as samples of a charango that would be triggered on a laptop sampler via a DrumKat MIDI percussion controller. While Kerpel planned to use the Argentine percussion instruments in a fairly traditional manner, he had no interest in attempting to reproduce or imitate the charango's traditional playing style with the sampler; instead, he envisioned a unique, hybrid sampler/charango instrument that would exploit the MIDI controller's ability to trigger the guitar's sounds in ways that would be physically impossible on an actual charango. The work's title is a play on words that

superimposes the progressive verbal tense onto the charango's name; the resulting invented word roughly translates as "Guitarring."

Kerpel also saw the commission as an opportunity to develop his concept of "live sampling," a process involving the real-time recording of rhythmic loops with subsequent playback back at different pitches. Live sampling necessitated the use of a software sampler, as looping pedals were limited in their ability to alter a loop's pitch. Kerpel wanted a sample of the chacarera rhythm to be recorded during the performance and then loaded into a software sampler bank, which would facilitate playback of the sample at its original pitch as well as perfect fourth and octave transpositions. While the sound of the drum when transposed would of course be altered, the crux of the process is that the pitch ratios of the transposed samples (4:3 and 2:1) would create complex counter rhythms when juxtaposed with the live ensemble as it played at the original tempo. Although Kerpel originally planned to sample and transpose the chacarera rhythm as traditionally played on a bombo leguero, he later chose to use the decidedly non-Argentine djembe for *Charangueando*'s live sampling after finding its overtone-rich sound particularly well-suited to transposed playback.

In choosing the final sounds for electronic manipulation, Kerpel indulged his sense of humor and his desire to add another "ethnic flavor"[27] to the piece. He recorded himself calling out a few expressions commonly heard during a traditional chacarera performance: "A ver esa chacarera!" (See the chacarera!), "Se va la segunda!" (Here's the second part!), and "Hey!". He then added a strong reverb effect to give the samples a

[27] From Kerpel's program notes for the *Charangueando* score.

larger-than-life, slightly unnatural quality so it would be obvious to a listener that they were electronically generated.

Kerpel developed the piece using a variety of acoustic and electronic instruments. He experimented with bombo leguero, djembe, and chas-chas rhythms using a Lexicon JamMan pedal, which was a descendant of the Boss DD-2. When satisfied with the rhythmic pattern upon which he would base much of the piece, he recorded it using ProTools recording software. He also used ProTools to record individual notes and chords on the charango, as well as individual notes on a vibraphone and marimba. Kerpel then exported the recorded samples into Propellerhead Reason, a relatively new and cutting-edge software sample player. He controlled Reason using a portable three-octave Korg MIDI keyboard that also featured finger pads for percussive input similar to those found on drum machines (*Figure 1.3*). With all of *Charangueando*'s instruments in the Reason sampler, Kerpel was able to record and edit the piece one instrument at a time using MIDI input; the completed MIDI files were later exported into Finale notation software to create parts for Ethos (only individual parts were created, as Kerpel was unable to join the separately exported MIDI tracks into a full score).

Figure 1.3: Korg MicroKontrol, the type of MIDI keyboard used by Kerpel when writing *Charangueando*. Note the finger pads used for percussive input, as well as the faders, dials, and buttons that may be assigned to various mixing and recording parameters. This controller is ideal for Kerpel, as it combines recording and performance functionality. (Image courtesy of Korg USA)

In January of 2004 Kerpel sent Ethos JPEG files and a demo mp3 of roughly half the piece via email, with the remainder of the music and another demo mp3 following in early March. The JPEGs were reduced to a fairly low resolution due to the constraints on email attachment sizes at the time; this along with Finale's peculiar interpretation of some of the MIDI data rendered many rhythms somewhat difficult to read (*Figure 1.4*). The demo mp3 (found on the accompanying data disc) proved quite helpful to the group when dealing with these issues. The players referred to the written parts for pitch information, while the demo mp3 better illustrated the correct rhythms and how the individual parts worked together. Ethos soon chose to simply memorize the music as they rehearsed it, basing this decision on both the sub-optimal parts as well as the music's pop/folk character. *Charangueando* proved to be easily memorized, and both Kerpel and Ethos recommend this approach to any future performers.

The completed piece included six parts: marimba, vibraphone, djembe, bombo leguero, chas-chas, and sampler/DrumKat. In order to cover all six parts, one player was assigned to djembe, bombo leguero, and occasional chas-chas, with the vibraphone player also doubling on chas-chas at times. The coda also required an extra bombo leguero (or low tom-tom), which would be played by the marimba player.

Prior to *Charangueando*'s first performance, Kerpel met twice with Ethos to answer questions and address any issues with the parts. He worked with Ethos members on proper interpretation of the chacarera feel (as discussed in the introduction) and helped to refine the live sampling process. During these meetings it was decided that the chas-chas in part one of the piece would be pre-recorded and played back through the sampler, as it was awkward and ineffective for the bombo leguero/djembe player to play the chas-

chas with one hand while simultaneously playing the syncopated chacarera rhythm with the other. The vibraphone player was able to simultaneously play chas-chas and vibraphone later in the piece with minor compromises to each part, though it was not a practical long-term approach. While Kerpel and Ethos agreed there were additional concerns with the live sampling process and some of the orchestration, insufficient time remained for these to be resolved before the premiere performance. Overall Kerpel was pleasantly surprised at how closely Ethos's realization of the composition matched his demo mp3's, and *Charangueando* had a well-received world premiere on June 7, 2004 at Symphony Space's Leonard Nimoy Thalia Theater in New York City.

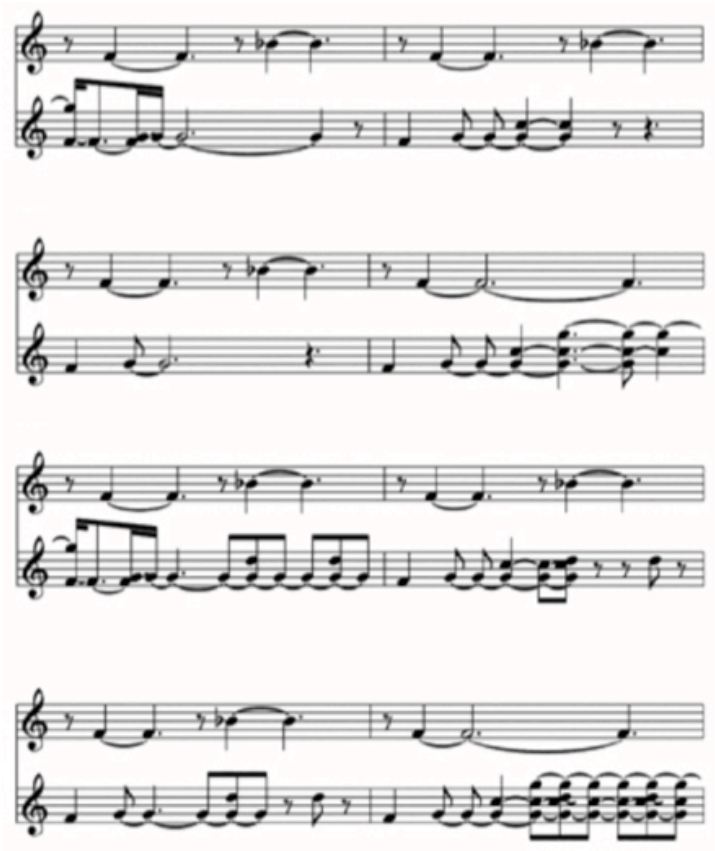


Figure 1.4: Original sampler part, measures 115-122

Revisions and Edits to the Score and Instrumentation

As I prepared the score, I sought to clarify Kerpel's original parts while addressing the issues raised by Kerpel and Ethos during the piece's development. All changes to the piece have met with Kerpel's approval, and the revised version of the score was performed at the CUNY Graduate Center on November 22, 2010. A video of that performance is included on the accompanying data disc.

The first revision involved the chas-chas part that had to be pre-recorded for the premiere performance. While pre-recording the part may have been an acceptable solution from a listener's standpoint, the fact that all of the events heard at the performance were not created in real-time was a disappointment for Kerpel. (For those who may wonder why Kerpel found it acceptable to pre-record the charango samples, it is important to remember that the charango/sampler instrument is triggered in real-time by the MIDI percussion controller.) As I dwelt on the fact that there were not enough hands available in the quartet to cover the part, I realized that there were at least a few idle feet. I found that the chas-chas easily attached to a kick drum pedal using an inverted beater commonly used in electronic drum sets (*Figure 1.5*); with the pedal

Figure 1.5: Chas-chas pedal

attached to a rubber trigger pad (another common electronic drum accessory), the chas-chas part was now easily executed by the sampler player without any compromise to either part. This also yielded an unexpected benefit: assigning the chas-chas pedal to the sampler player keeps the chas-chas, whose steady rhythms are easily heard and followed by all of the musicians, locked in with the syncopated loops being simultaneously triggered on the sampler. This solution also works well for *Charangueando*'s second part, eliminating the need for the vibraphone player to attempt an awkward doubling. *Figure 1.6* shows measures 115-122 in the revised sampler part, illustrating both the added chas-chas pedal and the score's improved notation.

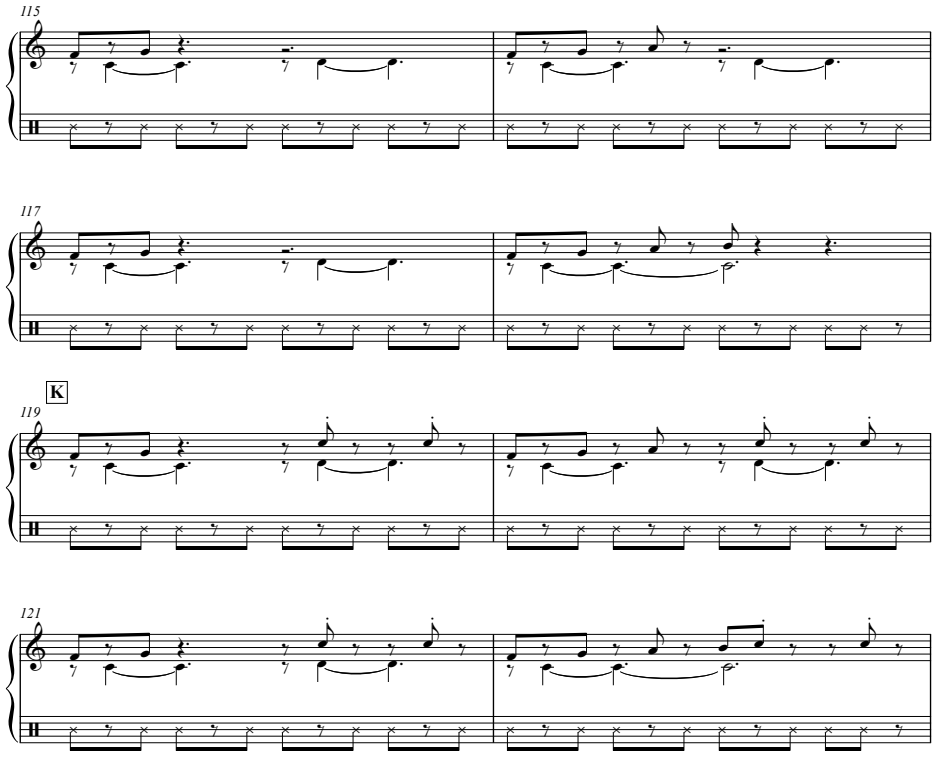


Figure 1.6: Revised sampler part (with added chas-chas), measures 115-122

An orchestration issue which proved challenging for Ethos in the premiere performance involved the marimba solo in measures 87-98. Kerpel had assigned an accompanying bass line to the marimba player in addition to the solo (*Figure 1.7*), making the execution of that particular section quite difficult (though Ethos member Eric Phinney pulled it off nicely). The solution I fashioned involved altering the ensemble setup. While Ethos's original setup placed the mallet instruments on opposite sides of the ensemble, the revised score requires the marimba and vibes to be close together in the middle of the stage. This enables the vibraphone player to easily play both the marimba bass line and the simple vibraphone accompaniment, leaving the marimba player free to commit all of his or her attention to the solo. *Figures 1.8* and *1.9* illustrate the revised vibraphone/bass marimba part and the revised setup.

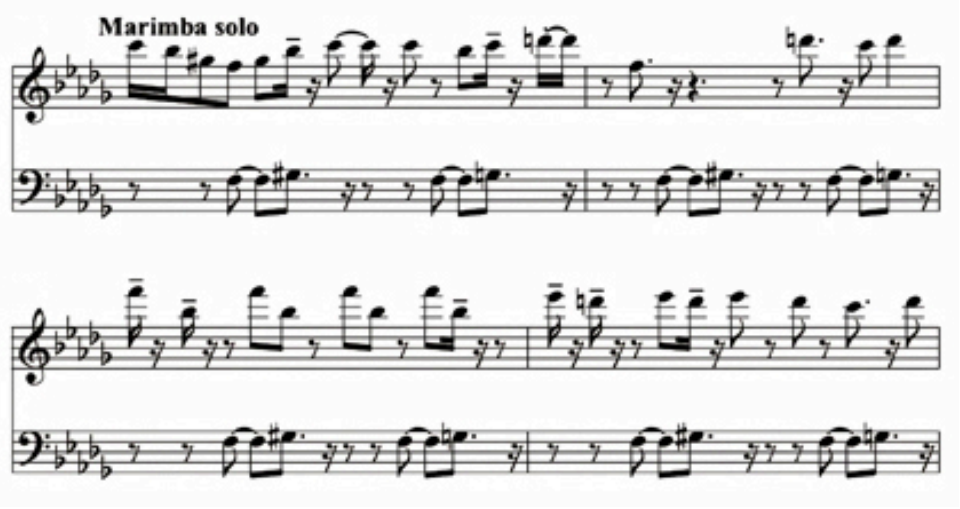


Figure 1.7: Original solo with bass marimba part, measures 87-90

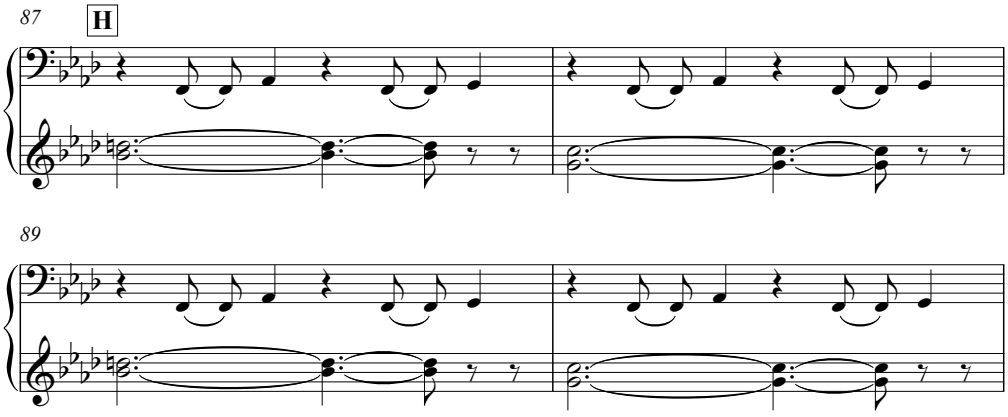


Figure 1.8: Revised vibraphone part with marimba bass line, measures 87-90. The bass clef is above the treble because it is played with the vibraphone player's right hand.

Figure 1.9: Revised *Charangueando* setup. Note the vibraphone player reaching to play the bass end of the marimba, as well as the sampler player (seated at left) playing the chas-chas pedal. (Photo courtesy of John Hartzell)

The revised score also contains a few other minor changes in orchestration. Measures 132-143 and 144-155 were originally identical; all accompaniment parts in measures 132-143 have now been cut in order to highlight the introduction of the charango chord samples and their unusually syncopated melody. In measures 172-203 and 260-307, the vibraphone and upper marimba parts have been exchanged. This allows the marimba player, who is also playing a bass line in these sections, to focus solely on rhythmic accompaniment while the vibraphone player is given the freer melodic line.

The final revisions to *Charangueando* involve the amount of time and equipment necessary for the live sampling process. In early 2004, no existing software was capable of elegantly executing live sampling. The best option available to Ethos at the time was "Unity," a suite of recording, editing, and sampler software created by a company called Bitheadz. While the Unity suite contained all of the tools necessary to perform the live sampling process, they were separated into different programs in a manner similar to Microsoft Office. Unity's recording program was used to record and edit the sample, with the edited file then saved to the desktop and imported into Unity's software sampler program for playback. As a result, the live sampling process lasted at least one minute even under the best of circumstances. During this seemingly interminable period, the sampler player hurriedly worked within Unity while the djembe player improvised around the chacarera rhythm. This perhaps served as an interesting introduction to the chacarera for the audience, but it was at best "too much of a good thing" and a solution was needed for future performances of *Charangueando*.

Thanks to the inexorable march of technology, all problems encountered with the live sampling process were easily resolved with little effort on my part. In the fall of 2004 I discovered "Live," a software program made by a German-based company called Ableton. Designed for use as a performance rather than a studio tool, the newest version of Live at the time (version 4) incorporated most of the features found in the various Unity programs within one relatively simple and much more stable program. Using Live instead of Unity greatly improved the live sampling workflow, as edited loops could be placed into Live's sampler through drag-and-drop rather than saving and importing.

As a companion to the score I created a template for Live to be used with *Charangueando* that allows the live sampling process to be completed in a matter of seconds. (While using the template during the performance of *Charangueando* at the CUNY Graduate Center I encountered some difficulties with loop editing--unrelated to Live or to the template--and the process still took less than thirty seconds.) Bearing in mind that the full-featured version of Live currently costs $849.00, I designed the template for use with Live's $99.00 "Intro" version in order to minimize possible expenses incurred by ensembles wishing to perform the piece. A detailed description of the live sampling process using the Ableton Live template may be found in Chapter 3, with an accompanying screencast on the dissertation's data disc.

Continuing with my effort to lower costs for future performers of the piece, I experimented with a different MIDI percussion controller and a very simple A/D (analog to digital) interface for the CUNY Graduate Center performance. I found the Korg NanoPad (*Figure 1.10*) to be an excellent replacement for the DrumKat. Unlike the fairly large DrumKat, which is struck with sticks, the extremely portable NanoPad features finger pads similar to those on the keyboard controller used by Kerpel when composing *Charangueando*. The pads on the NanoPad may even be held down for sustained notes like keys on a keyboard; this feature makes the playback of long samples such as the chacarera loop a much simpler endeavor than with the DrumKat, which requires separate strokes to begin and end ("latch" and "release" in technical terms) lengthy samples. For A/D conversion I used the Alesis MicLink, which is an xlr to usb cable with a built-in 16-bit converter. While not appropriate for critical recording, the MicLink interfaced flawlessly with Live and worked quite well for the djembe sampling. Together, these two

devices greatly improve the setup and execution of the sampler part while also considerably lowering the costs associated with performing *Charangueando* (the basic DrumKat model sells for $670 compared to the NanoPad's price of $60; an audio interface may cost from $100 - $500 or more, while the MicLink retails for $37).

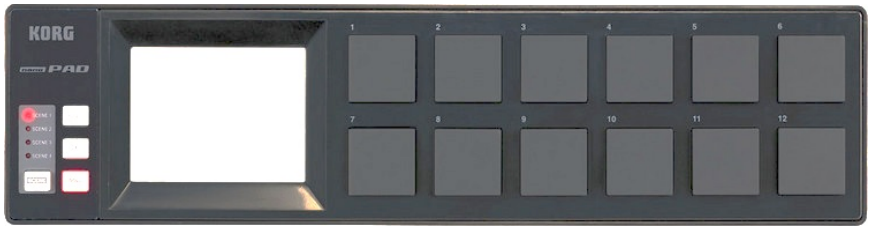


Figure 1.10: Korg NanoPad (Image courtesy of Korg USA)

CHAPTER 2

Charangueando Score

Charangueando

Percussion Quartet

Gaby Kerpel
(2004)

Charangueando

Percussion Quartet

Composed November 2003-May 2004, Buenos Aires, Argentina and New York, NY
Premiered June 7, 2004 by Ethos Percussion Group at Symphony Space, New York, NY
Duration: ca. 11'

Commissioned by the Jerome Foundation Emerging Composers Commissioning Fund for Ethos Percussion Group

Gaby Kerpel

Edited by Trey Files
E-mail: trey@treyfiles.com

Charangueando

Percussion Quartet

Instrumentation

Player 1:	Vibraphone, Marimba (low f; shared with Player 2), Chas-Chas (see Notes to Performers for details)
Player 2:	Marimba (low f), Bombo Leguero (floor tom may be substituted; see Notes to Performers for details)
Player 3:	Djembe, Bombo Leguero (floor tom may be substituted; see Notes to Performers for details)
Player 4:	Sampler (MIDI controller + laptop running Ableton Live software; see Appendix for details), Chas-Chas with foot pedal (see Notes to Performers for details)

Sampler data and demonstration videos may be found at: http://www.treyfiles.com/charangueando.html

***Figure 2.1: Charangueando* Notation Key**

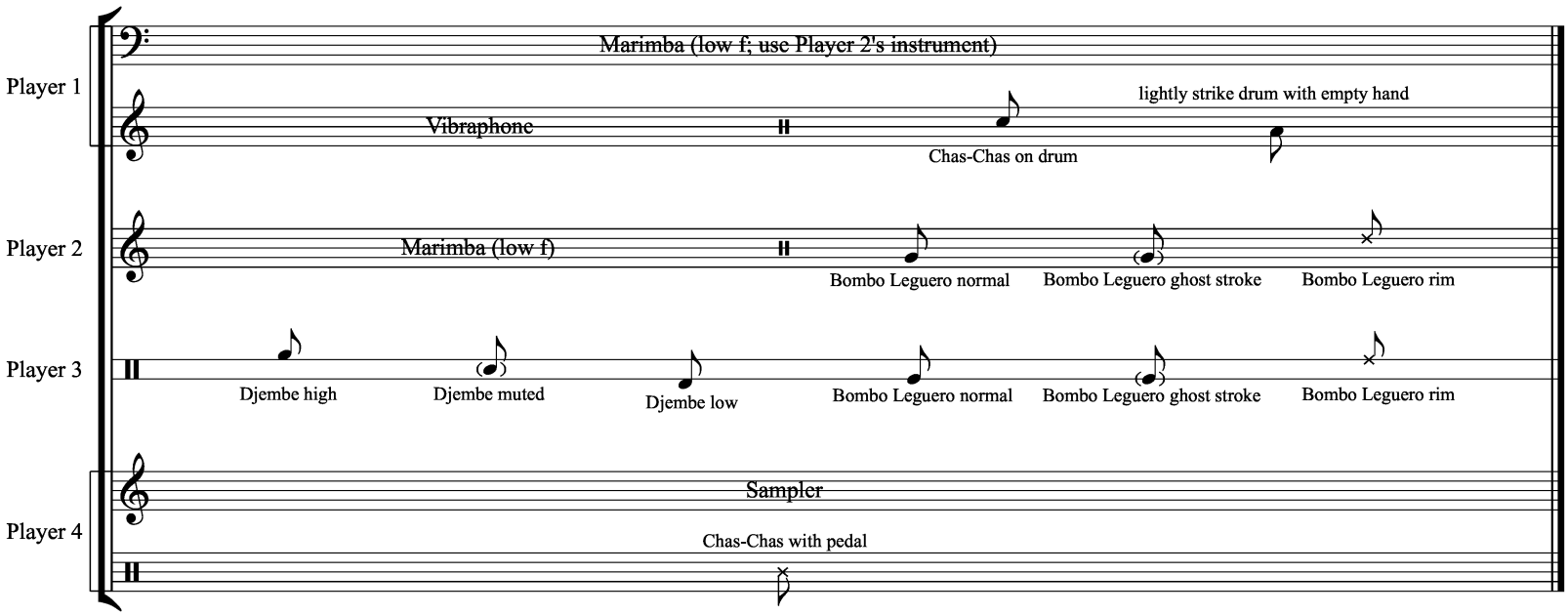
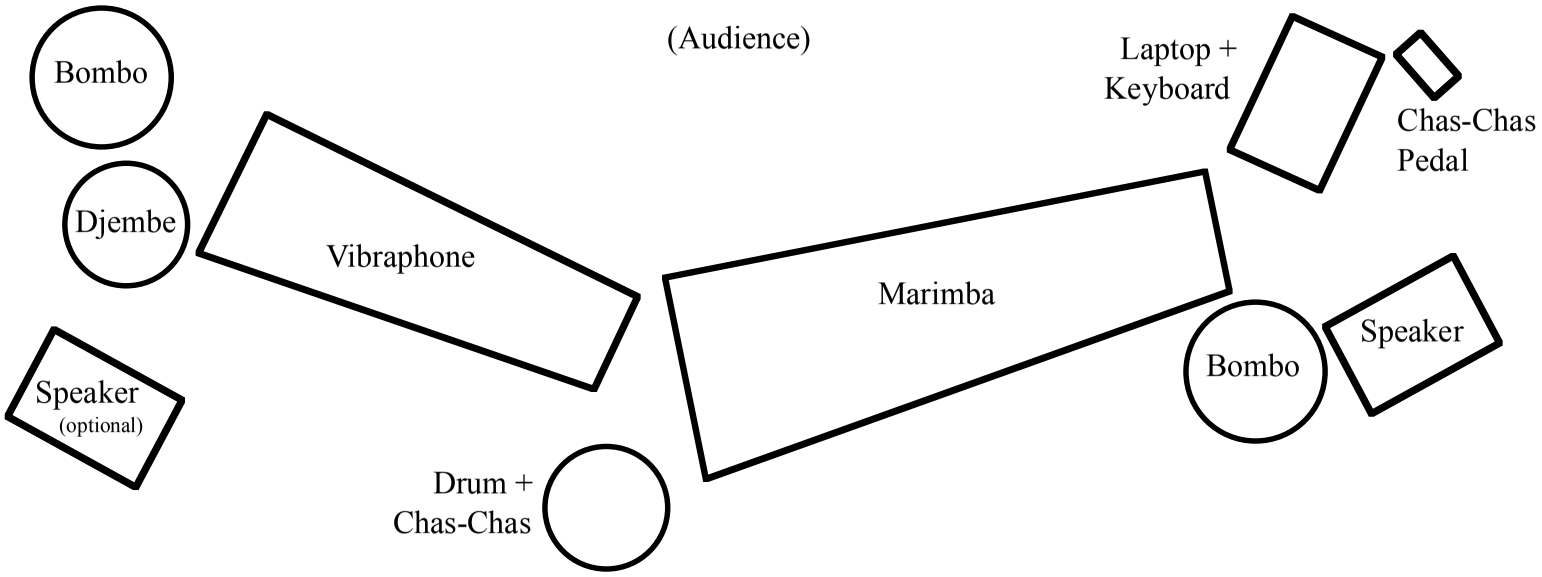


***Figure 2.2: Charangueando* Setup**



Program Notes

The rhythms and melodies in ***Charangueando*** are based in Argentinean Folk music. The marimba and vibes, which are obviously foreign to this style, provide the harmony and melodies, while the rhythm is given by the *bombo leguero* (a traditional Argentinean instrument with a mild and deep sound) and the *chas-chas* (another traditional instrument made with goat nails that gives a high and crispy sound).

The laptop sampler is used in two ways. It reproduces some sounds that are not included in a percussion group, like the *charango* (a small Argentinean guitar that very much represents the sound of South America) and some vocals I recorded to add another ethnic flavor to the piece. The sampler also executes "live sampling technique," which allows the players to record a short performance in real time (in this case a djembe pattern) and then manipulate the sound in several ways. In ***Charangueando*** the djembe pattern is sampled and subsequently transposed in such a way that it builds another rhythmic pattern.

-Gaby Kerpel

About the Composer

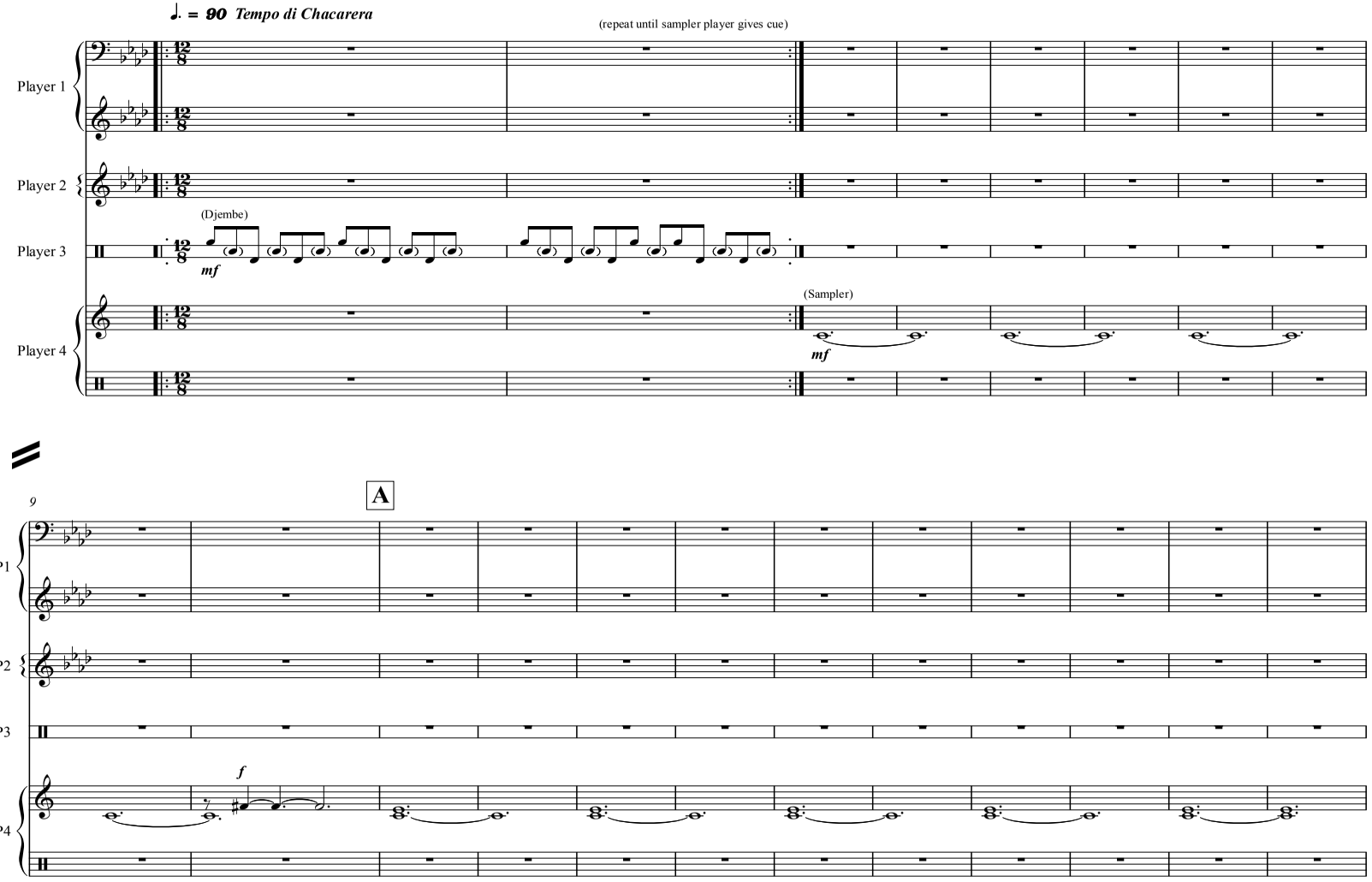
As a young man in Buenos Aires, Gaby Kerpel studied classical music (including piano, harmony, and improvisation) before realizing that traditional composition was not the road he wished to follow. In 1984 he was introduced to La Organizacíon Negra, an ensemble that was creating innovative theater that required unique music. Kerpel provided this music by learning to use technology as a creative tool. He composed for and performed with La Organizacíon Negra for the next seven years while also collaborating on other dance, film, and video projects. In 1993, La Organizacíon Negra was dissolved and two of its members formed a new group, De La Guarda, which Mr. Kerpel was asked to join.

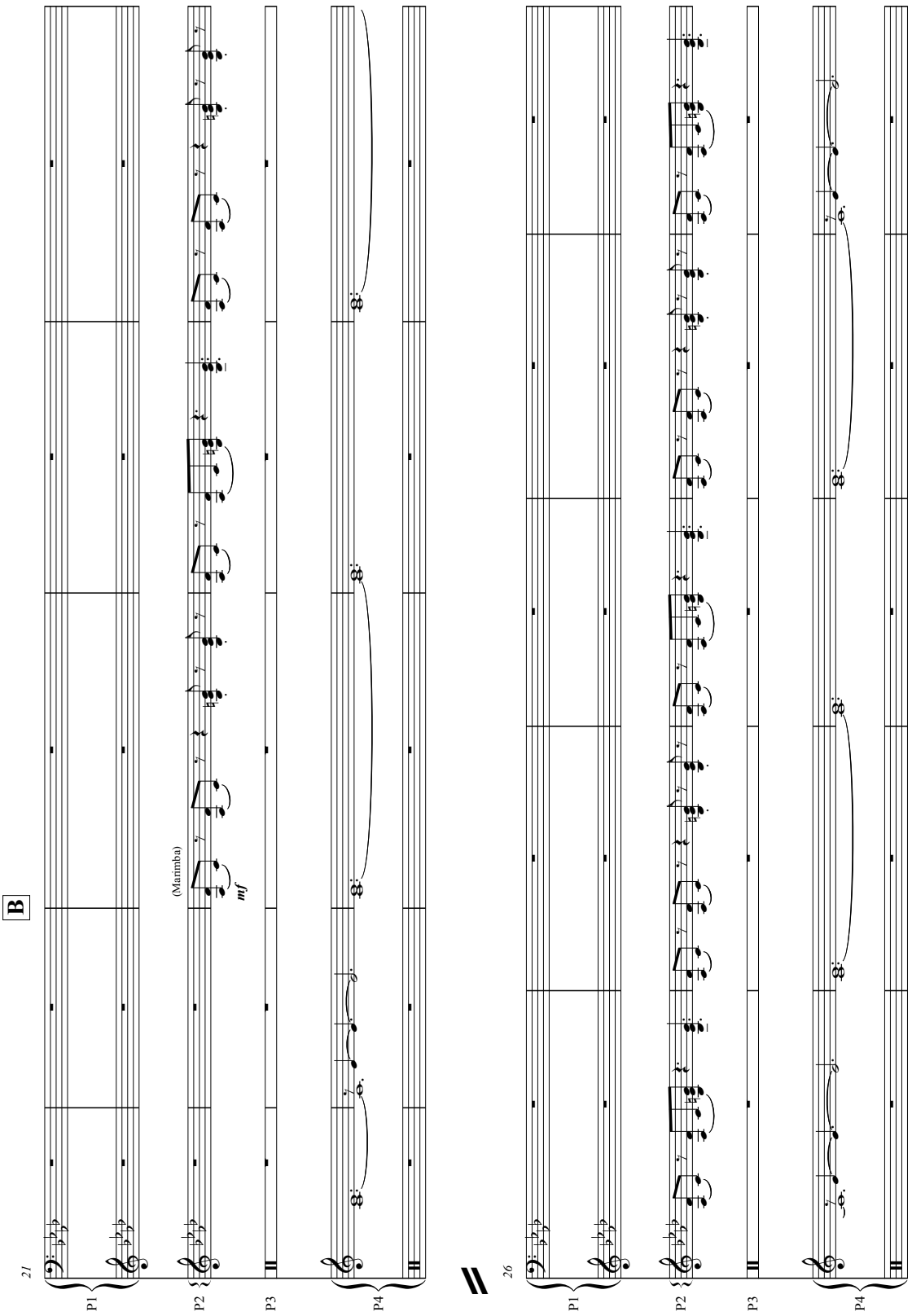
Gaby Kerpel is best known for creating the music for *Villa Villa*, an aerial performance-art/interactive theater show by De La Guarda that has been performed throughout the world. He made his solo recording debut on the critically-acclaimed Nonesuch release *Carnabailito,* and his music currently propels *Fuerza Bruta,* another theater experience that furthers the style established by *Villa Villa*. Mr. Kerpel's music is driven by South American percussion sounds and inspired by the instruments and folk melodies of northeastern Argentina. Kerpel describes his electronic approach to folkloric sound as "finding a way to express my experiences by passing a vision of Argentine music through the filter of my taste."

for Ethos Percussion Group

Charangueando

Gaby Kerpel
(2004)

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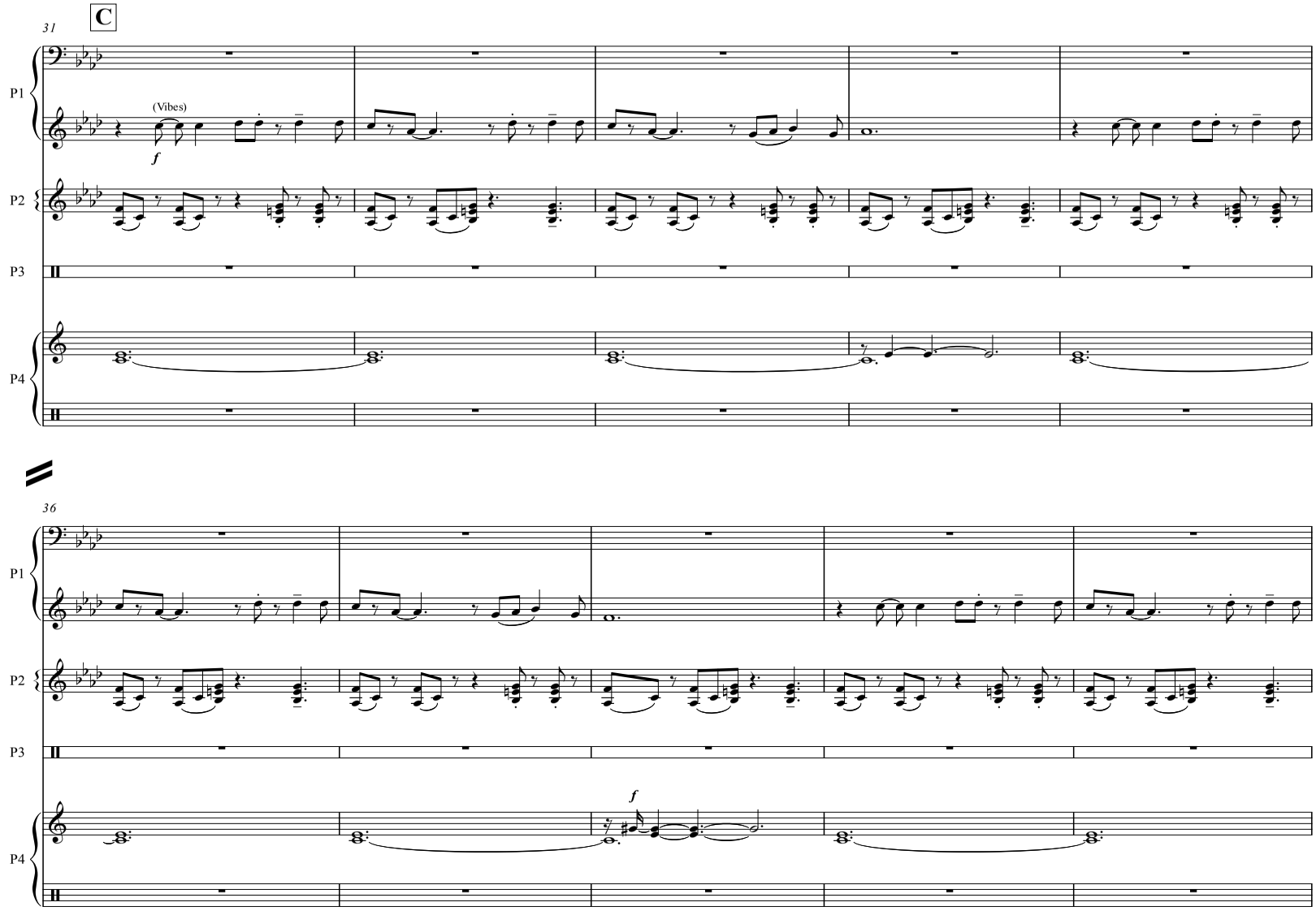
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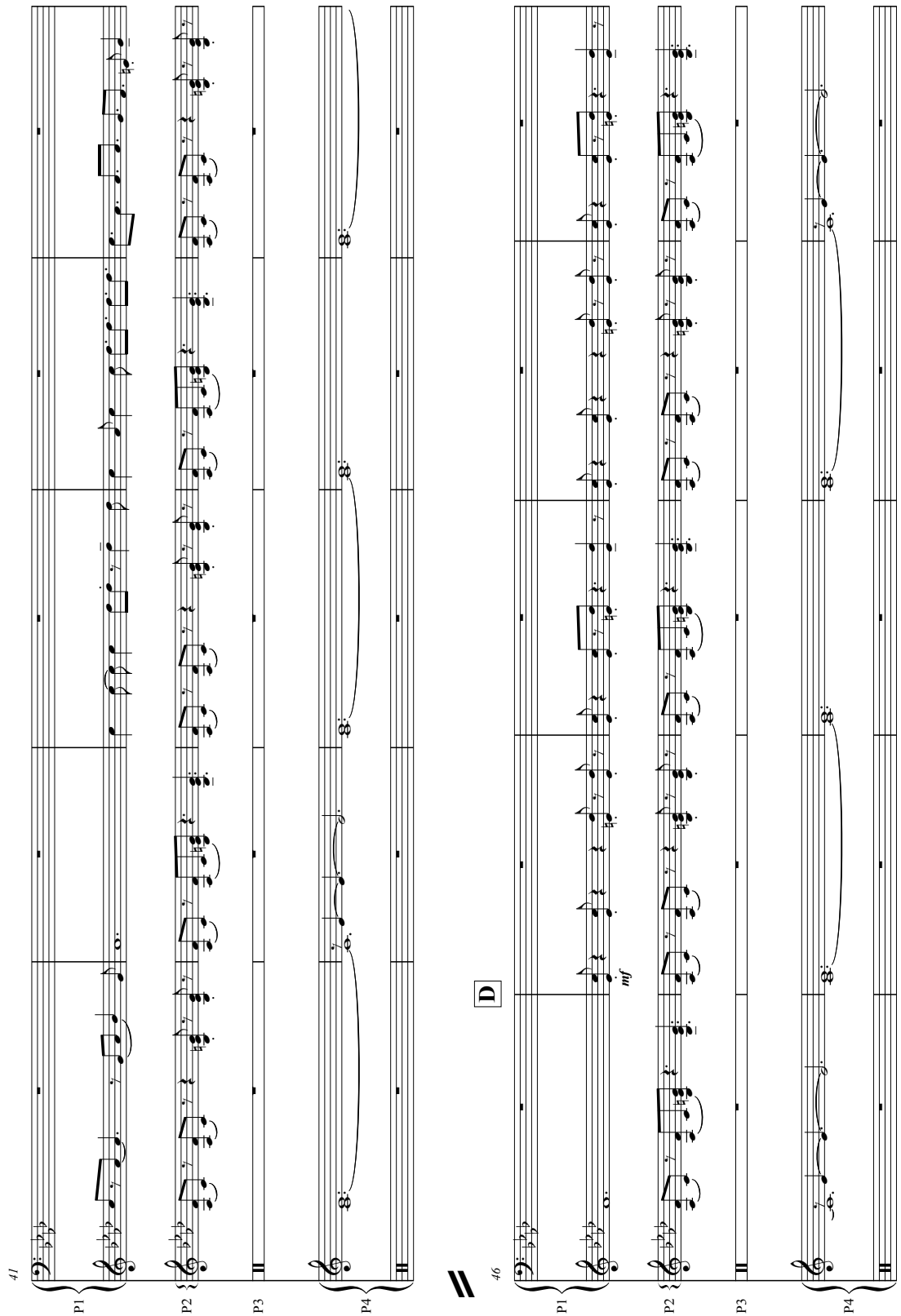
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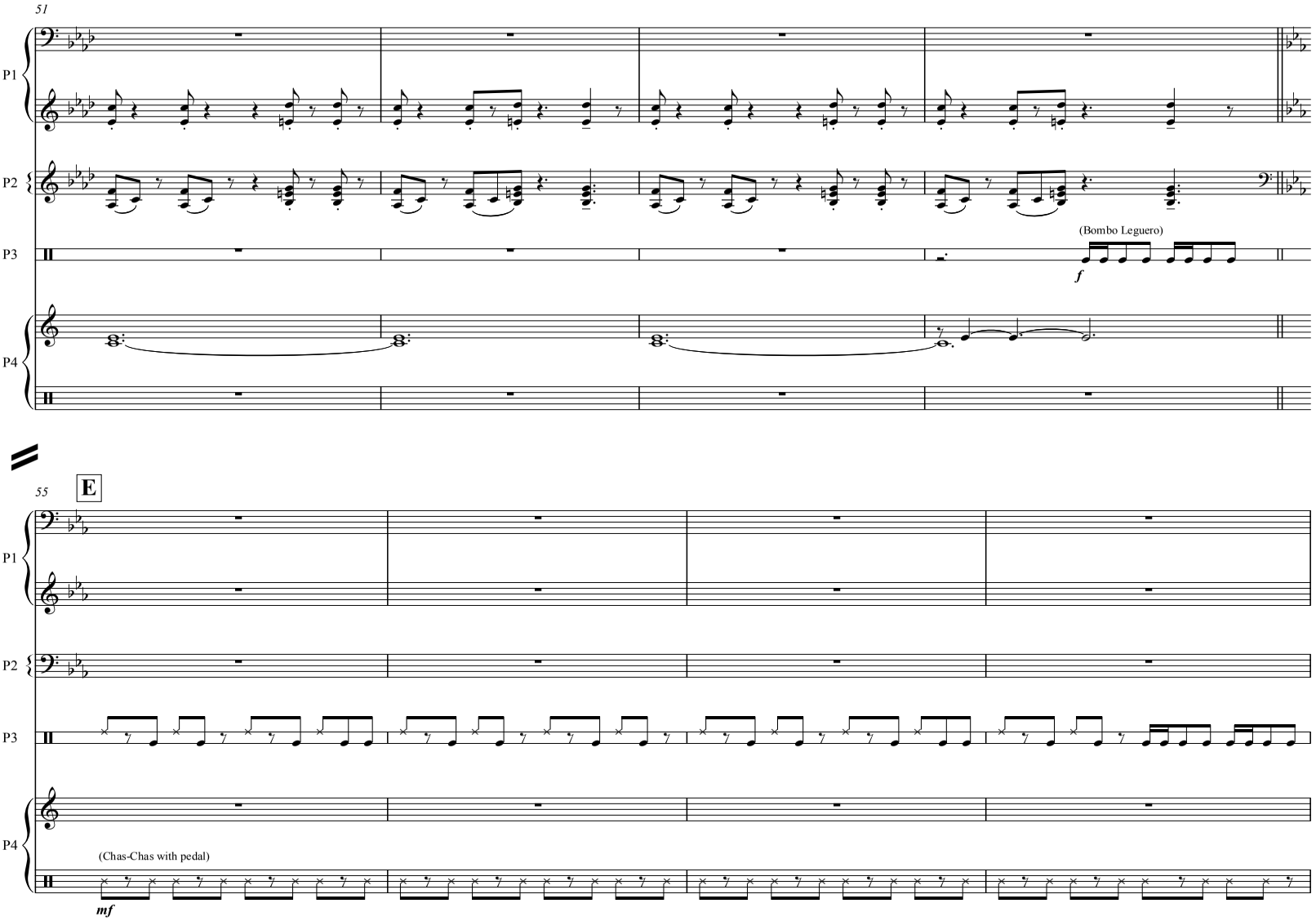
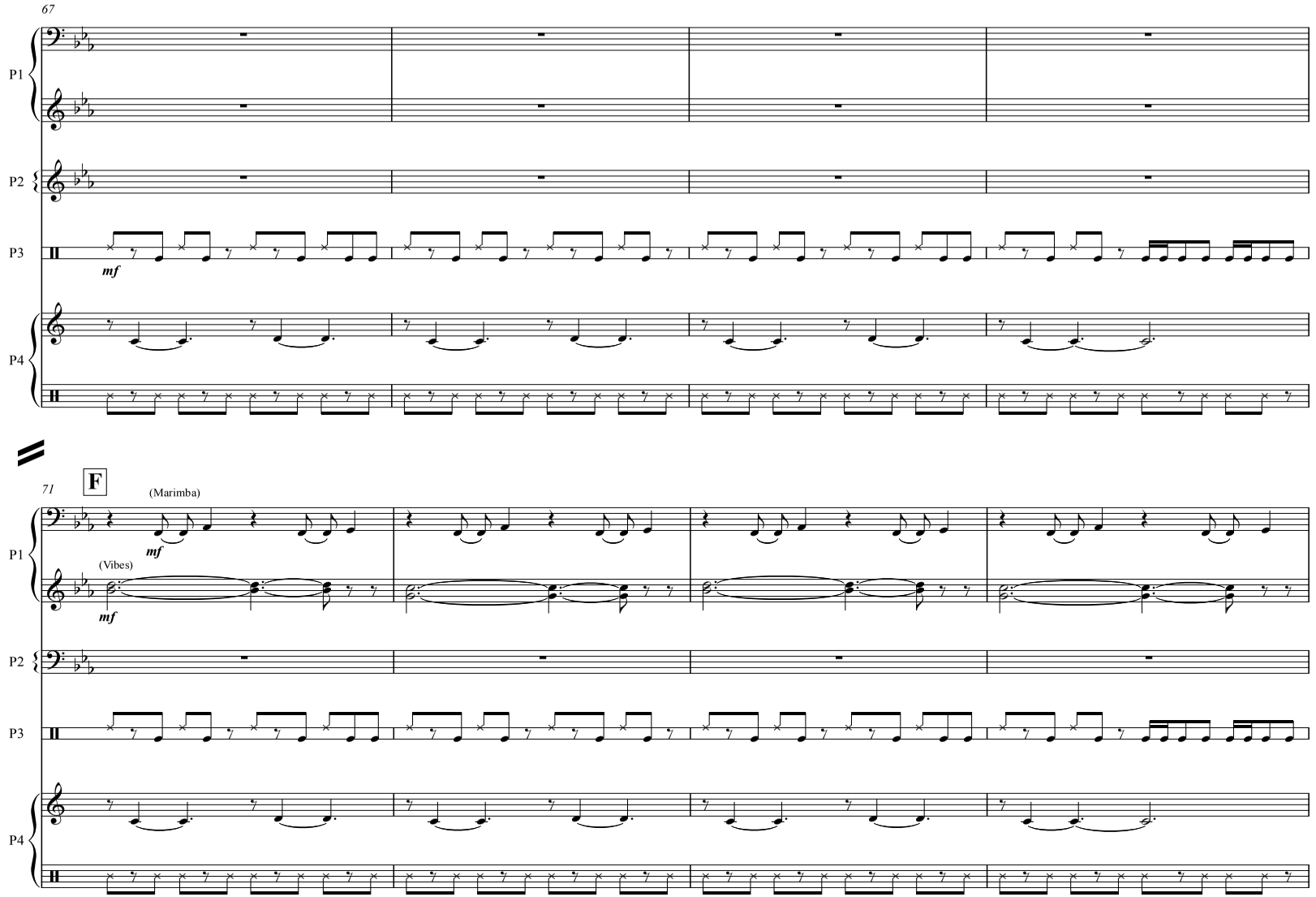
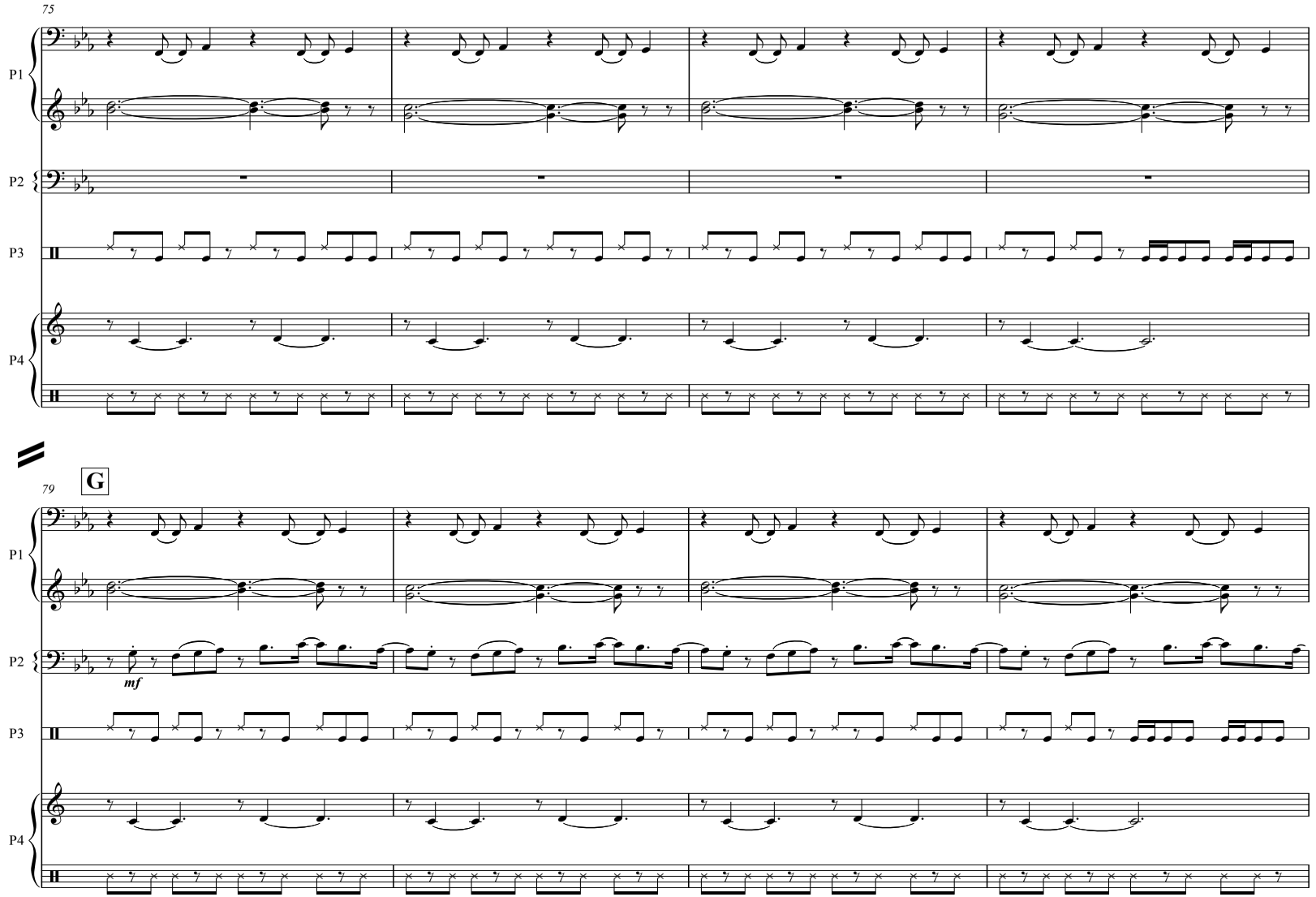
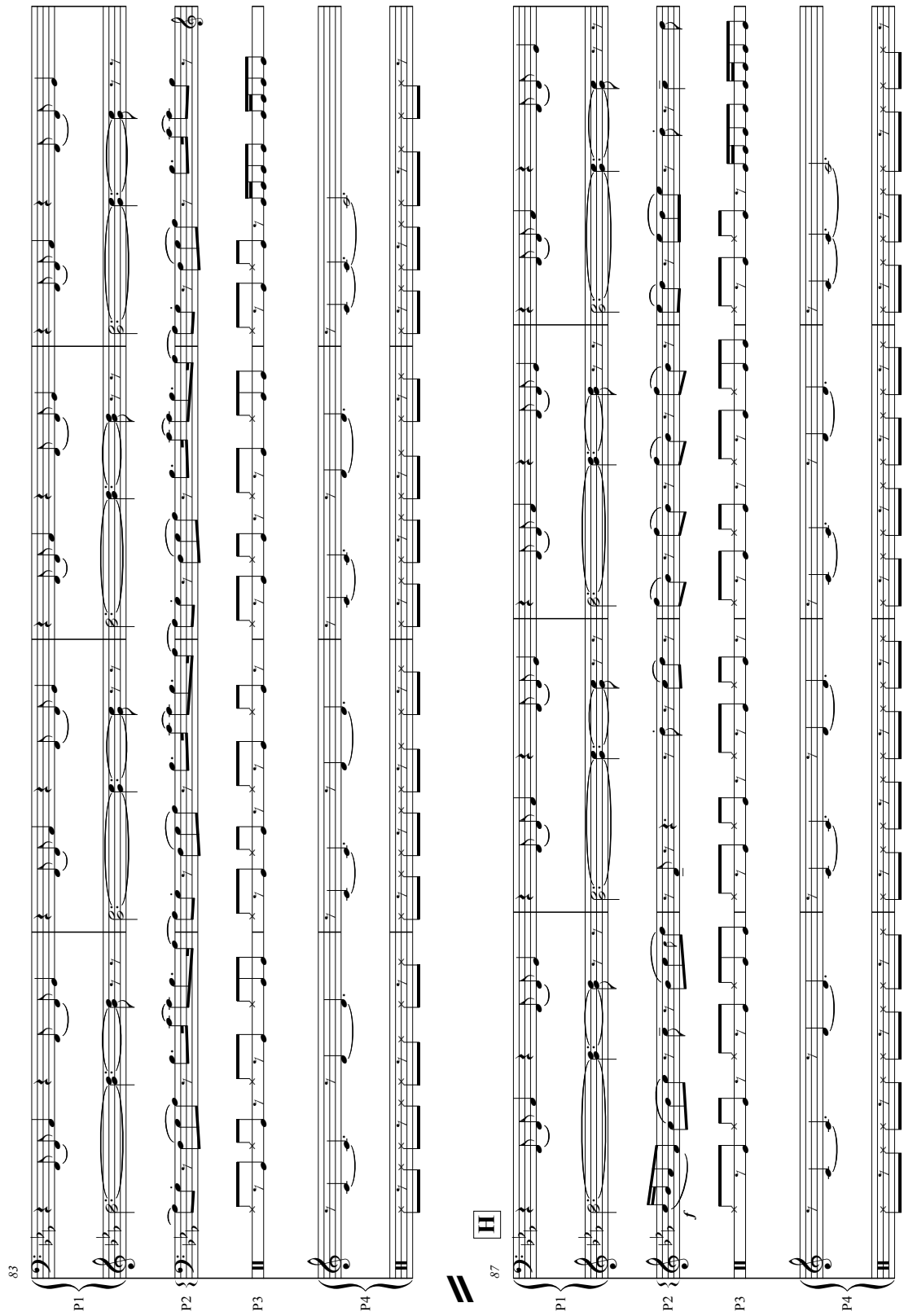
mf
P1
P2
P3
P4

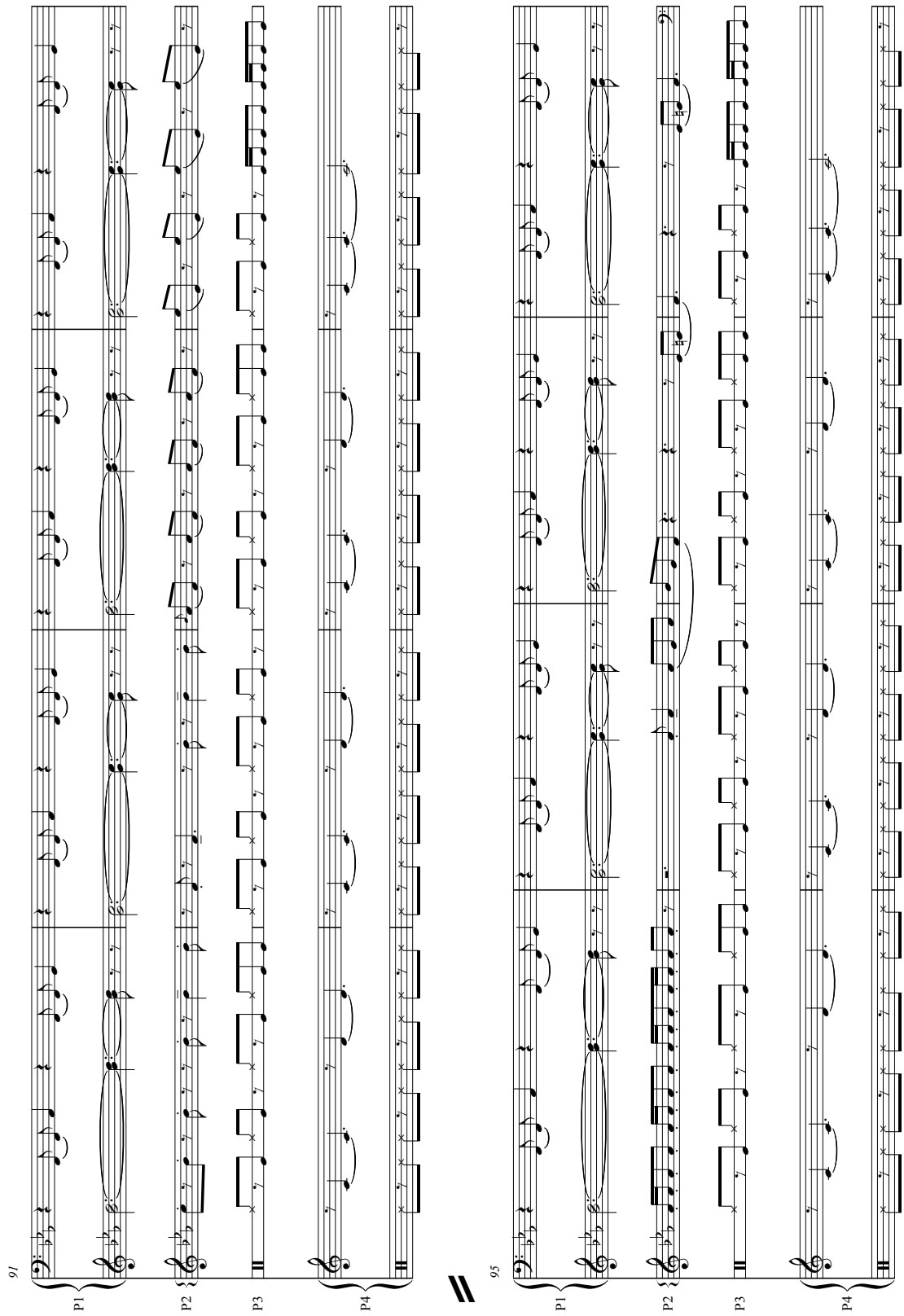

51
P1
P2
P3
(Bombo Leguero)
f
P4
55
E
P1
P2
P3
P4
(Chas-Chas with pedal)
mf

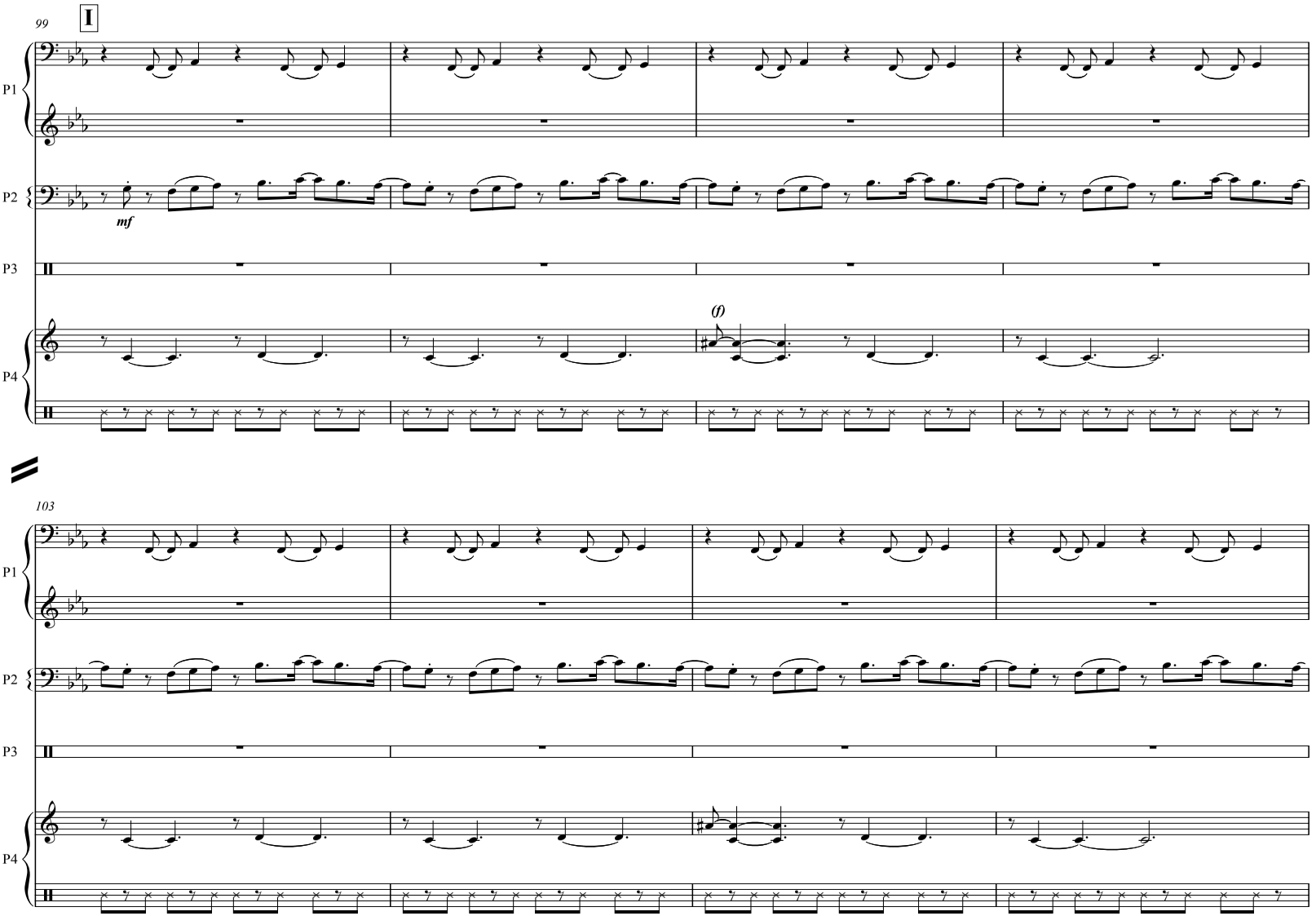

59
P1
P2
P3
P4
63
P1
P2
P3
P4
mf

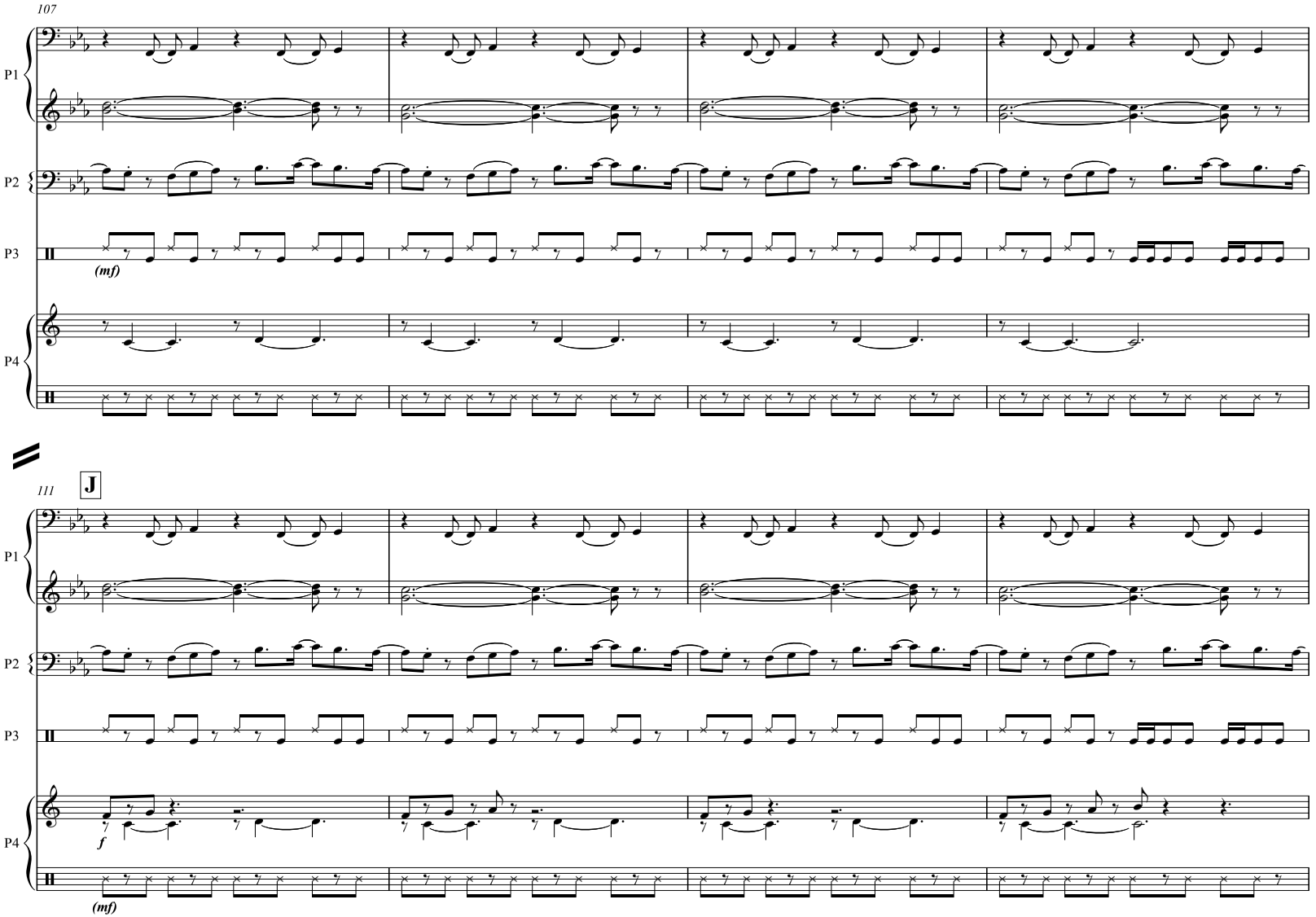

67
P1
P2
P3
mf
P4
71
F
(Marimba)
mf
(Vibes)
mf
P1
P2
P3
P4

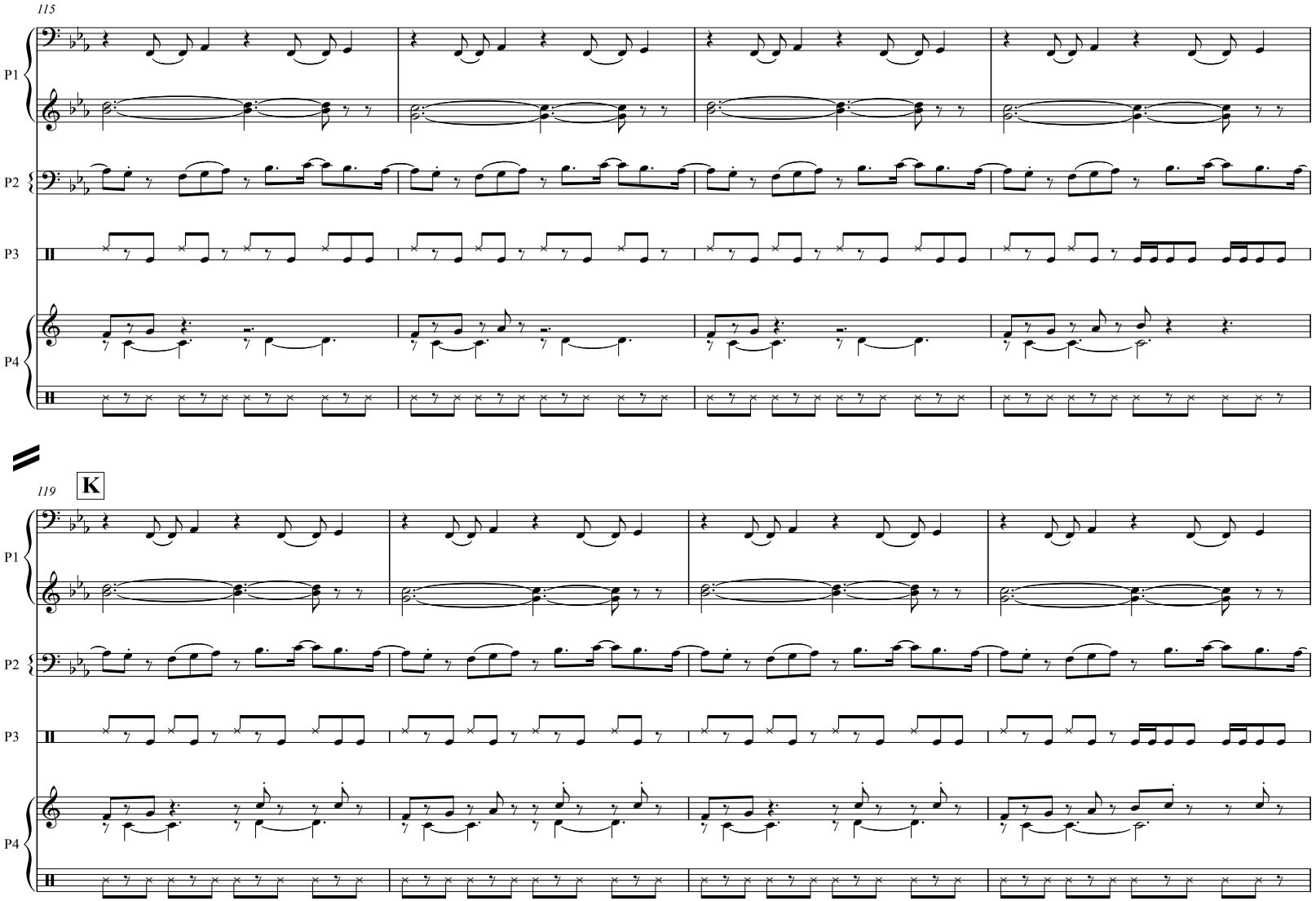

75
P1
P2
P3
P4
79
G
mf

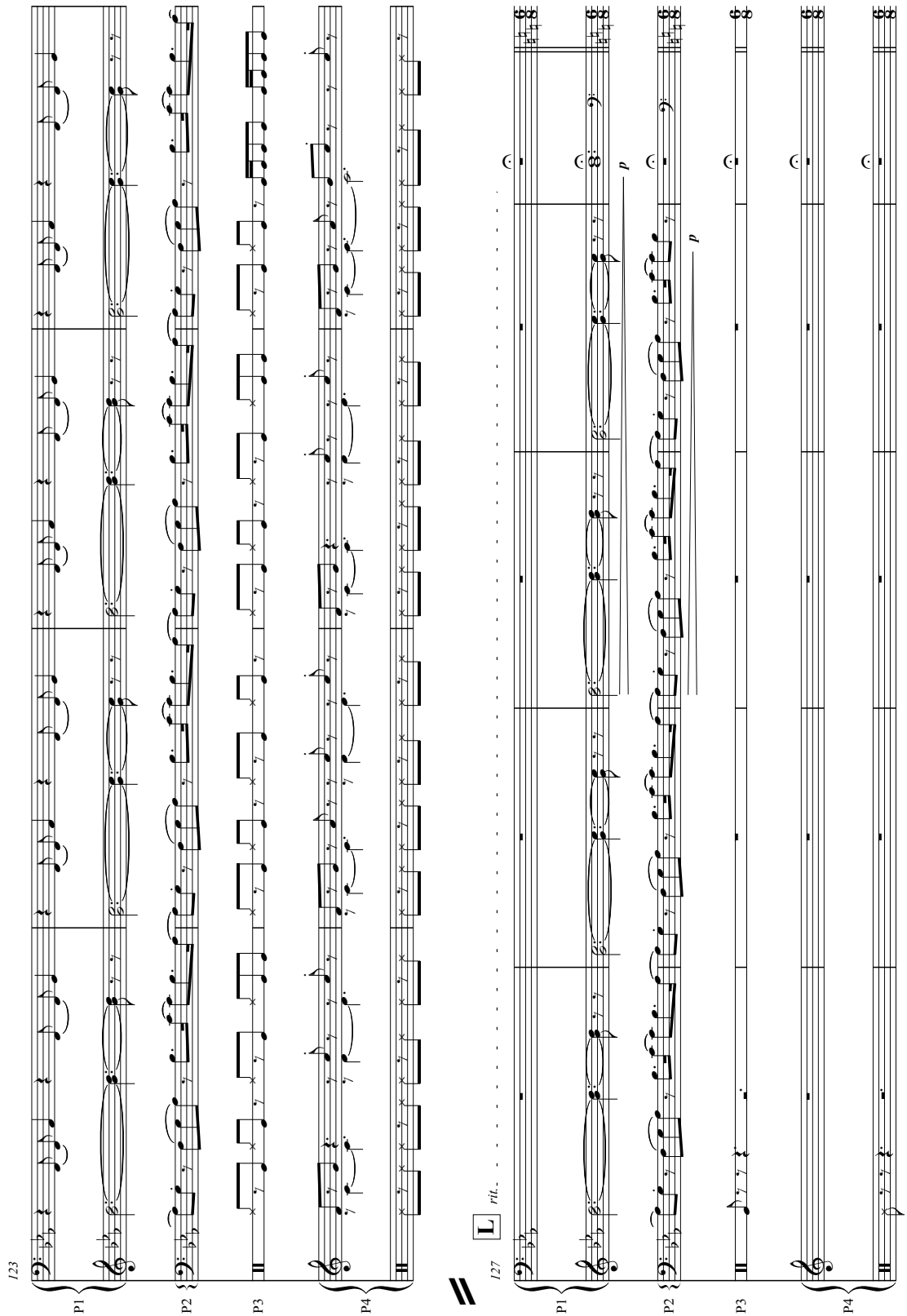

83
P1
P2
P3
P4
87
H
P1
P2
f
P3
P4

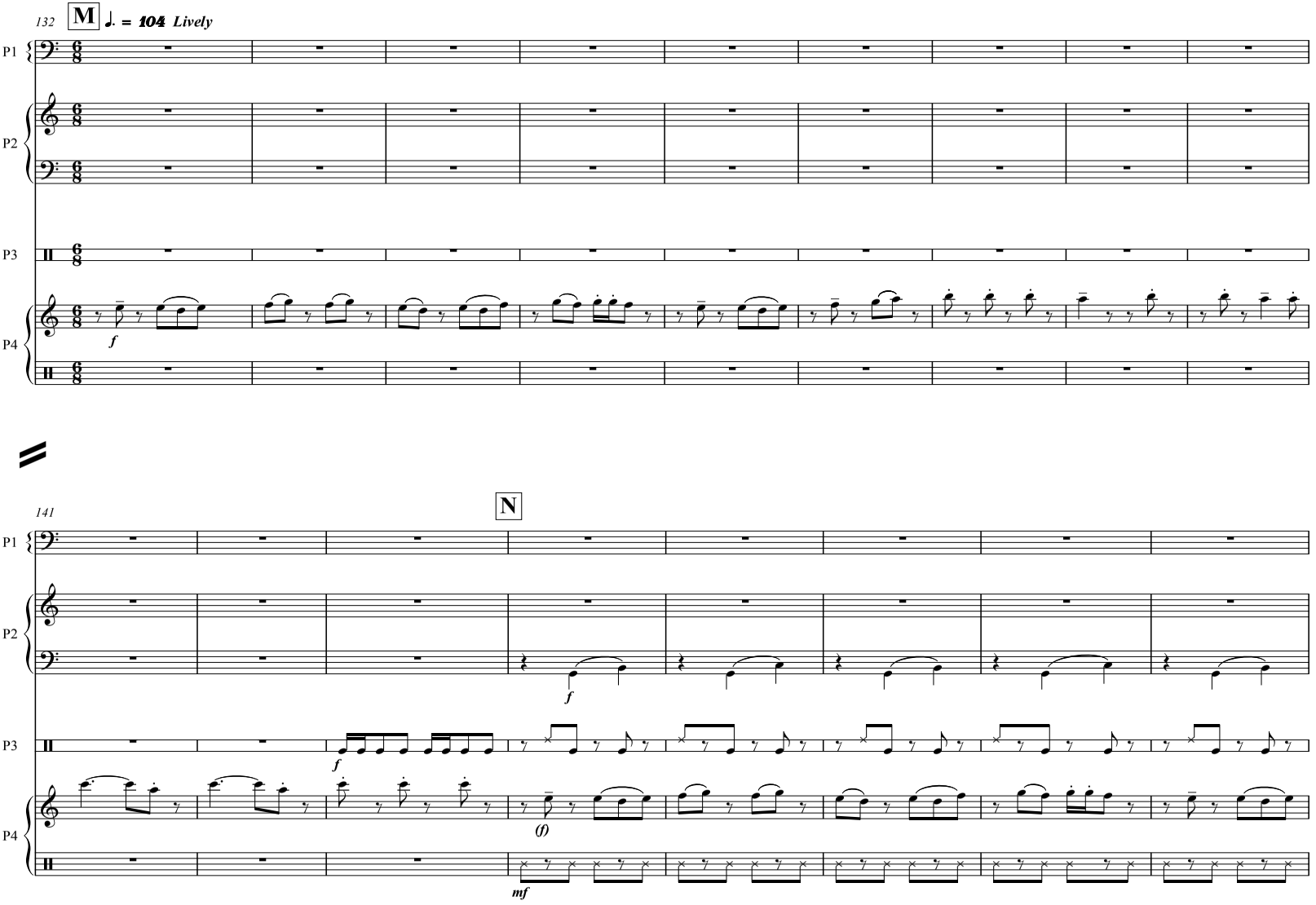

91
P1
P2
P3
P4
95
P1
P2
P3
P4

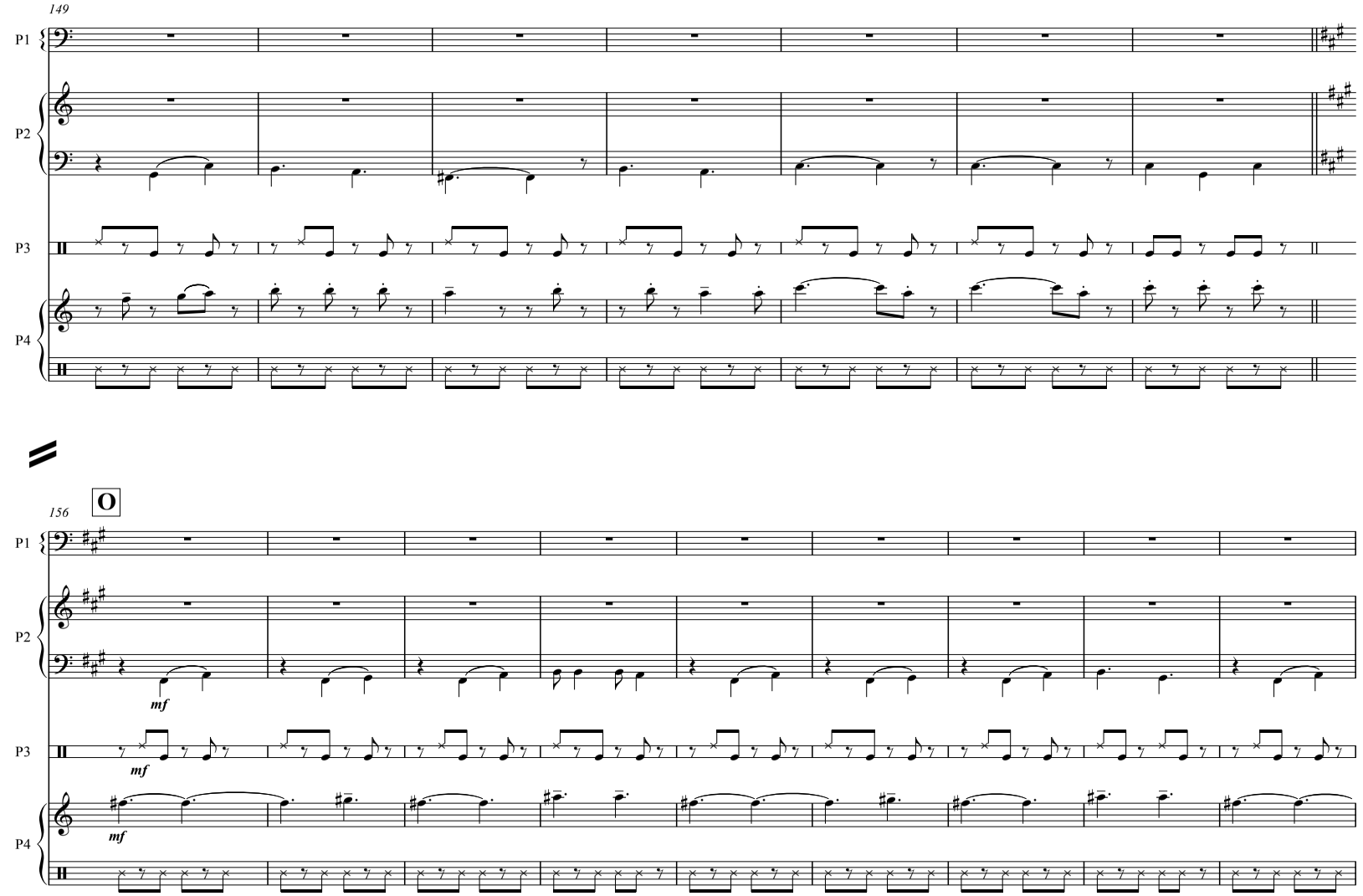

99
I
P1
P2
mf
P3
(f)
P4
103
P1
P2
P3
P4

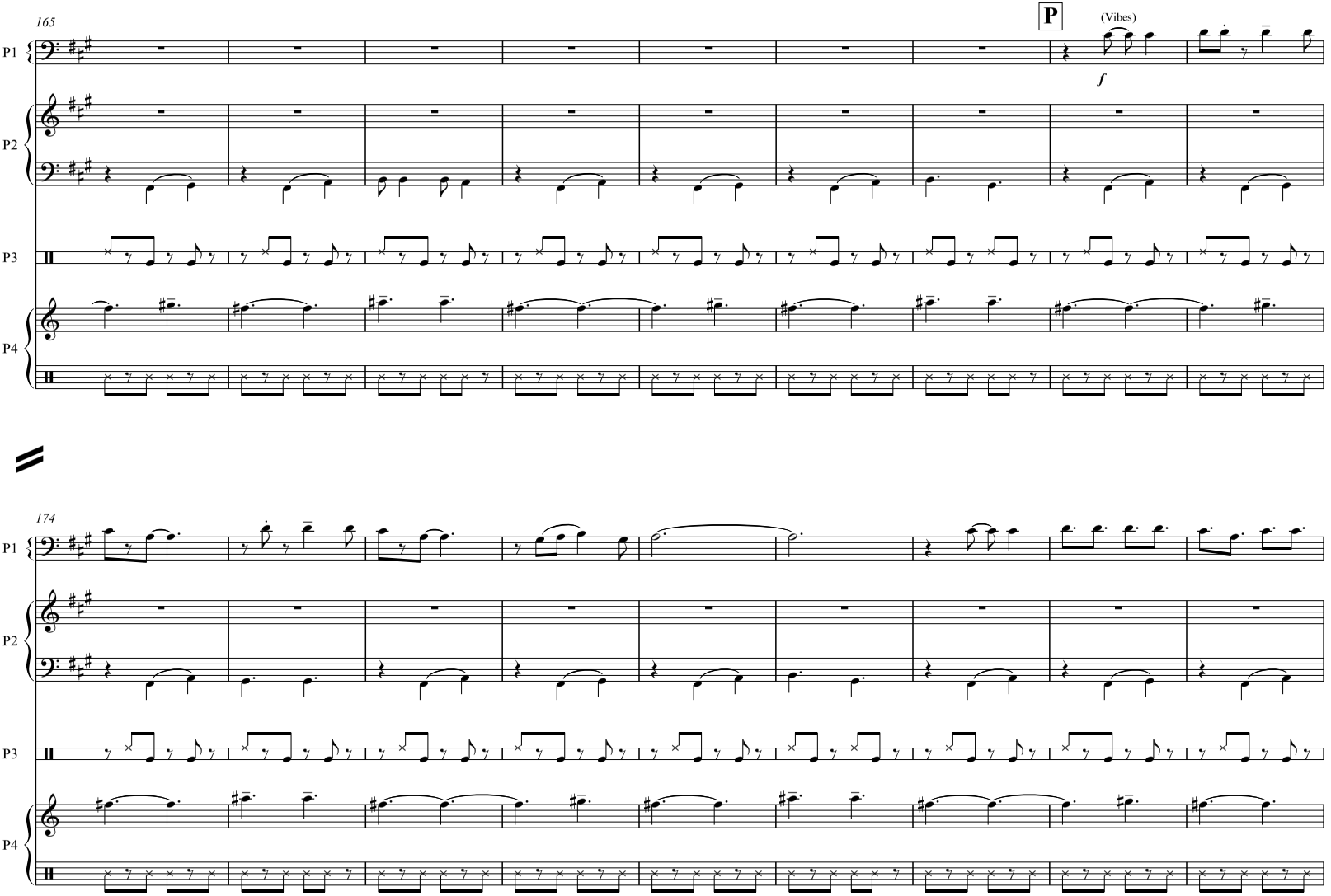

107
P1
P2
P3
(mf)
P4
111
J
P1
P2
P3
P4
f
(mf)

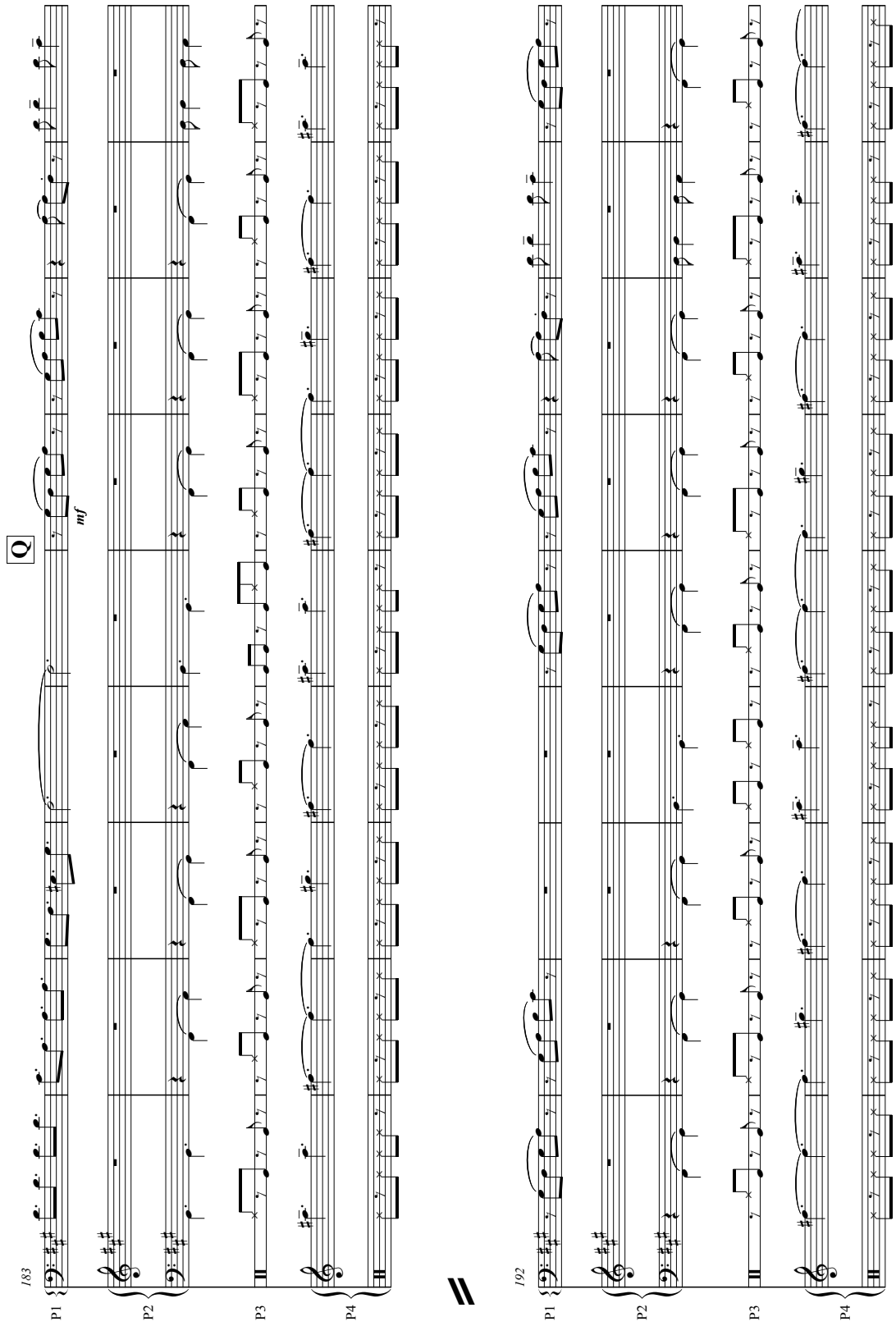

115
P1
P2
P3
P4
119
K
P1
P2
P3
P4

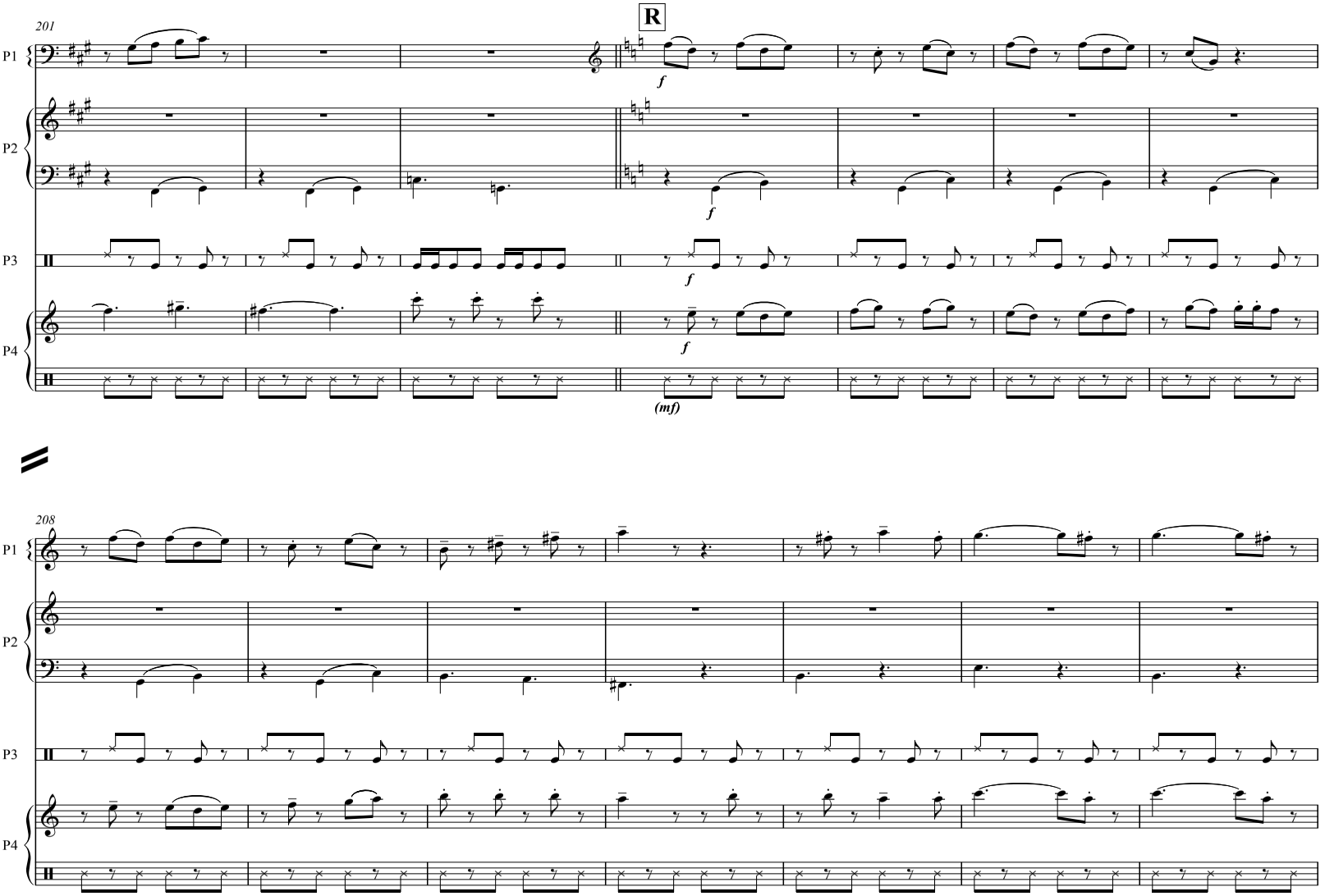

123
P1
P2
P3
P4
127
L
rit.
p
p
P1
P2
P3
P4

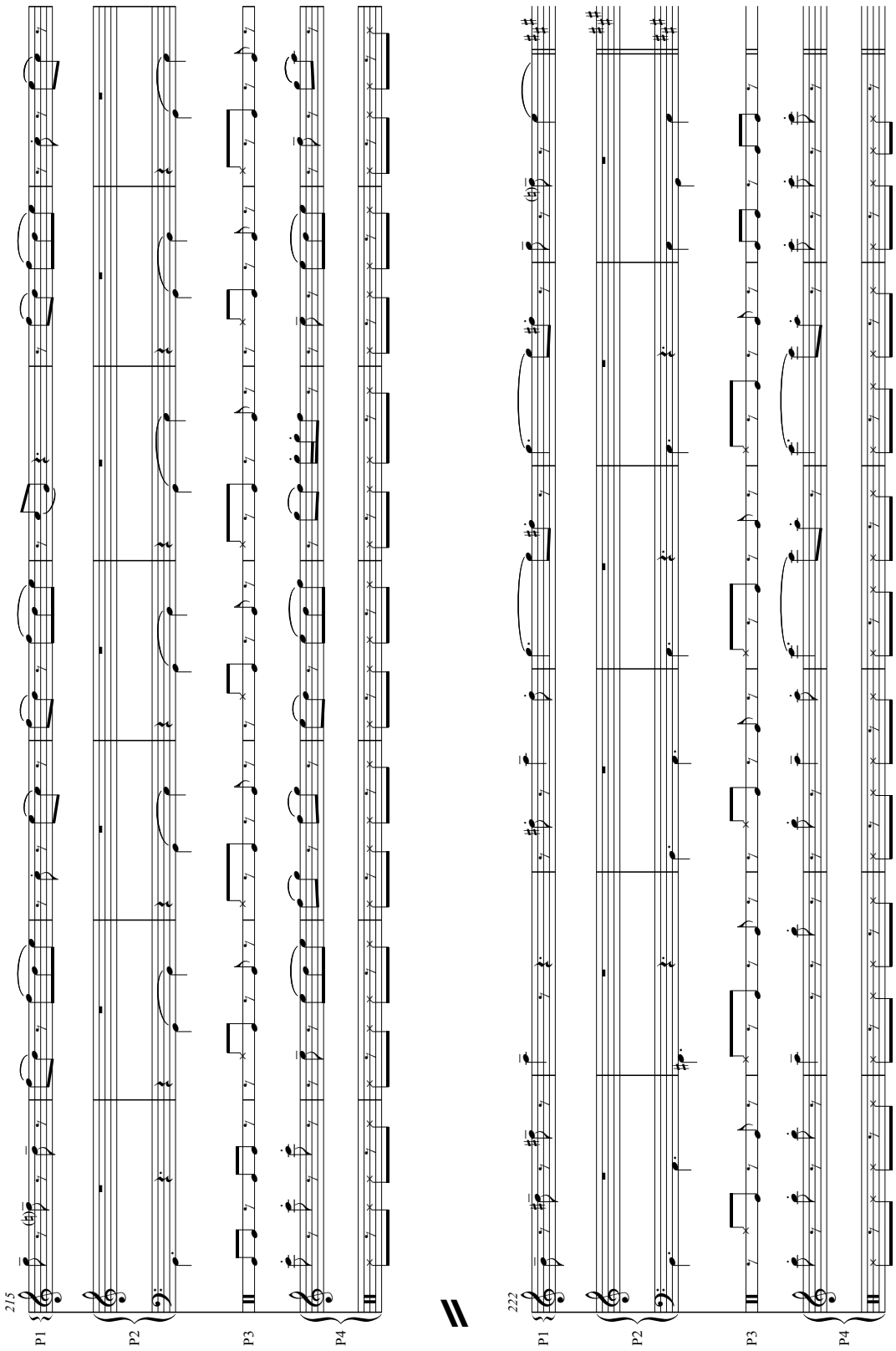

132
M
♩. = 104 Lively
P1
P2
P3
P4
f
141
N
f
f
(f)
mf

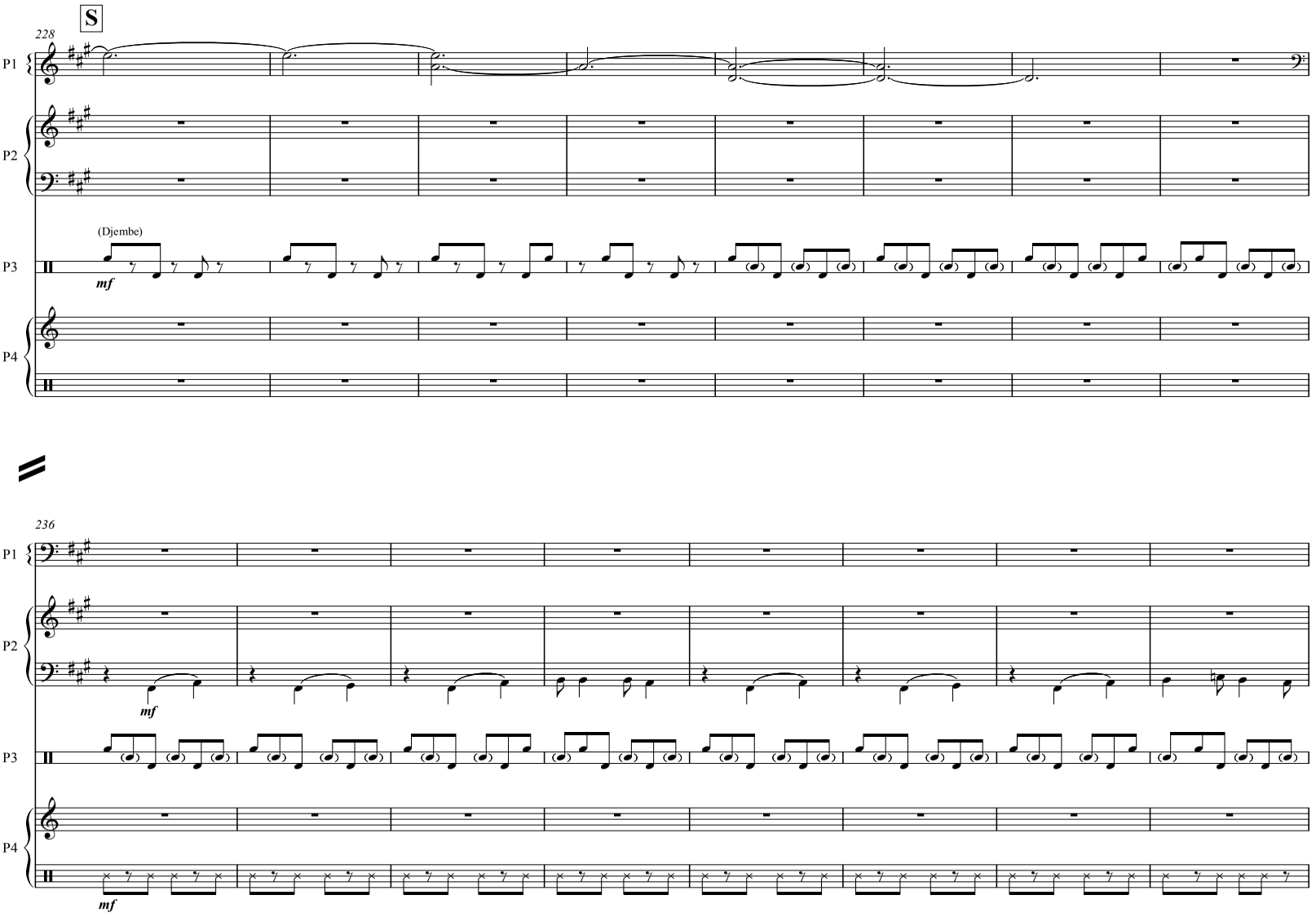

149
P1
P2
P3
P4
156
O
mf
mf
mf

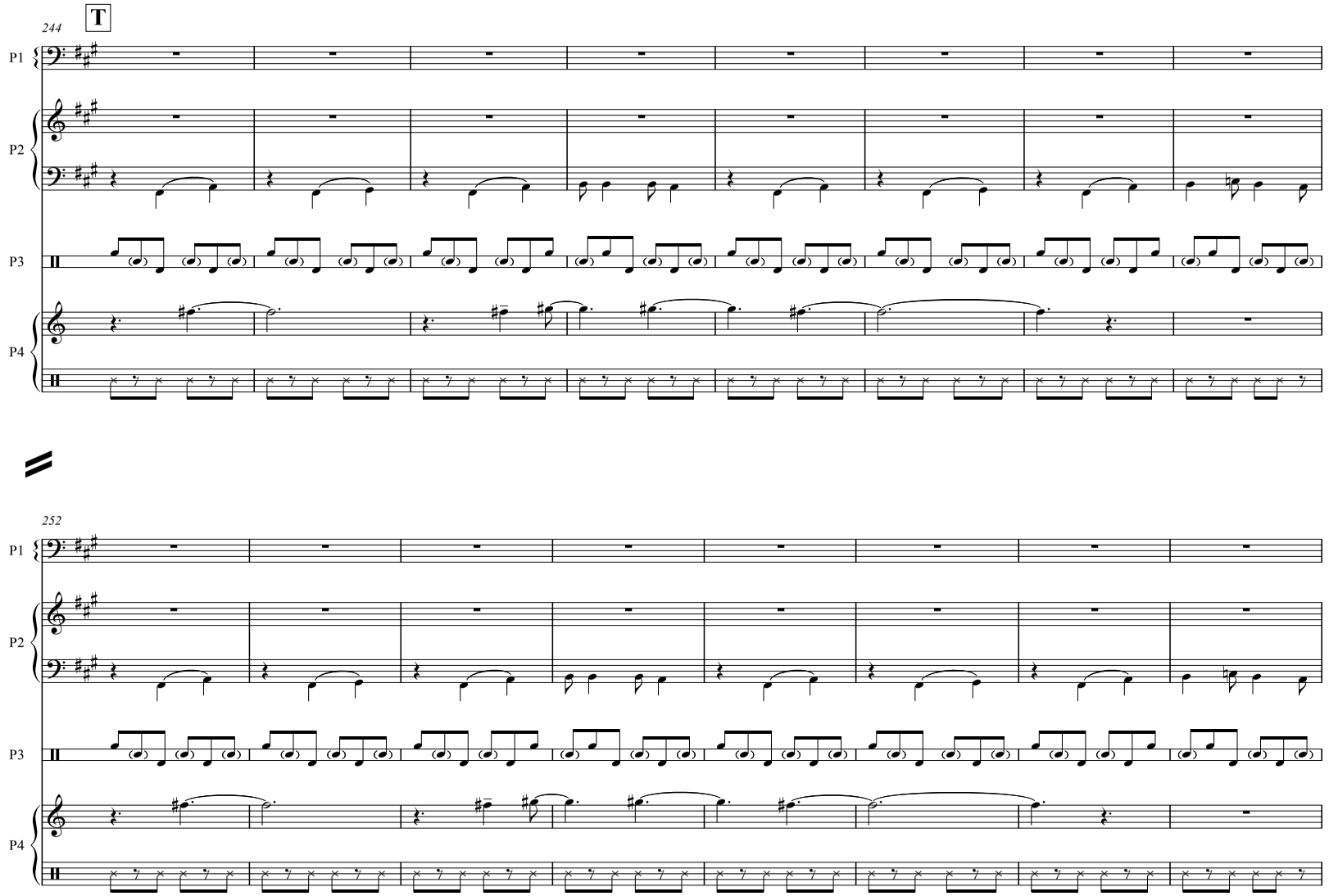

165
P
(Vibes)
f
P1
P2
P3
P4
174
P1
P2
P3
P4

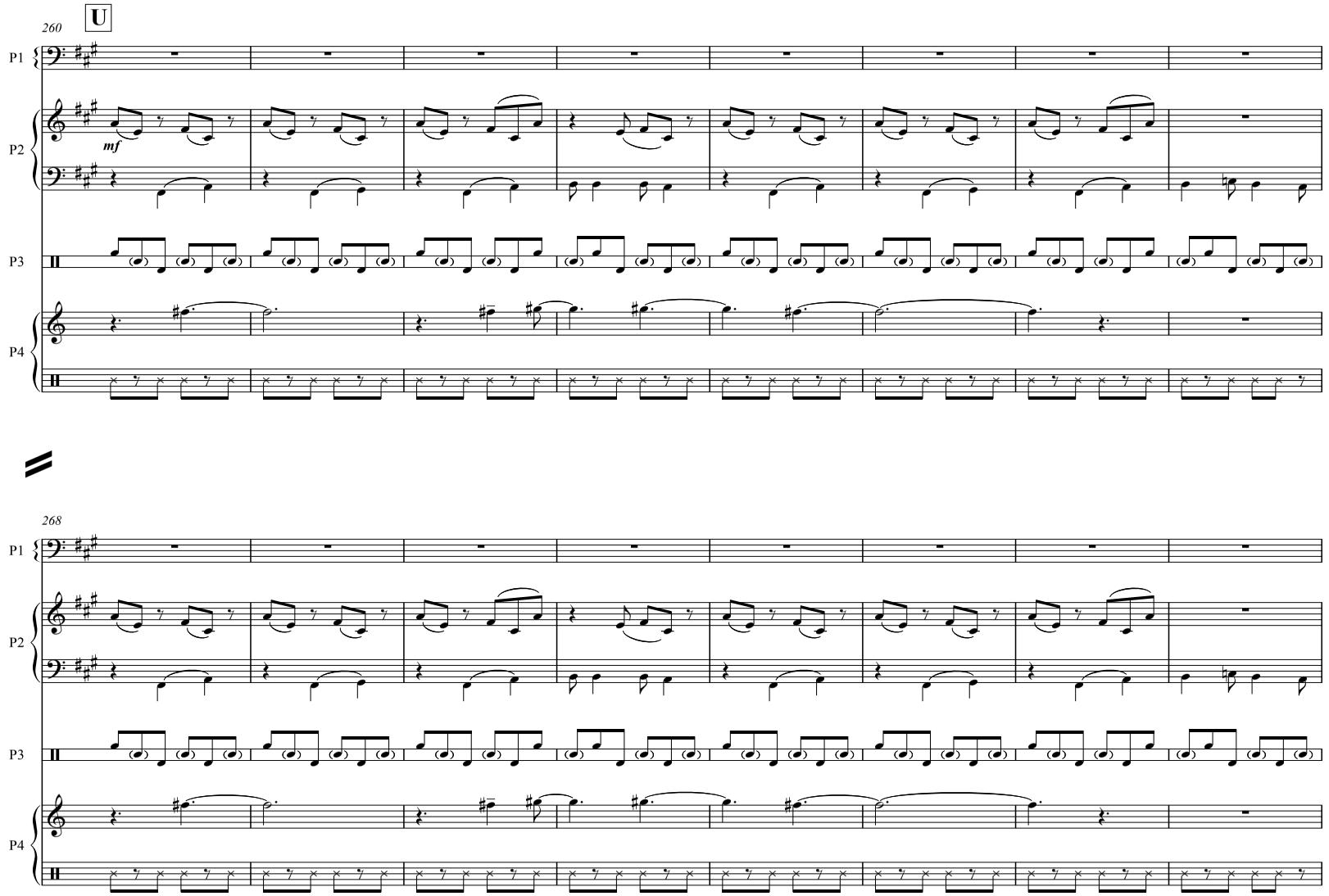

183
Q
mf
P1
P2
P3
P4
192
P1
P2
P3
P4

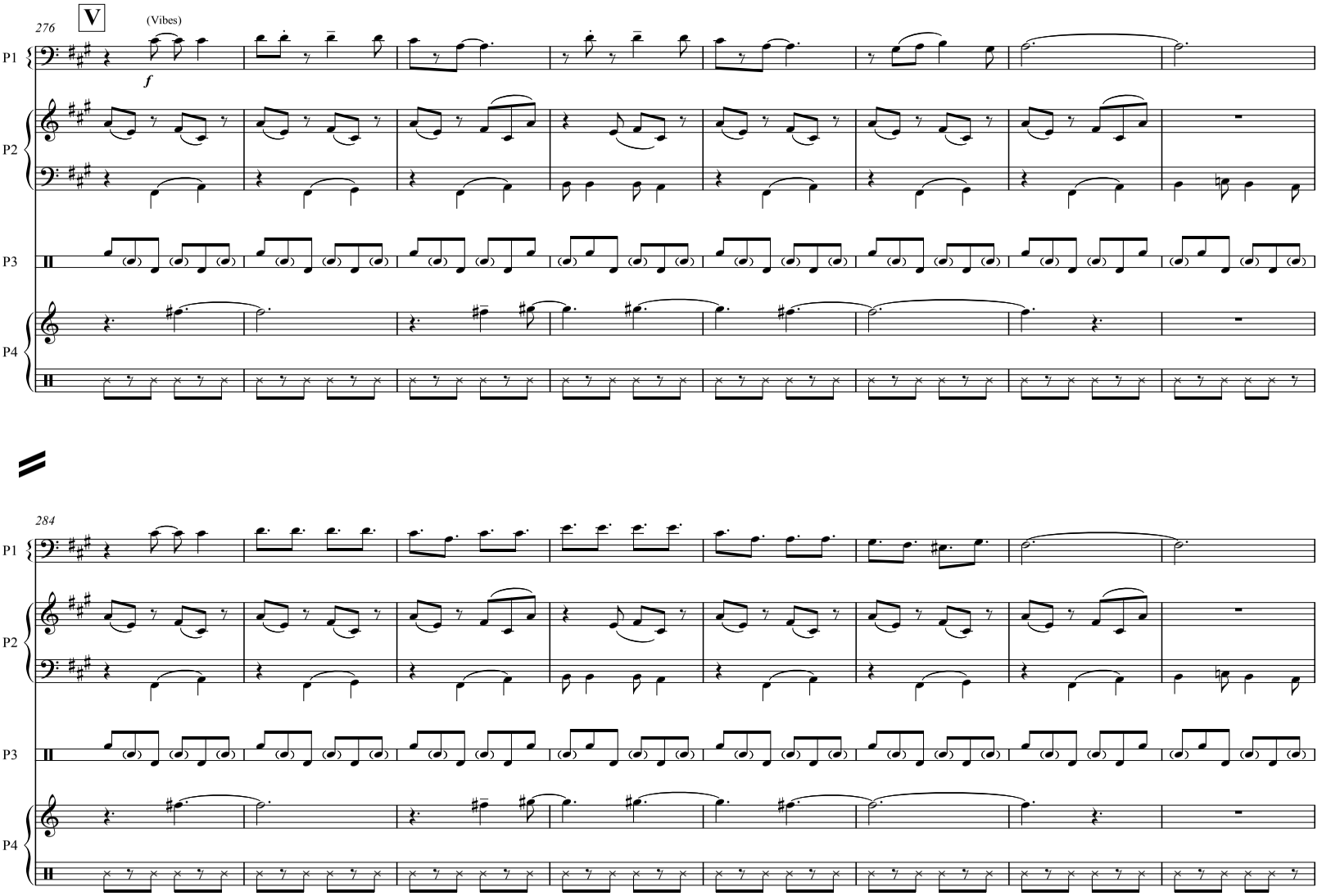

201
R
P1
P2
P3
P4
f
f
f
f
(mf)
208
P1
P2
P3
P4

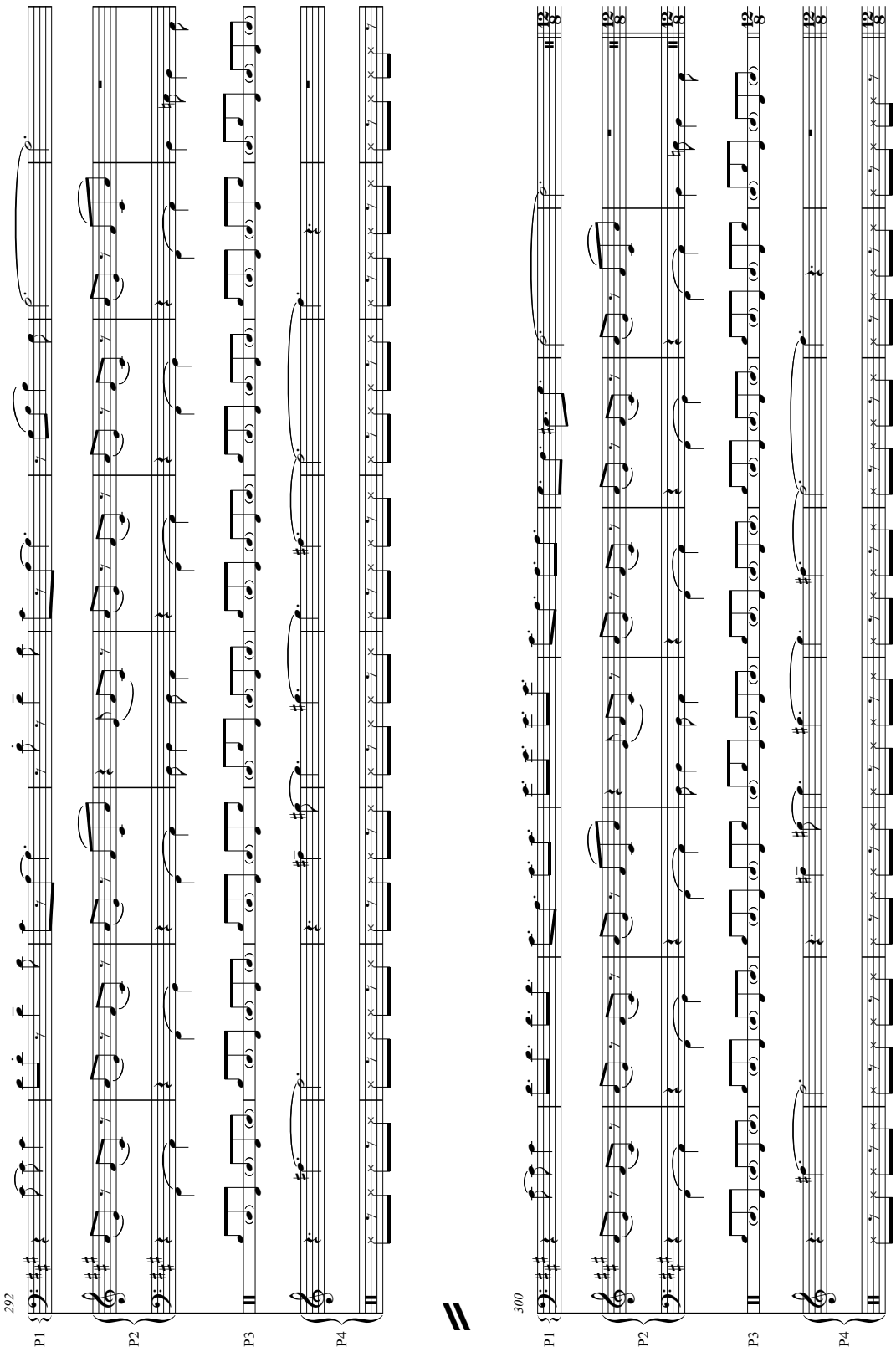

215
P1
P2
P3
P4
222
P1
P2
P3
P4

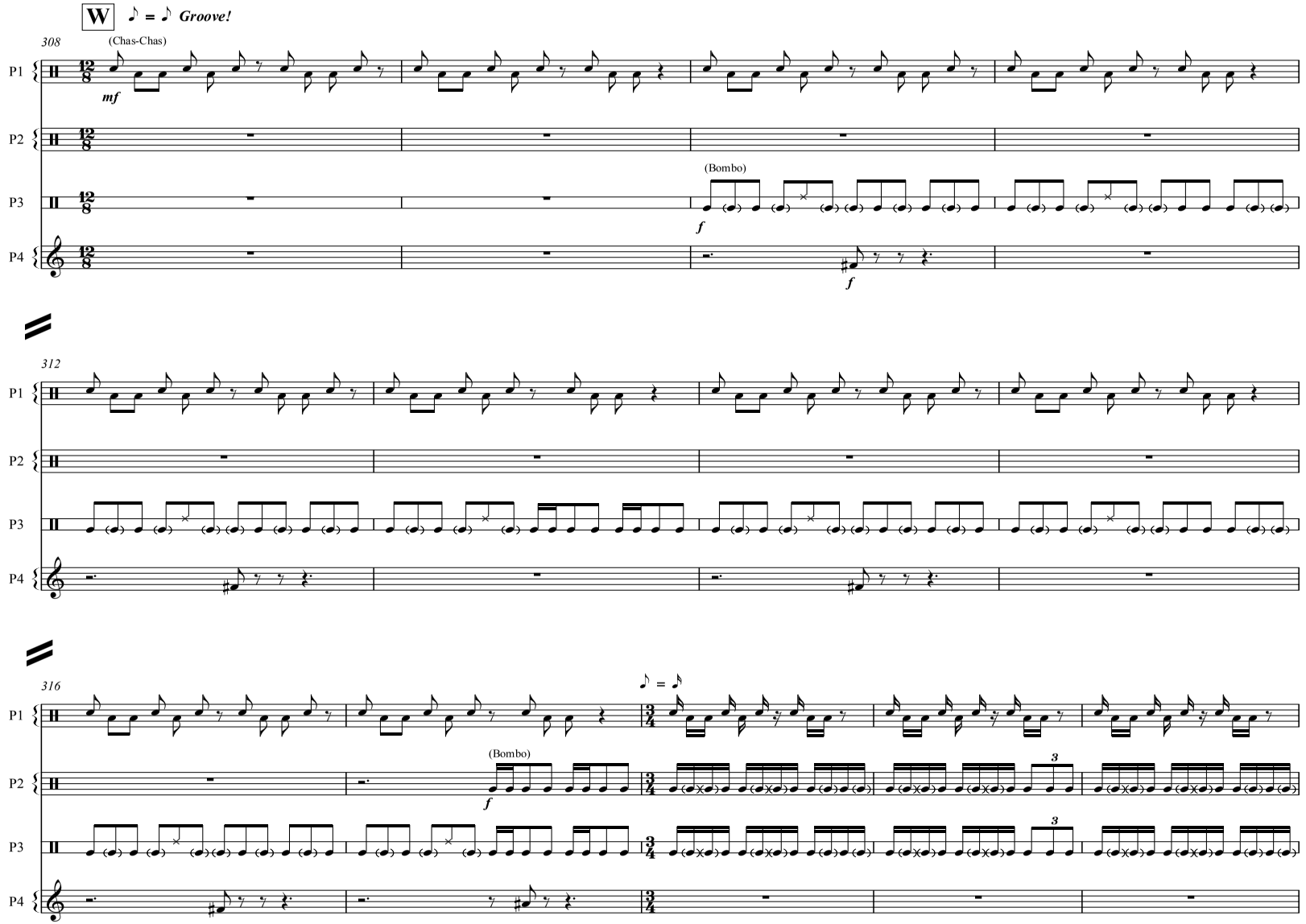

S
228
P1
P2
(Djembe)
P3
mf
P4
236
P1
P2
mf
P3
P4
mf

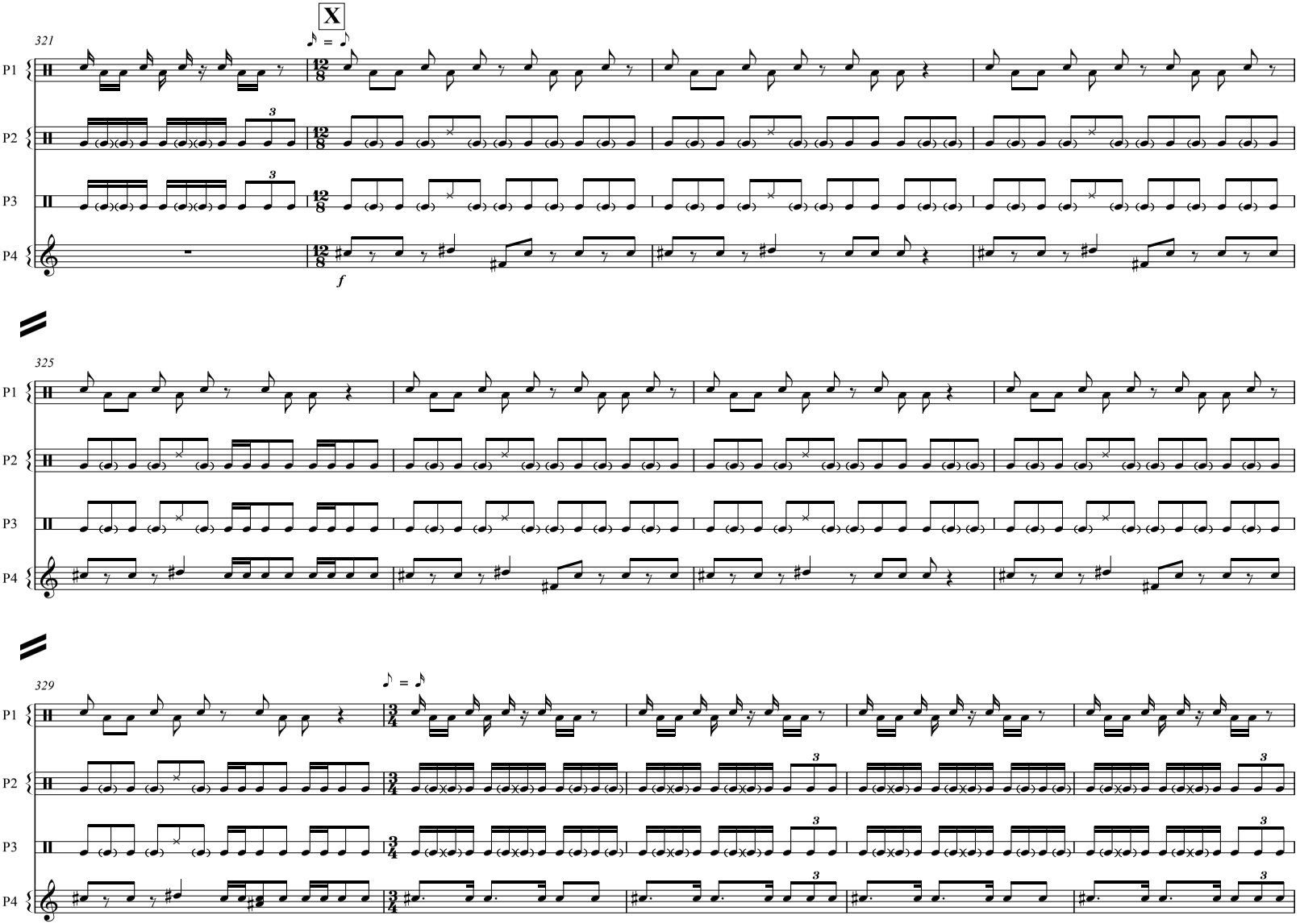

T
244
P1
P2
P3
P4
252
P1
P2
P3
P4

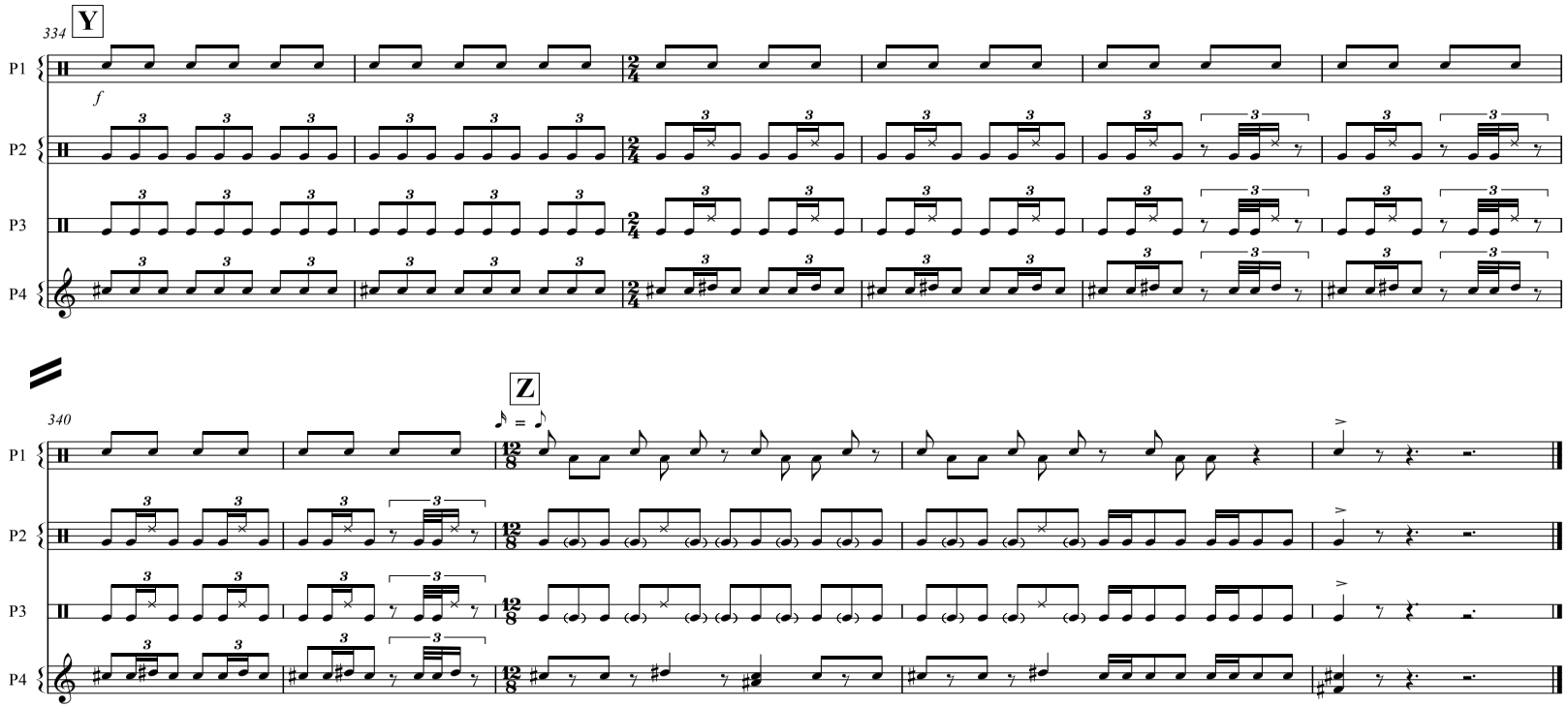

U
260
P1
P2
mf
P3
P4
268
P1
P2
P3
P4


276
V
(Vibes)
f
P1
P2
P3
P4
284
P1
P2
P3
P4


292
P1
P2
P3
P4
300
P1
P2
P3
P4


W
♪ = ♪ Groove!
308
(Chas-Chas)
mf
(Bombo)
f
f
312
316
♪ = ♪
(Bombo)
f
3
3
P1
P2
P3
P4


321
X
P1
P2
P3
P4
f
325
329


334
Y
P1
P2
P3
P4
f
340
Z

CHAPTER 3

Charangueando: Performance Issues

PART ONE: General Considerations for Performers

PART TWO: Live Sampling and the Laptop as an Instrument

Note: This chapter is designed as a supplement to the *Charangueando* score, with insights for performers into general performance issues and the live sampling process. Part One will be reformatted and included in the published score as a section titled "Notes to Performers." Part Two will be reformatted and included in the published score as an appendix.

PART ONE: General Considerations for Performers

Charangueando draws heavily on the folk and popular music practices embraced by Gaby Kerpel. As performers in those styles generally forego the use of sheet music in performance, memorization of *Charangueando* is greatly encouraged.

The djembe is used in *Charangueando* because its characteristically bright overtones enhance the sound of the live sample when played back at different pitches. Three sounds are needed from the drum: high (open), low (bass), and muted. These sounds may be easily realized without sophisticated hand drum technique. The open tones on the downbeat of each measure should be slightly muted to achieve a shorter, brighter sound. If possible the fundamental tone of the drum should be tuned to f-natural, and a tunable synthetic drum mounted on a stand works very well for the piece.

The *bombo leguero* from northern Argentina is a deep, rope-tensioned drum with unshaven goatskin heads. The *bombo leguero*'s low, mellow sound is contrasted with brighter "clicks" made on the wooden rim. If no *bombo legueros* are available (two are needed), the sound may be approximated by laying a towel completely over the head and rim of a 14 x 14 floor tom with thick, fiberskyn-type heads. Non-tapered sticks such as Innovative Percussion's GS-2 are appropriate, though the back ends of larger concert snare sticks (2B or so) may also work.

The *chas-chas* are traditional northern Argentine shakers made from bundles of goat hooves. They are often struck against a small bowl-shaped drum called a *cultrun*; at W, Player 1 imitates this sound by striking the *chas-chas* against a piccolo snare drum that is covered with a towel. Surprisingly, *chas-chas* are inexpensive and easy to find (at the time of this writing, an Amazon search for "goat hoof rattle" yielded a pair for $17).

Player 4 will also play a set of *chas-chas*, though in a non-traditional manner. The musician will need an electronic kick-drum trigger that uses an inverted beater, such as the Roland KD-7 or Pintech K-3. The shaft of the inverted beater should be wound through the *chas-chas* so that they rest securely on top of the felt beater (see *Fig. 1.5* on page 33). The trigger isn't actually plugged into anything; it simply provides a muted surface to strike the pedal against.

The pitch manipulation of the sampled djembe pattern creates some quite syncopated rhythms. To help performers understand what the sampler is playing, *Figures 3.9* and *3.10* (page 89) illustrate the rhythms resulting from the laptop's transpositions. It may also be helpful for the musicians to focus on the sampler player's *chas-chas* from E through K, as the sampler player is uniquely able to match the timing of his acoustic instrument with that of the syncopated sample playback.

During the section from F through K, Player 1 will play the bass end of Player 2's marimba. When using the recommended setup (*Figure 2*.2, page 45) this is quite simple, especially if a 4½-octave marimba is used; the vibraphone part is played with two mallets in the left hand while the marimba part is played with one mallet in the right hand.

Player 3 may subtly improvise simple "fills" on the *bombo leguero* to help mark phrases and sections, though adherence to the written pattern for each section is very important. There should be no improvisation from W to the end.

Player 3 has a quick switch back to djembe at S. The last few bars of R should be played with one hand so that the musician may put one stick down. The first time through the pattern at S may then be played with one hand if necessary (with no muted strokes) as the remaining stick is put down.

Player 1 has a similar quick change to the *chas-chas* at W. The last few bars of V should be played with the left hand as the right hand picks up the *chas-chas*. If necessary, some or all of W to the end may be played with the vibraphone mallet still in the left hand as it makes the muted strokes (though the strokes should be made with the fingers rather than the mallet).

From W to the end, there is no preferred sticking for the *bombo leguero* pattern. However, both players are encouraged to incorporate the same sticking if doing so helps the consistency of the rhythmic feel.

All of these issues were effectively addressed by the Queens College Percussion Ensemble during their excellent performance of *Charangueando.* A video of this performance may be viewed at http://www.treyfiles.com/charangueando.html.

PART TWO: Live Sampling And The Laptop As An Instrument

"Live sampling" involves the real-time recording and manipulated playback of a portion of music. Much of *Charangueando* is built upon a two-measure djembe pattern that is recorded and subsequently processed through Ableton Live software. Although the use of a pre-recorded djembe pattern could make performances less technically challenging, Mr. Kerpel feels strongly that doing so would sacrifice the immediacy (and risk) of live music creation. The piece also features samples of a *charango* (a small folk guitar from northern Argentina) controlled by a MIDI keyboard or drum pad. It is important to note that Mr. Kerpel's goal is not to reproduce or imitate the instrument's traditional playing style; instead, he has created a unique, hybrid laptop/charango instrument by exploiting the MIDI controller's ability to play the guitar's sounds in a way that would be physically impossible on an actual charango.

Electronics Requirements for *Charangueando*

- Laptop computer

- Ableton Live software (version 7 or later)

- Audio interface for analog/digital ("a/d") and digital/analog ("d/a") conversion or Alesis MicLink cable for a/d conversion

- MIDI controller (keyboard or drum pad)

- Microphone for djembe (Shure SM 57 works very well)

- Speaker(s)

- *Charangueando* data (downloaded from http://www.treyfiles.com/charangueando.html)

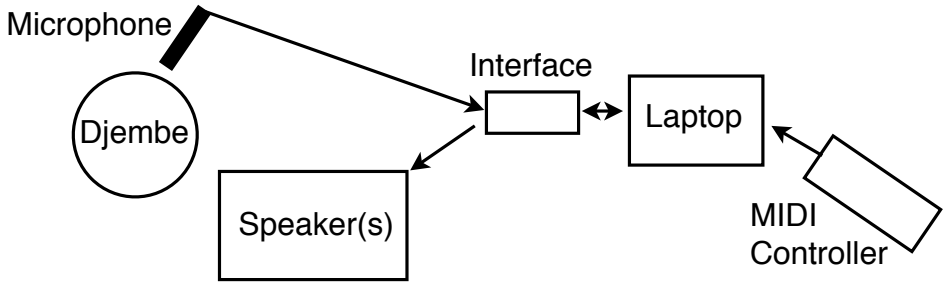


Figure 3.1: Setup diagram for "live sampling" process using an audio interface for input and output (a/d conversion and d/a conversion)

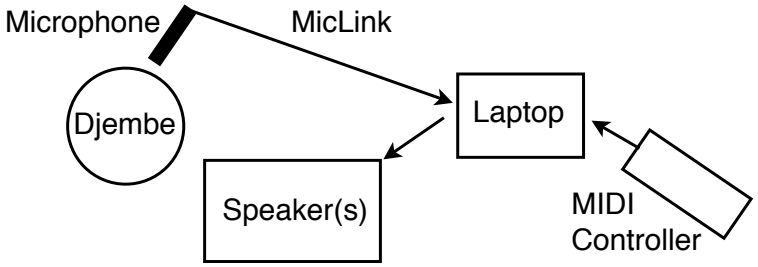


Figure 3.2: Setup diagram for "live sampling" process using an Alesis MicLink cable for a/d conversion and the laptop's headphone jack for audio output (utilizing the laptop's internal d/a conversion)

The Ableton Live *Charangueando* Project has been thoroughly preset and is designed for use by musicians who may have little or no familiarity with the program. However, Ableton Live must be used rather than a looping device or delay pedal due to the required pitch manipulation of the sampled material.

The web page for *Charangueando* includes the Ableton Live Project folder as well as a tutorial video for the Live Sampling process. The musician will need to install Ableton Live onto his or her computer in order to be able to open the *Charangueando*

Project. The audio interface and MIDI controller will need to be recognized by Ableton Live in order to proceed (as always, consult the user manual if any issues should arise).

The *Charangueando* Project has seven channels (Record, Playback, Gaby Vox, Pluck, Hard Strum, Light Strum, and Surdo) as well as a Master Volume channel. The volume fader of each channel may be adjusted to ensure proper balance between the groups of sampled sounds (the volume fader on the Record channel should always remain all the way down). All of the sounds needed except for the Live Sampling pattern are preset in the Ableton Live *Charangueando* Project and should need no adjustment other than that of the volume fader.

In order to make *Charangueando* as widely accessible as possible, the score has been designed with the possible use of a MIDI keyboard controller in mind. Only a two-octave range is utilized, so even most portable and inexpensive controllers are sufficient. However, the piece was conceived and premiered using a DrumKAT controller, and the use of pad controllers instead of a keyboard is welcome. It should be noted, however, that the use of a DrumKAT might necessitate editing a variety of parameters in order for sample playback to properly reflect written note values. An effective and recommended alternative to a keyboard or DrumKAT is the Korg NanoPad, an inexpensive finger pad controller similar to the pad controllers used by Gaby Kerpel. The *Charangueando* presets for the NanoPad using the NanoPad may be downloaded from http://www.treyfiles.com/charangueando.html. Unlike the DrumKAT, the NanoPad requires no further editing of parameters once the preset is loaded. See *Figure 3.3* for a keyboard map of the *Charangueando* template's sample assignments; *Figures 3.4-3.6* show the NanoPad preset's pad assignments for each section of *Charangueando*.

Finally, the use of an onstage speaker is preferable to the house PA system, as this will help the laptop sounds to best blend with the acoustic instruments. Though the sampled sounds are all monophonic, two speakers are recommended so that all performers may clearly hear the laptop.

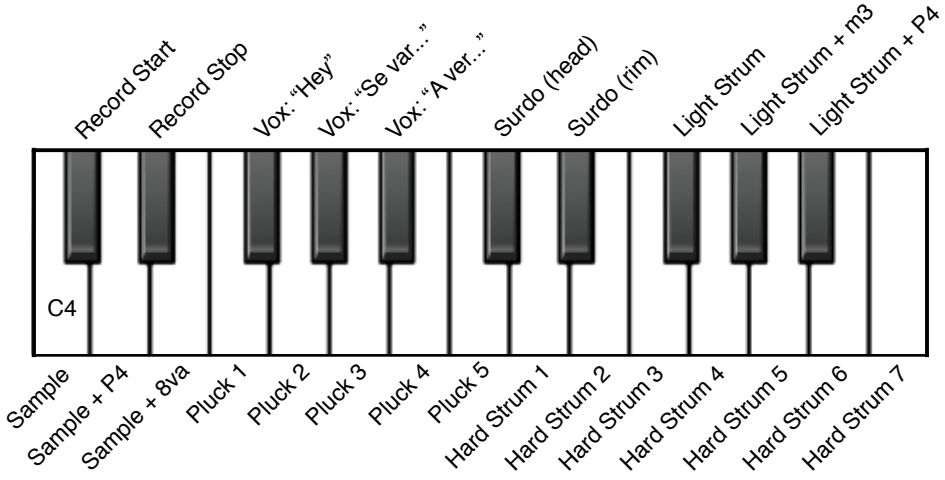


Figure 3.3: Keyboard map for sample assignments in *Charangueando* template

Figure 3.4: NanoPad preset pad assignments for Scene 1 (measures 1-131)

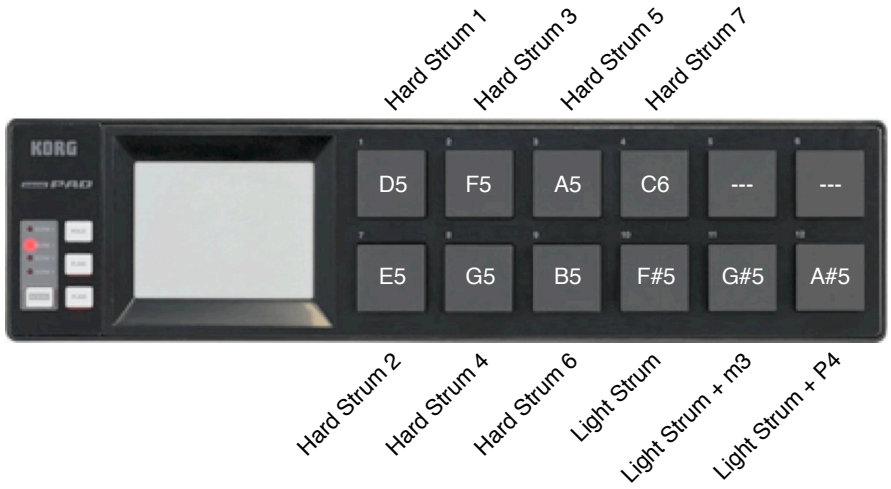


Figure 3.5: NanoPad preset pad assignments for Scene 2 (measures 132-307)

Figure 3.6: NanoPad preset pad assignments for Scene 3 (measures 307-344)

Live sampling Process

Below is a recommended approach to the live sampling process; these steps may be observed in the screencast tutorial at www.treyfiles.com/charangueando.html. This method has been designed for ease and reliability rather than the fastest possible speed. Please note that Ableton Live is a very flexible program, and there are certainly other potential approaches to this process. Performers with access to full versions of Live (particularly with the "Simpler" instrument) or with MIDI pedalboards are encouraged to experiment with other methods if so desired.

1. Start in Session view and make sure all channels are record-enabled.

2. Set the audio input on the Record channel to the same channel that the microphone is plugged into on the interface.

3. Make sure that the gain level on the interface/record channel is strong but not "red lining" the Record channel as the djembe is played.

4. Let the djembe play the pattern once through. Shortly before the downbeat of the second time, begin recording the audio clip in the "Record" channel. You may trigger the recording process by pressing the C#4 key on a MIDI keyboard or by using a keyboard shortcut (see the screencast for how to program this). After the djembe has completed the pattern, press the D#4 key or the assigned keyboard shortcut to stop recording. Timing is not critical as long as the entire pattern has been recorded.

5. Double-click on the recorded clip. This will open the sample edit window at the bottom of the screen (See *Figure 3.7*).

6. Disable the "Warp" function for the sample. This box should turn from yellow to gray (See *Figure 3.7*).

7. Move the "Start Playback" indicator to just in front of the first large transient in the sampled pattern (See *Figure 3.7*).

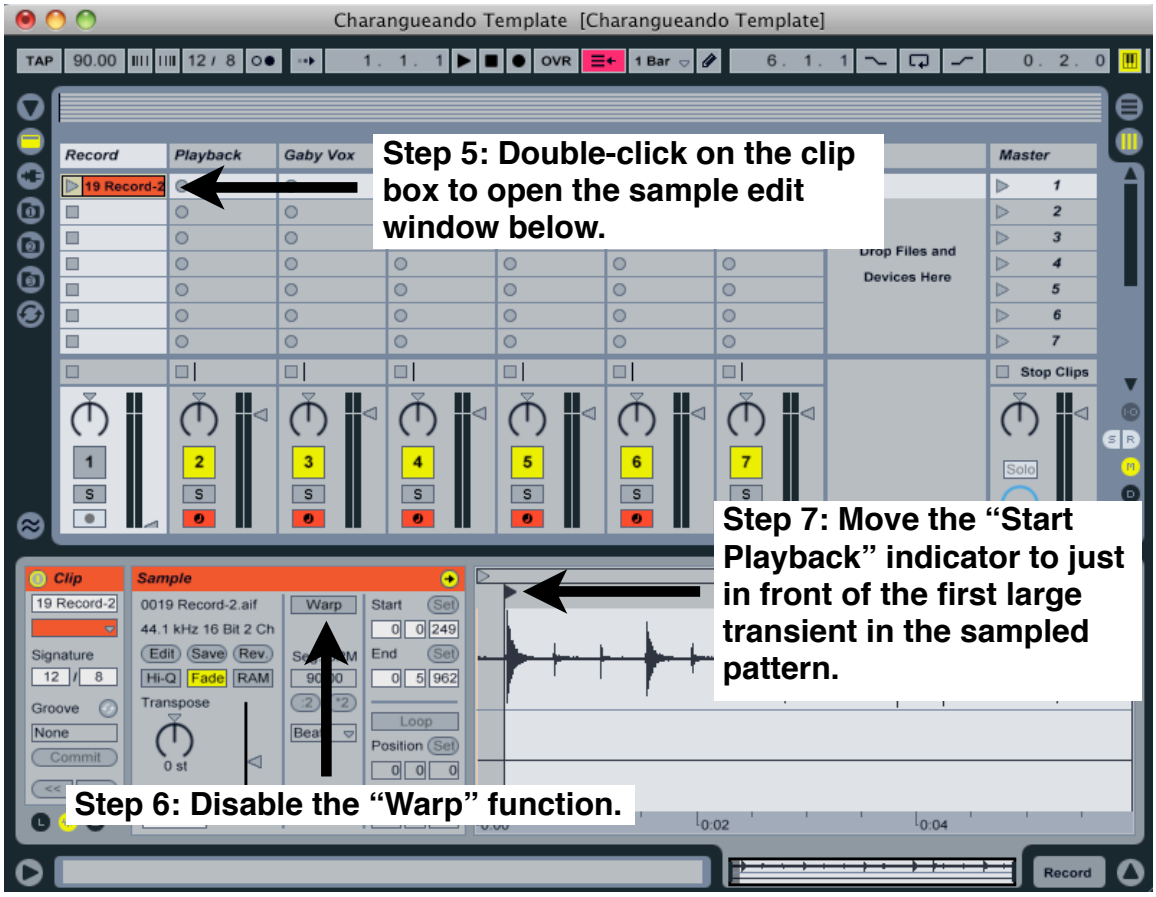


Figure 3.7: Screenshot of "live sampling" process, Steps 5-7

8. Double-click the top of the "Playback" channel to view the "Impulse" instrument at the bottom of the screen (See *Figure 3.8*).

9. Drag the sampled djembe clip into each of the first three sample boxes of the Impulse instrument (this will take three separate actions). Once this is done, the process is complete and you are ready to cue the advance to Measure 3 (See *Figure 3.8*).

Note: Steps 1-3 would ideally be done during sound check, provided the djembe and microphone may remain in place until the performance.

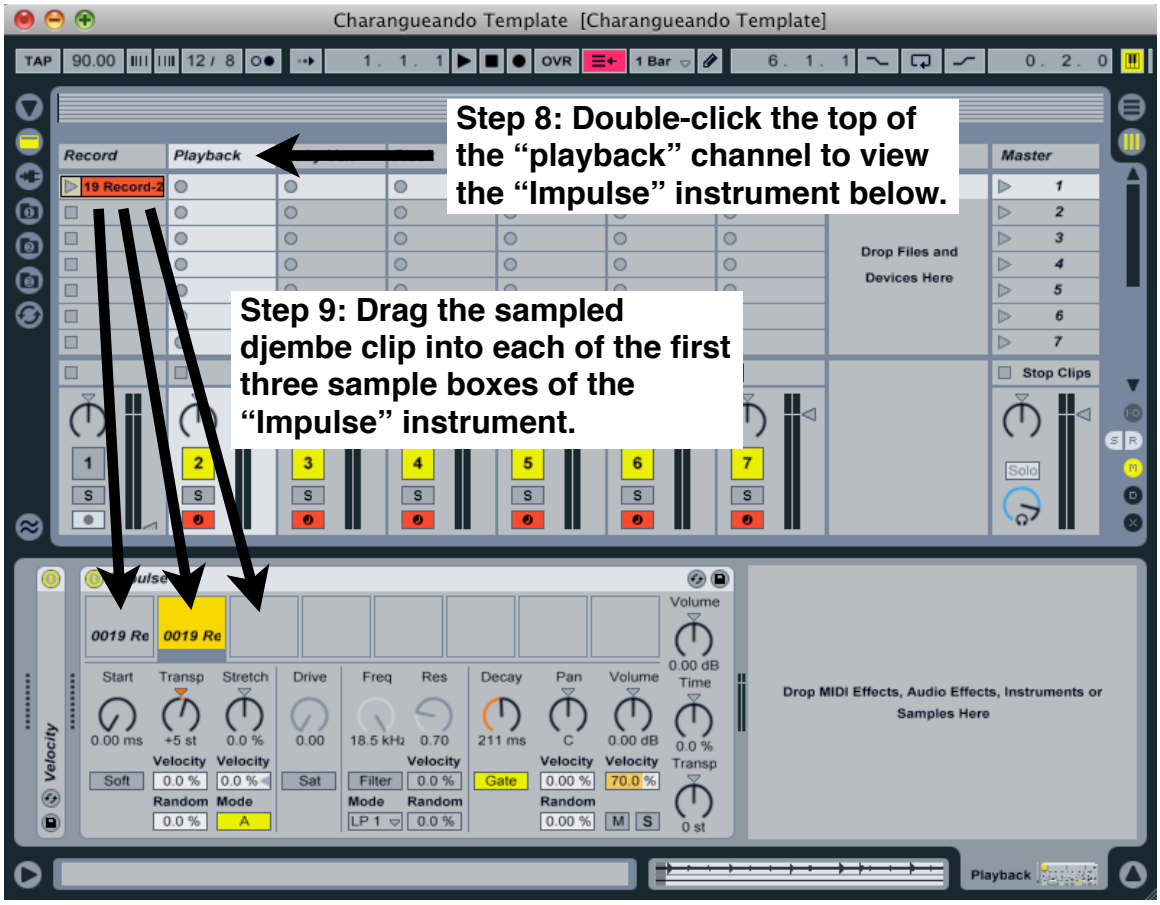


Figure 3.8: Screenshot of "live sampling" process, Steps 8-9

After All This, What Exactly Happens When The Sample Pitch Changes?

All players in *Charangueando* should be aware of exactly how the three pitches of sample playback affect the rhythm of the sampled djembe performance. This will enable them to lock in (or adjust if needed) to the sampler part and successfully realize the piece's quirky grooves. The sampler player is particularly important in this aspect, as he or she is able to help the ensemble the ensemble considerably by keeping the chas-chas pedal rhythms in strict sync with the sampler.

Playback of the sample at the original pitch, which first occurs in measure 3, does not alter the sample rhythm at all. The octave transposition that enters at A (measure 11) alters the sample at a 2:1 ratio, resulting in double-time rhythm. Beginning in measure 19, the repeated octave transposition is displaced by one eighth-note every fourth bar, resulting in increased syncopation (*Fig. 3.9)*.

In measure 63 the sampler playback begins alternating between the original pitch and the perfect fourth transposition. This may be somewhat difficult to recognize, though, as only partial samples are triggered one eighth-note after beats one and three. The perfect fourth transposition results in a 4:3 ratio between the original sample and the transposed version, meaning every transposed note is reduced in length by 25%. This very syncopated pattern lines up quite closely to the marimba ostinato that begins at G (measure 79), so the marimba player should listen carefully to the sampler during this section (*Figure 3.10*).

Once each performer understands how to relate his or her part to these transposed rhythms, the challenging ensemble passages in *Charangueando* will project to the listener a deceptively simple character common to much of Mr. Kerpel's music.

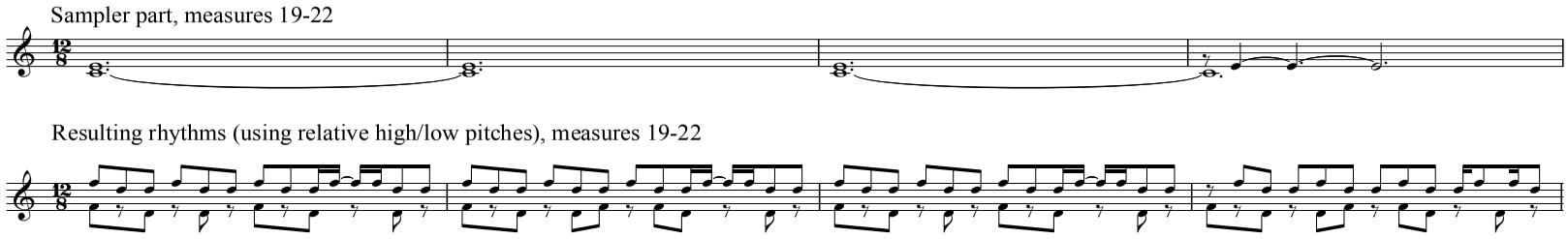


Figure 3.9: Rhythmic modulation resulting from sample playback at one-octave transposition

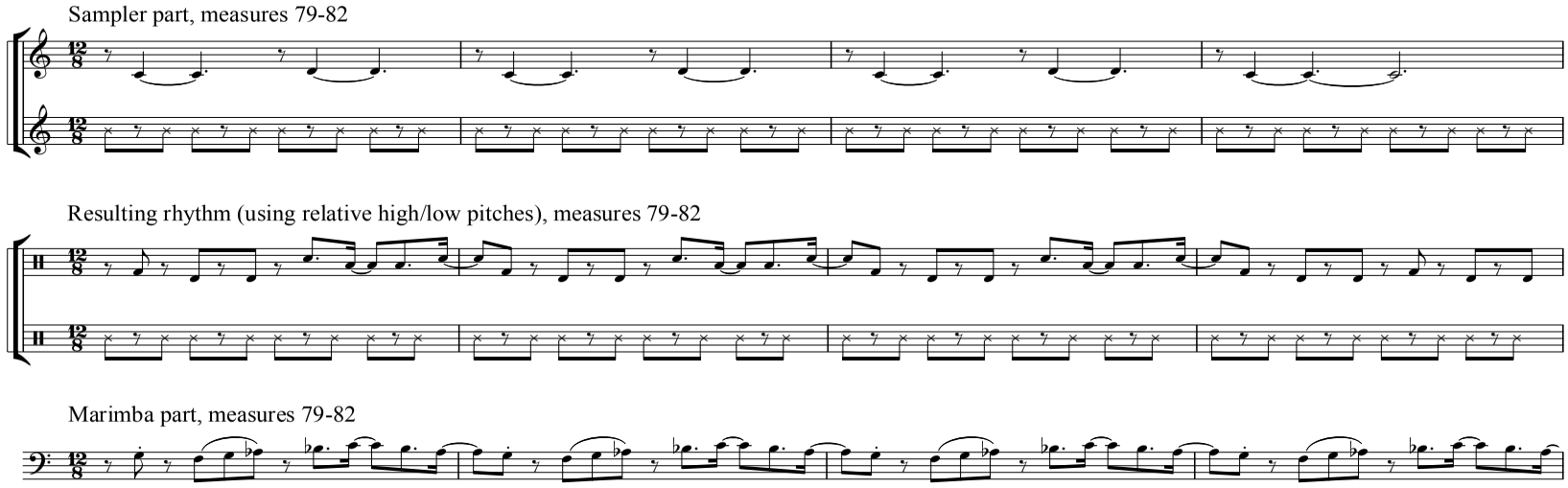


Figure 3.10: Rhythmic modulation resulting from sample playback at perfect fourth transposition

CHAPTER 4

PART ONE: Michael Markus's Background

PART TWO: Creating the *Suli Ti Nani* Score

PART ONE: Michael Markus's Background

The Insider Outsider

> "I have seen a lot of students play djembe. For me, I can say that Michael is the best. He is the best, *the best* student. He can be [taught] and knows how to teach others to have good technique… He really studied hard. Every day he would call me and we would do one-on-one class. He really understands [the music]." [28]
>
> - M'Bemba Bangoura, former djembe soloist with Ballet Djoliba

> "I trust any people that come from Michael Markus to me. I believe and I trust him… Understand [that] I open my heart to you because that guy sent you to me. We are like this [holds hands closely together]. I trust him. I believe him."[29]
>
> - Famaro Dioubate, Mandeng Griot and balafon master

Michael Markus's commitment to traditional Guinean music defies the emic/etic[30] or insider/outsider[31] paradigms commonly (though not uncontroversially) invoked when discussing the study of non-native cultures. Born in the Midwestern United States and trained as a classical percussionist, his upbringing and Caucasian ethnicity would

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[28] M'Bemba Bangoura, interview with the author, New York, NY, April 2, 2011.

[29] Famaro Dioubate, interview with the author, New York, NY, September 2, 2011.

[30] Anthropologist Kenneth Pike coined the terms "emic" and "etic" in 1954 to distinguish two perspectives through which aspects of a culture may be described. The "emic" viewpoint relates information in ways that have meaning to members of the society being described, while the "etic" viewpoint is based on scientific observation. The purpose of "emic/etic" categorization has inspired passionate debate among anthropologists, particularly between Pike and cultural anthropologist Marvin Harris.

[31] "Insider" or "outsider" refers to an individual's status in relation to a particular culture. Although these two categories appear to be clearly self-evident, when applied they are often only relative at best. For example: while many westerners would understandably ascribe "insider" status to a native of Guinea regarding traditional Guinean music, this broad use of the term (as well as the concept of a singular traditional Guinean music) fails to account for significant differences among the various ethnic groups within Guinea and their respective musical styles.

certainly not suggest any degree of insider status in relation to djembe drumming of West Africa. However, Markus's discovery and subsequent rigorous pursuit of the art form "on its own terms" (his words[32]), rather than through an academic approach, coincided with the immigration of several master musicians from Guinea to the United States. As a result, he has become a key figure in the ever-evolving tradition's American iteration.

Michael Markus was born in Chicago in 1969 and raised in Evanston, Illinois. He began studying percussion through his elementary school music program, then added private drum set lessons while in sixth grade. Once in high school, he took several music theory classes and performed with school orchestras and jazz bands. He also became interested in hand drumming, taking conga lessons at a local drum shop with a musician from Cuba during his sophomore and junior years.

He was accepted to the School of Music at Ithaca College, where he studied with world-renowned marimba player Gordon Stout. While the percussion program at Ithaca was focused on orchestral technique and marimba, Markus retained his interest in other styles. In addition to playing in jazz and rock bands, he sought out teachers in the Ithaca area for more hand drum study. This resulted in his discovery of Maurice Haltom, a martial artist and conga player who taught classes at a private studio in Ithaca.

Haltom's approach to teaching included rote learning and a holistic view of music and dance. He insisted that his drumming students develop an understanding of rhythmic movement, telling them, "If you can't dance, you're not a drummer." Markus embraced these concepts and furthered his movement skills through Haltom's martial arts classes. Haltom also introduced Markus to African-style culture, emphasizing the broader social

[32] Michael Markus, interview with the author, New York, NY, February 18, 2009.

context of Afro-Cuban rhythms and a teacher/student relationship rooted in the traditional master/apprentice model. The multifaceted lessons with Haltom had a profound impact on Markus, and today he strives to emulate Haltom's teaching methods when conducting his own classes and workshops.

As Markus neared graduation from Ithaca, he sought advice from various teachers concerning whether to move to San Francisco or New York City. Pat Hall, a guest lecturer at nearby Cornell University who specialized in African and Caribbean dance, recommended New York City based on its growing West African communities. Markus took several day trips to New York to attend workshops at the private studio of "Papa" Ladji Camara, a Guinean djembe master who had served as soloist with Les Ballets Africains and Babatunde Olatunji's ensemble. Inspired by these workshops and the many opportunities for djembe study in New York, Michael moved to the city in 1993.

Upon his arrival in New York, Markus committed himself fully to his passion for the drumming and music of Guinea (what he refers to as his "djembe fever"). He attended from 9 to 13 drum and/or dance classes a week for a period of several years, often augmenting them with additional private lessons. Most of these classes were taught at two separate establishments located at 622 Broadway in Manhattan: the Fareta School for African Drumming and Dance was housed in the basement, while space upstairs at Lezly Dance and Skate School was rented to African music instructors when not in use for roller skating or dance classes. Markus entered a work/study arrangement with Fareta that allowed him to attend unlimited classes in exchange for performing regular cleaning and maintenance duties at the school. Although this arrangement was quite labor-intensive, it enabled Markus to work closely with noted musicians and dancers from

Guinea's national ensembles including "Papa" Ladji Camara, Epizo Bangoura, Youssof Koubassa, and M'Bemba Bangoura (see *Figure 4.1*).

A significant aspect of Markus's approach to djembe study involved abandoning his lifelong use of Western pedagogical methods. The djembe classes in New York were taught in the African manner introduced to Markus by Maurice Haltom; however, like most classically-trained musicians, when learning new rhythms by rote Markus would regularly "see" a transcription in his head and use this imaginary notation as a guide. At an early point in his djembe studies Markus realized that this approach could have long-term disadvantages, as it prevented him from conceptualizing the music in the same way as his African teachers. He then made a deliberate decision to not only never actually transcribe any rhythms, but to also purge his mind of any notational imagery when playing Guinean music. With effort he replaced the mental transcriptions with nature scenes or images of his instructors, and later with memories of dancers or events in Guinea after he began to travel there regularly. Over time he no longer needed to actively block any notational associations, and now he has reached a point where he sometimes struggles to relate many aspects of Guinean drumming in Western notational terms.

Markus's commitment to learning in as traditional a manner as possible also extended to the use of technology. Many students would record classes for later practice or transcription, and in the process build a library of cassette tapes for future reference. Markus never recorded a single class, instead relying on his complete immersion in New York's djembe culture to ingrain the music into his memory. When asked about Markus's approach to djembe study, M'Bemba Bangoura observed that it resembled the

process used to train promising students in Conakry (such as himself) through hours of daily rehearsal and apprenticeship with master teachers.

Figure 4.1: M'Bemba Bangoura (Photo courtesy of Magbana)

Markus went to Guinea for the first time in 1995, travelling with M'Bemba Bangoura to his home in Guinea's capital city of Conakry with two other students. Determined to broaden the students' understanding of the musical culture and traditions, Bangoura arranged for them to study with other musicians while in Conakry. Markus continued to augment his intense lessons in New York with annual trips to Guinea for many years, eventually partnering with M'Bemba to facilitate trips for large groups of students. Experiencing the music in Guinea with a variety of teachers provided him with deeper insights into how rhythms could vary based on generational, village-to-village, or contextual factors. He also developed his Guinean language skills, with his rudimentary

Susu (Bangoura's ethnic language) often needed in a country where few speak English fluently.

In 1998 Markus began teaching his own classes with the approval of M'Bemba Bangoura, who had become his principal teacher and mentor. Soon afterward he founded Magbana, an ensemble of drummers and dancers. Named after the Guinean slang for "taxi," the ensemble combined traditional rhythms and movements with occasional forays into western orchestration (such as using a drum set or bongos) and martial arts-inspired choreography. The early members of Magbana were New Yorkers of diverse ethnic backgrounds who shared Markus's love for Guinean music, and Markus created works featuring their respective abilities through an approach inspired by Fodeba Keita's suites for Les Ballets Africains (see the "Coda" to this chapter on page 99 for more information on this topic).

Shortly after he began teaching, Markus's informative classes and charismatic teaching style earned him a faculty position at the Drummers' Collective in Manhattan. At this private school primarily dedicated to drum set study, Markus taught for several years alongside such noted percussionists as Mike Clark (a legendary drummer for Herbie Hancock) and Bobby Sanabria (a Grammy-nominated bandleader/drum set player who now directs the Afro-Cuban Jazz Orchestra at Manhattan School of Music). During this time Magabana performed regularly for concert audiences, educational outreach programs, and corporate events and released a self-titled CD; Markus also recorded a series of eleven educational CD's covering various rhythms from Guinea.

Over the course of his djembe studies Markus developed an interest in drum design. The unique shape of the djembe allows the player to produce both deep bass and

high “slap” tones, and Markus had observed how variations in the contours of the drum’s goblet shape affected these qualities. Markus also learned how the type of wood and interior finishing could influence the tone and projection capabilities of a djembe. With many students unable to find quality instruments in the United States, he began selecting drums for them while in Guinea. This led to a partnership in 2006 with drum builder Tom Kondas to form Wula Drum (the name, suggested by Bangoura, translates as “in the bush”). Kondas had visited Guinea with Markus and M’Bemba Bangoura in 2003, where he became fascinated with the local craftsmen and their untapped commercial potential due to the absence of consistent approaches to form and construction. Kondas moved to Conakry full-time in 2004, where he began designing and supervising the creation of what would become the Wula drum line. As the company developed, Kondas and Markus took special care to incorporate environmentally conscious practices and to pay their Guinean employees a fair year-round wage. Since their first shipment in 2007, Wula’s innovative designs and consistently high quality have earned the company a very strong reputation worldwide.

Figure 4.2: Wula “Master” djembe
(Photo courtesy of Wula Drum)

Magbana and Wula Drum embody Michael Markus's deep affection for Guinean music as well as his desire to bring the art form to new audiences and musicians. Magbana's membership has evolved in recent years, with Markus now joined by most of the top Guinean musicians in New York City (*Figure 4.3*). In the summer of 2011, Markus and Kondas opened the Wula Drum World Percussion Center in Long Island

Figure 4.3: Magbana in performance. (L-R) Mangue Sylla, Baba Richard González, Michael Markus, and M'Bemba Bangoura (Photo courtesy of Magbana)

City, New York. The center hosts lessons and master classes by artists from a variety of global traditions, as well as a showroom for Wula Drum and rehearsal space for Magbana. Markus regularly teaches classes there and at the Church Street School for Music and Art in Manhattan. Through his performances in Magbana alongside past members of Guinea's national ensembles (using artisan quality drums from a company he created) and his classes that introduce new generations of drummers to the djembe,

Michael Markus has grown to become a key figure in the djembe's journey to North America. At the time of this writing, *Suli Ti Nani* is his only notated composition.

Coda: Master Guinean Musicians at a Skating School?

The circumstances leading to soloists from the world-renowned Les Ballets Africains teaching classes in a New York City roller skating school (and/or its basement) in the early 1990's are certainly worthy of exploration, and one would be right to assume that numerous complex political and socioeconomic factors are involved. The following information is by no means comprehensive, but simply a brief description of how Michael Markus's path intersected with those of his first Guinean teachers almost twenty years ago.

After leading Guinea to its independence from France in 1958, President Ahmed Sékou Touré sought to use the arts as a means of creating a unified national identity. He asked Fodeba Keita, a native of Guinea who had founded Les Ballets Africains in Paris in 1952, to reestablish the group in Guinea as the national dance company. When Keita readily agreed, Touré had the best musicians and most promising students from all of Guinea's regions and ethnic groups brought to Conakry for Les Ballets Africains' new incarnation. Keita then crafted elaborate suites incorporating dances and music from each region and ethnic group (this process often involved reorchestrating the music for instruments used by the Ballets ensemble, resulting in the common use of the terms "village" or "ballet-style" when classifying a Guinean rhythm's orchestration). Les Ballets Africains was soon touring throughout the world to great acclaim as Guinea's artistic ambassadors. Ballet Djoliba, another national company, was formed a few years

later, along with a feeder system for the national companies consisting of regional educational programs and student ensembles.

Sékou Touré retained the presidency until his death in 1984. During his lifetime members of Les Ballets Africains and Ballet Djoliba enjoyed living conditions and travel privileges unknown to most Guineans. Although the ensembles continued to tour as artistic ambassadors after Sékou Touré's death, the military regime that assumed power no longer supported the ensemble members' accustomed standard of living. Rehearsals were moved from the presidential palace to a relatively bare compound, and compensation for ensemble members was greatly reduced. Aware that their skills and reputations were marketable outside of Guinea, many ensemble members left the country in pursuit of opportunities to better provide for themselves and their families.

Guinean musicians and dancers such as Epizo Bangoura and M'Bemba Bangoura (no direct relation) came to New York City in the early 1990's, where they were met with a number of challenges. Due to Guinea's political history, there were very few relationships between American artistic or educational institutions upon which to build. Also, no Western-style conservatory system had been established in Guinea, so in spite of their obvious level of artistry no musicians from Guinea had the equivalent of a college degree. Language barriers did not help, as English is but a third or fourth language for most Guineans. These factors unfortunately prevented them from securing teaching appointments in collegiate music programs.

Without institutional support, these Guinean artists faced the stark indifference of New York City's real estate market. Guinean drums are of course designed for outdoor use, and are therefore quite loud. Even in the early 1990's, affordable spaces that were

both accessible to prospective students and amenable to loud volume were difficult to find. An unlikely solution was presented when dance and skating instructor Lezly Ziering, a colorful figure seemingly left over from the 1970's disco scene, offered a part-time arrangement in his Greenwich Village studio that met all of their needs. Ziering's space also had the added advantage of being an hourly rental, as a long-term lease would have been much harder to obtain for the recent immigrants. After teaching at Lezly Dance and Skate for some time, Epizo Bangoura secured a lease for the basement of the same building (with the help of several students) and founded the Fareta School there.

622 Broadway served as an ad hoc center for Guinean music and dance for only a few years. The building was sold in the mid-1990's and has since been extensively renovated (it is now a Best Buy). Epizo Bangoura closed the Fareta School and relocated to Australia when the building was sold, but M'Bemba Bangoura remains in New York. The presence of M'Bemba Bangoura and revered soloist Laurent Camara, as well as that of younger virtuosos such as Mangue Sylla and Famaro Dioubate, has fostered a relatively vibrant Guinean music community within the city. However, the same barriers to the academic world remain and these artists continue to teach primarily through dance schools or community centers rather than universities or conservatories. Lezly Ziering remains a beloved figure in the New York skating community, serving as founder and chairman of the Central Park Dance Skater's Association.[33]

[33] Raphie Frank, "Lezly Ziering, Skate Teacher & Founder Central Park Dance Skater's Association," *Gothamist*, June 13, 2005, http://gothamist.com/2005/06/13/lezly_ziering_skate_teacher_founder_central_park_dance_skaters_association.php (accessed September 10, 2011).

PART TWO: Creating the *Suli Ti Nani* Score

The Composing Process, Original Parts

I began studying with Michael Markus at the Drummers' Collective in early 2004, and I approached him with the idea for an Ethos commission in the spring of that year. Markus readily accepted, seeing the commission as an opportunity to introduce Guinean music to chamber music audiences and conservatory percussionists. Ethos understood that Markus, like Kerpel, did not normally notate his music, and I agreed to transcribe the composition for the group. Markus began work on *Suli Ti Nani* in August of 2004, with the premiere planned for the coming December.

Markus modeled the five-movement composition after the suites performed by Guinea's national ballet companies, with continuous music incorporating rhythms and instruments from several of the country's regions and ethnic groups. He designed the first four movements to each feature a different solo instrument and performer; the soloists would be expected to improvise extensively as well as lead call-and-response sections in their respective movements. The final movement would include shorter improvised solos by all of the musicians, with three performers on *djembes* (Guinea's signature drum), and the fourth playing large cylindrical drums called *dunduns* (more information about the instruments used in *Suli Ti Nani* may be found in the Introduction and in Chapter 6). The work's title, which translates from the Susu language as "Five for Four," refers to the five-movement structure to be performed by a quartet of drummers.

Markus met with the group early in the process, pairing each player with a solo instrument based on individual preferences and personalities. While most of the solo instruments would commonly be heard in a Guinean ballet performance, Yousif

Sheronick's skills with caxixi inspired Markus to open the piece with a markedly non-traditional shaker feature. Markus then selected the rhythms upon which to base each movement, adapting or reorchestrating them as needed and making sure to include a variety of tempos and meters. Finally, he composed call-and-response breaks for all five movements, as well as an introduction for the first movement and a lengthy unison djembe feature for the last.

Once Markus had completed the piece, I met with him several times to develop transcriptions for Ethos. He had quite helpfully notated most of the repeated polyrhythms (which he referred to as "cells") as well as the rhythms for many of the call-and-response breaks (*Figure 4.4*). In order to hear how each polyrhythmic cell should be realized, I used a portable ProTools multi-track setup to record Markus playing each part. This enabled me to listen to individual parts for transcription and create audio loops of the full polyrhythms for Ethos members to play along with when practicing. After using a similar process for each of the call-and-response breaks, the formal structure of each movement was written out in a simple outline form (*Figure 4.5*). I then used Markus's notated cells, the multi-tracked audio and the written outlines to create fully notated parts for Ethos (*Figure 4.6*).

These parts greatly helped the members of Ethos to learn the rhythms and forms for each movement, but they were not designed for use in performance or to fully convey how to perform the piece. Instead they were used as a means to prepare the ensemble for several rehearsals with Markus, enabling him to focus on proper sound production, improvisational strategies, and stylistic nuances rather than teaching polyrhythms. Markus coached each Ethos member on his accompanied solo as the rest of the quartet

played the corresponding polyrhythms, allowing the soloists to hear his suggestions in context while giving the rest of the group a chance to refine their technique on the many unfamiliar instruments. Markus also provided suggestions for the improvised unaccompanied solos that occur between each movement, demonstrating to each member several possible ways to logically and musically shift between the connected movements' differing rhythmic feels or meters. Work on these transitional solos also involved a degree of stage blocking, as the other three musicians needed to establish ways of discreetly moving themselves and various instruments into position for each movement's unique orchestration during the solos.

The rehearsal process for *Suli Ti Nani*'s premiere went quite smoothly, thanks in large part to Markus's excellent teaching skills. The music proved to be fairly easily memorized, and the musicians rarely used the notated parts after the first or second rehearsal (though they still keep them for reference when returning to the piece after an extended hiatus). *Suli Ti Nani* was premiered to an enthusiastic audience on December 9, 2004 at Symphony Space's Leonard Nimoy Thalia in New York City; the concert also featured Magbana as special guest performers. Since then the work has been regularly performed by Ethos in concerts throughout the United States.

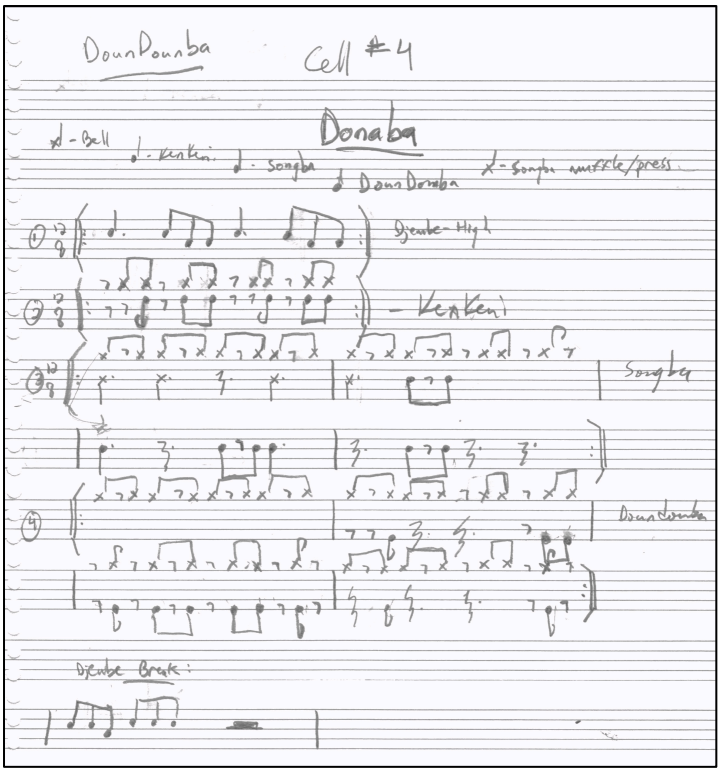


Figure 4.4: Michael Markus's cells for "Donaba" from movement 4 of *Suli Ti Nani*

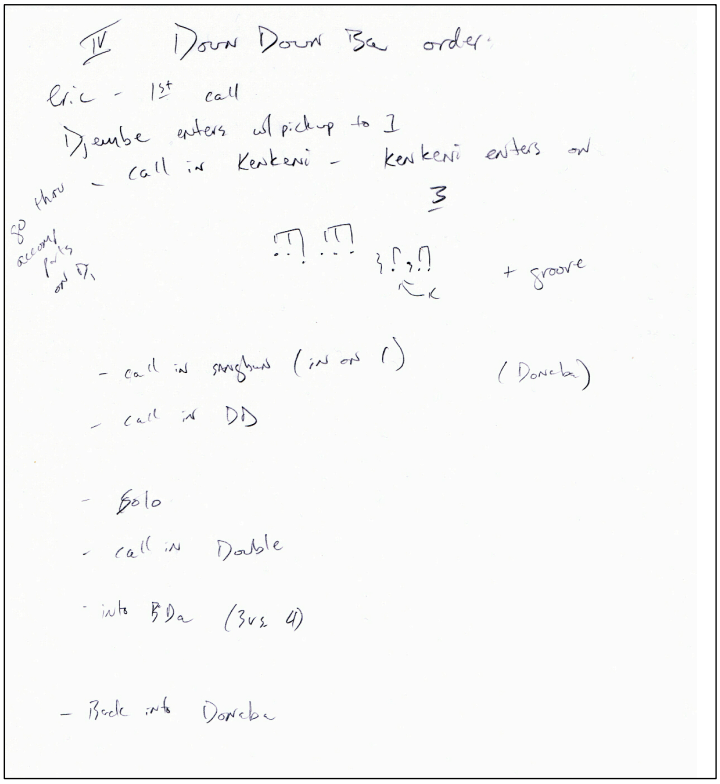


Figure 4.5: Written outline for movement 4 of *Suli Ti Nani*

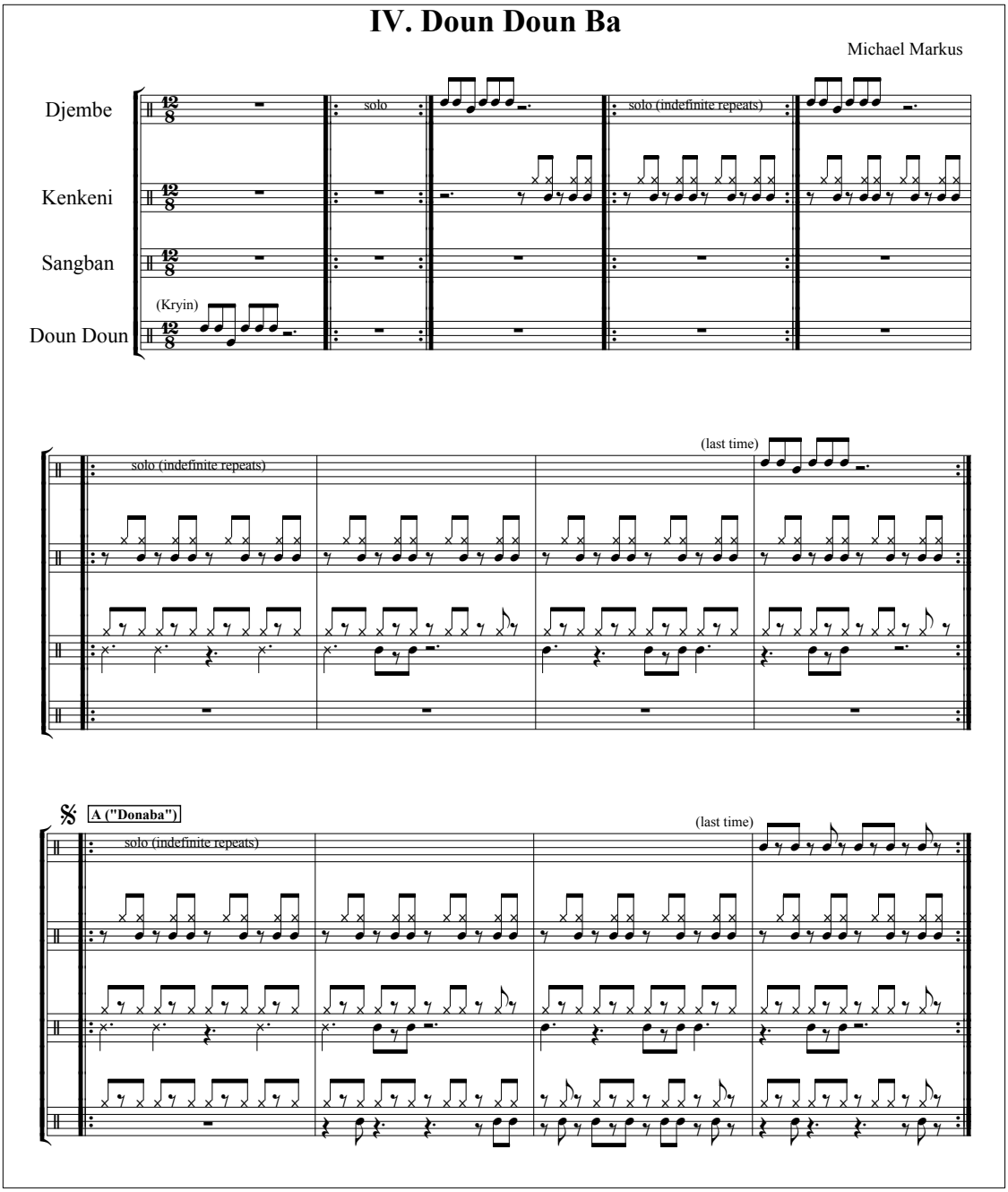


Figure 4.6: 2004 notation for "Donaba" from movement 4 of *Suli Ti Nani*

Revisions and Supplements to the Score

In the fall of 2009, I replaced my obsolete notation software (Overture from 1997) with the current version of Sibelius and recreated the *Suli Ti Nani* parts from 2004. The new version included very few edits or changes, the most significant being a revision to the Zaouli-inspired call-and-response section in the first movement which corrected errors in the 2004 version that were noted by Michael Markus during one of our interviews. These new parts served as the foundation for my work with students from Queens College for a performance of *Suli Ti Nani* in the fall of 2010 (video excerpts of that performance are included on the accompanying data disc).

Preparing the piece with its "target audience" of collegiate percussionists made clear that notation alone was not sufficient to convey all of the information necessary for musicians unfamiliar with Guinean music to make appropriate interpretive choices. The students were quite capable of accurately executing the written rhythms; however, without considerable coaching they had no frame of reference for the improvisations and the "feel" of each movement was sorely lacking. As most of our rehearsal time was dedicated to these elements, I concluded that the score would need supplemental materials illustrating these two extra-conservatory aspects of *Suli Ti Nani*.

I created an appendix to the score designed to address strategies for improvisation (see Part Two of Chapter Six) that covers general concepts for the piece as well as specific suggestions for each movement. Also included are numerous sample solo phrases and example "Feature" and "Transitional" solos for each movement. The appendix's sixty pages of discussion and notated examples are considerably longer than

the actual score, and, as I state in both the "Notes to Performers" and the appendix's introduction, the information it provides is of equal importance to the score itself.

When notating the examples for the section in the appendix dedicated to "Gbada" in Movement 4, I was challenged by how to depict the rhythms' ternary/quaternary duality (a common characteristic of much West African music referenced in the introduction). During "Gbada," the accompaniment drums strongly suggest a 3-pulse meter; this makes it difficult for an inexperienced soloist to approach his or her phrasing from the 4-pulse meter upon which this 3-pulse feel is superimposed. I therefore chose to notate each example phrase with both 4- and 3-pulse meters (*Figures 4.7* and *4.8*), providing a visual approximation of what David Locke fittingly describes as the "musical polysemy"[34] inherent in these rhythms. In the "Gbada" section of Movement 4's Example Feature Solo, I represent this quality by contrasting 4-pulse groupings for the solo part and kenkeni accompaniment cues above it with 6-pulse groupings (encompassing two repeated 3-pulse patterns) for the dundun and sangban accompaniment cues below (*Figure 4.9*). While all of the appendix's "Gbada" examples are closely related to Locke's "metric matrix" concept, my presentation of these ideas differs from his somewhat as my objective is limited to specific performance practice issues rather than broader analytical paradigms.

[34] Locke, "The Metric Matrix: Simultaneous Multidimensionality in African Music."

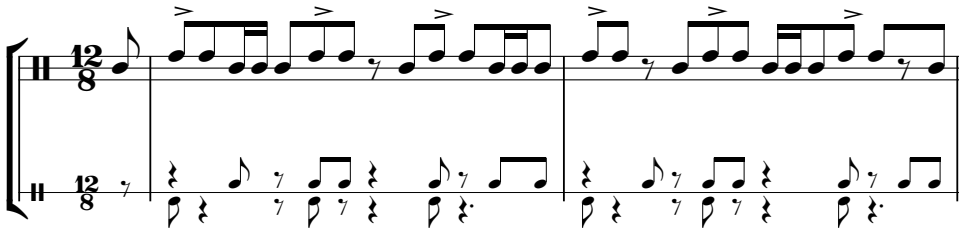


Figure 4.7: "Gbada" solo phrase with 4-pulse groupings

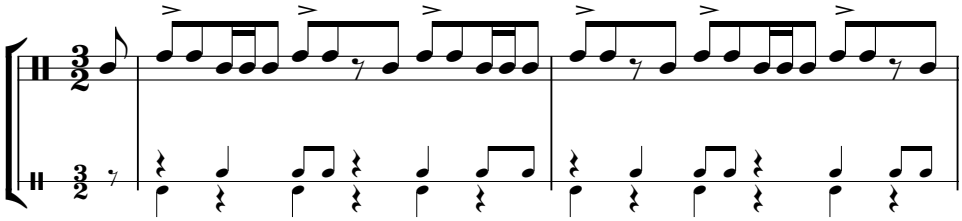


Figure 4.8: The same "Gbada" solo phrase with 3-pulse groupings

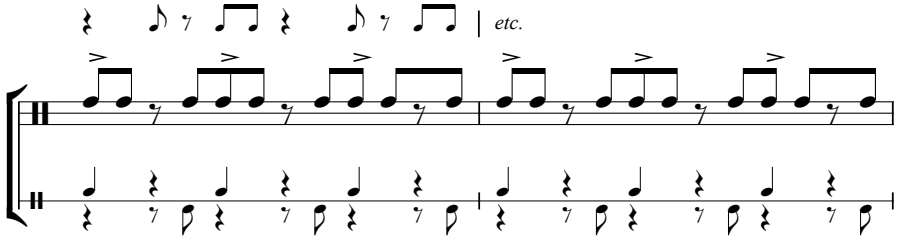


Figure 4.9: Excerpt from Movement 4 Example Solo with solo and upper accompaniment rhythms in 4-pulse groupings, lower accompaniment rhythms in 6-pulse groupings

The score is further supplemented with a variety of video and audio media available to performers via links to a page hosted on my website (http://www.treyfiles.com/sulitinani.html). Included on the web page are audio recordings I made of each example solo and its related accompaniment as well as video excerpts of my performance with the Queens College students. In addition to giving performers an aural model for the appendix's example solos, the audio files illustrate

proper "feel" and tone production for each instrument. The video excerpts provide another perspective on ensemble sound and "feel" while clearly demonstrating how to smoothly transition from one movement to the next. While the appendix and web page are certainly no substitute for a knowledgeable instructor, they will enable ensembles without any prior knowledge of Guinean music to perform *Suli Ti Nani* with a much greater understanding of its extra-conservatory elements than would be possible through the score alone.

Another positive outcome of my work with the Queens College students involves *Suli Ti Nani*'s instrument setups and their changes between movements. Transitioning from the dunduns' vertical "ballet" setup to their horizontal "village" setup and back between movements 3, 4, and 5 had always been problematic for Ethos, as the three drums are generally tied together to create the "ballet" setup (see *Figure 4.3* on page 98). For the premiere performance Ethos was able to borrow an additional set of dunduns from Michael Markus, but this was an impractical solution for touring. Consequently, when touring with *Suli Ti Nani* Ethos would leave the dunduns in the "ballet" setup throughout the entire piece and gather closely around the vertical dunduns during Movement 4, with the kenkeni bell from each drum awkwardly relegated to a separate stand. The students helped me to greatly improve on Ethos's approach to this issue through a trial and error process. We eventually discovered that standing the kenkeni and sangban drums on makeshift platforms instead of tying them to the dundun enabled all three drums to be easily moved to an appropriate horizontal position on preset waiter tray stands for Movement 4 and then back to "ballet" setup for Movement 5. We also found that the same waiter tray stands could be used to mount the three kyrin in Movement 3,

with the results both aurally and visually preferable to Ethos's method of playing the kyrin on the floor. The blocking outlined in the score and demonstrated in the web page video reflects these changes, and Ethos plans to incorporate them in its own future performances of the piece.

One last revision to *Suli Ti Nani*'s notation involved the marimba parts in Movement 2. During our interviews Markus often expressed a desire to alter them, as he was dissatisfied with his approximations of traditional Sorsornet balafon parts (*Figure 4.10*). We resolved to consult his friend Famoro Dioubate, a balafon virtuoso who lives

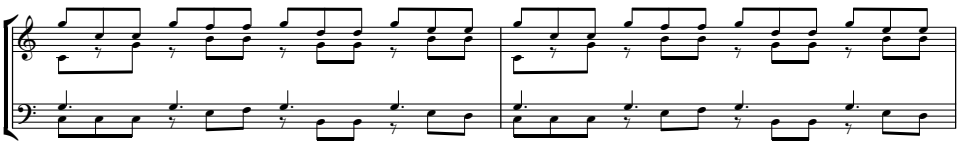


Figure 4.10: Original marimba ostinato for "Sorsornet"

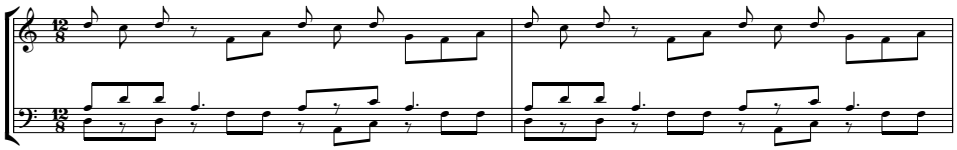


Figure 4.11: Revised marimba ostinato for "Sorsornet"
(based on input from Famoro Dioubate)

in New York City, regarding this issue. Due to numerous scheduling conflicts this happened later than we anticipated, but I was able to finally meet with Dioubate in the fall of 2011. Being a griot (a revered storyteller and keeper of history), Dioubate is very protective of his craft and the traditions it represents. Markus knew that Dioubate could be skeptical of offering any information for the purpose of transcription in a published score, as the idea of Westerners playing traditional balafon parts without the guidance of

a proper teacher is rarely sanctioned for both artistic and commercial reasons. Markus eased any tensions that may have arisen by introducing me to Dioubate as a friend and emphasizing his own thorough involvement in the project. Thanks to the credibility bestowed upon me through my association with Markus, Dioubate gladly shared a few appropriate Sorsornet variations (*Figure 4.11*) and demonstrated some possibilities for the call-and-response sections. Markus and I agreed to credit him in the score, as the revised marimba parts reflect his generous input.

With the score and supplemental materials completed, a question arose as to how to categorize *Suli Ti Nani* when published: is it an arrangement of traditional music or a contemporary composition? While Michael Markus and Ethos have always considered the piece to be a contemporary composition with substantial Guinean characteristics, performers and audiences unfamiliar with African music could not be faulted for presuming that *Suli Ti Nani* represents "traditional African drumming." I therefore added a brief "Editor's Note" devoted to this subject (see page 121). Ethos has always taken care to distinguish *Suli Ti Nani* from traditional African practice when introducing it during performances, and the inclusion of this editor's note will hopefully encourage others to do the same.

All changes to the piece since its 2004 premiere have met with Michael Markus's approval, and Ethos will present the first performance of the fully revised score at Vassar College in early 2012.

CHAPTER 5

Suli Ti Nani Score

Suli Ti Nani

Percussion Quartet

Michael Markus
(2004)

Suli Ti Nani

Percussion Quartet

Composed July-May 2004, New York, NY
Premiered December 9, 2004 by Ethos Percussion Group at Symphony Space, New York, NY
Duration: ca. 20’

Commissioned by the Jerome Foundation Emerging Composers Commissioning Fund for Ethos Percussion Group

Michael Markus

Marimba Part Arranged With Assistance From Famoro Dioubate
Full Score Edited by Trey Files
E-mail: trey@treyfiles.com

Suli Ti Nani

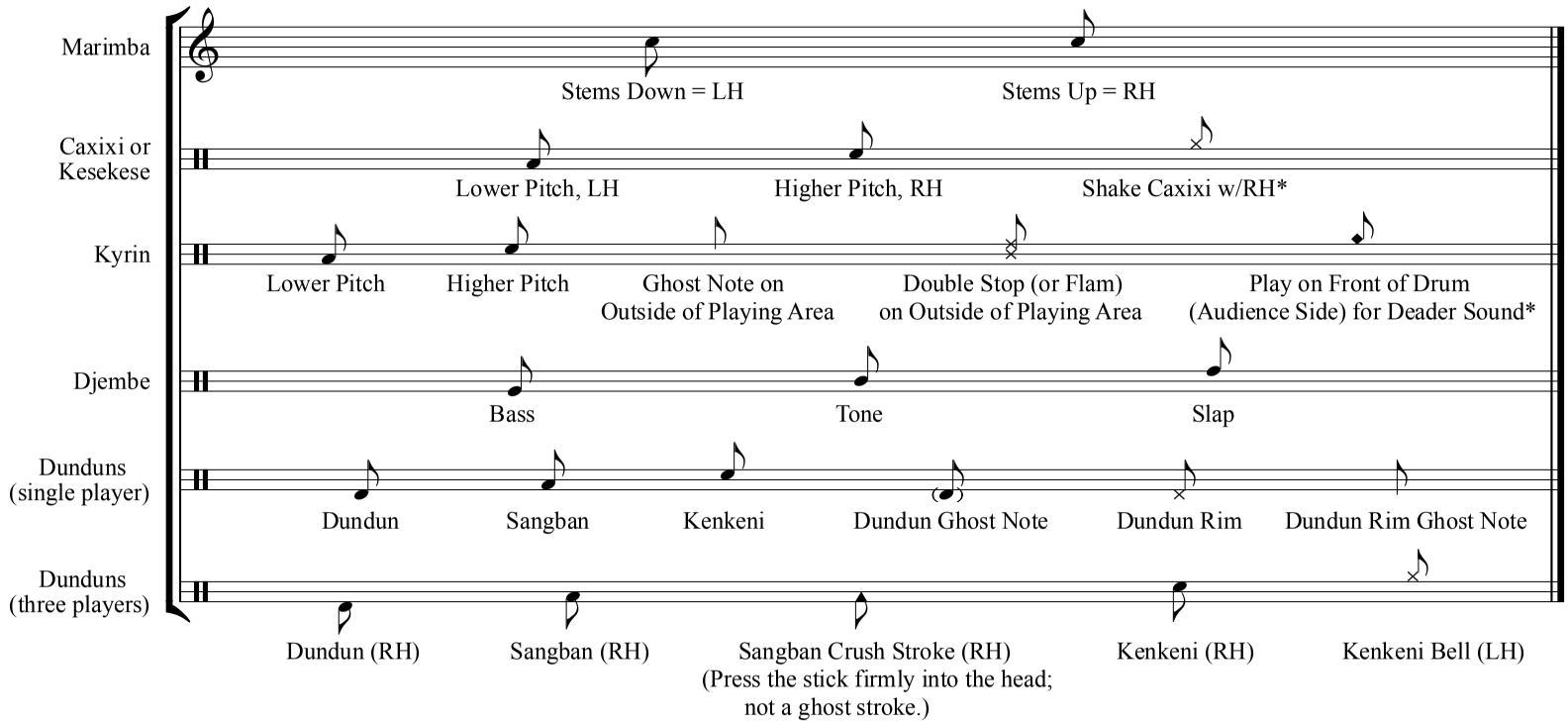
Percussion Quartet

Instrumentation

1 pair caxixi, 3 pairs kesekese (high, medium, and low), 3 djembes (high, medium, and low), 3 kyrin (high, medium, and low), 3 dunduns (kenkeni, sangban, and dundun), 4-octave marimba

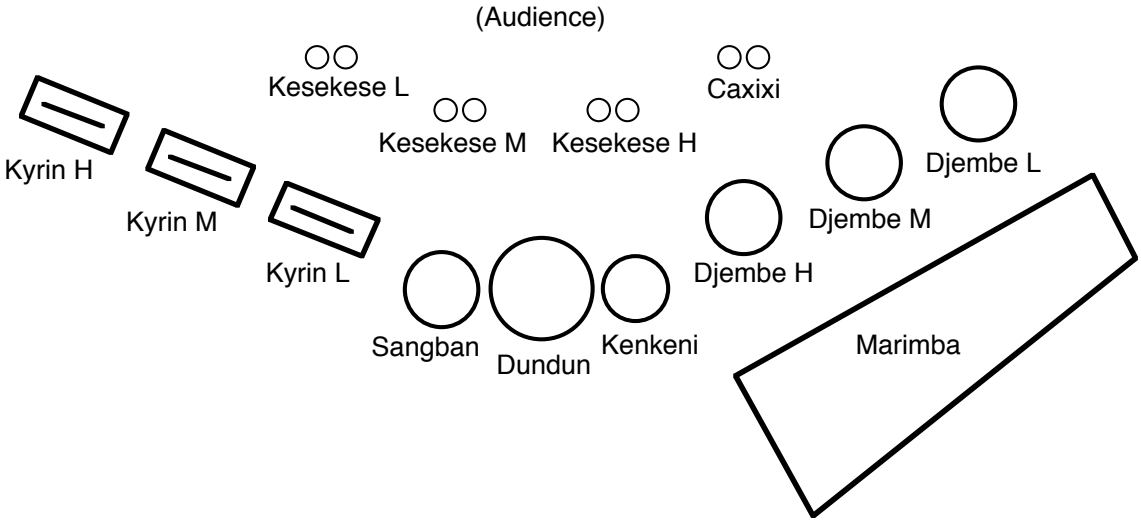
Player 1:	I. Forest	Caxixi (soloist)
	II. Sorsornet	Upper Marimba
	III. Sinte	Low Kyrin
	IV. Dundunba	Kenkeni
	V. Makuru	Medium Djembe
Player 2:	I. Forest	High Kesekese
	II. Sorsornet	High Djembe
	III. Sinte	Medium Kyrin
	IV. Dundunba	High Djembe (soloist)
	V. Makuru	High Djembe
Player 3:	I. Forest	Medium Kesekese
	II. Sorsornet	Lower Marimba
	III. Sinte	High Kyrin (soloist)
	IV. Dundunba	Dundun
	V. Makuru	Low Djembe
Player 4:	I. Forest	Low Kesekese
	II. Sorsornet	Dunduns (soloist)
	III. Sinte	Dunduns
	IV. Dundunba	Sangban
	V. Makuru	Dunduns

***Figure 5.1: Suli Ti Nani* Notation Key**



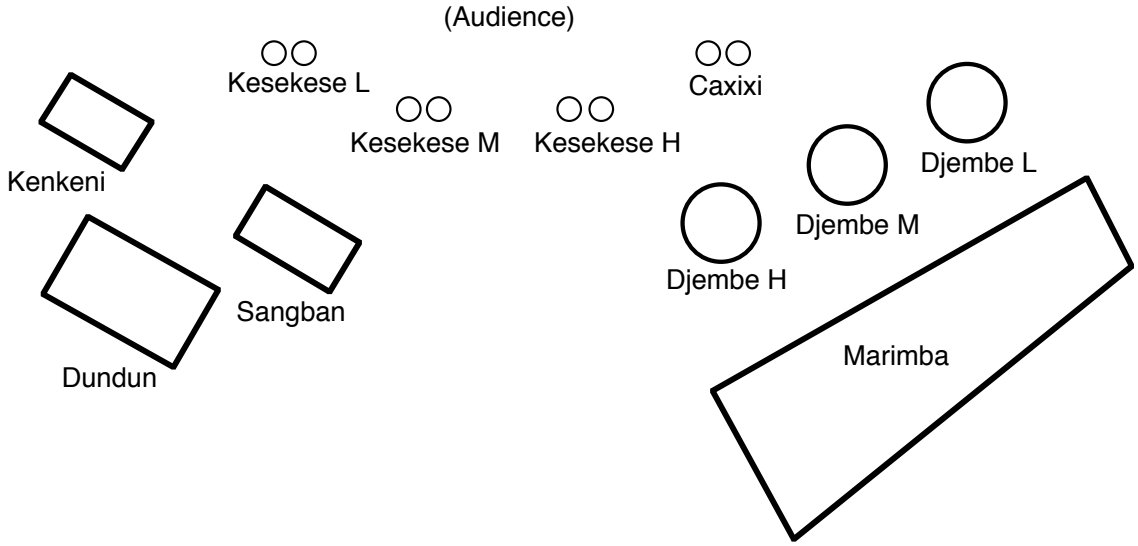
* *Soloist only; see sample solo phrases and solos.*

Figure 5.2: Suli Ti Nani* Setup, Movements 1, 2, 3, and 5



**Kesekese may be left on the stage at each player's position after the first movement (Player 1 will play the transitional solo on caxixi as he/she moves to the marimba); Kyrin do not need to be returned to the stands for the final movement.*

***Figure 5.3: Suli Ti Nani* Setup, Movement 4**



Program Notes

Suli Ti Nani ("Five for Four" in the Susu language) utilizes instruments and rhythms from Guinea, West Africa in a manner reminiscent of Guinea's national ballet, Ballet Djoliba. After Guinea gained independence from France in 1958, the best musicians and dancers from each of Guinea's ethnic groups were brought together to form Ballet Djoliba as part of president Sékou Touré's efforts to create a post-colonial national identity. Following the example of Guinea native Keita Fodeba's Ballets Africans, the ensemble adapts music and dance originally intended for field work, celebrations, and rituals into concert suites that they perform around the world. While the constraints of a concert setting sometimes necessitate significant alteration of the music from its original "village" form, Ballet Djoliba's performances wonderfully convey the joy and virtuosity of Guinea's vibrant music and musicians.

Each movement of *Suli Ti Nani* focuses on a rhythm from a different region of Guinea. Although the instruments used are often not those originally associated with the rhythms, this is a common practice in national ballet-style arrangements. "Forest" combines the shakers of the Mamara people with rhythms from Guinea's forest region and a series of calls and responses from *Zaouli*, a Maninka mask dance. "Sorsornet," from a welcoming dance of the Baga people, features the dundun family of drums with a balafon-inspired marimba accompaniment. "Sinte" was originally played by the Nalu people with all of the musicians using one giant log drum, but for this version Michael (mercifully) set it on multiple, smaller kyrin from Guinea's forest region. The complex polyrhythmic patterns in "Dundunba" are from *Donaba* and *Gbada*, two dances that traditionally incorporate feats of strength and virtuosic movement. "Makuru," based on a

rhythm from the border region between Guinea and Sierra Leone, features Guinea's most famous drum: the djembe. With its challenging technical and improvisational demands, *Suli Ti Nani* serves as an effective introduction to the music of Guinea for the performers as well as the audience.

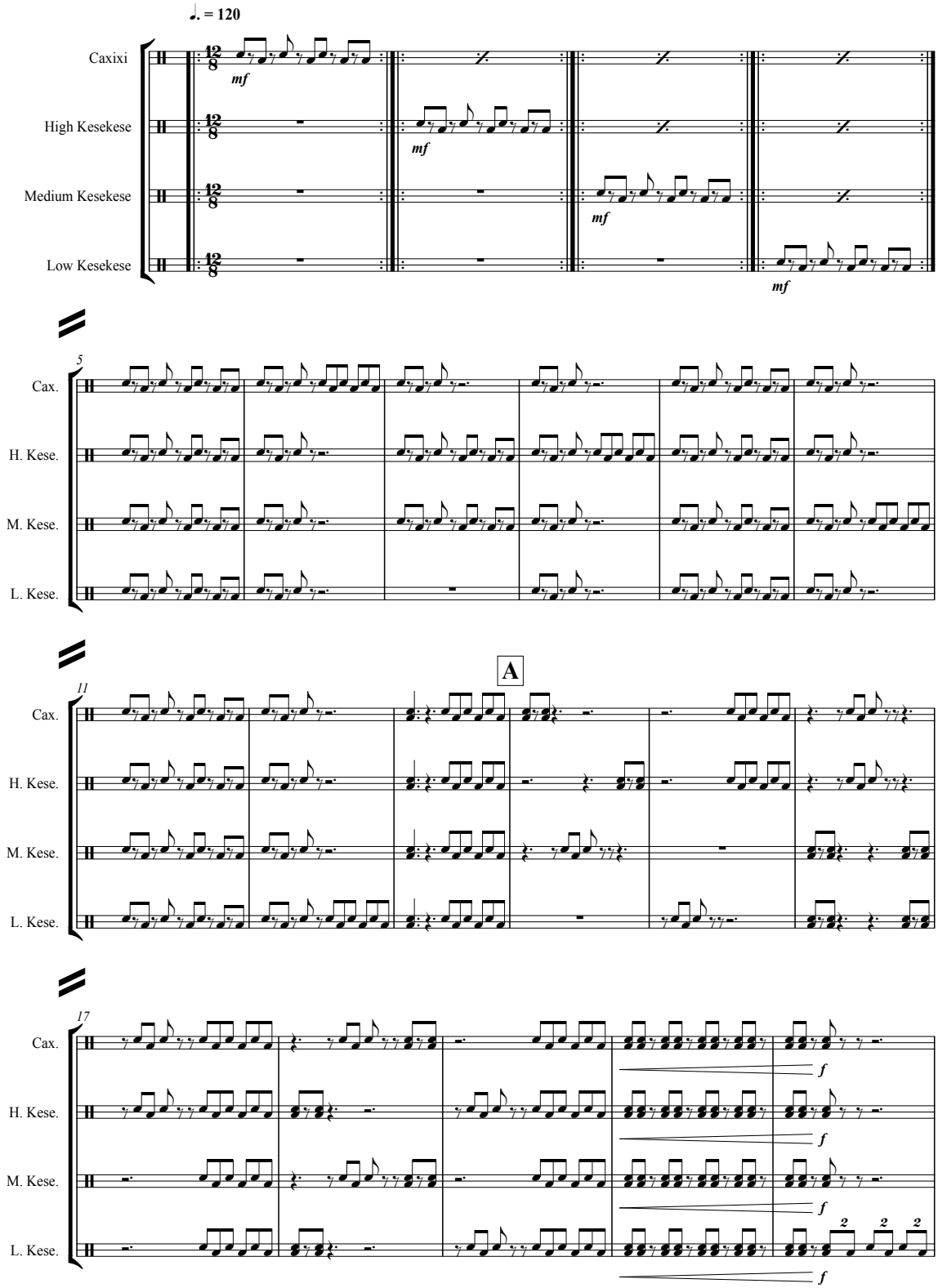
About the Composer

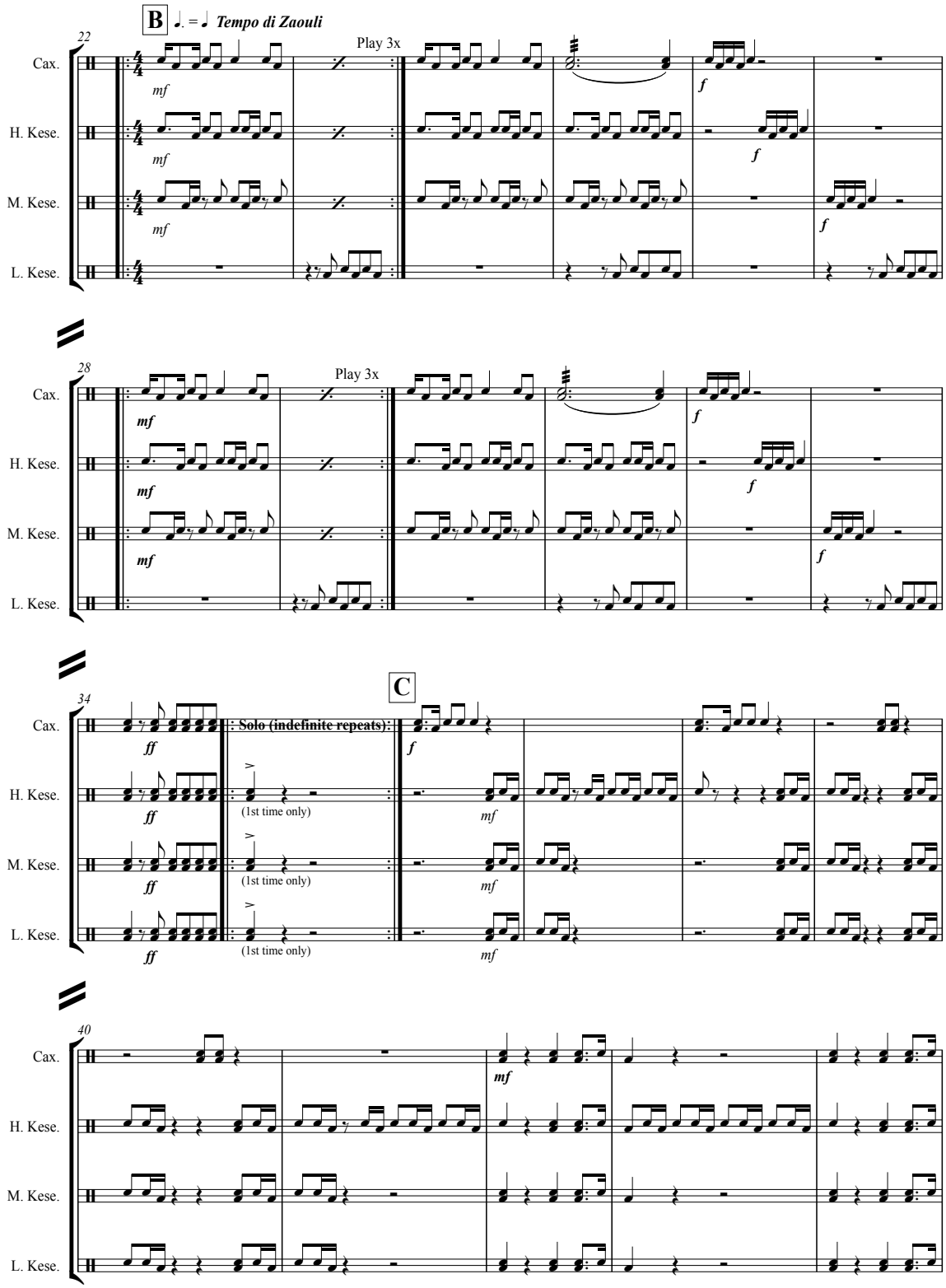
Michael Markus is the founder and artistic director of Magbana Drum and Dance NYC. He began studying the music of Guinea in 1992, and he has traveled there regularly since 1995. Michael often performs with master musicians from Guinea, including former members of Ballet Djoliba.

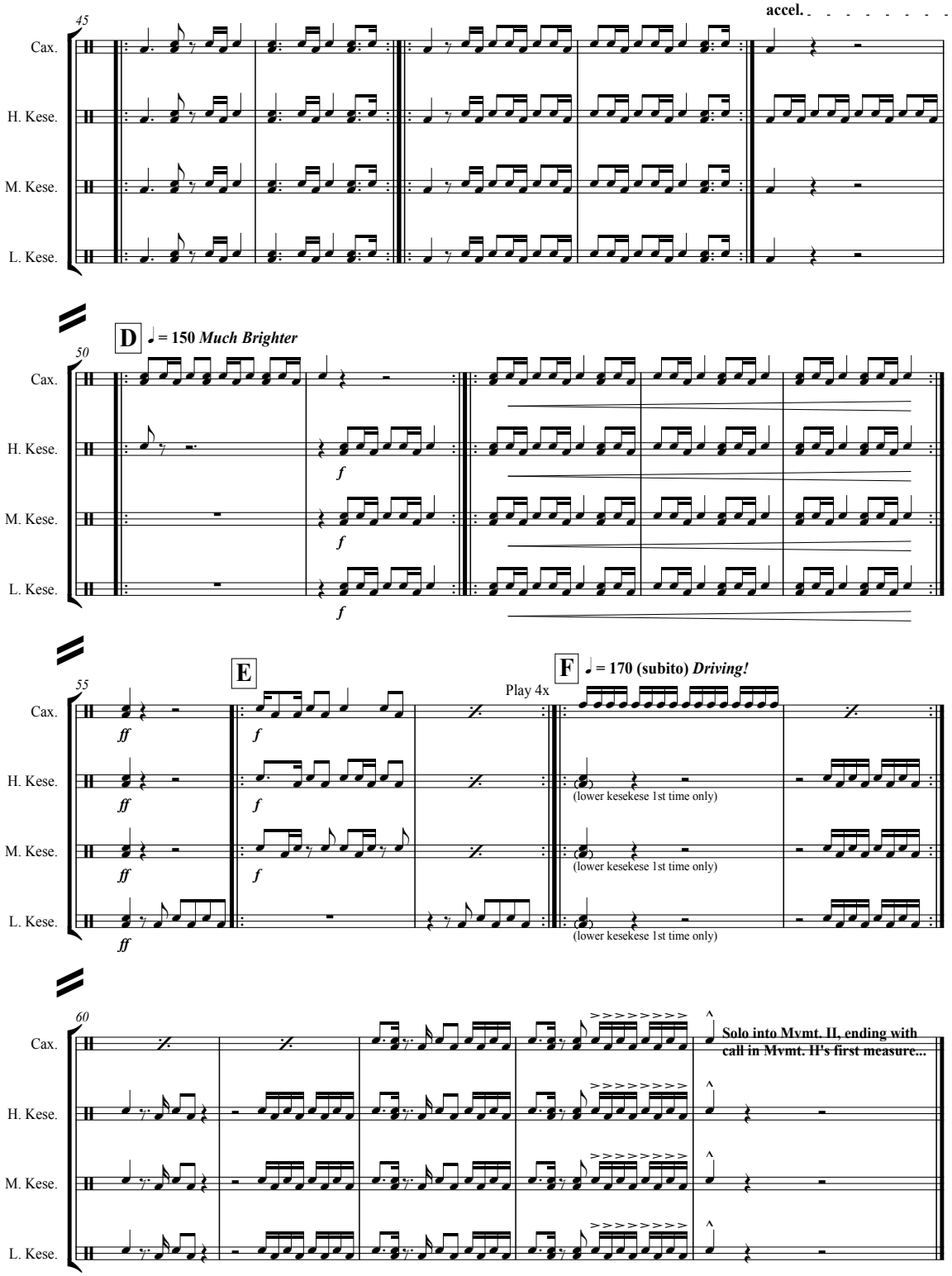
Editor's Note: Is This Traditional African Music?

Given *Suli Ti Nani*'s extensive use of Guinean instruments, conventions, and rhythms, audiences and performers may understandably misinterpret the piece as a form of "traditional African drumming." Therefore, it is important to note that *Suli Ti Nani* is by no means a literal representation of traditional Guinean music; rather, Michael Markus's intent in creating *Suli Ti Nani* was to introduce elements of Guinean music to western musicians and audiences. While nothing in *Suli Ti Nani* runs counter to traditional practice, Mr. Markus has adapted and arranged the material with a western quartet's limited instrumentation and experience in mind while also incorporating many original passages. Additionally, the presentation of this music on a concert stage without its corresponding ceremonies, dances, and/or songs precludes any consideration of *Suli Ti Nani* as an example of traditional performance style. While *Suli Ti Nani* clearly embraces Guinea's rich musical heritage, it truly belongs to the ever-evolving Western chamber music tradition.

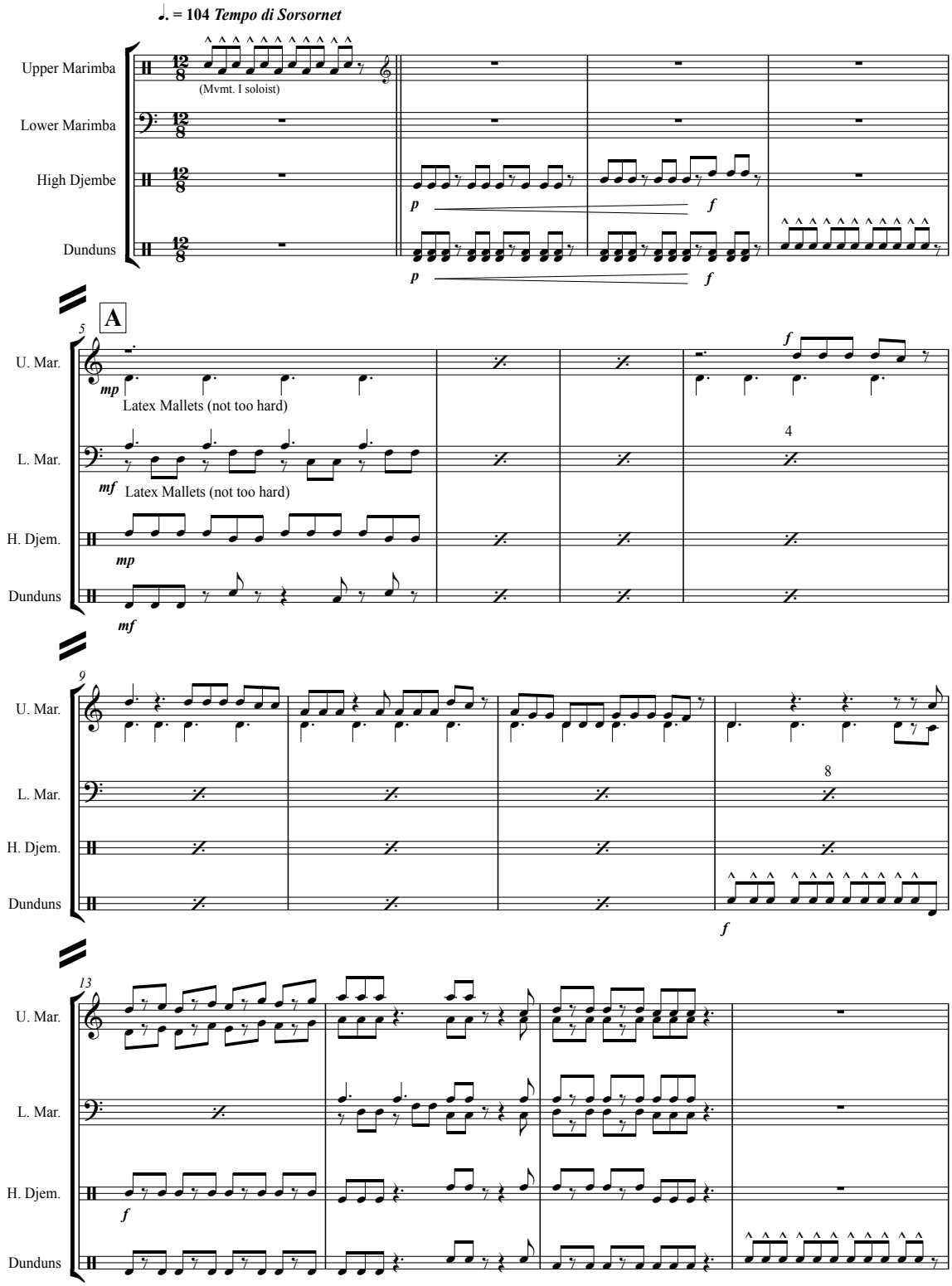
I. Forest

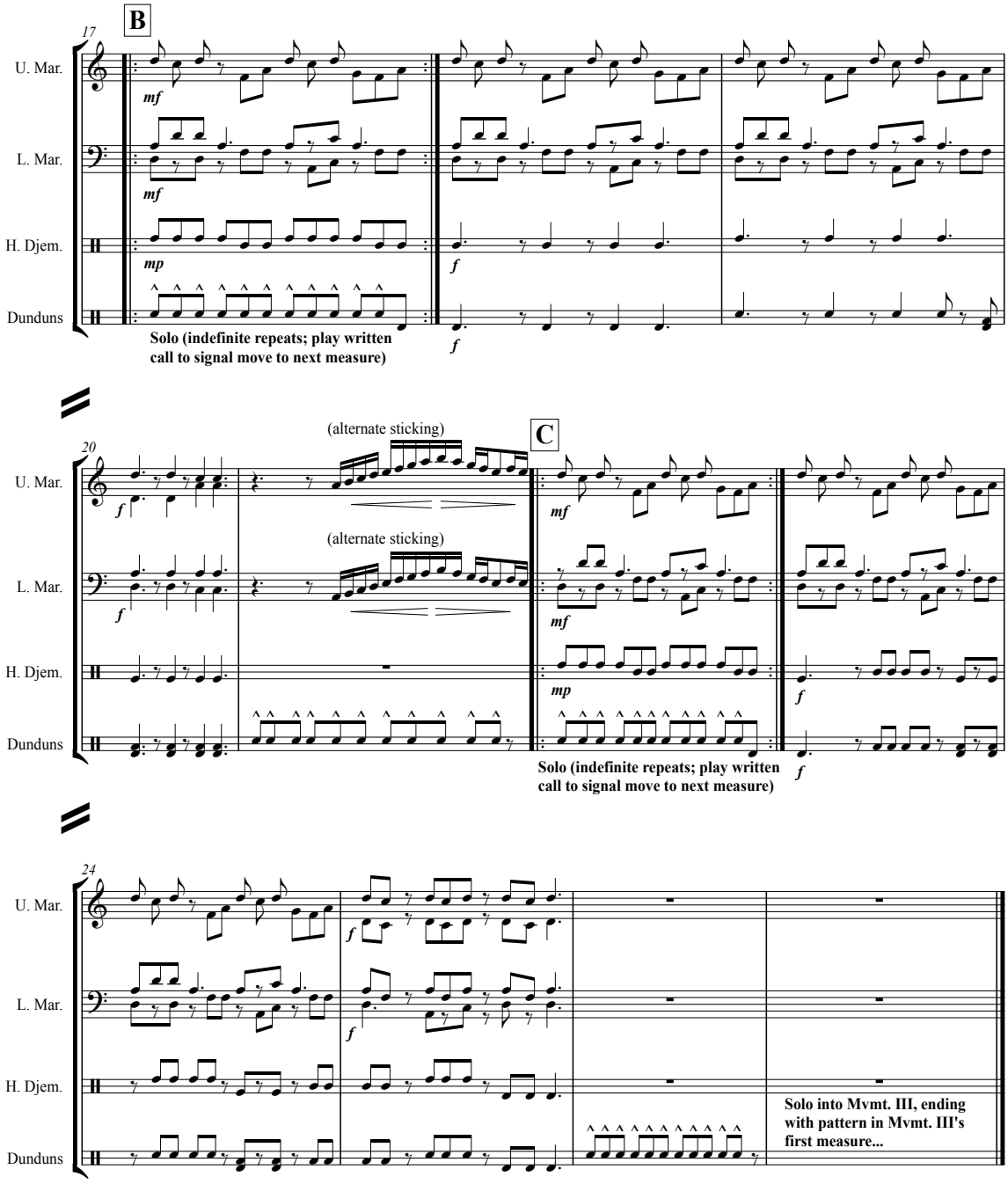

♩. = 120
Caxixi
High Kesekese
Medium Kesekese
Low Kesekese
mf
5
Cax.
H. Kese.
M. Kese.
L. Kese.
11
A
17
f
2


B
♩. = ♩ Tempo di Zaouli
22
Play 3x
Cax.
H. Kese.
M. Kese.
L. Kese.
mf
f
28
Play 3x
34
C
Solo (indefinite repeats)
ff
(1st time only)
40

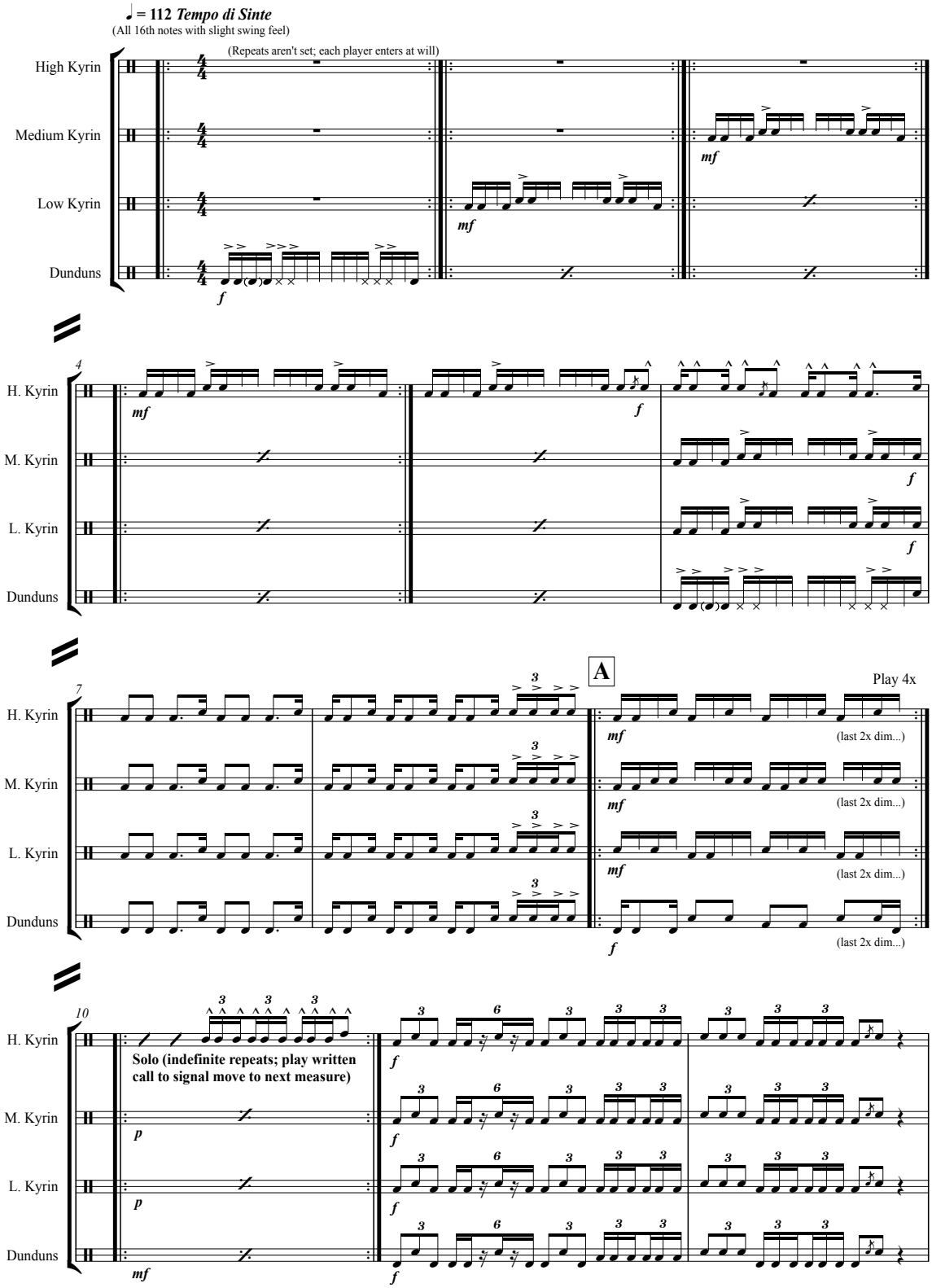

45
accel.
Cax.
H. Kese.
M. Kese.
L. Kese.
D
♩ = 150 Much Brighter
50
f
E
F
♩ = 170 (subito) Driving!
55
ff
Play 4x
(lower kesekese 1st time only)
60
Solo into Mvmt. II, ending with call in Mvmt. II's first measure...

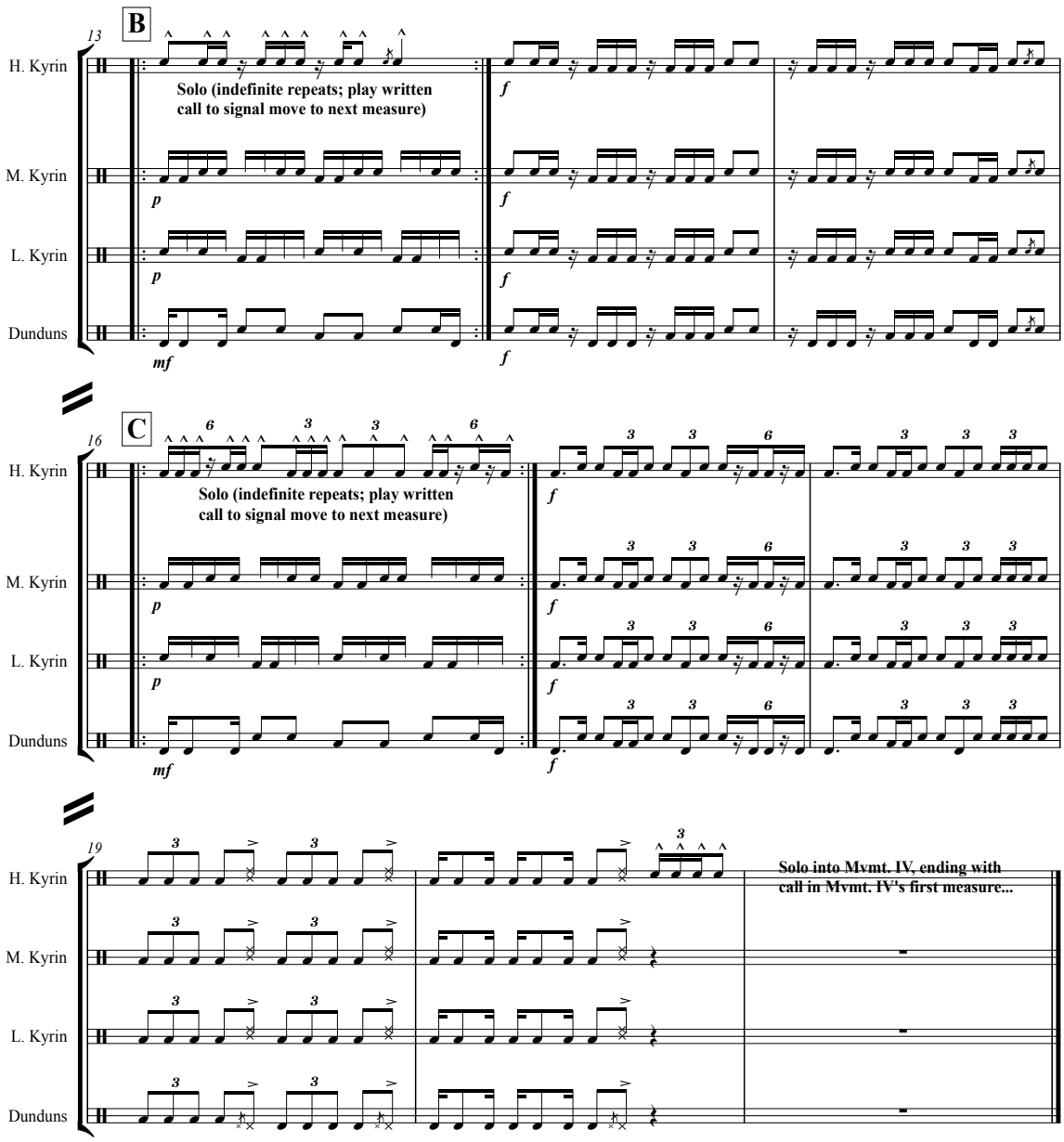
II. Sorsornet



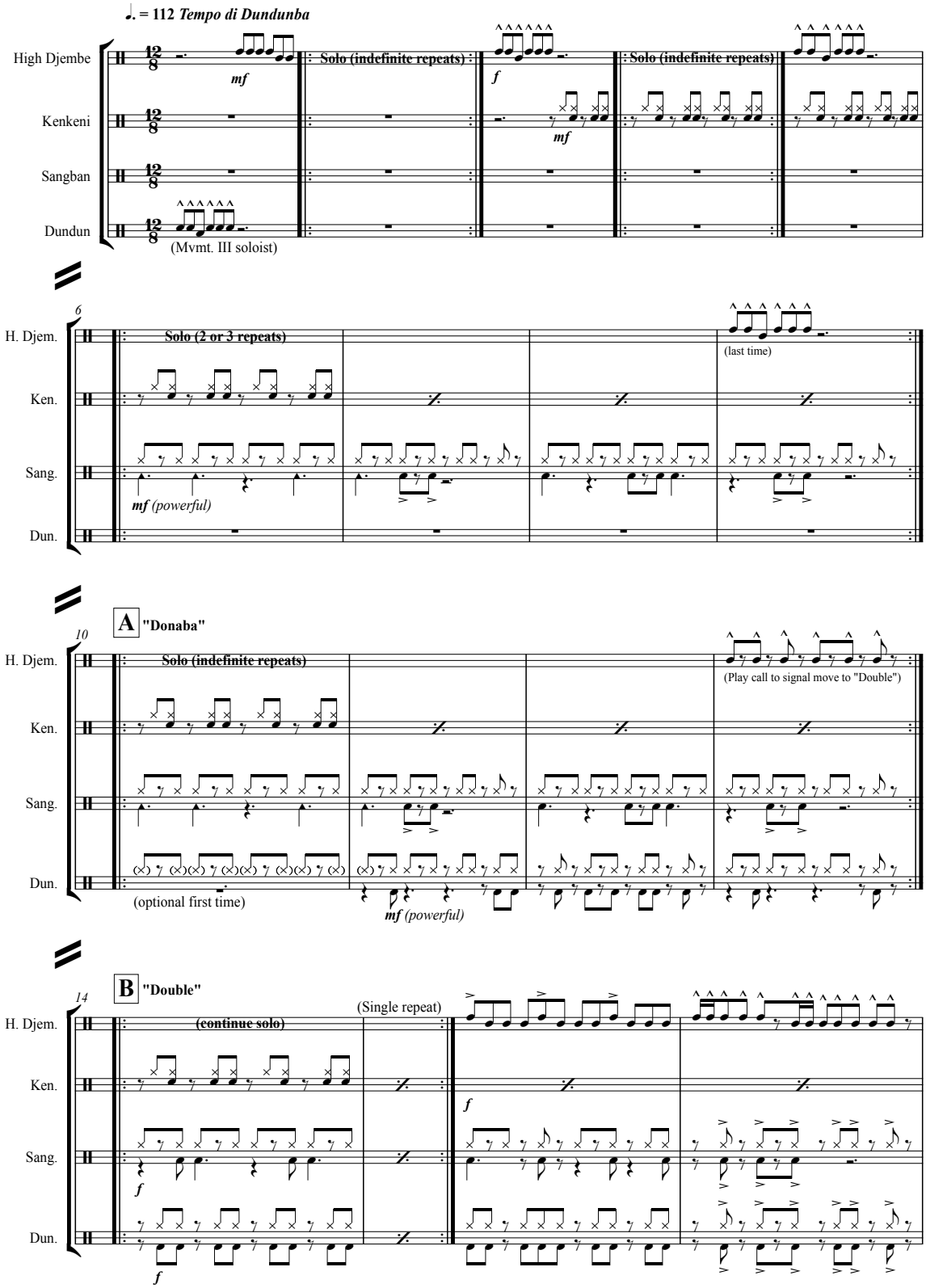

B
17
U. Mar.
L. Mar.
H. Djem.
Dunduns
mf
mf
mp
f
f
Solo (indefinite repeats; play written call to signal move to next measure)
(alternate sticking)
(alternate sticking)
C
20
U. Mar.
L. Mar.
H. Djem.
Dunduns
f
f
mf
mf
mp
f
f
Solo (indefinite repeats; play written call to signal move to next measure)
24
U. Mar.
L. Mar.
H. Djem.
Dunduns
f
f
Solo into Mvmt. III, ending with pattern in Mvmt. III's first measure...

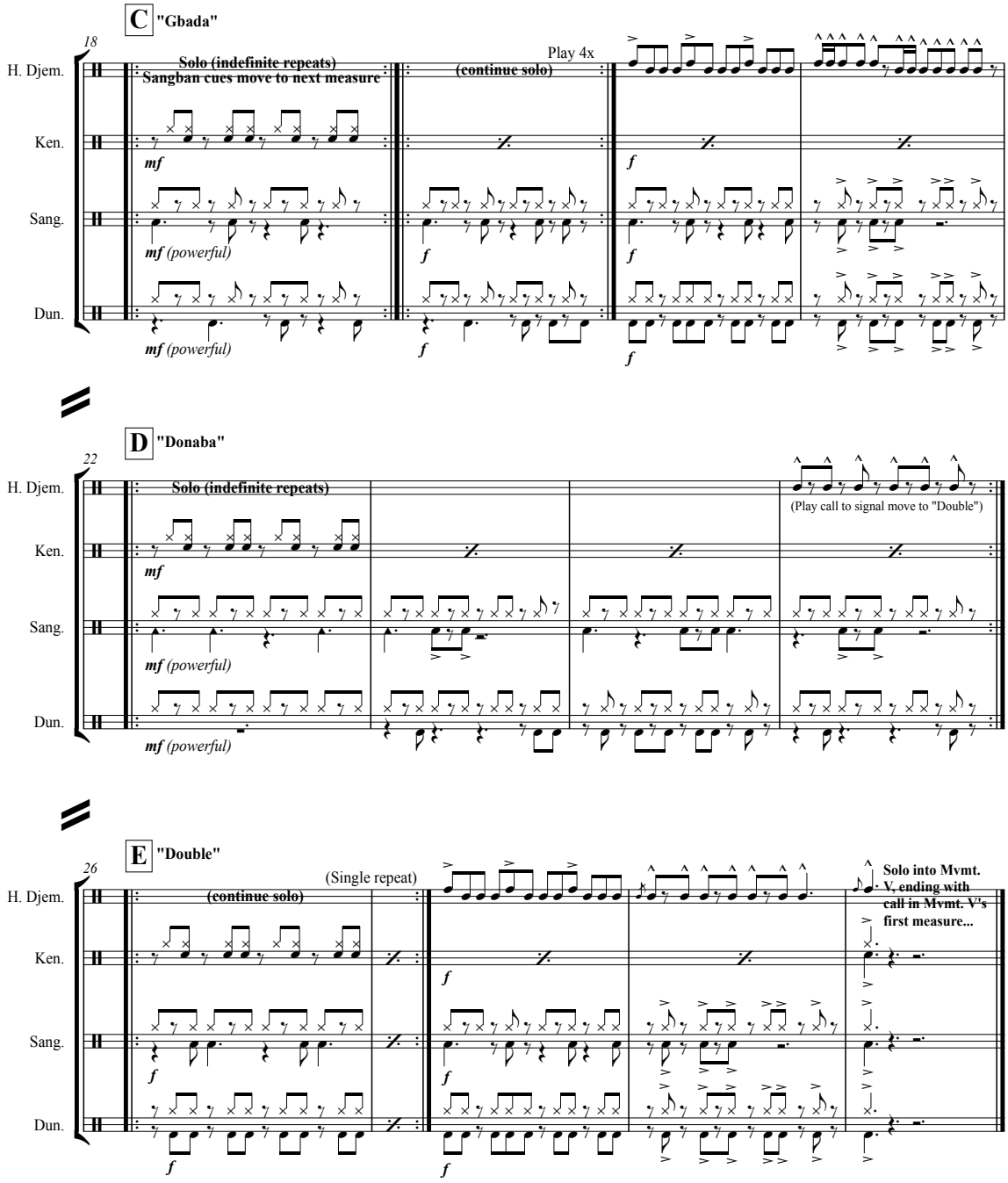
III. Sinte


♩ = 112 Tempo di Sinte
(All 16th notes with slight swing feel)
(Repeats aren't set; each player enters at will)
High Kyrin
Medium Kyrin
Low Kyrin
Dunduns
mf
f
4
H. Kyrin
M. Kyrin
L. Kyrin
Dunduns
7
A
Play 4x
(last 2x dim...)
10
Solo (indefinite repeats; play written call to signal move to next measure)
p

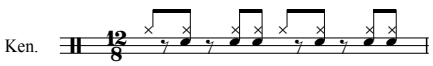

13
B
H. Kyrin
M. Kyrin
L. Kyrin
Dunduns
Solo (indefinite repeats; play written call to signal move to next measure)
mf
p
f
16
C
Solo (indefinite repeats; play written call to signal move to next measure)
19
Solo into Mvmt. IV, ending with call in Mvmt. IV's first measure...

IV. Dundunba

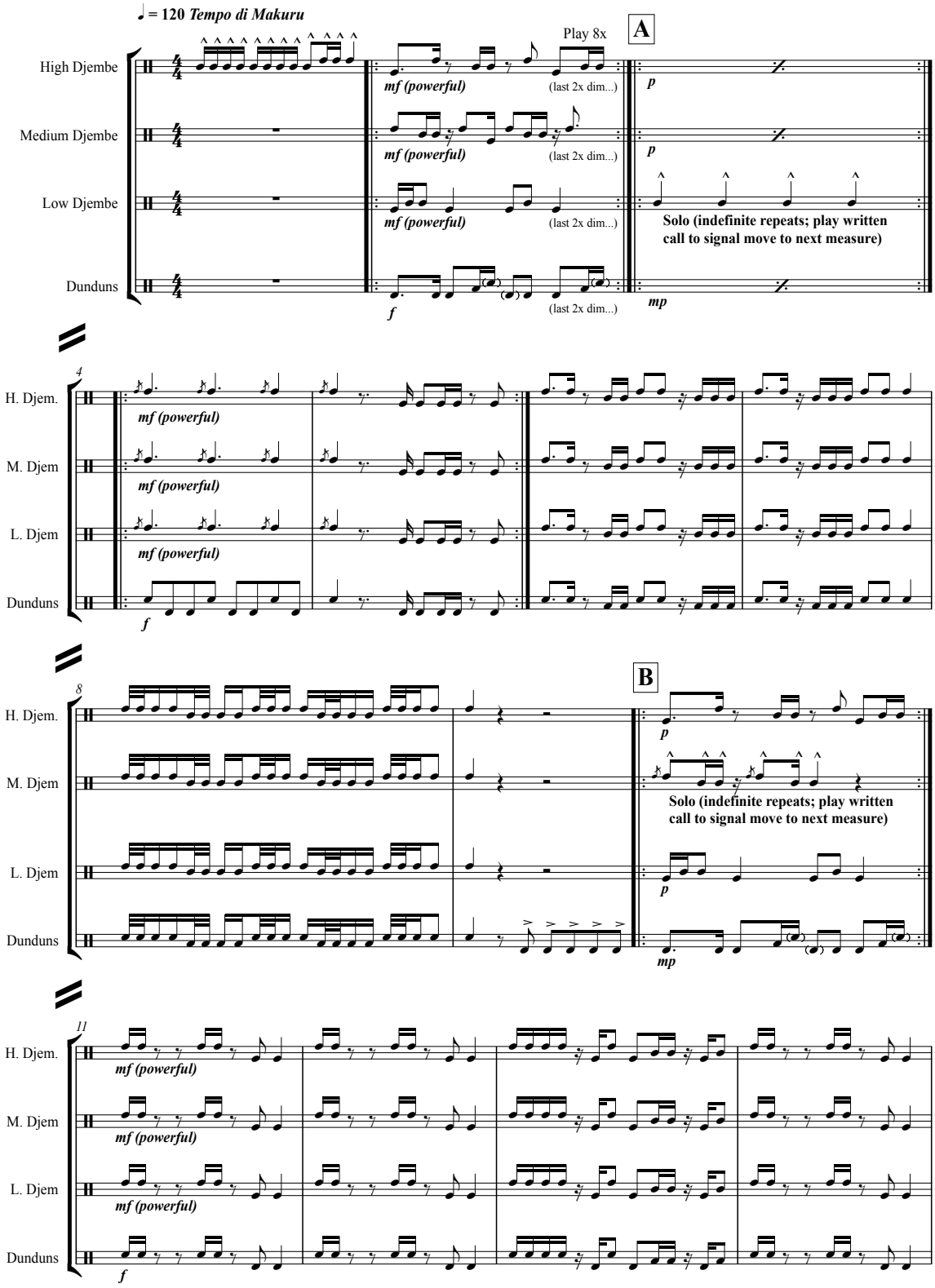

♩. = 112 Tempo di Dundunba
High Djembe
Kenkeni
Sangban
Dundun
mf
Solo (indefinite repeats)
f
mf
Solo (indefinite repeats)
(Mvmt. III soloist)
6
H. Djem.
Ken.
Sang.
Dun.
Solo (2 or 3 repeats)
(last time)
mf (powerful)
A "Donaba"
10
Solo (indefinite repeats)
(Play call to signal move to "Double")
(optional first time)
mf (powerful)
B "Double"
14
(continue solo)
(Single repeat)
f
f
f

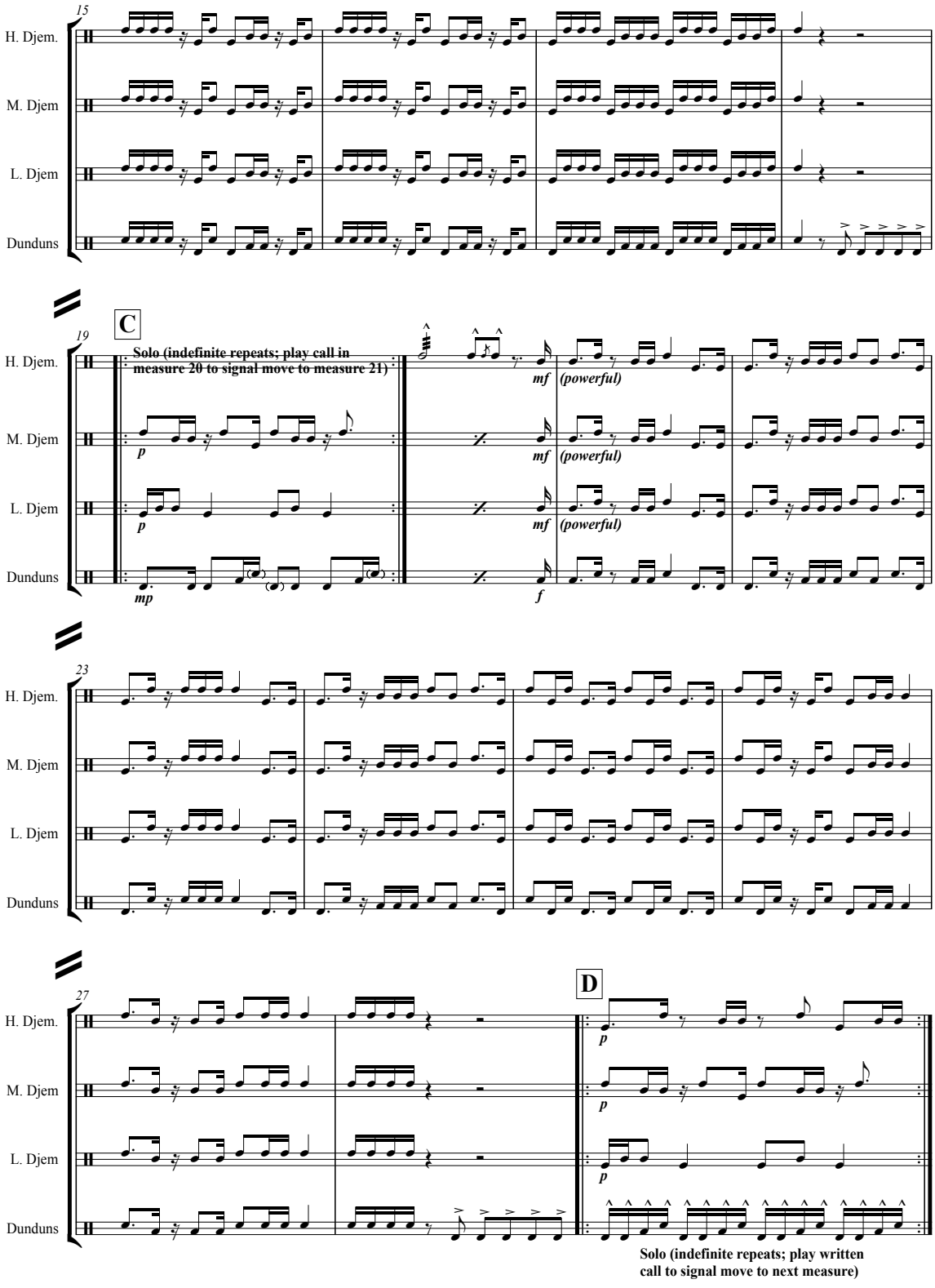


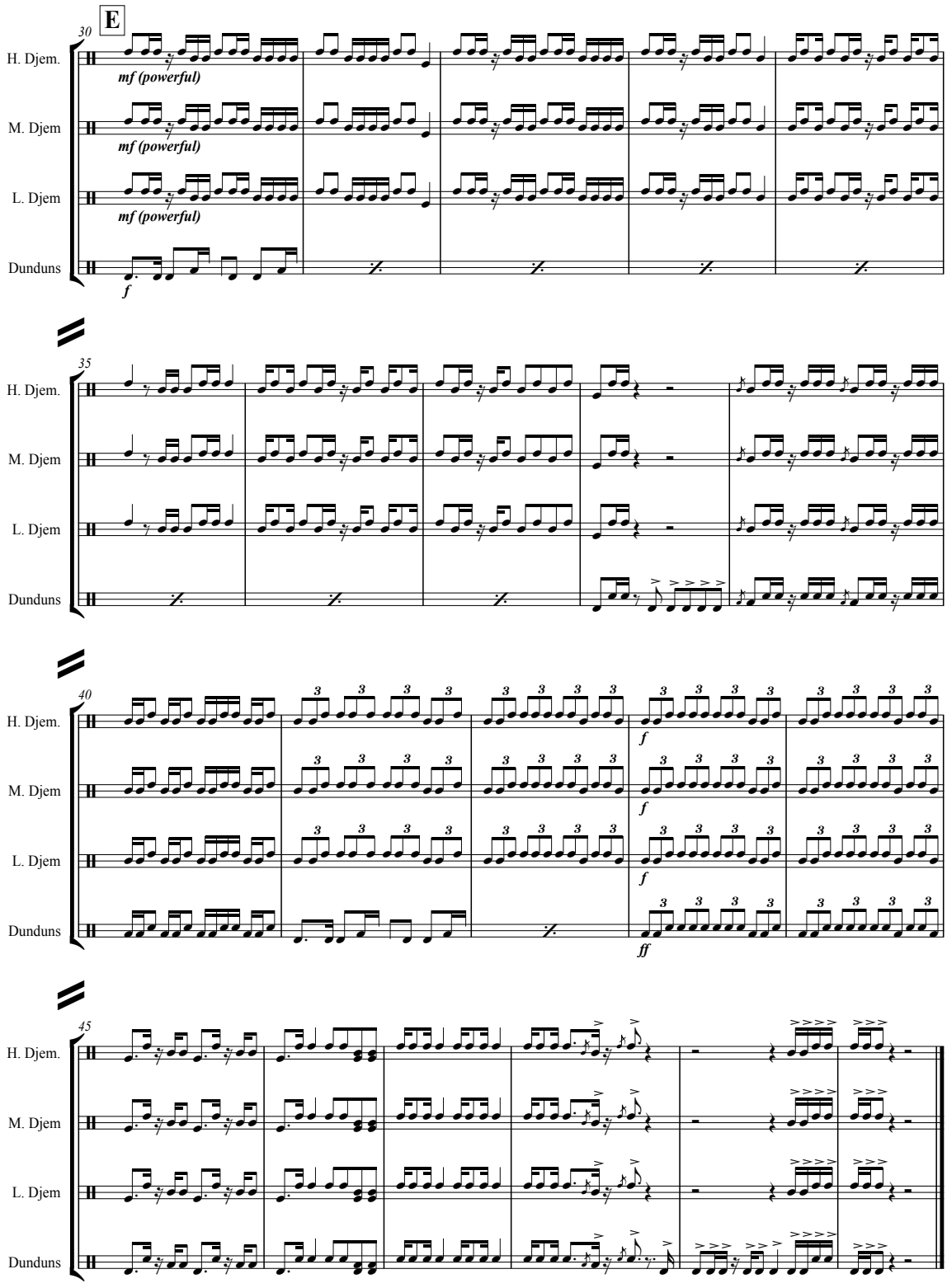
Note: The kenkeni part may prove quite challenging for either the ensemble or the kenkeni player. The following pattern is an acceptable alternative if needed:



V. Makuru


♩ = 120 Tempo di Makuru
Play 8x
A
High Djembe
Medium Djembe
Low Djembe
Dunduns
mf (powerful)
(last 2x dim...)
p
Solo (indefinite repeats; play written call to signal move to next measure)
f
mp
4
H. Djem.
M. Djem
L. Djem
8
B
11


15
H. Djem.
M. Djem
L. Djem
Dunduns
C
19
Solo (indefinite repeats; play call in measure 20 to signal move to measure 21)
p
mp
mf (powerful)
f
23
D
27
p
Solo (indefinite repeats; play written call to signal move to next measure)


E
30
H. Djem.
M. Djem
L. Djem
Dunduns
mf (powerful)
mf (powerful)
mf (powerful)
f
35
40
f
f
f
ff
45

CHAPTER 6

Suli Ti Nani: Performance Issues

PART ONE: General Considerations for Performers

PART TWO: Improvisation in *Suli Ti Nani*

Note: This chapter is designed as a supplement to the *Suli Ti Nani* score, with insights for performers into general performance issues and suggested approaches to the improvised solos required of each performer. Part One will be reformatted and included in the published score as a section titled "Notes to Performers." Part Two will be reformatted and included in the published score as an appendix.

PART ONE: General Considerations for Performers

Suli Ti Nani is modeled on the performances of Ballet Djoliba, Guinea's national ballet. Because *Suli Ti Nani* is based on an unwritten musical tradition, performance of the piece without the use of printed parts is greatly encouraged.

Each of the first four movements features a different soloist, and all four players take a solo in the final movement. Each solo is open in length and should be improvised; approaches to soloing are discussed in the appendix, which also includes sample phrases and solos. As a majority of the piece consists of improvised material, a thorough understanding of the information presented in the appendix is essential for a successful performance of *Suli Ti Nani*. The accompaniment rhythms should be played exactly as written, with the exception of variations listed in the score or other variations appropriate to the tradition. The unaccompanied solos between movements are designed to fill the time needed for setup changes or moving to different instruments, allowing all five movements to be played without pause. While it is strongly recommended that performers adhere to the part assignments listed in the score, parts may be switched if necessary. Individual movements may also be performed independently (without the transitional solos, of course).

Suli Ti Nani features a number of instruments that may not be found in a typical percussion studio. While it is preferable to play the piece on these instruments, some recommended substitutions may be found in the following pages. Performers interested in acquiring instruments from Guinea may purchase them directly from Michael Markus's company, Wula Drum (www.wuladrum.com).

I. Forest

Kesekese are conical basket shakers with long handles played by the Maninka people in the Faranah region of upper Guinea. They are generally larger than Brazilian caxixi. If no kesekese are available, 4 graduated sets of caxixi or similar shakers may be used. While obviously not native to Guinea, caxixi are recommended for the soloist because they are much easier to manipulate than the bulkier kesekese. The players should stand for this movement.

II. Sorsornet

Dunduns are cylindrical wooden drums with unshaven cowhide or goatskin heads tied on each side. "Dundun" is actually a generic term describing three specific drums of the Malinke people: dundun or dundunba (largest), sangban (middle), and kenkeni (smallest). For this movement, the dunduns should be set up vertically on the floor ("ballet style"), with the smaller drums on either side of the dundunba. Though it is common for the smaller drums to be tied to the dundunba for this style of playing in order to ensure uniform height, it is recommended that individual stands (small boxes or milk crates) are used instead for the smaller drums so that they may be easily moved into position for the fourth movement. If dunduns are not available, their sound may be approximated by placing towels over 12", 14", and 16" tom-toms with thick, fiberskyn-type heads. Non-tapered sticks such as Innovative Percussion's GS-2 are appropriate, as are the back ends of larger concert snare sticks (2B or so).

III. Sinte

The *kyrin* is a two-pitched cylindrical log drum originally played by the Susu people of Guinea's lower coastal region. These are very durable drums, designed to be played loudly with drum sticks. It is recommended that they each be placed directly on a waiter tray stand (resting on the straps), with the higher pitch farthest from the performer. Ghost notes should be played on the outside of the playing area (right hand to right side, left hand to left side). Substitutes for this drum are difficult to recommend, as the typical tongue-type log drum is not appropriate.

IV. Dundunba

For this movement the dunduns should be moved to the waiter tray stands previously used for the kyrin. Each player will also play a clapperless metal bell (also called a *kenkeni*) tied to the top of the drum. The bell should be played with a thick piece of metal (a large bolt is often used) in the left hand, while the right holds a stick for open or crush strokes on the head. The bells should be securely tied to the drums before the performance. Careful attention should be paid to the transitions in and out of this movement in order to make them as smooth as possible (the kyrin soloist may "hand off" to the djembe soloist while the other two players set up the drums). Note that the setup diagram (*Figure 5.3*) shows the dunduns in a staggered arrangement to allow for more space around each player. Metal plates may be used instead of the bells, and prepared tom-toms may be substituted for dunduns.

V. Makuru

The djembe players should work diligently to achieve clear and consistent bass, tone, and slap sounds. While the Malinke people traditionally play the djembe in a standing position, the performers may be seated for *Suli Ti Nani*. Accompaniment players should be careful to not overpower the soloists. Performers may find that using the same "sticking" works for the unison calls, but it is not required. Djembes must be used for this movement; congas or other hand drums are not appropriate.

The issues discussed in this section, as well as those discussed later regarding improvisation, were effectively addressed by the Queens College Percussion Ensemble during their excellent performance of *Suli Ti Nani.* Excerpts of this performance may be viewed at http://www.treyfiles.com/sulitinani.html.

PART TWO: Improvisation in *Suli Ti Nani*

As improvisation is a significant characteristic of the Guinean musical traditions from which *Suli Ti Nani* is derived, musicians who perform the piece are expected to improvise fairly extensively. A typical twenty-minute performance of the work includes at least fifteen minutes of individual soloing, with each player improvising at least two "feature" solos as well as an unaccompanied "transitional" solo. For musicians unfamiliar with West African drumming or with improvisation in general, this aspect of performing *Suli Ti Nani* will most likely be the most challenging. In addition, the burden on less experienced soloists is increased by the fact that the score's notation is unable to clearly impart any information about these improvised solos other than (1) when they begin and (2) the calls which end them. Therefore, this appendix has been designed to introduce soloing concepts and musical vocabulary that will assist performers as they undertake the improvisatory elements of the piece.

The following information is derived from extensive sessions with Michael Markus during the development of *Suli Ti Nani*, as well as from Ethos's experiences performing the piece and their collaboration with M'Bemba Bangoura of Guinea's Ballet Djoliba on another project. Rather than serve as a general primer for such broad topics as improvisation or African drumming, the appendix is intended to specifically address issues related to the performance of *Suli Ti Nani* (though the insights offered may certainly apply elsewhere). This material is of equal importance to the score's notated content, and is essential to performing the solos in *Suli Ti Nani* in a manner appropriately rooted in the work's Guinean heritage.

Improvised Solos Aren't "Made Up" on the Spot

Performers who don't improvise often suspect that improvisations are (or should be) entirely unique musical statements delivered by means of an almost divine inspiration. While this may be true in some (rare) cases, it is not a recommended approach to improvising in *Suli Ti Nani*. Instead, effective soloing in the Guinean style primarily involves the spontaneous presentation and manipulation of musical elements already familiar to the performer. By working with the example phrases and solos provided in this appendix, performers may begin to develop a stylistically appropriate vocabulary upon which to base their solos. With practice, the example phrases will become second nature and the performer may then develop his or her own variations as well as solo phrases of their own.

Beginning, Middle, and End

As performers become comfortable with individual solo phrases, the next step is to put them together during the feature solos in a way that creates larger formal structures. Put simply in narrative terms, this requires giving the solos a beginning, middle, and end. For the caxixi soloist in "Forest," this could mean having two or three distinct sections in the single unaccompanied solo. For the kyrin soloist in "Sinte," this may involve focusing each of the three separate solos on a different musical concept. During "Makuru," each soloist should ideally have a structural arc to his or her individual solo while maintaining an overall character that differs from the others.

The example feature solos in this appendix will generally adhere to a three-part formal structure that is often utilized during Ethos's performances of *Suli Ti Nani*. The

solos begin with sparse, simple rhythmic statements such as *Figure 6.6 - 1* (page 153), *Figure 6.10 - 4* (page 162) and *Figure 6.14 - 1* (page 174); by contrasting with the generally thick accompaniment textures, these statements help the audience to identify both a clear pulse and the member of the ensemble that is currently being featured. Gradually the introductory phrases progress to more abstract or syncopated gestures such as *Figure 6.2 - 5* (page 145), *Figure 6.14 - 9* (page 175), or *Figure 6.20 - 4* (page 193). The solos conclude with technically and rhythmically demanding phrases such as *Figures 6.6 - 9* and *6.6 - 10* (page 154), *Figure 6.10 - 10* (page 163), or *Figure 6.19 - 10* (page 192). Following these comparatively dense passages, it is often helpful to leave a bit of space before the call into the next section so that it may be easily recognized. There is no recommended length for the feature solos; performers should simply play as long as the moment demands. Ethos's experience suggests that solo lengths may vary greatly, depending on the ever-changing dispositions of individual performers, the ensemble as a whole, and the audience.

Point A to Point B

The transitional solos develop somewhat differently than the feature solos, as they serve a very specific dual purpose: (1) to fill the time needed for the performers to move into position for the next movement, and (2) to set up the coming movement's rhythmic feel. These solos need not be any longer than the time necessary for the players to move to their new positions, and the crux of each transitional solo should be a relatively brief, coherent progression from the old rhythmic feel to the new. The performers may choose to employ subito tempo changes, ritards, accelerandos, or metric modulations in order to

achieve this objective. It is also recommended that performers be prepared to extend the solo in case the other musicians encounter unforeseen complications. The transitional solos should begin immediately at the conclusion of each movement, though all performers should briefly remain in place and then proceed with the transition at a focused, but relaxed, pace.

About the Examples

As stated in the score's "Editor's Note," the rhythms in *Suli Ti Nani* were created to accompany dances, songs, and ceremonies. The transference of these rhythms to a concert setting eliminates the interplay between musicians and others (primarily dancers) that is a significant aspect of traditional Guinean improvisation; in so doing it also renders soloing in *Suli Ti Nani* comparatively less complicated, as the performers need not concern themselves with any of the conventions associated with such interaction. This more Western, exclusively musical context informed the selection of the example material, which includes common Guinean phrases as well as others suggested by Michael Markus or adapted from Ethos Percussion Group's performances of *Suli Ti Nani*. Performers are encouraged to study all of the examples (rather than just those related to their particular solos), and are welcome to adapt rhythms or ideas from any of the examples into any solo. Once performers become comfortable with this material they are strongly encouraged to introduce their own original rhythms and phrases, as the ultimate purpose of improvisation in *Suli Ti Nani* is to showcase each soloists' musical personality. Demonstration recordings of each example solo may be downloaded from http://www.treyfiles.com/sulitinani.html.

I. Forest

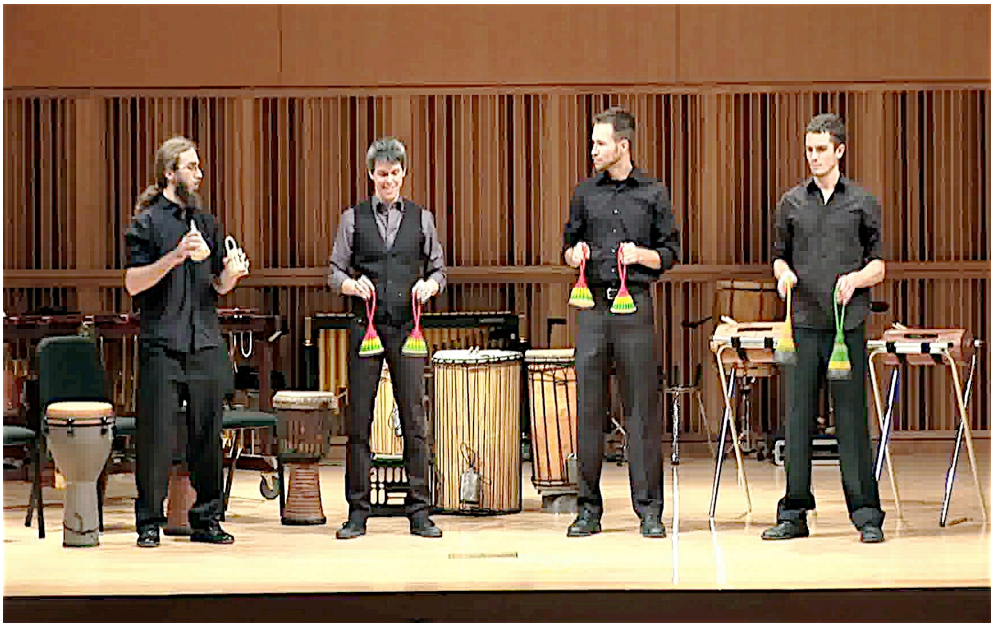


Figure 6.1: Performance of "Forest." (Photo courtesy of John Hartzell)

"Forest" begins with a 12/8 introduction composed by Michael Markus that features a great deal of interplay among the performers. This transitions at measure 22 to the heart of the movement, which is based on a mask dance from the Gouro people of Côte d'Ivoire called Zaouli. The call given by the caxixi in measure 36 to end the solo leads to a well-known call-and-response section from Zaouli that is often quoted in various contexts by Guinean ensembles.

The caxixi solo in this movement is *Suli Ti Nani*'s only feature unaccompanied by the rest of the quartet. Michael Markus and Ethos's Yousif Sheronick determined that the caxixi soloist could create his or her own accompaniment, providing a steady 16^{th}-note ostinato with one shaker while using the other for most of the solo statements. The ostinato caxixi is generally shaken sideways, with the instrument turned so that the louder bottom surface is utilized when it joins the left hand for foreground rhythms. The

ostinato's groove is enhanced by incorporating the common up/down shaker motion, which adds a slight quarter-note pulse. When preparing this solo, the primary concerns should be achieving clear rhythmic articulation and maintaining a distinct foreground/background relationship between the solo and ostinato voices. Variety may be achieved by interrupting the ostinato with sustained, roll-type shakes or by abandoning the ostinato for brief periods of straightforward two-handed rhythms. The solo is usually concluded with an extended ritard followed by a sustained "roll." While certainly not required, this approach has proven to be an effective means of creating dramatic tension while also giving the other performers a clear indication that the solo is ending.

Not much time is needed for the transition from "Forest" to "Sorsornet," so the soloist should begin to establish the coming 12/8 feel reasonably soon in the transitional solo. The soloist moves to position at the upper end of the marimba while playing, and after giving the opening call for "Sorsornet" there is plenty of time to put the caxixi down and be prepared with mallets for measure 5.

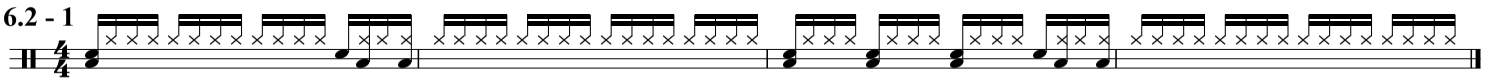
Example solo phrases for "Forest" may be found in *Figure 6.2*. The example feature solo (*Figure 6.*3) begins with the unison ensemble statement in measure 34; measures S1-S65 contain the solo represented in the score by measure 35, and the example solo ends with measure 36. The example transitional solo (*Figure 6.*4) begins with measure 65; measures T1-T25 contain the solo represented in the score by measure 66, and the example solo concludes with the first measure of "Sorsornet." In the context of Ethos's performance experience, these solos are slightly longer than average; the examples are extended in order to illustrate a wide variety of possible approaches.

Figure 6.2:

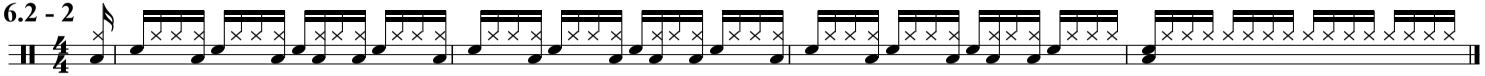
Example Solo Phrases for "Forest"

Caxixi

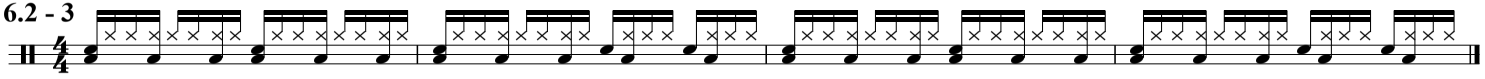
6.2 - 1



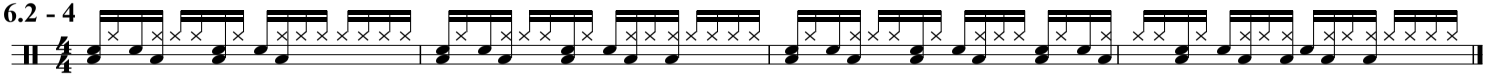
6.2 - 2



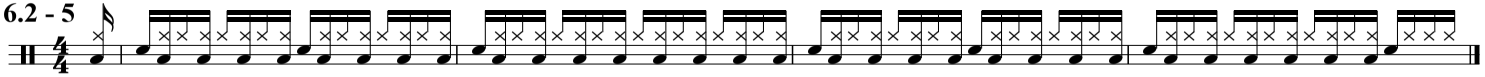
6.2 - 3



6.2 - 4



6.2 - 5



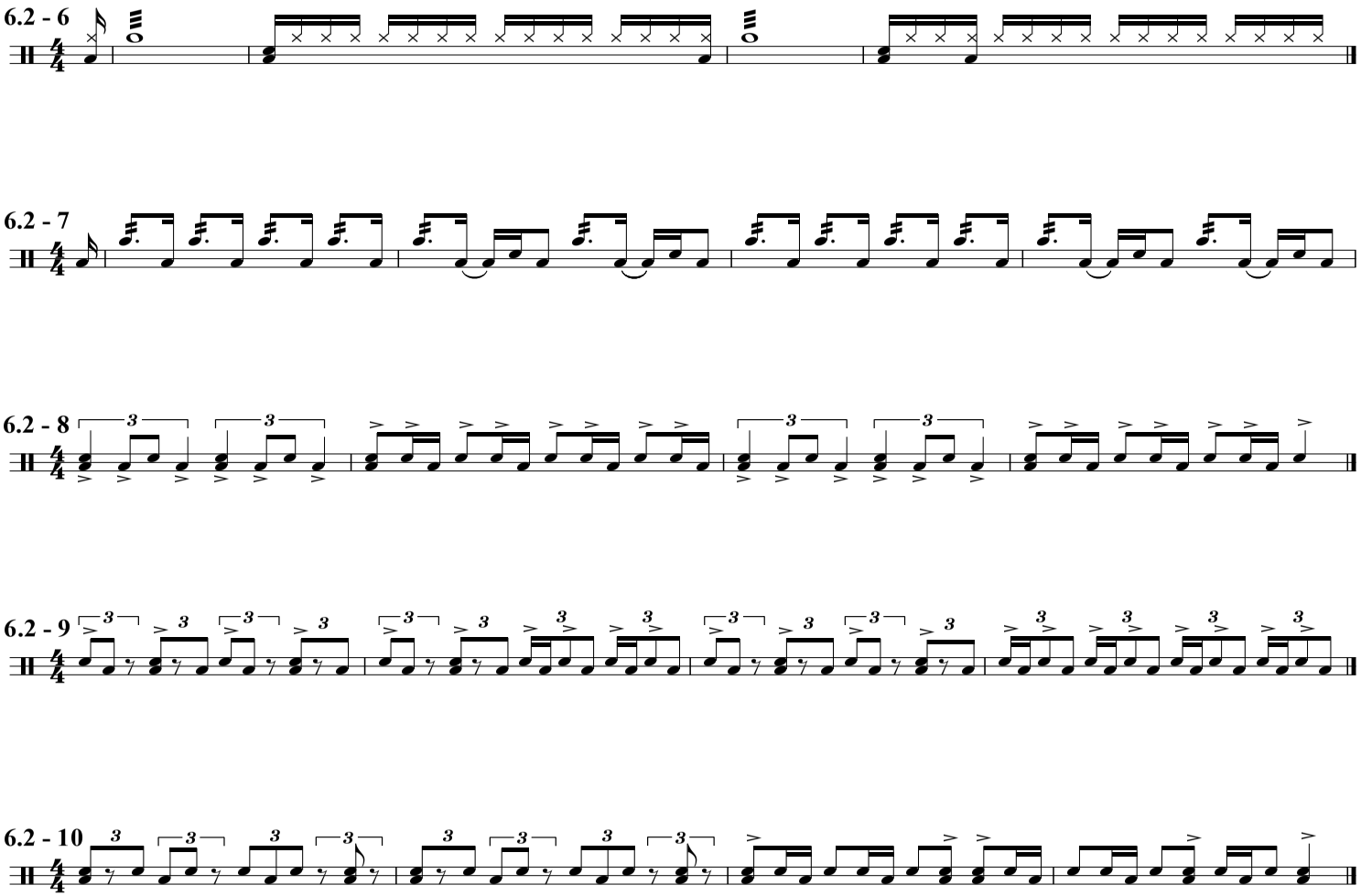

6.2 - 6
6.2 - 7
6.2 - 8
6.2 - 9
6.2 - 10

Figure 6.3:
Example Feature Solo for "Forest"

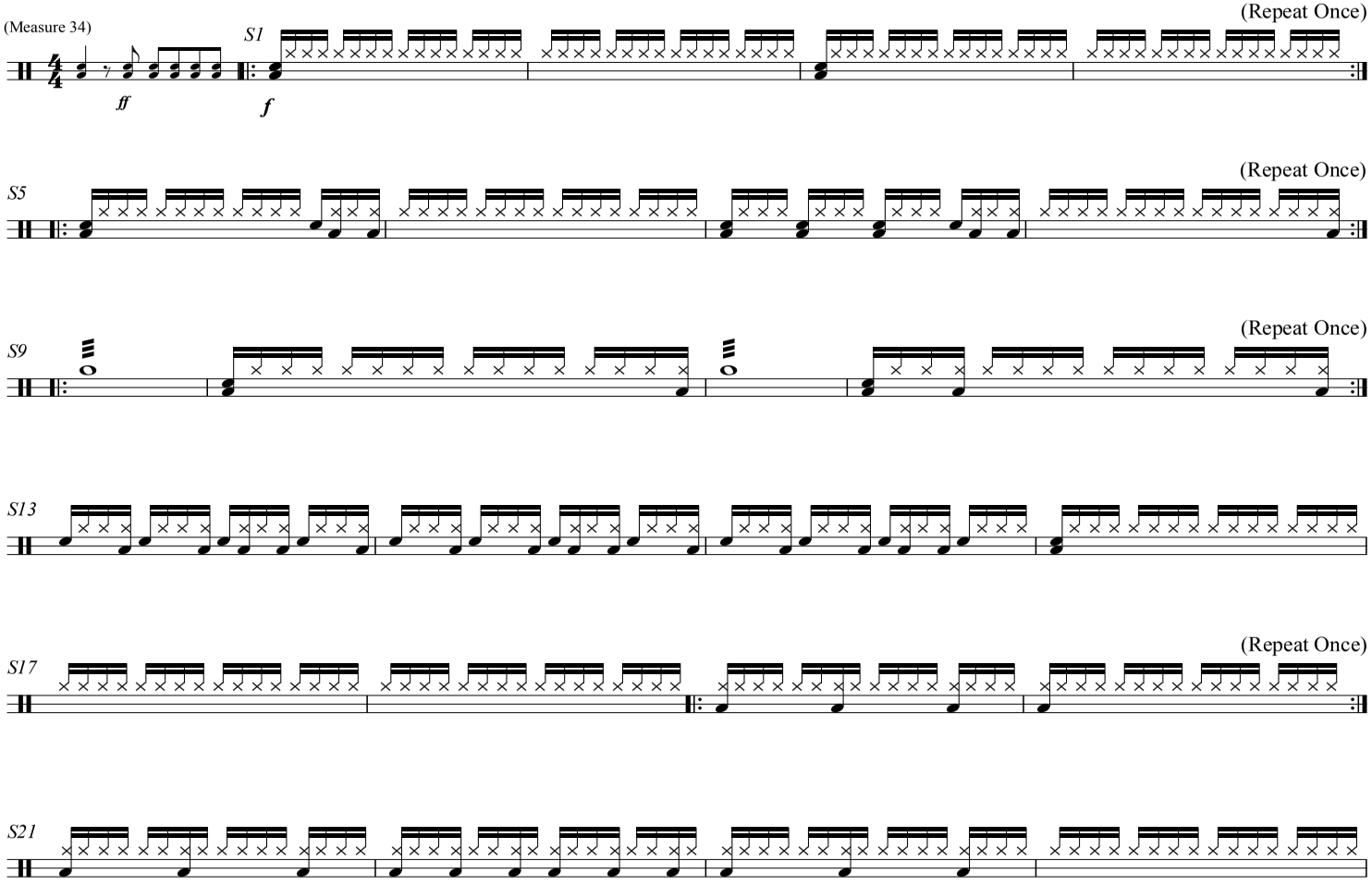


Fig 6.3: Example Feature Solo for "Forest" Page 2

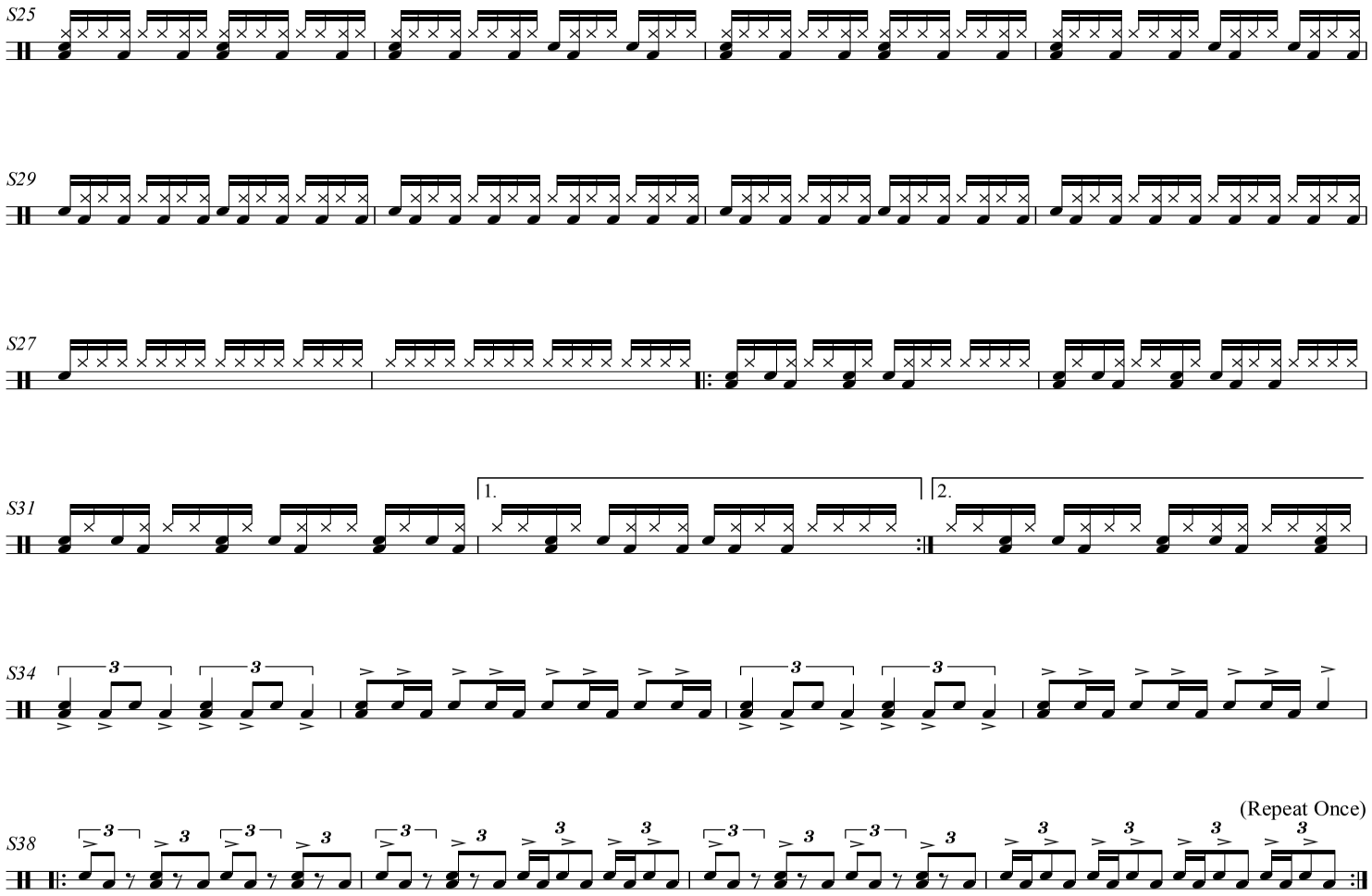


Fig 6.3: Example Feature Solo for "Forest" Page 3

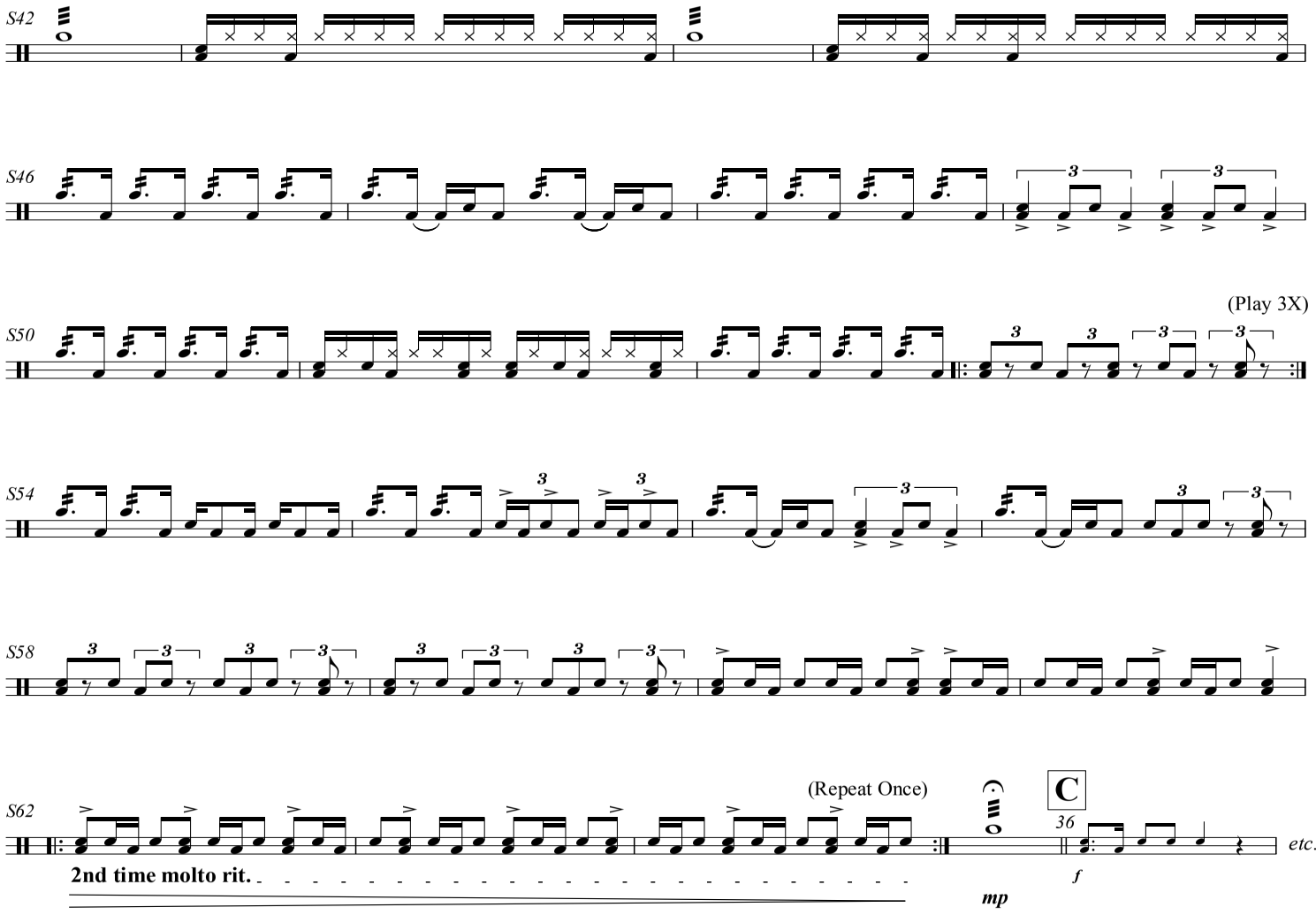
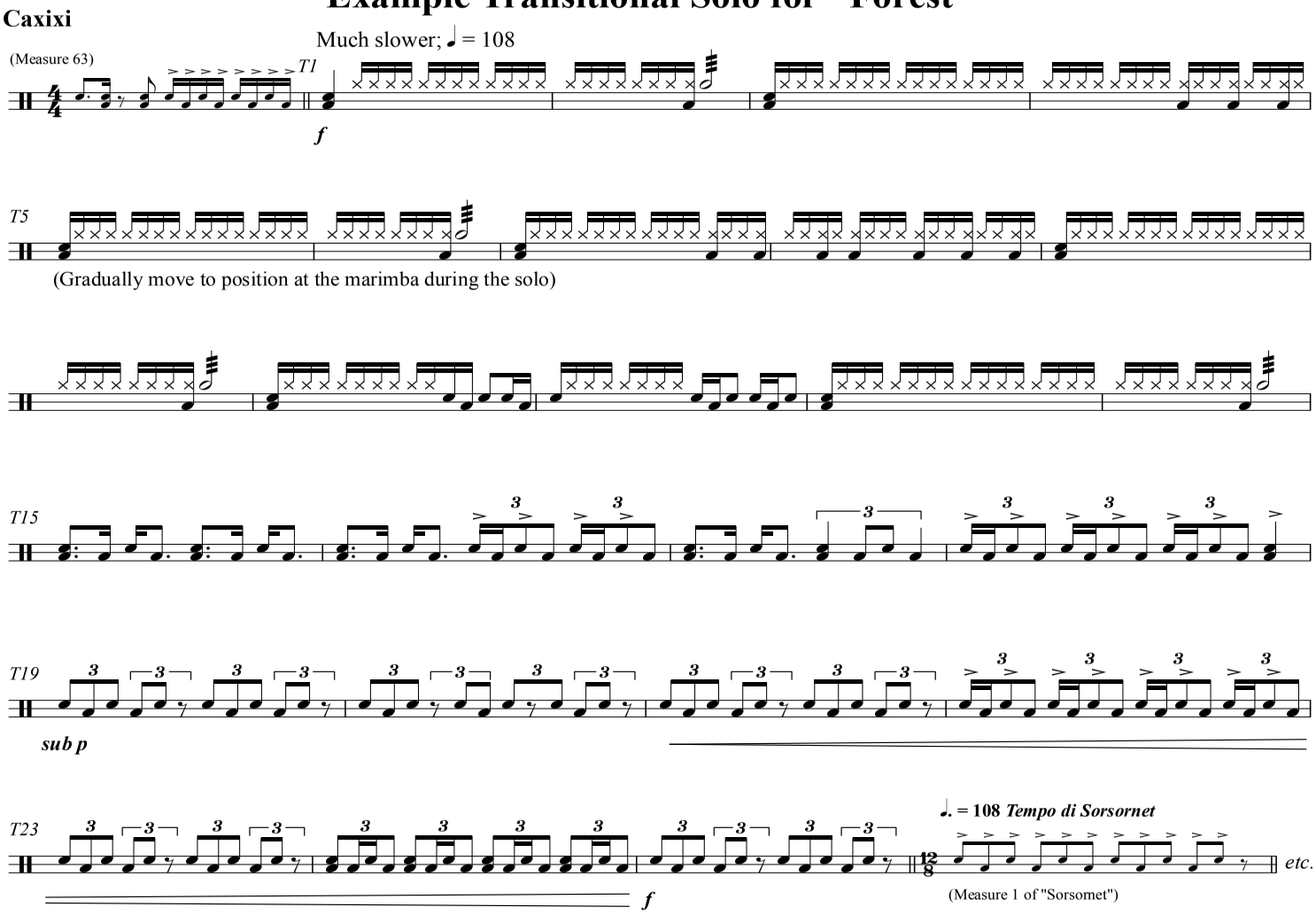


Figure 6.4:

Example Transitional Solo for "Forest"



II. Sorsornet

Figure 6.5: Performance of "Sorsornet." (Photo courtesy of John Hartzell)

Unlike "Forest," little material is presented in "Sorsornet" before the feature solo begins. After a four-measure introduction, the djembe, dundun, and balafon-derived marimba parts play standard accompaniment patterns for this Baga welcoming dance; after a few repetitions the dundun pattern may be minimally embellished as the upper marimba introduces a traditional Sorsornet melody. The first call-and-response section occurs in measures 12-16, followed by the first of two open-ended dundun solos represented in the score by measure 17. The feel for "Sorsornet" should be broad and centered throughout (though not relaxed or heavy), and performers should take great care to not push the tempo even when playing more complex figures.

Example solo phrases for "Sorsornet" may be found in *Figure 6.6*. The example feature solo (*Figure 6.*7) is anchored by a regular return to the simple figure played on the first beat of each of the first four measures (S1-S4). The restatement of this figure

throughout the solo provides the listener with an accessible point of reference, which can be especially welcome after more abstract passages such as S39-S44. While suggested by Michael Markus, this strategy is not inherently associated with Sorsornet or required for the solo. Performers who choose to adopt this approach may of course develop their own motifs.

Rudimental stickings may facilitate the execution of figures such as Example Solo Phrase 10 (*Figure 6.6 – 10*), which works well when approached as a double paradiddle. Performers may also at times incorporate other elements of rudimental drumming into their solos, as the virtuosity and showmanship associated with this style of playing are equally valued in the Guinean tradition. However, any figures that cannot be executed while maintaining the deep, full tone of the dunduns should be avoided.

The transition from "Sorsornet" to "Sinte" is generally brief, and the soloist's greatest challenge is solidly establishing the feel for "Sinte." The tempo at the end of the transitional solo should be bright and driving, with the 16^{th}-notes given a slight swing feel similar to the "Second Line" style of New Orleans.

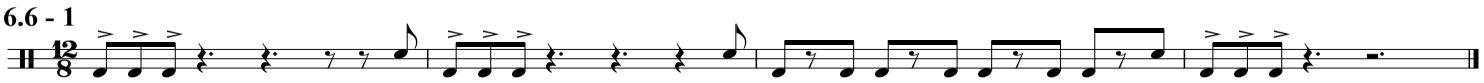
The example feature solo begins with measure 5, and examples of possible pattern variations are found in measures 8-11. Measures S1-S76 contain the solo represented in the score by measure 17, and the example solo ends with the call played to signal the move to measure 18. The example transitional solo (*Figure 6.8*) begins with measure 26; measures T1-T23 contain the solo represented in the score by measure 27, and the example solo concludes with the first measure of "Sinte." In the context of Ethos's performance experience, these solos are slightly longer than average; the examples are extended in order to illustrate a wide variety of possible approaches.

Figure 6.6:

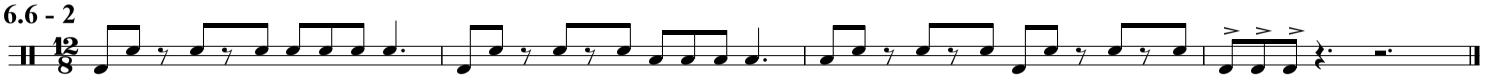
Dunduns

Example Solo Phrases for "Sorsornet"

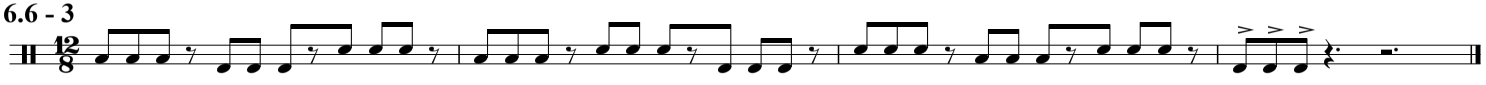
6.6 - 1



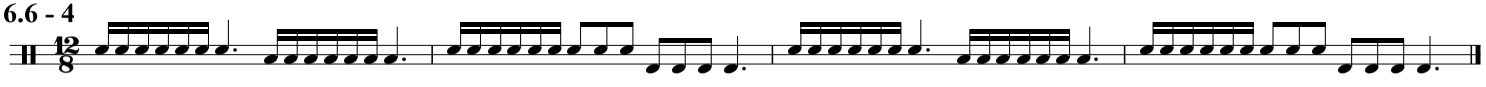
6.6 - 2



6.6 - 3

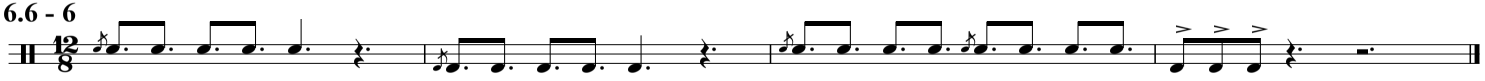


6.6 - 4

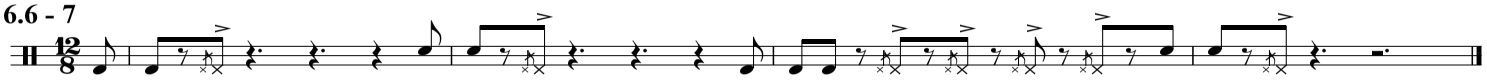


6.6 - 5

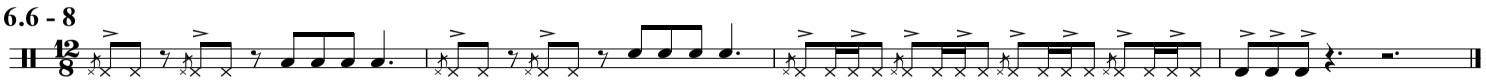
6.6 - 6



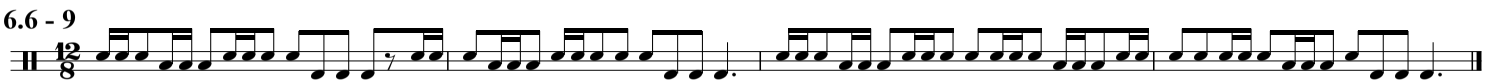
6.6 - 7



6.6 - 8



6.6 - 9



6.6 - 10

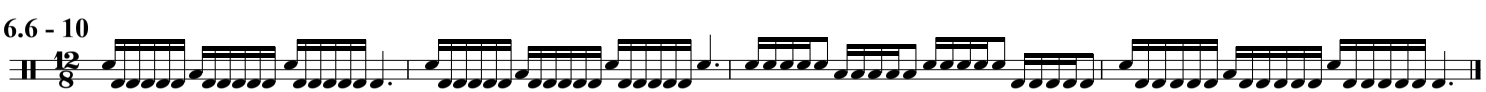
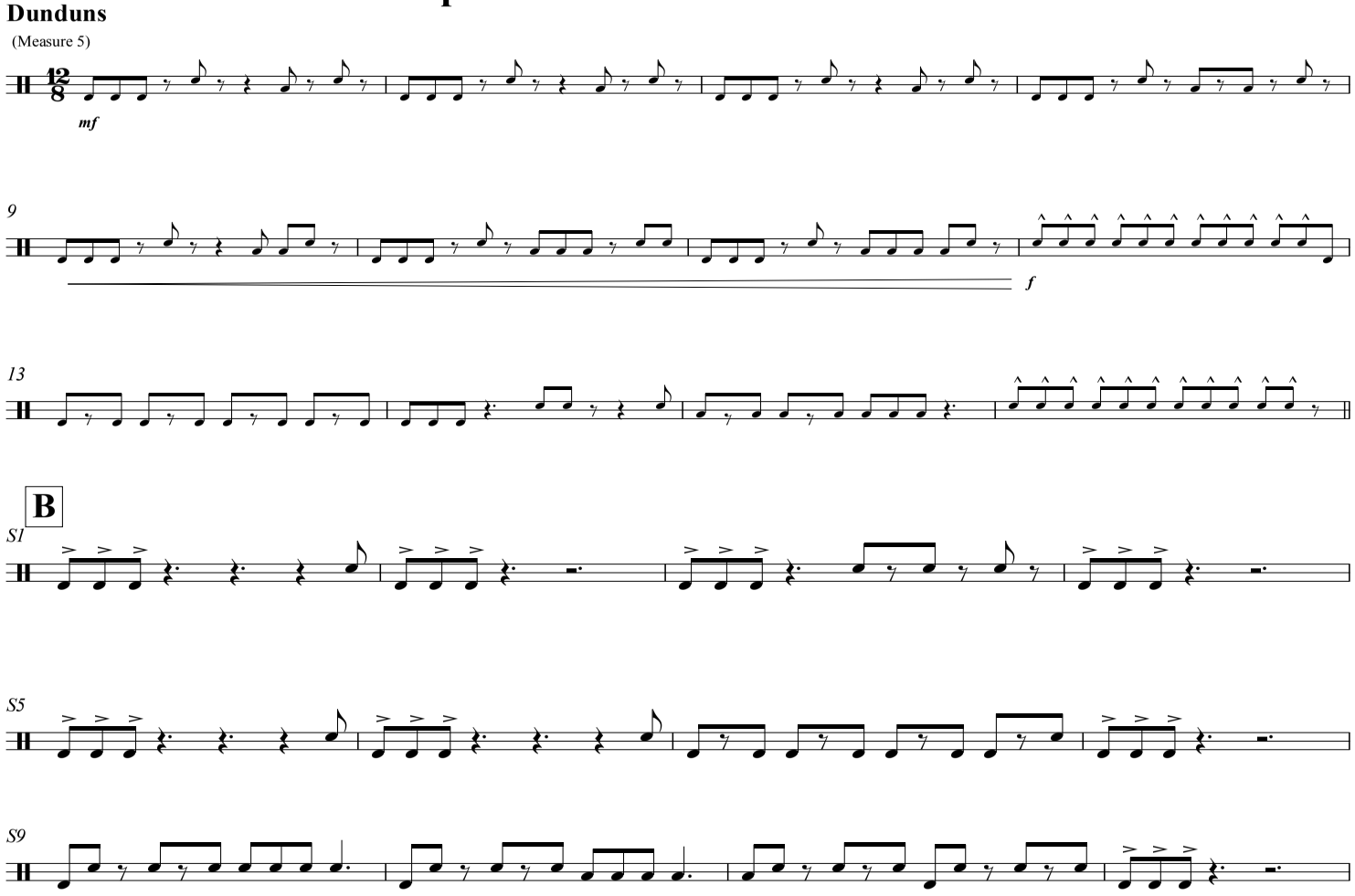
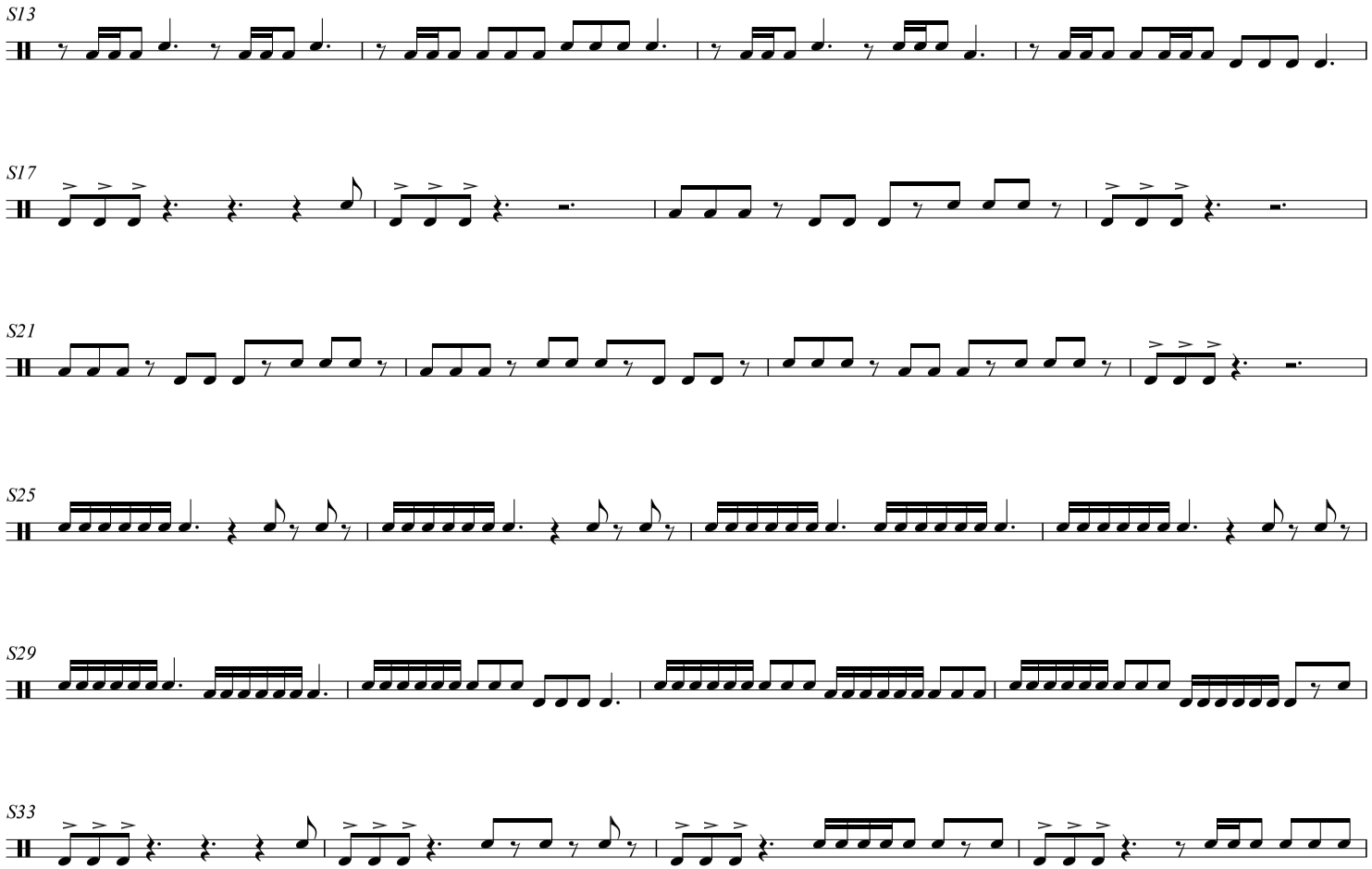


Figure 6.7:
Example Feature Solo for "Sorsornet"




S13
S17
S21
S25
S29
S33

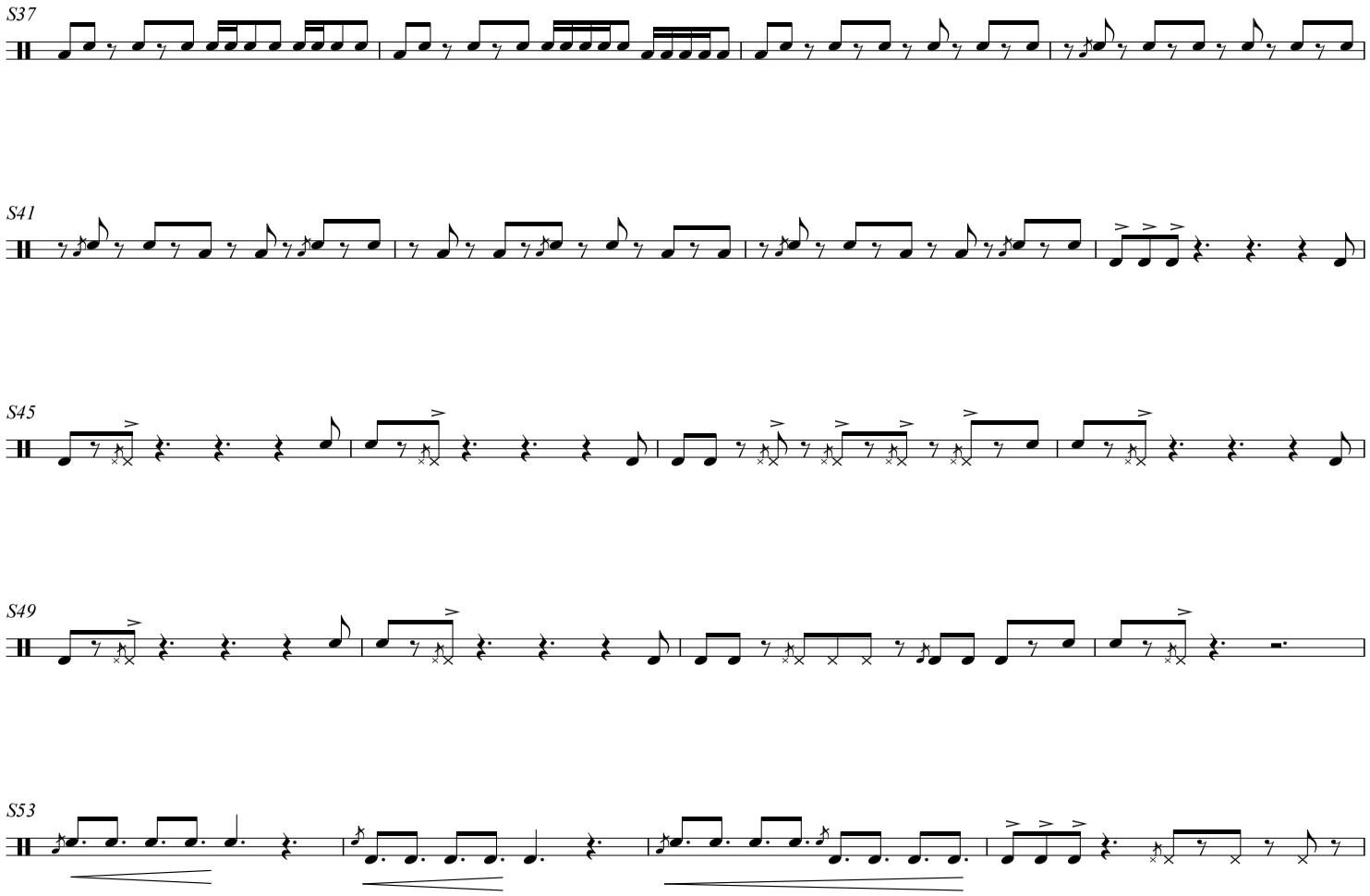

S37
S41
S45
S49
S53

Fig 6.7: Example Feature Solo for "Sorsornet" Page 4

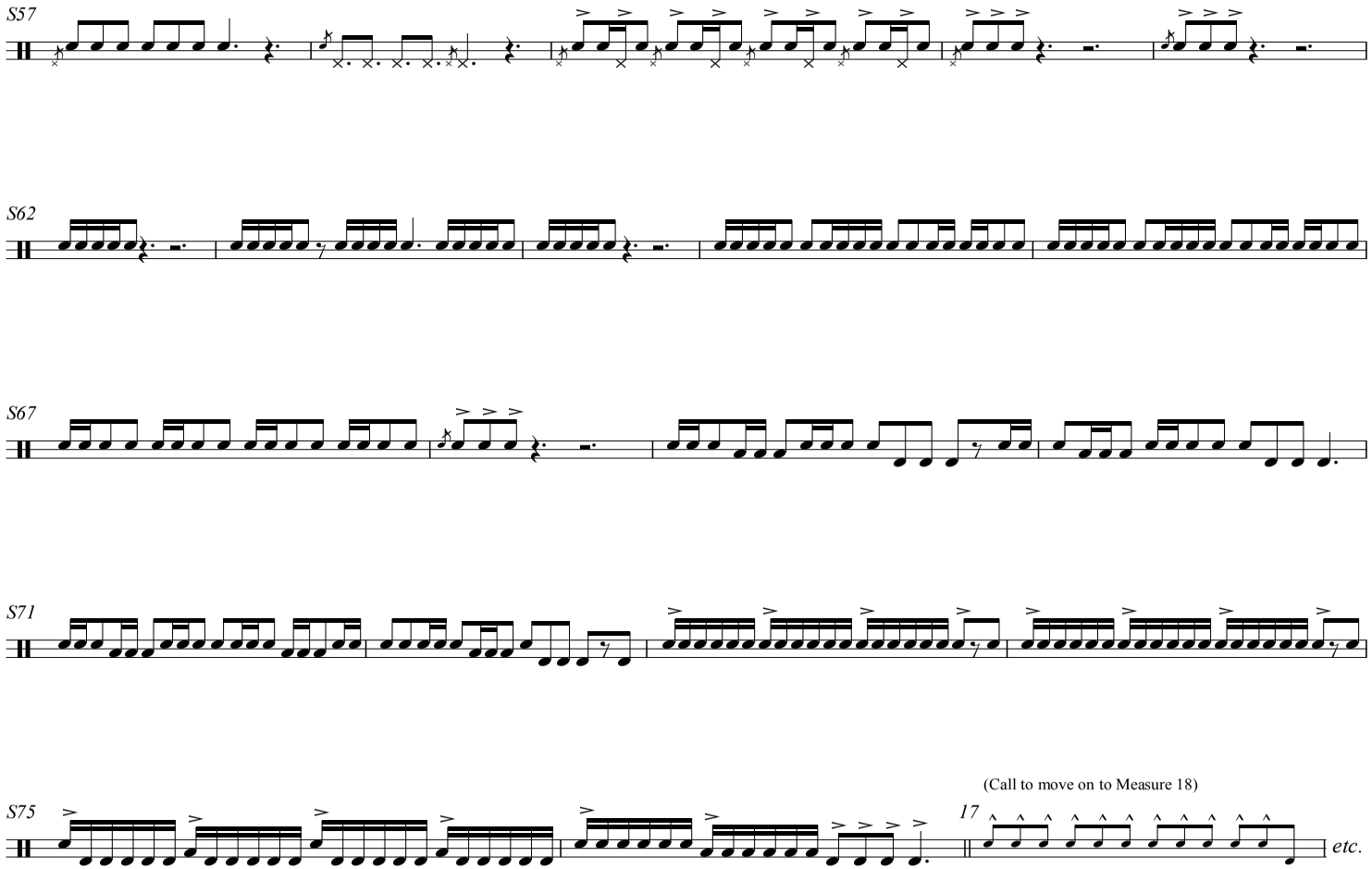
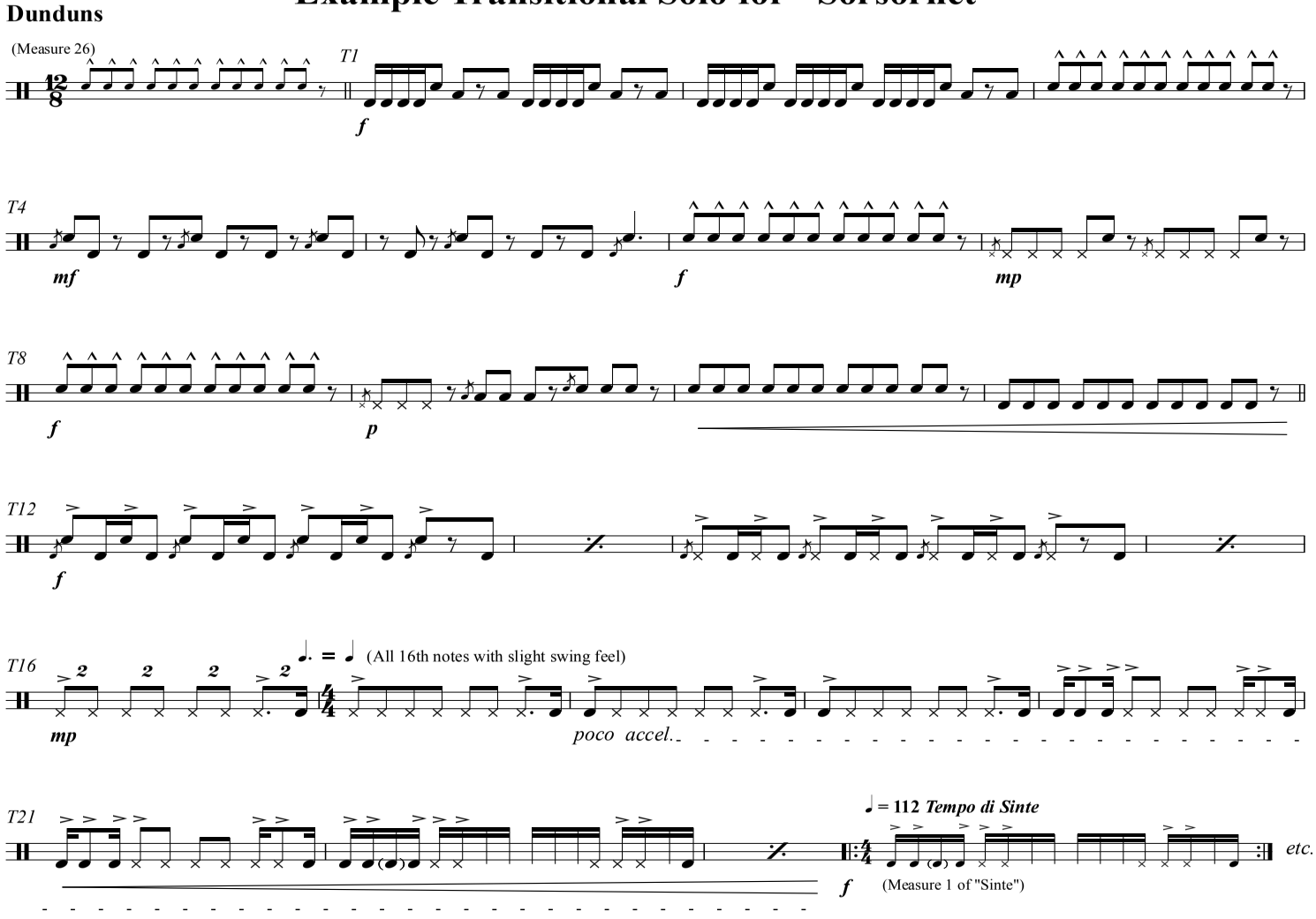


Figure 6.8:
Example Transitional Solo for "Sorsornet"



III. Sinte

Figure 6.9: Performance of "Sinte." (Photo courtesy of John Hartzell)

"Sinte" opens with staggered entrances on a unison rhythm established by the dundun player. The slight swing feel of the rhythms in this pre-initiation dance of the Nalu people is comparable to the "Second Line" style from New Orleans, and the ensemble should take special care to maintain a consistent approach to this feel from player to player. Because each kyrin part in "Sinte" consists of 16th-notes without pause, it is imperative that the performers closely observe the difference between "regular" and "ghost" notes. Regular notes should be struck in the middle of the kyrin's slits and have a full, solid tone; ghost notes should be struck lightly on the outside area of the top of the drum (right stick to right side, left stick to left side) to produce a much softer, thinner sound. The rhythm's signature composite melodies will emerge only if these distinctions are made.

Example solo phrases for "Sinte" may be found in *Figure 6.10*. The example feature solo (*Figure 6.11*) emerges from the accompaniment texture with a loud,

extended roll. The solo returns to the accompaniment pattern at its conclusion, blending back in with the ensemble before giving the call to move on. Soloists may also vamp on the accompaniment rhythm at other times as a means of breaking up the solo statements.

Double stops on the side of the playing area may be broken (or "flammy"), and, unlike the ghost notes played in the same area, they should sound authoritative. If the ensemble begins to feel heavy or drag, the soloist may prod the ensemble by repeating quarter-note double stops at the desired tempo. If the soloist would like to create additional excitement, he or she may speed up the ensemble with repeated double stops. One additional sound, produced by striking the front of the drum, is notated in the solo; performers are encouraged to explore other possible sounds during their improvisations.

The ensemble should carefully prepare and rehearse the relatively complicated transition to "Dundunba." The kyrin soloist will improvise while the other two kyrin are replaced on their stands by the dundun and sangban; the soloist's kyrin must be quickly replaced by the kenkeni after cueing the solo djembe entrance in "Dundunba." The soloists should carefully pace their solos in accordance with the progress of the transition.

The example feature solo begins with measure 11. Measures S1-S75 contain the solo represented in the score by measure 13, and the example solo ends with the call played to signal the move to measure 14. The example transitional solo (*Figure 6.12*) begins with measure 19; measures T1-T25 contain the solo represented in the score by measure 21, and the example solo concludes with the first measure of "Dundunba." In the context of Ethos's performance experience, these solos are slightly longer than average; the examples are extended in order to illustrate a wide variety of possible approaches.

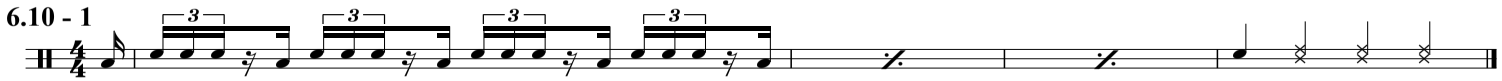
Figure 6.10:

Example Solo Phrases for "Sinte"

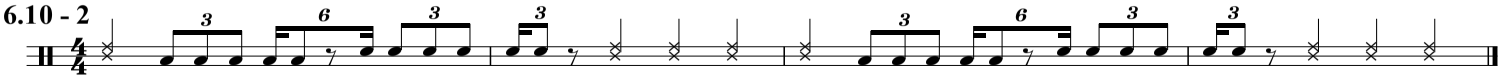
High Kyrin

(All 16th notes with slight swing feel)

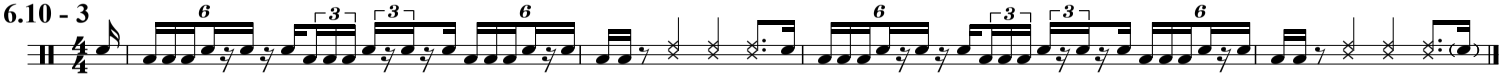
6.10 - 1



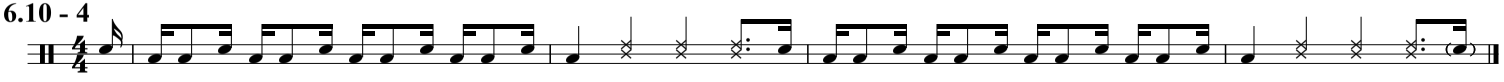
6.10 - 2



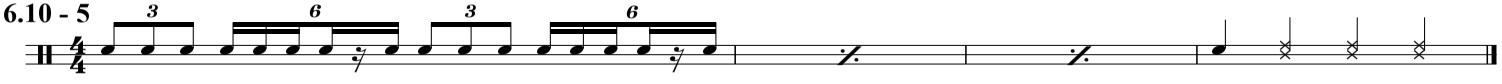
6.10 - 3



6.10 - 4



6.10 - 5



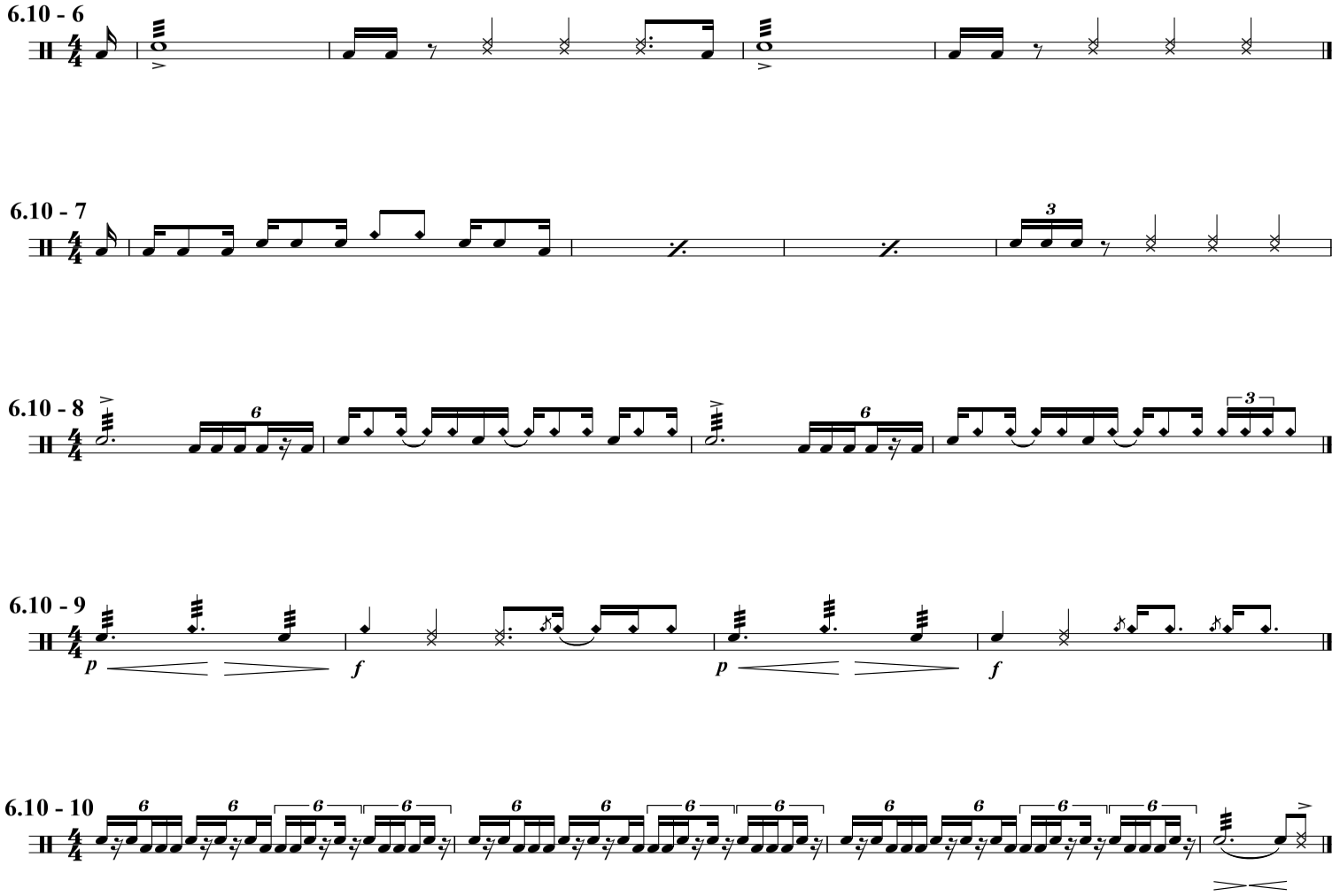

6.10 - 6
6.10 - 7
6.10 - 8
6.10 - 9
p
f
p
f
6.10 - 10

Figure 6.11:
Example Feature Solo for "Sinte"

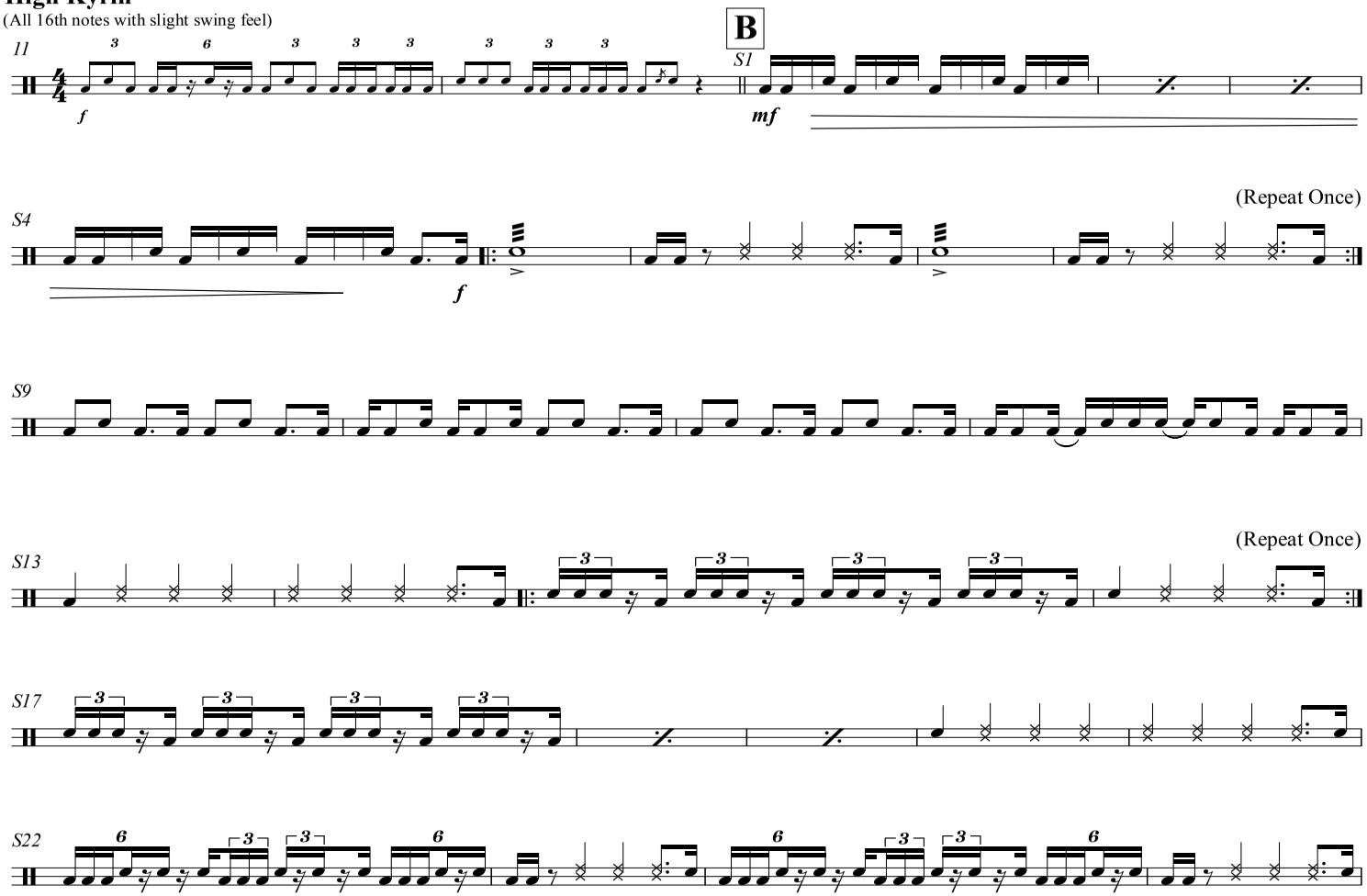
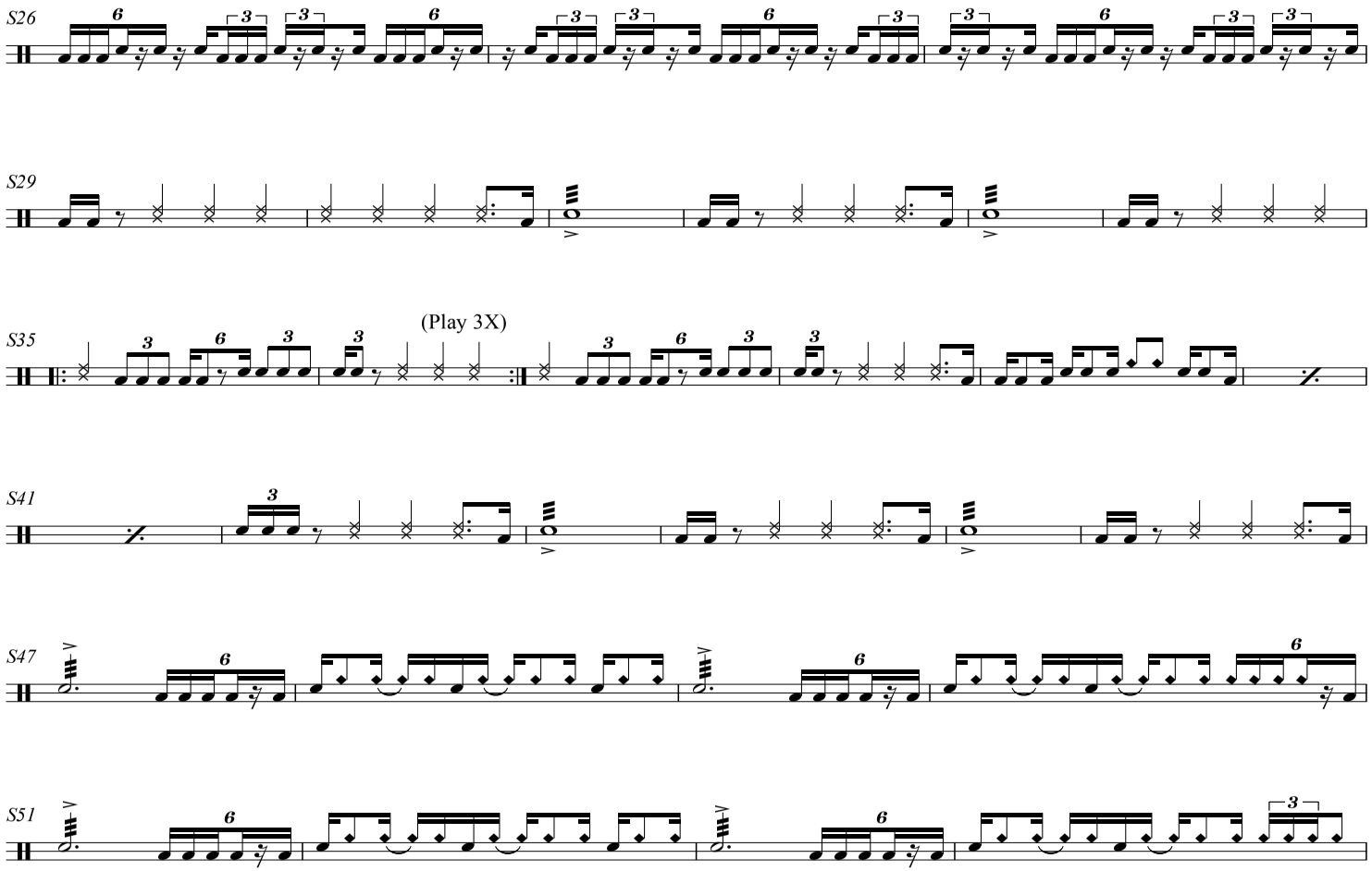


Fig. 6.11: Example Feature Solo for "Sinte" Page 2



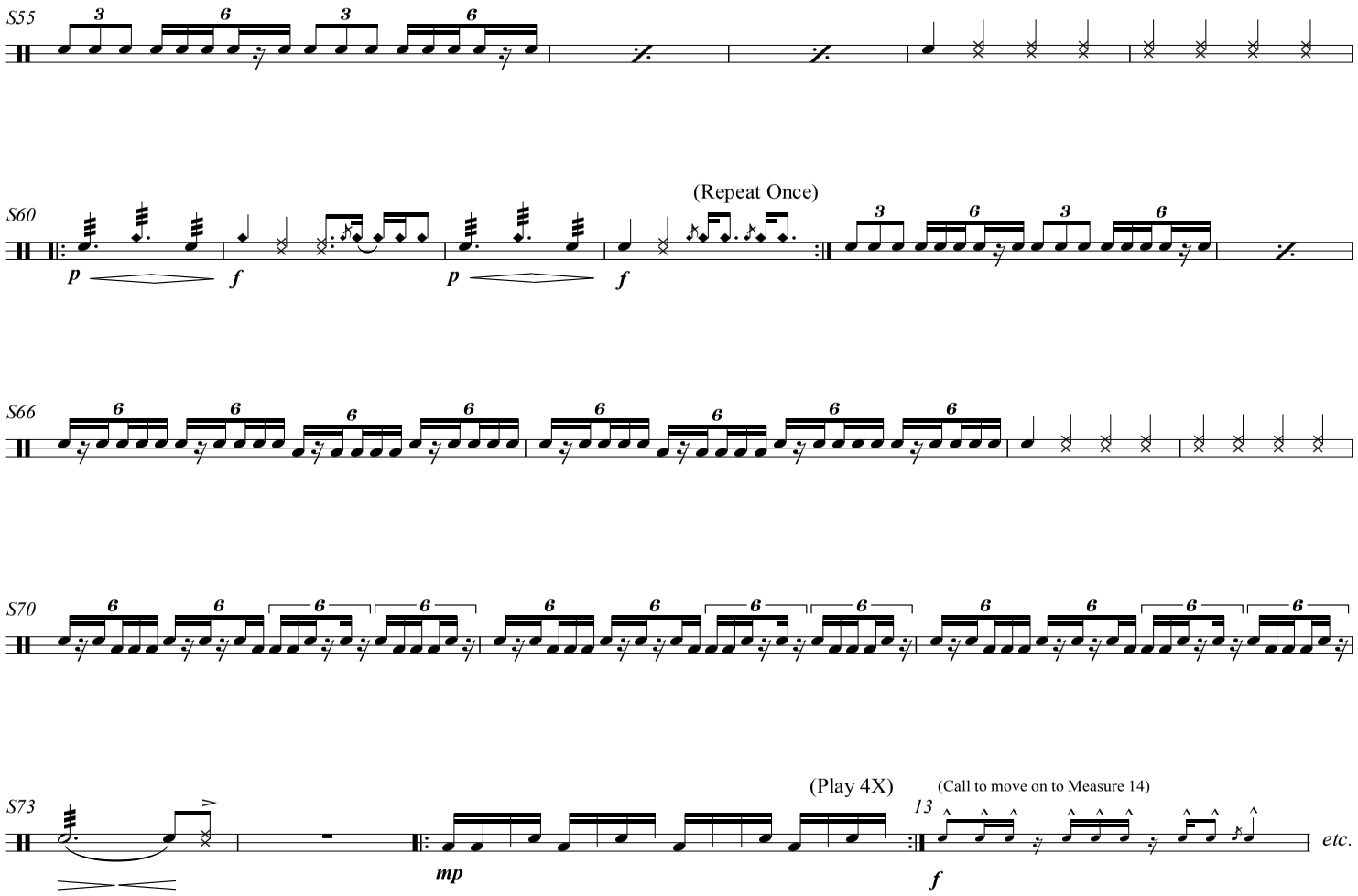
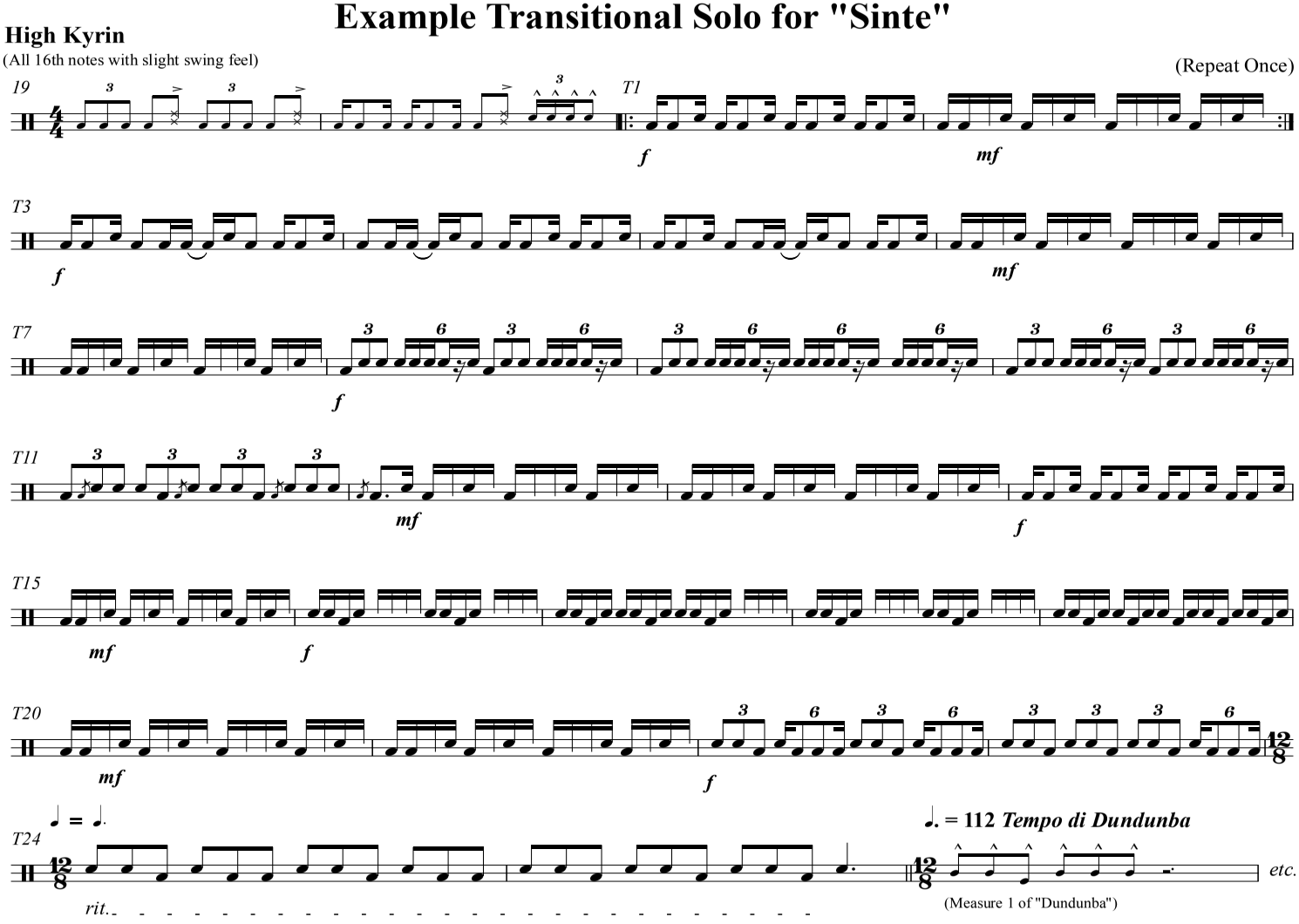

S55
S60
(Repeat Once)
S66
S70
S73
(Play 4X)
(Call to move on to Measure 14)
13
etc.

Figure 6.12:
Example Transitional Solo for "Sinte"



IV. Dundunba

Figure 6.13: Performance of "Dundunba." (Photo courtesy of John Hartzell)

Based on the dundunba family of Maninka dances, "Dundunba" involves a greater degree of parity between the soloist and the accompanying musicians than any of *Suli Ti Nani*'s other movements. The dunduns create intricate composite rhythms through which the djembe player must weave his or her improvisations, and brief ensemble passages link the djembe solos in lieu of the other movements' call-and-response sections. At one point the djembe soloist must even follow a cue from the sangban player, reflecting the sangban's central role in dundunba's traditional practice.

"Dundunba" features two of the dozens of dundunba variations: Donaba and Gbada. Donaba is a fairly recent dundunba variation, and is named for a virtuoso female dancer. During Donaba, the kenkeni maintains a steady background rhythm while the dundun and sangban create a driving composite melody. The soloist should generally follow the ebb and flow of their four-bar phrase, with relatively sparse playing in bar 4

(and occasionally in bar 2). The soloist may also regularly double the sangban's rhythm on beat two of bars 2 and/or 4. Example solo phrases for Donaba may be found in *Figure 6.14*. Gbada traditionally functions as an interlude between Dundunba variations, providing the participants with an opportunity to reorganize the area designated for dancing. For this section the soloist should cycle through a number of repeated, vamp-like phrases without pause, providing a contrast to Donaba's more nuanced interplay. Example solo phrases for Gbada may be found in *Figure 6.15*. When performing the Gbada section the ensemble should follow a visual cue from the sangban player to move to measure 19. Traditionally this cue would occur when the dance area was sufficiently cleared; for *Suli Ti Nani'*s purposes it should happen following an indication from the soloist (a visual cue or a particular repeated rhythm) that he or she is ready to move on.

Dundunba's complex rhythms exemplify the binary/tertiary juxtaposition commonly found in West African music, with often-ambiguous pulse centers that defy strict metric classification according to conventional Western criteria. The process of creating the score and solo examples for *Suli Ti Nani* of course necessitated the use of Western metric conventions which cannot accurately represent many Guinean rhythms, and the Gbada section in particular illustrates the challenge inherent in attempting to relate music in this style via Western notation.

The composite rhythm created by Gbada's sangban and dundun parts strongly implies a three-pulse metric grouping (3/4 or 3/2 meter), as do most of the phrases commonly played by the solo djembe player. However, when discussing how this should be notated, Michael Markus explained that Guinean musicians would execute these figures while internalizing four pulses (12/8 meter) against them. Overall, though,

Guinean musicians and dancers do not define, and thereby constrain, rhythms as westerners do via the construct of time signatures, and Michael Markus describes a more Guinean approach to interpreting Gbada as simultaneously focusing each ear on a different metric subdivision.

In order to help less experienced musicians reconcile the likely conflict between the ersatz meter suggested by the dundun/sangban composite rhythm and the more appropriate one reflected in the 12/8 notation, each of the example solo phrases for Gbada in *Figure 6.15* is notated in both 12/8 and 3/2 meter. These phrases also include the sangban and kenkeni drum parts, as these are the rhythms Michael Markus advises the soloist to focus on during Gbada. Although the accompaniment drums are each notated in both 12/8 and 3/2 for the examples, in practice the soloist would listen to the kenkeni for a clear 12/8 reference against the sangban's (and dundun's) implied 3/2. Understanding when the first note of the repeated djembe phrases aligns with an individual kenkeni note (this occurs on beat 3 of most of the "b" examples) will also help the soloist to relate properly to the downbeat when playing phrases that group across bar lines, such as examples *6.15 - 3a/b*, *6.15 - 6a/b*, *6.15 - 7a/b* and *6.15 - 8a/b* (pages 177-9).

The incredible rhythmic sophistication of Guinean music is especially evident in examples *6.15 – 7a/b* and *6.15 - 8a/b* (page 179). While the 3/2 versions of these rhythms are easily understood, the borderline incomprehensible 12/8 versions provide a more accurate illustration of the subdivisions observed during these rhythms by traditional dancers and musicians. Performers should note that achieving this level of interpretive accuracy is certainly not expected and that any of the rhythms in Gbada may be acceptably subdivided in three if necessary.

Due to the relative complexity of "Dundunba," the example feature solo is presented as a complete performance of the movement (*Figure 6.16*). The kenkeni, sangban, and dundun parts are also indicated, though without any of the bell patterns. During "Donaba," the inclusion of the sangban and dundun parts makes clear the connection between their composite melody and the solo djembe phrases. In an effort to visually represent Michael Markus' concept of maintaining different subdivisions in each ear during Gbada, the kenkeni part is notated above the djembe part while the sangban and dundun are below. Because the kenkeni part is so repetitive, it is depicted in the example feature solo only at its original entrance and at the introduction of each new phrase during Gbada (to illustrate both the 12/8 feel and the point of alignment between the kenkeni and djembe patterns).

The solo begins with the kyrin stating a standard dundunba call in measure 1 that will later be used by the djembe to bring in each of the dunduns. The djembe establishes the tempo and feel by playing a common dundunba accompaniment rhythm in measures 2a-2c before calling in the kenkeni in measure 3. The djembe then returns to the accompaniment pattern while the kenkeni establishes its repeated rhythm. The djembe plays a short solo phrase before calling in the sangban in measure 5, which marks the beginning of the longer Donaba phrasing. Again, the djembe moves to the background as the sangban enters, with a brief solo statement before calling in the dundun in measure 9b (as noted in the score, another repeat of measures 6-9 is optional). With the dundun's entrance, the djembe moves to a different accompaniment pattern as the basis for measures 10a-13b. This simpler pattern helps to keep the djembe in the background as the composite rhythm/melody between the sangban and dundun is introduced. Beginning

in measure 10c, the djembe emerges as a solo voice and plays increasingly elaborate 4-bar phrases until giving the cue for the "Double" section in measure 13h.

The term "double" refers to a period of dense, repeated rhythm in Guinean music that generally precedes a transition or stop. During the example "Double" section, the soloist begins with a typical repeated figure in measures 14a and 15a that is then modified in measures 14b and 15b to create greater intensity and tension. In measures 16 and 17 the entire ensemble plays a traditional dundunba transitional phrase which then leads to Gbada.

To reflect Gbada's concurrent metric possibilities, the sangban and dundun notes are grouped to reflect a 3/2 subdivision while the djembe and kenkeni notes are grouped in 12/8. The djembe soloist begins Gbada with fairly simple repeated patterns so that the new feel is solidly established. The patterns become more difficult as Gbada progresses, with the final two incorporating triplets across the normal 12/8 note groupings. The pattern played in measure 18u serves as a cue for the sangban player that the soloist is ready to move on, resulting in the sangban player's cue in measure 18x for the ensemble to advance to measure 19. Measures 20 and 21 reprise the transitional phrase that ushered in Gbada to bring the ensemble back to Donaba.

With the return of Donaba in measure 22a, the soloist's statements less strictly reflect the sangban/dundun phrasing. In measures 22c-25d, the soloist almost completely ignores the accompaniment figures, playing an extended figure that culminates in the call to return to the double. The previous double is then repeated almost exactly, with the exception of the final djembe call in measure 29. Unlike the transitional call played in measure 17, this is a call to stop (and the ensemble responds accordingly).

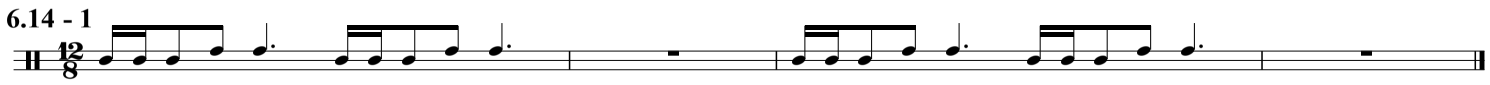
Although the transition from “Dundunba” to “Makuru” is not quite as involved as the transition into “Dundunba,” the ensemble should still carefully plan and rehearse each player’s actions. As the djembe soloist improvises, each dundun player needs to remove his or her instrument from its stand and return it to its original, vertical position in the center of the ensemble setup. The sangban and kenkeni players will then move into place next to the djembe soloist to play djembes in “Makuru.” The djembe soloist should remain alert and pace the solo in accordance with the progress of the transition.

The example transitional solo (*Figure 6.17*) begins with measure 28; measures T1-T28 contain the solo represented in the score by measure 30, and the example solo concludes with the first measure of “Makuru.” In the context of Ethos’s performance experience, the example feature and transition solos are of average length, though the second Donaba solo is perhaps a bit brief. Longer feature solos could certainly be performed if the performer is inspired to do so.

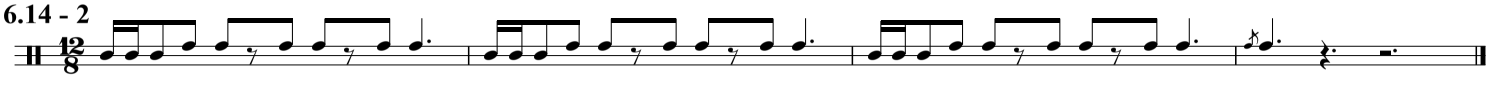
Figure 6.14:
Example Solo Phrases for "Dundunba" (Donaba)

High Djembe

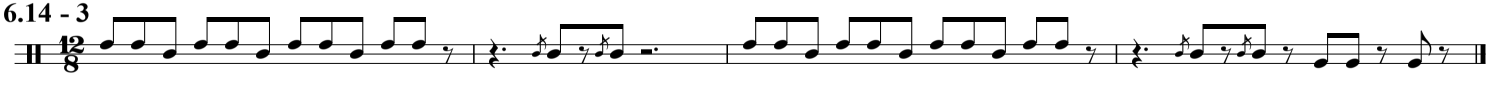
6.14 - 1



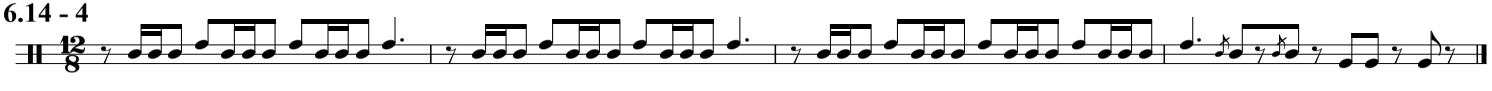
6.14 - 2



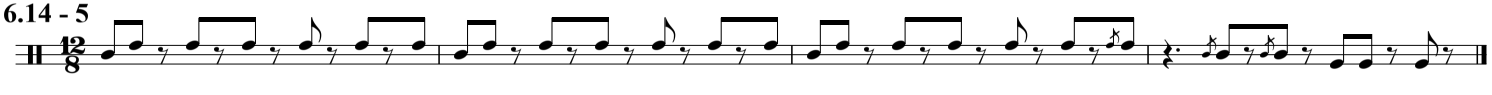
6.14 - 3



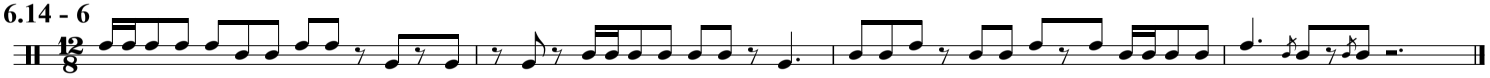
6.14 - 4



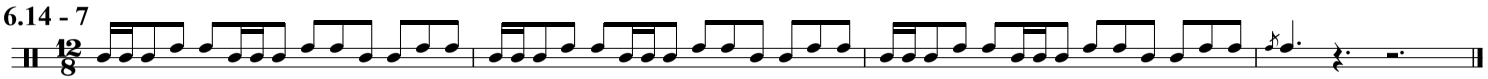
6.14 - 5



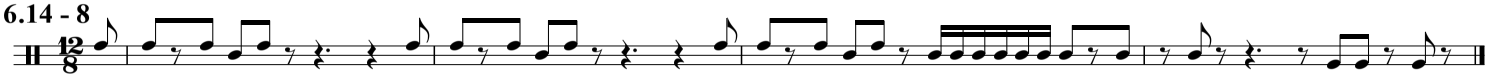
6.14 - 6



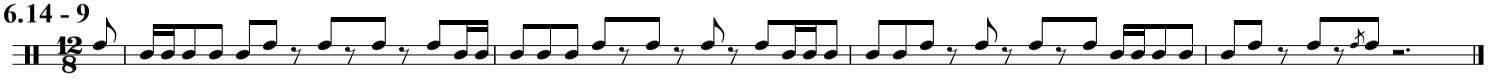
6.14 - 7



6.14 - 8



6.14 - 9



6.14 - 10

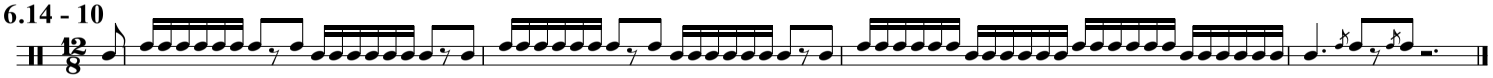
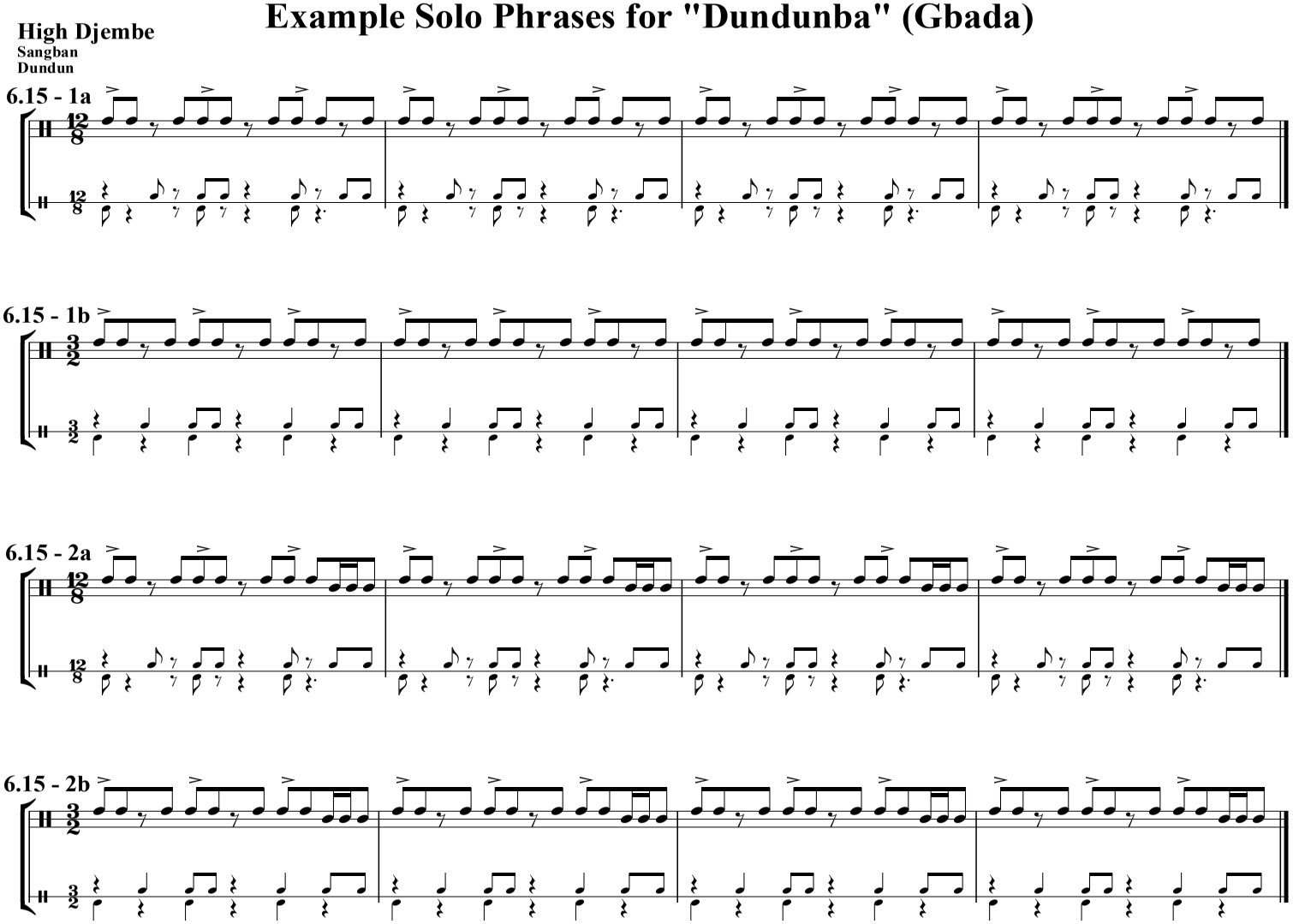
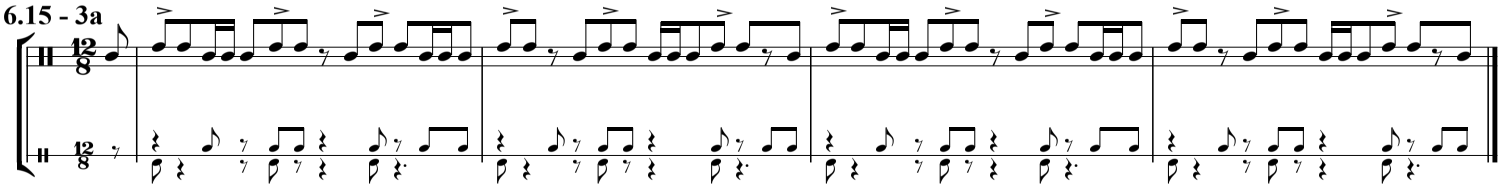


Figure 6.15:

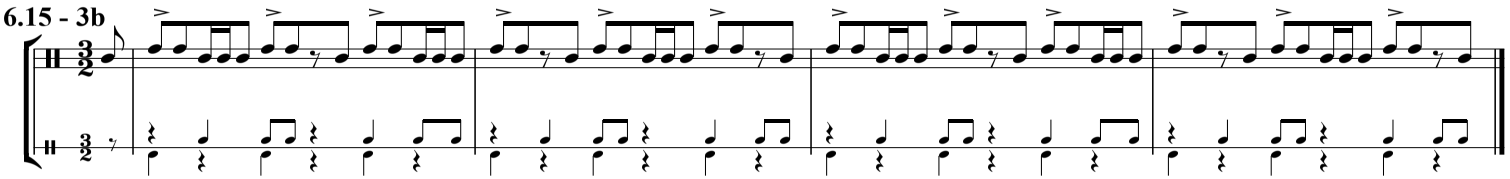
Example Solo Phrases for "Dundunba" (Gbada)



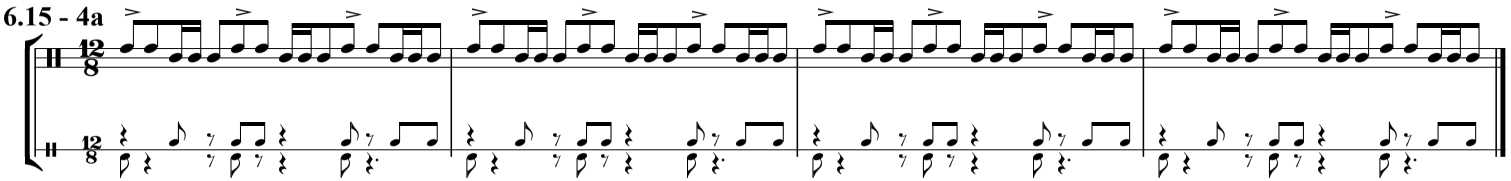
6.15 - 3a



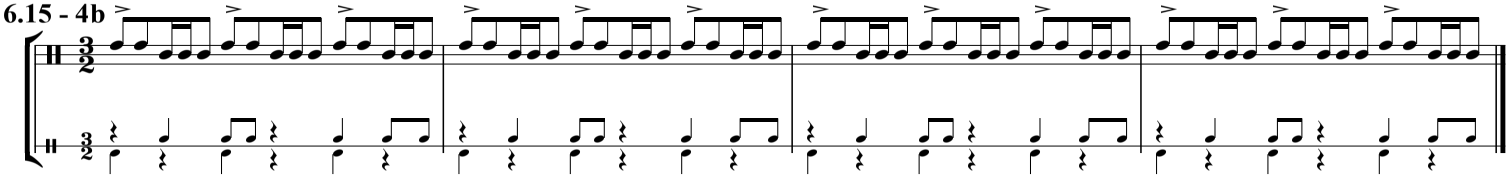
6.15 - 3b



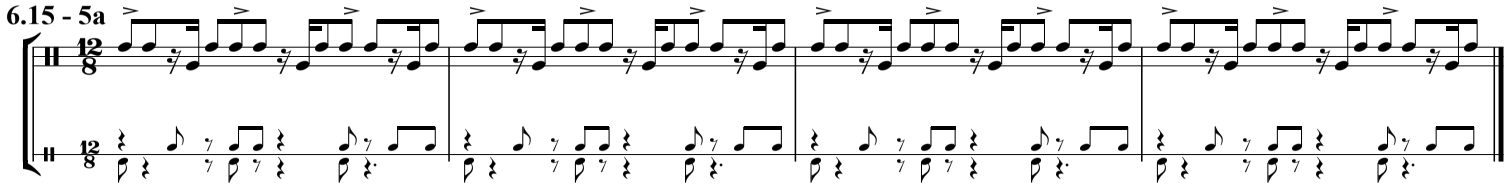
6.15 - 4a



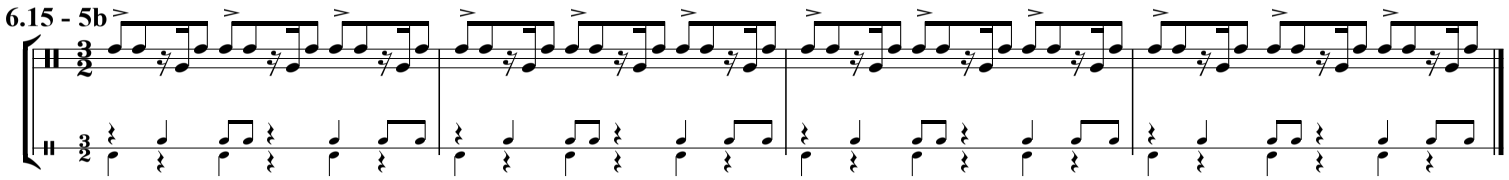
6.15 - 4b



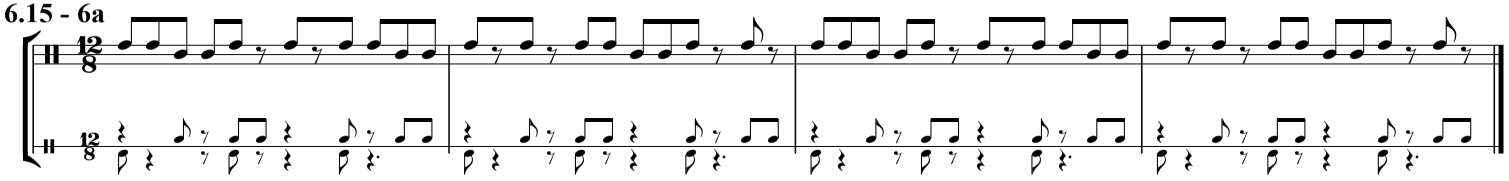
6.15 - 5a



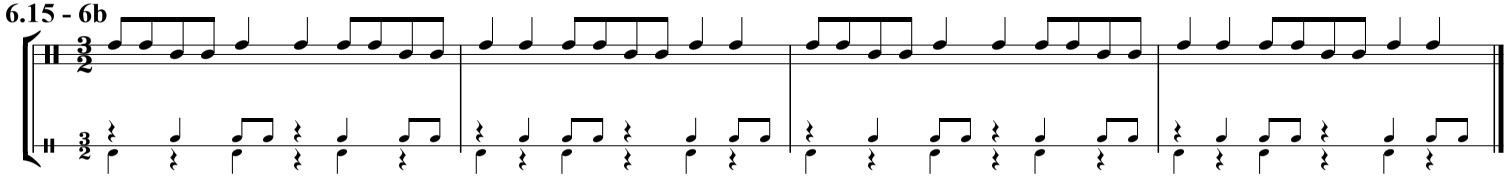
6.15 - 5b



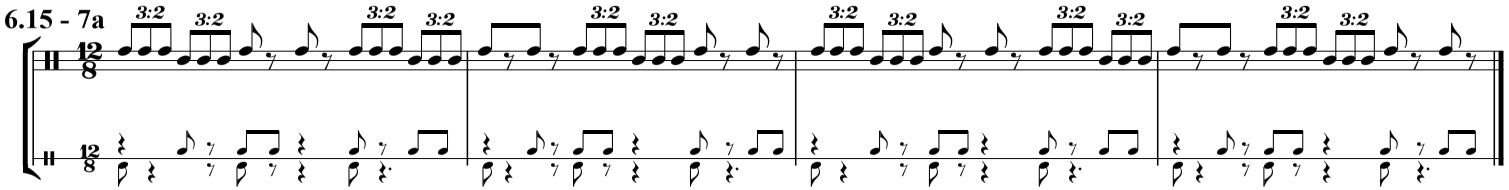
6.15 - 6a



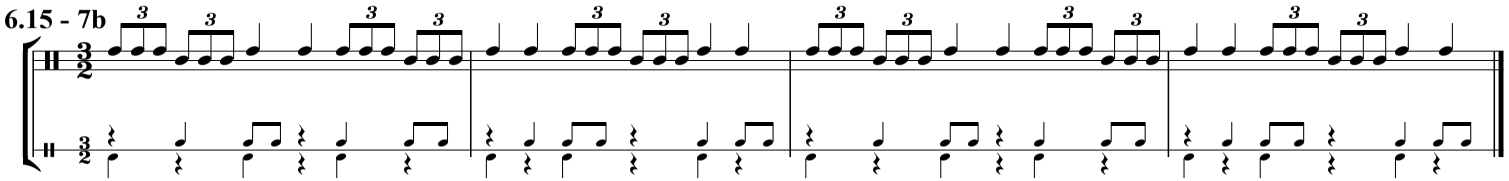
6.15 - 6b



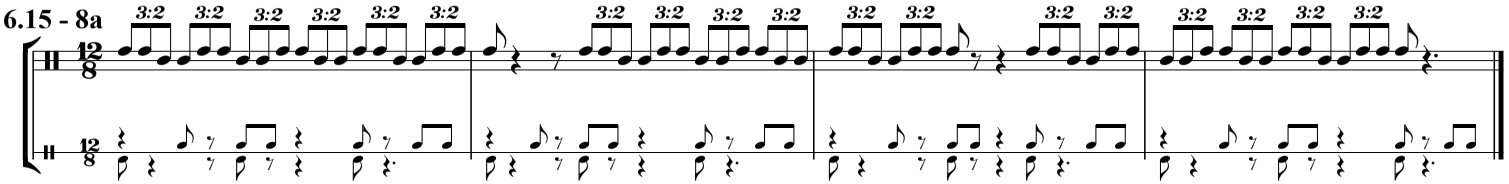
6.15 - 7a



6.15 - 7b



6.15 - 8a



6.15 - 8b

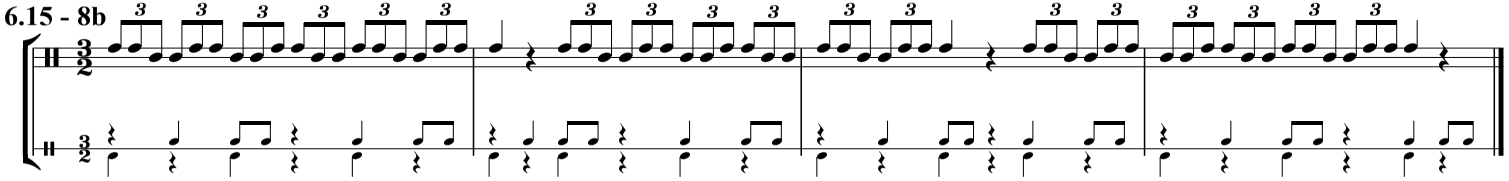
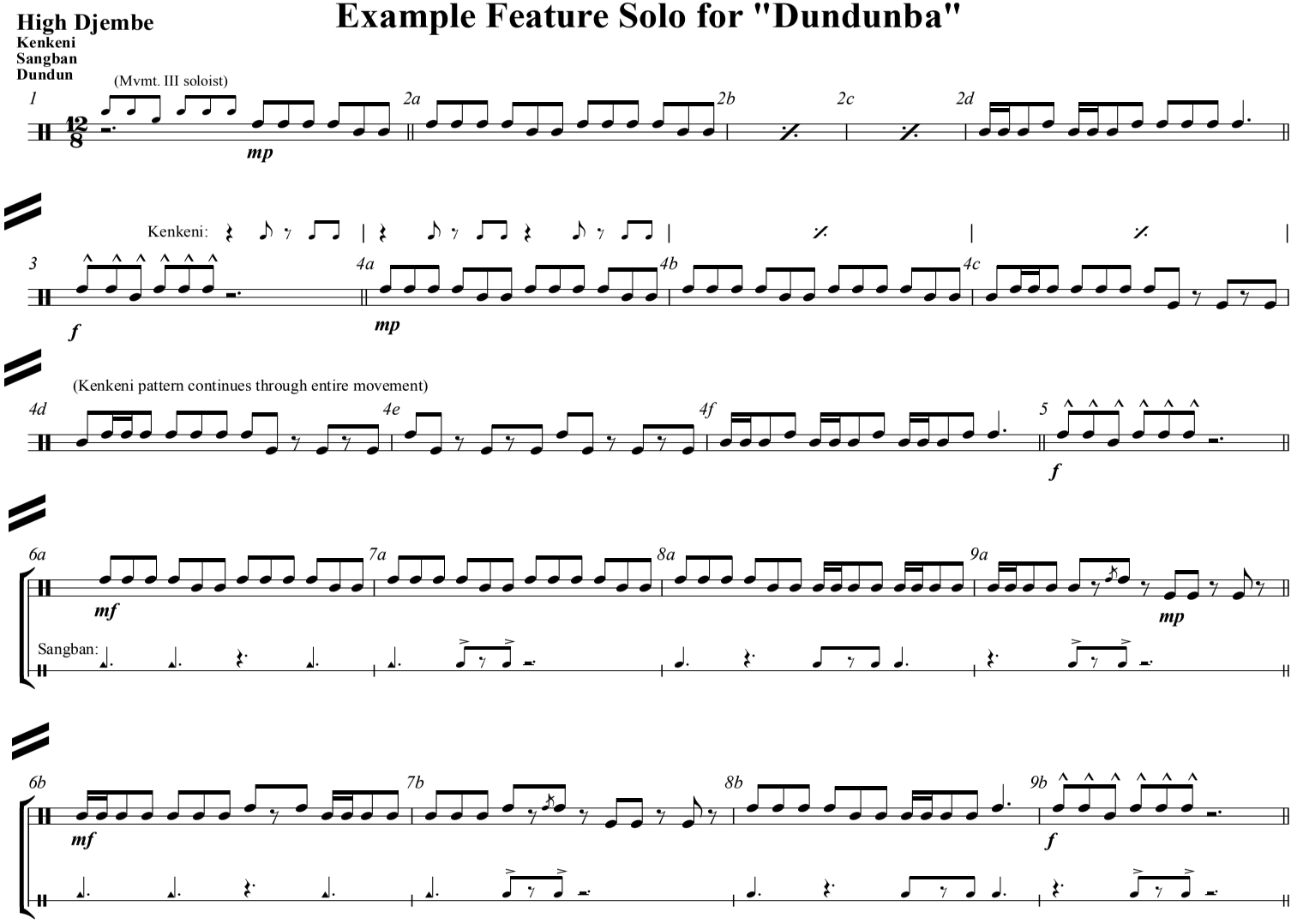
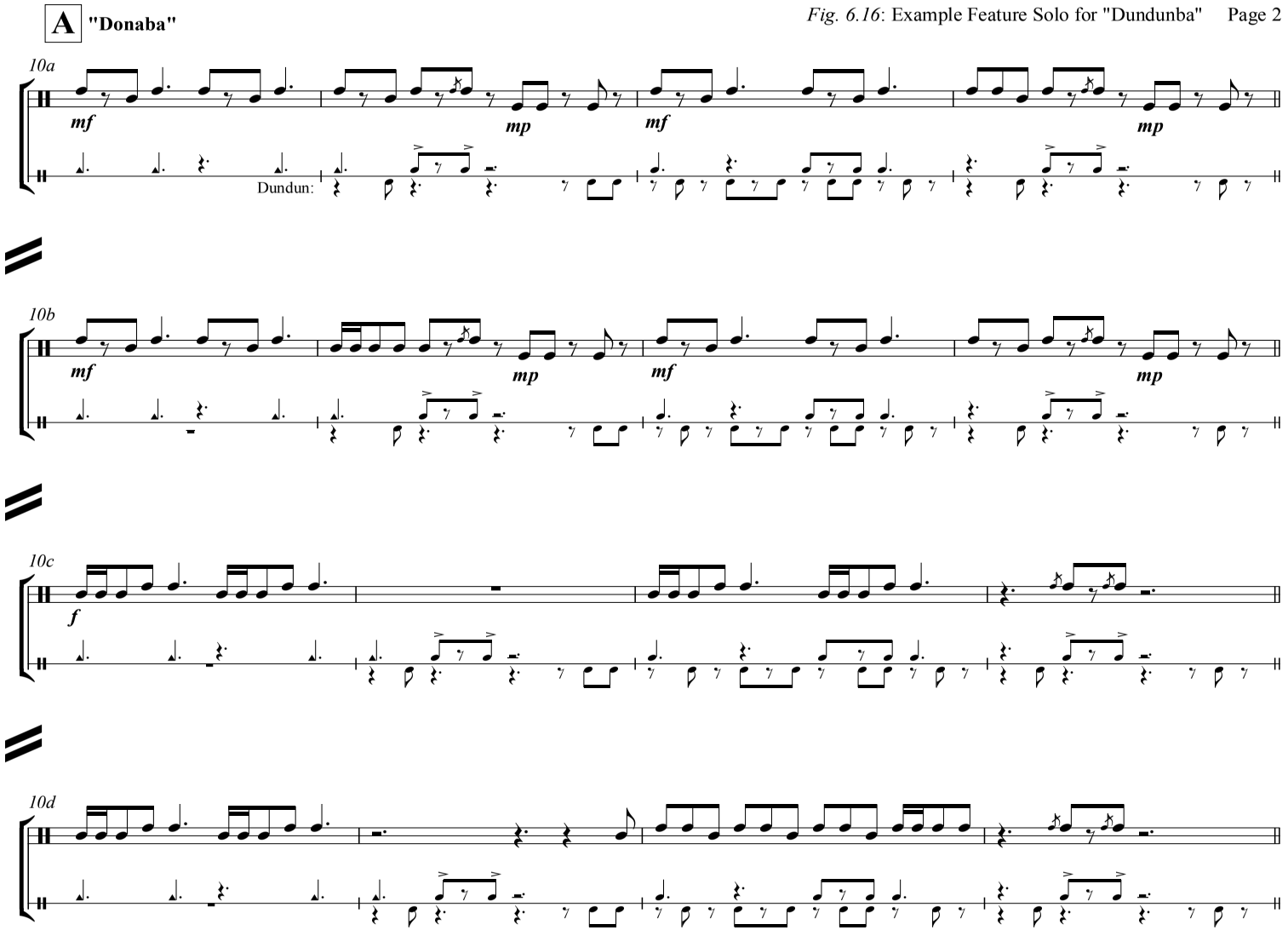
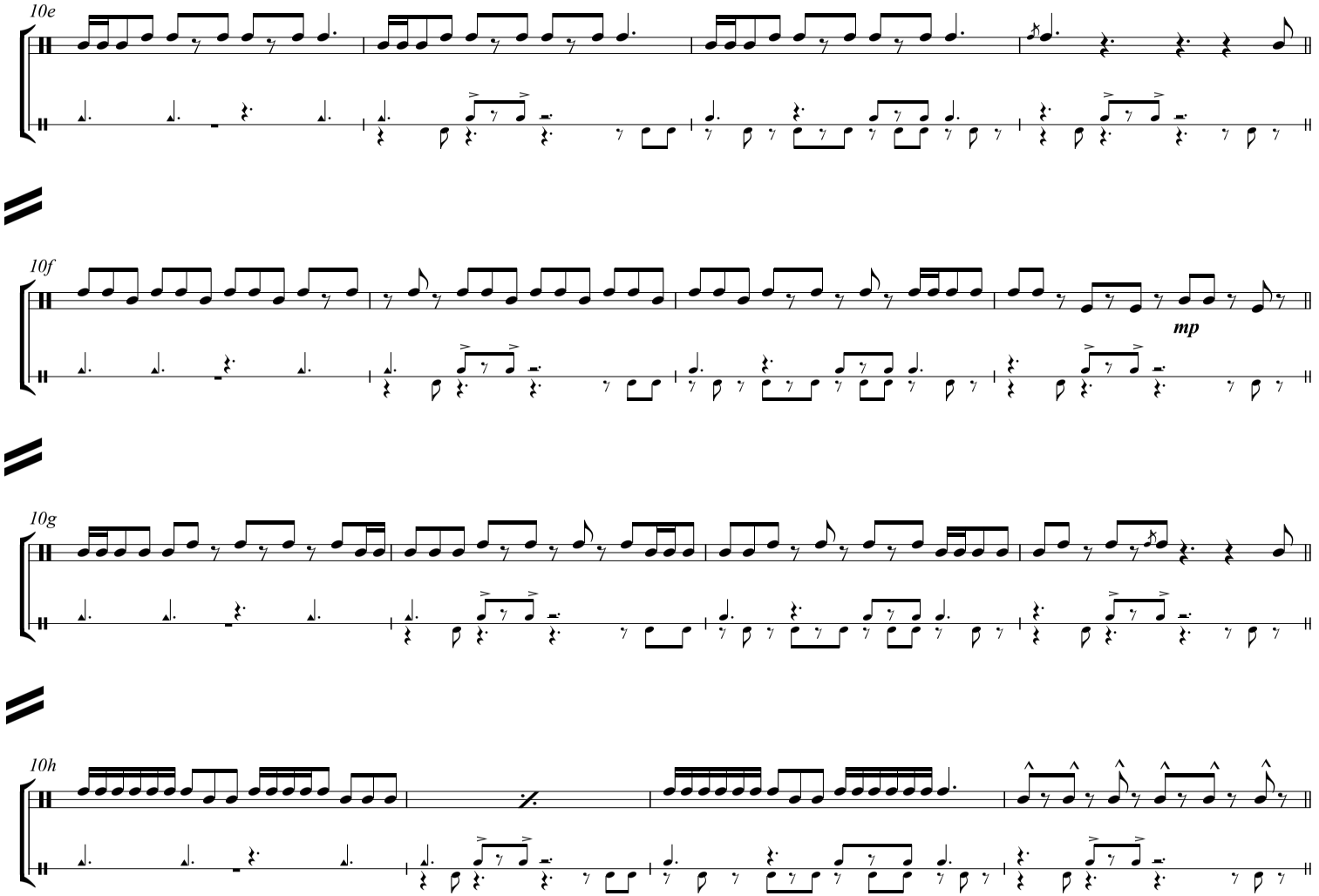
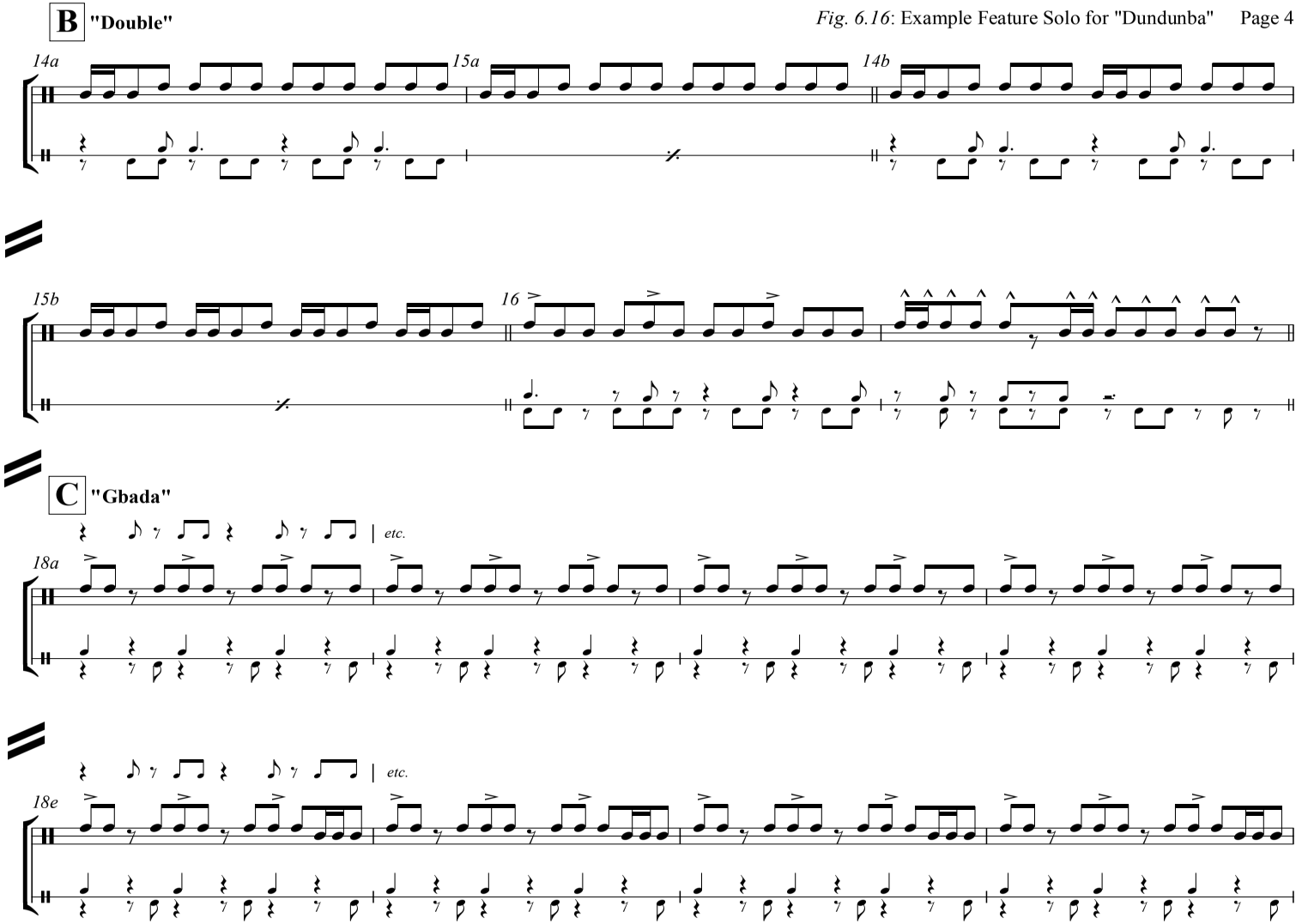


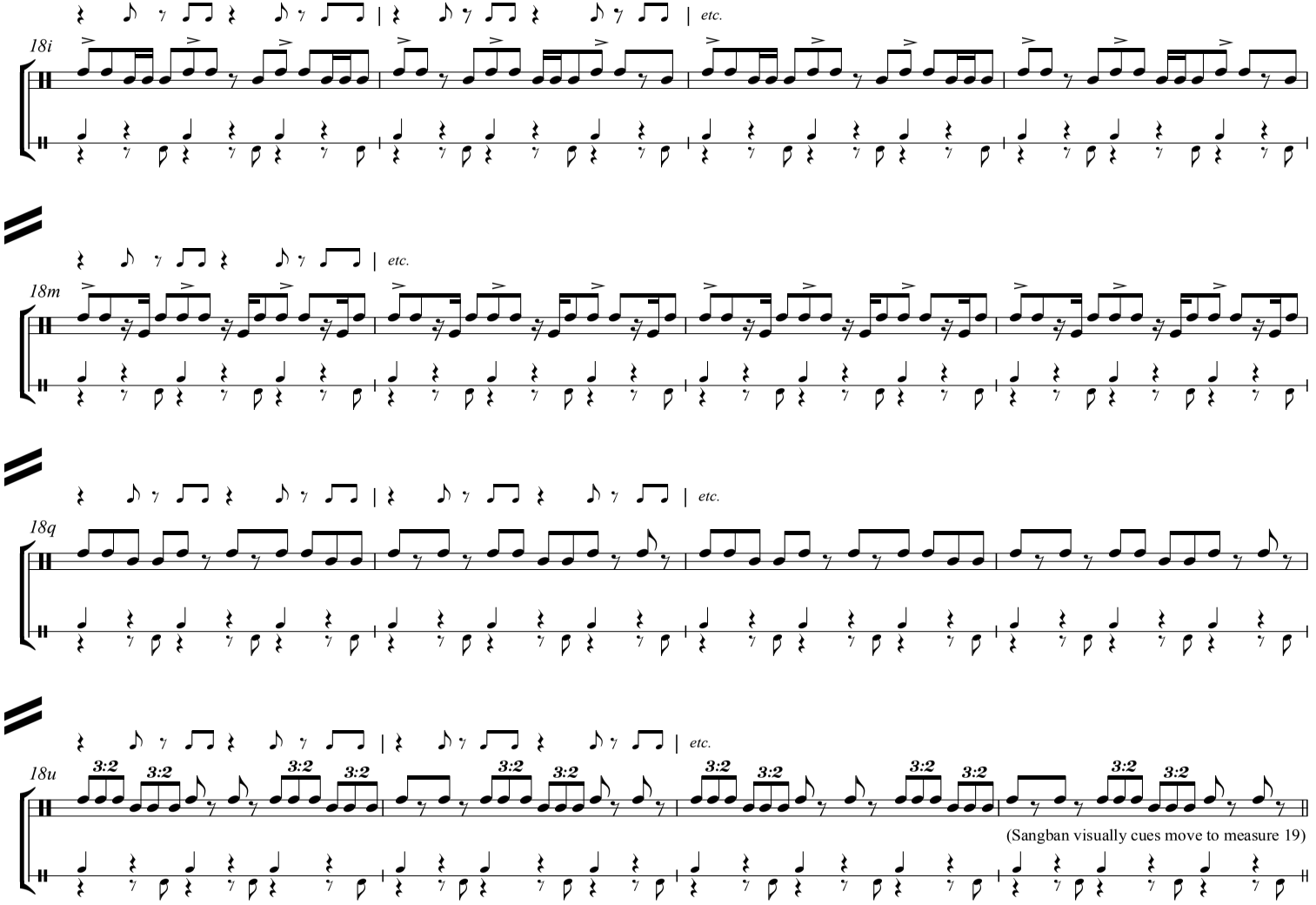
Figure 6.16:
Example Feature Solo for "Dundunba"

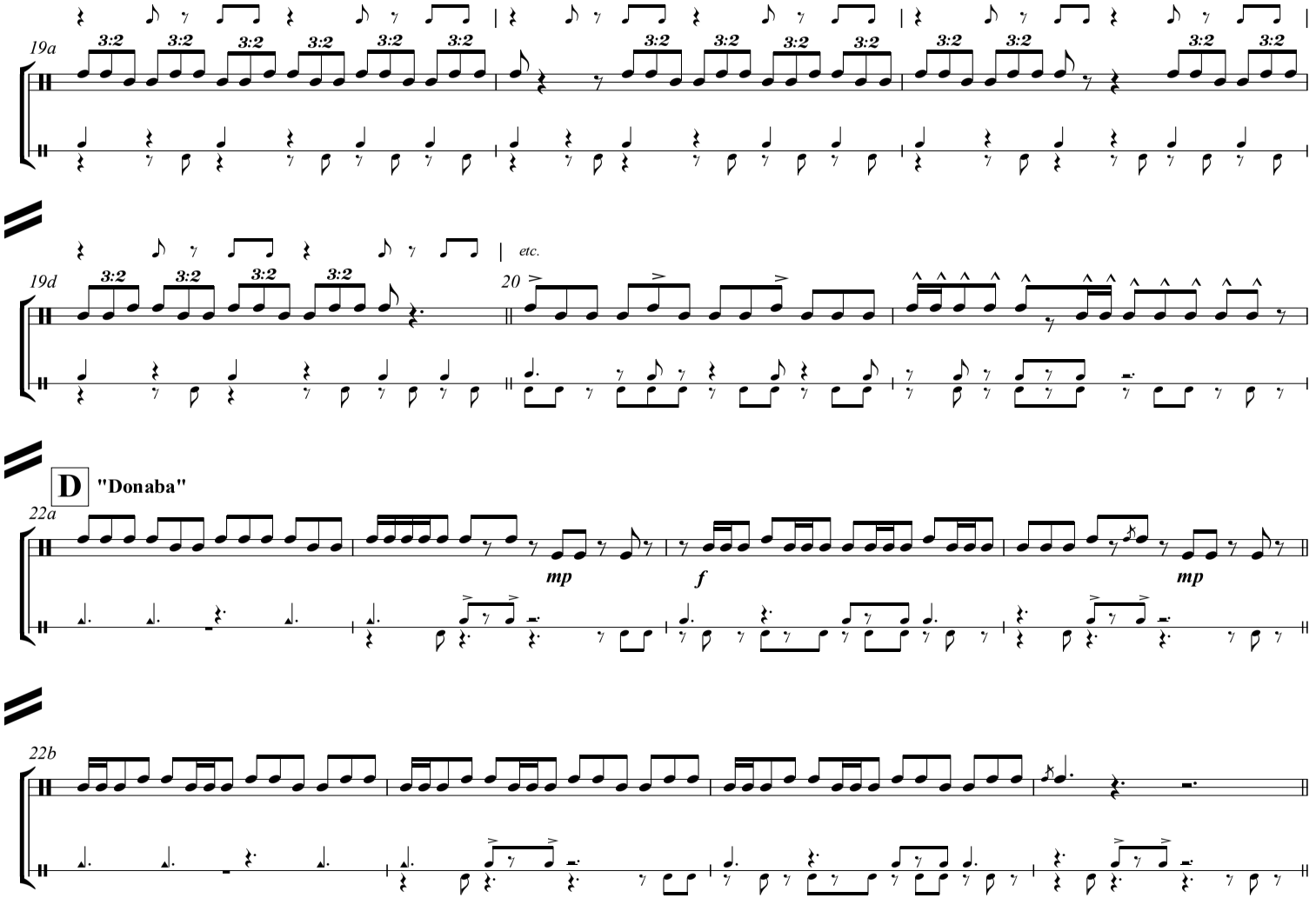



A
"Donaba"
10a
mf
mp
mf
mp
Dundun:
10b
mf
mp
mf
mp
10c
f
10d


10e
10f
mp
10g
10h


B "Double"
14a
15a
14b
15b
16
C "Gbada"
etc.
18a
etc.
18e


18i
etc.
18m
etc.
18q
etc.
18u
etc.
3:2
(Sangban visually cues move to measure 19)


19a
3:2
19d
etc.
20
D
"Donaba"
22a
mp
f
mp
22b

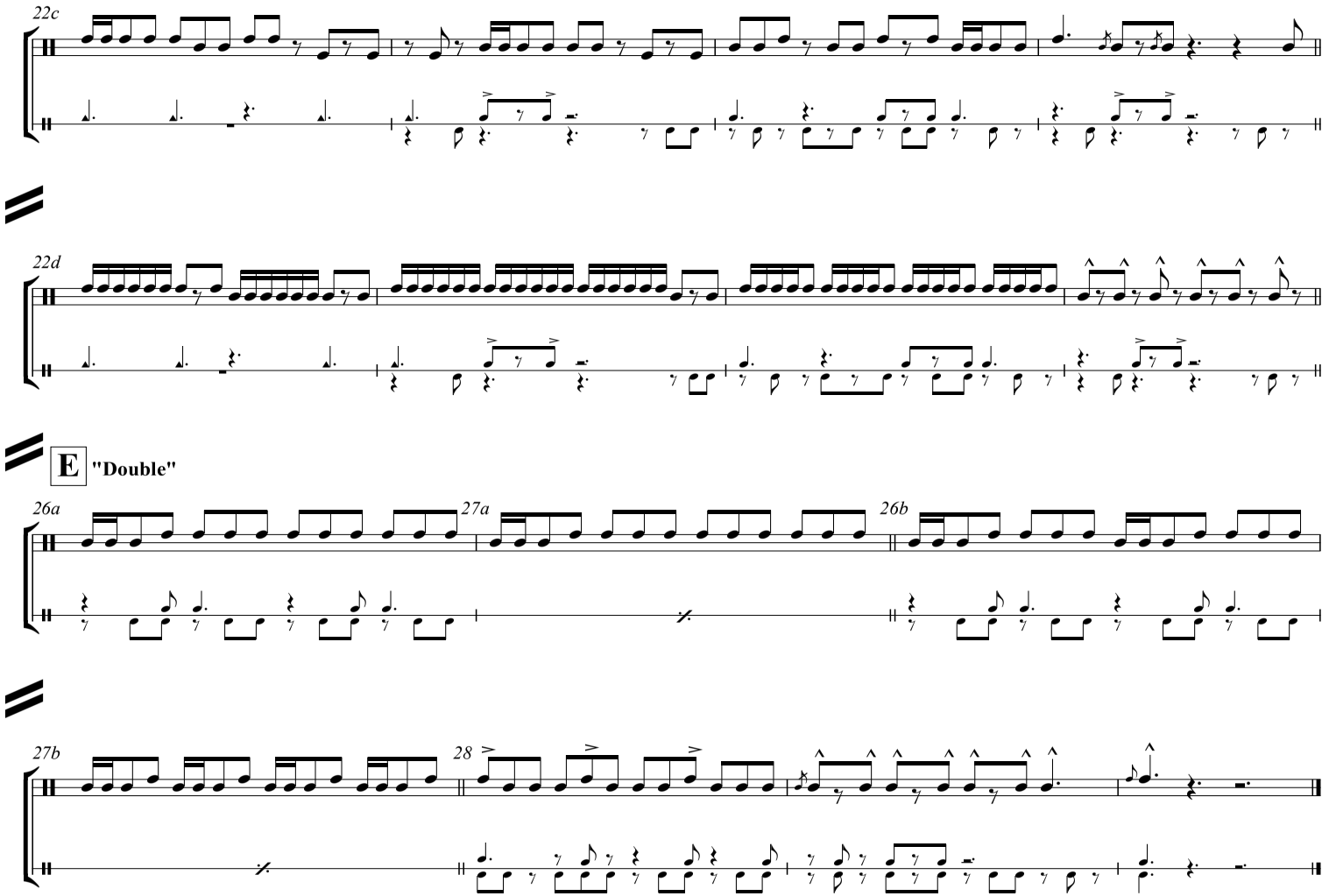
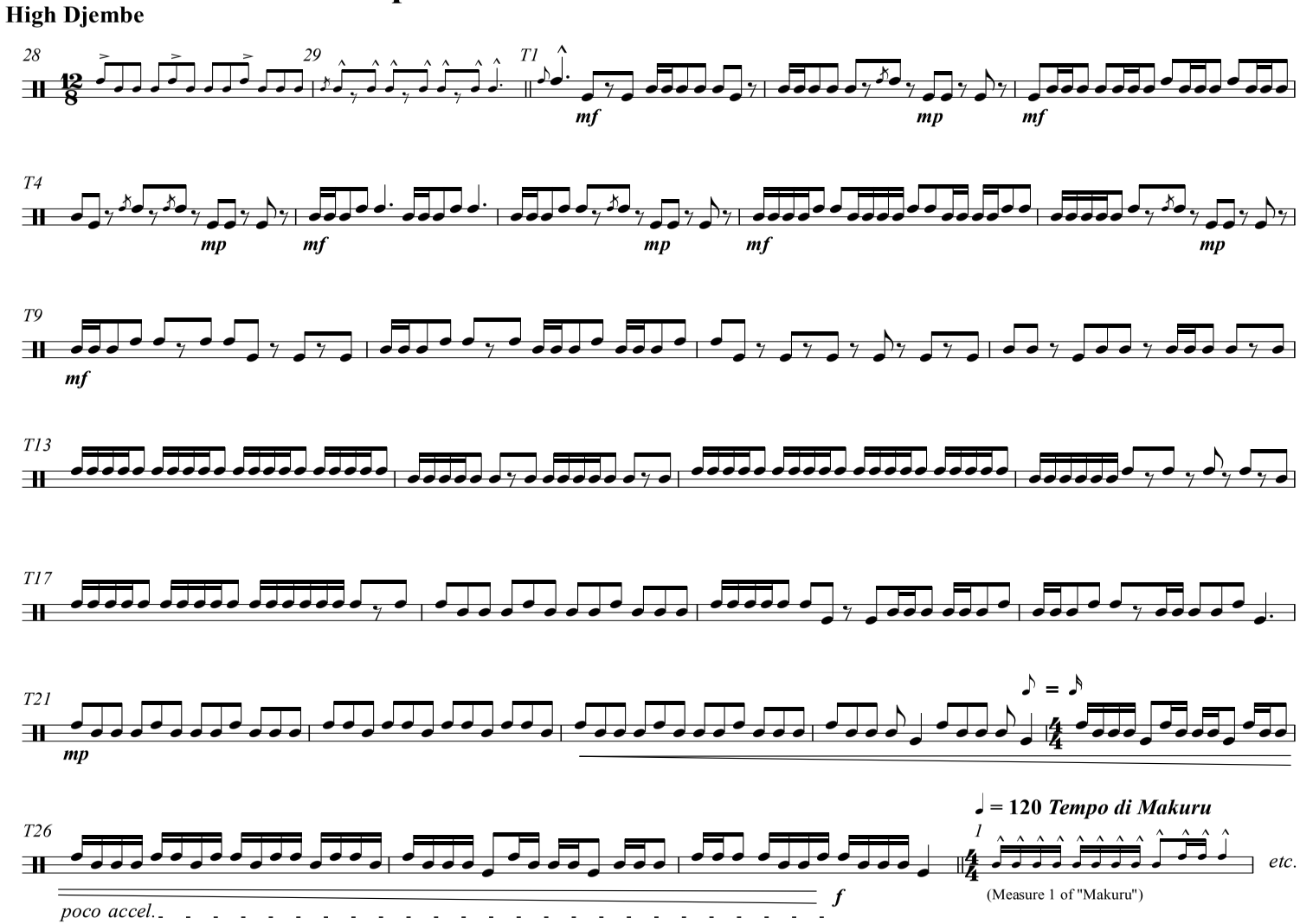

22c
22d
E
"Double"
26a
27a
26b
27b
28

Figure 6.17:
Example Transitional Solo for "Dundunba"



V. Makuru

Figure 6.18: Performance of "Makuru." (Photo courtesy of John Hartzell)

The Makuru rhythm originated in Sierra Leone, where its component parts are played on box drums called *sikos*. *Suli Ti Nani'*s "Makuru" movement features a well-known adaptation of Makuru for Guinean instruments that is often performed for social dances between young men and women. The calls and unison sections, like those in "Sorsornet" and "Sinte," were composed by Michael Markus and are unique to the composition. "Makuru" requires three ensemble members to play djembes, and performers not familiar with the instrument may need to dedicate considerable time to developing the technique needed to clearly produce the drum's bass, tone, and slap sounds.

Because "Makuru" contains more feature solos than the other movements, the improvisations may be relatively shorter (though this is not required). During each solo the accompaniment musicians must take great care to remain softer than the soloist

without sacrificing any of the music's intensity. Ideally, each solo will have a unique character, though soloists are welcome to quote each other or develop ideas established in other solos. Performers should note that the calls which end the solos are fairly common rhythms; therefore, these or similar rhythms should generally be avoided during the solos in order to prevent confusion. Example djembe solo phrases for "Makuru" may be found in *Figure 6.19*, and example dundun solo phrases may be found in *Figure 6.20*.

The example djembe solo (*Figure 6.21*) is written for the medium djembe player, though it could be played by any of the djembes (with one caveat noted later). It begins with a simple rhythm stated exclusively with slap sounds that will easily project through the ensemble, and then progresses to more syncopated figures that continue to use slap sounds extensively. The rhythm in measure S28 is almost identical to the call which ends the high djembe's solo; it would be acceptable to use this rhythm at any time in the low or medium djembe solos, but unwise to do so at all in the high djembe solo unless modified (by articulating beat 3 to match measure 20 in the score) and used as the ending for the solo. The sparse rhythms in measures S29-S36 provide a contrast between the earlier syncopation and the very active statements in S37-S43. The spaces left in measures S45-S46 allow the call ending the solo to be clearly recognized by the ensemble.

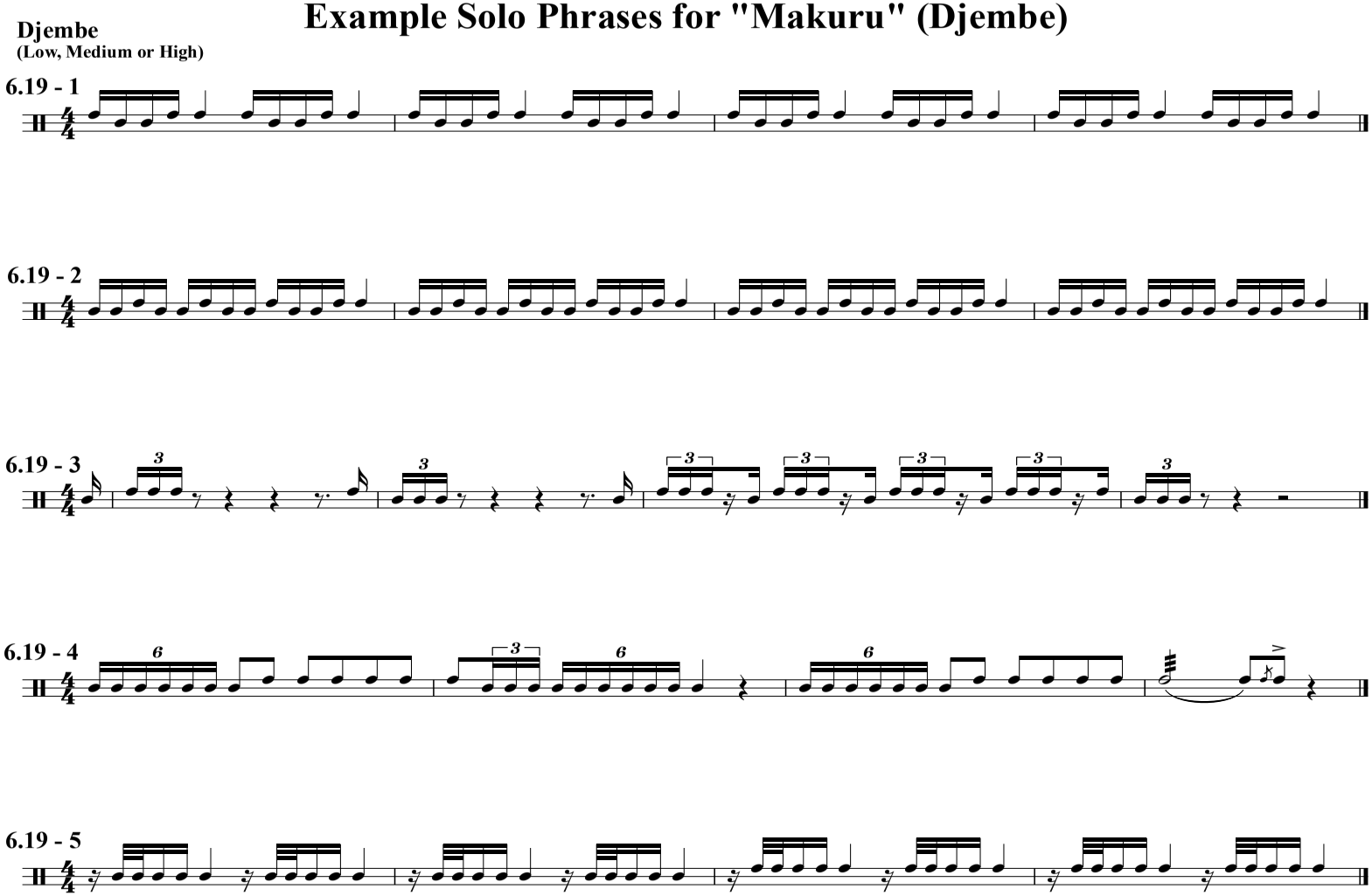
The example dundun solo (*Figure 6.22*) begins with a double-stop figure adapted from the rhythm which opens the example djembe solo. The dundun player then quickly establishes his or her own personality with embellishments to the figure in measures S2, S4, and S5. The opening rhythm and the extended roll introduced in measures S6 and S8 serve as recurring motifs throughout the solo. As in "Sorosornet," the dundun player

should execute the solo phrases with clear articulation and full tone, as the accompanying djembe texture may easily cloud the sound of the dunduns. This is especially important at the end of the example solo, where the 32nd-note figures in measure S35-S40 and the unaccented notes in measures S42-S45 could easily be lost among the accompaniment rhythms. (Playing the 32nd-notes with alternating strokes rather than double strokes may help to resolve any projection issues.) The almost constant 16th-notes in measures S42-S45 are broken with an abbreviated version of the opening motif in measure S46, and this definitive phrase ending also clearly sets up the call to end the solo in the following measure.

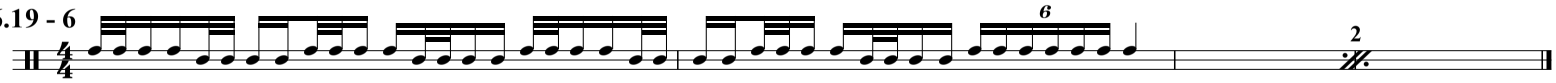
The example djembe solo begins with measure 8. Measures S1-S46 contain the solo represented in the score by measure 10, and the example solo ends with the call played to signal the move to measure 11. The example dundun solo begins with measure 27; measures S1-S46 contain the solo represented in the score by measure 29, and the example solo ends with the call played to signal the move to measure 30. In the context of Ethos's performance experience, these solos are slightly longer than average; the examples are extended in order to illustrate a wide variety of possible approaches.

Figure 6.19:

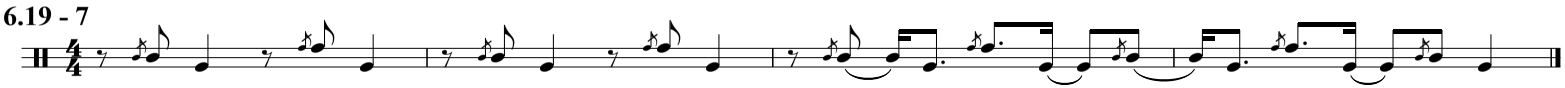
Example Solo Phrases for "Makuru" (Djembe)



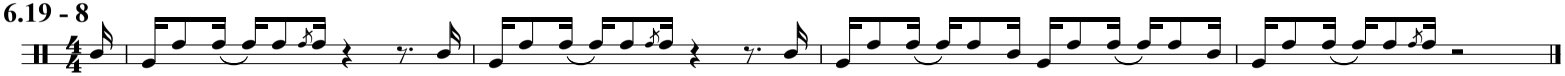
6.19 - 6



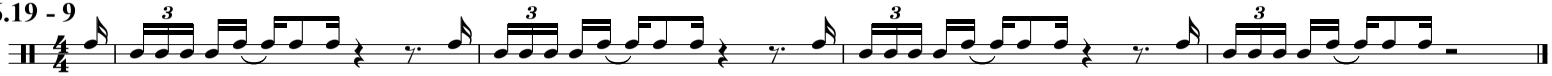
6.19 - 7



6.19 - 8



6.19 - 9



6.19 - 10

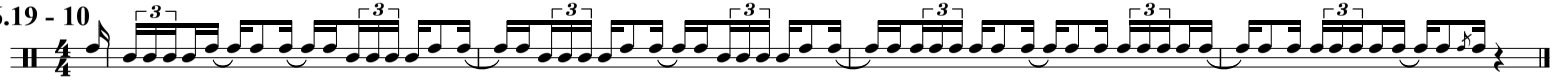
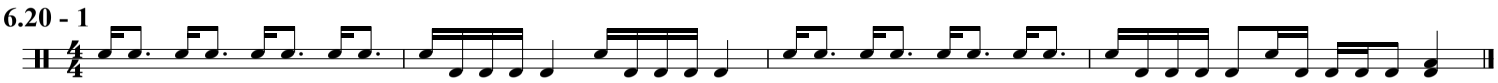


Figure 6.20:

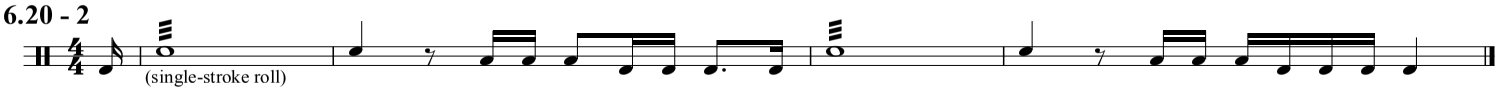
Example Solo Phrases for "Makuru" (Dunduns)

Dunduns

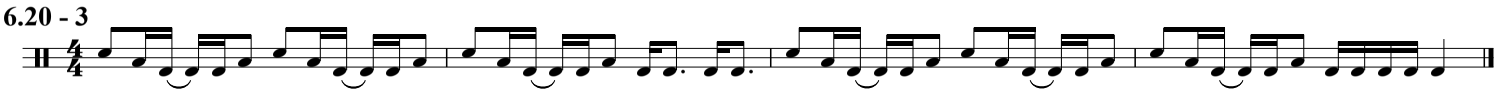
6.20 - 1



6.20 - 2



6.20 - 3



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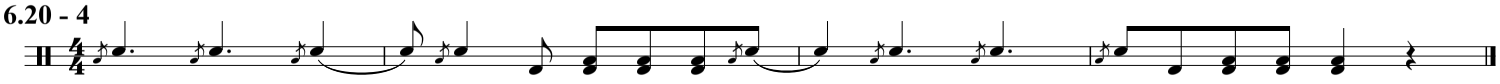

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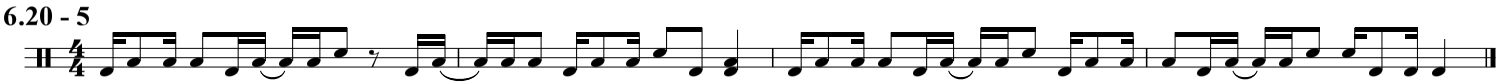
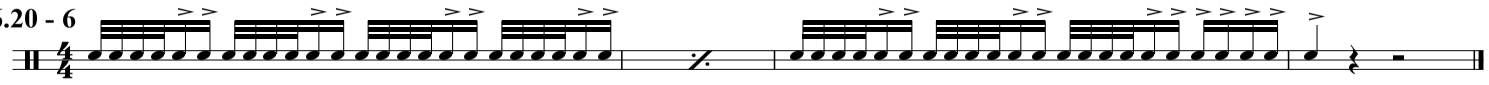
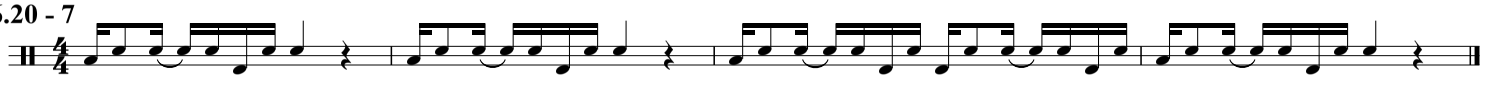


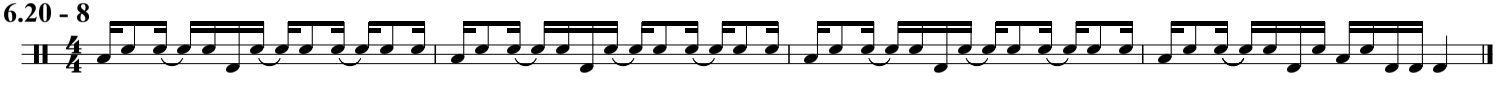
6.20 - 6



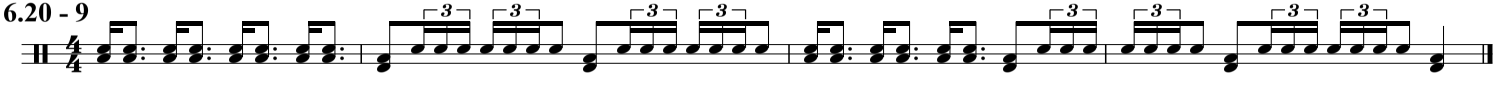
6.20 - 7



6.20 - 8



6.20 - 9



6.20 - 10

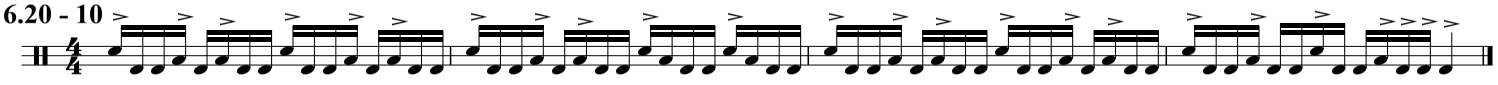
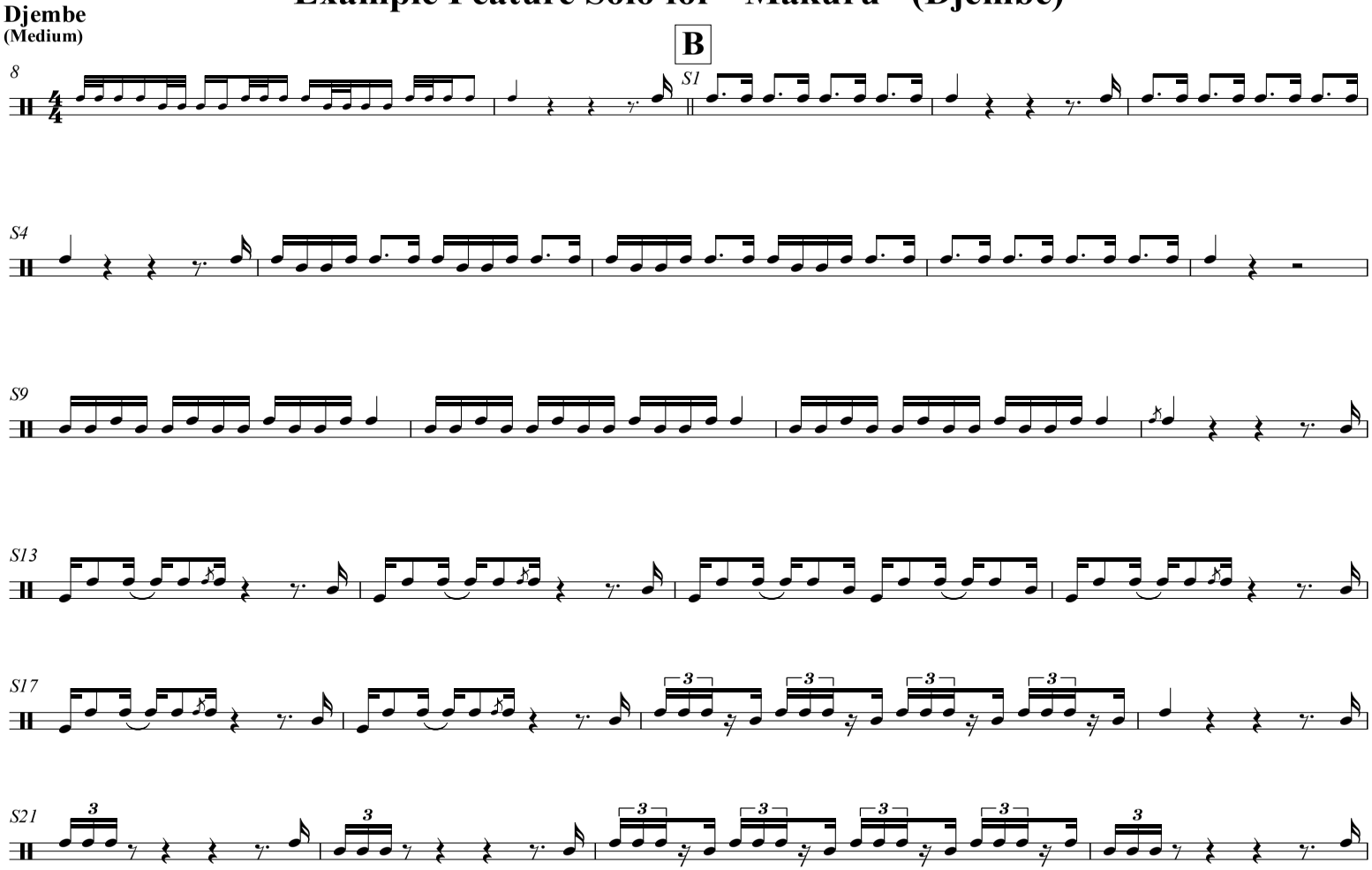


Figure 6.21:

Example Feature Solo for "Makuru" (Djembe)



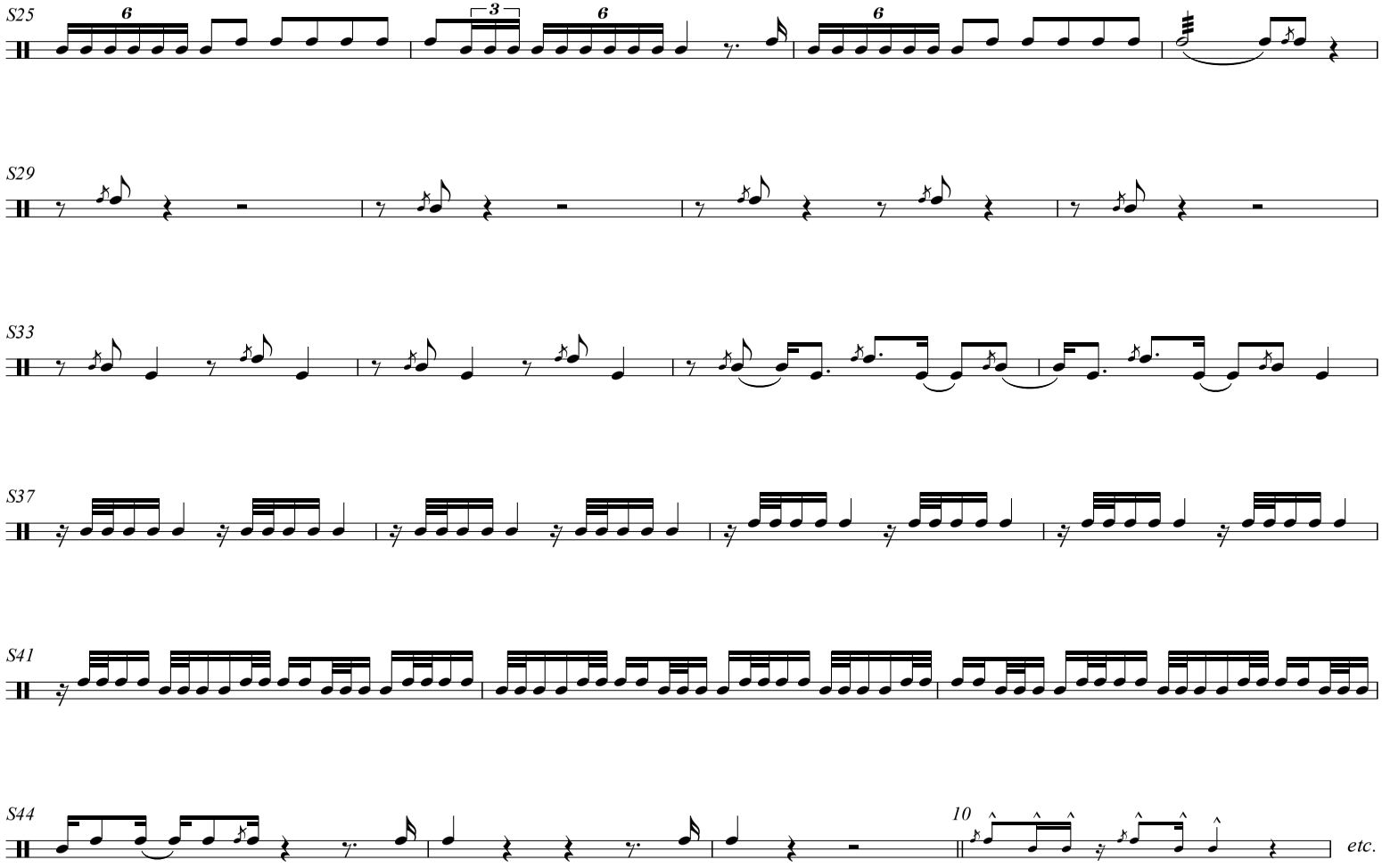
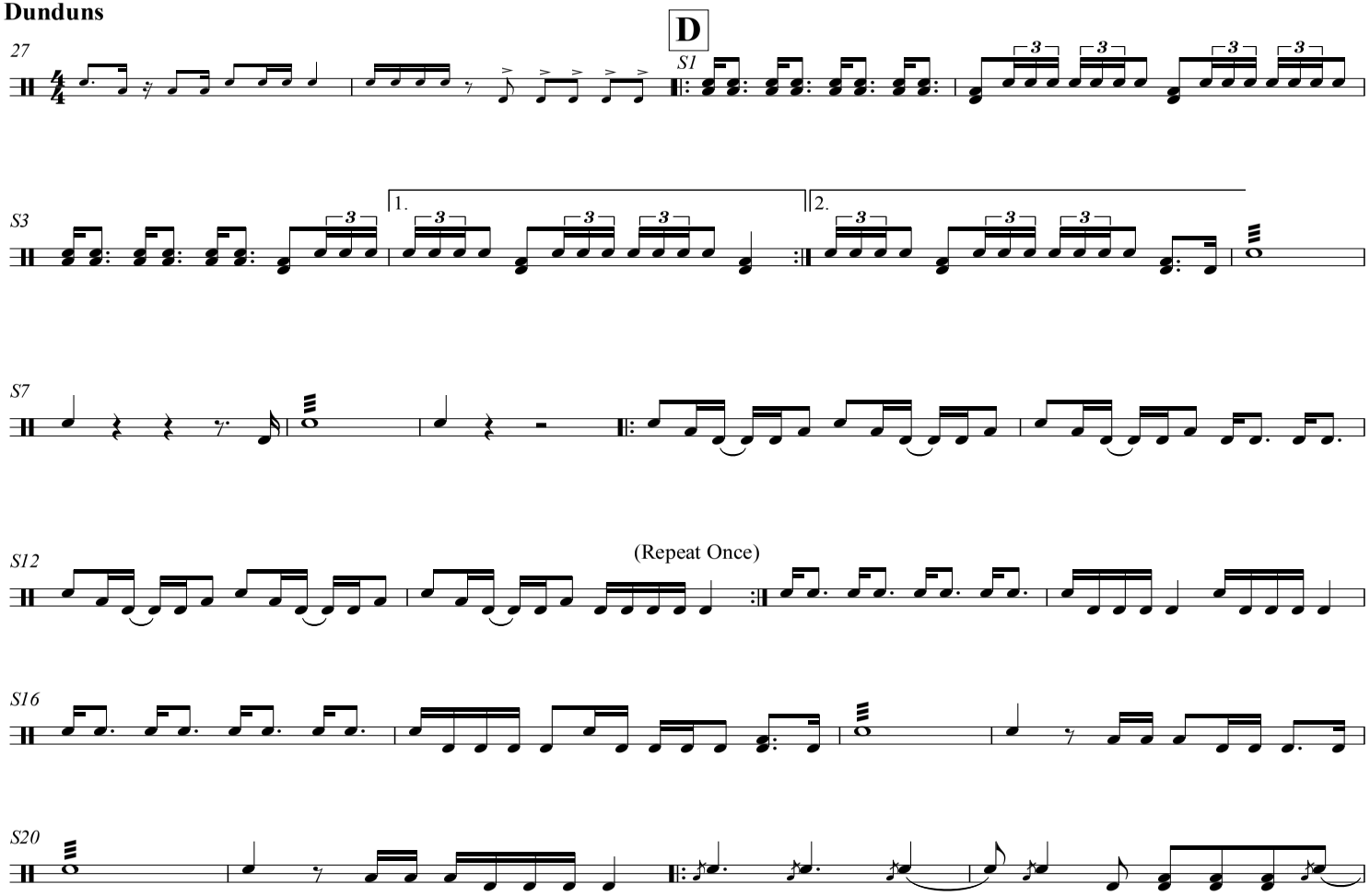
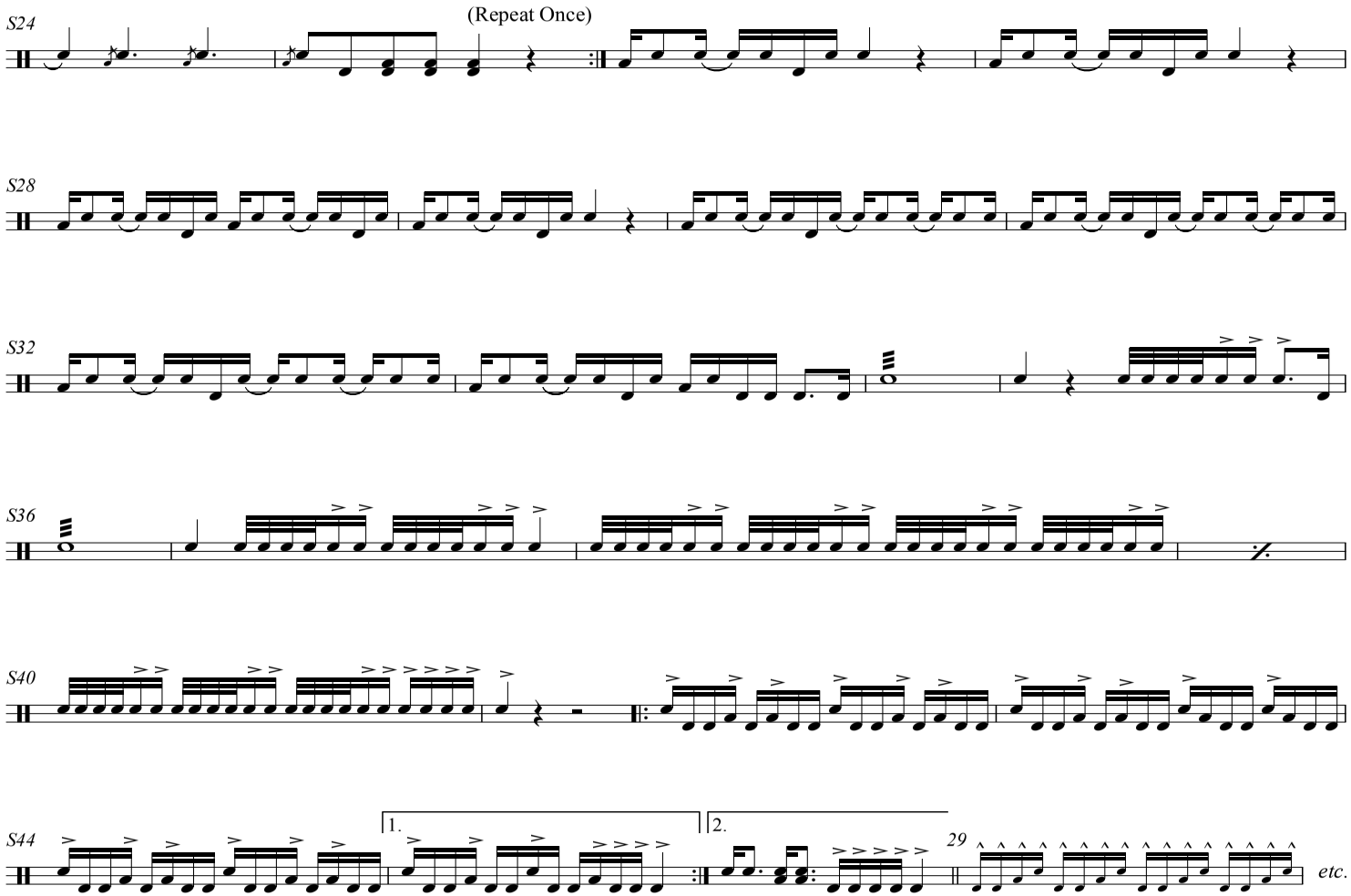

S25
S29
S33
S37
S41
S44
10
etc.

Figure 6.22:
Example Feature Solo for "Makuru" (Dunduns)




S24
(Repeat Once)
S28
S32
S36
S40
S44
1.
2.
29
etc.

Postlude

Ethos Percussion Group and the Jerome Foundation initiated a commissioning program (officially known as the "Jerome Foundation Emerging Composers Commissioning Fund for the Ethos Percussion Group") in 1998, and Ethos premiered three works the following year. With continued support from the Jerome Foundation, the ensemble commissioned two or three works a year for over a decade. Prior to the creation of the commissioning fund, Ethos's programming regularly featured works with clear ethnic influences as a reflection of its members' individual interests in a variety of global percussion styles. The group identified strongly with how composers such as John Cage, Lou Harrison, Christopher Rouse, and Minoru Miki brought ethnic musical elements into "classical" chamber music, and Ethos has used the commissioning fund to create a new body of literature inspired by their example. The composers commissioned by Ethos have introduced instruments, playing techniques, rhythms, and tonal concepts from the Middle East, Argentina, North and South India, Ghana, Guinea, and Bali into Ethos's chamber music milieu, and through these works the group's members have greatly refined their ethnic percussion skills. Jerome Fund commissions now comprise the majority of Ethos's concert and recorded repertoire, and their global characteristics are central to the ensemble's artistic identity.

As a member of Ethos, my personal experiences developing and performing commissions such as *Charangueando* and *Suli Ti Nani* have also enhanced my musical life outside of the ensemble. Their incorporation of hand drumming, improvisation, groove-oriented playing, and electronics fostered abilities that have proven quite marketable in the New York freelance arena; while my conservatory training has

certainly served me well, the contemporary marimba studies emphasized by my degree programs in lieu of these areas have had considerably less impact on my professional career. I would therefore posit that, because the professional world welcomes percussionists comfortable with hand drumming, improvisation, groove-oriented playing, and electronics (and that, objectively, the phrase "groove-oriented hand drum improvisation" fundamentally describes many of the world's great percussion traditions), these topics are of intrinsic importance to the percussive arts and should be included in any program designed to train professional drummers.

The relative scarcity of percussion ensemble repertoire capable of nurturing such skills prompted me to use this dissertation as a means of sharing these musically and pedagogically commendable compositions with the broader collegiate percussion community. When my work with the students at Queens College made clear that notation alone would be incapable of conveying the all of the information needed by performers, I augmented the newly notated scores with detailed appendices and extensive supplemental audio, video, and data files. In recognition of the methods currently used by musicians when approaching new works, I publicly posted the supplemental media as web pages and YouTube videos to make as much of the material "open source" as possible. These web resources complement the appendices, in effect creating small scale, multi-media method books for each piece. Thanks to the generous work of the Queens College percussion ensemble and the considerable input of Gaby Kerpel, Michael Markus, and Famoro Dioubate, the scores and supplemental materials I have developed for *Charangueando* and *Suli Ti Nani* should enable future performers to understand and execute the extra-conservatory demands of these works as each composer intended.

Over the course of my research, I encountered two subjects that seem particularly worthy of additional study. Although the connection between many Latin American musical traditions and those of West Africa have been firmly established, I had to abandon my efforts to demonstrate a link between the folk cultures of Northern Argentina and West Africa (in pursuit of a "common ancestor" for the two compositions) due to the uniquely opaque history of African slaves and their descendants in Argentina. Much has been written regarding African influence on the tango and other urban Argentine music/dance forms, but little contemporary research exists regarding this aspect of the folk traditions from rural Northern Argentina. While this topic remains of interest to me, I will leave it to more qualified historians and sociologists. However, I do plan to continue investigating the post-Sékou Touré diaspora of Guinean music and musicians, particularly in New York City. I am intrigued by the often-unexpected factors affecting how Guinea's musical traditions continue to spread and evolve, and I believe an article on this subject would be of interest to the journal of the Percussive Arts Society.

Both scores created for this dissertation are scheduled for publication by Bachovich Music in 2012, making them the seventh and eighth entries in Bachovich's "Ethos Series." Bachovich's interest in the works gives me hope that *Charangueando* and *Suli Ti Nani* will find a deserved place in the percussion ensemble canon, enabling other musicians to benefit as I have from their inventive ethnic/contemporary synthesis and perhaps inspiring conservatory percussionists to further explore the fascinating electronic and folk practices upon which the works are based. Finally, I have been pleased to see that surveys dedicated to various global percussion traditions have been recently offered at institutions such as Juilliard and Manhattan School of Music; this

makes me optimistic for a future where the study of percussion music involving hand drumming, improvisation, groove-oriented playing, and electronics may no longer be deemed “extra-conservatory.”

Bibliography

Boss DD-2 Digital Delay Instructions. Osaka: Roland Corporation, 1984.

Daniel, Oliver. *Stokowski: A Counterpoint of Views*. New York: Dodd, Mead and Co., 1982.

"EN TUS TIERRAS BAILARE. Wendy, Delfín y La Tigresa. Juntos por primera vez." YouTube video, 4:22, posted by "micalatina," April 19, 2010. http://www.youtube.com/watch?v=xzMUyqmaqcw (accessed October 12, 2010).

Exarheas, Andreas. "Profile of Atahualpa Yupanqui - Pioneer of South American Indigenous Music." *Sounds and Colors*. August 16, 2010 (accessed January 20, 2011).

Frank, Raphie. "Lezly Ziering, Skate Teacher & Founder Central Park Dance Skater's Association." *Gothamist*, June 13, 2005. http://gothamist.com/2005/06/13/lezly_ziering_skate_teacher_founder_central_park_dance_skaters_association.php (accessed September 10, 2011).

"Gaby Kerpel Live @ CM Music Channel, Herias Sin Herer." YouTube video, 7:42, from a performance broadcast online by CM Music Channel in August 2008, posted by "gabytok," August 17, 2008. http://www.youtube.com/watch?v=bnHh4WFRIJw (accessed December 10, 2010).

Grenlee, Steve. "Hot tunes for these cooler days." *Boston Globe*. September 5, 2003. http://www.boston.com/ae/music/articles/2003/09/05/hot_tunes_for_these_cooler_days (accessed October 15, 2010).

Guillermoprieto, Alma. "What is that Monkey Doing Behind the Rowboat?" *New York Review of Books*, June 9, 2010. http://www.nybooks.com/blogs/nyrblog/2010/jun/09/what-monkey-doing-behind-rowboat/ (accessed October 15, 2010).

King's Place Music and Arts Venue (London). "Silvia Iriondo." http://www.kingsplace.co.uk/music/artists/silvia-iriondo (accessed January 12, 2011)

Locke, David. "The Metric Matrix: Simultaneous Multidimensionality in African Music." *Analytical Approaches to World Music Journal* 1, No. 1 (2011). http://aawmjournal.com/articles/2011a/Locke_AAWM_Vol_1_1.pdf (accessed September 15, 2011).

Perkins, Robin. "Gaby Kerpel - The Man Behind The Music." *Fly Global Music*. August 1, 2009. http://www.flyglobalmusic.com/fly/archives/latin_america_features/gaby_kerpel_the_man_behind_the.html (accessed February 2, 2011).

Ratliff, Ben. "Dreamy Sounds From The 'De La Guarda' Guy." *New York Times*, August 31, 2003. http://www.nytimes.com/2003/08/31/arts/music-playlist-dreamy-sounds-from-the-de-la-guarda-guy.html (accessed October 15, 2010).

Sirota, Warren. *Echoplex Digital Pro: User's Guide*. Oakland: Oberheim Corporation, 2001.

Young, Victoria, "Defying Urban Ennui, and Gravity." *New York Times*, July 2, 1998. http://www.nytimes.com/1998/07/02/theater/defying-urban-ennui-and-gravity.html (accessed October 15, 2010).

Zak, Albin J. *The Poetics of Rock: Cutting Tracks, Making Records*. Berkeley: University of California Press, 2001.

ZZK Records (Buenos Aires). "King Coya." http://www.zzkrecords.com/artist/King_Coya (accessed January 12, 2011).

Interviews

Bangoura, M'Bemba. Interview with the author, New York, NY, April 2, 2011.

Dioubate, Famaro. Interview with the author, New York, NY, September 2, 2011.

Kerpel, Gaby. Interview with the author, New York, NY, September 12, 2008.

Markus, Michael. Interview with the author, New York, NY, February 18, 2009.