

**TOWARD A PEDAGOGY OF "PLAY"  
FOR THE MANDE BALA**

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## ABSTRACT

A theoretical model is proposed that posits "play" as both the long-term goal of bala learning, and as the means through which the short-term steps toward that goal can best be achieved. Play is defined in two different ways. In the first sense it is an orchestrating of means and ends in which means are at the centre of interest. In this sense, play is a *goal* of bala learning. In the second sense, play is defined (using the framework of Applied Behaviour Analysis) as: activities that (a) are inherently reinforcing (and not inherently punishing), and (b) do not eventuate extinction, escape, or avoidance. In this sense, play is conceived as one possible *means* through which to achieve pedagogical goals.

The case is made that owing to its intrinsic (musical) characteristics—in particular, the inherent scalability of pattern density—Mande bala music is especially well suited to a pedagogy of "play." Although the model proposed is supported by empirical evidence and has a strong rational underpinning, the model itself is not *tested* in the present study, but rather, is herein *articulated* (via illustrative case studies depicting the learning of various bala patterns through digitally mediated means—books, CDs, DVDs, etc.) An argument is built to support the notion that in comparison with traditional, immersion-based pedagogical modalities, the digital mediation of bala teaching eventuates a pedagogical loss, but that this pedagogical loss can be attenuated through a more "playful" pedagogical approach.

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## CHAPTER 1

### Introduction

For the past ten years, I have been trying to learn to play the Mande<sup>1</sup> bala, a heptatonic xylophone, with usually between seventeen and twenty-two keys. Lately, nearly every time I sit down to practice the instrument, I am struck with an overwhelming sense that I am wasting my time—that I am "spinning my tires" or "grinding metal on metal." I do not mean to say that I think playing music is a waste of time (although, there is certainly a discussion to be had there). Neither do I mean that I think "practicing" is a waste of time (although this notion too could be examined). Rather, I mean that when I sit down to practice, I am hounded by a deflating awareness that the approach that I am using is inadequate, and that not only does this approach have me on an unnecessarily arduous road toward my goals, often, I doubt that the road I am on is even leading me to the goals that I am pursuing. And as if all of this were not enough, my feeling of deflation is only exacerbated by a nagging hopefulness of just how close I am to a better approach—if I could only put the pieces together in just the right way.

Traditionally, the bala is learned through what ethnomusicologist Eric Charry (2000: 331) describes as the oral-aural-tactile method.<sup>2</sup> This method typically depends on frequent and prolonged, face-to-face interaction with a teacher (or teachers) and provides the student with countless opportunities for the reinforcement of their skills in live performance contexts—usually as accompanist to the teacher himself.<sup>3</sup> A great deal

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<sup>1</sup> The term Mande designates a region in West Africa (see [Figure 4](#)) defined largely by the shared cultural and linguistic history of the people within that region. (See Chapter 2.)

<sup>2</sup> The phrase "oral-aural-tactile" is not likely attributable to Charry, having antecedents in disciplines other than ethnomusicology. See, for example, religious scholar Gabriel Moran's (1997: 57) exegesis on the act of teaching. Ethnomusicologist Timothy Rice offers a similar formulation: "aural-visual-tactile" (1994: 49).

<sup>3</sup> In Mande, although women are welcome to learn to play the bala, the activity tends to be the domain of men, whereas women tend toward a specialization in singing. One notable exception to this pattern is Fatoumata "Djéliquinet" Kouyaté, who is both an accomplished singer and an

of Mande-music learning depends precisely on the immersion (and the one-on-one interaction) that the traditional pedagogical methodology affords.<sup>4</sup>

But as is the case for the majority of non-Mande learners, I have not had many opportunities to study under the traditional paradigm. From the very beginning, much—indeed most—of my learning has been mediated through video-based pedagogical materials (as well as books and CD recordings), and it has been almost entirely self-directed. With the advent of the Internet and other digital media communication technologies, and thanks in part to the enormous popularity of Mande jembe and dunun-based dance-drumming ensembles (see note 42), the opportunities for potential students to come into contact with and cultivate an interest in learning to play the bala have increased exponentially. But since there has not been a corresponding increase in the number of qualified teachers<sup>5</sup> with whom these students might study (using the traditional oral-aural-tactile method), both students and teachers alike are turning to digital media technologies (instructional e-books, CDs and DVDs, for example) for pedagogical communication.<sup>6</sup>

Unfortunately, however, the musical information imparted in these new media contexts is still largely based upon the traditional pedagogical modality, and the consequent (now digitally mediated) pedagogy suffers as a result. I believe this to be true for at least three reasons. First, since students abroad (i.e., outside of Mande) do

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expert instrumentalist specializing in bala performance. Nonetheless, all of my teachers were men, and all were taught by elder male relatives—fathers, uncles, grandfathers, etc.

<sup>4</sup> It could also be noted that in a traditional pedagogical paradigm, the immediacy of performance imperatives plays an important role in governing both the selection of the material that the teacher imparts and the pace at which that material is imparted.

<sup>5</sup> The problem of the sheer number of teachers is but one side of the story. The other side is one of geographical distribution. Even if there were "teachers to go around," getting them to the places where students need them would be a challenge in its own right.

<sup>6</sup> Of course, both the method of "lifting" from audio and video recordings, as well as the use of Skype or Facetime interfaces, grow ever more prevalent, not only among Mande musicians, but globally, in classical, pop, folk, and other musical traditions, but I am referring here to commercially available "digital products" whose authors had pedagogical communication as their principal objective from the outset.

not have a performance context equivalent to that found in a traditional paradigm, the adaptation of pedagogical intent to a digitally mediated format experiences a marked diffusion of clear pedagogical goals. Put simply, it is not made apparent (in the DVDs, CDs, and e-books) just what the student should be aiming to *do* with the musical material that is being furnished.<sup>7</sup>

Second, because there is no teacher present to mediate the process (and, lacking a governing performance imperative), learning is made much more laborious and onerous—much more than it needs to be. Consider the following observations made by Charry (ibid: 341-42) in a discussion of what constitutes "practicing" among Mande instrumentalists:

What Africans, Mande melody instrumentalists in particular, practice are exemplars of pieces. The very nature of the music makes this possible. Instrumental renditions of pieces consist of harmonic-melodic patterns, usually lasting from a few seconds to less than fifteen seconds, that are played cyclically, *with various kinds of input expected from the performer*. One cycle of a piece, then, can be repeated over and over without variation as practice. I refer to one cycle of a piece as an exemplar of that piece. These exemplars would usually not be less than one cycle long, so that contact with the musical whole is retained. *The density of hand or finger movement can be pared down for beginners*, and they can also be elaborated internally—that is, the length always remains the same, but more movements can be added to increase the density, or new movements can be substituted for old ones. *No matter how simplified an exemplar may be made, it is still considered to be the piece, albeit a beginner's version.* (Emphasis mine.)

Hard work, in the sense of consistent dedication to the cultivation of one's craft, will always be a part of Mande music learning. The harder one works, the further one will get. But practicing the bala does not need to feel (indeed, as I argue below, should not feel) "work-like." Precisely because of the scalability of pattern density that Charry

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<sup>7</sup> Within the traditional paradigm, students have frequent opportunities (again, through their role as accompanists) to experience the music making of the master players with whom they are learning. It is in part through this repeated exposure that students come to discover how the patterns that they learn are *handled* in professional music-making settings. These experiences appear to have been overlooked in adapting the apprenticeship approach to a digitally mediated one.

identifies as characteristic of Mande (bala) music, the complicated patterns of master players need not be learned in the guise in which they are played in instruction videos, but could instead be learned in appropriately simplified incremental steps.<sup>8</sup> To do this would be to generate more frequent opportunities for positive reinforcement, thereby giving the self-directed learner greater stimulus control,<sup>9</sup> and so, the means to program a more enjoyable learning process. What is more, owing to characteristics intrinsic to this style of music (namely, that "no matter how simplified an exemplar may be made, it is still considered to be the piece"), with certain kinds of simplification each step can itself become a viable variation—or a more simplified pattern from which variations and improvisations could develop.<sup>10</sup> Presenting patterns in incremental steps would also provide the means to involve more creativity in practicing activities, further increasing the reinforcement potential of those activities.

A third drawback of basing digitally mediated pedagogical methodologies on those of the traditional modality is the lack of an articulated "grammar" for improvisation. Charry (ibid: 177) describes a "common grammar for creating ornamental phrases." Although he also explains that specific pieces "attract specific tokens created from this common grammar," and although the learning of vocabulary is fundamental to maintaining contact with that which defines the tradition, if students had a clearer understanding of the *common grammar* of bala music, they would not have to rely so

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<sup>8</sup> As will be seen in Chapter 4, of the products currently available, very few take this incremental, stepwise process of acquisition into account.

<sup>9</sup> Stimulus control (like positive reinforcement) is a term drawn from the field of behaviour analysis (discussed below). It refers to the management of the relationship between behavioural stimuli and their corresponding responses.

<sup>10</sup> When learners attempt to apply variations to patterns that are too complicated for their level of competency, those variations tend to come across as awkward-sounding, forced, or alien to the tradition. I see this not a failing of the learner, but of the pedagogical approach being employed. If the patterns were presented incrementally (especially using the "density analysis" approach described in Chapter 5), learners would have an easier time exploring the possibilities for their own creative input.



heavily on memorized "tokens" (what Lucy Durán [1981: 191] refers to as "stock ornamental phrases"), and would thus be freer to play more expressively.<sup>11</sup>

The purpose of this dissertation, then, is three-fold: First, I will attempt to clarify the nature of bala music making (as it appears in a variety of performance contexts), so as to move toward a clearer articulation of the goals of a digitally mediated bala pedagogy. Next, after examining the currently available digital pedagogical materials, I will illustrate ways in which the patterns furnished in these materials might be simplified so as to facilitate a more incremental (and so, less arduous) pedagogical pathway. I will also build an argument for the validity of this approach based on the principles of behaviour analysis—the scientific study of laws that govern human behavior (Martin & Pear, 2015: 316). Finally, I will take steps toward the articulation of a pedagogical grammar of bala music, which, when combined with an incremental simplification of the patterns taught (through digital media), should provide readers with the means to begin to more creatively experiment with their own bala learning endeavours without compromising the inherent logic of the music as it is played by Mande musicians.

I describe the approach herein articulated as a pedagogy of "play" but the term play is defined in two different—albeit, complimentary—ways. In the first sense, following psychologist Stephen Miller (1973: 87), play is an orchestrating of means and ends in which means are at the centre of interest. In this sense, play is a *goal* of bala learning.<sup>12</sup> Play defined in this way is explored more fully in Chapters 3 and 4. In the second sense, play is defined using the framework of Applied Behaviour Analysis as: activities that (a) are inherently reinforcing (and not inherently punishing), and (b) do not eventuate

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<sup>11</sup> Further, with a better grasp of the grammar of bala music, rather than focusing exclusively on repertory, exercises could be created to develop general skills. Although Roderic Knight (1984a: 76) observes, "structured lessons, exercises, and practice are largely foreign to the tradition," the teachers with whom I have worked would certainly welcome "foreign" skill development techniques as long as they produced positive results.

<sup>12</sup> This definition of "play" is framed here as a longer-term, curricular goal of bala learning—the ability to "galumph" in an idiomatic way.

extinction, escape, or avoidance. In this sense, play is conceived as one possible *means* through which to achieve pedagogical goals. This definition of play is discussed in greater depth in Chapters 5 and 6. With this dissertation I am aiming to develop a more pedagogically sound approach to using the materials imparted through digital means and also to chart a clearer path toward the elaboration of new (and more effective) materials.

## **Chapter Overviews**

Chapter 2, "Preliminaries," begins with a literature review in order to establish a relationship between the present study and the existing ethnomusicological literature. The methodology used for conducting this study is also set forth. This includes participant observation, transcription and analysis, and learning to perform, as well as collecting, organizing, and becoming familiar with (through repeated, focused listening) a broad selection of Mande bala music. Additionally, relevant technical matters are discussed that relate to such things as terminology and transcription.

Chapter 3, "The Goals of Bala Pedagogy," aims to articulate what skills are required of students so that they may be considered competent bala players. The many contexts for bala music making (both within Mande and abroad) are discussed and the nature of Mande bala music is explored. The purpose here is to more clearly establish the pedagogical goals for the bala student, as well as to recognize the ways that bala music is different from other kinds of Mande musics. (Doing this will also further establish relationships between the present study and any previous studies that have dealt with Mande music, the majority of which have focused not on the bala but on other Mande instruments.)

Chapter 4, "Teaching and Learning Bala Music," endeavours (a) to summarize what is known about how bala music is taught and learned in the traditional paradigm, and (b) to examine how traditional methods have typically been adapted to a digitally mediated modality. Illustrative examples are drawn from commercially available print, DVD, and CD materials as well as from private videos. The problems inherent in making this adaptation are discussed. This chapter seeks to establish that the currently available digitally mediated instructional material is pedagogically problematic.

Chapter 5, "A Pedagogy of 'Play,'" begins with a refining of the theoretical framework for the pedagogical approach herein proposed. Principles and procedures of behaviour analysis are first summarized and then the term "play" is examined more closely. Several examples are used to illustrate the teaching and learning of the basic accompaniment patterns such as they are furnished in the digitally mediated materials.

Chapter 6, "Toward a Pedagogical Grammar," continues the work of Chapter 5 by considering ways that the pedagogy of "play" could be applied not only to the learning of accompaniment patterns but to the musical system as a whole, thus applying a behaviour-analytic approach to attaining the "goals of bala pedagogy" outlined in Chapter 3 (i.e., play in the sense of "galumphing"—circumnavigating obstacles put there and voluntarily acceded to by the player). Three related aspects of bala music grammar are emphasized. First, the concept of the "keyboard area" is introduced, next the "embedded melody" idea is explored, and finally an attempt is made to establish some of the principles of what is often called "rolling." Additionally, consideration is given to the relationship between the learning of musical vocabulary and the learning of a music through its grammar.

Chapter 7, "Conclusions," aims to summarize the study, considers its strengths and weaknesses, and proposes directions for future research. Proposals are considered for ways in which the pedagogical problems outlined in Chapter 4 could be overcome. A

broader point about a behaviour-analytic pedagogy is also considered, namely, that although Mande music is particularly well suited to the pedagogy of "play" approach (owing to characteristics inherent to this music), perhaps other musics and indeed other disciplines could benefit from an approach that emphasizes behavioural principles—or even, that restructuring these disciplines to more closely resemble those characteristics of Mande bala music could facilitate the application of a behaviour-analytic approach.

## CHAPTER 2

### Preliminaries

This dissertation is a bringing together of manifold elements. One of the greatest challenges to writing has been the organization of these elements, since, I cannot say anything meaningful about x until readers first know what y and z are, but y and z will not make any sense until readers first have some experience with x.

Notwithstanding this difficulty, there are certainly some matters that can be dealt with at the outset. These include: Literature Review; Theoretical Framework; Research Methodology, Fieldwork, and Data Collection; Transcription and Notation; Bala Tuning; and Terminology and Orthography. Other "preliminary" matters will be dealt with in the chapters that follow as the need arises.

#### Literature Review

Since my focus throughout this PhD program has been on the bala, for this dissertation I will limit the discussion to bala music only. This said, however, it should be clarified that in writing about bala music, I am also, to a certain extent, writing about the kora, the koni, and the guitar, insofar as these four instruments comprise (in the strictest sense) the instrumentarium of the Mande *jelilu* (sing. *jeli*)—hereditary bardic praise singers, historians, genealogists, and instrumentalists—who share a common repertory<sup>13</sup> and have a similar playing style.

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<sup>13</sup> As will be discussed below, however, for each of the four instruments, there are pieces that, though certainly not exclusive to one instrument, do tend to be more commonly associated with one than another. The piece *Bakari Jan*, for example, sung for a military commander of a former Bambara king, is a staple of the koni repertory, but is not especially important for bala *jelilu*. There are many examples like this.

To date, very little has been written about the Mande bala. Educator and ethnomusicologist Lynne Jessup's *The Mandinka Balafon* (1983) is the only major work focused exclusively on the instrument. And, it does have a pedagogical orientation. To a certain extent, owing to this orientation, it could be said that *The Mandinka Balafon* has already done what the present dissertation is aiming to do, that is, to adapt traditional teaching techniques to a new communication medium. However, the present study distinguishes itself from Jessup's in a few key ways. To begin with, Jessup limits herself to the Gambian Mandinka (a branch of Mande that is, in fact, more commonly associated with kora playing [Charry, 2000: 10]). I too have studied in the Gambia,<sup>14</sup> but the majority of the work done for the present dissertation derives from a long-time association with three Guinean (Susu, Maninka, and Jahanka) bala *jelilu*: Sory Diabate, Naby "Coyah" Camara, and Famoro Dioubate. As will be discussed in greater detail below, there are significant differences between the repertory tendencies of the bala *jelilu* of Gambian (Mandinka) and Guinean (Susu/Maninka) origin. Admittedly, though, in terms of playing style, as well as in terms of how the music is taught and learned in the traditional modality, these differences are mitigated. So, another way in which my own study differs from Jessup's is with respect to intended audience and intended use. Jessup clearly has beginner students in mind and aims at bringing Mande bala performances into elementary schools, or perhaps high schools. I address bala pedagogy more generally, and my intended audience is principally individual, guided or self-directed, largely non-Mande adult learners at a range of levels. Jessup's work provides good source material for beginning learners. This dissertation deals with how best to handle—and indeed, develop—such material. There are certainly aspects of Jessup's work that will be directly

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<sup>14</sup> Before heading to the Gambia, I contacted Lynne Jessup and it was on her recommendation (and, with her blessing to use her name as my "calling card"), that I spent three weeks in Sukuta, living in the home of, and studying with, Mawdo Suso, the principal informant for her 1983 study.

applicable to the pedagogy of "play," however, and these will be incorporated and expanded upon in the present study.

Other discussions of the pedagogical processes involved for learners of Mande music (whether the learners themselves are Mande or non-Mande, and whether the focus is exclusively on the bala or on another *jeli* instrument) include sections in Roderic Knight's (1973) two-volume PhD dissertation and Eric Charry's (2000) *Mande Music*. But even where these works do consider *jeli* instrumental music pedagogy, neither addresses the specific concerns that are considered in the present dissertation. (Neither work, for instance, addresses the adapting of the traditional pedagogical modality to a digitally mediated one, nor focuses exclusively on the bala.) Both, however, do speak directly to Mande playing style and are each drawn upon heavily here. Joe Luther Williams' 2006 dissertation also deals with bala pedagogy to some extent, but not remotely in the same way as it is dealt with here. Williams explores the ways in which pedagogical transmission contributes to the formation of "identity," whereas my work considers the pedagogical processes through which students acquire and develop their instrumental skills. And although Julie Strand also discusses Mande xylophone pedagogy and her own learning process in her 2006 dissertation, her work deals with a Burkinabe branch of Mande (the Sambla) whose *baan* (xylophone) style is different enough from the Mandinka/Maninka/Susu bala that it does not render my own work superfluous. Other studies dealing with the bala focus on either tuning systems (Knight, 1991; Rouget and Schwarz, 1996) or repertory (Knight, 1982). Again, I draw on these (when discussing tuning and repertory, for example), but none make the present dissertation redundant.

Since what I am dealing with does hinge so fully on the specific characteristics of Mande music (and Mande music making), and since a line does need to be drawn, else the work would never be completed, the most manageable place to draw it is at the

Mande bala itself.<sup>15</sup> However, this dissertation also deals with pedagogy and it is being undertaken within an ethnomusicology paradigm. I must therefore additionally consider the place of the present research in relation to the broader ethnomusicologically-informed literature on music pedagogy. Ethnomusicologist Timothy Rice (2003: 65) has summarized this literature, pointing out that "music learning and teaching must play a crucial role not only in the absorption and transmission of technical and aesthetic knowledge, but in the creation and maintenance of the cultural, social, political, and economic systems in which these activities are embedded." Rice (ibid: 68) broadly divides his summary into two general areas of inquiry, those addressing the sociological aspects of music teaching and learning, and those dealing with the procedures associated with the teaching and learning of the musical content itself. Although I do briefly address the sociology of teaching and learning (in Chapter 7 below), the focus of the present study is rather on methods of learning and the attainment (and assessment) of musical skills. To this end, my study should sit comfortably in the company of a number of ethnomusicological studies on the learning of particular instruments or styles of music.<sup>16</sup>

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<sup>15</sup> Perhaps future studies could more fully explore possible applications of this work to other musical systems, or, as music educators Patricia Campbell (2003, 2004) and Huib Schippers (2010) have done, to the teaching and learning of music more generally, irrespective of the system in question.

<sup>16</sup> These studies include John Baily's (1988, 2001) work on Afghan *dutâr* and *rubâb* skills acquisition, John Miller Chernoff's (1979) and David Locke's (1998) pioneering work on the teaching and learning of Ghanaian (and Nigerian) drumming styles, Stith Bennett's (1980) study of practicing among rock musicians, as well as Daniel Neuman's (1980) work on practicing in a North Indian context, Paul Berliner's work on American jazz (1994) and on the teaching and learning of the *mbira dzavadzimu* in Zimbabwe (1991), Patrick Halliwell's (1994) (and also Andreas Gutzwiller's [1974]) work on learning from Japanese master musicians, and Rice's (1994, 1995, 1996) own work on learning to play the Bulgarian *gaida*.



## Theoretical Framework

The principal claim being made in this dissertation is that the adapting of traditional pedagogical practices for teaching the bala to non-traditional communication media (CDs, DVDs, the Internet, etc.) negatively affects pedagogical efficacy. In order for such a claim to be verified, a relatively un-biased means is needed for assessing the comparative efficacy of the various instruction methods—the traditional, the currently available digitally mediated, and the digitally mediated that incorporates elements of a pedagogy of "play" (see Chapter 5). Although I must reiterate that in the present dissertation, no such empirical comparison is undertaken,<sup>17</sup> one pedagogical model that would afford this possibility is that offered by W. James Popham and Eva L. Baker in a series of works published in 1970 by Prentice-Hall: *Systematic Instruction, Establishing Instructional Goals*, and *Planning an Instructional Sequence*. In these works, the authors propose an empirical instructional model for improving instruction quality.<sup>18</sup> Their endorsement of an empirical model hinges on the view that it is preferable to base instructional improvement on "some sort of relatively unbiased *evidence*" (ibid: 10, emphasis in original), which in this case is the observable behaviours of the students—their achievement or non-achievement of the instructional goals.

Popham and Baker's model consists of four main steps: 1. Specify Objectives (in terms of observable and unambiguous student behaviours), 2. Pre-assess (in order to

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<sup>17</sup> Owing in a large part to this study's having been realized within an ethnomusicology-centered academic paradigm—and not an education-centred one—a drastic shift of focus would be required in order to apply due rigor to the methodology of comparing pedagogical systems. Although the pedagogy of "play" is itself based upon the empirically supported principles of behaviour-analysis, and although the suitability of the pedagogy to Mande music unique characteristics is empirically demonstrated (see Chapter 5), an illustration of the efficacy of the pedagogical model that this dissertation proposes is sought here not through empirical testing, but rather, through illustrative theoretical case studies. (A description of these case studies begins in Chapter 5 and continues in Chapter 6.)

<sup>18</sup> The model is also referred to as a goals-based or goals-referenced instructional model, as distinguished from a means-based or means-referenced one.

determine the level of the student as regards those behaviours), 3. Select Learning Activities (that are relevant to the pedagogical objectives—which, in the light of pre-assessment, may have been revised), and 4. Evaluate (to verify that the students can emit the desired behaviours once instruction [and, in some cases, practicing] is undertaken). The authors posit that even in the case of the "teacher as artist" (1970b: 7) conception (which they place on a continuum, at the other end of which is "teacher as technician"), there are certain *instructional* behaviours that "can be systematically studied and, on the basis of subsequent learner performance, effectively revised" (ibid: 8).<sup>19</sup> Thus, "unachieved objectives are generally viewed as reflecting inadequacies in the *instruction*" (1970a, emphasis mine), not in the abilities of the student.<sup>20</sup> (In a student-teacher pedagogical relationship, the burden of accountability is shared. But in a self-directed pedagogical context, the burden of accountability falls squarely on the method itself.)

Some readers may be surprised to see an apparently "dated" behavioural approach being used in a modern educational context. Behavioural approaches to education were given a luke-warm reception among North American educators at the time that they were first introduced in the 1960s and 1970s. They were characterized as amounting to little more than "inauthentic and spiritless conditioning" (Kneller [1972: 400]). (Such opponents of behavioural models also saw no place in the classroom for computer-based learning modules.) As a result, education philosophy took a turn toward "process over product" approaches, shunning the empirical emphasis advocated by behaviourists. My rationale for using a behaviourally oriented pedagogical model here is three-fold: (1) For my Mande instructors, as well as for me, the bottom line for

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<sup>19</sup> Instructional revisions are made either (a) in terms of the teaching activities employed, which is done if the learners failed to achieve the objectives, or (b) in terms of a re-specification of objectives, which, if the learners have achieved the original goals are now augmented.

<sup>20</sup> Obviously this view assumes that students are making an earnest effort to improve.

assessment is "show me that you can do it." A behavioural model for instruction provides a basis for accountability, a means to demonstrate something that can be done following instruction that could not be done prior to instruction (Gagné [1972: 394]). For the task of effectively revising instructor behaviour, the empirical emphasis of the Popham and Baker model is a boon, not a detractor. (2) Popham and Baker's model incorporates (or accommodates), that most fundamental of teaching axioms, "if it is too difficult, break it up into smaller steps." As will be seen, this feature of their model is fundamental to the pedagogy of "play"—especially as this is understood from the behaviour-analytic perspective. (3) Since, as will be discussed in Chapters 3 and 5, the long-term, curricular goal for Mande bala playing is "play" itself—in the sense of "galumphing"—a behavioural model in fact does not contradict and can well incorporate many of today's process-oriented principles of educational philosophy.

Since the task here is to find a way to adapt the traditional teaching practices of Mande bala instructors to non-traditional communication media, in fact, the instructional behaviours that are being studied and revised are those of the auto-didact, and not of the Mande instructors themselves.<sup>21</sup> And (apart from my own shortcomings as an auto-didact bala student), the evidence for the negative effect that the adaptation to new media has thus far had on pedagogical efficacy is reflected in informal observations made by my traditionally trained Mande instructors (Dioubate, 2013-per, Diabate, 2012-per, and Camara, 2012-per). Upon seeing performances by non-Mande learners on YouTube and other online video sharing platforms, as well as through one-on-one interactions with the same, the *balafolalu* reveal that although they see much progress being made, and although they are, by and large, pleased with the efforts of many of the non-Mande learners who have not had the benefit of the oral-aural-tactile apprenticeship modality, these learners (among whom I too must be counted) are not quite hitting the

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<sup>21</sup> Recall that I began this dissertation with a disquietude about *my own* practicing endeavours.

mark where becoming "competent players" is concerned.<sup>22</sup> A further elaboration of just how or just why the *balafolalu* might have this opinion will be developed below, but there are first some things that the reader must understand about the characteristics of Mande music, and these are considered in Chapter 3.

In addition to the claim about pedagogical efficacy that forms the principal focus of this study, there are three undergirding claims being made here implicitly. These claims address the particular ways that pedagogical efficacy is compromised when the teaching process undergoes a digital mediation, and constitute (1) a diffusion of pedagogical goals, (2) an unnecessarily laborious and onerous process, and (3) the lack of an articulated grammar for improvisation. Following Popham and Baker's empirical instructional model, the first of these claims simply comprises an elaboration of the first step in their four-step model: specifying objectives (or, establishing instructional goals). The matter of articulating instructional goals is not straightforward, however, especially at the long-term, curricular level.<sup>23</sup> Individual players will bear stylistic idiosyncracies that distinguish their playing from that of their contemporaries. What is more, different students will have different goals, and these will be both time and situation dependent. These and other matters are considered in depth in Chapter 3. An examination of the second claim—that the pedagogical process is unnecessarily arduous, and that changing this will improve pedagogical efficacy—takes as its theoretical framework the principles and procedures of behaviour analysis (see Chapter 5). The field of behaviour analysis is an experimental one. Principles are derived through the replicable testing of theoretical models. Although no new behavioural tests will be conducted for the present

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<sup>22</sup> Charry (2000: 330–31), discussing kora apprenticeship—though, I think the statements could be equally well said about bala learning—opines: "the most effective way to teach the kora (at least in terms of turning out competent players) is the traditional oral-aural-tactile method used by kora players, passed down from father, uncle, or some close relative." The key to understanding this statement from the perspective of Popham and Baker's empirical instruction model lies in the phrase "in terms of turning out competent players."

<sup>23</sup> As will be seen, articulating shorter-term goals is far more straightforward.

study,<sup>24</sup> the various principles that will be used to explain, buttress, and justify this second claim are derived from these experimentally supported principles of human behaviour.<sup>25</sup> Jay Rahn has summarized what he considers to be the advantages and disadvantages of applying a behavioural framework to the study of musico-behavioural phenomena, ultimately concluding that in doing so, "one might begin to entertain the prospect of a theory of music that not only accounts for, [*sic*] but predicts and controls musical practice" (1987: 125). Where autodidact pedagogy is concerned, an ability to "predict and control" is obviously a desirable aim. This discussion is developed across Chapters 4 and 5. The final claim—that the lack of an articulated grammar for improvisation is one of the ways that a pedagogical loss is engendered when traditional techniques are adapted to digitally mediated interfaces—is also grounded in the principles and procedures of behaviour analysis. A familiarity with the "inner workings" of bala music allows the teacher (or the auto-didact student) to design their instructional sequences in a way that promotes program adherence (i.e., so that learning is inherently reinforcing and not inherently punishing, and so that the program does not eventuate extinction, escape, or avoidance—see Chapter 5). This occurs at the level of the teaching/learning of individual patterns, but also at the level of the more curricular teaching/learning of what will be termed "inner-circle" playing (see Chapter 3.) The processes by which the raw musical data (that informs the elaboration of bala grammar) has been gathered and transcription has been undertaken, as well as the notation system used in this process, are considered in detail below.

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<sup>24</sup> That is, no tests that would stand up to the degree of methodological scrutiny typically exacted by behavioural scientists.

<sup>25</sup> See Martin and Pear (2015) for references.

## **Positionality, Research Methodology, Fieldwork, and Data Collection**

Research for this study, which has included locating and meeting with teachers, recording performances, organizing collected data, transcribing musical phenomena, learning to play the instrument, building a pedagogically oriented website, and conducting ongoing interviews with both Mande instructors and non-Mande learners, began long before I had the idea to pursue graduate studies in ethnomusicology. This dissertation is really a continuation of a project that I had begun several years earlier, and that I will certainly continue long after graduation. Unfortunately what this means in terms of research methodology is that the process undertaken here was highly individualized, minimally systematic, and ultimately (unless considered in the very broadest sense), non-replicable.

And yet, such appears to be the nature of much ethnomusicological study. Rice (2014: 153), for instance, has discussed how "ethnomusicologists understand that the knowledge they generate about other musical cultures is not objective but is made possible by the conversations they have with those they meet in the field." I nod assent to this recognition, and so, too, acknowledge the need for the researcher to position him- or herself in relation to his or her subject(s) of study. I am a third generation Anglophone Canadian with British parentage on my father's side and Ukrainian parentage on my mother's side, although, for the present study, my positionality stems principally from the behaviour-analytic culture into which I was born (see Chapter 5) and from my previous experiences with music learning.

Notwithstanding the soundscape of late 1970s and early 1980s Winnipeg, relevant experiences began after the age of around twenty—during the mid 1990s—during my undergraduate years at the University of Manitoba. An acute interest in sound, music, and dance, but also language, geography, and history led to my actively seeking to paint

for myself as complete a picture as possible of the global historical ethnomusicological record—I travelled throughout Canada collecting instruments and recordings, compiled vast compendia of liner note information, familiarized myself with ethnomusicological literature, took credit courses in music history and ethnomusicology, and taught myself to play the drum set as well as a wide variety of percussion instruments from various traditions around the world.<sup>26</sup> Although I did have many opportunities for remunerated performance, I never sought to be a professional music-maker; rather, I was driven by the sheer joy that can be derived from the pursuit and acquisition of skills and knowledge. Save for one or two private drum set lessons I was an entirely self-taught percussionist, primarily learning from method books, DVDs, and "jam sessions" with friends.

Although our *guru-shishya* relationship was short-lived—just a few months—my first formal music teacher was Mr. K. S. Kalidas, a *mridangam* and Karnatak percussion specialist, who I sought out in Chennai, India. This trip to India was entirely self-funded (through my work as a tree planter)<sup>27</sup> and marked the first of several tree planting-funded trips to different countries (Cuba, Ghana, Italy, Peru, Senegal) with music and/or language study as the primary objective. Along this trajectory, in 2006, I completed a Master's degree in Spanish-English/English-Spanish Translation and Interpretation at a Catholic university in Guadalajara, Mexico. It is in Mexico that the story (related below) of my experiences with digitally mediated Mande bala study—as well as my experiences with bala fieldwork—begins.

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<sup>26</sup> It is worth noting here that I did originally come to the bala as a percussionist. I am sure my experiences with the instrument would be different had I first learned to play the trumpet or the piano—not to mention the *dutar*—or some other "melody instrument."

<sup>27</sup> Tree planting is notoriously punishing work—often in miserable conditions. It was the subject of an episode of the 2015 BBC III series, "World's Toughest Jobs" (BBC, 2017-web). I was a tree planter for fourteen years.

Fieldwork is taken to be a sine qua non of ethnomusicology research. Helen Myers (1992: 21), for instance, describes fieldwork as "the most critical stage of ethnomusicological research—the eyewitness report, the foundation upon which all else rests." Bruno Nettl (2005: 12–13), similarly, describes fieldwork to be "essential" and positions "direct confrontation with musical creation and performance, with the people who conceive of, produce and consume music" as the third pillar in his four-part "credo" for ethnomusicologists: "Principally, ethnomusicology is study with the use of fieldwork." Rice (2008: 45), however, points out that ethnomusicological fieldwork is often undertaken "unconnected to any particular theory." While I applaud Rice's re-framing of the fieldwork methodology problem in terms of an ongoing, mutually influential mediation between members of a *shared* (Heideggerian) ontology (instead of merely as a search by "outsiders" for data from within a community of "insiders"), the disconnect that he highlights between fieldwork "method" and the supposed ethnomusicological theory that is being tested is still glaring. I regard this to be a problem—both for the present study and for ethnomusicology in general—but it is one that may be unavoidable. However, if Bruno Nettl (2008: ix) is correct when he reminds us that "everything that comes later—analysis, interpretation, theory—depends on what happened in the 'field,'" then as it should be with all fieldworkers, it is incumbent upon me at the very least to elucidate how I came to acquire my primary source material, as well as to clarify the nature and the scope of that material. It must be understood, however, that although the collecting of the raw musical data that has shaped my understanding of and perspectives on the nature of bala music and bala pedagogy is fundamental to the study undertaken here, equally important were my own learning activities, and the many and ongoing interactions that I continue to have both with the people who furnished that raw data, as well as with those who have been (pedagogically) interacting with it.



The first opportunity I ever had to play (and play around with) a Mande bala was in 2004 when my friend, percussionist Eric Moreno, let me borrow an instrument that he had at his studio in Guadalajara, Mexico, where I was living at the time. Moreno and I had been involved in a Mande drumming study group for at least a year prior, and at some point during that time he had come into the possession of a pair of balas. Using a copy of Jessup's *The Mandinka Balafon* (1983) as our starting point, we eagerly set about learning to play. But, as was alluded to above, and as will be discussed further in subsequent chapters, there was very little repertory crossover between Jessup's manual and the Mande drumming music that our study group endeavoured to learn. Applications of what we had learned for the bala to the music that we were making with the group (or vice versa) were therefore limited.<sup>28</sup> It was then that Moreno suggested we contact a mutual friend and colleague, multi-instrumentalist Oscar Justiniano, who had recently returned from Guinea where he had come under the tutelage of Alseni Sylla, a *balafola* (bala player; pl. *balafolalu*) based in Conakry. Justiniano quickly made the trip from Mexico City and spent several weeks living with us in Guadalajara. He openly and enthusiastically shared with us what he had learned abroad—including a forty-minute video recording of lessons that he had made with Sylla in Guinea. This recording was my first exposure to Guinean bala music, and it was the first video document that I began to transcribe.

The first "document" that I myself recorded was the video that I made the following year when the Guinean circus troupe Circus Baobab passed through Guadalajara and I had the chance to meet the young, but highly-accomplished, *balafola* and percussionist Sory Diabate. I took a few private lessons with Diabate—my first ever—but quickly recognized that, having only a few days together, I would end up learning very little from

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<sup>28</sup> At that time we would not have been willing to simply "mash up" similarly-metered drum rhythms and bala pieces without the explicit approval of a qualified teacher.

our encounter. I proposed, therefore, that if I could film him, he could give me a kind of video “assignment”—something that I could work on alone and prepare for the next time we happened to cross paths. He agreed, we settled on a price, and we began to film, and thus began my longstanding relationship with digitally mediated bala pedagogy.

For this first session, it was Diabate himself who selected the pieces. He did this with virtually no knowledge of my personal learning goals, nor my activities with the Mande drumming study group. (The implications of this point will be discussed further in subsequent chapters.) For now, it will suffice to explain that for all of the pieces selected, the format was more or less the same. The camera rolling, Diabate would begin with some warming up and some exploratory “noodling,” eventually settling into the first accompaniment pattern for whichever piece he had selected. He would play this pattern, more or less unchanging for whatever amount of time he felt would be enough for me to “get it” (usually around a minute or two). Then he would introduce some sort of (mostly improvised) transition phrase that would lead directly into a second accompaniment pattern. This again, he would play for a minute or so, largely unchanging, until he improvised another transition phrase leading into a third accompaniment, and so on. Some pieces warranted the introduction of a song melody and some included a short “arrangement” phrase. For each piece (of which there were nine in total), at least four, but sometimes as many as seven, accompaniment patterns were presented. Occasionally I would intervene with a request for Diabate to play a little slower and I would even sometimes tap out a metronomic marker as a reference to make later transcription go a little easier, but by and large it was Diabate who set the pace.

As regards Diabate’s format for presenting the music, two (seemingly contrasting) observations must be made. First, the performance context was highly atypical. Diabate was not “performing” as such, but rather doing his best to imagine what kind of recording would be most appropriate as a video *lesson*. Thus, the improvised transition phrases

and the suppressing of variations were purposeful attempts on his part to facilitate my acquisition of the material. Second, a continuous, flowing playing style usually trumped pedagogical clarity. Not everything that Diabate played was executed perfectly, but once the playing had begun, nothing "stopped the flow." He "played through" mistakes, cut certain phrases short to make sure that cadences "lined up," and timed the length of ostinati repetitions so as to create a (reasonably) cohesive musical whole. As I later transcribed and learned to play the patterns and phrases that he was showing, I had to make decisions about what was likely intended "as lesson," and what was more probably a flow accommodation.<sup>29</sup>

My next opportunity for data collection was during a trip made just a month after having met Diabate: three weeks in Sukuta, The Gambia, living and working with Mawdo Suso and his son Yusupha, followed immediately by one week in Milan, Italy where I was introduced to Naby "Eco" Camara.<sup>30</sup> As was the case with Diabate, being that one-on-one lesson time would be so limited in both Sukuta and Milan, priority was placed on making video "lessons" that I would later use in self-directed study.<sup>31</sup>

At the Suso compound, drawing from Jessup (1983) and Charry (2000) (both of whose works I had brought with me), I compiled a lengthy (but regionally-appropriate) list of repertory items and asked Mawdo to choose the twenty pieces that he thought

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<sup>29</sup> One additional observation about the format of these first recordings is that, with only one bala (plus an occasional "four on the floor" tapping by me to mark time), there was next to no indication of where phrases began or ended, nor how multiple bala parts might relate to each other, nor certainly of how these bala parts might relate to drumming, dancing, or singing parts. All of that (rather essential) knowledge had to be deduced in the years that followed—and there were many mistakes made along the way. In fact, even today there are some relationships (between jembe and dunun parts on the one hand and bala parts on the other, for example, or between the dancers' steps and the bala accompaniments) about which I hesitate to assert any definitive knowledge. The path, though joyful, is long—and winding.

<sup>30</sup> It is very common for Mande musicians to have—and use—nicknames. These are useful for both recall and differentiation: Which Naby Camara? Oh, Naby "Eco." Do you know Sory Diabate? Oh, do you mean Sory "Baobab?" My initial contact with Naby "Eco" was made through a mutual friend (Italian dunun specialist Danilo Sporgia), with whom I had been exchanging recorded Mande music and other information through online file sharing services.

<sup>31</sup> I was therefore engaging in the participant observation activities that characterize much ethnomusicological fieldwork, but atypically, I was not learning to play the instrument in situ.

merited the greatest attention. For ten of these, we made rather extensive recordings involving two *balas* and several *jelimuso*<sup>32</sup> singers. For the remaining ten, the recordings consisted of only Mawdo and Yusupha, Yusupha playing accompaniment (with some variations), and Mawdo playing corresponding lead parts and song melodies. In Milan, once again it was the *balafola* who made the repertory selections. In that instance the format consisted of some preparatory “noodling,” a locking into the first accompaniment pattern, and then a smooth transition into the next, the next, and so on. In both cases, as it was with Diabate, the performance context was atypical. Here too, the *balafolalu* (Naby “Eco” and the Susos) were sharing what they thought would be appropriate material for a learner. This is not to say that the material was simplified, as such,<sup>33</sup> but rather that variations were largely suppressed and accompaniments were perpetuated longer than they might likely be in a more natural performance context. Nonetheless, as with Diabate, for the Susos and for “Eco,” a balance was kept between flow and pedagogy, with flow occupying the highest-priority slot.

At the end of 2006, Circus Baobab made a second tour with a stop in Guadalajara and I was able once again to arrange a recording session with Sory Diabate. We followed a format nearly identical to that of the previous year, with the exception that this time, I made a few repertory requests so as to be better equipped to make some comparative studies at some point in the future with what I had collected in The Gambia. During this second encounter, even though I had been working on the material that Diabate had given me the previous year, we spent almost no time in a one-on-one lesson arrangement, favouring instead the self-directed video-mediated approach.<sup>34</sup>

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<sup>32</sup> *Muso* is the Mandenkan word for “woman,” so *jelimuso* = female *jeli*.

<sup>33</sup> On the contrary, as I will explain subsequently, it is precisely because the accompaniments were not simplified that the learning process has been so laborious.

<sup>34</sup> The main reason we had for proceeding this way was the limitation on time that Diabate's situation imposed. He was only going to be in Guadalajara for a few days, and since so much

Three years passed before I had another opportunity to interact with a *balafola*—this time, in Toronto, with Naby “Coyah” Camara. As before, having only a few days in which to take face-to-face lessons, in addition to our few hours of lesson time, I proposed video-mediation. And with very little prompting, “Coyah” followed a nearly identical format to that of Diabate, “Eco,” and the Susos: a deliberate suppression of variation to facilitate later “capture” by the student, a preference for maintaining a flowing playing style once the groove had begun, and repertory selection done largely “on the fly” with the *balafola* doing most of the selecting.

The first break in this pattern of data collection occurred in New York later the same year (2009) when I had occasion to meet Famoro Dioubate. With Dioubate, again, video mediation was proposed, but this time, since it was understood that I would be able to return to New York much more easily than to any of the previous filming locations, we recorded fewer pieces, variations were not suppressed nearly as much, and the session was rather more interactive. The flowing playing style, however, continued to reign. It seems once the “play” switch is in the on position, flow just . . . happens. With Dioubate’s videos and this new format, though, the process of transcribing and learning became more involved because the distinction between one *kumbengo* [accompaniment pattern; pl. *kumbengolu*] and the next, and between ostinato and variation, is less sharply defined. This feature of Mande bala music will be discussed in more detail in subsequent chapters.

The second break in the previously defined pattern of data collection came with my next encounter with “Coyah.” I had maintained intermittent contact with all of my teachers—including “Coyah”—and in October of 2011, he invited me to his home in Seattle with the intention of collaborating on the production of a set of instructional

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more information can be conveyed working with videos, we decided that this would be a better use of our time together.

DVDs.<sup>35</sup> We filmed the material for these DVDs, but for technical reasons,<sup>36</sup> decided not to release it, and so the master tapes from that session were added to my private collection. The format for this new material was a sharp departure from anything that I had previously gathered. “Flow” was no longer at the fore. Instead, for the nearly twenty pieces filmed (selected by “Coyah” with some discussion and input from me), three discrete accompaniment patterns were presented and these were played with no variation at all for approximately one minute each.<sup>37</sup>

Several subsequent trips to New York (as well as subsequent visits to Toronto by both “Coyah” and Diabate) bore much fruit, but nearly everything that was filmed followed the same general templates: either (a) musical material intended for a learner and played in a flowing style, but nonetheless atypical for any non-pedagogical context, or (b) material that was stripped entirely of its characteristic “flow” so as to demonstrate an immutable *kumbengo* to a potential learner. This said, there were a few instances in which the camera rolled to capture something more akin to a typical performance style. The Montreal learning sessions (2011, 2012, and 2013), for example, commissioned by my friend and colleague Trevor Ferrier, in which he and I played (immutable) interlocking accompaniment patterns to support the exploratory solo playing of either “Coyah” or Diabate—again, filming these sessions with an eye to undertake some future analysis—

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<sup>35</sup> Perhaps inspired by our 2009 recording session, the following year “Coyah” collaborated with a Washington State-based hand-drum manufacturer to create the first-ever commercial DVD of instructional material for the bala: *Balaphone Instruction* Vol. 1. They released that material in 2010.

<sup>36</sup> Having a limited budget meant that we could not afford a studio, and although we were generously granted access to a local art gallery, the acoustics and lighting in this venue resulted in raw footage that did not meet our (intuitive) standards of quality.

<sup>37</sup> An interesting feature of this recording session (and subsequent ones with other *balafolalu* in which we were attempting to produce expressly instructional material for sale to the public) was that, unlike during previous sessions, the *balafola* found it quite challenging to maintain a consistent, totally variation-free *kumbengo* during an entire minute. Again, these recordings represent a stark departure from what could be considered a typical performance context. I think the difficulty the *balafolalu* have suppressing variation (which includes suppressing the transformation of “errors” into “happy accidents”) speaks volumes not only about what constitutes a typical playing style, but also about how the material is likely to have been originally learned.

did not follow the previously established pattern. With Dioubate also, I had begun to film sessions in which he would simply "play" (i.e., "galumph"), including a few sessions where he was in a live performance context—at a wedding, for example, or in a restaurant. These recordings provided excellent examples of a more typical playing style, and not surprisingly, they were much more revealing in terms of the pedagogical goals discussed in the following chapter. In any case, all of this is to say that a good majority of the raw data for this study is really not typical *in situ* playing. Some degree of adaptation on the part of the "informant"<sup>38</sup> has been at play in wholly most of my opportunities for data collection, the complete chronology of which is shown in the References section at the end of this dissertation. However, this adaptation far from invalidates. The data collected serves not only as source material for learning, but also as evidence of the pedagogical intent of the *balafolalu* with whom I have worked.

### **Transcription and Notation**

When my Mexican colleague, Oscar Justiniano, first offered to share the video recordings that he had made with Alseni Sylla during his study trip to Guinea, my immediate inclination was to get it onto paper (or actually, into a digital form, since I was notating with Microsoft Excel at the time). Is this because, like those ethnomusicologists described (and playfully ribbed) by Nettl (2005: 75), I “can’t say a thing until I’ve written it down?—until I’ve ‘transcribed’ it”? No, not at all. There is obviously rather a lot that can

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<sup>38</sup> I have chosen to use the term "informant" throughout this study despite a possible trend away from its use in ethnomusicological work. (The term is somehow seen to dehumanize the people with whom the researcher is living and/or studying. "Consultant" is a term that does not carry this stigma, although it is not clear to me just why this is.) I refer to my teachers as "informants" here, to mean, simply, "those who inform"—and indeed, it is the *balafolalu* (and other individuals) with whom I have studied that furnish much of the information found in the study. I am confident that even using the term "informant," the admiration and respect that I hold for each of these (human) individuals will come across in my writing.

be said about music (and music making) without ever needing to transcribe. But my primary goal was (and is) learning to play the instrument, and when working with videos, I find that transcription greatly facilitates acquisition.

Music is necessarily bound by time; music *requires* the passage of time in order for it to be experienced. The transcription, though, can be experienced irrespective of time. A visual representation of music—provided that the representation is more than just an impressionistic one—must be stretched out along a timeline: one event, *then* another, *then* another. That visual representation can then be used as a “roadmap” since, for all practical purposes, what you see on the paper now—not what all those little lines and symbols *represent*, but the lines and symbols *themselves*—will be the same thirty seconds, or thirty minutes, or thirty days later. Unlike time-bound media (music, film, dance, etc.), time-independent media (drawings, paintings, photographs, etc.) can be considered “all at once.” As such, visual representations of music allow one to quickly find one’s place, to reference particular events along a timeline, and to more carefully analyze event relationships. These are the main reasons that I have for transcribing. I use transcriptions as a pedagogical and pattern-recognition tool—much as I might do with any other visualized data. But in this case visualization is also a step toward embodiment (learning “to do”), and once this has been done, once the sequence of movements and sounds has become part of one’s experience, the transcription can (and in most cases should) be put aside.

When Mande bala music is mediated through video or audio—as was the case with the Alseni Sylla recordings—“getting it in the hands” the first time around is made far easier when, at a glance, note for note, the student can see what must be done. As one’s familiarity with the instrument and the sounds of the repertory develop, one simultaneously develops the capacity for learning directly from the video (or the CD) without transcription aids. But even now, for me, the transcription “roadmap” continues to



prove invaluable for explanation and illustration, for analyzing (and memorizing) long passages, for working out polyrhythmic independence, and for recognizing patterns.<sup>39</sup>

But if visual data aids learning (in terms of rate of acquisition, say, or retention), I have found that learning is aided further when I can use a combination of both visual *and* aural data—and contemporary technology makes this possible like never before. Even though I made my first transcriptions of Justiniano's recordings of Alseni Sylla using an exclusively visual system (which I will describe below), I moved quickly to adopt the use of Harald Loquenz's Jaliya V4 (JV4) software with which one gets both visual and audio feedback. JV4 uses a modified version of Time Unit Box System (TUBS) notation. TUBS notation was developed in 1962 by Philip Harland as a means of conveying African (primarily Ewe) ensemble drum music at the UCLA Institute of Ethnomusicology. It was later introduced to the broader academic community by James Koetting (1970) and has since found traction both inside and outside academia.<sup>40</sup> Since I always found TUBS to be a highly accessible and user-friendly notation system, introducing JV4 software into my transcription process was relatively painless.

Now, although Harland may have developed TUBS in response to circulating notions of an inability of Western notation to successfully communicate "African rhythm" (see Agawu [2003: 64–68]), this is not the reason that I gravitated toward the box system. I employed TUBS for its immediacy and ease of use to quickly notate percussion music—especially *ostinati*—of all kinds. However the use of any notation system to represent a non-notated music accords advantage to those who, through a

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<sup>39</sup> When learning almost exclusively from video and audio recordings, as I have done, having a visual "capture"—a snapshot—of a collection of musical sequences also facilitates mental mapping: who played what, when, and for what piece. It is far more convenient to be able to refer to something physical, something spatial, rather than say, having to navigate through a collection of recordings—or experiences.

<sup>40</sup> See, for example, Oyelami (1989, 1991), Mathews (1992, 2013), Dworsky and Sansby (1995), Cooke and Micklem (1999), Micklem, Cooke and Stone (1999), Wilcken (2004), and Nas (2015-web).

continued practice with that system, have *already* become conversant with it. For example, for those who do not have a background in Western music, the use of Western notation obfuscates rather than clarifies, alienates rather than communicates. Why should people with no background in Western music be expected to undergo training in Western music in order to be able to read a report on the Mande bala—or any other non-Western instrument?<sup>41</sup>

As regards Western notation specifically, the process by which one acquires conversancy with the system—namely, training in Western music—also invariably shapes one’s understanding of how music “works,” of how music “ought to sound,” and indeed, of what music even is. A poignant illustration of this can be found in Vera Flaig’s case study number one in her analysis of contemporary jembe<sup>42</sup> pedagogy (2010: 213–20), which highlights how differing (preconceived) musical values leads to conflict between jembe master Famoudou Konaté and one of his long-time German students and collaborators. As with the jembe, Mande bala music does not fully conform to the set of norms that has been established in Western music.<sup>43</sup> Conveying bala music using Western notation, I feel, one runs the risk of, as Knight (1984b: 25) puts it, “implying

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<sup>41</sup> If an airplane mechanic of four years decides she would now like to move into the field of motorcycle mechanics, no doubt those four years fixing airplanes would both (a) reduce the time required for her to learn to repair motorcycles and (b) provide insights that fellow motorcycle mechanics wouldn’t have. But should all students of motorcycle repair be expected to first spend four years fixing airplanes? Of course not: that would be like starting a course in conversational French and being told that you must first learn to speak Danish.

<sup>42</sup> The jembe is a carved, wooden, goblet-shaped, single-headed drum played with the hands. Jembes are commonly played in ensembles that include at least three double-headed cylindrical dunun bass drums (kenkeni, sangban, and dununba), each played with its own accompanying bell pattern. Jembe-based drum and dance ensembles have become a de facto popular phenomenon in North America and Europe (and are becoming ever more common in South America and East Asia as well). Rainer Polak (2000: 8) describes the “unparalleled boom” that the jembe has experienced in recent decades, citing an increase in concert performances, CD releases, drum classes, and instrument exportation as evidence of its continuous rise in popularity. Jembe ensembles are now a staple component of many undergraduate music programs in universities everywhere, and jembe players (*jembefolalu*, sing. *jembefola*) are invited to teach and conduct workshops the world over.

<sup>43</sup> The very fact that Mande music is not normally conveyed in writing speaks to how different the perspectives of Mande-trained musicians and Western-trained musicians are likely to be.

things that are not there.” While I acknowledge that this argument could be made of any system of signs—it may be that I favour the TUBS system for no other reason than *because* I have developed a greater conversancy with that system—in my experience (which includes years of studying alongside, and also teaching, students with no training in Western music), the TUBS notation is simply more intuitive, easier to use, faster to learn, and less alienating than Western notation. Also, because TUBS is highly adaptable and totally “open source,” it does a better job of avoiding “implying things that are not there.” In this dissertation, therefore, I use two versions of TUBS. In addition to screenshots from Loquenz’s JV4 software (which are described in [Figure 1](#)), a modified, vertically-oriented version will be used here to convey certain kinds of visual information.

In 2002, while studying at the International Center for African Music and Dance at the University of Ghana at Legon, I set about learning to play the Dagara-Birifor *gyil* (a fourteen-key pentatonic xylophone). At that time I sought a means to visualize a particular sequence of notes that my teacher wanted me to learn but that was giving me some trouble. I was already familiar with TUBS notation of course, and had seen Trevor Wiggins and Joseph Kobom’s (1992: 45–58) application of that notation to *gyil* music, but felt that their version of TUBS was unsatisfactory for my purposes. Wiggins and Kobom chose to maintain the horizontal orientation of Harland and Koetting’s (1970) original design, and instead of using letters to represent stroke types as Koetting had done, used numbers with lines above and below to indicate which of the *gyil*’s fourteen keys should be struck. (On their system, right- and left-hand strokes are distinguished vertically, the top row representing right-hand strokes, the bottom row, left-hand strokes.) An example of Wiggins and Kobom’s notation (the first line from the piece *Derkpee*—equivalent to four bars of Western notation) is shown in [Figure 2](#). I found that turning the axis of the system vertically while visually “stretching out” the single boxes to represent

the fourteen keys of the *gyil*, I was able to achieve the desired effect.<sup>44</sup> On this vertically-oriented system, left- and right-hand strokes were differentiated (with the use of pen for the one, pencil for the other). I also opted to use note letters instead of numbers, since my instrument was tuned to a Western (diatonic) scale. With a traditionally-tuned instrument, numbers, or some other neutral symbol set, would likely be preferable. The adaptation of this system to Justiniano's (and Sylla's) bala recordings several years later was obviously very straightforward, with further modifications (double bar lines to indicate repeats, different box types to distinguish left- and right-hand strokes, etc.) being developed as needs arose. The current incarnation of the notation, and the one that will be used in this dissertation, is described fully in [Figure 3](#).

There are a few aspects of Mande bala music that confound its capture in a notated form. Two of these must be addressed here. The first and most salient is the ambiguity of where cycles “begin” and “end.” Knight (1984b: 24) has observed that:

Mandinka musicians do not give much thought to where a kumbengo 'begins' or 'ends,' since it is cyclic. Thus the transcribed form of a kumbengo is an arbitrary slice, based on what form seems best to convey its character, aided in some cases by how it is presented in teaching.

If this conception is accurate, then perhaps a more ideal notation would be a three-dimensional one in which the “piano roll” physically folds back onto itself to create a “loop.” But the important question must be asked: How accurate is Knight's conception? There is no question that Mande bala music, like all *jeli* music, as well as Mande drumming (and many other musics from throughout the African continent and beyond), is both cyclical and metrically polysemous. But this alone does not confirm that there is no definitive starting point for patterns. The cyclical nature of Mande *kumbengolu* cannot

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<sup>44</sup> There have been many vertically-oriented notation systems, of course, including the vertical TUBS application by Moses Serwadda and Hewitt Pantaleoni for African dance-drumming (1968), but at the time (in 2002), I was unfamiliar with these, so the turning of the axis was for me a novelty.

preclude the possibility for (or the need of) an identifiable starting place within the cycle.

Charry (2000: xxviii) addresses the ambiguity of starting points in Mande music thus:

The apparent lack of a definitive starting point in a cycle is also difficult for non-Africans to grasp and presents serious notational problems. One of the most common questions that American jembe students ask of their African teachers is Where is one? This question does not make sense from a local African point of view. Pieces might best be thought of as starting *up* rather than starting *at a specific point in time*. (Emphasis mine.)

Even after ten years of bala study, I myself still cannot provide an unequivocal answer to the question of whether cycles do or do not have definitive starting points. There are several reasons for this. First, the music is not notated by Mande *jelilu*, so attempts to reduce it to writing have in nearly all cases been undertaken by non-Mande (usually WAM-trained) scholars and musicians. No top player of bala music has, him- or herself, ever had call to enter the discussion in writing; thus far, it has always been mediated through a second party. Second, although recordings aligned to rhythmic frameworks (like a drum set backbeat on two and four) can serve as excellent indicators of which point along a cycle is typically interpreted as "one," this alone is not enough. Can we be sure that the assigning of "one" to that place along the cycle was not simply a composition decision? Perhaps musicians who make recordings with "one" in a place that deviates from a majority norm are, as Locke (2011: 48) suggests, simply exploiting multidimensionality as a creative compositional exploration. (My guess would be that Abou Sylla [2011-disc] has done exactly this with *Sorsorne*, which aligns patterns and melodies internally in ways that run counter to nearly every other source for that piece.) Third, any part of the socio-musical whole (beats in a musical cycle, dancers' steps, song cadences, etc.), could be falling on up beats, down beats, or somewhere in between, depending on one's perspective. Even though I have studied, that is, tried to learn "to do," many musics that operate cyclically (Mande bala, Mande drumming, Ewe drumming, Dagomba drumming, Senufo *kpoye* [xylophone], Lo-Birirfor *gyil* [xylophone],

etc.), owing to different (and even shifting) frames of reference, unambiguous communication about the "where's one" problem has always been elusive. The following anecdote, related by Ewe percussion instructor Alfred Ladzekpo (to Huib Schippers [2010: 7]) is illustrative: "I had to run out and ask my brother Kobla, who was more experienced: 'What do these students mean? They are asking where the *one* is in this rhythm.' This is not a concept in our music: we see the rhythm as a whole. In the end, we just decided the *one* was on a particular beat in the bell pattern, and everybody was happy." (Emphasis in original.) The assigning of "one" by Ladzekpo here to satisfy the needs of the students may well have been both arbitrary and subject to change. And if the "where's one" problem can be equally applied to bala music-making practice, the assignment of "one" could be similarly arbitrary and variable.

There would be profound implications for both pedagogy and scholarship if the conception could be confirmed one way or the other. There are at least two possibilities: (1) There is no "one" as such. Players understand the cycles and phrases as a series of discrete, non-hierarchical units and cultivate the flexibility to perceive departures to and from any point in the cycle. In one performance (or recording), a player/composer might assign "one" to a particular place in the cycle; in another, the same player assigns "one" to a different place in the same cycle—sometimes even to a point in the cycle where neither "beat" nor note is sounded. On this conception, musicians could even shift their perspective (as frequently or infrequently as they choose) in the midst of a given performance. (2) There is a "one." Players maintain a consistent perception of the counts in the "metric matrix" (Locke, 2011) throughout a given performance and from one performance to the next. Even if they don't always start cycles "on one," they do have a concept "of one" and could communicate it thus. Even though a listener's perspective as regards which pulse corresponds with "one" might be pulled to a different pulse in the

course of a given performance, the musician maintains a consistent perspective on beat and pulse relationships.

I have seen how Mande players use certain points in a given cycle as markers to assess how well they (or their students) are lined up with the other participants—the markers being certain notes on certain instruments, the steps of the dancers, standardized “stock” phrases,<sup>45</sup> or cadences in songs, for example. On this conception, cycles could be likened to playground merry-go-rounds. The merry-go-round is always turning but the relationships (between pulses and beats) are fixed. As long as a player “jumps on” at the right spot (that is, without compromising those relationships), it really doesn’t matter on which beat or pulse they’ve begun. But I want to know if there really is a “correct” way to perceive (and therefore, notate) these patterns. If there is, then we scholars are doing the music and its practitioners a disservice (not to mention potentially wasting the time of new learners), by communicating it erroneously. In my experience, when musicians who are playing together are not feeling “one” in the same place, there is a much higher likelihood that one of the musicians will either (a) “fall off the merry-go-round” (or come back onto it in a way that indeed does compromise the established melo-rhythmic relationships), or (b) pull the time in directions that—unintentionally—destabilize the melo-rhythmic framework upon which improvisations are built, songs are sung, or dances are danced.<sup>46</sup> However, lacking an unequivocal answer, for the purposes of this dissertation, following Charry (as well as Knight, Jessup, and other scholars of Mande music), I simply do my best based on how I most naturally feel cycles and patterns to assign “one” to a particular beat or pulse. Wherever possible, this “best

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<sup>45</sup> Lucy Durán (1981: 189) refers to the “key phrase,” the “point in the kumbengo to which all variation must return.”

<sup>46</sup> Some might argue that it is precisely from this rhythmic destabilization that the polyrhythmic nature of Mande music (and other music-making practices on the African continent) derives its “dynamic energy.” I would contend simply that destabilization is not a necessary condition for that dynamic energy, since it clearly does not happen in all cases.

guess" is corroborated either by my *balafolalu* teachers or by commercial recordings of Mande musicians.

The other transcription issue to address is the matter of the *roulement* or roll (discussed more fully in Chapter 6). This term, though not totally universal in its application, refers to the phenomenon of introducing often very fast, usually descending, sequences of notes to add variety and interest to the exposition of the *kumbengo*. TUBS notation is great for certain kinds of capture, but TUBS is based on the "density referent" or the fastest regularly occurring pulse.<sup>47</sup> If a *roulement* is introduced, the density referent changes, since now the fastest pulse is double (or, in the case of a triplet roll, double-and-a-half) as fast as the fastest pulse of the *kumbengo*. In order to accommodate this sudden increase in density, the number of boxes in between each pulse of the *kumbengo* would suffer a corresponding increase, rendering the notation far less legible. When working with Loquenz's JV4 software, the density referents of individual beats can be modified (though usually to the detriment of the audio playback accuracy),<sup>48</sup> but to deal with this problem when using my modified vertical TUBS, I usually notate *roulements* in a separate grid, with an appropriate indication within the grid of the notated *kumbengo*. For the purposes of this dissertation, however, I will notate rolls using JV4 only.

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<sup>47</sup> Vera Flaig (2005: 205) has summarized the literature on the "density referent" concept as follows: "See Robert Kauffman 'African Rhythm: A Reassessment,' *Ethnomusicology*, Vol. 24, No. 3, and 'What Do We Know About African Rhythm?' by James Koetting and Roderic Knight in *Ethnomusicology*, Vol. 30, No. 1. The idea of using the quickest common pulse to notate and analyze African music came about as the result of Richard Waterman's theory of the 'metronome sense' (Waterman: 1952). This idea was developed further by Mantle Hood ('density referent,' 1971) and Ruth Stone ('inner time,' 1984)." (With this last reference, I think Flaig is in fact referring to Stone's *Let the Inside Be Sweet: The Interpretation of Music Event among the Kpelle of Liberia*, which was published in 1982.)

<sup>48</sup> To accommodate this, sometimes the beat-to-pulse ratio must be adjusted, occasionally leading to a counterintuitive rendering of the "strong beat-weak beat" relationship.



## Bala Tuning

The way an instrument is tuned will bear on both its transcription and its analysis.<sup>49</sup> In each of the notation systems used in this dissertation (JV4 and TUBS), note names correspond to a diatonic keyboard tuning. As was mentioned previously, most balas have between seventeen and twenty-two keys. My own bala<sup>50</sup> has twenty-one keys, arranged as follows (from lowest to highest<sup>51</sup>): G<sub>1</sub>, A<sub>1</sub>, B<sub>1</sub>, C<sub>1</sub>, D<sub>1</sub>, E<sub>1</sub>, F<sub>1</sub>, G<sub>2</sub>, A<sub>2</sub>, B<sub>2</sub>, C<sub>2</sub>, D<sub>2</sub>, E<sub>2</sub>, F<sub>2</sub>, G<sub>3</sub>, A<sub>3</sub>, B<sub>3</sub>, C<sub>3</sub>, D<sub>3</sub>, E<sub>3</sub>, F<sub>3</sub>. On this instrument C<sub>1</sub> corresponds to middle C. (The keyboard used in the JV4 screenshots has twenty-two keys, adding a G<sub>4</sub> above F<sub>3</sub>.)

Diatonically-tuned balas are common. For balas outside Mande, I would guess the diatonic tuning is the most common tuning.<sup>52</sup> But traditionally—that is, in Mande—the bala is not tuned diatonically. Charry (2000: 165) has summarized research on bala tuning as follows:

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<sup>49</sup> Bala tuning also bears on pedagogy. This is discussed in Chapter 4.

<sup>50</sup> I have several, but there is one that I use most often.

<sup>51</sup> In the conception of many bala- (and other West African xylophone-) players, the order would be from highest to lowest, since for those players, the terms "low" and "high," and "up" and "down" refer not to pitch, but to the physical characteristics of the instrument. On that conception, the lower-pitched notes are called "high" notes because they are physically higher up on the trapezoidal keyboard. In fact, Charry (2000: 309) has asserted this to be true of *jeli* instruments universally: "Designations of pitch height on all the *jeli* instruments are the opposite of Western terminology: *sanfe* (Md: *santo*; up, high) designates the bass (larger or longer) strings or slats; *duguma* (Md: *duuma*; down, low) designates the treble (smaller or shorter) strings or slats. *Yele* (to ascend) designates moving toward the bass end of the instrument, and *jigi* (Md: *jii*; to descend) designates moving toward the treble end." The bala is typically learned with the student and teacher facing each other, each playing their own instrument. (See Chapter 4.) The instruments are parallel to each other, but may be oriented in one of two ways usually depending on the students' preference: (1) each bala is oriented to align lower-pitched slats to the players' left, or (2) the balas are in "mirror image" orientation, such that one player has lower-pitched slats to the left and one has them to the right. Famoro Dioubate, for instance, plays with the lower-pitched slats on his right-hand side. All of my other teachers play as I do—with the lower-pitched slats on the left. Throughout this dissertation I make observations about "sticking" (the distribution of struck notes between the two hands) from this right-handed perspective. These observations would simply be reversed for "southpaws."

<sup>52</sup> I base this assertion on my own limited experiences participating in and conducting workshops in which students bring their own instruments, as well as on my (again, limited) knowledge of bala sales in North America (Canada, the US, and Mexico), and further, on observations made of balas played by non-Mande players online. Further research would be needed to confirm this definitively.

Gilbert Rouget (1999-disc, Rouget and Schwarz 1969) did extensive work measuring Maninka (Malinke) *balas*, albeit on a limited sample, and concluded that they are tuned equiheptatonically, seven equal intervals to the octave. Lynne Jessup (1983) did measurements on a larger but less select sample and came to the same basic conclusion, as did Panneton (1987: 195–96), who used only one instrument and measured with and without the gourd resonators.

Notwithstanding Knight's (1991: 5) subsequent identifying of "an individuality that manages to express itself within the orally-transmitted standard tuning" (which is reflected in Charry's own observation [2000: 167] that *balas* "appear to reflect tuning preferences of the regions they come from"),<sup>53</sup> the *bala* can be said therefore to, in Charry's (2000: 167) words, "roughly conform to a conception of an equal seven-tone scale."<sup>54</sup> The tunes played on my diatonically-tuned instrument, then, have been adapted to be played on that instrument. As such, I think it is important to avoid drawing too heavily upon Western theoretical notions (of scale degrees, for example, or of pitch and interval relationships). While yes, the instrument is diatonic and many of the same rules of Western theory apply,<sup>55</sup> they must not *define* how the instrument is played.<sup>56</sup> (None of my teachers *learned* to play on diatonically tuned instruments, but rather, learned on equiheptatonic instruments.) I do (as do my teachers) borrow some

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<sup>53</sup> And notwithstanding Innes' (1974: 20–21) identifying of a *bala* that bears an "idiosyncratic" tuning that corresponds with the *hardino* tuning of the *kora*.

<sup>54</sup> Further evidence to support the notion that the standard (or theoretically ideal) tuning for the *bala* in Mande is an equidistant heptatonic one is Charry's (2000: 166) highlighting that "The set of instruments measured by Rouget was an ideal set to be measured, and Knight's (1991a: 5) comment that Rouget 'happened upon the three best-tuned *balos* in all Mande!' is probably true. The Dioubate (Diabate) brothers recorded by Rouget (Sidi Mamady, Sidi Moussa, and Sidi Karamon) were the most renowned players of their time in Guinea." This observation is corroborated by Famoro Dioubate (Per-2010b, 2012), who has emphasized the "heavy respect" these players were accorded in their time. It is very plausible to suppose both that the Dioubate brothers would have taken great care in tuning their instruments and that other *bala* players (contemporary and of subsequent generations) would have sought to emulate the tuning they used.

<sup>55</sup> I recall a session with Famoro Dioubate (Per-2010a) in which I asked about the validity of a set of *kumbengolu* that I had learned for playing the piece *Soli*. I asked, "So then, what is this? Is it *Soli*?" Dioubate replied, "Yeah it's good. It's *Soli*. But . . . the tune . . . the tuning—the really tuning . . . you stay here . . . in C."

<sup>56</sup> This is changing. As will be explored further in Chapter 6, some aspects of the adaptation process are coming to shape the way the instrument is now approached.

terminology from Western theory and speak of thirds and fourths and fifths, for example. But when I do this, I am really talking about sets of three, or four, or five slats, and not, of major and minor thirds, fourths, and fifths—not as such, in any case. Again, the concepts do apply. Dioubate (and Diabate), especially, would agree that a C–E third is not the same as a D–F third (because one is major, the other minor). But the point stands that such concepts are adapted from an external system. On an equidistantly tuned instrument, a third is a third is a third.

### **Terminology and Orthography**

The term Mande is only one of many terms in common usage today (both in academic writing and "on the street"). Mande, Manding, Manden, Mandeng, and even in some contexts, Mali, all have currency in English.<sup>57</sup> There are at least three classes of "object" to which any of these terms could be referring. Following Charry (2000: xxii), these are: (a) a homeland, (b) people, and (c) a language classification. The map shown in [Figure 4](#) depicts Mande language distribution<sup>58</sup> according to current data curated at the Web edition of the *Ethnologue: Languages of the World* reference work (Lewis et al: 2015-web). At the Ethnologue website, language maps organized by country and/or region show the approximate area of language family distribution.<sup>59</sup> According to the current system of classification, Mande is a subdivision of the Niger-Congo language branch at

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<sup>57</sup> In other languages, other terms are used, such as the French *Mandingue*, the Spanish *Mandingo/a*, and the Portuguese *Mandé/ê*.

<sup>58</sup> This map, of course, is only an approximation. In many parts of the region depicted here, languages belonging to the Mande classification are not the only language used in the area. Also, modern African cities (like most cities around the world) are highly cosmopolitan, so many more languages than those of the Mande family are spoken in the urban centers.

<sup>59</sup> For an explanation of how these maps are compiled, see the Language Maps page in the About section of the Ethnologue website (Lewis et al: 2016-web). To create the map shown in [Figure 4](#), I simply collected the individual country maps and resized them to a uniform scale using Adobe Photoshop. I then printed a hard copy and (by hand, using a light-table) traced both the national border divisions and the divisions for the Mande language family for the entire region onto a single sheet of paper.

the same classification level as Atlantic-Congo, Kordofanian, and one unclassified language of Ivory Coast called Mbre (mka).<sup>60</sup>

All three of "a homeland," "people," and "a language classification" have their current geographical distribution owing to a thirteenth-century unification of a collection of city-states under a single ruler: the lion king, Sunjata Keita. This unification (and its perpetuation and expansion by subsequent generations of rulers until the last decade of the sixteenth century [Charry, 2000: 43]), coupled with a centuries-long trans-Saharan gold and salt trade (developed in the early centuries of the C.E. and strengthened by the arrival of Arab traders in North Africa in the eighth century [ibid, 2000: 38]),<sup>61</sup> facilitated the growth of Mande from its origins in the borderlands between present-day Guinea and Mali into an empire which at its height stretched from Gao in the east to the Senegambian coast, from Timbuktu in the north to the forested regions now found in central Côte d'Ivoire and Liberia (ibid, 2000: 1).<sup>62</sup>

However, not all of the people speaking Mande-classified languages could be said to represent the music under examination here. As is depicted in [Figure 5](#), the Mande language family is subdivided into Eastern and Western. Eastern Mande languages such as Dan (dnj), Guro (goa), and Bisa (bib), are not considered in this study. The Western subgroup is further subdivided into Central-Southwestern and Northwestern. Of the Northwestern languages, Soninke (snk) is considered, but the Boso, Bobo, and Samogo

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<sup>60</sup> In this dissertation, the first time any individual language is named, the three-letter ISO 639-3 code is indicated in parentheses immediately following. ISO 639-3 is an internationally recognized language classification authority and it is the one used by Lewis et al. (2016-web) at the Ethnologue website.

<sup>61</sup> The tenth-century Ghana empire of the Soninke people (belonging to another Mande language subgroup) predates the Mali (early Mande) empire. At its height the Ghana empire (Wagadu) spanned an area that runs approximately along the 16<sup>th</sup> parallel near the border between present day Mali and Mauritania. Koumbi Saleh in present day Mauritania was likely its historical capital. The modern day nation state, Ghana, takes its name from this ancient empire. (See Charry [2000: 37–40].)

<sup>62</sup> For a concise summary of the prehistory and history of this part of West Africa (with an emphasis on the "areas inhabited by people speaking Mande languages"), see Charry (2000: 29–48).

languages are not. The Central subgroup of the Central-Southwestern branch is comprised of Manding-Jogo and Susu-Yalunka. The languages Susu (sus) and Yalunka (yal) are two of those considered in this study. Among the Manding-Jogo languages, those encompassed here belong just to one of the two subgroups comprising the Manding-Vai subgroup. Neither Vai (vai) nor Kono (kno) are under study in this dissertation. When I refer to "Mande music," therefore, I am referring to the music-making activities of Susu-Yalunka, Soninke, and Manding-Mokole languages only. These are highlighted in [Figure 6](#).<sup>63</sup>

The Manding-Mokole languages include Kuranko (knk), Konyanka Maninka (mku) and Sankaran Maninka (msc), Eastern and Western Maninkakan (emk, mlq) and Kita Maninkakan (mwk), Jahanka (jad), Bamanankan (bam), Jula (dyu), and the Senegambian language Mandinka (mnk). Mandinka, considered along with the Maninka and Maninkakan languages (mku, msc, emk, mlq, mwk), make up what Ethnologue refers to as a "macrolanguage" called Mandingo (man). Rather than opting for this term, in order to allow for a means to distinguish the stylistic musical characteristics of the individual *balafolalu* who have informed this study, I will distinguish between the Mandinka language and what I will refer to as Maninkakan—comprising all of the remaining Mandingo (man) languages.<sup>64</sup>

The instrument under examination in the present study is perhaps more commonly known in North America by the French term *balafon* (additionally spelled in English as *balafone* or *balaphone*). But throughout this dissertation (including in its title), I have chosen to refer to the instrument using the Maninkakan term *bala*. Charry (2000: 138)

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<sup>63</sup> Notwithstanding regional variants, the Mande peoples across the region highlighted in the map shown in [Figure 6](#) define a cohesive whole in terms of the characteristics of their music-making practices: instruments, repertory, performance contexts, playing style, etc.

<sup>64</sup> In casual conversation I might use any of Maninkakan, Maninka, or the French *Malinké* to refer collectively to these five languages: Konyanka Maninka, Sankaran Maninka, Eastern Maninkakan, Western Maninkakan, and Kita Maninkakan. For this dissertation, I will consistently use Maninkakan to refer to the languages and Maninka to refer to the ethnic designation.

has speculated that the term *balafon* (*balafo*, *balafeu*, *balafou*) "probably entered into European usage from *bala fo* (to play the bala)." If this is true, then this term was likely borne of some kind of translation error, corruption, or linguistic misunderstanding on the part of the early European chroniclers. I see no reason to adopt the use of French terminology, when a perfectly viable word in a local language could be used instead.<sup>65</sup> Writing about pronunciation and the adaptation of French orthographic tendencies to English (and in particular, about his preference for the term *jembe* over the French *djembe*), Charry (1996: 66) has explained:

Since most African languages have no indigenous writing system, European scripts have been adopted, and as a result, spelling is also cause for confusion. For example, the English *j* sound is represented in West African French writing as *dj*, *di* or sometimes *dy*, and the English long *u* sound is written as *ou* in French. . . . The French spelling "*djembe*" has been accepted by a public unaware of the colonial legacy implied in such a simple matter as spelling. It is not a French instrument, but an African one. Africans and non-Africans alike are developing systems for writing Bamana and Maninka using phonetic spellings rather than the ornate French that harkens back to the colonial era. The simplification of French spellings such as *djembe*, *Mandiani*, and *Doundounba* to *jembe*, *Manjani*, and *Dundunba*, addresses this problem while promoting African pronunciations.

I echo Charry's sentiments here. It is not a French instrument, but a Mande one. As such, I would prefer to use local terminology (and simplified English orthographies) wherever possible. However, my teachers—the informants for this study—speak a variety of Mande languages. (See Table 1.)

*Table 1. Mande Languages Spoken by Balafolalu informants*<sup>66</sup>

<i>Balafola</i> Informant	Mande Language(s) Spoken
Camara, Naby "Coyah"	Susu
Camara, Naby "Eco"	Susu
Diabate, Sory	Susu (Maninkakan)

<sup>65</sup> This is because I am writing in English here. When communicating in French, I do refer to the instrument with the term *balafon*.

<sup>66</sup> Diabate considers himself to be a native Susu speaker, but his father is bilingual, speaking both Susu and Maninkakan. As such, Diabate has acquired basic skills in Maninkakan. Dioubate grew up speaking Jahanka (which he describes as more closely related to Mandinka than Maninkakan), but is now also fluent in Maninkakan.

In the Susu language, the instrument is called *balanyi*<sup>67</sup> or *balani*, in Mandinka it is a *balo*, and in Maninkakan and Bamanankan, a *bala*. Given both the variety of names in local languages and the linguistic heterogeneity of my teachers, it might appear sensible to opt for a more generic term like *balafon*, which Charry (ibid: 139) points out, can be "generally applied to all West African xylophones." But it *is* a Mande instrument. So if the mandate is to promote local terminology, how to decide which local term to use?<sup>68</sup> My decision to give preference to *bala* over *balanyi* or *balo* is principally based on the practical consideration that there is simply not enough known yet about the stylistic differences of *bala* playing across language communities.<sup>69</sup> And since Charry's is the most complete account to date and he considers *bala* to be an adequate term<sup>70</sup> to "refer explicitly to the Maninka/Susu instrument," (ibid: 139) until a comprehensive comparative study can be done, I must consider the Maninkakan/Bamanankan term to be applicable to the Maninka instrument as well as the Susu one. Some of the differences between the Susu playing style and the Maninka one are explored further in Chapter 3.

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<sup>67</sup> See Aoubacar Touré (2004: 146). The Kuranko name for the instrument is similar to the Susu name: *balanje* (Jackson, 1977) or *balangi* (Jenkins, 1979-disc).

<sup>68</sup> Charry (2000: 140) has generated a map depicting the distribution of the various xylophone types used in West Africa ranging from the Balanta *kadj* in Senegambia to the Sissala *jengsi* in Ghana and Burkina Faso. I cannot confirm that every group (delineated linguistically or by ethnic designation) uses the general term when speaking languages other than the local dialect, but many do. However, the Eastern "half" of these (split along a dividing line roughly traceable through Southern Mali and North-Western Côte d'Ivoire) are tuned pentatonically. Thus, my avoidance of the term *balafon* here (and my preference for a Mandenkan term), additionally helps signal the heptatonic tuning of Mande instruments.

<sup>69</sup> To be sure, differences are indeed articulated. Abou Sylla, for instance, has shared his impressions with Williams (2006: 73), who relates: "Susu are mainly known for their virtuosity and 'flexibility' on the balafon as instrumentalists while the Malinké are more renowned both for their singing ability and for their knowledge of Mande history and customs." But a more comprehensive comparative study than Charry's has yet to be undertaken.

<sup>70</sup> See Table 10 in Charry (2000: 141–42) for a list of sources dealing with West African xylophones organized by instrument name.

## CHAPTER 3

### The Goals of Bala Pedagogy

Popham and Baker (1970b: 82) regard decisions made by educators to be of two basic kinds: (1) decisions about the procedures used to meet instructional objectives, and (2) decisions about what those objectives should be. The purpose of the present chapter is to identify and articulate the objectives—the goals—of bala study.<sup>71</sup> In order to know how best to use (or, if need be, evaluate and redesign) digitally mediated pedagogical material, it has to be clear what learners are expected to be able to do once instruction has taken place. The four-step instructional model advocated in this study requires that pedagogical goals be expressed in unambiguous terms of observable behaviour. But before arriving at the precise, behaviourally-stated objectives that would allow for empirical assessment (of both learner and teacher), there must first be an understanding of bala music more generally, both in terms of the contexts for performance and in terms of the characteristics of the music itself. The groundwork for arriving at this understanding is set forth below.

#### The Four "Spheres" of Mande Music

In *Music in Africa: The Manding Contexts*, Knight (1984a: 53) discusses the "many facets" of music-making practice in Mande culture ranging from strictly amateur to professional and virtuosic. He goes on to compare the professional performance practices of *jellilu* on the one hand and *tantango*<sup>72</sup> drummers on the other, differentiating

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<sup>71</sup> Naturally, different people will have different goals. The enterprise is not monolithic. Here I am referring to the general goal of becoming a "competent player." (See note 22.)

<sup>72</sup> The term *tantango* (also *tangtang* or *tangtango*) can refer generally to any of a trio of drums usually played in a set. The drums individually are called *sabaro* (lead drum), *kutiriba* (large



these as two distinct realms. In his 2005 DVD release *Mande Music and Dance* (a revised edition of the videos *Music of the Mande Parts I & II* [1992-vid] and *Music of the Mande Part III: Mandinka Drumming* [1995-vid]),<sup>73</sup> Knight organizes the music-making practices of the Gambian Mandinka into three general categories:

1. Music for the Warriors, Hunters, and Ordinary People
2. Professional Music: Mandinka Jaliyaa with the Kora
3. Gambian Tantango Drumming (Knight, 2005-vid)

Using a similar schema, Charry (2000: 1–3)<sup>74</sup> organizes the professional<sup>75</sup> music-making practices of Mande peoples into what he refers to as "spheres." Three of these are characterized as traditional:

1. music related to hunters' societies and their legendary hunter heroes, sung to the accompaniment of the *simbi*, a seven-stringed calabash (gourd) harp;
2. music of the *jelis* (called *jeliya*), played on the *bala* (xylophone), *koni* (lute), and *kora* (harp), which is associated with rulers, warriors, traders, and patrons; and
3. drumming related to various life-cycle, agricultural, and recreational events played on the *jembe* (struck with the bare hands) and *dunun* (struck with a stick) in Mali and Guinea or the *tantango* (struck with one hand and one stick) in the Senegambia.

One is considered modern:

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*kutiro*), and *kutirindingo* (small *kutiro*). All three are single-headed conical drums played with one hand and one short stick. The ensemble can also be referred to by the name *Seruba* (*Saoruba*) in reference to a popular dance rhythm played by the ensemble (Knight, 1974: 33), the singing style that accompanies the drumming (ibid, 26), and the event at which the drums are played (Charry, 2000: 237). The *Seruba* ensemble represents the Western (Senegambian) branch of the Mande drumming continuum. For more on *tantango* drumming, see Knight (1974: 25–34), Knight (1984a: 53–90), and Charry (2000: 235–41), as well as Ly (1992-disc) and Zanetti (1997-disc). (For reviews of these discs, see Knight [1996: 145–47] and Charry [1998: 184], respectively.)

<sup>73</sup> A fourth volume covers the Balanta xylophone, though I have never actually seen this volume and cannot attest to whether it was released. According to data reported at Ethnologue.com, Balanta (bjt) is not a Mande language, but an Atlantic-Congo one. Knight (2010-vid) has included one short clip of Balanta xylophone playing on his 2010 DVD release *Music of West Africa: The Mandinka and their Neighbors*. For a review of the 1992 and 1995 videos, see Charry (1997: 325–26), and of the 2005 DVD, Charry (2008: 154–56).

<sup>74</sup> Charry originally offered the "four 'spheres'" schema in his PhD dissertation (1992), but since *Mande Music* (2000) is both expanded and more widely known, I reference it over the dissertation wherever possible.

<sup>75</sup> Although he settles on the term "professional" to describe the remunerative nature of this music-making activity, Charry (1992: 4) is quick to observe that the term "does not adequately convey the oftentimes personal, spiritual, social, or historical nature of this remuneration, particularly with regard to the *jeli*." For more on the complicated nature of *jeli* remuneration, see Charry (2000: 96–102).

4. modern urban electric groups (called orchestras), largely dominated by guitar-playing jelis, which draw from the other three spheres.

I draw attention to these ways of dividing the music-making activities of Mande peoples for a few reasons. First, the "four spheres" model (much as the previous division by Knight) provides a means for further contextualizing the particular style of Mande music that is under examination here. Neither the characteristics of bala music making described in the present chapter, nor the pedagogical observations made in subsequent ones, are meant to stand for (nor apply to) *all* professional Mande music-making endeavours. Although there are aspects of bala music making that could be said to be globally representative of one of the spheres (the music of the jelis), I am not claiming here the existence of pedagogical uniformity across spheres.<sup>76</sup> Second, below I make observations about the relationships between patronym and musical activity. Subsequently I also discuss aspects of repertory crossover between jembe music and bala music. Having the "four spheres" framework will facilitate these discussions.

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<sup>76</sup> My experiences with jembe pedagogy do lead me to hypothesize that a good deal of pedagogical similarity probably exists between the *jeliya* and drumming spheres, but this would need to be explored more carefully in future studies.

## Mande Social Organization: Jelis and Numus

Mande society can be broadly divided in a number of different ways. One schema emphasizes the freeborn (*horon*; pl. *horonnu*)/slave (*jon*) dichotomy.<sup>77</sup> Another schema emphasizes the artisan (*nyamakala*; pl. *nyamakalalu*)/non-artisan (*horon*) dichotomy. It is the latter that is of interest here. Non-artisan *horonnu* include landowners, warriors, rulers, and traders. *Nyamakalalu* are artisans who work with (spiritually imbued) materials such as wood, clay, leather, metal, words, and music (Charry, 2000: 48). *Horonnu* are restricted from using these materials, but because they rely on them (for farming implements or instruments of war, for example), they form a kind of symbiotic relationship with the *nyamakalalu*, who for their part rely on the *horonnu* for food, livestock, and other non-manufactured goods (ibid). Each group guards its status through endogamy (though today, not so strictly). There are four categories of *nyamakala*: the *garanke* (leather-workers), the *fina* (Koranic and genealogy reciters), the *numu* (blacksmiths), and the *jeli* (oral historians and musicians), and an individual's patronym will usually offer an indication of which status (*horon* or *nyamakala*) and role (*garanke*, *fina*, *numu*, or *jeli*) he/she is likely to satisfy or fulfill.

Charry (ibid: 49) signals that "each group has its own oral traditions referring to prototypical ancestors, but their historical origins are not well understood." However, the institutionalization of these divisions in the thirteenth-century Kurukan Fuga Charter has probably played an important role in the longevity of their presence. The earliest written accounts of the Mande empire (and the Ghana empire that preceded it) come from

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<sup>77</sup> Knight (1973: 35) explains that although slaves normally were acquired as prisoners of war, slave status in Mande could be entered into voluntarily; slaves were generally not mistreated. Additionally the descendants of slaves would achieve free man status at the fourth generation. As Knight does, Charry (2000: 48) points out that this institution of Mande social order "is now largely extinct."

eleventh-century Arab explorers.<sup>78</sup> These accounts, along with early European documents from several hundreds of years later form a corpus of references from which much can be gleaned of the history of the region and its people. But another important source for historical data is found in the epic stories (captured in song and storytelling) recounted by the Mande peoples themselves. (And it is the *jelilu* who are charged with preserving and disseminating this data.) The so-called "epic of Sunjata" is one of the principal (if not *the* principal) accounts transmitted by *jelilu* through story, song, and other means (genealogy recitation, for example, or these days, film). There are countless versions of the Sunjata epic,<sup>79</sup> and as Charry (ibid: 41) observes, their importance to the cohesion and identity of the Mande peoples cannot be overstated. One chapter in the Sunjata epic tells of the proclaiming of the Kurukan Fuga Charter, named after the site (near the town of Kangaba in present-day Mali) where the assembly of individuals — including the lion king himself—first proclaimed the Charter after a victory at the Battle of Kirina, which took place in (or shortly after) 1235 (Niane, 1975: 31).<sup>80</sup> The Kurukan Fuga Charter (which in 2009 was inscribed into the UNESCO Representative List of the Intangible Cultural Heritage of Humanity<sup>81</sup>) is a convention, a "collection of rules of conduct, teachings, and precepts aimed at organizing social life"<sup>82</sup> (Niane in CELHTO, 2008: 13). It takes the form of a series of forty-four "articles" that outline the hierarchical social organization of the society (including the rights and duties of the various groups), regulations regarding property and material ownership, and guidelines for the preservation of nature. The first article reads: "The Great Mande Society is divided into

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<sup>78</sup> For a chronologically-organized collection of references to musical activity in Mande from between the eleventh and nineteenth centuries, see Charry (2000: 355–74; 409–12).

<sup>79</sup> See Bulman (1997) for a comprehensive list. See also under the "sunjata" references tab at mandebala.net (Martin, 2016-web).

<sup>80</sup> See Niane (2006: 75–85) for an English-language example of one printed version of this chapter of the epic, or Niane (1960: 133–42) for the original French version.

<sup>81</sup> Decision 4.COM 13.59, 2009 (UNESCO, 2015-web).

<sup>82</sup> "Un ensemble de règles de conduite, d'enseignements, de préceptes destinés à organiser la vie en société."

sixteen clans of quiver carriers, five clans of marabouts, four groups of 'nyamakalas' and one group of slaves. Each one has a specific activity and role" (Niang, 2006: 75).

In Mande, one's patronym conveys "essential information about ethnic background and social standing" (Charry, 1992: 37). Siriman Kouyate (in Niang, 2006: 78–79)<sup>83</sup> identifies patronyms associated with the four groups of *nyamakala* as follows: (a) *Jeli*: Kouyate and Diabate, (b) *Fina*: Camara, (c) *Numu*: Kante, Camara, Kourouma, and (d) *Garanke*: Sylla. Regarding membership in the *jeli* subdivision, however, Kouyate clarifies that:

In the course of time, the *jeli* became a kind of congregation which can be joined by everyone who holds the rules in respect. That is how nowadays; belong to this class [*sic*] Keita, Conde, Kante, Kourouma, Koita, Toure, Diawara, etc. (ibid: 78)

Two of my bala teachers, Sory Diabate and Famoro Dioubate, bear indisputably *jeli* patronyms. But the other three, Mawdo Suso,<sup>84</sup> Naby "Eco" Camara, and Naby "Coyah" Camara bear family names that more properly correspond to a *fina* or a *numu* lineage. *Numu* family names tend to be associated with the drumming sphere, rather than the *jeliya* sphere. As Charry points out, drumming is an integral part of *numu* ritual life:

Numu hands perform circumcision and excision; all-night jembe drumming prepares youth for the operation. Numu hands create agricultural tools; rhythms for agricultural work are played on the jembe. And numu hands sculpt the wooden masks of the secretive power societies that they also lead, whose ceremonies are marked by jembe drumming. (2000: 51)

In terms of the music-making activities of *jelilu* and *numulu*, respectively, one might find procedural error in this study if in the following section I am to begin to discuss the

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<sup>83</sup> Kouyate is credited with providing the notes prepared for a document of the proceedings of the 2006 "Inter-generational Forum on Endogenous Governance in West Africa" (organized by the Sahel and West Africa Club and the Organization for Economic Development and Cooperation) in which English and French language versions of the Charter were drafted. Both versions are available online through the OECD/SWAC website (OECD/SWAC, 2015-web).

<sup>84</sup> Charry (2000: 51) identifies Suso—the Senegambian form of Sissoko—as a *numu* family name.

characteristics of "*jeli*" music making despite three of my five principal informants being of *numu* patronym.<sup>85</sup> But as is discussed further below, the *numulu* also have a long association with the *bala*. Indeed, origin stories of the *bala* (which comprise another chapter in the Sunjata epic) tell of how the Sorcerer King of Sosso, Sumanguru (Soumaouro) Kante—a *numu*—received the *bala* from a *jinn* or spirit and kept the instrument in a secret chamber prohibiting all others from playing it. Eventually the instrument would fall into *jeli* hands, but it was originally (according to oral history) a *numu* instrument. The music-making activities of *numulu* and *jelilu* may generally correspond to the drumming and *jeliya* spheres, respectively, but the *bala* is a kind of "bridge instrument" that unites these two realms. Regardless of its associations, however, the role the *bala* plays in the activities of the *jeli* is primarily what gives character to the style of music played on it.

### ***Jeli* Music Making; *Bala* Music Making**

Charry (2000: 91) offers the following as a description of what it is that Mande *jelilu* do:

Jelis are musicians, singers, public speakers, oral historians, praisers, go-betweens, advisers, chroniclers, and shapers of the past and the present. Although most *jelis* have had a thorough Islamic education and routinely pepper their performances with quotations from the Koran, the knowledge they retain and transmit is essentially political and historical in nature rather than religious. *Jelis* usually do not have a leading role in ceremonies where drummers are essential, such as circumcision ceremonies, agricultural festivities, or secret power societies. *Jelis* may indeed be present, praising the participants or playing their own drums (the *tama* and *dundun*), but they are usually still acting with their role of *jeli* as social or political motivator.

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<sup>85</sup> This objection is undermined somewhat if one considers that Camaras and Susos may have simply joined the *jeli* congregation some time after the proclamation of the Kurukan Fuga Charter.

*Jelilu* tend to specialize<sup>86</sup> in one of three principal media for communication (each requiring its own type of training): speech (*kuma*), song (*donkilo*), and instrument playing (*foli*). It is mostly the latter that is under examination here, although the three media are obviously interrelated. Indeed, where the traditional professional activities of the *jeli* are concerned, instrument playing is intended mostly to provide a vehicle for the voice.<sup>87</sup> In the liner notes of his final solo album *Savane*, the Malian guitarist and singer Ali Farka Toure (2006-disc: 1) observes, "It's not the music that's especially important, but rather, what is said. But the music has to be really good so that the listener *hears* what is being said."<sup>88</sup> Although occasionally brought to the fore, instrument playing generally takes a back seat to the primacy of the voice and especially of the words that the singer/speaker is articulating. Generally, the role of the bala in *jeliya*—which Charry (2000: 406) defines as "what the jeli does, or the art of the jeli; *ya* is a suffix that translates as -ness or -hood"—is as accompaniment to the singer. Charry explains further: "Although sometimes *jeliya* is intended to animate dancing, deep *jeliya* is for listening and is intended to inspire listeners to act. *Jeliya* can be chamber music, played in the open courtyard of a patron, or concert music, played in the halls or stadiums of large cities. Above all, *jeliya* is classic" (ibid: 90).

However, there exists today a broad range of contexts for bala playing—more than just praise singing, more than traditional *jeliya* alone. Modern *balafolalu* are recording artists and international festival performers. They play for drum and dance classes, in nightclubs, and in universities. One type of performance, for example, is the *bala/bote* ensemble (captured by Knight in 1987 in Conakry and released in his 2010 DVD *Music*

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<sup>86</sup> Charry (2000: 93) explains that "jelikelu [male jelis] are usually minimally competent in speech, singing, and instrument playing but commonly specialize and excel in just one area." For *jelimusolou* (female jelis) the norm is to "engage in speech and specialize in singing" (ibid).

<sup>87</sup> Charry (2000: 311) formulates this differently: "*Jeliya* shines in all its glory in the *meeting* of the three worlds of instrumental music, song, and speech." (Emphasis mine.)

<sup>88</sup> "C'est pas la musique qui est tellement importante mais ce qui se dit. Mais il faut quand même que la musique soit très bien pour qu'on entende ce qui se dit." (Translation mine.)

of West Africa: *The Mandinka and Their Neighbors*). These ensembles are typical among urban-dwelling Susu *balafolalu* and often found at weddings and other celebrations—like the "bride hair-braiding party" at which Knight did his filming. The ensemble consists of a number of *balas* (often two or three) accompanied by the *bote* and *tolonyi*.<sup>89</sup> The format for this performance is similar to jembe/dunun dance-drum events in that a half-circle of dancers is formed in front of the musicians, and these dancers take turns interacting one-on-one with the lead players.<sup>90</sup> Knight (2010-vid: 16) explains:

The *balafon* players respond to the revelers. As one or another of the women prompts them with the beginning of a song, they launch into it, continuing until another is requested. The dancers drop bills into a tray in front of the ensemble. . . . The two *balafon* players do not have clearly differentiated parts. Instead, both play a basic idiomatic rendering of the song, each adding variants or improvised solo passages. Modulai Syllah, on the left, was the leader of this group, but the other player can be seen soloing as well. It is a free-wheeling kind of cooperation between the players.

Regardless of the context, however, the main constituents—the building blocks of the music—appear to be the same.<sup>91</sup> Knight (1973: 65–71) identifies four basic elements for *jeli* music: two vocal elements (*donkilo* and *sataro*) and two instrumental elements (*kumbengo* and *birimintingo*). The *donkilo* (song) is a strophic melody, any of several of which may be rendered in a given "piece" or *julo*. The *donkilo* is the kind of song melody

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<sup>89</sup> *Bote* is the Susu name for a kettle-drum-shaped bass drum skinned with cowhide, and placed on the ground in front of the seated player. It is played with a stick held in one hand and accompanied by the *tolonyi*, a metal bell suspended in the performer's other hand and played with large metal rings worn on the fingers and thumb of that same hand. Knight (2010-vid: 15) reports that in the Kuranko language (see [Figure 6](#)), the drum is called *kunang* and the bell is called *nenge*. These drums are usually played in groups of two (i.e., two individuals, each with his own set of instruments).

<sup>90</sup> In both types of event (the *bala/bote* event and the jembe/dunun event), depending on the "energy" of the scene, new dancers will often enter the circle just as the previous dancer is finishing, physically pushing the previous dancer out of the circle in order to take their turn.

<sup>91</sup> This observation is based on my limited experience with *bala/bote* ensemble music. The academic record is in need of a full monographic study of Susu *bala* music and a subsequent comparative study of Susu and Maninka *bala* playing. Both are of course beyond the scope of the present dissertation.



that can be rendered in chorus. The *sataro* (reciting/relating) cannot be rendered in chorus. *Sataro* melodies are non-strophic and find a balance between extemporization and stock phrase referral. The *sataro* tends to be sung according to speech rhythms and is more closely related to speech than the more strictly song-like *donkilo*. It is in the *sataro* that the main (praising and proverb) work of the *jeli* is undertaken. The *kumbengo* is a short instrumental ostinato accompaniment that is "repeated with subtle rhythmic and melodic variations for the duration of a performance" (ibid: 68). *Birimintingo* refers to "improvisatory passages containing ornamentations of the basic *kumbengo*, instrumental renditions of the *donkilo* vocal line, or unrelated melodic material that is part of [the instrumentalist's] standard repertoire of formulas" (ibid). Knight asserts that the term *birimintingo* "applies as well to variations and ornaments employed more subtly during the playing of the *kumbengo*" (ibid). By one reading of Knight's characterization of the relationship between *kumbengo* and *birimintingo*, the *kumbengo* is properly immutable and any variation to the *kumbengo* ought be termed *birimintingo*. But Lucy Durán (like Charry after her) characterizes the relationship differently. And as regards the bala music making of my teachers, I would too.

### **The *Kumbengo-Birimintingo* Continuum**

In this section I contrast various authors' reported interpretations of the relationship between *kumbengo* and *birimintingo*. A few clarifications must be made at the outset, however. To begin with, most properly, Knight's study is of the *kora*. Owing to differences of interface between the *bala* and the *kora* (the *bala*'s slats are arranged sequentially, whereas on the *kora*, adjacent notes mostly alternate between two rows of strings, each row being played with a different hand), the concept of the *kumbengo* and of the *kumbengo-birimintingo* relationship as expressed by *balafolalu* and *korafolalu*

could be very different.<sup>92</sup> Second, the very terms *kumbengo* and *birimintingo* are not commonly used by *balafolalu*—unless, like Mawdo Suso, they are Gambian, though these *balafolalu*, Charry suspects (2000: 324), may be borrowing the term from the kora lexicon.<sup>93</sup> Famoro Dioubate, who grew up speaking Jahanka, which he describes as "similar" (2015a-per) to the Mandinka spoken by Suso, is familiar with the term used as Suso uses it, but Dioubate uses it infrequently in his interactions with me. Dioubate, along with Naby "Eco" Camara, Naby "Coyah" Camara, and Sory Diabate all prefer instead the French or English terms *accompagnement* (accompaniment) and *solo* (solo).<sup>94</sup> However, since Knight and many scholars after him use the terms *kumbengo* and *birimintingo* when referring to *jeli* instrumental music generally, for consistency and ease of comparison, I will continue to use these terms in the present section.

As was previously mentioned, by one reading, Knight characterizes the *kumbengo* as a fixed sequence of notes, and even where deviation from this sequence does form part of normal exposition, any deviation from the sequence is termed *birimintingo*.

Knight's glossary definitions for the two terms are as follows:

KUMBENGO - The basic instrumental ostinato used to accompany singing. (1973: 359)

BIRIMINTINGO - Instrumental ornamentation and variation of the *kumbengo* including playing vocal melodies on the instrument when they are not themselves used as the *kumbengo*. (ibid: 356)

Durán (1981: 186), who introduces the terms with the definitions "*kumbengo* (a recurrent theme)" and "*birimintingo* (variation and embellishment)," illustrates that although the

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<sup>92</sup> This is discussed further below.

<sup>93</sup> I have heard Mawdo Suso use the term to refer not only to the ostinato accompaniment pattern, but also the place on the keyboard at which the pattern was being played: "It sounds good there—at that *kumbengo*" (2006-per). For a discussion of the various meanings of the term (as well as its constituents), see Charry (2000: 313–25).

<sup>94</sup> Except for Suso, all of the *balafolalu* with whom I have worked also distinguish between *accompagnement de base* (basic or supporting accompaniment) and *accompagnement de solo* (solo accompaniment).

tendency has been "to regard the kumbengo as the 'fixed' part of a kora piece, and the birimintingo as the improvised element," (ibid: 187) this is not always strictly the case. In addition to proposing that there may be multiple *kumbengolu* for a given piece,<sup>95</sup> Durán (ibid: 191) clarifies that "although a kumbengo may be repeated with some consistency for teaching purposes, it should not be regarded as a fixed composition, or indeed as anything other than a melodic idea whose realisation into specific note patterns varies constantly from one player, and one performance, to another." I agree wholeheartedly with this characterization. However, Durán identifies three distinct approaches employed by *korafola* Amadu Bansang Jobate (Jobarteh) for varying the *kumbengolu* that he plays for the piece *Tutu Jara* and, consistent with Knight, refers to all of these "variation approaches" as *birimintingo*.

My own conception (informed by discussions with my *balafolalu* teachers [see below]) is much more closely in line with Charry's. He refers to "accompaniment-type playing" and "solo-type playing" (2000: 14) and discusses the "relative fixity of kumbengo and birimintingo" (ibid: 176) thus: "The opposition of kumbengo with birimintingo is not necessarily characterized by fixed versus variable, composed versus improvised, or repeated pattern versus ornamentation-variation. Kumbengo and birimintingo both exhibit these features, though in varying degrees" (ibid: 177). I use the diagram in [Figure 7](#) as a heuristic tool for better understanding how bala players tend to express the continuum which has at one end, the repetitive, immutable ostinato and at the other, "soloing." The diagram consists of a set of three concentric circles, demarcating three general regions. (The circles are drawn with dashed lines to imply the possibility for smooth transitioning from one region to the next.) The regions are designated: the "core," the "inner-circle," and the "outer-circle." I conceive of the core as representing the

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<sup>95</sup> As is discussed in greater detail below, Durán's notion of just what constitutes "multiple kumbengolu for a given piece" may be different from my own, but it is important to note here that she distinguishes herself from Knight (as well as from Anthony King) on this point.

unchanging *kumbengo*. This is the *kumbengo* that a new learner uses to accompany their teacher. The inner-circle *kumbengo* is the one that is being constantly developed<sup>96</sup> by the expert player. It is this development that is commonly used to generate variety and interest in the exposition of the piece. The outer-circle is where the musician takes a turn at "soloing." In the outer-circle, the musician is no longer accompanying. When Knight (1973: 69) explains how "when a singer is performing there is only one thing for the instrumentalist to do, and that is to hold the kumbengo (*kumbengo muta*)," I understand him to mean that the instrumentalist should play closer to (though not necessarily fully inside) the core. And when Nyama Suso (quoted in Knight [1973: 81–82]) explains that "holding the kumbengo is essential for good *jaliya*" and further (*ibid*), that "[i]f you know your kumbengo well, you will have no trouble with *birimintingo* because good *birimintingo* depends on leaving and returning to the kumbengo smoothly," I understand him to be referring to good inner-circle playing which leads naturally (smoothly) to good outer-circle playing.

In one discussion with Famoro Dioubate (2013-per), I proposed the core/inner-circle/outer-circle framework to him and he confirmed that inner-circle playing is more important than outer-circle playing.<sup>97</sup> According to Dioubate, the inner-circle player will always be called back to the next gig even if he doesn't spend much time in the outer-circle, whereas the player who is not as familiar with the inner-circle, but does know one or two core *kumbengolu* and has the ability to "jump" straight to the outer-circle will leave

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<sup>96</sup> I think of this inner-circle development as a continuous "folding" or "turning over" of the musical material. These terms, colourful as they are, are merely meant to convey Knight's (1973: 68) "subtle rhythmic and melodic variations" or Charry's (2000: 141) "various kinds of input."

<sup>97</sup> As was clarified in Chapter 2, my work with the Mande bala and with Mande music makers is part of an ongoing and mutually influential mediation between members of a *shared* ontology. As such, the distinction between insider and outsider—the "emic" and the "etic"—is seldom clear-cut. In this instance, it was I who first proposed the core/inner-circle/outer-circle model, however, Dioubate was quick to incorporate these terms into his toolkit for communicating with me.

the singer wanting.<sup>98</sup> This sentiment is again echoed by Knight (1973: 346), who observes: "the skilled instrumentalist is one who has a firm knowledge of the kumbengo and the ability to employ birimintingo judiciously."

But similarly, accompanying entails far more than simply playing in the core. The following conversation between Dioubate and myself (2015a-per) (in which we are discussing the piece *Bani*) should serve to illustrate:

FD: When you accompany, it's not like you . . . stay! . . . in one accompaniment. About your intelligence, you stay here, but you do the movement . . .

TM: Yeah!

FD: You know what I mean? Give your soloist . . . something to . . . open . . .

TM: Or the singer, also . . .

FD: Also. Yeah!

TM: Katenen (Dioubate) tells me: "Don't just play the same thing over and over. I need some . . . *piment* (spice/pepper)."

FD: Yeah. You know what I'm saying? It's those . . .

TM: Yeah. But Sory (Diabate) tells me: "No! Accompany is accompany; you do nothing else!"

FD: Because he want to be . . . move around . . . he don't want you do nothing . . . You know, accompany is not wrong. You're not wrong. You know? But you have some . . . like . . . look . . .

At this point, Dioubate moves to the bala to illustrate. (See [Transcription 1.](#))

FD: You cannot stay like that.

TM: Right . . .

FD: So . . .

Dioubate returns to the bala. (See [Transcription 2.](#))

FD: See? You not move but you do animation here so the singer will be . . . [and, miming dance and excitement] "Oh yeah!" You know? You hold the time and the melody and you give something . . .

It is for this reason that I view robust inner-circle playing as the principal pedagogical goal in bala studies.<sup>99</sup> Practically, of course, the student would do well to first learn to

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<sup>98</sup> This resonates strongly with Knight's having observed that: "the prime goal of the instrumentalist should not be to become more and more skillful at playing birimintingo. The skill is important, but more important is a solid foundation in the kumbengo—the ability to play it unfalteringly, and with feeling. Instrumentally the heart of a performance lies in the kumbengo, with the birimintingo added for variety" (1973: 70).

play a "core" *kumbengo*,<sup>100</sup> but the long-term objective for the student should be to cultivate an understanding of how to "play" (galumph) with that *kumbengo* in an idiomatically appropriate way— i.e., in the inner-circle.<sup>101</sup>

### **Multiple *Kumbengolu* for a Single Piece**

In his introduction to *Mande Music*, Charry (2000: 14) explains that the transcriptions he provides throughout the book consist of single cycles of pieces that "should be taken as a harmonic, melodic, or rhythmic model of a piece that may undergo various musical transformations." These cycles are the *kumbengolu* that make up the various pieces in the repertory. In [Transcription 1](#), I provided an example of a few cycles of one *kumbengo* for the piece *Bani*, and [Transcription 2](#) illustrated some of the "musical transformations" that the *kumbengo* might undergo. These examples were given in the context of a conversation that I was having with Famoro Dioubate, in which he asserted that despite the "animation" that he was injecting into his expression of the *kumbengo*, he hadn't actually "moved."<sup>102</sup> But just what is the "movement" to which Dioubate is referring? What would it have looked like if Dioubate *had* "moved?"

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<sup>99</sup> It is worth reiterating that, although "robust inner-circle" playing is characteristic of the playing style of all the *balafolalu* with whom I have worked, the degree of its application is situation dependent. (For some contexts, such as studio recording sessions, the player is expected to remain much more tightly tethered to a "core" *kumbengo*, passing over the inner-circle to arrive more quickly to the outer-circle.) Additionally, the degree to which inner-circle play is exercised, as well as the particular ways that this occurs, may be a hallmark of lineage. Dioubate's "line" (drawn directly through his grandfather, El Hadj Djeli Sory Kouyate) may place more emphasis on inner-circle play than does Naby "Coyah" Camara's, for example.

<sup>100</sup> This is especially true when pedagogical decisions about instructional objectives are being governed by performance imperatives.

<sup>101</sup> Ultimately, when it is being played "correctly" (that is, in the way that will garner the most looks of approval—or other rewards—from knowledgeable Mande participants), when the music truly "comes alive," there is a smooth blurring of lines between any of the three areas. The differences between core, inner-circle, and outer-circle (and indeed between *kumbengo*, *birimintingo*, and song melodies rendered on the bala) fade away. But the distinction is still valuable.

<sup>102</sup> Recall: "See? You not move but you do animation here so the singer will be . . . 'Oh yeah!'" (2015a-per).

Above I explained that Guinean bala players distinguish between basic (or supporting) accompaniments (*accompagnements de base*) and solo accompaniments (*accompagnements de solo*).<sup>103</sup> The basic accompaniments tend to occupy a lower-register set of slats than the solo accompaniments. For example, [Transcription 3](#) shows a basic accompaniment for *Bani*, and [Transcription 4](#) is a solo accompaniment for the same piece.<sup>104</sup> Jessup too, perhaps by her own design, or perhaps following Suso (or another *balafola* with whom she would have worked), distinguishes between "basic *kumbengo*" and "master *kumbengo*" (or sometimes "*kumbengo 1*" and "*kumbengo 2*"), signalling that while junior players hold the basic *kumbengo*, the senior *jeli* "may add a second, different, but related *kumbengo*" (1983: 58). Jessup's master *kumbengolu* tend to occupy higher-register slat sets than her basic *kumbengolu*.<sup>105</sup>

What is important about the relationship between the so-called basic accompaniments and the solo (or master) accompaniments is that in nearly every case, they could be played together—either simultaneously or in sequence.<sup>106</sup> (Bala performance does not require more than one player, but two or more balas played together is the performance norm.) One interpretation of Dioubate's utterance (i.e., that he had not "moved") is simply that he was playing "inner-circle" the entire time, and that he did not at any point move to the "outer-circle." But another interpretation is that "movement" would have consisted of him changing registers—adopting another

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<sup>103</sup> See note 94.

<sup>104</sup> These are from Famoro Dioubate (2015a-per).

<sup>105</sup> I must reiterate at this point, that among Guinean bala players, the term "kumbengo" to mean accompaniment pattern is not commonly used. In fact, to avoid confusion it might actually be preferable to speak rather of "patterns" or perhaps "cells" but because of its established history of use in ethnomusicological writing, and in order to facilitate comparison with what has been previously written, I will still need to use the term *kumbengo*, but from this point on I will also begin to use "accompaniment" to refer to (what I believe to be) the same phenomenon. I hope that this will not cause confusion.

<sup>106</sup> To illustrate this, Jessup refers to her transcription of the piece *Kolong Kuma*. However, there are several pieces for which Jessup has not transcribed the accompaniments in alignment with each other. These are discussed in the following chapter.

*kumbengo* entirely.<sup>107</sup> On this interpretation, to say he had "moved" would mean he began playing in the basic accompaniment register (C<sub>1</sub> to A<sub>2</sub> for [Transcription 3](#)), but then transitioned to a register normally occupied by the solo accompaniment patterns (C<sub>1</sub> to G<sub>3</sub> for [Transcription 4](#).)

As was briefly mentioned above, Durán makes a point of distinguishing her notion of what constitutes a piece on the one hand and a *kumbengo* on the other from that of Knight (1973) and King (1974a) (each of whom, Durán explains, offer just one *kumbengo* as illustrative of a particular piece). Durán considers that (for at least certain pieces) multiple *kumbengolu* are taught and learned:

Previous writing on the kora may have given the impression that for each piece there is only one form of *kumbengo* common to all the players. Apart from differences in individual style and interpretation, pieces may vary considerably on a regional basis. Some have more than just one *kumbengo*, and these may be performed as separate items or, in some cases, as a continuous set of related items. (1981: 187)

Durán's transcriptions (1981: 192–5) of the piece *Tutu Jara* provide some evidence of her notion of *kumbengo* differentiation. She presents what she considers to be four<sup>108</sup> distinct *kumbengolu*, explaining, "when accompanying song, each of the four *kumbengolu* is usually expounded in turn, but in instrumental solos Amadu may switch rapidly back and forth from one to the other" (ibid: 188). Because, as previously mentioned, I have greater conversancy with TUBS-style notation systems, but also in

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<sup>107</sup> The distinction between inner-circle and outer-circle playing (which, again, is described along a fluid continuum) can be applied to any *kumbengo*, whether "basic" or "solo." However, as is discussed below, the distinction between basic and solo *kumbengolu* tends to fade away in inner-circle performance practice. Outer-circle playing, as I am conceiving of it, departs much more clearly from the structural markers of any given *kumbengo* expression. This is why I speak of outer-circle playing as being more closely equivalent to "soloing."

<sup>108</sup> Although there are five *kumbengo* transcriptions presented in her article, Durán clarifies that Jobarteh (her *korafola* informant) treats the *Segu Tutu kumbengo* as belonging to a different piece—a point not lost on me for the present discussion. What are the characteristics of *Segu Tutu* that lead Jobarteh to consider it to be a different piece? And why, then, does Durán include it in her study?



order to have kora audio playback, I have rendered Durán's transcriptions in JV4.<sup>109</sup>

[Transcription 5](#) corresponds with Durán's Example 5 (i) Tilibo kumbengo, triple-time version (ibid, 192), [Transcription 6](#) corresponds with Durán's Example 6 (i) Tilibo kumbengo, compound duple-time version (ibid, 193), [Transcription 7](#) corresponds with Durán's Example 7 (i) Old kumbengo (ibid, 194), and [Transcription 8](#) corresponds with Durán's Example 8 (i) Amadu Bansang's kumbengo (ibid, 195). I would agree that these are all different *kumbengolu*, but in fact, as regards her assignment of starting points—because of the way that Durán has chosen to notate the patterns—I struggle to see any relationship between them at all, and cannot envision the way that they, as they are notated, would be played simultaneously.<sup>110</sup>

Durán recognizes that "the four kumbengolu differ in all but a few features" (ibid, 188), but there are three methods that she uses to relate the patterns to one other. First, in addition to the patterns themselves, for her Examples 5, 6, and 7, she includes "melodic skeletons"—outlines of the patterns based on certain key notes. The melodic skeletons identified for her Example 5 and Example 6 (D, C, E, C, D, C, F, C) are identical, but a displacement of four 16th notes (in Example 6) makes the relationship

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<sup>109</sup> Visually, the JV4 renderings may not necessarily correspond to Durán's proposed meters. As was previously explained, in order to accommodate the JV4 audio playback, sometimes a seemingly counterintuitive beat and pulse structure must be used. I am confident however that the audio playback does a good job of recreating the musical sound that Durán's transcriptions are meant to visualize. Durán actually makes a few small errors in her transcriptions, notably the misplacing of the *konkondiro* rhythmic tap in her Example 7 (i) (ibid: 194). I have corrected this error in the transcriptions here.

<sup>110</sup> The two audio recordings to which Durán refers the reader are Knight (1972-disc) and Jobarteh (1978-disc). In Knight, the *korafolalu* Suntu Suso and Amadu Kanuteh play only one *kumbengo* (corresponding with Durán's Example 5), and are playing "inner-circle" throughout most of the track, with occasional departures toward the "outer-circle." In Jobarteh, the *korafola* plays quite far away from the "core" throughout the track, indeed hovering around the threshold between the inner and the outer-circle throughout, and even makes a few very marked shifts of "meter," but I hear only one kumbengo being played predominantly—Durán's Example 7. At one point in the track (at around 6:10), though, there is a change wherein Jobarteh begins to play a pattern corresponding quite precisely to Durán's Example 8, and plays this pattern until the end of the track, but the starting point of the pattern is highly ambiguous. Lacking any metric context in the recording (a *konkondiro* pattern, or some kind of "click track"), the starting point is in my opinion virtually undecipherable. As such, the relationship between the two *kumbengolu* in the recording is unclear. This certainly adds to the charm of the recording, and of the music generally, but does no favours for the student who must insist on clarity.

between the two patterns—as notated—suspect.<sup>111</sup> The melodic skeleton for her Example 7 (G, F, E, G, F, F, E, D, F, C, A), notated as it is, bears no clear relationship with any of the other examples. Second, Durán identifies the *konkondiro*<sup>112</sup> pattern for each of the notated examples, providing a clear means by which to make comparisons. Following these *konkondiro* patterns, however, none of the *kumbengolu* "lines up" with any other.<sup>113</sup> The third method by which Durán identifies a relationship between *kumbengolu* is using the "key phrase" concept. This concept, which bears on the discussion of the *kumbengo-birimintingo* continuum (see above), is important for understanding much of the music of the *jelilu*, but for the moment, it is relevant only in so far as Durán uses it to relate one *kumbengo* to another. Unfortunately however, although Durán does give indications (square brackets underneath the staff) of which phrases it is that Jobarteh most commonly *substitutes* with "stock ornamental phrases" (ibid: 191), she has not similarly indicated which parts of the notated *kumbengolu* she considers to constitute the key phrases. From Durán's examples, then, notated as they are, it would be very difficult to identify how she or her *korafola* informant relate one *kumbengo* to another, unless indeed, these are just so different as to be capable of describing entirely different pieces—or perhaps different members of a single tune family.

All of this is to observe that, although Durán introduced the idea of multiple *kumbengolu* for given pieces, I do not believe that her concept<sup>114</sup> squares with the basic accompaniment/solo accompaniment model followed by Jessup and her informants nor me and mine. Rather than conceiving of the *kumbengolu* for *Tutu Jara* as playable

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<sup>111</sup> If these patterns were notated differently, their "multiple *kumbengolu* for single piece" relationships could perhaps be identified.

<sup>112</sup> *Konkondiro* refers to the rhythmic "knocking" on the shell of the resonating gourd of the kora. This pattern is usually played by another player, often the apprentice of the *korafola*. Knight (1973: 192–205) has identified four distinct patterns, of which his "Lambango tap" is the one notated by Durán. Charry (2000: 182) has observed that this technique is not common unless among Senegambian kora players.

<sup>113</sup> By this, I mean that none of the patterns as notated could be played simultaneously.

<sup>114</sup> That is, the one expressed in her 1981 article. It may well be that she has a different understanding now.

simultaneously, I believe Durán considers them to be musical material meant to be played in medley, as is suggested when she says: "the use of more than one kumbengo as a basis for performance (which has hitherto gone unremarked) allows for a more *extended structure* and probably occurs primarily in instrumental solos" (ibid: 191, emphasis mine).

David Racanelli, who appears to have the same notion of *kumbengo* differentiation as Jessup and myself, bases much of his "Formulaic Variation Procedures in Mande Griot (*Jeli*) Guitar Playing and Improvisation," on Durán's *Tutu Jara* analysis and reports the following:

My Mande colleagues judge a player's competence according to how many themes he knows for a piece and how easily he can move between them in performance. For obvious reasons, players prefer to play the pieces for which they know the greatest number of themes. (2012: 156)<sup>115</sup>

This assertion by Racanelli is only partially consistent with my own findings among bala players. In my experience, bala players do not judge competence based on the sheer number of accompaniment patterns that another player knows, but rather on their *handling* of the relatively small handful of (simultaneously playable) "themes" that a given piece embodies. However, it may be that my own understanding of the definition and uses of the terms *kumbengo* and *accompagnement* (as well as the related terms "piece" and "version") simply differs from that of Durán and Racanelli,<sup>116</sup> so I will take a moment here to consider the terms more carefully. Charry (2000: 308–28) has summarized research into Mande music terminology and makes several pertinent observations. To begin with, he signals that the term *kumbengo* is a compound whose root is the verb *ben*, "to meet" or "to agree." The use of the term (especially in opposition

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<sup>115</sup> Racanelli uses "theme" interchangeably with "kumbengo."

<sup>116</sup> If this is true, it may well owe to differences in instrument focus (me on bala, Durán on kora, and Racanelli on guitar). Charry (2000: 309) points out that owing to differences in instrument construction and tuning variability, "some of the terminology appropriate to one instrument may not be appropriate to another."

with *birimintingo*) draws parallels to equivalents from the neighbouring Wolof and Pulaar languages (*fodet* and *foododirde/foodude*, respectively), whose meaning implies "pulling," "attracting to oneself," or "holding together." He emphasizes, however, that the term *kumbengo* has many more applications among *korafolalu* and *konifolalu* than among *balafolalu*, since these first two use the term to refer to different tunings and also to the tonics of pieces played in each tuning. (For bala players, whose instrument is of a fixed tuning—and especially when the bala is tuned equi-heptatonically—these applications simply do not apply.)<sup>117</sup> But *korafolalu* and *konifolalu* also use the term to refer to the accompaniment patterns played on those instruments. Charry signals:

Kumbengo translates into accompaniment because whenever someone is singing or reciting, the instrumentalist plays a cyclic pattern, a kumbengo, over and over again, usually varying or ornamenting it, so as to support the vocal aspect but not draw attention away from it. The kumbengo accompanies the voice. Birimintingo translates into solo because it consists of relatively long melodic runs that are played when the voice is resting or is a featured part of instrumental performance without voice. (ibid: 314)

In this sense, the term *kumbengo* appears to correspond well with my *balafolalu* informants' use of *accompagnement*. But there may be less correspondence regarding the possibility of multiple *kumbengolu* being simultaneously playable for single pieces. I suspect that Durán's 1981 conception (as well, perhaps, as Knight's from 1973 and King's from 1974) was simply that the kumbengo consisted by and large of a "groove" (consisting of a singular manifestation of a field of possibilities) and that the inner-circle variations<sup>118</sup> were simply modifications to that manifested groove. Among bala players, the concept appears to involve more than just this. Charry's interpretation, informed by interviews with *korafolalu* as well as by his research into Mande musical terminology

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<sup>117</sup> Or if they do apply, they do so to a much lesser extent.

<sup>118</sup> Durán (1981: 190–91) identifies three types of variation used by her *korafola* informant: first, a variation based on the "melodic ideas inherent in the kumbengo" where notes are substituted or added (often as passing notes); second, variations that depart from the *kumbengo*, usually taking the form of a phrase substitution; and third, a variation (unique to the kora interface, but not without parallels in bala playing) called *sariro*, in which cross-rhythmic strumming is accompanied by a modified "skeletal" version of some part of the kumbengo.

(which highlights *kosiri nya* [way of playing], *sila* [road, path, way], *taarango* [means or way of going], and *siifa* [kind, type] as equivalents for "version") (2000: 310–11, 323–4), perhaps points towards the conception of the *balafola*. For bala players, each *kumbengo* appears to be only one of a virtual infinity of possible *expressions* of a given piece.

Once, when Sory Diabate and I were filming an extensive catalogue of *Konkoba* accompaniment patterns, at a certain point he interrupted the process to say, "Do you want me to keep going? I mean, I could do this forever" (2006-per).

I liken the relationship between *kumbengo* and piece (as expressed on the bala) to the parable of the blind men and the elephant. The first blind man feels one part of the elephant—the trunk, say, or the tail, and he assumes the character of this strange animal to be that of a long prehensile cylinder with thick skin. The next blind man feels another part of the elephant—the ears, and assumes the animal's character to be that of a broad, thin, pliable sheet. Another blind man feels the elephant's toenails and assumes that he is touching a smooth, hard, shell-like creature. No one *kumbengo* "is" *Bani*, but each reflects or expresses *Bani* in its own way. And each could be played either simultaneously or in sequence.

In practice, the number of possible *kumbengolu* that could be said to express a given piece is not actually infinite. There are certainly some widely-taught, generally agreed-upon "main" versions<sup>119</sup> that form a concrete (teachable) corpus and it is from these versions that the variations "spin off" according to a set of conventions.<sup>120</sup> If two players are playing simultaneously and one is maintaining a constant repetition of a single, unaltered (core) pattern, there is a limit to how "far away" a modified expression of the piece could get before it just starts to sound unappealing. But the potential that is

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<sup>119</sup> Charry clarifies that, at least among kora players, the term *silaba* (main road, main way) "refers to a standard accompaniment pattern" (2000: 323).

<sup>120</sup> Though, to my knowledge, these conventions are not taught in any codified way—hence the present dissertation.

embodied in *kumbengolu* truly is nearly infinite<sup>121</sup>—although, eventually, one would modify so drastically a given *kumbengo* as to eventuate a loss of any resemblance to the original piece.<sup>122</sup> If the same two players now start engaging in the "free-wheeling cooperation between players" described by Knight (2010-vid: 16), and neither one is maintaining a constant, immutable "core" version of a *kumbengo*, the possibility exists for them to engage in a never-ending, real time evolution of the musical material.<sup>123</sup>

### **Pedagogical Bedrock**

On an occasion in which Famoro Dioubate (2015a-per) and I were discussing the goals of bala pedagogy—at the same time as reviewing some video recordings that we had previously made of his playing—he made an observation to me about what we were viewing. In response to his own whimsically meandering through what seemed an ever-evolving interpretation of musical ideas, Dioubate turned to me to ask: "Do you see? It's a game. I'm just . . . it's like I'm playing a game." For me, this utterance by the *balafola*

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<sup>121</sup> Herein lies one application of the Mandenkan expression: "Manden te banna" (Mande has no end).

<sup>122</sup> This could be precisely from where the "parent-child" relationship between pieces comes, as is identified by Knight (1973: 99–109) and Charry (2000: 147, 150–51, 153, 155, 188, 310). This relationship describes the ways that variations on a piece can eventually "morph" into an entirely new piece.

<sup>123</sup> This draws a clear parallel to the *wagolgirli* style of playing described by Alhaji Ibrahim Abdulai in Chernoff (1979: 110). Abdulai, a Dagomba drummer from northern Ghana explains: "*Wadol' yini*" is main-style music, the one they don't change or bring other styles inside. It is steady music. The young people are playing like that. Usually they don't know styles and they play *wadol' yini*, that is, only the main style. Or else they play by heart, *yirin*. They are always trying to change it in a rough way because they don't know how to change smoothly. But if an old man is playing, it will be steady and it also changes. We call it *wagolgirli*, that he is curving the dance. It is steady changing play. That is the best. The changes come according to the dance. As he is beating and changing, it is *dol' soli*, that is, he is following the way. Steady changing music is the feeling of the drummer, that is, the particular one who is drumming, that's what he feels. As he is drumming, sometimes people are also dancing. He watches their feet and how they take their feet for the dance. He watches the movement of the body and the feet, and as the dancer takes his steps in the dance, he will drum according to it." Although in a lot of respects, the music-making contexts between Mande and Dagbon are quite different, this "steady changing play" describes very well what my *balafolalu* informants are doing as they "feel themselves through" the potential that is embodied in their bala *kumbengolu*.

hits pedagogical bedrock. Playing the bala is like playing a game.<sup>124</sup> And the first rule of the game is: "Don't drop the ball." Make it sound interesting. Try stuff out. Go exploring. Mix it up. But don't drop the ball. That is, even as variations are pushed, and prodded, and tested, always aim to maintain a (reasonably) cohesive contact with the rhythms and melodies (as expressed through the *kumbengolu*) that make up the piece, or as Dioubate puts it: "you hold the time and the melody and you *give* something." So not unlike a soccer player who fumbles the ball with one foot as he is dribbling up the field, but then recovers it as he steps with the other foot, or like a skateboarder who steps off her board unintentionally, but then turns that step-off into a stylish half-cab boneless,<sup>125</sup> "mistakes" become "happy accidents."<sup>126</sup> There are other rules to the game, of course (avoid excessive repetition; articulate rolls clearly for greater affective impact; become a conscientious listener; harness tempo and dynamic to generate excitement; honour the masters of the past with references to their phrases; etc.), but these begin to resemble characteristics of individual style and they evolve over the course of one's career. Verily, then, the bottom line for bala playing is: "you hold the time and the melody . . . and you give something."

This is not to say that every moment of music making with the bala must have a ludic quality. Not every interaction between *balafola* and bala is "game on." I consider "playing" and "practicing" to be subtly distinct (albeit related) modalities—and I have observed Sory Diabate (2013-per) comfortably switching between them. In fact, often he

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<sup>124</sup> As will be seen below, this is "play" defined as an orchestrating of means and ends where means are at the centre of interest.

<sup>125</sup> In skateboarding, a "boneless" is a trick in which you step off the board with one foot and then grab the board's underside, carrying it through the air momentarily, and a half cab is a 180 degree turn made while the board is travelling backwards in the direction of the tail. In short, then, a half cab boneless is a kind of skateboarding trick.

<sup>126</sup> I referred to this style of playing in Chapter 2 when, in describing the process through which the *balafolalu* and I first tried to mediate instruction through what would become video "lessons," I referred to the "continuous, flowing playing style" of all six of the *balafolalu* with whom I have worked: Sory Diabate, Naby "Eco" Camara, Naby "Coyah" Camara and Mawdo and Yusupha Suso, and Famoro Dioubate.

would use "playing" as a means of troubleshooting his own technical skill, and thus, guiding his practice.<sup>127</sup> Diabate would start to "jam on a groove," stumble upon something in his improvised explorations that he wanted to isolate and develop, and then interrupt "playing" momentarily (by dislodging himself entirely from the melo-rhythmic structure), to concentrate on a particular passage, phrase, or technique, i.e., to "work something out," or to . . . "practice."<sup>128</sup>

But Diabate would never consider that this "modality switching" (such as he regularly did while we were alone at home) was appropriate for a performance venue. Diabate is an international performer.<sup>129</sup> Although he has a strong connection with the traditions of his forefathers, the majority of his performance experience is drawn from years of international touring with a circus troupe and various musical ensembles. And the kinds of venues where such performances would be given require a concept of performance where "entertainment" (and not, say, spirit possession or political commentary) is the principal mandate. In such venues, practicing is that stuff you did at home in order to prepare for the performance. When you are performing at these venues, you are "putting on a show," not trying to improve your technique.

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<sup>127</sup> Musician, writer, and educator, Stephen Nachmanovitch (1990: 42) appears to be recommending a similar approach when he says: "Technique itself springs from play, because we can acquire technique only by the practice of practice, by persistently experimenting and playing with our tools and testing their limits and resistances."

<sup>128</sup> Famoro Dioubate too, occasionally detaches himself from "the flow" in order to momentarily concentrate on a particular passage or figure. In video lessons in which the *jeli* is playing to the accompaniment of a core *kumbengo* (sounded as a perpetual loop by the audio playback in the JV4 program), at times, he simply stops attending to the playback accompaniment, returns to a figure that was not executed perfectly, or for which he wanted to illustrate something more clearly to me, and then after a short time, finds his way back into the groove. Whether he did this solely to rework the figure, or whether it was a means of illustrating to me that "modality switching" is a viable method for practicing is unclear. (Sometimes it seemed that in addition to teaching the vocabulary, Dioubate aimed to impart a semblance of method for learning this vocabulary.) Neither Dioubate nor Diabate, however, would stay "out of the flow" for very long, apparently guided by how interested they were in the practicing. Both Knight (1984a: 76) and Charry (2000: 341) have observed that exercises, practice, and the playing of "patterns that were not actually pieces" are not common among Mande *jelilu*. I would simply point out that although the "practice" modality is not common, it does exist—though perhaps in a different guise than might be observed outside the Mande context.

<sup>129</sup> Here, I am referring to stage performance as conceived from a globalized, twenty-first century perspective.



Such observations (about the differences between "playing" and "practicing") bring up an important point. I expressed above that my principal pedagogical goal is to achieve the robust inner-circle playing style that characterizes Famoro Dioubate's (or Naby "Coyah" Camara's, for example) bala music making. In so many words, I want to be able to do what my *balafolalu* teachers can do. However, it is not my goal to become a performer. Even while, in terms of the objective abilities of the *balafola*, I would like to achieve a professional performance level, I have no intention of becoming a professional bala player, that is, of earning my living through bala performance. I play bala as a meditative exercise—whether alone or in company. For me, the joy is in simply playing, learning, and improving. I enjoy performing when I have the chance to do so, and if I can make a little money at it, great, but I do not need to perform. And I certainly do not seek to improve as a bala player *in order* to improve as a performer.<sup>130</sup> It may be that none of this really matters in the scheme of things. Regardless of the contexts in which I find myself making bala music, if the music that I am making bears all the hallmarks of the music that I am aiming to be able to make, then I can reasonably say that I am achieving my goals. But the process for achieving pedagogical goals (as well, perhaps, as the goals themselves) would change fundamentally in response to upcoming performance imperatives. If every other weekend I were out playing bala in front of paying audiences or making studio recordings with Guinean pop singers, I would no doubt need to practice very differently than if I only ever played for myself alone in my apartment or with friends in a park. An upcoming performance engagement would impact on a host of decisions made along the pedagogical pathway: which pieces to practice, when to add new pieces to the repertory, how much mastery to achieve with each piece, which aspects of playing to develop, how much of any particular skill to cultivate, etc. Philosophical considerations

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<sup>130</sup> I do, however, want to be able to demonstrate progress to my teachers—and this could certainly be considered a kind of "performance," albeit a specialized one.

such as "how should improvisation be *defined* for a Mande performance context," or "what role does self-expression have in the learning of a musical *tradition*," become far less important than the immediate, practical imperative of simply making sure that I have mastered the material for the upcoming show. In other words, even if I manage to clearly articulate the general educative goals (as I have begun to do above), my immediate and/or personal goals may not jibe 100 percent with the general ones—not to mention that they would likely be different for other students.<sup>131</sup> I do not think that this bears significantly on the efficacy of the pedagogical approach that I am striving to articulate in this dissertation, but it is nonetheless an important consideration.

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<sup>131</sup> As it may well be for others, in my case, all three of these—personal goals, general educative goals, and immediate performance goals—are in a constant state of evolution. My implementation of pedagogical methods too is being constantly tested and revised. This dissertation is really just a progress report along a journey that may have no end.

## CHAPTER 4

### Teaching and Learning the Bala

The principal claim being made in this dissertation is that, heretofore, attempts to adapt traditional practices for teaching the bala to a digitally mediated, self-directed modality have engendered at least three categories of pedagogical shortcoming: a diffusion of pedagogical goals, an unnecessarily onerous process, and the lack of an articulated "grammar" for improvisation. But why is this pedagogical "loss" precipitated? What are the characteristics of the two modalities—the traditional and the digitally-mediated—that engender a pedagogical imbalance between them? In the present chapter, the traditional teaching practices of Mande *jelilu* are considered more carefully. Following this, the various attempts at pedagogical communication through other media (books, DVDs, CDs, etc.) are examined.<sup>132</sup> The pedagogical merits and drawbacks of each are discussed.

#### Learning in Mande

There is little question that students of the bala who were not born into a *jeli* family in Mande face a steeper pedagogical climb than the Mande-born, *jeli*-raised learner. To begin with, instrumental study in Mande begins while the student is still very young.<sup>133</sup> Knight (1973: 84) reports that although formal kora apprenticeship begins at around the age of ten (often after a period of time in a Koranic school where rote memorization is

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<sup>132</sup> Owing to differences inherent in the materials themselves, commercial pedagogical materials are considered separately from those that now comprise my private collection of "field" recordings. Since the private recordings were dealt with in Chapter 2 above, in the present chapter, only the commercial (or otherwise publicly available) material is considered.

<sup>133</sup> Indeed, because *jeliya* in Mande is hereditary, for students growing up in the homeland, even where interest or aptitude is shown, the very decision to learn to play a *jeli* instrument is seldom in the hands of the learner, but rather in the hands of an adult—usually the parents or some close relative.

the predominant method of instruction), the informal learning process can begin as early as age five (ibid: 85), when a child may be given a small instrument and taught his first *kumbengo*. Adult learners on the other hand, although not unheard of, are not at all common in Mande,<sup>134</sup> whereas outside Mande (as evidenced by their attendance at workshops and by their online presence), the majority of learners are at least older than eighteen—most, older than thirty-five.<sup>135</sup> Children in Mande also have the opportunity (or more accurately, the familial obligation) to attend events where *jeli* work is being done, i.e., where *jeli* music is being made. (And this is not to mention simply being in the vicinity of one's peers, elder brothers, or cousins who are also learning and practicing at home.) The musical enculturation that takes place in these environs obviously offers an enormous advantage to the bala student who was born into a *jeli* family.

But beyond the advantages accrued by simply growing up in the Mande region, the apprenticeship modality itself offers significant advantages over digital mediation. And the principal difference between the two approaches that makes this advantage manifest is interactivity. Although Knight (1973: 86) asserts that a good deal of—indeed, "the best" (ibid: 88)—kora learning takes place in the course of actual performance (as the apprentice accompanies his teacher), and although Charry (2000: 340–41) has discussed the mark of pride associated with not having taken "formal" lessons from an

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<sup>134</sup> Charry (2000: 339) has related that while he was taking classes at the Conservatoire Nationale de Musique, de Danse, et d'Art Dramatique in Dakar, Senegal—a non-traditional pedagogical environment, and one where an adult learner contingent might be expected—there were approximately fifteen students, all of whom were "about high-school age." He was the only adult student present.

<sup>135</sup> This data is impressionistic, but I am reasonably confident it would bear out empirically. Such an age disparity may owe to several factors, but significant among them has to be the relative short history of the scholarly study of Mande music and the limited availability of high-quality pedagogical material. When I was ten years old, Jessup's (1983) study would have only just recently been published. The information to which a ten-year old has access today (through streaming video sites on the Internet, through an easily accessed recorded audio history, as well as through the academic record) is nearly incomparable.

elder relative,<sup>136</sup> face-to-face lessons are still the principal means through which pedagogical communication occurs.<sup>137</sup>

Neither Knight nor Charry go into great detail about how information is actually passed on from teacher to student, however. Knight (ibid: 85–86) explains that for the kora, learning to tune the instrument is often a final step in the pedagogical process, and so, asserts that "the first stage of learning is thus purely visual and tactile, not aural," but since the bala is of a fixed pitch, this cannot hold true among *balafolalu*. Knight also describes the importance of playing *konkondiro* patterns in developing a rhythmic sense, but again, because *konkondiro* is a phenomenon exclusive to the kora, it simply does not apply to bala learning. Charry admits plainly that he was "not around to see much of how the things being practiced were actually picked up" (2000: 341), and additionally discusses the important role that the tape recorder played in his own process, a process which he describes as "distinctly non-African" (ibid: 340).<sup>138</sup>

But Lucy Durán (2013a-vid; 2013b-vid) has recently undertaken a study spanning four years that focuses on the learning experiences of *jeli* children growing up in Mande homes in Bamako (capital of Mali), Niagassola (in Upper Guinea), and Garana (a small town near Segou, in Mali). In the films that resulted from the study, one can see clear evidence of how the interactive teaching process works, as well as how error correction, praise, and encouragement play a role in that process.

To begin with, there are several teacher-student interface possibilities. Teaching is done one-on-one or in small groups. (And often, owing to large family sizes and to the

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<sup>136</sup> Charry attributes this at least in part to *fadenya* (a competitive drive to distinguish oneself from one's paternal lineage) (2000: 54–61), and cites kora virtuoso Toumani Diabate as a prime example (ibid: 60; 341).

<sup>137</sup> *Learning* certainly takes place in other ways. But *teaching* is done almost entirely through this face-to-face, oral-aural-tactile approach.

<sup>138</sup> This was likely more true in the 1990s when Charry did his fieldwork. Today's smartphone-equipped Mande-born learners employ recording technology much more readily than would have been possible twenty-five years ago. I have observed Sory Diabate (2013-per) using his iPhone to great auto-didact pedagogical effect. But in the strictest conception of the "traditional" pedagogical modality, non-mediated, face-to-face learning is still a defining characteristic.

fact that more than one family may be staying in a single compound, there may be more than one teacher present.) Sometimes there is only one instrument and the teacher will either sit beside or across from the student, demonstrating melodies (and technique) on that instrument either by reaching around the student, by approaching the instrument front-to-back, or by taking the instrument out of the student's hands and then returning it. Other times, the teacher will either hum or sing the melody or simply indicate by pointing to the sequence of slats or strings that the student should play. When there is more than one instrument, sometimes the teacher will play along with the student until each is playing the pattern in its entirety,<sup>139</sup> and other times the teacher will fall silent to give the student the opportunity to grasp the pattern on their own.

Regardless of the interface, however, anytime a pattern is proving too difficult, when it is taking the student too long to learn it, or when the student is showing signs of frustration, impatience, or chagrin (despite an earnest effort to learn), the teacher simplifies. And of all the features of the face-to-face pedagogical modality, it is perhaps this one—i.e., the simplifying of material to facilitate a student's acquiring it—that bears most directly on the present study. There are several instances in Durán's films in which this simplification is depicted. For example, in the first film *Da Kali: The Pledge to the Art of the Griot* (2013a-vid), Lassi Diabate, guitarist and son of the much-celebrated Malian singer Bako Dagnon, is teaching guitar to a group of his students. He explains his process for teaching the piece *Tutu Jara* (also called *Bajuru*): "You learn *Bajuru* in stages. I first teach the smallest part . . . he has to do like this . . ." Here, Diabate strums quarter notes with his right hand on a single, open (but capoed) string. He goes on: "If he can play that, I tell him to do like this . . ." Diabate now plays the quarter notes fretting one string with his left hand, and adding a "hammer on" just after each quarter. He then

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<sup>139</sup> Charry (2000: 340) reports a similar teaching technique in his own learning: "In some lessons my teacher would keep playing the same thing over and over again with me until I could play it up to speed."

rounds out the phrase with a short melodic variation, giving the pattern an eight-count structure. In another example, this time from the film *Dò Farala a Kan: Something Has Been Added* (2013b-vid), Lassana Diabate, a *balafola* from Guinea, is teaching an accompaniment for the piece *Lasidan* to El Hadj Sekou Kouyate (then around 10 or 12 years old). In addition to offering instruction—"it's twice here, and then once and once"—Diabate simplifies the pattern that he is teaching, reducing it to a single melody line, playable by just one hand. Charry too (2000: 176), reports a similar approach by his own teachers: "Many of my teachers would initially simplify a kumbengo, suppressing variations, so that I could grasp it."

Throughout each of Durán's films, the learners are not only depicted receiving lessons and practicing their instruments, but importantly, they are also shown engaging in non-lesson, non-practice, music-making sessions, participating however they can given their current skill level. For example, the three young Kouyate boys shown in the second film (El Hadj Sekou, Moussa, and Nansiramady) upon learning a new pattern, are almost immediately engaged by a host of elder family members who envelope them in song, clapping, and other musical support. As well, over the three years that the boys are filmed, they make multiple trips to their home village of Niagassola, where, as Lassana Diabate puts it, "everybody plays the balafon" (2013b-vid), and where, as the film depicts, they engage in music-making sessions with their grandfather Filani Sekou Kouyate and the other elders of the village. Rokia Kouyate, the young singer and the daughter of Awa Kassemady Diabate, is shown participating in the weekly *sumu* wedding celebrations where Durán notes "most aspiring musicians can try out their skills in public, and also make some money" (2013a-vid). But she also earns a spot on the popular Malian television show *Ministar*, in which young artists imitate well-known Malian singers to compete for a cash prize. Salif Diabate—the kora-playing son of Mamadou Diabate—also joins a group called "Mande Kids," and is depicted playing with about a

dozen other young musician and dancers, enjoying themselves as they hone their art. The point here is that even before they are especially competent, the young artists are given ample opportunities to test (and develop) their conversancy with accompaniment patterns. And, certainly in the case of instrument playing, the structure of the music facilitates this.

Charry (2000: 184) characterizes the teaching of Mande (*jeli*) music thus:

"Teaching versions of pieces are usually stripped-down skeletal versions, which the teacher fleshes out as the student grasps them." Lassi Diabate's method for teaching *Tutu Jara* (described above) is an excellent example of this. Diabate begins with a "version" of the piece that is so simple (so simplified), it literally consists of the steady plucking of a single open string. But fundamentally, even if this "version" were the only one the student was able to play, he could still participate in a music-making session with more experienced musicians. To further illustrate, Lassana Diabate's son, Check Oumar, is shown taking his first bala lesson. The first piece Check is to learn is *Jawura*, and the first accompaniment that Lassana teaches him consists of just four cyclically played notes, which he divides between the right and the left hand. (See [Transcription 9](#).) As will be seen, these "stripped-down skeletal" versions of pieces are also the versions that many *balafolalu* first teach to foreigners (whether face to face, or through digital mediation). The problem is, unless the dialogue between teacher and student is maintained, the vital step of "fleshing the versions out" (whether through a generalized enculturation, performance, or subsequent lessons) is lost.



## Mande Balafolalu Teaching Non-Mande Students

A fascinating aspect of the interactions that I've had with my *jellu* teachers has been our attempts to "compare notes" as regards what constitutes effective pedagogy and what does not. Roderic Knight (1973: 85) has explained how "the traditional apprenticeship on an instrument such as the kora was based on the principle that learning must be a painful experience." He explains:

Not only was the young boy punished by a rapping on the knuckles if he did not concentrate hard and pick up patterns shown to him on the instrument quickly, but he was completely subservient to his teacher who sent him on errands, gave him many chores in the compound farm, and denied him all privileges such as new clothes or spending money. This was not idle tyranny of course, but a method of impressing upon the student the gravity of his undertaking and the respect he owed his teacher for it. It is still an important principle in apprenticeship today, but not as strict as it once was. (ibid)

Sory Diabate (2012-per) (who has acknowledged that his main interest is not in teaching, but rather, in his own development as a performer) would occasionally joke with me about whether "pedagogical technique" referred to the use of "beatings."<sup>140</sup> He has related tales from his own childhood, describing the all-night, outdoor drum and dance celebrations at which his father would give him hard "whacks" across the knees with a bala mallet any time the young lad was failing to take his role in the event seriously—an action which, at the time, of course, he resented enormously, but for which in retrospect he is grateful. Famoro Dioubate too (2013-per) has shared stories of the deliberately imposed subservience that he had to endure in order to gain access to the knowledge after which he so hungered. In fact, being aware that through my scholarship I have become familiar with these norms of Mande apprenticeship, Dioubate occasionally sends me out on errands, instructs me to restring or tie gourds onto his instrument, or

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<sup>140</sup> Not surprisingly, being unclear about the distinction between these two entities, Diabate was dumfounded by my insistence that an improved pedagogical technique would help me eliminate some of my bala weaknesses.

calls me over to relieve him of heavy loads as we walk back to his Harlem apartment from the grocery store or from the laundromat—being sure to call me *petit* (little one) as he does so.<sup>141</sup>

But both Diabate and Dioubate (as well as Naby "Coyah" Camara and Mawdo Suso) have additionally revealed, through instances of teaching that I have experienced or observed, a fluent—if not oft-articulated—conversancy with pedagogical techniques other than punishment and "tyranny." In particular, I have observed all four *balafolalu* engaging in the temporary simplification of complicated material in order to mitigate an otherwise slow or burdensome process—and often, they do this along trajectories of pattern density analyses.<sup>142</sup> And, as will be seen in Chapter 5, this is where the pedagogical practices of Mande bala teachers best tally with the principles of behaviour analysis (and also, incidentally, with Popham and Baker's empirical model for assessing instruction efficacy.) The teachers have a behavioural objective in mind, and seeing that I am not managing to "show them that I can do," what they are demonstrating, they simplify. If I still cannot do it, they simplify further. This process continues until we find my behavioural "staying speed."<sup>143</sup> Naturally, the ability to quickly find a student's pattern density staying speed varies from teacher to teacher—and not every teacher will be

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<sup>141</sup> Of course, Dioubate does this in good fun, and always with an air of levity. It is a kind of play that we engage in together. But still I comply with his requests out of respect for the traditions of old, and also to acknowledge his authority as a master musician. Additionally, of course, there is an implicit understanding that he would never request anything genuinely unreasonable of me.

<sup>142</sup> Here is another case where distinguishing between an emic and an etic genesis of a concept or a heuristic is far from clear-cut. The simplification of pattern density to mitigate an onerous learning trajectory is undoubtedly a characteristic of in-situ Mande learning, but I arrived at my notion of the pedagogy of "play" independently, through a familiarity with the principles and procedures of behavioural analysis and a frustration borne of using the currently available digitally mediated bala instructional material. Again, as per Rice (2008), the ontology is shared; so-called outsiders learn from and influence insiders, just as so-called insiders learn from and influence outsiders.

<sup>143</sup> "Staying speed" is a term used by famed martial artist Bruce Lee in the book compiled posthumously by his widow Linda Lee Cadwell, *The Tao of Jeet Kune Do*. Applying Buddhism's Eight-Fold Path to martial arts skill development, Lee (1975: 9) defines staying speed as: "the critical velocity that can be sustained [so as to eliminate suffering and give true knowledge]." Understood behaviourally, this "critical velocity" refers the point along the pattern density analysis trajectory at which stimulus control is achieved.

disposed to the seeking.<sup>144</sup> But, assuming the teacher has the inclination to seek stimulus control (or, promote program adherence vis-a-vis the principles of behaviour analysis described in Chapter 5), their skill at doing so can be developed like any other skill. Both Sory Diabate and Famoro Dioubate have under-simplified patterns for me, in effect, *discouraging* my earnest—even fervent—attempts to learn. But over time (and with no small amount of discussion and experimentation), all three of us have gotten better at more quickly zeroing in on (and communicating about) my pedagogical "sweet spot."<sup>145</sup>

In general, there are four main contexts for the interactive transmission of knowledge from *balafola* to non-Mande student: private lessons (consisting of one-on-one, face-to-face interaction between teacher and student), semi-private lessons (in which a small number of individuals [two or three, say] gather to take focused, usually intermediate- to advanced-level lessons with the teacher), workshops (in which a group of beginning learners are shown patterns collectively in an auditorium, classroom, or other pedagogical space<sup>146</sup>), and study trips to West Africa, whether individually or as part of a group.

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<sup>144</sup> If, for example, a teacher adheres to the Mande pedagogical principal that learning must be "painful," they may not be inclined to alleviate student suffering.

<sup>145</sup> It is worth noting that simply having an awareness of the existence of the "learning must be painful" principle among Mande (and other) teachers has helped facilitate communication about teaching and learning between my bala instructors and myself. It is also important to note that the scalability of accompaniment patterns as a characteristic feature of Mande music means that unscrupulous teachers can try to "pass off" virtually any version of a piece as representative of that piece. Unless the student is aware of this, they will likely assume that their teacher's version is definitive. My own *jellilu* teachers, especially in the earliest stages of their relationship with me, may have been under-simplifying as a deliberate means to guard against potential accusations (by other *jellilu*) of having "sold out" their tradition, or, in the parlance of the *jellilu* themselves, of "lying."

<sup>146</sup> Outdoor learning environments, for example—such as *Mama Africa*, a week-long music and dance camp held annually in Italy, the *Wula Drum and Dance Retreat*, which lasts for four days and is held each year in Pennsylvania, and the many outdoor jembe and dunun workshops hosted at international venues by Mamady Keita's Tam Tam Mandingue organization—are becoming more and more common.

In nearly all cases, unless the student has shown a long-term commitment, both to respecting the knowledge and the traditions of the *jelilu* teachers on the one hand, and to their own musical development on the other, longer-term pedagogical goals (i.e., beyond learning to play a few accompaniment patterns and perhaps some transitional phrases), are simply not considered. In Mande, with young *jeli* learners, it is tacitly understood that the long-term goal is for the learner to eventually become a practicing *jeli* and/or a professional musician. In terms of playing style, this translates into having an intimate knowledge of a corpus of "core" *kumbengolu*, an ability to play in the "inner-circle," and at least some familiarity with "outer-circle" playing. For those non-Mande students who have proven their seriousness and their dedication, a similar long-term goal is adopted. But in the case of occasional lessons (whether private or semi-private)—and certainly in the case of workshop teaching—the emphasis is usually on the short-term goals, and on everyone simply enjoying themselves for the time that they are together. The transmission of one or two *kumbengolu* is often prioritized as a short-term objective, but once this has been accomplished, an inordinate proportion of the remaining time sees the teacher "soloing" (i.e., playing "outer-circle") over top of the accompaniment of their students. In particular, there seems to be no effort made to move all but the most serious students from "core" *kumbengo* playing toward "inner-circle" playing—that is, from the stripped-down skeletal version to the fleshed out one.<sup>147</sup> Usually, unless a new student makes a special request,<sup>148</sup> what is taught instead in

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<sup>147</sup> There may be no good reason to find this surprising. To begin with, as was described above (and as is shown in Duran's [2013a-vid; 2013b-vid] films), this is probably how the *jelilu* themselves learned. What is more, Knight (1973: 346) generalizes that "birimtingo and the all-important sataro vocal style are only learned through individual initiative." Likely, many *jelilu* simply do not consider it their role to teach anything other than basic patterns and song melodies to their non-Mande students—at least not in the early stages.

<sup>148</sup> Many eager students, for instance, ask their teachers to show them how to "roll"—often before they have an understanding of how to play even a single *kumbengo*. (Rolling is considered more fully in Chapter 6.)

private or semi-private lessons are discrete accompaniment patterns, as well, perhaps, as a means to "move" between them.

### Commercial Pedagogical Materials for the Bala

At the time of writing, there are just six main commercial sources for bala instruction.<sup>149</sup>

These are listed in Table 2.

*Table 2. Commercial Pedagogical Material for the Bala*<sup>150</sup>

Title	Author	Format
The Mandinka Balafon: An Introduction with Notation for Teaching (1983)	Lynne Jessup	Book
Jaliya V4 (1997)	Harald Loquenz	PC App
Balaphone Instruction, Vol 1 (2010)	Naby "Coyah" Camara	DVD
Balaphone Instruction, Vol 2 (2012)	Naby "Coyah" Camara	DVD
Learn to Play the Balafon with N'Camara Abou Sylla (2014)	Abou Sylla	CD
Balafon Rhythms Pack, World Beat 101 (2014)	Naby "Coyah" Camara	Website

Lynne Jessup's 1983 study represents the earliest commercial example of expressly instructional material for the bala.<sup>151</sup> Although the study may be said to achieve various

<sup>149</sup> An ambitious bala student could ferret out other sources, but none of these are dedicated exclusively to the bala—indeed, many are transcriptions of kora music using a specially modified notation system—and few have an explicitly pedagogical intent. However, transcriptions can be found in Knight (1971; 1973; 1982; 1984b; 1992), Innes (1974), King (1974a; 1974b), Coolen (1983), Konate and Ott (1997), Charry (2000), Kaba and Charry (2000), Eyre (2002), Williams (2006), and Racanelli (2012).

<sup>150</sup> Although Jaliya V4 is neither strictly pedagogical, nor solely devoted to the bala, the application includes a sizeable corpus of bala transcriptions with audio playback and can be used to tremendous pedagogical effect.

<sup>151</sup> The extent to which Jessup's study was intended to be commercial rather than scholarly is unclear. Although she does mention in her preface that, "author's royalties for this book and accompanying tapes are being donated to the Oral History and Antiquities Division [of the Vice President's Office of the government of The Gambia] to further their work," the study is often cited in academic contexts.

objectives,<sup>152</sup> its full title, *The Mandinka Balafon: An Introduction with Notation for Teaching*, betrays a principally pedagogical intent. And yet, Jessup's pedagogical goals are not overtly stated. Indeed, utterances such as the following suggest that Jessup favours a means-based instructional model rather than a goals-based one: "hopefully, the student will expand his/her concepts of melody, pitch, improvisation, and African music" (1983: 63), or "its educational validity is that it expands the Western student's concepts of African music, and for the Gambian student, it reinforces the worth of the traditions of his/her own culture" (ibid), or "if possible, students should see a Mandinka balafon, or at least pictures of it so that they will understand the similarities and differences between the balafon and other types of xylophones" (ibid).

Popham and Baker (1970a: 7–13) propose that rather than beginning with the question "What shall I do?" the teacher should start by asking "What do I want my students to be able to do?"<sup>153</sup> When teachers frame their problem thus, they can attend to instructional goals and to the students' attainment of these goals rather than simply to the various ways that they might occupy the students' classroom time with activities that "seem instructional." Ambiguous notions such as "hopefully expanding students' concepts of," or "reinforcing students' worth of," or "so they will understand" are, according to Popham and Baker, of little instructional value. "In fact," they suggest, "one might think of a continuum in which educational objectives become more useful as they become less ambiguous" (1970b: 25).

Nevertheless, since the transcriptions of bala *kumbengolu* and the audio examples that accompany them comprise the central component of *The Mandinka Balafon*, it is

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<sup>152</sup> The study's measurements of bala tunings, for example, as well as several solid appendices, are valuable contributions to the ethnomusicological database irrespective of the pedagogical aims of the study.

<sup>153</sup> In the case of the auto-didact, of course, teacher and student are one in the same, but conceptualizing the instructional model as though each was a different person will facilitate discussion. A subsequent adaptation of the model to a self-instruction context, it is assumed, would be straightforward.

assumed that Jessup's intention is for students to learn to play these *kumbengolu*—and this certainly is a behavioural objective.<sup>154</sup> So just what is it that Jessup is expecting the students to learn to do? Transcriptions are given for a total of fourteen pieces.<sup>155</sup> With six of these, the transcription is of one *kumbengo* only, such as for the piece *Tiramakang* (see [Transcription 10](#)). For the remaining eight, two *kumbengolu* are transcribed. These are labelled Kumbengo 1 and Kumbengo 2, or in some cases, Basic Kumbengo and Master Kumbengo.<sup>156</sup> No indication is given, however, for how these pairs of *kumbengolu* "line up," i.e., for how they might be played either together simultaneously or in sequence, and indeed, several errors are made. In some cases (*Faringbulo* for example) the transcriptions of the two *kumbengolu* are at incompatible pitch levels (see [Transcription 11](#) and [Transcription 12](#)). In other cases (*Kura*, for example) the starting points of the patterns, notated as they are, erroneously suggest a relationship between the two *kumbengolu* that does not bear out in practice (see [Transcription 13](#) and [Transcription 14](#)).<sup>157</sup> For the two preceding examples, I was only able to determine the relationships between each pair of *kumbengolu* thanks to fieldwork conducted in The Gambia. Unless they had also undertaken such fieldwork, typical users of Jessup's book would more probably learn each *kumbengo* as a "stand alone" to be played independently of any of the others. This is not to say that every *kumbengo* learned would

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<sup>154</sup> And here, Jessup offers several excellent suggestions regarding how students might go about learning to play the *kumbengolu* notated. These suggestions are discussed further in Chapter 5.

<sup>155</sup> Jessup includes transcriptions for several of the melodies that are played in renditions of the *Sunjata fasa*, the collection of praise songs that recount the history of the Lion King's rise to prominence. I count all of these as a single piece, but I consider *Kura* (also called *Boloba*) to be distinct.

<sup>156</sup> One exception is for the piece *Mali Sajo*, where the two *kumbengolu* are labeled as "versions."

<sup>157</sup> *Kura* (or *Boloba*) is a piece for which the identification of a definitive starting point may not be fully settled. Famoro Dioubate's version (Fula Flute, 2008-disc) does not even bear the five-beat count that appears to characterize other recorded versions. Sory Diabate also teaches *Boloba* in a count of four rather than five beats. Naby "Coyah" Camara, on the other hand, does not. In the version shown in [Transcription 14](#), following Knight's (1971: 33–34; 1984b: 23–24), King's (1974b: 19), and Charry's (2000: 185–86) starting point assignment, Jessup's (1983: 140–41) Kumbengo 1 and Kumbengo 2 are both rhythmically transposed to C–E. Comparing this with [Transcription 13](#), C–E is at the second pulse of beat two for Kumbengo 1 (where it is also vertically transposed to F–A), but at the first pulse of beat five for Kumbengo 2.

also be played exclusively "in the core." Jessup does include notated variations for several *kumbengolu*, although these usually amount to little more than the addition or subtraction of one or two notes, a change of pitch for a given note, or the inversion of a pattern across the octave.<sup>158</sup> Such variations really do not give users enough of a basis for deriving general principles for bala improvisation. The variations do pull the execution of the *kumbengolu* toward the inner-circle, but ultimately they do not stray far from the core, and so give little indication of how to achieve the robust inner-circle playing style typical of bala *jellilu*. Jessup does suggest that the listening examples<sup>159</sup> could be used to form "an aural picture of the playing style, improvisation and performance practices" (1983: 63), with the implication that students should just . . . figure it all out for themselves: "the basic kumbengos are notated without regard to any individual performance style, ornamentation or improvisation, in the hope that the reader will perceive these aspects aurally by listening to the accompanying tape" (ibid: 54). The listening examples, though, are in all cases played on instruments whose tuning is non-standard (usually equiheptatonic), whereas the illustrative audio corresponding with the notated examples is played exclusively on a diatonic instrument.<sup>160</sup>

One additional feature of Jessup's book bears mentioning. For each notated piece, lyrics are provided (in Mandinka with English translations) for at least one *donkilo* (song) commonly associated with that piece. (This is a boon for the learner, and something typically overlooked in other digitally mediated sources.) Another (behavioural) pedagogical goal, then, could be to learn to sing these songs while simultaneously

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<sup>158</sup> Indeed, in a few cases, Jessup appears to have notated what on the audio recording really amounts to a "mistake"—a missed key, for example—and designates these as "variations."

<sup>159</sup> Included with the text are two cassette tapes, one providing audio content for the transcription examples, and one that offers supplementary listening material. More recent printings of the book include audio CDs instead of cassettes.

<sup>160</sup> Below I argue that the mere exposure to a variety of tunings in fact strengthens the student's capacity for perceiving Mande melodies more flexibly, but for beginning learners—especially for those who do not have former musical (or ethnomusicological) training of some kind—the challenge of matching melodies across tuning systems is significant—often insurmountable.



playing the supporting *kumbengolu* on the bala. Unfortunately, however, the melodies of the *donkilolu* are almost never notated,<sup>161</sup> so again it is expected that students should glean this information entirely from the cassettes, which becomes extremely challenging given the aforementioned problems of tuning and starting point alignment.

Proceeding chronologically, the next commercial release of pedagogical material for the bala is, as was mentioned above, not expressly devoted to the bala as such. The Jaliya V4 application—designated on the company website as an "archive and learning software for African instruments" (Loquenz, 2007-web)—includes notated examples of music for over a dozen instruments from across the African continent.<sup>162</sup> However, the full version of the software does include several bala transcriptions including two sizeable fragments of solo bala performances drawn from the three-CD anthology by El Hadj Djeli Sory Kouyate (1992-disc) for the pieces *56 (Cinquante-six)* and *Mamaya*.<sup>163</sup>

As with *The Mandinka Balafon*, Jaliya V4 transcriptions pose certain tonality challenges to students. It was mentioned above that the diatonic tuning (usually either  $G_1$  to  $F_3$  or  $G_1$  to  $G_4$ ) is probably the most common tuning for balas outside of Mande. But *56* and *Mamaya*, for example, were originally played on (and subsequently notated for) instruments with tunings other than diatonic.<sup>164</sup> As such, even though key and tuning adjustments in JV4 can be made at the touch of a button, in order for a student to

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<sup>161</sup> The two exceptions to this rule are: *Silati Ngaleng/Masani Ceesay*, sung in praise of a rich merchant, and *Nyaama, Nyaama, Nyaama*, one of the songs of the *Sunjata fasa*.

<sup>162</sup> As well, users can sample their own instruments and create notation files for any instrument in any tuning.

<sup>163</sup> In 2010 I submitted several of my own bala transcriptions to Harald Loquenz—the author of the JV4 software—who proceeded to include these in the full purchased version. Among those submitted were transliterations of previously published transcriptions (Jessup's, for example, or Charry's), as well as a few transcriptions of video material from my own private collection: *Apollo* and *Sörsörnë*. Prior to 2010, Loquenz included relatively few bala transcriptions, although *56* and *Mamaya* were among these.

<sup>164</sup> What is more, the  $G_1$  to  $G_4$  instrument that I use to illustrate examples in this dissertation is not the bala that comes with the program. Rather the Balafon Manding instrument included with JV4 has a 20-key,  $B_1$  to  $G_4$  tuning, which considerably limits its transcribing potential. I owe a debt of gratitude to my Slovenian colleague Janez Pirc for providing the .wav file samples for the  $G_1$  to  $G_4$  instrument used in this dissertation.

successfully transpose the music to a key that would "make sense" on their own instrument, they would first need knowledge of some of the fundamentals of Western music theory as well as a prior familiarity with the Mande melodies being transposed. Thus, as with *The Mandinka Balafon*, I imagine that many students either play the tunes starting at pitch levels that distort the original melodies, or simply get discouraged struggling with their transposition and opt to work on material from other sources.

The JV4 software does much more than provide transcriptions, of course, and in many respects it is of an unparalleled high quality. But if the goal is strong inner-circle playing, even students who use the JV4 transcriptions in combination with *The Mandinka Balafon* will be left wanting.

The third commercial source for bala instruction comes from one of the principal informants for the present study: Naby "Coyah" Camara. "Coyah's" first DVD, *Balaphone Instruction Vol. 1* (2010-vid), follows a straightforward format. Eight pieces are presented. For all but one of these, three accompaniment patterns are shown.<sup>165</sup> Just as with *The Mandinka Balafon*, however, no effort is made to clarify how any one accompaniment pattern "lines up" with any other. The patterns are presented in isolation with no reference made to other patterns and no means to connect them to any kind of "metric matrix" framework.<sup>166</sup> (In some cases the relationship between patterns is obvious but in others, students have a difficult time correctly identifying those

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<sup>165</sup> The exception here is the piece *Mane* for which only two patterns are given. The other pieces on the DVD are *Soli*, *Lasidan* (LosDon, LasDon), *Yankadi*, *Lamban*, *Guinea Fare*, *Sörsörnë* (Sorsenet, Sorsonet), and *Kebendo* (Kabendu, Kebendu).

<sup>166</sup> This is not entirely true. Before each new piece is introduced, the DVD does include a very brief clip of "Coyah" engaging in a kind of "performance mode" presentation of that piece. However, these clips are so brief as to be nearly useless. (The performance becomes audible at the same time that textual information about the piece is displayed on screen. This text then cross-fades to video of the audible performance. The total audio lasts for between 15 and 20 seconds; the video is shown for around 5 seconds.) Additionally, the pieces shown in the performance clips do not always correspond with the pieces thereupon presented. (For example, the performance clip meant to illustrate *Soli* is in fact, a performance of an unrelated piece, *Denykemba*.) Even when the performance does correspond with the piece presented, no effort is made to explicate any relationship between that performance and the accompaniments shown.

relationships, and they often err in their guesswork.)<sup>167</sup> One piece that students report having difficulty understanding (both with respect to where the pattern should begin as well as how the three patterns relate to one another) is *Lasidan*. The three accompaniments for *Lasidan* (which I include here as illustrative of what kind of material appears on "Coyah's" DVD) are shown at [Transcription 15](#), [Transcription 16](#), and [Transcription 17](#), respectively.

A one-page insert is included with the DVD comprising a brief "thank you" and also a "how to learn" section. (See [Figure 8](#).) The suggestion that pieces should be learned one "hand" at a time echoes Jessup (1983). This is discussed further in the following chapter.

The most frequently registered complaint (in website forums as well as in personal correspondences that I have had with users of "Coyah's" first DVD) is that the patterns shown, once learned, are simply not sufficient for achieving Mande-style music making. It seems that students are unable to ascertain just what they should "do" with the patterns even after they have learned to execute them on their own instruments. Again, there is no indication of how to bring the patterns out of the "core," and into the "inner-circle." To "Coyah's" credit, an attempt to address this problem is undertaken with his second DVD: *Balaphone Instruction Vol. 2* (2012-vid).

In this volume, six pieces are shown, including four that correspond to those covered in Vol. 1 (*Kebendo* [Kebendu], *Lasidan* [Los Don], *Mane*, and *Yankadi*) as well as two additional pieces (*Cette Vie* [Cest Vie, C'est Vie] and *Sehuluse*). The format for this DVD varies from piece to piece, but generally, the *balafola* furnishes two or three accompaniment patterns, and then illustrates a kind of "solo" arrangement consisting of

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<sup>167</sup> Through my work with "Coyah," I have been able to confirm that I have understood the relationships correctly. Some of the bala students with whom I have worked (or been in contact online), have demonstrated to me that they have learned to play (and relate) the patterns incorrectly.

an introductory "roll" followed by a smooth transitioning through several additional accompaniments. Taking once again, the piece *Lasidan*, for example, [Transcription 18](#) shows the first accompaniment from *Balaphone Instruction* vol. 2, [Transcription 19](#) shows the second, and [Transcription 20](#) is of the full "solo." As is seen in these transcriptions, the first accompaniment from Vol. 2 corresponds precisely with the first accompaniment for *Lasidan* from Vol. 1 (see [Transcription 15](#)), save for one added note. The second "accompaniment" for *Lasidan* as it is played in Vol. 2 is really a combination of accompaniment and "solo." These "solos" overcome the problem of students not having any means to relate the accompaniments to one another, but they do not necessarily overcome the problem of clarifying where the *balafola* perceives the starting point for that string of accompaniments.

Unlike in the previous volume, in Vol. 2, "Coyah" does not maintain a consistent tempo throughout his performances. Rather, at times he decreases the tempo—presumably in an effort to make clearer for students just what he is doing—and at times he increases the tempo, likely so as to facilitate a more exciting viewer experience. And indeed, this is one of the main problems with the second DVD—not the changes of tempo as such, but rather the lack of clarity of pedagogical intent on the part of the *balafola*. Although the DVD is clearly intended to have a pedagogical focus, at times "Coyah" appears to be performing, rather than "teaching." Another problem facing students who are trying to learn to play the pieces from Vol. 2 is that again, no (explicit) effort is made to provide students with the means to play "inner-circle" with any of the patterns shown. The "solos" are treated more like technical etudes—something to be memorized as a composition, and lacking instruction on how to incorporate *elements* of the "solos" into one's own inner-circle playing, they do little to prepare the students to

play anything but the memorized solo exactly as presented.<sup>168</sup> A third problem with "Coyah's" second DVD is that the *balafola* selects patterns that are simply too complicated to be learned in video format. Since the material is not written down (or otherwise visually captured in a time-independent medium), the student has little chance of gleaning anything but an overall impression of what they should be aiming to learn to do. Again, ambitious students could (and do) make their own transcriptions of the performances, but not all students are equipped with the tools to do this.

One additional commercial source for bala instruction attributed to Naby "Coyah" Camara are the video bala lessons available for streaming subscription at World Beat 101 (2014a-web), a website featuring instructional videos for learning jembe, dunun, and bala patterns. There are currently three pieces on offer: *Makuru*, *Yankadi*, and *Sörsörnë*, and three others that appear to be "coming soon": *Jarabi*, *Mane*, and *Makhadi* (a piece derived from *Bani*). I have not as yet accessed the site and so cannot comment knowledgeably about the videos, but World Beat Productions has posted a sample clip on their Vimeo channel (2014b-web) that offers clues as to the format for the other videos, and they appear to be similar to "Coyah's" two DVDs, namely, two accompaniments and one "solo" per piece. One feature that is unique to the site, however, is the "Solo & Accompaniment together" button, which is available for each piece. I can only imagine that this feature finally addresses the "alignment" problem that afflicts most of the other commercial sources shown in Table 2 above.

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<sup>168</sup> Although atypical for face-to-face bala learning, in fact, with many traditions around the world the process for learning to creatively express oneself with a musical instrument (i.e., to "improvise"), involves precisely this kind of verbatim memorization of lengthy scores. These scores are not meant to be *performed* verbatim, but rather, to serve as a vehicle for acquiring (and for expressing) whatever generative grammar is most appropriate to the tradition. (Such grammar for the bala is discussed in Chapter 6 below.) Two traditions in particular stand out: Iranian classical music (which is learned through the memorizing of the *radif*, a collection of melodic figures [*gushehs*] organized by mode [*dastgāh*]), and American jazz (in which players often memorize scored pieces as a first step toward being able to later improvise with them). For more on this pedagogical process see Nooshin (2015) for the Persian tradition and Berliner (1978) for American jazz.

The final commercially available source for bala instruction is Abou Sylla's (2014-disc) *Learn to Play the Balafon with N'Camara Abou Sylla*. This is a three-CD set of audio-only instructional material covering six pieces: *Yankadi*, *Kaira*, *Yabule*, *Makuru*, *Sörsörnë*, and *Sökö*. Again, three accompaniment patterns are given per piece, followed by a short "ensemble" version in which all of the patterns are played together to jembe/dunun accompaniment. Each pattern is additionally "broken down" into component parts (left hand / right hand, as well as first part / second part), and for some of the pieces, a short arrangement is also given, which allows students to incorporate pieces more quickly and more fully into their performance repertory—if they have one. In the ensemble tracks, Sylla also plays a soloist role in which he indeed does (finally!) illustrate a rollicking "inner-circle" playing style. Despite being audio-only, the instructional quality of *Learn to Play the Balafon with N'Camara Abou Sylla* is quite high and, thanks to Sylla's superlative playing in the ensemble performances, wonderfully illustrative. No effort is made to explicate how a student might move stepwise toward being able to play the way Sylla plays in the ensemble performances, though, and the ensemble tracks are still relatively short (ranging from 1.5 minutes to 2.5 minutes, and averaging 2 minutes), but in terms of the loss of pedagogical efficacy suffered by the other sources, here, that loss is mitigated perhaps more than elsewhere.

### **mandebala.net, YouTube, and Other Online Sources**

Commercial (and/or academic) sources are not the only digitally mediated means through which a learner of the bala might seek to augment their knowledge of and skill with the instrument. Although as yet they are relatively rare, a few free online sources do exist. On contemporary video-hosting websites like Vimeo, Daily Motion, and YouTube, users post "lessons" of bala (and other *balafon*) pieces promoting their use as a means

for learning to play the instrument. These are generally short—seldom lasting more than a minute or two—and they vary widely in terms of their format. Some (see MC Rambo [2009a-web, 2009b-web, 2009c-web], for example) follow a pattern similar to that found in commercial sources: a small number of *kumbengolu*, typically played without variation and with no reference to a metric matrix, played sometimes in isolation of one another, sometimes in sequence. Others (such as those depicting the *balafola* Oumar "Livio" Camara [2013a-web, 2013b-web, 2013c-web, 2014a-web, 2014b-web, 2014c-web]) depict more "inner-circle" playing. Even Famoro Dioubate (2013a-web, 2013b-web) has collaborated with YouTube channel custodians (Howcast) to produce short videos in which he offers a brief introduction to the instrument and to some of the techniques for playing it.

In May of 2008, I too began to prepare and upload video tutorials, beginning with the two pieces *Sörsörnë* and *Apollo* (Martin, 2008a-web, 2008b-web). The *Sörsörnë* tutorial consisted of five separate videos. These garnered a collective total of 36,425 views during the eight years that they were online. The *Apollo* tutorial consisted of seven separate videos, and garnered a collective total of 38,475 views during the same timeframe. The most-watched single video of the full list of thirteen (the first of the *Apollo* videos) has been viewed over 21,000 times.<sup>169</sup> Although, the material for each of the two tutorials was derived from different sources,<sup>170</sup> they followed a similar format to that which Sory Diabate and others had used when I first proposed making "video lessons." Individual accompaniments were presented in isolation, minor variations were presented one at a time for clarity, and transition phrases signalled a means to change smoothly

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<sup>169</sup> The significance of these totals is considered more carefully below.

<sup>170</sup> For *Sörsörnë*, my principal source was the video field data that Sory Diabate had furnished for me in 2005 (and then augmented in face-to-face lessons in 2006). In this case, Diabate had already done the work of "boiling down" his own inner-circle playing into a series of core *kumbengolu*, transition phrases, and melodies. For *Apollo*, it was my own transcription and subsequent analysis of the duet playing of Mawdo and Yusupha Suso (2006-per) that informed the articulation of these three elements: core *kumbengolu*, transitions, and song melodies.

(and "musically") from one accompaniment to another. In a departure from what Diabate had previously done, however, the final video in each of the two tutorials comprised an illustrative technical etude that compiled the material from each of the previous videos into a single playable "composition." This was performed with the metronomic accompaniment of the first lesson's *kumbengo*, audibly rendered on JV4. (The etude for *Sörsörnë* is shown at [Transcription 21](#), and the *Apollo* etude is shown at [Transcription 22](#).)<sup>171</sup>

In August of 2011, I inaugurated mandebala.net, a website whose stated mission is to "promote and enrich both independent and guided study of the Mande bala and of Mande music in general" (Martin, 2016-web). Although the site is being constantly updated, for the majority of its history a staple feature of mandebala.net has been its video playlists, organized (and searchable) by "piece." The *Sörsörnë* and *Apollo* tutorials were integrated into these playlists, and were soon<sup>172</sup> joined by several new pieces: *Allah L'a Ke*, *Dunumba*, *Faringbulo*, *Jaka*, *Kassa/Sofa*, *Konkoba*, *Tabara*, and *Yankadi*. Transcriptions of all of the available tutorial material (rendered in the vertical TUBS notation used in this dissertation) were also added.<sup>173</sup> These new tutorials bore the same general format as *Sörsörnë* and *Apollo*: a series of (independently presented) *kumbengolu*, with occasional indications for minor variations, as well as, in many cases, a final, unifying technical etude. Additionally, *donkilo* (song) melodies (with

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<sup>171</sup> *Apollo* is another piece for which a definitive starting point has yet to be confirmed (if indeed this is even possible). I followed Jessup (1983: 109–110) for the preparation of the tutorials, assigning "one" to G<sub>1</sub> played with the left hand. Sory Diabate (2013-per) has asserted that he perceives "one" to be the following note, namely C<sub>1</sub>.

<sup>172</sup> These latter eight tutorials were uploaded between April and May, 2012.

<sup>173</sup> At the time of writing, owing in a large part to an evolving perspective on the efficacy of such videos (and in anticipation of a possible set of replacements), all of the tutorial videos that I had previously uploaded to YouTube have now been set to "unlisted." This means that although the mandebala.net video playlists are still accessible, the tutorials themselves are not. What is more, the tutorial videos will no longer appear in YouTube search results nor in YouTube recommendations. (The videos have not been removed from YouTube, but they can now only be viewed via their unique URLs.) Concomitantly, the transcriptions once available on mandebala.net have also been removed. Likely, this situation will have changed by the time of this dissertation's completion.



accompanying lyrics, wherever these were known), or some sort of arrangement or "break," were included.

Whether through YouTube or through mandebala.net, direct communication with the people who were using the material became possible, and I received feedback from and engaged in discussion with users the world over. Several users even responded to the material by sending me privately, or by posting publically on their own YouTube channels, the results of their own study using the tutorial material. Many users seemed to consider the etudes to be "performable compositions," recording and uploading video of themselves playing the etudes as compositions (i.e., verbatim, from start to finish).<sup>174</sup> Absent of any indications of how the videos might be used, and absent of any in-depth analysis of the "grammar" of bala music (such as is provided in Chapters 5 and 6 of this dissertation), these users took on the performance of such compositions not as a means to the end of improving inner-circle playing through technical exercises, but rather, as an end in and of itself.

Now, perhaps this should not be a concern. Musical cultures, like human societies generally—however either of these are defined—evolve. These new compositions simply acquire a "life of their own." But thanks to new communication media, the reach achieved through YouTube videos, for example, or through mandebala.net is several orders of magnitude higher than could ever be achieved with face-to-face teaching.<sup>175</sup> As

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<sup>174</sup> The same thing happened with some of the JV4 transcriptions that I had submitted to Harald Loquenz (and that he began to include in the paid version of the software). I have seen videos uploaded to YouTube depicting the verbatim playing of some of my own transcriptions—transcriptions whose original purpose was the analysis of playing style, and not "playable composition."

<sup>175</sup> Google Analytics is a free Google service that compiles data on website usage. I set up Google Analytics for mandebala.net on October 1, 2012. Since that date, the site has been accessed over 18,000 times by over 6300 unique users in dozens of countries worldwide. [Figure 9](#) and [Figure 10](#) represent data up to October 1, 2015. In [Figure 9](#), "New Users" is the number of discrete IP addresses from which the site has been accessed. "Sessions" is the total number of times the site has been accessed regardless of IP address. (The Sessions number for Canada is high because it takes into account the number of times that I myself have accessed the site—including to make updates.) [Figure 9](#) shows the ten countries with the highest number of

many authors before me (Knight, Durán, Jessup, Charry, Racanelli, etc.) have shown (and as I hope to have further illustrated in Chapter 3 above), the performance of lengthy, "scored" compositions are not at all characteristics of Mande *jeli* music.<sup>176</sup> Being that mandebala.net (and the YouTube channel to which it links) seeks to promote the study of "Mande" music, if students are not managing to improve their inner-circle playing, then arguably, the objectives of the website are not being met. However, regardless of this concern (and really, *in spite* of the reach that can be achieved through digital mediation), the problem of the learning process being unnecessarily (and uncharacteristically) arduous persists. This matter is considered more carefully in the following chapter.

### **Bala Tuning and Bala Pedagogy**

Before turning the focus toward the problem of the learning process becoming more onerous as a result of digital mediation, there is one final consideration that merits some attention in the present chapter, and that is the relationship between bala tuning and pedagogy. There are two brief points to make. Recall that the theoretically ideal tuning for the bala is the equidistant tuning identified by Rouget and Schwarz (1969) and subsequently confirmed by Jessup (1983) and Panneton (1987). About this, Charry (2000: 209) rightly observes that: "Beginning a piece on the bala on a higher or lower

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Sessions; [Figure 10](#) shows the geographical location of all New Users, with dark blue countries having larger numbers, light blue, smaller.

<sup>176</sup> Discussing his own transcribed performances of kora instrumental playing, Knight (1973: 180–81) has signalled that: "the form is largely improvised." He further clarifies: "Therefore the objective of the present transcriptions is not to show the form of a complete performance, but to show the basic rules governing the rhythmic and harmonic synchronization of the vocal and instrumental parts, plus the tapping pattern usually added on the back of the kora. The transcriptions are only extracts." One notable exception to this characteristic—itsself, perhaps, evidence of evolving musical cultures—is the collective dance piece *Mamaya*, performances of which involve renditions of a lengthy scored "sentence." For a full transcription of one part of this sentence, as well as the lyrics of the song sung to the melody, see Kaba and Charry (2000: 189–91).

slat will not effect a theoretical change in tuning system." Take as an example the accompaniment pattern for *Jawura* that Lassana Diabate teaches to his son Check Oumar in the film *Dò Farala a Kan: Something Has Been Added* (Durán, 2013b-vid) (see [Transcription 9](#)). Diabate plays C<sub>1</sub> three times with the left hand and then D<sub>1</sub> once with the right hand. On a diatonically tuned instrument, the intervallic relationship between these two slats is a major second. There are only five places that a major second can be made on a diatonic instrument: C–D, D–E, F–G, G–A, and A–B. The keystroke combinations E–F and B–C make minor seconds—which is a different interval. What this means is that a bala student learning on a diatonic instrument must grow accustomed to playing melodies in fixed positions on their instrument's keyboards. On my G<sub>1</sub>–F<sub>3</sub> instrument, for example, Diabate's accompaniment pattern could be played starting on the first (i.e., left-most) slat, the second slat, the fourth slat, the fifth slat, and the seventh slat. To start the pattern on the third slat or the sixth slat would be to change the intervallic relationship, and thus, in theory, the melody—or at least, the mode. On an equidistantly tuned instrument, however, the accompaniment could be played starting at any slat. The student would not be bound to fixed positions on the keyboard and would thus (in theory) come to view the relationships between keys very differently.<sup>177</sup> Again, on an equidistantly tuned instrument, a third is a third is a third.

The second point to make with respect to bala tuning and pedagogy takes as a starting point Knight's (1991) identifying of a "pitch tolerance" or an "individuality" that expresses itself in slight deviations from a theoretical equidistant ideal.<sup>178</sup> Both Knight

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<sup>177</sup> In fact, my contention is that, much as Rahn (1983) proposes as an analytical basis for theorizing about any tuning system, in an equidistant bala context, each note is only understood in relation to the others, and not as a set of discrete values—one slat plus two more, or this slat and that slat, with four slats in-between them, etc.

<sup>178</sup> Knight (1991: 43) characterizes the deviations from this theoretical ideal as tuning "differences" and not as tuning "inaccuracies."

(1973: 66) and Jessup (1983: 33) refer to the itinerant nature of the *jeli's* work. Jessup, for example, states:

Jalis do not stay in one village to practice their art. Even the least active jalis travel to the villages surrounding their own, and the more active jalis go to Banjul to perform on Radio Gambia, or travel to other West African countries such as Senegal, Sierra Leone, Guinea-Bissau, the Republic of Guinea, Mali, Liberia, Mauritania, and the Ivory Coast.

Even though, as any instrumentalist would, a *jeli* would likely prefer to travel with his own instrument, in their travels around Mande, the *jelilu*—and especially the young apprentices who travel with them—undoubtedly come across a wide range of bala tunings. I believe that it is reasonable to postulate that through the mere exposure to these slight tuning variances, apprentices cultivate an adaptability, a flexibility—indeed, a *tolerance*—for being able to "hear" Mande melodies in novel ways. I would further postulate that the more exposure that young *jelilu* have to the various tuning "dialects" that are found throughout the region, the greater that tolerance might become.<sup>179</sup>

Each of these two points speak again to the advantages that Mande-born learners have over learners who come from outside the region.<sup>180</sup> But additionally, observations about the relationship between bala tuning and bala pedagogy will bear on the pedagogy of "play" that will be described more fully in the following two chapters.

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<sup>179</sup> Although this analogy may not be perfect (owing to the lack of concrete semantic content in music, which would preclude the complete incomprehensibility that might occur in a linguistic context), one might imagine how much more difficult it would be to communicate with a Briton, or a Nigerian, or a Tanzanian, or an Indian, or a New Zealander, if you had only ever spoken (and heard) the English of your native . . . Appalachia, for example.

<sup>180</sup> And in this case, I think it is true whether they are born into *jeli* families or not. Sory Diabate (2013-per), for example, has told me that when his son Alsény (who, at the time of writing is just three years old) is of an appropriate age, he will begin his training as a *balafola*. Diabate, who currently resides in Lyon, France, travels back and forth regularly to his native Guinea, so I am sure that young Alsény will be exposed to various bala tunings, including several versions of an equidistant one. But not all members of the Mande diaspora return to their homeland as often as Diabate does. It is plausible to imagine a *jeli*, who lives outside of the region but stays abroad, having a child who they aim to train as *jeli* or as a *balafola*. This young learner would not be as likely to cultivate the same tolerance to pitch variance that Mande-raised learners—or that young Alsény—would.

## CHAPTER 5

### A Pedagogy of "Play"

Up to this point, I have only tacitly alluded to a notion of what I might mean when referring to a pedagogy of "play." My descriptions of the manner with which Mande *balafolalu* handle the various *kumbengolu* that make up the repertory of their style of music give a sense of what play might mean in the context of this dissertation, but I have not yet clearly defined the term. This is finally done in the present chapter. In doing so, I draw upon concepts and terminology derived from the branch of psychology known as behaviour analysis. Thus, this chapter begins with a brief, general introduction to some of that discipline's key concepts. Following this, I clarify my use of the term "play" in the present study.<sup>181</sup> Each of these matters is dealt with in order to be subsequently able to return the focus of the discussion to the second claim made herein, namely that the learning process becomes (unnecessarily) more arduous and protracted as a result of the digital mediation of traditional pedagogical techniques.

#### **A Behaviour-Analytic Framework**

Whereas my *balafolalu* informants will have grown up immersed in the music of which they are now ambassadors, I grew up in a culture of behaviour analysis. Instead of attending weddings or naming ceremonies where my elder *jelilu* relatives were praising, singing, and playing musical instruments, I attended psychology conferences and textbook revision sessions at universities and research centers where my elder

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<sup>181</sup> The defining of play, along with the introduction to the principles and procedures of behaviour analysis are two good examples of the kinds of "preliminary" matters that could not have been placed anywhere earlier in this dissertation. They are the x that would not have made sense until readers first had some understanding of y and z.

*psychologist* relatives were giving lectures or compiling bibliographies. My father is a distinguished professor (now emeritus) at the University of Manitoba, the author of leading textbooks on behaviour modification (translated into as many as five different languages), and an internationally recognized pioneer in the field of applied behaviour analysis, applying behaviour-analytic principles to a gamut of areas (sports, music, and the military, to name a few). My brother is also a professor of behaviour analysis (at the University of Manitoba), and his wife is nearing completion of her PhD in the same discipline. I too have an undergraduate background in behaviour analysis, I have given talks in applied behaviour analysis both here in Canada (M.A.B.A.) and in the U.S. (A.B.A.I.),<sup>182</sup> and I have both co-authored and translated works in the field.<sup>183</sup> In much the same way that *jelilu* speak of the music they make as being "in the blood,"<sup>184</sup> in my blood is a conversancy with the principles and procedures of behaviour analysis.

Now, in no way do I offer the credentials of my family members as a validation for my use of behaviour-analytic principles here. I am simply pointing out that as a result of my enculturation, it comes very naturally to me to view situations and problems through

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<sup>182</sup> The Manitoba Association for Behaviour Analysis and the Association for Behavior Analysis International.

<sup>183</sup> Yu, D. et al. (2001), Martin, T. G. and Martin, G. L. (2006), and Martin, Garry L. (2008).

<sup>184</sup> This is a highly ubiquitous meme among Mande musicians. Several of the participants in Durán's *Growing Into Music* films (2013a-vid, 2013b-vid)—which deal with musical enculturation among Malian *jelilu* children—make the assertion. In his review of these films, Trevor Marchand (2015: 357) emphasizes this aspect of *jeli* identity, signalling that it "squarely challenges constructivist theories (i.e., that identity is a social construct) entrenched in contemporary Western academia." (Marchand even goes as far as to title his review "It's in Our Blood.") Sory Diabate, too (2013-per), uses this phrase to refer to his immersion as a child in the music of his native region, a small village to the south of the Guinean capital Conakry. It is worth noting, however, that Diabate has clarified that when he uses the phrase, he is not talking about anything genetically hereditary—merely that he was immersed in *jeliya* from a young age. Diabate also describes professional footballers (soccer players) as having football "in their blood." Famoro Dioubate (2015b-per) has explained to me that in terms of becoming a professional *jeli*, practically, the office is open to anyone who can achieve a high-enough level of skill in the combined *jeli* arts while simultaneously remaining respectful and humble about that achievement. (This is further confirmed when Siriman Kouyate [in Niang, 2006: 78] observes: "In the course of time, the *jeli* became a kind of congregation which can be joined by everyone who holds the rules in respect.") There may still be a taboo against asserting *jeli* status (though more research would be needed to confirm this), but making one's living practicing *jeliya* may be less strictly forbidden for non-jelis than is commonly assumed.

a behaviour-analytic lens, and especially, to use the language of behavioural analysis in explanations of behavioural phenomena—in this case, bala pedagogy. However, recognizing that the reader may not be familiar with these concepts (nor with this language),<sup>185</sup> I will take a moment here to offer a brief "crash-course" introduction. Only those principles that bear directly on the pedagogy of "play" will be discussed here—the minimum needed to give the reader a general basis for understanding the behaviour-analytic framework upon which at least one foundational definition of (and indeed, a key argument in favour of) "play" rests.

### *Behaviours, Antecedents, and Consequences*

Behaviour analysis evolved from the research and writings of B. F. Skinner (e.g., 1953, 1957, 1974, 1989). Applications of behavioural techniques to change the behaviour of individuals in every day living are now referred to collectively as behaviour modification or applied behaviour analysis<sup>186</sup> (Martin & Pear, 2015: 4). In simple terms, behaviour is anything that a person says or does. More technically, behaviour is any muscular, glandular, or electrical activity of an organism (ibid: 2). Thus, restringing a guitar, playing

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<sup>185</sup> Despite several prominent authors' broadly defining (or otherwise characterizing) ethnomusicology as a study of human behaviour (McAllester in "Whither Ethnomusicology," 1959: 103; Merriam, 1964: 27; Nketia, 1962: 1, Blacking, 1966: 218; 1973: 10; Helser in Merriam, 1977: 204; Nettl in Merriam, ibid; Rice, 2014: 21, 26, 44, 51–55), Rahn (1983: 20) has identified "a general avoidance of the findings of behaviourism" by ethnomusicologists. He offers two possible explanations for this: (1) musico-behavioural studies have tended to be limited to musical stimuli no more complex than three-tone melodies, (ibid: 20) and (2) "behaviourists have frequently been condemned for the artificiality of their experimental situations. It has been contended that the great amounts of information that they have published on rats running in mazes do little to explain the psychological make up of humanity" (ibid: 49). Notwithstanding such criticisms, there are obvious methodological advantages to avoiding "the vagaries of mentalistic language" and remaining "in the realm of observable phenomena" (ibid: 171)—which a behaviour-analytic approach affords.

<sup>186</sup> Behaviour analysis has also gone by the name behaviourism, with adherents dubbed behaviourists. This helps to explain why Rahn (1987: 107) refers to his position as "behaviorist."

a note on a flute, singing, and turning on an audiocassette, but also thinking and feeling, are all examples of behaviours.<sup>187</sup>

Behaviour analysis examines how one's behaviour is influenced by one's environment. The term environment here refers collectively to the people, objects, and events currently present in one's immediate surroundings that activate one's sense receptors and that can affect behaviour (ibid: 4). But the *specific* people, objects, and events that make up a person's environment are termed stimuli (sing. stimulus).

Any situation in which behaviour occurs can be analyzed in terms of three sets of events: (a) the stimuli that exist just prior to the occurrence of the behaviour, called antecedent stimuli; (b) the behaviour itself; and (c) the immediate and delayed consequences of the behaviour (such as rewards or punishers). Identifying the antecedents and consequences of a behaviour is sometimes referred to as an ABC (antecedents, behaviour, and consequences) assessment (Martin, 2015: 75).<sup>188</sup>

Suppose, for example, that a music teacher teaching a student the fingering for a particular scale, says, "OK, watch me," and then demonstrates the correct technique. Suppose further that the student correctly imitates the prompt of the teacher, following which, the teacher says, "Yeah, you've got it. Good job." In this example, with respect to the behaviour of the student, the teacher's instruction and modeling prompt was the antecedent, the student emitted the appropriate behaviour, and the reaction of the teacher served as a rewarding consequence.

### *Operant and Reflexive Behaviour*

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<sup>187</sup> Most behaviour analysts distinguish between overt behaviours—those that can be easily monitored by observers—and covert, private, or internal behaviours—those that cannot be readily monitored by observers. Just before a musician is about to perform publicly, for example, she might think to herself: "I hope I play well." She may feel nervous, her heart rate may increase, and she may begin to sweat. Thoughts and feelings are conceptualized as covert behaviours.

<sup>188</sup> When a stimulus precedes and influences behaviour, it is often called a "cue," "signal," or "prompt" (ibid: 5).



Behaviour analysts consider behaviour as belonging to two main categories: (1) operant behaviour and (2) reflexive or respondent behaviour. Operant behaviour is voluntary behaviour that operates on the environment to generate consequences and is in turn influenced by those consequences (Pear, 2001: 30). More generally, operant behaviour is behaviour that is affected by immediate rewards or punishers. Examples of operant behaviour include asking for directions, writing an exam, listening to a radio show, opening a car door, and strumming a chord on a guitar. Operant behaviours are influenced by operant conditioning (discussed below). Reflexive behaviour is involuntary and consists of behaviour that occurs automatically to prior stimuli (ibid: 25). Examples include being startled when you hear a loud sound behind you, experiencing “butterflies” in the stomach before performances in front of an audience, suffering a burning sensation when you hold your arm over a fire, and feeling sexually aroused during moments of intimacy with a spouse or significant other. Reflexive responses are influenced by respondent conditioning.<sup>189</sup>

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<sup>189</sup> For more on respondent conditioning and on the interaction between operant and respondent conditioning see Martin and Pear (2015: 175–184, 189–198).

## *The Principles and Procedures of Operant Conditioning*

Operant conditioning is a type of learning in which a stimulus comes to influence a behaviour because of that behaviour's consequences. Operant behavioural principles and procedures include (but are not limited to) positive reinforcement, operant extinction, punishment, escape and avoidance conditioning, shaping, chaining, stimulus generalization, stimulus discrimination, and stimulus control.

Positive reinforcement. A stimulus occurring immediately following a behaviour, that causes the behaviour to increase is called a positive reinforcer. The application of a positive reinforcer to strengthen a behaviour is called positive reinforcement (ibid: 31). Owing to the genetic structure and biological needs of human beings, we can be reinforced by certain stimuli without prior learning, provided that we have been appropriately deprived of those stimuli. Such stimuli are called *unconditioned reinforcers*. Examples include, food, water, and sexual contact. A stimulus that was not originally a reinforcer can become one through appropriate pairings with other reinforcers. Stimuli that acquire reinforcing value are called *conditioned reinforcers* (ibid: 36). A common example of a conditioned reinforcer is praise. As children, we experience many instances of praise (from our parents, for example), being paired with hugs, smiles, and the receipt of food. Other examples of stimuli that have become conditioned reinforcers for most of us include money, applause from an audience, or seeing the corporate logo of a favourite company.

Operant extinction. Positive reinforcement is a powerful tool for strengthening behaviour. But what happens when a response is no longer followed by a reinforcer? That response is then weakened—a process referred to as operant extinction (ibid: 34). In general terms, behaviours that no longer “pay off” gradually decrease. For example,

when a student is engaging in regular practice and making daily advances, the specific strategies that she is employing to improve her skills will likely be sustained. However, if that student begins to "plateau" and ceases to see the advances that she previously saw, she might either attempt to adopt new practicing strategies, or she might even abandon the practicing entirely. The positive reinforcement that she was receiving as a result of her original strategies were removed, and consequently, she was "extinguished" from continuing to use those strategies—or indeed, from practicing at all.

Punishment. A stimulus occurring immediately following a behaviour, that causes the behaviour to decrease, is called a punisher. The application of a punisher to weaken a behaviour is called punishment (ibid: 34). Like positive reinforcement, punishment has affected our learning throughout life. The immediate consequences of touching a red-hot stove element, for example, or inserting a screwdriver into a light socket, teaches us not to do it again. (We have all had our behaviour affected by criticism and the negative reactions of others.)

Escape and avoidance conditioning. The principle of *escape conditioning* (also referred to as negative reinforcement) states that we learn to do things that terminate aversive events, or that allow us to escape them (ibid: 309). In escape learning, the likelihood of a certain behaviour's occurrence is increased as a result of terminating or removing a punisher (or aversive stimulus) immediately after instances of that behaviour. For example, when we return home and encounter loud music blaring from the speakers of a family member's laptop, we might escape the aversive noise by closing the laptop or by turning the volume down. In addition to learning to engage in behaviours that enable us to escape from unpleasant events that are already present, we also learn to engage in behaviours that prevent unpleasant events from occurring at all. This is called *avoidance conditioning* (ibid: 310). A student of the piano or the drum set, for example, might learn to sit with an erect posture in order to avoid unpleasant frowns from an

instructor who seeks to help the student avoid longer-term back and spine problems. As another example, when listening to a playlist, hearing that the current track will soon finish and recognizing that you don't want to listen to the next track in the queue, you might press the "skip/next" button in order to skip past it.

Shaping is a procedure for gradually refining and improving a skill through the reinforcement of successive approximations of, or increasingly close attempts at, correct execution, one approximation at a time, until the desired end result is achieved (Martin, 2015: 53). In shaping, some aspect of a behaviour (form, force, frequency, or duration), is gradually changed. For example, practicing to a metronome, a student might start at a slow tempo in the first session and gradually increase the tempo across sessions until the target tempo is achieved. Or, if a student is aiming to practice for three hours every day, they might "shape" themselves towards that goal, beginning with thirty minutes a day for the first week, one hour a day for the next week, an hour and a half for the following week, and so on.

Chaining is a procedure by which an individual learns to perform a specific series of steps that are linked together, one after the other, and always in the same order. The procedure is called chaining, and the complete behavioural sequence is referred to as a behavioural chain (also called a stimulus-response chain) (ibid: 55). For example, when learning to play a sonata on the cello, a student might aim to master just the first two bars of the first movement, then the first three bars, then the first four bars, and so on with each bar being added to the chain of behaviours previously mastered. There are three principal methods for teaching a behavioural chain (Martin & Pear, 2015: 105–108). One method is called *total task presentation*. With this method, the student attempts all the steps from the beginning to the end of the behavioural sequence on each trial and continues with total task trials until all the steps have been mastered. The second method is called *backward chaining*. With this approach, the student first

masters the very last step of the sequence, then masters the next to the last step, and links it to the last step. They then master the third from last step, and that is then linked to the last two steps. The student continues in this way, progressing backward toward the beginning of the behavioural sequence, until all the steps are mastered. The third chaining method is called *forward chaining*. With this method, the initial step of the sequence is taught first. Then the first and second steps are taught and linked together. Next, the first three steps are taught and linked together, and so on. Training continues in this way until the entire sequence is acquired. The *total task presentation* method is usually the method of choice when teaching relatively simple chains with a small number of steps. However, when teaching a complex sequence, *backward* or *forward chaining* will tend to be more effective than *total task presentation*.

Stimulus generalization and stimulus discrimination. Imagine what life would be like for an ethnomusicologist if humans could not perform a learned skill in any situation other than the one in which we had originally learned it. If you learned to play an instrument while conducting field research in Iran, say, or in Ghana, you would have to “relearn” that instrument when you returned to your home country. You could learn to play a piece of music in the practice studio, but would be unable to perform the same piece in the recital hall. Fortunately we do not have such limitations on our adaptability. If we have been conditioned to respond to a particular stimulus, we are more likely to respond to a whole range of similar stimuli. For example, a youngster learns to say “dulcimer” when shown a Hungarian *cimbalom*. Later, that youngster sees a Persian *santur* and says, “dulcimer.” This is an instance of what is called stimulus generalization. Stimulus generalization occurs when a behaviour becomes more probable in the presence of one stimulus or situation as a result of having been reinforced in the presence of other stimuli (Martin, 2015: 52). In contrast, when a behaviour occurs in the presence of one stimulus or situation more readily than in the presence of another, a

behaviour analyst would say that the individual has discriminated between the two stimuli or situations, and that a stimulus discrimination has occurred (ibid: 52). An individual who differentiates a *santur* from a *cimbalom* is making a stimulus discrimination. Thus, stimulus discrimination is the opposite of stimulus generalization. A stimulus discrimination is acquired when a response is reinforced in the presence of a particular stimulus and that response is not reinforced (or a different response is reinforced) in the presence of another stimulus that is different in at least one respect.

Stimulus control. Through stimulus discrimination training we learn to respond to certain stimuli and to not respond to certain others. Behaviour analysts use the term *stimulus control* to refer to the degree of correlation between a stimulus and a behaviour (ibid: 48). For example, for most drivers, there is good stimulus control between the stimulus of a red traffic light and the response of stopping the vehicle at the intersection. Through our operant learning experiences a wide range of stimuli acquire stimulus control over our operant behaviour. Examples include imitating the behaviour of skilful models (expert musicians, say, or martial artists), responding appropriately to rules and goals, talking quietly in certain settings such as mosques, churches, or libraries, and getting up in the morning when our alarm clock rings. Martin and Pear (2015: 162) suggest that before designing a lengthy behaviour modification program involving procedures like shaping and chaining, the question should be asked: "Can I capitalize on existing forms of stimulus control to bring about the desired behaviours?"

For over half a century, these and other principles, as well as the procedures that derive from them, have been successfully applied to explain and improve the behaviour of thousands of individuals of wide-ranging age and ability. Target behaviours have ranged from simple motor skills to complex intellectual activities—such as music making. This

brief introduction should serve to facilitate a continued discussion of the pedagogy of "play."

## Two Definitions of "Play"

Even despite the term's clearly important conceptual role in this dissertation, as well as its prominent placement—in the very title of the work—I have waited until now to define "play" for the reason mentioned above: rather a lot of groundwork first needed to be laid. For the present discussion, play means two rather different—if complementary—things simultaneously. And the first sense of the term is defiantly resistant to definition.<sup>190</sup>

Stuart Brown, M.D. and Christopher Vaughan (a journalist), leading authors on the science of play (2009: 15–16), describe their own reticence to capture a sense of play in the exacting framework of a dictionary-type definition in a way that succinctly summarizes my view:

Though I have studied play for decades, I have long resisted giving an absolute definition of play because it is so varied. For one person, dangling hundreds of feet above the ground, held there by only a few callused fingers on a granite cliff face, is ecstasy. For someone else, it is stark terror. Gardening might be wonderful fun for some but a sweaty bore for others.

Another reason I resist defining play is that at its most basic level, play is a very primal activity. It is preconscious and preverbal—it arises out of ancient biological structures that existed before our consciousness or our ability to speak. For example, the natural tussling of sibling kittens just happens. In us, play can also happen without a conscious decision that, okay, I'm going to play now. Like digestion and sleep, play in its most basic form proceeds without a complex intellectual framework.

Finally, I hate to define play because it is a thing of beauty best appreciated by experiencing it. Defining play has always seemed to me like explaining a joke—analyzing it takes the joy out of it.

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<sup>190</sup> M. J. Ellis (1973: 20-22) has discussed the view that "play" is beyond definition. According to this view, attempts to define play are counter-productive: "The sheer heterogeneity of this *mélange* of activities that can be broken down into a variety of categories such as investigation, manipulation, specific and diverse exploration, and epistemic behavior, seems to preclude the possibility of arriving at general principles predicting the nature, occurrence, and setting of all these behaviors." While I do not agree with this perspective, I feel there is value in acknowledging that it exists.

Rather than defining play as such, Brown and Vaughan instead go on (ibid: 17–18) to tease out a "short list" of what they consider to be the elements (or properties) of play. To begin with they regard play to be "apparently purposeless," that is, it is done for its own sake. Play has no obvious survival value—it will not "help in getting money or food."<sup>191</sup> Additionally, according to these authors, play is voluntary and has "inherent attraction." We play because we choose to, they say, not because someone is telling us to. We do it for its sheer intrinsic value—we do it because it is fun. Brown and Vaughan (ibid) also say that play is engaging in two senses: first, when we play, we lose track of time, and second, we lose our sense of self-consciousness. The authors explain: "we stop worrying about whether we look good or awkward, smart or stupid. We stop thinking about the fact that we are thinking. . . . We are fully in the moment, in the zone. We are experiencing what the psychologist Mihaly Csikszentmihalyi calls 'flow.'"<sup>192</sup> Another characteristic of play according to Brown and Vaughan (ibid) is that it has "improvisational potential." In other words, what we set out to do may not be what we end up with. It is often unpredictable, inconstant, "open to serendipity, to chance." And finally, the authors propose that play provides a "continuation desire." We do not want it to stop, and we will even "improvise new rules or conditions" so that it does not have to.

Scott Eberle (2014) has also moved (mindfully) toward a definition of play through a description of its component characteristics. Eberle takes as a starting point his own

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<sup>191</sup> This said, if play truly is "at play" in bala playing (and indeed, in many other kinds of instrument playing, as well as in many other activities—certain sports, for example, politics, teaching, etc.—all can be very well remunerated), then perhaps this property, perhaps this whole list of properties, ought be considered with some degree of skepticism.

<sup>192</sup> Csikszentmihalyi (2008: 4) defines flow as "the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it." In "An Exploratory Model of Play," Csikszentmihalyi and Bennett (1971: 45) characterize play thus: "Play is *going*. It is what happens after all the decisions are made—when 'let's go' is the last thing one remembers. Play is action generating action: a unified experience *flowing* from one moment to the next in contradistinction to our otherwise disjointed 'everyday' experiences." (Emphasis mine.) For more on flow and its application to various aspects of human experience, see Csikszentmihalyi (2014a, 2014b).



summary of a wide-ranging selection of previous authors' attempts at defining play,<sup>193</sup> signalling that, across the board, there appear to be five basic definitional elements. Play is: apparently purposeless, voluntary, outside the ordinary, fun, and focused by rules (ibid: 215). Recognizing this, Eberle proposes a refinement of the defining elements, which he conceptualizes as "an emergent self-feeding process where causes and effects are linked" (ibid: 230) and which occurs in a never-ending, fractal iteration. For Eberle, play comprises pleasure, surprise, anticipation, understanding, strength, and poise, each element respectively existing in continuum opposition with excess, shock/terror, obsession, indifference, heedlessness, and abstraction.

For this dissertation, then, when I refer to play (in the first sense), I am referring to the properties outlined by Brown and Vaughan and by Eberle above. But I am also referring to the conception articulated by Stephen Miller (1973) who, after Lewis Carroll, uses the term "galumphing" as a shorthand for "patterned, voluntary elaboration or complication of process, where the pattern is not under the dominant control of goals" (ibid: 92).<sup>194</sup> Miller, like Brown and Vaughan, and like Eberle, also entertains the definition of play through the articulation of a set of characteristics<sup>195</sup>—a task, which he too, describes as seemingly "inappropriate to what we are discussing" (ibid: 89). He ultimately settles on the ends-means relationship as play's principal defining trait, however, positing play as: "a way of orchestrating the ends and means of action in which

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<sup>193</sup> See especially: Huizinga (1955: 1–10), Sutton-Smith (1997, 1999: 253), Burghardt (2005: 65), and Henricks (2006: 12–14).

<sup>194</sup> Amid the variety of definitions considered by various authors (see Erikson [1950], Huizinga [1955], and Piaget [1962], for example), I have found the definitions considered by Brown & Vaughan (2009), Eberle (2014), and Miller (1973) to be the most useful for my purposes here. Perhaps a future study could consider play in a broader academic and historical context.

<sup>195</sup> Miller (ibid: 89) derives his set of play elements through extended observation of the behavioural interactions of baboons in Kenya and identifies six characteristics delimiting play from non-play: (1) the motor patterns involved in play resemble those of non-play motor patterns, such as those related to aggression, sex, feeding, and grooming, but (2) these "occur in combinations and permutations seldom possible in the non-play context"; (3) play often involves the *repetition* of such combinatorial motor-pattern permutations, and are (4) exaggerated or "uneconomic," and tend to (5) conflict governing motivations that directly relate to immediate survival; (6) play tends to be the domain of "protected" individuals—usually juveniles and infants.

the means are the center of interest, in which the economics of survival are subordinated to combinatorial flexibility" (ibid: 87). Regarding "combinatory flexibility," Miller further clarifies: "If an infant complicated an action in a totally random way, he would not be playing<sup>196</sup> . . . Play is not means without the end; it is a crooked line to the end; it circumnavigates obstacles put there by the player, or voluntarily acceded to by him" (ibid: 93).

Thus, in concert with my earlier framing (see Chapter 3) of Famoro Dioubate's (2015a-per) statement, "It's like I'm playing a game," as the pedagogical bedrock for bala studies, the application of this characterizing of play by Miller to bala music making should be straight forward: the obstacles are "you keep the time and the melody" and the crooked line is "and you give something." This is "play" defined in the first sense.

Now, although I agree with Brown and Vaughan (2009: 126) when they assert that the opposite of play is not work, and that "far from standing in opposition to each other, play and work are mutually supportive," the second definition of play as it is used in this dissertation does in one sense stand work and play in opposition to one another.

However, it does this from the perspective of the behavioural framework set forth in the

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<sup>196</sup> Simha Arom (1991: 299) has stated that for the music-making activities of various communities in the Central African Republic, the arrangement of melo-rhythmic figures is syntactically unconstrained: "All the possible realizations of a given rhythmic figure are culturally speaking identical so that the order in which they are repeated is almost always random. A figure with several realisations can thus just as well be indefinitely repeated in a given form as appear successively in every one of its admissible forms. In other words, with only rare exceptions, the order in which the realizations of a given figure are concatenated is optional. This in turn means that no syntactic constraints apply." I would argue that among Mande *balafolalu*, the order of elements—the application of variations to the *kumbengo*, and the movement between different *kumbengolu* (or different "versions" of a given *kumbengo*)—is not "random," but playful. It is "a crooked line to the end," an intentional "mixing up" of figures brought off for aesthetic impact (or to achieve some other end). Actually, Locke's (2011: 50) framing of the aesthetic goals of "African musicians"—though here I am only speaking of bala *jelilu*—is fair: "keeping the music's polyphonic texture in a constant state of process" and "impart[ing] a multivalent quality to notes, figures, motive, and phrases." I do not believe, however, as Locke (ibid) suggests, that Arom is claiming that Central Africans are "mindlessly pulling phrases out of a hat." Rather, I surmise that Arom meant simply that the *possibility* for nearly any combination of figures is theoretically feasible. And this is true of bala music as well. (There is nothing to say that an indefinite repetition of a single variation is not a viable theoretical possibility, provided this is what the *balafola* is intending.) Locke's notion that Arom considers Central African music-makers to be randomizing automatons is, in my view, suspect.

previous section. Put simply, in the second sense, play is the engaging in behaviour (or behaviours) that does not in and of itself eventuate extinction, escape, or avoidance. That is, play, by this second definition, is behaviour that is intrinsically "reinforcing," and not intrinsically "punishing."

Ronnie Coleman is an internationally renowned bodybuilding professional (now retired) who, among many other accolades, has the distinction of holding the record for the most first-place finishes—twenty-six—with the International Federation of Bodybuilding and Fitness (Wikipedia, 2016a-web). Coleman has additionally tied the previous record holder—Lee Haney—for the most consecutive first place wins of the popular Mr. Olympia bodybuilding contest (ibid).<sup>197</sup> In the bodybuilding training video *Ronnie Coleman: The Unbelievable* (Okabe, 2001-vid), Coleman makes a statement that has become an enormously widespread (and, lamentably, oft misquoted) Internet meme that bears on the present discussion. He says: "Ain't nobody gonna give you nothin'. Everybody wanna be a bodybuilder . . . but don't nobody wanna lift no heavy-ass weight." In Chapter 1 of this dissertation, I proposed that hard work is fundamental to improving as a bala player. I would further argue that the bottom line for any self-improvement regimen is adherence. Regardless of how many shortcuts a qualified teacher can provide, unless the student does the work, unless they "put in the time," they will simply never improve. If a program of bala study is designed in such a way as to emphasize the "heavy-ass-ness of the weight," so-to-speak, and the student starts to dread their practice sessions, they will be far less likely to adhere to the regimen that has

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<sup>197</sup> The popularity of Mr. Olympia owes in a large part to the 1977 release of the film *Pumping Iron*, which featured Lou Ferrigno and Arnold Schwarzenegger. Schwarzenegger is runner-up to Haney and Coleman for most Mr. Olympia wins, having won the contest seven times—though not consecutively (Wikipedia, 2016b-web).

been laid out.<sup>198</sup> Young people of *jeli* patronym growing up in Mande are obliged to learn to play. For non-Mande learners, this is not the case. Therefore, avoiding the pitfalls of operant extinction and escape and avoidance conditioning is, for the non-Mande learner, as important as any other aspect of the pedagogical process. In this sense the teacher (or the auto-didact student) should do what he/she can to make the hard work required to improve as a bala player feel more like play and less like work, or, speaking behaviourally, "capitalize on existing forms of stimulus control to bring about the desired behaviours" (Martin & Pear, 2015: 162).

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<sup>198</sup> My own practicing record can attest to this, although, even where I do keep a record of the time that I devote to practicing, I do not additionally keep data (even if impressionistic data) on how I "felt" about given practice sessions (nor about practice more generally, vis-a-vis the "deflating awareness" concerns expressed in Chapter 1.) Time spent practicing is of course a fundamental factor here, but since I have not yet done the empirical work to convincingly demonstrate correlation—or indeed, causality—I can really only speak for myself.

## First, Learn the Structures

If the validity of the claims of this dissertation are to be assessed (see Chapter 2) an empirical model of instruction (such as that offered by Popham and Baker)—in which emphasis is placed on the clear articulation of observable behavioural goals—must be used. But if a goals-based model such as Popham and Baker's is chosen as the theoretical framework for conducting comparative efficacy tests of competing pedagogical approaches, one might be tempted to see "pedagogy" on the one hand and "play" on the other as wholly irreconcilable entities. How can "play" (i.e., inner-circle galumphing) be the *goal* of instruction, if play is "apparently purposeless?" Some further clarification by Miller should serve to address this apparent contradiction. To begin with, Miller (1973: 92) observes that play "involves a *relative* autonomy of means. Ends are not obliterated, but they don't, as in some other modes of organization, *determine* the means." (Emphasis mine.) He suggests that with games, such as baseball or chess,<sup>199</sup> or with apparently goal-driven activities like climbing (or cycling up) a mountain, the symbolic importance attached to the attainment of the goal—winning the game, or reaching the summit—acquires "meaning and motivational value as it is magnified by the lengthening and elaboration of the path that leads to it" (ibid).<sup>200</sup> But more pointedly,

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<sup>199</sup> Nachmanovitch (1990; 43) distinguishes between "game" and "play," postulating that: "Play is the free spirit of exploration, doing and being for its own pure joy. Game is an activity defined by a set of rules, like baseball, sonnet, symphony, diplomacy. Play is an attitude, a spirit, a way of doing things, whereas game is a defined activity with rules and a playing field and participants." Jean Piaget (1962: 110–13) makes a similar distinction in his tripartite categorization schema, identifying "practice games" (play done for its intrinsic pleasure value), "symbolic games" (play involving make-believe representations), and "games with rules" (play in which rules are deliberately imposed and enforced through sanction). Miller, though (1973: 94), points out that all three of Piaget's game-types—including the rules-based games highlighted by Nachmanovitch—can be approached "playfully." He stresses: "play is a way of organizing activity, not a particular set of activities; it is a syntax, not a vocabulary. So whenever the vocabulary happens to be visible and the 'this is play' message appears, the syntax still reveals itself."

<sup>200</sup> This is how a game of baseball can still be considered "fun," even if you are on the "losing" team. Here, Miller cites the Russian composer Igor Stravinsky (1970: 52–53) who writes "The idea of work to be done is for me so closely bound up with the idea of . . . the pleasure that the

Miller (1973: 91) observes that, notwithstanding psychologist Karl Groos' (1898: xx–xxi) formulation of play in young animals amounting to a "pre-practicing" of the skills that will be needed later in life, the skills used in play are in fact:

played with *after* they are acquired. They may not have been completely mastered, but some amount of competence must already have been attained. . . . [P]lay can certainly be exercise, but it is more nearly post-exercise than pre-exercise. . . . [A]n important difference should be apparent between the way activity appears in the learning or task mode and in the play mode. In the first case, activities are under the control of goals—means are marshalled at the service of ends. In play, the means are given much freer sway. (Emphasis in original.)

Although I have made reference to the distinction previously, I must reiterate more explicitly here that short-term goals and long-term goals in the context of bala study, though related, are not (quite) the same thing. In order to achieve the long-term goal of playful, inner-circle music making that I have observed in my *balafolalu* teachers, the student must first have some conversancy with the *kumbengolu* that make up the pieces—they must first have at least a few of them (or some part of them) "in the hands." And the process of getting a *kumbengo* in the hands—the short-term goal—can be simplified or complicated according to the approach employed. Consider the following accompaniment pattern, played by Sory Diabate (2005-per) for the piece *Guinea Fare*: [Transcription 23](#).<sup>201</sup> There are at least three different approaches that one could use (and that I have observed students using) for learning to play such a pattern:

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actual doing of the work affords us that, should the impossible happen and my work suddenly be given to me in a perfectly completed form, I should be embarrassed and nonplussed by it, as by a hoax." This is not to say that every instance of lengthening and elaboration should be considered play, however. The unsympathetic prolongation of dissertation writing, for instance, was often occasioned not by play, but by its very scarcity.

<sup>201</sup> *Guinea Fare* (or *Ginε Fare*) is a popular Susu dance that celebrates and is danced by women. (According to Linda Sangster and Emmanuel Faber, *ginε* = a wife / *une femme* [1968: G-3], and *fare* = to the dance / *à la danse* [1968: F-1]; Aboubacar Touré translates *ginε* as *femme* [woman; wife] [2004: 156] and *faree* as *danse* or *fête* [dance; celebration] [ibid: 150].) *Guinea Fare* has to date been sorely understudied, despite its importance to the Susu bala (*balanyi*) canon. There appear to be several "versions" (*Mane*, *Yokui*, and *Tiamba*, for example). (It is *Guinea Fare* that the *balafolalu* are performing with *bote* and *tolonyi* in Knight [2010-vid]. [See Chapter 3.] The piece plays an important role within the context of that ensemble and is requested at a variety of

1. Note-by-note/phrase-by-phrase. With this approach the student would begin by playing only the first few notes, however many she could manage—one, or two, say. For instance, she might begin thus: [Transcription 27](#). Once these first notes could be played, she would add notes, one or two at a time until the pattern could be played in its entirety. So, assuming she could play up to the muted D with the right hand on the first try, she would next add the G with the left hand. (See [Transcription 28](#).) Then she would add the next E—with the right hand. (See [Transcription 29](#).) Following this she would add the fifth (E–B). (See [Transcription 30](#).) The student would continue thus until the entire pattern could be "looped" back around to the beginning. In certain cases, the note-by-note approach can also be done at the level of "phrase," where instead of individual notes, the student adds manageable "chunks" to the end of each approximation learned.<sup>202</sup> For example, if the "target" *kumbengo* (this time, for the piece *Sörsörnë*) is that shown in [Transcription 31](#), the student might start with the following phrase: [Transcription 32](#). Then she would add this phrase: [Transcription 33](#). And then this phrase: [Transcription 34](#). The remaining "chunk" would then be added, thus completing the entire *kumbengo*.

It will not have escaped some readers that the process described here corresponds precisely to the *forward chaining* method used by behaviour analysts. (See

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celebrations.) There exists a large body of songs sung (mostly by women) to *Guinea Fare* accompaniments, of which *Mbaa Mbie* (see [Transcription 24](#)) is a popular example. (This version comes from Famoro Dioubate [2012-per] who simplified the melody for easier capture. The transcription begins with one full cycle of an accompaniment pattern, and the song begins halfway through cycle 2. Two different renditions are shown.) Another popular melody is shown in [Transcription 25](#). Although no name was given to me for this melody, it corresponds to the track "Sily (Solo de Balafon)" played by El Hadj Djeli Sory Kouyate on the Tempo International LP, *Sons nouveaux d'une nation nouvelle* (Various Artists, 1962-disc). (This version also comes from Famoro Dioubate [2012-per] and again was simplified by the *balafola* to facilitate its capture. The version by Kouyate [who is Dioubate's grandfather and with whom Dioubate studied extensively], is highly ornamented.) *Guinea Fare* has now also become a popular jembe piece. The pattern shown in [Transcription 23](#) might more properly be considered a "variation" on a slightly simpler pattern (see [Transcription 26](#)), but it will serve to illustrate the various approaches through which one could attempt to learn the kinds of patterns presented in digitally mediated formats.

<sup>202</sup> Jessup (1983: 65) also draws attention to this method for teaching: "The kumbengo may be divided into short sequences which can be recombined when they are learned."

above.) Thus one viable variation on the "note-by-note/phrase-by-phrase" approach would be the *backward chaining* method, in which the notes (or phrases) would be added one at a time but in reverse order. Unless for very simple patterns, however—such as the one taught by Lassana Diabate to his son Check (Durán, 2013b-vid) (see [Transcription 9](#))—either of these two methods would be preferable to *total task presentation*.<sup>203</sup>

The principal drawback of the "note-by-note/phrase-by-phrase" approach is its stark lack of immediacy. The student employing this approach is only able to participate in music-making activities once the full *kumbengo* has been learned—and with some *kumbengolu*, this can take a rather long time. The student is effectively "in time out" until the entire ostinato has been mastered and the "loop" can be closed. Assuming that the opportunity to participate in music-making situations with others is one of the more highly reinforcing aspects—if not the most highly reinforcing aspect—of learning to play a musical instrument<sup>204</sup> (and perhaps particularly a Mande instrument), the "note-by-note/phrase-by-phrase" approach delays this reinforcement, thereby increasing the likelihood that the student will suffer extinction before they achieve competency with even a single *kumbengo*.<sup>205</sup> Another drawback of this approach is the rigid playing that it promotes in the student. The student learns to play one complicated pattern only one way. A subsequent process to learn how to "play with" that pattern is possible, but this

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<sup>203</sup> Ash and Holding (1990: 139–146) report their findings regarding the relative efficacy of the three chaining methods. In their study, they attempt to teach introductory psychology students to perform a musical task on a keyboard, scoring the students for both melodic and timing errors. *Forward chaining* was found to be the most effective approach on most measures, and *backward chaining* and *forward chaining* were both more effective than *total task presentation*.

<sup>204</sup> This of course is not applicable to the auto-didact student who is working in isolation, but even in their case, the achievement of having learned a completed *kumbengo* would have high reinforcement value.

<sup>205</sup> I have had this experience with students. One student in particular (a young Guinean woman who was studying at York University), anticipating how long the process was likely to take, decided that learning to play the bala—even learning to play one *kumbengo*—was going to require more work than she was willing to put in and she chose to abandon the undertaking even before she had learned to play one completed pattern. For more on the relative efficacy of immediate versus delayed reinforcement, see Martin & Pear (2015: 38–39).



again prolongs the learning process, and so, increases rather than decreases the likelihood of extinction.

2. One hand, then the other. This approach is the one recommended by Naby "Coyah" Camara in *Balaphone Instruction* vol. 1<sup>206</sup> (2010-vid) (see [Figure 8](#)) and also by Jessup (1983). Jessup recommends the approach for certain pieces over others,<sup>207</sup> but she includes audio playback and notation for each of "right hand," "left hand" and "both hands" for all of the pieces in her study. The approach is simple in concept: First the student learns to play the part for one hand in isolation of the other. Then she learns the second hand's part (again, in isolation), and the final step is to combine the two hands into a single playable *kumbengo*. [Transcription 35](#), for example, shows the left hand (bass) part for Sory Diabate's *Guinea Fare* accompaniment 1, and [Transcription 36](#) shows the right hand (treble) part for the same accompaniment. (The "note-by-note/phrase-by-phrase" method can be harnessed in the learning of each part [the left hand part and the right hand part, respectively] in the case that either of these is too difficult to learn via *total task presentation*.)

The "one hand, then the other" approach has two main advantages. First, learning the part for a single hand is usually much easier than learning the two hands at the same time. This decreases the likelihood of extinction. Second, the isolating of the patterns played by each hand facilitates the development of two important bala music-making skills: (1) independence, and (2) the identifying of "embedded melodies" (see Chapter 6). However, the third stage of the "one hand, then the other" approach—the re-combinatory

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<sup>206</sup> Perhaps more accurately, it is the method arrived at through the collaboration of Naby "Coyah" and Michael Goude, "Coyah's" partner in the elaboration of the two-volume DVD set—although the publication is under "Coyah's" name.

<sup>207</sup> Jessup mentions three pieces specifically: *Jula Jekere* (ibid: 80), *Silati Ngaleng/Masani* Ceesay (ibid: 83), and *Tabara* (ibid: 114). She explains: "Notations are written, first, with each hand separately to give a feeling for each hand, and then together, to illustrate the resultant pattern. Often in xylophone music, one hand will play a steady pulse, while the other adds rhythmic variety. Each part alone does not make the melody, but together the result is a melody. Harmonies also result from this combination" (ibid: 63–64).

stage—is no small matter. In fact, often the re-combining of the two melodies is so challenging as to simply occasion a full halting of the learning effort. In my experience, whenever this approach is attempted, unless the patterns themselves (or the relationships between them) are already exceptionally simple, at the re-combination stage the student simply gives up, or at least, is forced to use some other tactic to learn the pattern—most commonly, the "note-by-note/phrase-by-phrase" approach.

3. Density analysis. The third means by which students might attempt to get a given *kumbengo* "in the hands" mirrors the teaching approach described by Charry (2000: 184) in which a stripped-down, skeletal version is taught and then "fleshed out" gradually as the student grasps it. If the goal is to learn Diabate's accompaniment 1 for *Guinea Fare*, for example, the student might begin with the pattern shown at [Transcription 37](#). Then she would add another layer of density. She might, for example, try the pattern shown at [Transcription 38](#). Once this pattern was mastered, she could try adding the Gs with the left hand, thus giving: [Transcription 39](#). In this way the student gradually fills out different aspects of the pattern, adding layers of density at each step. With the "density analysis" approach, there are often many routes for arriving at the target *kumbengo*. For instance, the student could instead begin with this pattern: [Transcription 40](#). And then she might add the Gs with the left hand, as follows: [Transcription 41](#). Then she adds the Bs and the As to arrive back at the pattern shown at [Transcription 39](#). Indeed, through this method, the routes one can take to arrive at the target *kumbengo* are myriad. For instance, this could be another viable starting place: [Transcription 42](#). And this might be one more: [Transcription 43](#).

There are several reasons to prefer (in most cases) the "density analysis" approach over the other two approaches, the principal of these being that it enables near immediate participation, since learning to play a skeletal version of a *kumbengo* requires very little time or effort. The reinforcement potential of this approach is thus very high,

and the likelihood of extinction (or escape or avoidance) is rather low. If the "note-by-note/phrase-by-phrase" approach corresponds with the behaviour-analytic procedure called *chaining*, then the "density analysis" approach corresponds with a process of behavioural *shaping*. The "form" of the student's behaviour is gradually shaped toward a final target behaviour—the ability to play a completed *kumbengo*.

What is more, however, unlike with the other two approaches, every step in the "density analysis" shaping process can serve as a viable, fully functioning *kumbengo*—albeit a skeletal one.<sup>208</sup> For this reason the "density analysis" approach is also more economical in the sense that the learner becomes familiar with multiple versions of the *kumbengo* before arriving at a "final" step. If additionally, she is (made) sensitive to the possibility of using these various *kumbengolu* as a means for creatively exploring the "folding and turning" possibilities inherent in their juggling, then she is also provided with the means to begin to express herself more creatively on the instrument—or, to galumph. (That is, she is not bound to play one complicated *kumbengo* only one way.) Further still, if the student is taught some of the "grammar" of bala music (of the kind that will be explored in Chapter 6, for example), the platforms from which applications of that grammar are exercised, become much, much easier to work with.

The 2004 film *Ray*, written and directed by Taylor Hackford (2004-vid) and starring Jamie Foxx, Kerry Washington, and Regina King, is a (fictionalized) biographical depiction of the life of the legendary American rhythm and blues, jazz, gospel, and pop musician Ray Charles. One scene in the film depicts one of Charles' earliest encounters with the piano as a young boy, prior to losing his sight. In the Red Wing Cafe, the young man cautiously approaches Wylie Pitman (stylized in the film as "Mr. Pitt") as he sits playing boogie woogie on an upright piano. Mr. Pitt notices him, calls him over, and

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<sup>208</sup> Recall the *kumbengo* taught by Lassana Diabate (Durán, 2013b-vid) to his son Check. (See [Transcription 9](#).) As pared down as this pattern is, it still provided the elder Diabate enough of a support for his own inner- and outer-circle playing.

invites him to have a seat asking if he'd like to learn to play: "You like the piano, huh? Come on, you want to learn how to play? Come on over here; let me show you how to play. Come on; I'm going to teach you how to play." Young Ray, obviously entranced, obliges and readies himself for his first "lesson." Mr. Pitt continues: "Now what we're going to do, I'm going to teach you three notes, right? This is the first note right here. Play that. And here's the second note right here. Play that. Here's the third note. Now, here's the way it goes. Listen. Listen closely, now." From here, Mr. Pitt strikes up a swinging boogie woogie line with his left hand and with his right hand, adds a syncopated pattern using one of the three notes that he's just taught to Ray. Mr. Pitt then beckons for the young man to join in, praising and encouraging his participation: "Play that. Good! Try the other notes." This final utterance "try the other notes" is indicative of a fundamental aspect of learning to play the bala.<sup>209</sup> In my estimation, creative input from the student should not be stifled, but rather encouraged. Mande players do the very same, and they too are praised and encouraged for doing so.<sup>210</sup> A balance does have to be kept between references to the lineage of past masters on the one hand, and "making it all up as you go along" on the other (and this too will be discussed further in the following chapter), but inner-circle playing has as much (if not more) to do with exploration and experimentation as with sticking rigidly within the confines of what your teacher gives you.<sup>211</sup>

One final advantage that the "density analysis" approach has over the other two approaches is that, being highly scalable, it knits closely with the principles of applied

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<sup>209</sup> I am sure that this kind of encouragement to "try other notes" could be said to be indicative of the teaching practices of musicians the world over. The only reason to reference *Ray* specifically has more to do with my having recently seen the film than because of some "Africa in America" connection that could be drawn between Pitman's style of teaching and that of my Mande instructors. A Romanian, or an Afghani, or a Japanese teacher (of various instruments and styles), could just as likely issue similar prompting.

<sup>210</sup> In Durán (2013b-vid), for example, Fantamady Kouyate teaches a pattern to one of the children and with pride at how quickly the young man is able to learn and then vary the pattern says: "He is already adding a variation. And he's just learned the piece!"

<sup>211</sup> Again, all the while, abiding the first rule: "Don't drop the ball"—unless in practice mode.

behaviour analysis (and also, as was observed previously, with Popham and Baker's four-step empirical model). At any point along a trajectory toward a target *kumbengo*, if the student is unable to manage a given step, the teacher can simplify it, either by removing a layer of density or by changing their tack entirely. Alternatively, they might split a given step into parts, and teach the parts using the "step-by-step/phrase-by-phrase" approach. For example, if the student is able to play the pattern shown at [Transcription 38](#), but is having trouble adding all the notes necessary to be able to then play the pattern at [Transcription 39](#), she could first attempt an intermediary pattern, such as this one: [Transcription 44](#). If that is too difficult, she could instead begin thus: [Transcription 45](#). Similarly, if the student is already able to play the pattern at [Transcription 37](#), but the next step—the pattern at [Transcription 42](#)—is too dense for her to pick up easily, she could learn [Transcription 46](#) as an intermediary step. This is where the confluence of Popham and Baker's (1970b: 7) "teacher as artist" and "teacher as technician" conception finds its apogee—provided the aim is always to attenuate the "heavy-ass-ness of the weight" as the student is shaped toward the final behaviour, i.e., the target *kumbengo*.

### **Three More Examples of "Density Analysis"**

Although I am fairly confident that the examples given above (using one of Sory Diabate's accompaniment patterns for *Guinea Fare*) do a good job of making clear just how much more advantageous the "density analysis" approach is over either of the other two approaches discussed, I would like, here, to offer three additional examples. I do this to further illustrate the efficacy of the "density analysis" method, but also to strengthen

my argument that the particular guise in which *kumbengolu* are furnished in digitally mediated modes of communication (whether commercial or non-commercial) is often inadequate for conveying the kind of information that would be otherwise conveyed in interactive, face-to-face instruction situations with a sympathetic teacher. The *kumbengolu* conveyed through digital mediation are often (a) too complicated to achieve a "pedagogy of 'play'" (in the behavioural sense), and/or (b) seldom, if ever, parsed in such a way as to equip the auto-didact student with the tools necessary for arriving at anything more than a clunky cutting-and-pasting of a difficult-to-manage pattern—which, again, results in a more arduous and irksome pedagogical process.

The first example is drawn from the DVD material that Naby "Coyah" Camara (2011a-per) and I worked on together in Seattle in 2011. For the piece *Tutu Jara*, the *balafola* proposed the following as one possible target *kumbengo*: [Transcription 47](#). The process for getting this *kumbengo* "in the hands" might begin with this skeletal pattern: [Transcription 48](#). From here, the student might add C and B with the right hand as follows: [Transcription 49](#). Or he could chart out a different route from [Transcription 48](#), and instead add the Fs: [Transcription 50](#). From here, he might learn to play the pattern at [Transcription 51](#). (Another route for arriving at this pattern might well be via the pattern shown at [Transcription 52](#).) Another starting point for learning the completed *kumbengo* might be this pattern: [Transcription 53](#). From here, the student could add F and G with the left hand: [Transcription 54](#). Or he could add F and E with the right hand, to again arrive at [Transcription 49](#). From here, the following pattern could be played: [Transcription 55](#). Again all of these patterns could be considered viable variations, and once learned, they become fodder for experimentation and exploration. Another functional pattern might be: [Transcription 56](#).

The next example of a piece with complicated accompaniment patterns that would benefit from a density analysis is *Diya*. (The accompaniments for *Diya* proved very

challenging when I learned them originally using the "note-by-note/phrase-by-phrase" approach.) Here is one target *kumbengo* (again from "Coyah" [2012-per]) for *Diya*: [Transcription 57](#). One way to begin teaching (or learning) this pattern would be to restrict the left hand to playing only on the G upbeats, while playing all of the right hand downbeats: [Transcription 58](#). This pattern could be simplified further, of course, but since the right hand notes always alternate in thirds, the student would likely be able to pick up on the "alternating thirds" pattern when the *kumbengo* is presented in this guise. Indeed, in order to emphasize this "alternating thirds" pattern, as another starting point, the student could learn: [Transcription 59](#). Regardless, once the pattern at [Transcription 58](#) was mastered, it ought to be a simple matter to then learn: [Transcription 60](#). Similarly, once the student was able to play the pattern at [Transcription 59](#), she should not have difficulty learning to play the patterns at [Transcription 61](#) and [Transcription 62](#), nor indeed, of subsequently incorporating the left hand Gs as follows: [Transcription 63](#).

The final illustration of the "density analysis" approach considers another version of *Tutu Jara*—this time from Famoro Dioubate (2015c-per).<sup>212</sup> The reason to choose this piece (apart from that the patterns Dioubate plays are somewhat complicated and could benefit from a density analysis) is that it should lead well into the next chapter's discussion of *kumbengo* generation and pedagogical grammar. The target *kumbengo*, played in its entirety, is shown at [Transcription 64](#). There are at least two possible starting points, the pattern shown at [Transcription 65](#), and the one shown at

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<sup>212</sup> The source for this *kumbengo* is not the same as for those previously analyzed. With the previous three pieces (Sory Diabate's *Guinea Fare*, and Naby "Coyah" Camara's *Tutu Jara* and *Diya*), the *kumbengo* was presented in a pedagogical context (i.e., private or public videos in which "teaching" was understood to be the principal aim). In this case, the pattern was originally played by Dioubate in a live performance (2012-per), in which bass player Sean Dixon and *korafola* Yacouba Sissoko were also performing. I subsequently transcribed a portion of Dioubate's playing, learned to play what I had transcribed, and then demonstrated that material for Dioubate on a later visit (2015c-per). Upon seeing what I was playing, the *balafola* gave me feedback, correcting certain aspects, vetoing others. The result was a pared down *kumbengo*—the basis for the improvisations that he was originally playing with Dixon and Sissoko. It is this *kumbengo* that is analyzed here.

[Transcription 66](#). Proceeding from [Transcription 66](#), the student might then learn to play the pattern at [Transcription 67](#). From here, he could add F, D, and E with the right hand, thus: [Transcription 68](#). This pattern, of course, could also be arrived at via a different intermediary pattern: [Transcription 69](#). Another route to pursue, again leading from [Transcription 66](#), might be this one: [Transcription 70](#). From here, the addition of the A–D and A–E dyads should be straightforward: [Transcription 71](#). And this pattern could also be played: [Transcription 72](#).

Now, some readers may have noticed—as is especially evident with Dioubate's *Tutu Jara* patterns above—that the technique thus far employed for "teasing out" the layers of pattern density that make up the shaping steps of the "density analysis" approach has simply been to remove selected notes from the given target *kumbengo*. (Up to this point, none of the "functional *kumbengolu*" that could be used as steps along a pedagogical pathway to facilitate students' learning them displaces any notes from [nor adds any notes to] the final pattern.) I have made clear above how a simplified "functional" *kumbengo* can provide a basis from which students can more easily explore the possibilities for their own creative input,<sup>213</sup> but as yet I have considered neither (a) how the "trying of other notes" can be used as part of the pedagogical process (whose goal is to get a target *kumbengo* "in the hands," nor (b) what the rules, tricks, and techniques are (i.e., the "grammar") that *balafolalu* have generally tended towards in the course of their own music-making practices and that might be harnessed as students move toward the longer-term goal of being able to play in the "inner-circle." The first of these matters I consider in the section below, the second, in the following chapter.

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<sup>213</sup> It is easier to "go exploring," to "try other notes" when the take off and return points are more manageable.



## "Playing" with the Four Elements of Rhythm

Although I had previously reproved Jessup for apparently leaning towards a means-based instructional model rather than a goals-based one (see Chapter 4), in fact, she does offer many excellent suggestions as regards how one might seek to facilitate students achieving their pedagogical goals. Indeed, for each piece in her 1983 study, the author offers what she calls "teaching suggestions" (many of which could be harnessed to great effect at step three of Popham and Baker's instructional model: Select Learning Activities.)<sup>214</sup> In addition to these, Jessup offers an analysis of each of the *kumbengolu* presented according to its "motor pattern" (see Jessup [1983: 111, 114], for example).

Jessup draws her concept of the motor pattern from Gerhard Kubik, who had worked extensively with xylophonists and hand drummers in South, Central, and East Africa. Kubik (1962: 39) distinguished between "the movements of the musician's hands (motor image) and the pattern actually coming out (acoustic image)." Sometimes, he observed, these were identical, but sometimes they were different from one another. The musicians that Kubik studied would, in the course of their playing, make motions in the air as though they were about to strike a drum head or a xylophone key without actually sounding those notes out on their instruments. And this "motor image" of the hands would occasionally influence "the metrically different acoustic image" (ibid: 40). Despite Kubik's (1965: 35) regarding these motor images to be "of primary importance in much of Africa's instrumental music," and despite the concept's potential application to bala

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<sup>214</sup> For instance, she proposes the use of onomatopoeic techniques for facilitating the students grasping of rhythmic feels (1983: 75), as well as vocalizations for facilitating visual and cognitive correspondence between key sets (ibid: 80). She suggests formal analysis as a means of aiding the students perceiving the overall shape of a pattern as a step towards learning it (ibid: 97, 100). She employs behavioural chaining procedures for teaching patterns (ibid: 104, 117). And she puts forth the use of mnemonic associations between song melodies and stories to facilitate melody recall (ibid: 127). Jessup does not specify her sources for these methods. It could be that they were arrived at through collaboration with Mawdo Suso, that they were drawn from other experiences or literature, or that they were simply the product of her own pedagogical intuition.

playing, Jessup's motor pattern analysis amounts to little more than an isolation of the *kumbengolu's* rhythmic component. Nonetheless, the analysis is still highly useful and can be used to great effect in the four-step empirical instruction model, as I will demonstrate.

Consider the "four elements of rhythm" as outlined by Woody Thompson (1997). Thompson (ibid: 21–22) identifies Subdivision (the breaking up of a given period of time into units), Sticking (the manner of execution of a beat, distributed between right or left hand, right or left foot, index finger, middle finger, ring finger, etc.),<sup>215</sup> Placement (which instrument and which part of the instrument is being struck), and Dynamics (the force of a stroke, and thus, its overall volume) as the bare essentials of musical (percussive) rhythm.<sup>216</sup> In the same way that pattern density is one dimension along which a teacher or an auto-didact student can simplify a *kumbengo* to facilitate its acquisition, the four elements represent other dimensions along which a similar simplification process could occur. If a pattern is presented to a student at 180 bpm, for example, she will likely have a difficult time grasping it. But if the same pattern, articulated at the same volume and across the same keys, is presented at 90 bpm, she will be much more likely to pick it up. This would be an example of a simplification along the Subdivision dimension. Similarly, if a student is shown the following accompaniment (derived from the *Tutu Jara* target *kumbengo* [Camara, 2011a-per] shown at [Transcription 47](#)), the alternation of left hand and right hand strokes (between F, E, and G) will likely pose some difficulties:

[Transcription 73](#). If instead, as a step towards this pattern, the student could first learn to

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<sup>215</sup> Sticking also describes the use or non-use of implements to make contact with an instrument. Thus, whereas drum set players who use sticks would refer to "sticking," a jembe player using her hands would refer to "handing," and a *bongocero* (bongo player) would refer to "fingering." All describe the same element of rhythm.

<sup>216</sup> Thompson identifies Duration as one additional potential element, but does not include it in his final list since, whereas Subdivision, Placement, Sticking, and Dynamics could each be isolated (and changed) irrespective of the other elements, Duration cannot. (A change to Duration must be accompanied by a corresponding change to Dynamic and/or Subdivision . . . unless perhaps in the case that one is employing electronic drum triggers.)

play the pattern shown at [Transcription 74](#), which would no doubt be easier to pick up, he could then be given instructions for dividing the Fs (as well as the E and the G) between his two hands. This is an example of a simplification along the Sticking dimension. When Jessup presents motor patterns for the *kumbengolu* that she furnishes, she is simplifying along the Placement dimension. (Jessup does this using R to represent a right hand stroke, L to represent a left hand stroke, B to represent "both" hands striking at the same time, and · to represent a rest or an empty pulse.) Thus, if the learner is having difficulty learning the pattern as it is expressed on the keyboard, he might first aim to learn to play the pattern on his lap, to "work out" the Subdivision and Sticking before bringing the emergent motor pattern back to the instrument. For example, for the *Tiramakang kumbengo* shown at [Transcription 10](#), the motor pattern would be:

B L · L R · R · R · L · B · B ·

In Chapter 1, I cited the following characterization by Charry (2000: 341) of the nature of Mande music: "Instrumental renditions of pieces consist of harmonic-melodic patterns . . . that are played cyclically, with various kinds of input expected from the performer." Subsequently (in Chapter 3), I likened the relationship between *kumbengo* and piece to the parable of the blind men and the elephant and described the *kumbengo* as a field of possibilities. When learning a *kumbengo* (whether face-to-face or through digital mediation), it is of course important to follow the teachers' models as closely as possible. However, there is some "wiggle room"—especially as regards getting that *kumbengo* in the hands.<sup>217</sup> One common technique, for example, that *balafolalu* regularly employ (both in their teaching and in their music making) is the shifting of a

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<sup>217</sup> Indeed, although on one occasion Famoro Dioubate (2015a-per) cautioned that I should avoid creating new *kumbengolu* until I was truly "qualified" to do so, he additionally remarked that in repeating verbatim the memorized material through which I would awkwardly but dutifully cycle, I was "making confusion to myself." Dioubate too, it seemed, wanted me to try other notes, to follow him, yes, but to do so less strictly.

syncopated pattern towards an on-beat feel, or vice versa. The Placement, Sticking, and Dynamics remain the same, but the Subdivision is adjusted to accommodate simplification or illustration. For example, in order to facilitate the acquisition of the *Diya* patterns shown at [Transcription 61](#) or [Transcription 62](#), there is no reason that the pattern shown at [Transcription 75](#) (or any similar pattern) could not be used if, for instance, it helped the student to visualize the intervallic relationships.<sup>218</sup> Similarly, although the target *kumbengo* for *Tutu Jara* shown at [Transcription 47](#) is played in alternating, single-pulse subdivision, the "doubling" of any of those notes in order to facilitate acquisition—or even just to make a functional simplified *kumbengo* more "musical"—is also possible.<sup>219</sup> (See [Transcription 76](#) and [Transcription 77](#) for example.)

In addition to changes made along the dimensions of Subdivision, Sticking, and Placement, the possibility also exists for the student to "tease out" pattern density layers along the Dynamics dimension. Regardless of the shaping steps that led the student to be able to play a full target *kumbengo*, the possibilities regarding their handling of that *kumbengo* can be explored through a manipulation of Dynamics. That is, any of the layers of pattern density can be highlighted or de-emphasized through Dynamics "play" (i.e., galumphing.) Here, the student stays very distinctly "in the core" but conducts exercises that explore the possibilities for the creation of new layers. Indeed it is often

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<sup>218</sup> For novice students especially, however, as regards the adapting of rhythmic relationships in order to facilitate piece acquisition, a certain degree of caution must be exercised. Charry (2000: 188 n115) has noted that "offbeat relationships are typical of bala playing, where one hand plays on the beat and the other hand plays on the offbeat." He describes lesson interactions with his teacher Bala Dounbouya in which the *balafo* "would play one hand (part) by itself and then the other hand (part) by itself. Sometimes the rhythm differed when he played the parts alone, as if he needed one part as a frame of reference for the other. They were rhythmically different—even independent—but each was necessary to define the other." Modifications along the Subdivision dimension (whether these are made with pedagogical or with aesthetic aims), may compromise *defining* rhythmic relationships. A balance must be sought between dutifully modelling and "trying other notes."

<sup>219</sup> Charry (2000: 180, 298) refers to this "doubling" of notes as an increase in "attack density," signaling that it is more common in bala playing than in koni playing.

through this very Dynamics play that an incremental pathway from core to inner-circle can be achieved.<sup>220</sup>

All of these simplification-, exploration-, and galumphing-strategies can be employed by a teacher as a means of shaping the student towards a given pedagogical goal in a manner that seeks stimulus control. They correspond with steps three and four in Popham and Baker's goals-based model, and they can be described (in behavioural terms) as facilitating a more reinforcing and (in the terms of Brown and Vaughan, Eberle, and Miller) a more "playful" pedagogical pathway.

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<sup>220</sup> Again I might issue a caution for novices against the premature application of an approach that echoes the following utterance by Nina Simone (1969-disc) in her recording of the Bob Dylan tune "I Shall Be Released." At the beginning of the track Simone interrupts the players to rebuke them, saying: "You're all pushing. You're pushing it. You're pushing it. Just relax. Relax. You're pushing it. It'll go up by itself. Don't put *nothin'* in it unless you feel it." The student who has not yet practiced the individual hand density layers, or who has not conducted some kind of hand-density analysis, I fear, opens themselves up to the potential for a "new age" interpretation of Dynamics play. There is value in simply playing the accompaniment over and over, i.e., in not putting "nothin' in it unless you feel it"—as a means to develop (and exercise) technical proficiency. But Nina Simone is an extraordinarily high-level musician, as are the musicians with whom she is making that 1969 recording. Unless some experience has first been garnered, the risk is high that for the novice, a "don't put nothin' in it unless you feel it" practice session will be less about becoming a better player and more about . . . dude . . . just feeeeling it.

## CHAPTER 6

### Toward a Pedagogical Grammar

In the previous chapter, I sought to demonstrate the relative efficacy of a "density analysis" approach for learning to play a single *kumbengo*. I showed how complex patterns can be parsed into various layers of density and how a familiarity with these layers can be used to begin to incrementally shape a student from core playing toward the inner-circle. But the pieces that comprise the bala's repertory can be (and tend to be) expressed through many more than just one *kumbengo* each.<sup>221</sup> In the present chapter I aim to demonstrate that there are unifying principles at work that relate the various *kumbengolu* of a single piece to one another—the "keyboard areas" that appear to govern the articulation of patterns in a great many of the pieces played by Mande *jelilu*, as well as the embedded melodies that shape a piece's evolution over time.

While it is true that many of the *kumbengolu* that are shared via digital mediation are so complicated that they are "in need of" a density analysis in order to make the process of learning to play them feel less "work-like," many of the patterns are presented in an already simplified guise. With an understanding of the bala's keyboard areas and a familiarity with the concept of the embedded melody—as well as a subsequent understanding of some of the principles of "rolling" (also discussed in this chapter)—I hope to equip students with the means to use simplified patterns more effectively, as well as to generate their own patterns in a way that supports and augments, rather than co-opts and redirects, the music they make in a Mande paradigm. It is expected that providing the student with the means to take greater individual control of their own learning would also furnish them with the power to better capitalize on stimulus control

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<sup>221</sup> Recall: No one *kumbengo* "is" *Bani*, but each expresses or reflects *Bani* in its own way. (See Chapter 3.)

and create a more "playful" learning experience—both in the sense of increasing intrinsic reinforcement value (while simultaneously decreasing intrinsic punishment value), as well as in the sense of charting out "a crooked line to the end."

## Keyboard Areas and Keyboard Layout

For many pieces played on the bala, accompaniment patterns comprise sets of alternating (and variously rhythmically articulated) fourths and fifths. These fourths and fifths (and their corollary inversions across the octave) can be placed at different starting points running up and down the keyboard. Depending on which notes are involved, the sets of slats that are expressed by these patterns comprise what I have termed "keyboard areas." To explicate the keyboard areas concept more fully, I will refer to the piece *Konkoba*,<sup>222</sup> which, although often considered more appropriate for advanced learners, will give perhaps the clearest illustration of the model. However, as is the case with many pieces in the repertory, there appear to be several "versions" of *Konkoba*.<sup>223</sup> The one transcribed here, from Sory Diabate (2005-per), is the simplest and corresponds to the track "Layi Bare" on the Wofa (2001-disc) album *Iyo*<sup>224</sup> and to "Konkoba" from *Allah Nan Fan* by the group Les Bay-fall de Guinée (2006-disc).

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<sup>222</sup> *Konkoba* is a sorely understudied Mande phenomenon given its ubiquity and apparent importance. Charry (2000: 182–3), who refers readers to Boulton (1934-vid), El Dabh and Proschan (1979: 18–54), Huet and Keita (1954: 85), and Joyeux (1924, fig. 8), reports that the *Konkoba* is "a large masked figure" whose appearance can be accompanied by large numbers of bala players (which Charry supposes to be "typical of Guinean bala-based traditions.") Uschi Billmeier (1999: 65), whose observations are corroborated in numerous CD liner notes, explains that *Konkoba*—as a jembe rhythm—is played both "for working in the fields" and "in honor of a powerful and rich farmer." Billmeier also reports that "the word konko means forest or jungle," although Mamadou Camara (1999: 233) defines *konko* as *campagne* (field) and *könkö* as *faim* or *famine* (hunger; famine). Richard Spears (1973: 225) also defines *könkö* as hunger.

<sup>223</sup> "Version" here refers not to different iterations of a given *kumbengo*, but rather to different sets of *kumbengolu* that define a given piece. These are often (in recordings and in performances) played sequentially, as Durán (1981: 188) has noted is done with *Tutu Jara*.

<sup>224</sup> This "simplest" *Konkoba* is played until 1:57, at which point the song *Konkoba Sayon* is introduced. *Konkoba Sayon* doubles the length of each cycle.

[Transcription 78](#) shows the first two accompaniments as demonstrated by Diabate.

There are several observations to make about these accompaniments. First, the sticking configuration follows a consistent left, then right, then left, then right pattern. Charry (2000: 188) explains, rightly, that this "alternating left-right two-pulse kinetic pattern" is typical of many bala *kumbengolu*.<sup>225</sup> Second, the notation here (and Diabate's playing on the video) depicts a ternary time feel. Locke (2011: 52) distinguishes between two predominant metric matrices: ternary (where "beats contain three fast pulses") and quaternary (where "beats contain four fast pulses").<sup>226</sup> Kwabena Nketia (1974: 125–31) uses "duple rhythm" and "triple rhythm" to refer to beat structures divided into "two and multiples of two" pulses and "three and multiples of three" pulses, respectively.<sup>227</sup> In terms of the articulation of pulses within the structure, inherent in this rendering of *Konkoba* is a "loping" feel, where note placement is on the first and third pulses of the three-pulse structure. But the interpretation of such a pattern as being either ternary or quaternary (that is, "in three" or "in four") is not as strict as previous studies may have suggested.<sup>228</sup> In bala playing (as in a great many other kinds of music from across the African continent and beyond), the distinction between binary, ternary, and quaternary

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<sup>225</sup> Jessup too (1983: 56–57) has made this observation. Indeed, it is precisely this feature of several of the pieces that Jessup includes in her study (*Jula Jekere* and *Kolong Kuma*, for example) that leads her to make an association with Kubik's (1962; 1965) work on motor images.

<sup>226</sup> Locke offers his "metric matrices" as analytical tools applicable to many African musics, though he illustrates their use using an item from the Dagomba (Northern Ghanaian) dance-drumming repertory.

<sup>227</sup> In Nketia's triple rhythm structure, of course, when there are six pulses, two-beat and three-beat subdivisions can be perceived (by the performer as well as by a listener or a dancer) to be happening at the same time. And when there are twenty-four or forty-eight pulses, four-beat subdivisions can also be present. (In a Western theoretical context, the 3:2 ratio is referred to as a hemiola.) Hand percussionists in North America tend to refer informally to grooves as being predominantly "in three" or "in four." Informally, I also distinguish between the common "three groups of four" and "four groups of three" subdivision feels.

<sup>228</sup> Nor indeed, as the "locking into" a particular beat and pulse structure that the reduction of music to notated form imposes. Sory Diabate (2006-per) once expressed his doubts at the feasibility of my practicing with computer-generated *kumbengolu* precisely for this reason. Famoro Dioubate (2010b-per) and Naby Camara (2012-per) disagreed with Diabate on this point, and he has since changed his view (2013-per). Now, he and the others encourage my continued use of JV4—provided I am conscious of the potential for pulse-structure variance in non-computer mediated contexts.



time feels is not so much digital, as analogue. In other words, the same set of *kumbengolu* that are used to express a piece in a ternary time-feel could express the same piece in a quaternary one (or a binary one, depending on how one is rendering the "conversion.")<sup>229</sup> There is an extensive body of discographic evidence demonstrating this. What is more, among bala players, there appear to be some established conventions for making such conversions. If in the ternary structure, the loping:

1 · 3 1 · 3 1 · 3 1 · 3

is used, in the binary and quaternary versions, the strokes tend to simply be "flattened out" into a straight "up-down" or "on-off" feel. [Transcription 79](#) is of an accompaniment for the piece *Lamban* (Camara, 2010-vid) in a ternary time feel. [Transcription 80](#) shows the same accompaniment contracted to a binary time feel and [Transcription 81](#) expands the accompaniment to a quaternary feel—aurally indistinguishable from the binary feel.<sup>230</sup> If in the ternary structure, instead of the loping feel, every pulse corresponds with a note (that is, if the pulse structure is "filled out"), the convention appears to be to expand the evenly-distributed pulses in the ternary structure to either the *first three* pulses or the *last three* pulses of the quaternary one. In his self-produced album

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<sup>229</sup> And to be sure, there can also be play between these—it is not merely a case of sometimes one, sometimes the other. Charry (2000: 325) points out: "sometimes rhythms can, even should, be felt in both a binary and ternary rhythm at the same moment." Rainer Polak (1998) has discussed the deliberate and even systematic microtiming shifting that players effect toward (or away from) various time feels. The phenomenon is now referred to as "non-isochronous beat subdivision" and is found in musics throughout the world. See Gabrielsson, Bengtsson, and Gabrielsson (1983), During (1997), Benadon (2006), Gerischer (2006), Kvifte (2007), Polak (2010), and Jankowsky (2013).

<sup>230</sup> *Lamban* is another piece for which there are reportedly several versions. Mawdo Suso (2006-per) has identified *Lambandingo* (small *Lamban*) and *Lambamba* (big *Lamban*) as distinct. Curiously, the *Lambandingo kumengolu* shared by Suso have a marked ternary feel, whereas the *Lambamba kumbengolu* are quite clearly binary/quaternary. There are many recordings of *Lamban* (such as Conde [2006-disc]) where the musicians begin in a ternary feel and let the music "morph" into a quaternary one. Further research may reveal that all of Suso's *Lambandingo kumbengolu* could also be played as *Lambamba* by simply making the ternary to quaternary conversion, but it may also be that there are certain incompatibilities between them according to the songs and dances the *kumbengolu* are meant to accompany. Famoro Dioubate (2013-per) has identified a third *Lamban* version, *Lambangbe*, which Sory Diabate has adapted to be played with the jembe rhythm *Dunumba* (see below).

*Kontendemi* (2014-disc), Famoro Dioubate plays "Mamaya" in a clear ternary structure. [Transcription 82](#) shows one accompaniment for that piece notated "in three." But Dioubate (2010b-per) has shown me the same accompaniment "in four" as illustrated in [Transcription 83](#). The first accompaniment for *Sörsörnë* (which has a strong ternary feel), as played by Sory Diabate (2005-per) is shown in [Transcription 84](#). A nearly identical accompaniment in a quaternary feel was Diabate's first accompaniment for *Jole* (2005-per). This is shown in [Transcription 85](#). It may be that these are not the only conventions for making this type of conversion (i.e., of a "filled-out" ternary pattern to a quaternary one); further study would be required to reveal others if they exist.

The third observation to make about Diabate's *kumbengolu* for *Konkoba* is that the second, with respect to the heptatonic octave, is simply the intervallic inversion of the first. It is this observation that will bear most directly on the keyboard areas model. Between the first and second accompaniments, and then, between the second and higher-register re-iteration of the first accompaniment, two additional accompaniments could be expressed, each one using half of either of the other two. These two "half-and-half" *kumbengolu* are illustrated in [Transcription 86](#).<sup>231</sup> The full set of four accompaniments is shown, now in the vertically-oriented TUBS-style notation, in [Figure 11](#). If, in order to visualize these patterns more simply, the rhythmic pattern of the left hand is followed, and the intervals (delineated by each group of three notes) are played simultaneously as dyads—i.e., if a modification along the dimension of Subdivision is made—the arrangement shown in [Figure 12](#) emerges. Visualized thus, a clear pattern of (perfect) 4ths and 5ths can be identified. For accompaniment 1, the pattern is 4–5–5–4,

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<sup>231</sup> Although Diabate did not teach these latter two *kumbengolu* as accompaniments in my first (2005) interaction with him, there were several instances in which such "half-and-half" *kumbengolu* were expressed, sometimes as accompaniments, sometimes as transitional devices to move from one accompaniment to the next. Diabate himself did this (as did each of Naby "Eco" Camara, Naby "Coyah" Camara, and Famoro Dioubate), for *Konkoba* and for myriad other pieces.

or  $G_1-C_1$ ,  $A_1-E_1$ ,  $G_1-D_1$ ,  $B_1-E_1$ . (See [Figure 13](#).) The note F, which falls outside the 4–5–5–4 pattern, is the only note in the octave that is not played. And it is with respect to this "avoid note" that the four keyboard areas emerge: Area 1 corresponding to  $G_1-E_1$ , Area 2 corresponding to  $A_1-G_1$  (minus  $F_1$ ), Area 3 corresponding to  $C_1-B_2$  (minus  $F_1$ ), and Area 4 corresponding to  $E_1-D_2$  (minus  $F_1$ ). (See [Figure 14](#).) These keyboard areas would then of course be repeated across the octave, starting again at  $G_2$ . What is significant here is not so much the specific notes to which the keyboard areas correspond, as the arrangement of the areas with respect to the avoid notes.<sup>232</sup> In Area 1, a set of six adjacent slats is played. In Areas 2 and 4, one slat "reaches across" the avoid note (toward the higher pitch, in the case of Area 2, toward the lower pitch in the case of Area 4). In Area 3, the slat set straddles the avoid note evenly, three slats played on either side.

The accompaniments for a great many pieces—but especially those corresponding with the jembe/dunun repertory on the one hand and the "modern Guinean" repertory on the other—conform to the keyboard area model. The order of fourths and fifths, however, and also the duration spent in each group of either four or five keys, respectively, varies. Indeed it is this variance that appears to distinguish many of the "pieces." The patterns taught to me as the first accompaniments for *Sörsörnë* and *Jole* (see [Transcription 84](#) and [Transcription 85](#)), for example, correspond to Keyboard Area 1, and would be described by the pattern 5–5–4–4. Following the same steps as were followed for

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<sup>232</sup> Again, the equi-heptatonic tuning of *balas* in Mande would make moot observations about just which notes were being played in these keyboard area arrangements. Played on a diatonic keyboard, however, the avoid notes will tend to be F, B, or D, since, with the other four possibilities (A, C, E, and G), the "perfect fifth—perfect fourth" relationship is compromised with the necessary introduction of a  $B_1-F_1$  diminished fifth or an  $F_1-B_2$  augmented fourth as one of the dyads. This said, it must be noted that I myself have never played (nor been taught these particular patterns) on equi-heptatonic instruments. It could well be that everything that I am observing about keyboard areas applies to instruments with Western tunings only—which would imply that they represent a Mande adaptation to Western temperament. A fascinating study would be one in which Mande players were asked to adapt their melodies to instruments whose tunings correspond to neither Mande nor Western systems.

*Konkoba* above, [Figure 15](#) shows the "alternating left-right two-pulse kinetic pattern" for *Sörsörnë*, and [Figure 16](#) shows that pattern for *Jole*. Next, the dyad arrangement for the two pieces is shown. (See [Figure 17](#) and [Figure 18](#).) Then, [Figure 19](#) is of the 5–5–4–4 pattern for *Sörsörnë*'s accompaniment 1 and [Figure 20](#) shows the same pattern for *Jole*'s accompaniment 1. Finally, the full set of four keyboard areas is depicted in [Figure 21](#) for *Sörsörnë*, and [Figure 22](#) for *Jole*. Other pieces for which the keyboard area model appear to apply include (but are not limited to): *Jarabi* ([Figure 23](#)), *Kaira* ([Figure 24](#)), *Sökö* (whose keyboard areas configuration corresponds precisely to that of *Guinea Berese Na Kha Dira*) ([Figure 25](#)), *Soli* ([Figure 26](#)), and at least one "version" of *Tutu Jara* ([Figure 27](#)). Although the keyboard areas model does apply to a large number of pieces in the bala repertory, it does not appear to apply to the repertory as a whole. It is beyond the scope of this dissertation to explore piece categorization in exhaustive detail, but since continued discussion of the significance of the keyboard areas model depends at least partly on a clarification of how the pieces that fit this model differ from other pieces, a few observations should be made.

Pieces in the Mande repertory can be categorized variously. Charry (2000: 148), for instance, has organized pieces based on their geographical and historical origins as well as according to the instrument on which each piece was likely composed or with which it is associated (ibid: 398–401). Knight (1982: 40) has organized pieces according to the ethnic backgrounds of the individuals to whom pieces are dedicated, and Billmeier (1999: 26–105) has organized pieces according to their function in Mande society. Another basis for repertory categorization might be the musical characteristics that the pieces bear. Knight (1973: 192–205), for example, has organized kora pieces according to the *konkondiro* pattern that would be played with each piece and Charry (2000) has grouped pieces according to their harmonic scheme. To begin with, Charry (ibid: 151, 184–85) has identified what he calls the Sunjata Complex. Members of this category

(*Lamban*, *Boloba*, and *Sunjata*) share an F/C to G/D to F/C harmonic scheme. (The pieces *Yankadi [Jawura]*, *Mane*, and *Yokui*, are all based on a 1–3–5, 1–2–6 pattern that also bears a harmonic relationship to the members the Sunjata Complex.) In addition to this, Charry (ibid: 151) introduces the Kelefa Complex<sup>233</sup> and also identifies *Nanfulen* and *Fakoli* as being related due their each have three distinct harmonic areas (instead of the more typical two or four). Although *Nanfulen* and *Fakoli* share the feature of having three harmonic areas (A/F/G) occupied in equal duration, one version of *Sökö* (different from the one considered in [Figure 25](#)) occupies those same three harmonic areas, albeit in a four-part A/F/G/G scheme. This structure of a-b-c-c (sometimes expressed as c-a-b-c) is present in several pieces including *Lasidan* and *Talasa* and informs variation for *Mbaa Mbie* and *Soli*. One version of *Konkoba* called *Konkoba Sayon* follows an interesting and unique harmonic scheme: E/B to G/C to E/A to F/C to D/A to F/B to D/G. (See [Transcription 87](#).) And of course, a category could be made for the pieces (listed above) that conform to the keyboard areas model. I believe there are several benefits to according this category some consideration.

The first benefit to giving consideration to the keyboard areas model is a pedagogical one and relates to key-set visualization. Famoro Dioubate (2010b-per?) has stressed the importance of "taking your position" before striking out to the outer-circle. By this I believe he means that one has to have at least some idea of where one will "land" upon their return to the core (or to the inner-circle).<sup>234</sup> Cultivating the ability to visualize (whether on the keyboard itself or in the "mind's eye") the sets of keys to which

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<sup>233</sup> Charry does not, however, clarify which pieces would pertain to this category, although Yusupha Suso (2006-per) has identified *Sinyaro*, *Kele Ma'nyi*, *Hama Ba Jata*, and *Jaka* as potential members, describing the complex as "a tree with branches." Other such "tune families" include one comprised of the pieces *Mariama*, *Sabar*, *Jimbasengo*, *Sira Ba Bolo*, *Kura M'Bisan*, and *Kumbu Sora* and another comprising *Sirifo Haidara*, *Tantamba*, *Yeye*, and *Salimou*.

<sup>234</sup> Chernoff (1979: 56) has described that among Ghanaian Ewe drummers, the tendency is to attend more to the point of return than to the point of departure: "the musician unifies his time with the last beat he plays rather than the first one." (Chernoff's extrapolation from Ewe music to characterize an "African" approach posed in opposition to a "Western" approach may be somewhat facile, but the principle does appear to apply in this case.)

one will aim when returning from an exploratory run aids in this endeavour.

Experimenting with various iterations of the keyboard areas model has so far proven helpful<sup>235</sup> for engraining "slat sets" in one's experience.

Consider the following accompaniment pattern for *Soli*, furnished by Famoro Dioubate (2010a-per): [Transcription 88](#). This pattern occupies Keyboard Area 3, with F as the avoid note. (See [Figure 28](#).) A second accompaniment pattern furnished by the same *balafola* (ibid) is played as follows: [Transcription 89](#). As can be seen clearly in the vertical TUBS visualization at [Figure 29](#), this second accompaniment occupies keyboard Area 1 (in its  $G_2$ – $E_2$  iteration), but since it additionally employs the lower-pitched  $E_1$ , in fact the accompaniment stretches across two keyboard areas: Area 1 as well as Area 4. Similarly, in Dioubate's (ibid) third accompaniment pattern (shown at [Transcription 90](#) and again at [Figure 29](#)), the low-pitched  $E_1$  straddles the accompaniment across both Area 4 and Area 1, but because  $G_3$  is also employed, the accompaniment additionally breaches Area 2 (in its  $A_2$  to  $G_3$  iteration).

In all three accompaniments, a similar schema can be identified: the two keys adjacent to the "avoid notes" (in this case G and E), serve as "anchors" while the bipartite structure of the kumbengo oscillates between the two pairs of slats that make up the "inner-four" notes—B and D in the first part, and A and C in the second. [Figure 30](#) visualizes these relationships. Depending on the model's arrangement of 4ths and 5ths (i.e., whether 4–4–5–5, or 4–5–4–5, etc.), the inner-four notes will oscillate between either the "upper" and "lower" thirds creating an ABAB or a BABA arrangement (as in the case of Dioubate's *Soli* accompaniments) or between the "inner" and "outer" notes, creating an ABBA or a BAAB arrangement (as would be the case with the *Sörsörnë*

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<sup>235</sup> This assertion is based not on any controlled experiments with duly considered methodologies. Rather it appears to have borne out in practice, both in my own playing and in that of students that I have had, but as a truth claim, it would need to be tested more rigorously.

pattern shown at [Transcription 84](#) and considered in [Figure 15](#), [Figure 17](#), and [Figure 19](#)).

John Castellano (2000: 40), director emeritus of The Collective School of Music and long-time instructor at New York University's Gallatin School of Individual Achievement, advocates a practice regimen design based on "diligent focused effort," wherein "focused" refers to the identifying of weaknesses and the subsequent design of exercises<sup>236</sup> that will allow one "to develop that particular skill." There are many "bala skills" that could be developed in this way: the playing of octave melodies, note-by-note (and similar) ascents and descents along the length of the keyboard, the visualizing of groups of five and four keys, rolling (see below), right-hand/left-hand independence, and the visualizing of keyboard area sets, whether within a single area, or across multiple areas. Rather than solely learning to dutifully cycle through sets of memorized *kumbengolu*, a student could instead design exercises (such as, for instance, those based on the keyboard areas model) that would allow them to develop the skills that could enable a more playful (in the sense of "a crooked line to the end") interpretation of those *kumbengolu*.

A second benefit to considering (and to cultivating an understanding of) bala keyboard areas concerns the ways that *balafolalu* likely seek a means of supporting (with a *kumbengo* or set of *kumbengolu*) the songs that are sung at popular drum and dance celebrations, such as that described by Knight (2010-vid). Recall his description of the format for a typical bala/bote performance (ibid: 16): "The *balafon* players respond to the revelers. As one or another of the women prompts them with the beginning of a song, they launch into it, continuing until another [song] is requested." Sory Diabate (2013-per) has shown me video that he had taken of a wedding celebration in Conakry

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<sup>236</sup> This is another sense in which pedagogy becomes "playful." The very process of designing exercises—of solving problems, or ameliorating shortcomings—can be made "game-like."

(and that he described as "typical" of that type of bala performance), which followed a format identical to that described by Knight. Upon seeing the video, the two questions that I immediately asked myself were: (a) How do the *balafolalu* identify the tonality of the tune (i.e., how do they know at which pitch level to begin their accompaniments?), and (b) How do they identify a set of adequate *kumbengolu* that might support the song as the women present them—particularly in the case when the instrumentalists have never heard the song they are being asked to support?"<sup>237</sup> One clue might be found in observing that for some of the songs, Diabate and I were able to identify the outline of some familiar accompaniments, such as those played for *Guinea Fare* or *Soli*. Thus in some cases, the *balafolalu* appeared to be simply playing a variant of a known piece in support of the song melodies of the female participants. But in other cases, it appeared as though the *balafolalu* were aiming to identify an appropriately supportive combination of 4ths and 5ths (i.e., Keyboard Area 1). From there, they would expound any rhythmically appropriate combination of *kumbengolu* that corresponded with the other keyboard areas. To illustrate how this might be done, consider the following transcription of an unidentified piece<sup>238</sup> played by Burkinabe *balafola* Issiaka Dembele (2008-web): [Transcription 91](#). An appropriate Area 1 *kumbengo* that could be played in support of Dembele here would be that shown (as a two-pulse kinetic pattern) at [Transcription 92](#). The vertical TUBS visualization of that accompaniment is shown at [Figure 31](#). The avoid note here is B—and the inner-four notes oscillate between the inner pair (E and F) in the first half and the outer pair (D and G) in the second. Now, of course Dembele is not

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<sup>237</sup> This situation is common; new songs are being composed all the time.

<sup>238</sup> An American colleague Darrin Jackson has identified the piece as *Saxo Dugu*. This seems reasonable to me considering the similarity of the "key phrase" melody repeated throughout Dembele's performance (beginning halfway through beat 5 in most measures of the transcription) to a similar melody heard in various recorded versions of that piece (see Sory Kandia Kouyate [1999a-disc] for example). However, I have never learned to play *Saxo Dugu* myself, nor have I studied it seriously, and so I am largely unfamiliar with its identifying characteristics and would thus hesitate to identify it definitively.



"singing" a melody here, but rather, engaging in inner-circle improvisations around an established (if not easily articulable) accompaniment. However, assuming the composer of the song has based her composition on some similar pattern—which often happens—then the identification of Keyboard Area 1 should, in principle, be a reasonable first step to unlocking the harmonic scheme for that song's melody.

The third benefit to considering the bala's keyboard areas deals with the relationship between the repertory of the drumming sphere and that of the *jeliya* sphere. This relationship is explored in the following section.

## Bala Repertory / Jembe Repertory

I have had many opportunities to play bala with (and teach bala to) non-Mande jembe enthusiasts. But even among those who have achieved a high level of competency on that instrument, only the most dedicated practitioners have anything more than a cursory knowledge of bala repertory.<sup>239</sup> As such, I am frequently asked if I know and can play (or teach) "the bala part" for a given jembe piece.<sup>240</sup> Students tend to expect a one-to-one correspondence between bala repertory and jembe repertory, and although there are pieces for which bala and jembe (and also, importantly, dunun) do each have parts to play, repertory crossover between the drumming sphere and the *jeliya* sphere is seldom fixed.<sup>241</sup>

In Chapter 2, I explained that my first opportunity to play a bala came in 2004 while I was in Guadalajara, Mexico. I also explained how at that time I was involved in a local (Mexican) Mande drumming group. I had been playing jembe and dunun for at least ten years prior to my sojourn in Guadalajara, and I was familiar not only with the repertory of those instruments, but also with the canonical (audio and video) recordings and relevant literature available to students thereof. At that time, jembe enthusiasts throughout North America regarded several sources for instructional material to be "sacrosanct" and these

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<sup>239</sup> I would guess that as many as 80–90% of new "initiates" to the bala have come to this instrument through experiences with jembe dance-drumming.

<sup>240</sup> Actually, in the parlance of jembe enthusiasts, "rhythm" (or even "dance") would be the term used instead of "piece," but for consistency, I will use piece here to describe repertory items for either instrument—though, truth be told, even for bala repertory items, "piece" is not a totally satisfactory term, as it implies a kind of "start-to-finish" composition practice which, as has been seen, does not at all reflect the performance reality of bala playing. Lacking an English-language alternative, however, and following Knight, Durán, and Charry (as well as my francophone informants, who use the French term *morceau*), I have used "piece" throughout this dissertation.

<sup>241</sup> Most properly, perhaps music in which jembe, dunun, and bala are played together would be best described as belonging to Charry's fourth sphere: a kind of modern, albeit in this case "neo-traditional," hybrid category. This said, however, it could be understood that the process of canonization of musical material across the drumming and *jeliya* spheres is ongoing. Sory Diabate's bala parts for *Tiriba* and *Koreduga* (*Kotedjuga*) (see Martin [forthcoming-vid]) are good examples of this process.

played a major role in defining the canon of jembe music that exists now for students the world over. Principal among these sources was (and continues to be) Uschi Billmeier's *Mamady Keita: A Life for the Djembe—Traditional Rhythms of the Malinke* (1999), as well as the corresponding three-volume video collection *Traditional Rhythms of the Mandingue* (2000-vid), also by Mamady Keita.<sup>242</sup> When Eric Moreno and I set out to learn to play the bala tunes in Jessup (1983), we expected for there to be a clear relationship between bala repertory and jembe repertory, especially since these two instruments were often played together in audio recordings. But we quickly recognized that in fact, wholly none of the pieces in Jessup corresponded with the pieces presented in Billmeier's book and Keita's videos. Table 3 lists the pieces found in each of these three sources, as well as, for purposes of comparison, Knight's 1982 article "Manding/Fula Relations as Reflected in the Manding Song Repertoire."<sup>243</sup>

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<sup>242</sup> Also important were (a) Paul Nas' West African Percussion (WAP) pages (2015-web), a website that compiles and documents Nas' own (and other students') lessons with several of the most highly-regarded names in jembe performance and pedagogy (Mamady Keita, Famoudou Konate, and Baba Toure, most notably), juxtaposing these with other printed sources, (b) Famoudou Konate and Thomas Ott's *Rhythmen und Lieder aus Guinea* (1997), published in English as *Rhythms and Songs from Guinea* (2000), and (c) Mamady Keita's four-volume DVD release *Guinée: Les rythmes du Mandeng* (2004-vid). Since that time, a great deal more instructional material has been produced, but these newer works have not diminished the importance of the earlier ones.

<sup>243</sup> Knight's dissertation (1973: 100–9) does offer a more complete repertory list (over one hundred items, including derived pieces), but "Manding/Fula Relations as Reflected in the Manding Song Repertoire" condenses this list into what could be considered "core repertory." (What is more, many of the pieces in Knight's 1973 list now have very limited currency or are obsolete, making the 1982 list more representative.) Regardless, even making the same comparison with Knight's dissertation, only one item from that repertory list appears in either of Billmeier or Keita, the piece *Mamaya*—though actually, *Mamaya*, which was first composed on the bala represents an adaptation on the part of jembe players, not the other way around. For more on the history of *Mamaya*, see Charry (2000: 286–7) and Kaba and Charry (2000: 187–206). Another example of this direction of adaptation (i.e., a borrowing from the *jeliya* sphere on the part of jembe players) is the piece *Lamban* (*Lambango*, *Lambamba*), which has now been folded wholesale in the canon of pieces taught in dance-drumming classes in Europe, North America, Japan, and beyond.

Table 3. Repertory Comparison of Four Sources

Knights, 1982	Jessup, 1983	Billmeier, 1999	Keita, 2000 (3 vols.)
-	-	Abondan	-
Abou Njai	-	-	-
Ala l'a ke	Ala L'a Ke	-	-
Alifa Yaya	-	-	-
Amadu Falike	-	-	-
-	Apollo	-	-
Bakariba	-	-	-
-	-	Balakulandjan	-
Balan Kula	-	-	-
-	-	Baö	-
Bamba Bojang	-	-	-
Chedo	-	-	-
-	-	Dallah	-
Dandan Nyariya	-	-	-
-	-	Denadon	-
-	-	Djaa	Djaa (vol. 1)
-	-	Djabara	-
-	-	Djagbe	Djagbe (vol. 1)
-	-	Djabewara	-
-	-	Djansa	Djansa (vol. 2)
-	-	Djole	-
-	-	Donaba	-
Duga	-	-	-
-	-	Dunungbe	Dunungbe (vol. 3)
Fainkunko	-	-	-
-	-	Fankani	Fankani (vol. 1)
-	Faringbulo	-	-
Fode Kabba	-	-	-
Galajo	-	-	-
-	-	Garangedon	Garangedon (vol. 2)
-	-	Gidamba	-
Hamaba	-	-	-
Janjong	-	-	-
Jara Dinke	-	-	-
Jula Faso	-	-	-
Jula Jekere	Jula Jekere	-	-
Kairaba	-	-	-
-	-	Kakilambe	Kakilambe (vol. 3)
-	-	Kanin	-
-	-	Kassa	Kassa (vol. 2)
-	-	Kassa Soro	-
Kata Ndau	-	-	-
-	-	Kawa	-
-	-	Kele m'Se	-
Kelefaba	-	-	-
-	Kolong Kuma	-	-
Kodi n'a julo	-	-	-

-	-	Konden	-
-	-	Konkoba	-
-	-	Könö	-
-	-	Könöwulen	-
-	-	Kontemuru	-
-	-	Kotedjuga	Kotedjuga (vol. 3)
-	-	Kuku	Kuku (vol. 1)
Kumbu Sora	-	-	-
Kura	Kura	-	-
-	-	Kurabadon	-
Lambango	Lambango	-	-
-	-	Liberté	-
Maki	-	-	-
Malang Marang	-	-	-
Mali Sajo	Mali Sajo	-	-
Mamadu Bitiki	-	-	-
Mamadu Masina	-	-	-
-	-	Mamaya	-
Mansa Jata	-	-	-
-	-	Marakadon	-
-	Masani Ceesay	-	-
-	Mbu Muso	-	-
-	-	Mendiani	Mendiani (vols. 1 & 2)
Miniyamba	-	-	-
-	-	Moribayassa	Moribayassa (vol. 1)
Musa Koli	-	-	-
-	-	Namani	-
-	-	Nantalomba	-
-	-	N'Goron	N'Goron (vol. 3)
Nteri Jato	-	-	-
Nya Wuleng	-	-	-
-	-	Saa	-
Satang Madi	-	-	-
-	-	Senefoli	Senefoli (vol. 2)
Silati Ngaleng Koi	-	-	-
Sira Ba	-	-	-
Sherif Sidi	-	-	-
-	-	Soboninkun	Soboninkun (vol. 3)
-	-	Sofa	Sofa (vol. 2)
-	-	Sökö	-
-	-	Soli	Soli (vols. 1 & 2)
-	-	Soliwoulen	Soliwoulen (vol. 3)
Sori	Sori	-	-
-	-	Sorsornet	-
Sumbu Yaya	-	-	-
Sunjata	Sunjata	-	-
Sunkariba	-	-	-
Suntu Baji	-	-	-
-	-	Sunun	-

Tabara	Tabara	-	-
-	-	Takosaba	-
Tara	-	-	-
Tira Makang	Tiramakang	-	-
-	-	Tiriba	Tiriba (vol. 3)
-	-	Toro	-
Tubanka	-	-	-
Tutu Jara	-	-	-
-	-	Wassolonka	-
-	-	Woima	-
-	-	Yankadi-Makru	-
Yeyengo	-	-	-
-	-	Zaouli	-

The rather stark discrepancy of repertory items between the first two and the latter two sources owes to two principal factors. The first factor is a geographical/ linguistic one.<sup>244</sup> Had Jessup undertaken her study in Guinea among Susu- or Maninkakan-speaking informants instead of in The Gambia with Mandinka-speaking informants, her repertory list would no doubt have looked very different. The second factor is the aforementioned difference of "sphere"—Knight and Jessup are dealing with *jeliya* repertory whereas Billmeier and Keita deal with drumming repertory.

The repertory list that Sory Diabate (2005-per) selected for our first encounter together (around one year after the learning attempts with Moreno), bore much more similarity to Billmeier's and Keita's lists than to Knight's or Jessup's. Diabate's selections, along with the lists of pieces recorded in my subsequent three encounters with Susu-speaking, Guinean informants<sup>245</sup> are presented in Table 4. (Pieces that correspond with the Billmeier and Keita lists from Table 3 are highlighted in grey.)

<sup>244</sup> For explanations of the geographic and linguistic origins of pieces from the *jeliya* sphere see Knight (1973: 98–110; 1982: 37–47) as well as Charry (2000: 147–57). See Billmeier (1999: 26–105) and Charry (2000: 198–211, 218–21) for piece origins of items from the drumming sphere.

<sup>245</sup> In my second encounter with Diabate (2006-per), it was I who proposed some of the pieces. (In Table 4, these pieces have been placed in parentheses.) I did this in order to facilitate comparison with material that I had previously collected in The Gambia working with Mawdo Suso. It is worth noting that, as in the previous year, most of the pieces that Diabate himself selected corresponded with the Billmeier/Keita lists (i.e., with the drumming sphere repertory) rather than with the Knight/Jessup lists (the *jeliya* sphere repertory). Also worth noting is that

Table 4. Repertory Selections by Susu-Speaking, Guinean Informants, 2005-2009

Diabate, 2005	Diabate, 2006	"Eco," 2006	"Coyah," 2009
-	(Allah L'a Ke)	-	-
-	(Apollo)	-	-
-	-	-	Denykemba
-	(Duga)	-	-
Dunumba	-	-	-
-	-	-	Fasson
Guinea Fare: Mane	-	-	-
-	Guinea Fare: Mbaa Mbie	-	Guinea Fare: Mbaa Mbie
-	Guinea Fare: Tiamba	-	-
Guinea Fare: Yokui	-	-	-
-	(Janjon)	-	-
-	Jarabi	-	-
Jole	-	-	-
-	-	Kaira	-
-	-	Kassa	-
-	Kawa	-	-
-	-	-	Kebendo
-	Konden	-	-
Konkoba	Konkoba	Konkoba	Konkoba
-	Konyagui	-	-
-	-	Mamaya	-
-	(Masani Cisse)	-	-
-	-	Nanfulen	-
-	Sabar	-	-
Sofa	-	-	-
-	Sökö	Sökö	Sökö
-	Soli	Soli	Soli
-	(Sori)	-	-
Sörsörnë	-	-	-
-	(Sunjata)	-	-
-	-	-	Talasa
-	-	-	Tantamba
-	Tiriba	-	-
-	-	Tubaka	-
-	Warra	-	Warra
-	Xemefuri Derabe	-	-
-	-	-	Yabule
Yankadi	-	Yankadi	-

Diabate, then in his early 20s, was not nearly as familiar with (at least some of) the *jeliya* pieces (*Allah L'a Ke* and *Masane Cisse*, for example). Since that time, his knowledge of repertory items from both spheres has greatly increased.

In Chapter 3, I described the long association that exists between the bala and members of the *nyamakala* subgroup, the *numulu* (blacksmiths). The preceding tables put this relationship into evidence. Charry (2000: 138) explains that the bala "is a pivotal instrument linking not only the worlds of the jeli and numu, but also jelis and drummers." In terms of repertory (and also performance context), today's aspiring *balafola* must become familiar not only with pieces considered to be the domain of the *jeli*, but also with those that would fall within the purview of the drummer—and by extension, the dancer.<sup>246</sup> The repertorial relationship between these two spheres has not yet been explored in much depth in academic writing.<sup>247</sup> Although it falls outside the scope of the present study to address this lacuna in great detail, the keyboard areas concept may be a good starting point. To understand just how this is so behooves a consideration of the process by which pieces are (likely) adapted from one sphere to another.<sup>248</sup>

One approach that *balafolalu* employ to incorporate items from their own repertory into that of the *jembefolalu* is to simply carry a piece over wholesale and give it a new name. From Table 2, Diabate's version of *Kawa* is an example of this. *Kawa* (a Maninka mask dance from the Faranah region of Guinea), as played by Diabate, is really the bala piece *Fakoli* (played in honor of Fakoli Doumbia, who became one of Sunjata's generals). Diabate (2006-per) presented this music not as *Fakoli*, but as *Kawa*, because

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<sup>246</sup> This is probably less true in certain parts of Mande—such as in the Senegambia, where, rather than the jembe/dunun ensemble, it is the *tantango* drums that predominate. This also, to a certain extent, depends on individual goals and performance imperatives. A highly competent jembe player (and also a dancer), Sory Diabate is a multi-instrumentalist. But not all *balafolalu* (even in areas where the jembe is the predominant drum used) would have Diabate's knowledge of drumming traditions, nor indeed, even the impetus to learn to play drums. However, all of the Guinean informants for this study do have an extensive familiarity with the pieces drummers play, and, in cases where the correspondence indeed is "one-to-one," all know very well how drum parts and bala parts "line up."

<sup>247</sup> For a comparison of piece descriptions drawn from an extensive collection of academic writing and CD and DVD liner notes for these and other pieces from the bala (and where relevant, jembe) repertory, see the references tabs at mandebala.net (Martin, 2015-web).

<sup>248</sup> Admittedly, it may be somewhat naïve to say that pieces are "adapted" as such. Rather, the spheres probably tend to just "collide" chaotically and the individuals involved simply do what they can to find ways to make agreeable sounding music together, but the observations made here should still be of some value.



he assumed it would be more useful to me (a foreign learner with a prior knowledge of jembe music) in this more familiar guise.<sup>249</sup> *Yankadi* too (a Susu social dance) appears to be a wholesale adaptation of the *jeli* piece *Jawura* (a celebration dance piece from Kita in Mali), although the question of which of these is the antecedent to the other has not yet been satisfactorily answered.<sup>250</sup> In both cases, the adaptation poses no problem. For other pieces that are now played in jembe ensemble (drum and dance) contexts, the *jeliya* origins of the piece are more obscure. The pieces that were offered by Diabate as *Sofa*, by Naby "Eco" Camara as *Kassa*, and by Alseni Sylla (my colleague Oscar Justiniano's Susu-speaking teacher in Guinea) as *Maninka Fare*, for instance, seem to be derived from one source. While I have not as yet managed to uncover unequivocally the "true identity" of that piece as it was presented, I suspect it could be a modified form of *Lamban*.

Many pieces in the jembe repertory are not technically (or at least, were not originally) Mande pieces. Charry (1996: 68) observes that jembe repertory items derive from a variety of sources and that many "are adaptations from other kinds of drums played by neighbouring ethnic groups." He cites *Kuku* (a Manya dance from the southern

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<sup>249</sup> Diabate has explained that, indeed, his framing of the majority of the pieces that were shared in our first two encounters was based on this assumption—which was made largely due to my explaining that I had been playing music with Kabele Bah, a Guinean *dununfola* who was living in Mexico at that time, but that Sory knew quite well from back home. It should be noted, however, that the *balafola* Sekou Conde, who performed with the late *jembefola* Fadouba Oulare on Oulare's self-titled CD (2008-disc) as well as on Cédric Dupire and Matthieu Imbert-Bouchard's DVD documentary *L'homme qu'il faut à la place qu'il faut* (2008-vid), and Vijay Rakha's performance DVD *M'Bemba Fakoli* (2008-vid), has also adapted *Fakoli* to be played with (or as) *Kawa*, though there are several versions of each piece.

<sup>250</sup> About Sylla (2014-disc) asserts that *Yankadi* is a Susu piece from Guinea, but that "in Mali they call this music *Jawura*." My own evidence for the relationship between *Yankadi* and *Jawura* comes from an encounter with Naby "Eco" Camara in Milan, Italy (2006-per) in which, upon seeing a video recording that I had just made with Mawdo Suso in The Gambia, "Eco" identified as *Yankadi* a piece that Mawdo had labeled *Jawura*. Interestingly, "Eco" was able to sing, in Susu, songs that melodically, corresponded quite exactly to the Mandinka songs sung in the video. This linguistic "retooling" of pan-Mande melodies is worthy of further study. In a recent encounter with Famoro Dioubate (2015b-per), I observed the *balafola*'s wife Missia Saran Dioubate, who comes from Kankan in Guinea, singing in her native Maninkakan many of the Bamana Segou songs sung in Bamanankan by Oumou Kouyate in Durán (2013b-vid).

forest region in Guinea) as an example of this. In the lists in Table 2, *Sabar* (derived from a set of Senegalese drums referred to collectively by the same name),<sup>251</sup> *Jole* (a Temne dance originally from Sierra Leone and played on rectangular frame drums), *Tiriba* (a Landuma dance from the Lower Guinea region near Boke and Boffa), and *Sörsörnë* (a Baga mask dance also from Lower Guinea), all fall into this category. It is not difficult to imagine how drum rhythms could be adapted to a jembe/dunun ensemble. But slightly more difficult is finding a plausible explanation for how the bala melodies that are now associated with these adapted jembe rhythms were developed—especially if, unlike *Kawa* and *Yankadi*, no clear *jeliya* repertory equivalent (or source) can be identified.

Taking the specific case of *Sörsörnë*, if the dance originally comes from the Baga ethnic group, one might expect some Baga-derived musical antecedent to have informed both the rhythms (that are now played on the jembe and dunun) *and* the melodies that are now played on the bala. Unfortunately, very little information about Baga music exists. Though much has been written about the visual arts of the Baga people, their musical expression remains relatively unknown to Western scholarship. According to Charry (2001: 542), the Baga use a variety of drums (*timba*, *të-ndëf*, *kirinyin* or *krin*, *tali*, *sangban* or *sangbany*) and several other percussion instruments to accompany “a plethora of wooden masks representing spirits used in initiation ceremonies,” but neither jembes nor balas figure into the Baga instrumentarium. Frederick Lamp (1996: 204–8, 262), who has undertaken the most comprehensive study of Baga artistic expression to date, has given perhaps the only serious, scholarly account of the *Sörsörnë* tradition. He describes that *Sörsörnë* is indeed a mask, the essential features of which are a raffia skirt and a headdress (bearing [or sometimes consisting of] a set of horns, and with an implicit female identity). The mask is set on a series of telescoping bamboo tubes and as

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<sup>251</sup> Patricia Tang (2007: 35) notes that “the drum ensemble as a whole, as well as the individual drums, can be called *sabar*,” although each individual drum also has its own name.

it moves through the village and the cries “sorne, sorne” (rise up, rise up) are heard, the bamboo is extended, and the mask is raised to the height of the nearby palm trees. Lamp laments the lack of any pre-1990 manuscript reference to the *Sörsörnë* tradition or any photo from earlier than 1985. He does include lyrics for two songs in his account, but no melodic (nor other musical) information is given. Discographic evidence of Baga music too is scant, with only a handful of recordings presenting a very limited selection: Wassa (1991-disc) and Wofa (1995-disc), two Guinean drum- and xylophone-ensemble troupes who feature a few Susu and Baga rhythms in their music; Baga Guiné (1995-disc), a performing group comprised entirely of Baga women whose only album features singing and percussion; and Mohamed Bangoura (2000-disc), a *jembefola* who integrates *jembe* ensemble performance with the traditional percussion music of the Baga.

None of the tracks on these recordings bears any musical resemblance—whether rhythmically, melodically, or textually—to the *Sörsörnë* that was taught to me by my *bala* teachers. To my knowledge, no commercial field recordings of any kind as yet exist that can shed light on the possibility of a Baga-inspired origin for *Sörsörnë* melodies. But ultimately, I don't suspect there is one.

To begin with, Famoro Dioubate (2009-per) has reported that *Sörsörnë*, as it is played on the *bala* today, is a composition credited to one of the principal *balafolalu* of Les Ballets Africains in the early 1960s.<sup>252</sup> In Guinea, as in Mali, Senegal, and other West African nations, shortly after independence (in the late 1950s and early 1960s), state-sponsored national ensembles were formed. These ensembles, which took at least three guises—distinguished using the French terms *ballet*, *orchestre*, and *ensemble*—juxtaposed and married (or “chaotically collided”) regional, ethnically diverse musical

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<sup>252</sup> At the time that Dioubate furnished this data point, he was unable to recall the name of that *balafola*. Further study would be required to uncover his identity, and, if he is still alive today, perhaps to interview him as regards his melodic sources for the piece.

styles in unprecedented ways. Much of the "mash-up" of jembe (drumming) and bala (*jeli*) repertory comes from this period. Further, Charry (2000: 22) has observed that: "in Guinea, the musical influence on Mande groups by their neighbours appears to be limited to the sphere of drumming, primarily in the context of the national ballets." There are at least two other pieces from the *jeli* repertory that are harmonically very similar to *Sörsörnë*: *Kanimba* and *Warra*.<sup>253</sup> Although the song melodies that identify and distinguish these two pieces are very different (both from one another and from those that identify and distinguish *Sörsörnë*), the supporting accompaniment patterns—the *kumbengolu*—that are played *and taught* for each of those pieces bear exactly the same keyboard areas as those of *Sörsörnë*. And this is true for many of the jembe pieces for which the bala now has (or is developing) a canonized role.

I theorize that the *balafolalu* involved in making adaptations of bala playing to a modern, neo-traditional context (who, it is worth noting, were likely simultaneously exploring the possibilities of adapting traditional *jeli* melodies to Western tuning systems)<sup>254</sup> may have been basing these adaptations in a keyboard areas framework—even if it might not have been articulated as such. It certainly appears that Sory Diabate has done this with his version of *Jole*. (See [Transcription 85](#).) And indeed, the ubiquitous applicability of the model to what are now understood to be jembe-derived repertory items in the bala canon would support this notion: all of *Jole*, *Tiriba*, *Kassa/Sofa/Maninka Fare*, *Konden*, *Sörsörnë*, and *Dunumba* follow the pattern, as do many of the more recently developed (i.e., twentieth century) *jeli*-repertory pieces (such as *Kaira*, *Jarabi*, and *Bani*). Again, it is beyond the scope of this dissertation to flesh the theory out more

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<sup>253</sup> Toumani Diabate and Taj Mahal's "Guede Man Na" (1999-disc) also bears a harmonic scheme similar to that of *Sörsörnë*, and Lassana Diabate's bala accompaniments on that recording echo those taught by my own teachers.

<sup>254</sup> Despite an earlier cautioning against hastily drawing definitive parallels between Western theoretical notions (such as scale degrees) and Mande bala theory (see Chapter 2), it has not escaped me that, perhaps not coincidentally, the "avoid note" in the keyboard areas framework may well correspond to the "leading tone" or "subtonic" of a Western tonal conception.

fully, but having articulated the conception of the keyboard areas model, a basis has been established from which to launch further investigations.

### Listening for Embedded Melodies

Although I have provided one theoretical framework (above) upon which bala students might base either the elaboration of a given *kumbengo* or the development of new *kumbengolu* (i.e., the keyboard areas model and its corollary keyboard layout), this framework is demonstrably not the only means through which such elaborations and developments take place among Mande-born players. [Transcription 93](#) shows a rendition of the piece *Sörsörnë* as performed by Famoro Dioubate (2009-per). At measure one, I have highlighted one identifying melody for that piece. Dioubate plays the melody here with the note C at two different octaves (C<sub>1</sub> and C<sub>2</sub>). I have highlighted the melody as though both Cs were played at the same octave: A<sub>2</sub>-D<sub>2</sub>-D<sub>2</sub>-A<sub>2</sub>-F<sub>1</sub>-F<sub>1</sub>-A<sub>2</sub>-C<sub>(2)</sub>-C<sub>2</sub>-A<sub>2</sub>-F<sub>1</sub>-F<sub>1</sub>. The melody that I have highlighted is played between the two hands, and is framed within the structure of a single *kumbengo*. In this *kumbengo*, several other notes are also played. Thus, the melody that I have highlighted might be thought of as being "embedded" within the broader structure of the full *kumbengo*.<sup>255</sup> Beginning halfway through measure 2, throughout measures 3 and 4, and up to the halfway point of measure 5, the same melody (articulated in a different octave configuration: A<sub>2</sub>-D<sub>1</sub>-D<sub>1</sub>-A<sub>1</sub>-F<sub>1</sub>-F<sub>1</sub>-A<sub>1</sub>-C<sub>1</sub>-C<sub>1</sub>-A<sub>1</sub>-F<sub>1</sub>-F<sub>1</sub>) is taken up entirely in the left hand, freeing the right hand to play complimentary cross rhythms<sup>256</sup> or independent melodies.<sup>257</sup> Later, at

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<sup>255</sup> Dioubate returns to this *kumbengo* at measure 18.

<sup>256</sup> Indeed, Dioubate plays two different cross rhythm patterns, one starting at beat 3 of measure 2, and the other starting between beats 3 and 4 of measure 4.

<sup>257</sup> This is done beginning at measure 8.

measure 22, a nearly identical pattern is played—although here, instead of C, the related note G is played:  $A_2-D_2-D_2-A_2-F_1-F_1-A_2-G_2-G_2-A_2-F_1-F_1$ .

This phenomenon—by which a *balafola* will take up a pattern initially played between two hands and render it with only one (usually the left)—is common. Indeed, another illustration of the phenomenon can be found at [Transcription 4](#), which depicts the solo accompaniment pattern for *Bani*. In this accompaniment, the left hand pattern ( $A_2-F_1-C_1-A_2-G_2-A_2-F_1-C_1-A_2-D_1$ ) derives from the nearly identical pattern (played between the two hands) in the basic accompaniment shown at [Transcription 3](#).<sup>258</sup> The charting of new melodic lines, however, through a selection of some combination of notes embedded within the structure of one *kumbengo* and the subsequent rendering of that same melodic line within the structure of a different *kumbengo* (or some other *kumbengo* iteration) is also common. In another example, again from Dioubate (2010b-per), but now for the piece *Soli*, a melodic fragment from one *kumbengo* becomes the basis for the commencement of a totally different one. Highlighted throughout [Transcription 94](#) is the fragment  $D_2-D_2-B_2-G_2$  which appears in the first *kumbengo* (measures 1 through 4) and is repeated in the second *kumbengo* (measures 5 through 7). Similarly, in the first *kumbengo*, the fragment  $C_2-C_2-A_2-G_2$ , is taken up in the second *kumbengo* as  $C_2-C_2-B_2-G_2$ . The audio playback for this transcription should illustrate the embedded melody phenomenon quite clearly.

A few observations could be made about the phenomenon.<sup>259</sup> To begin with, although on the surface, the notion of the embedded melody appears to resemble

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<sup>258</sup> Charry (2000: 184) describes a similar phenomenon in his discussion of the accompaniments taught by his bala teacher Bala Dounbouya for the piece *Kulanjan*. What Charry illustrates is a pattern played entirely in the right hand (while the left hand plays a cross rhythm on a lower-pitched note) being taken up by the left hand in order that the right hand can now be free to play the same cross rhythm on the same note one octave higher. The principle is the same, although the precise expression of the principle may, in the case Charry is describing, be unique.

<sup>259</sup> Although I refer here to embedded melodies as a "phenomenon," they could also be referred to as a "technique" insofar as they can be exploited in the service of *kumbengo* development.

Gerhard Kubik's (1960, 1962, 1964, 2010) notion of the *subjective* or *inherent pattern*,<sup>260</sup>

I am not convinced that these are the same phenomenon—though in truth, I am neither totally sure that they are not. With "inherent pattern" Kubik seems to be referring chiefly to a psycho-acoustical or an audio-psychological effect:

It was first called the "melodic fission effect" (by Miller and Heise), referring to the fact that if one constructs a fast-running sequence of sounds in disjunct intervals, human auditory perception cannot process the melody as a whole. We split it up into separate melodic lines at different tonal levels, associating a set of high tones to form one line; and independently, a set of low tones to form another. All of a sudden we seem to hear at least two, sometimes even three independent interweaving melodic lines. (2010: II.107)<sup>261</sup>

Kubik (ibid) stumbled upon inherent patterns occurring in the *amadinda* xylophone music of the fourteenth century Buganda kingdom,<sup>262</sup> and subsequently observed their occurrence in other Kiganda court music expressions. According to Kubik (1962: 36; 2010: II.112–13), in order for the I.P. Effect to manifest, certain conditions must be met: first, the emergent intervals must be of a certain size—large enough, but not too large; second, notes must occur in regular pulse-units with no metric accents; third, the sequence of notes must be played very rapidly; fourth, the patterns must be played cyclically; and fifth, the cycle must be repeated several times.

Based solely on the above, there is little question that embedded melodies and inherent patterns are simply not the same thing. None of Kubik's conditions need be met

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<sup>260</sup> Kubik (1960: 12) initially referred to "inherent rhythms," but subsequently updated this term: "since these were not merely rhythms but complex melodic patterns, I later changed the term to 'inherent patterns' and spoke of an I.P. Effect" (2010: II.108).

<sup>261</sup> Although Kubik attributes the term "melodic fission effect" to Miller and Heise, these authors did not refer to the phenomenon thus—neither in their 1950 article (which may have been the first to describe the *effect*), nor in their 1951 follow up. D. A. Norman (1967) and W. J. Dowling (1967, 1968) initially called the phenomenon "rhythmic fission." Dowling (1973) may have been the first to use the term "*melodic fission*," which he did "because of [his] focus on distinct melodies."

<sup>262</sup> Buganda, located to the northwest of Lake Victoria (in present day Uganda), was the first major Bantu kingdom in East Africa. Established with the unification of the Ganda people under king Kato Kintu in the fourteenth century, by the nineteenth century, the kingdom had grown to become one of the largest and most powerful in the East African region. The *amadinda* is a large, pentatonically-tuned xylophone with no gourd resonators, typically played by three musicians simultaneously.

when the embedded melodies phenomenon can be said to occur. Embedded melodies are not so much an audio-psychological phenomenon as a technique of extemporized, "on-the-fly" composition. Indeed, I have seen little evidence of inherent patterns (as defined above) in bala performance.<sup>263</sup>

However, through the various attempts that Kubik has made to convey a sense of the phenomenon that he is describing, he has discussed inherent patterns in a way that may suggest a relationship between the two entities after all. For instance, describing inherent patterns in *amadinda* xylophone playing, Kubik (1960:13) writes:

the musicians occasionally phrase or combine a number of notes of their own parts into groups, or just emphasise the pattern suddenly at certain points. These accents are of course not played by previous arrangement. They combine by chance into a further rhythmic pattern.

Well, this might describe what is happening when a *balafola* identifies an embedded melody and then rearticulates it in a new *kumbengo*. Kubik continues: "An *amadinda* tune is a sort of *picture-puzzle* and it would be quite impossible to reproduce in a score all that could be heard" (ibid: 14) (Emphasis mine.) Here, too, the phrase "picture-puzzle" is a good descriptor for the embedded melody potential that a *kumbengo* embodies, and it would be quite challenging to notate all its possible expressions simultaneously.

In another instance Kubik (1962: 33) explains:

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<sup>263</sup> This is despite Jessup's (1983: 57) claim to the contrary: "Inherent rhythms are often caused in Mandinka balafon duets when two players hit a unison pitch simultaneously. . . . 'Jina Muso' played as a duet illustrates this phenomenon. . . . Inherent rhythms are also created when one note occurs repeatedly, adding an importance or weight to that note, which can shift the feeling of meter or create a broken rhythmic pattern, e.g., 'Kaira.'" My sense here is that Jessup may have made this claim single-mindedly, as per the proverb: "to someone with a hammer, everything looks like a nail." The I.L.A.M. recordings by Hugh Tracey to which Kubik (1962: 34) refers his readers clearly illustrate the I.P. Effect. Jessup's *Jina Muso* recording, in my view, does not. And Jessup's claim that inherent patterns are present in her *Kaira* recording, I believe, stretches Kubik's definition of inherent patterns far beyond its original meaning. Although providing no clear evidence, Kubik has claimed the possible existence of inherent patterns in kora music, but he has further admitted: "in West African music and in the Sudanic belt from west to East Africa, [the] phenomenon seems less prominent" (2010: II.110). I tend to agree with this latter assertion.



The musicians playing together (or in the case of a soloist, his left and right hands or fingers) produce rhythmic patterns, which are not perceived by the listener as they are actually played by the musicians. Instead of this he hears a conflict of other rhythms, which are not played as such but arise in his imagination.

This description may apply to inherent patterns on the one hand, but embedded melodies on the other. He goes on:

The notes of the music are the same both in the heard and the played image. The listener does not add any notes, but their grouping in his perceiving mind is often different from the grouping in the musician's hand." (ibid)

Again, here, Kubik could be describing either inherent patterns or embedded melodies.

Similarly, discussing Central African *likembe* (lamellaphone) music, the author describes:

"patterns which automatically emerge from the total musical complex" (ibid), and, discussing the patterns emergent from Baganda *enanga* (eight-stringed trough zither) performances, again using the term "picture-puzzle," he writes:

There is not one but a number of ways of perception. From moment to moment the notes may form different groups, because they can be associated in more than one direction. . . . The performer can also help to let this or that grouping appear—by accentuation of those notes he wishes to form into a group. If he shifts his accentuation and as a result of this, other inherent rhythms are brought into the foreground, we often believe we hear a variation. But in reality none of the notes have been changed. The same fragments have only formed a different image in the kaleidoscope. (ibid: 42)

And finally, a few years later, summarizing now his more matured understanding of the

I.P. Effect, Kubik (1964: 155) writes:

inherent rhythms are melodic-rhythmic gestalt patterns which are not played by the performers but arise in our and the performers' imagination directly from the structure of African instrumental compositions. . . . Compositions with inherent rhythms are multi-dimensional. You can 'read' them from many starting points and you always get another regular rhythm pattern. It is somehow like a crossword puzzle, where every letter is at the same time an ingredient of two different words; only a little more complicated. . . . What I call inherent rhythms are certainly not merely rhythm patterns. They are rhythms and melodies in one gestalt. . . . To make all the inner dimensions of these musical picture puzzles gradually visible to yourself the total pattern must be repeated again and again.

In a great many ways, these descriptions would be aptly applied to the embedded melodies of bala *kumbengolu*. Although the matter of the ambiguity of "starting points" has not (in my view) been satisfactorily resolved (see Chapter 2), there is little doubt of the potential of a *kumbengo* to allow for different and even multiple, simultaneous patterns to "emerge." I do not think that this potential describes Kubik's "melodic fission effect" so I will continue to regard inherent patterns as essentially distinct from embedded melodies, but in many ways, the two effects can be meaningfully described using similar, if not identical, language.

Another observation to be made about embedded melodies is that teasing them out can often be accomplished through the repetitive articulation of a single *kumbengo*, and especially through "playing" (galumphing) with different ways of accenting the various notes that comprise them.<sup>264</sup> It is thus not only the layers of pattern density that can be discovered through Dynamics "play," (see Chapter 5) but also a near infinite number of embedded melodies. In a paper published in 1952, Richard Waterman (1952: 211) introduced to the Western academic interpretation of "African" musical expression a concept that he termed *metronome sense*:

[Metronome sense] entails habits of conceiving any music as structured along a theoretical framework of beats regularly spaced in time and of co-operating in terms of overt or inhibited motor behavior with the pulses of this rhythmic pattern whether or not the beats are expressed in actual melodic or percussive tones. Essentially, this simply means that African music, with few exceptions, is to be regarded as music for the dance, although the "dance" involved may be entirely a mental one.

For *balafolalu* (and other *jeli* instrumentalists), the notion of "piece" may consist of little more than a collection of interlocking melodies that are variously expressed through the different *kumbengolu* into which those melodies have been embedded. Upon cycling

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<sup>264</sup> It is for this reason that I have called this section "listening for" embedded melodies.

through some inner-circle expressions of one or two of the *kumbengolu* that he was demonstrating for the piece *Bani*, Famoro Dioubate (2015a-per) once explained, suggestively: "Everything is there." Development as a Mande instrumentalist, it seems to me, consists in part, of discovering the defining melody fragments that are embedded within a piece's *kumbengolu*, but additionally, in cultivating a "metronome sense" with respect to those melodies. Obviously, since (most)<sup>265</sup> *jeli* instrumental music is performed on melodic instruments, the term might better be modified to something like "embedded melody sense," but the concept remains nonetheless the same: a theoretical framework of interlocking melo-rhythms, at times expressed overtly, at times expressed (or "danced") "mentally."<sup>266</sup>

### **Vocabulary Vs. Grammar**

Thus far in this chapter I have discussed two elements of bala "grammar" that may be put to service in the pedagogical process: the concept of the keyboard area and the phenomenon of the embedded melody. The final element of the bala's grammar that must be explored (so as to equip students with a minimum necessary understanding for being able to develop a playful—but appropriately "Mande"—learning environment) is that of rolling (see below). However, before discussing the grammar of rolling, some discussion of the differences between (and the relative value of) grammar and what could be termed "vocabulary" must first take place.

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<sup>265</sup> Charry (2000: 198–99) explains that in certain parts of Mande, such as in the North of Mali among the Xasonka and Soninke, *jelilu* also play the tama (hourglass-shaped string tension drum) and the dunun (bass drum).

<sup>266</sup> Again, this is where the traditional apprenticeship modality provides such an overwhelming advantage to the learner, since, as accompanist to the teacher, the student experiences countless opportunities to play the immutable core *kumbengo* and simply listen to the various ways that the teacher has for expressing the embedded melodies that the *kumbengo* embodies. For the non-traditional learner, the pattern density analyses advocated for in Chapter 7 could be harnessed to cultivate both a "pattern density awareness," as well as an "embedded melody sense."

Throughout this dissertation I have considered the role of student creativity to be of primary concern as regards the goals of bala learning. My assertion has been that the playful handling of bala *kumbengolu* expressed through inner-circle music making should be the principal goal of the bala student—and there is an element of creativity inherent to inner-circle playing. I have endeavoured to stress, however, that this creative handling of material rests firmly upon the correct (i.e., verbatim) learning of the *kumbengolu* and certain typical *birimintingo* phrases that are taught by qualified instructors. They need not necessarily be taught in the guise in which they are presented when mediated digitally, but the student (especially the novice student, and very especially the student who has some confidence with musical creativity in other idioms, but who is new to Mande music) must know from whence they are deviating before they begin to deviate.<sup>267</sup>

The student must also have some concept of what shape "creativity" takes in a Mande context. As I have shown through the combined illustration of keyboard areas and embedded melodies, as well as through an extended discussion of the "relative fixity" of *kumbengo* and *birimintingo*, and the scalability of pattern density, Mande music in many respects functions in a way that is grammatically distinct from other kinds of music. The grammar of bala music is not the same as for Indian *jal tarang*, not the same as for Thai *piphat*, not the same as for the *marimba de chonta* of Colombia and Ecuador, not the same as for American jazz vibraphone. There are grammatical similarities between all of these musics, to be sure. But the assumption that a bala improvisation based on the stylistic norms of jazz, say, or of *klezmer*, would be viewed in the Mande heartland as anything but a foreign approach to playing a local instrument is hasty, bordering on careless. Such an improvisation may well be "tasty"—but that does not

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<sup>267</sup> Recall Miller (1973: 91): the skills used in play are "played with *after* they are acquired." (See Chapter 5 above.)

make it idiomatic.<sup>268</sup> Critical audiences in Mande (comprising the elder guardians of the tradition—among whom Famoro Dioubate and Naby "Coyah" Camara must be counted) want to see that new students are continuing "the line." When "Coyah"—and especially Dioubate—and I listen to bala music together, the *balafolalu* remark less on grammatical expression and sweetly executed "solos," and more on the conveying of a vocabulary that harkens to earlier times.<sup>269</sup> When they are judging my own playing and assessing my progress as their student, they are of course interested to see that the music that I make "flows" in a way that befits the tradition.<sup>270</sup> But both "Coyah" and Dioubate also want me to demonstrate (a) that I have learned the specific phrases that they have taught and (b) that I am able to seamlessly incorporate these phrases into my playing. Taking the case of Dioubate, specifically, many of the phrases that he has taught to me were in turn taught to him by his grandfather El Hadj Jeli Sory Kouyate. When Dioubate hears recordings of his grandfather's playing (such as on Sory Kandia Kouyate [1999b-disc], for example), he is able to mime the precise movements that would be required to play the patterns that his mentor has recorded "in wax"—and to be sure, he plays them verbatim. It is enormously important for Dioubate to see that I can play (and would thus subsequently teach) such phrases.<sup>271</sup>

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<sup>268</sup> This may be less true in the urban centres where musicians are exposed to (and appreciate) styles from all over the (globalizing) world, but in places like Niagassola where Durán did research for her 2013 study, a jazz-tinged solo on a bala, even though it would be appreciated, would very likely be considered "foreign."

<sup>269</sup> To be clear, they do also remark on superlative solo playing. But they seem less impressed with virtuosic outer-circle playing when this has no grounding in the patterns and phrases that define the tradition.

<sup>270</sup> Indeed if it did not, this would be a fundamental problem and one that would require immediate attention—which is why I maintain that robust inner-circle playing should still be the first goal of the bala student.

<sup>271</sup> Although much younger than "Coyah" and Dioubate, Sory Diabate also speaks of *phrases* (phrases) that he recognizes in the playing of the other two and describes a certain nostalgia when these *phrases* draw particularly far back into history—to El Hadj Jeli Sory Kouyate and beyond. As a side note, absolutely one of the goals of future Mande (bala) music scholarship should be to trace and document these "lines" (as per Allan Moore's [2004] proposed mandate for historical studies in Popular Music).

A balance must be sought, therefore, between the "playful" (in the Brown & Vaughan, Eberle, and Miller sense) learning of bala music through an explorative expression of its grammar, and the sometimes-vexatious drudgery of learning to play the phrases and patterns *just the way they are played* by the elder masters. David Hughes has discussed the problem of how to imbue in his own students at the SOAS in London (School of Oriental and African Studies) the kind of etic (outsider's) humility that he himself felt "in the face of a complex and unfamiliar music system" when he was a young student (2004: 263). He regards this humility to be "totally lacking" in some (indeed, perhaps more and more) of the students born into today's postmodern and Internet-connected world and observes: "appropriate creativity is some meeting point of the needs of students, teachers, and the tradition itself . . . [C]reativity does have to be an ultimate goal. But as in any genre of music, improvisation must be based on knowledge of the parameters of the genre; whether one then works within those parameters or challenges and expands them is another question" (ibid: 281).

### **Rolling (and Running)**

Whether in inner-circle or outer-circle playing, "rolling" is a fundamental aspect of creative self-expression on the bala. The term "roll" is borrowed from rudimental snare drumming. Applied to the bala—as it commonly is—it refers to the rapid, descending flurries that *balafolalu* liberally intersperse in their playing. Despite their importance and their ubiquity, however, the learning of rolls often proves enormously challenging. In fact, for me, the roll has undoubtedly been the most taxing aspect of bala music study. This owes to several factors. To begin with, rolls are frustratingly resistant to transcription.<sup>272</sup>

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<sup>272</sup> And, as was indicated previously, when working with video data, transcription becomes an important part of the learning process.

At even a moderate tempo, the attack density of rolls can often be so high as to befog a clear picture (i.e., on the video playback screen) of which keyboard slats are being struck and when. And this is true even when frame-by-frame computer analysis is employed.<sup>273</sup> Additionally, as was mentioned in Chapter 2, when using the vertical TUBS notation, the high attack-density of rolls relative to *kumbengo* patterns necessitates their rendering in a separate grid, lest the density referent become so great as to be illegible. This makes their capture in the vertical TUBS medium impractical. But even with JV4 (which is currently my preferred medium for transcribing), rolls pose transcription challenges. In principle, note placement in rolls is metrically precise, but in practice, a rubato slurring of note articulation is the norm—and this, most often, is by design. Similar to the microtiming play that occurs in the non-isochronous beat subdivision described by Polak (1998) and others (see note 229 above), the notes that comprise bala rolls can be metrically "pushed and pulled" in order to, say, accommodate different time feels, or, to simply give a different color to the roll being played. Within the framework of the *kumbengo*, a roll—as an item of vocabulary—may have a clear starting point and a clear end point, but what happens in between these points is metrically pliant. With much of the video data that has informed the present study, the articulation of roll notes into a grid-based notation system would truly be a fool's errand.<sup>274</sup>

Through digital media, Mande *balafolalu* have thus far tended to convey rolls as *vocabulary*. And the grammar that governs the rolls is not so much a means of generating new roll phrases, as of manipulating the "feel" of the existing phrases (i.e., of

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<sup>273</sup> This problem could be alleviated with higher-tech equipment. For this study, cameras with frame rates ranging from 24 to just 60 frames per second were used. Today's high-quality slow motion cameras can have frame rates as high as 4500 frames per second.

<sup>274</sup> The transcription challenges posed by bala rolling may relate in part to the way that *balafolalu* have thus far taught this aspect of playing through digital media. Knight (1973: 70, 83, 346) has suggested that in an apprenticeship context, it is uncommon for masters to teach *birimintingo* (which, for the bala, includes rolling) to their students, proposing instead that these skills are learned only through "individual initiative." As regards rolling specifically, Sory Diabate (2012-per) confirms Knight's assertion, explaining that "no one taught him how to roll; he learned of his own accord."

playing with the metric distribution of notes that fall in between the start point and end point of the roll) that students are expected to memorize. Indeed, in videos made with Famoro Dioubate, the *jeli* would often play a single roll dozens of times in various ways, demonstrating the intentional slurring of the notes that comprise it, exploring multiple means for metrically interpreting them.<sup>275</sup> Thus for the present analysis, I will consider just one roll and examine the various ways that Dioubate has for playing it.

Before showing how Dioubate "plays with" this roll, however, there is a terminological nuance that must be clarified. Whereas Naby "Coyah" Camara and Sory Diabate (and, at times, Dioubate himself) use the equivalent French term *roulement* (roll) to refer to the phenomenon in question, Dioubate will in fact be more likely to use the term "run." Sometimes, though, when he refers to "runs," it appears that he is describing only that specific point at which the left hand plays a "skipping" double-stroke across two keys (and subsequently, the articulation between the two hands of a tuplet of some kind), and not to the descending flurry in its entirety. Thus, according to this terminology, the sequence shown at measure 2 of [Transcription 95](#) includes two runs (the C, B–C–B combination at beat 4, and the F, E–F–E combination at beat 6), but comprises just one *roulement* or roll (beginning at beat 4, and running through to beat 1 of measure 3). The reason that this bears mentioning is that Dioubate has further clarified a distinction between single-runs and double-runs, as is illustrated in [Transcription 96](#). Here, the single-runs are the F<sub>2</sub>, E<sub>2</sub>–F<sub>2</sub>–E<sub>2</sub> combination at beat 8 of measures 1 and 3, and at beat 1 of measures 2 and 4 and the F<sub>1</sub>, E<sub>1</sub>–F<sub>1</sub>–E<sub>1</sub> combination at beat 4 of these same two

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<sup>275</sup> Dioubate does this in part, I believe, as an expression of his own pedagogical intent. (See note 128.) In videos we have made, he appears to "play" with this aspect of roll articulation as a means of cementing the viewer's (me, in this case) knowledge of which notes are played by which hand and in which order, but also, so as to "stretch out" the viewer's understanding of the metric possibilities that the rolls incarnate. In other words, it seems that he is demonstrating not only how the roll "goes," but also how it might be "practiced."



measures, and the double-run is the C, B–C–B, A–B–A combination starting at beat 2 of measures 2 and 4. The following analysis considers the single-run only.

There are at least four ways that Dioubate has for rhythmically articulating a single-run that could conform to a grid-based notation system. [Transcription 97](#) shows the framework for the run. Based in a popular *kumbengo* for the piece *Kaira*, a "walk-down" beginning with the note F at beat 4 of measure 2 and ending with the A–E dyad spans four full three-pulse beats.<sup>276</sup> The first run is shown at [Transcription 98](#). Here, the attack density increase occurs "on the beat" at beat 5. [Transcription 99](#) and [Transcription 100](#) show two alternate sticking patterns for this run. All three are commonly used.<sup>277</sup>

The second articulation for the single-run is shown at [Transcription 101](#). Here, the left hand stroke again occurs "on the beat" at beat 5, but this time it is followed by a very brief rhythmic pause that separates the left hand stroke from the attack density increase that immediately follows it. The microtiming of this articulation is also often manifested as a flam, where the left hand plays the C and then, instead of three evenly spaced notes (as is shown in the transcription here), the B (played with the left hand) becomes the grace note to the right hand C that follows.<sup>278</sup>

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<sup>276</sup> In the notation, there are in fact six pulses per beat, but this is done only so as to clearly illustrate the relationship between the framework and the roll proper, as will be seen. The count is still quite clearly "four-and-a, five-and-a, six-and-a, seven." It should be mentioned also that although the sticking configuration for the "walk-down" is given here as R L R L R L R L L B, Dioubate's original sticking pattern was R L R L L R R L B. Dioubate may have had a reason for choosing this pattern, but, being somewhat counterintuitive, I suspect it was arrived at arbitrarily. For simplicity I have used an alternating, right-left sticking here.

<sup>277</sup> Each has its advantages. A bala student should certainly practice all three sticking variants and cultivate the flexibility to use whichever one is called for in/by a given musical situation.

<sup>278</sup> This microtiming shift from triplet to flam is common for both bala music and jembe music. Polak (2010) describes an "overlap of flam and pulse [inter-onset-intervals] in the range of about 70 to 90 ms." He speculates that "the resulting ambiguity of rhythmic ornament and metric pulse is musically intended; and . . . other musical traditions of the world might tend to respect an approximately 100 ms threshold for metric pulsation because their performers and listeners prefer to avoid such ambiguity."

In the third articulation (at [Transcription 102](#)) the attack density increase occurs in anticipation of the beat and takes the form of an anacrusis. Here, the R L L, R L L sticking pattern is the one that most clearly illustrates the shape of the run, though others are certainly possible. The fourth articulation (shown at [Transcription 103](#)) involves an internal change of tuplet and so, in the JV4 environment, requires a different framework from the other three. The tuplet is of four pulses within the original ternary time feel, but mapped onto an eight-pulse framework, it is expressed in six (or twelve) pulses.

Now, there is value to learning rolls as vocabulary. And since, as was described above, bala teachers expect it, it is somewhat of a necessity. But ultimately, students should be furnished with the tools necessary to be able to creatively incorporate rolling and running into their own inner-circle explorations of given *kumbengolu*. Learning to play Mande music is far more than simply memorizing and reordering vocabulary fragments. The vocabulary can point the way, but even if it is not expressed overtly, some sort of "grammar" must eventually be teased out of that vocabulary, so that students can begin to (musically) "think for themselves." Though admittedly incomplete,<sup>279</sup> it is expected that the analysis presented here will provide students with enough of a basis for understanding rolling and running so as to afford them this possibility.

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<sup>279</sup> A more complete analysis would address such questions as: do rolls always occur on the same slats of the diatonic keyboard, or do they occur in different places according to the piece's "key"? Do different players roll (or run) differently, or are Dioubate's articulations representative? Are there norms (or rules) as regards the relationship between the start point and end point of rolls and the *kumbengo* framework? Are rolls always descending, or do ascending rolls also occur? How are rolls incorporated into frameworks other than that of the *kumbengo*—such as into the melodic framework of song melody embellishment?

## CHAPTER 7

### Conclusions

I began this dissertation expressing the notion that the approach that I had been using to learn to play the Mande bala was somehow faulty. Despite an earnest desire to improve and despite years of consistent and sometimes gruelling hard work, for some reason I was unable to achieve the levels of musicianship for which I was aiming. Much of my consternation likely owed to the means through which I had attempted to acquire my bala skills, since, having never had the opportunity to undergo a traditional apprenticeship, I was at a significant pedagogical disadvantage. I sought, therefore, to supplement the few face-to-face interactions that I was able to have with qualified bala teachers using digitally mediated information that took two forms: (1) the commercially available books, audio, and video material created by others, and (2) the video (and audio) material provided by my teachers, which I recorded and subsequently transcribed and studied. In the present chapter, I aim to summarize the approach that I have begun to implement most recently when using this material. It is this approach—referred to here as the "pedagogy of 'play'"—that has been outlined and explored throughout this study. Below, I summarize the approach and discuss its application to a self-directed modality. I also consider the merits and drawbacks of the approach (and of the study itself), and I reflect on possible directions for future research.

## The Beginning of Knowledge

Quantitative measurement is fundamental to scientific ways of understanding. The Right Honorable Lord Kelvin (Sir William Thompson) (1889: 73), acclaimed Scottish engineer and mathematical physicist, once propounded:

[W]hen you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be.<sup>280</sup>

In order to achieve a truly defensible assessment of the relative efficacy of one pedagogical approach over another, the difference between the two approaches must be measurable in some way. Otherwise, on what basis is the superior efficacy being asserted? Although the present study has not included a measurable comparison between pedagogical approaches, the means to measure the difference may be found in the empirical model of instruction offered by Popham and Baker (1970a, 1970b, 1970c). On their system, clear behavioural goals are presented and criteria are established for the meeting of said goals. Then, once instruction has taken place, a quantified assessment is made of whether or not (zero or one), or, to what extent (a gradational scale), the goals were met. (Other factors could be assessed as well, such as, how quickly the goals were met, or at what cost.) On this basis, certain pedagogical

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<sup>280</sup> Obviously Thompson's statement does not apply to all areas of human knowledge production. Musical expression *itself* in many ways defies quantification and yet, the knowledge acquired or expressed through music-making practice (as well as through many other kinds of fundamentally "human" human endeavours), is by no means "meagre and unsatisfactory." (Further, nearly all of the new information presented in this study was empirically derived not through quantitative methods, but through qualitative ones, and said information is non-trivial and of a high quality.) However, the point stands that expressing certain kinds of knowledge numerically continues to be science's most effective means for achieving objectivity—or as close an approximation to objectivity as is (humanly) possible. And I see the objective search for truth, however unattainable, as the principle *telos* of academic scholarship.

approaches will be deemed more effective, and others, less so, and so a basis is established for comparing the efficacy of various approaches.

With this dissertation I have sought to articulate the overarching goals of bala learning. I asserted that "play" is at the heart of these goals. Play is a difficult concept to define, but for this study, bala "play" (also called "galumphing") has referred to the robust "inner-circle" bala music making that balances *kumbengo* with *birimintingo* and abides by the guidelines "you hold the time and the melody and you give something." But Popham and Baker (1970b: 81–2) distinguish between instruction and curriculum, asserting first that: "there should be a positive relationship between the effectiveness of an instructional scheme and the educator's concern that the right goals are being sought" and second that: "[i]nstructional questions usually are amenable to empirical solutions, curricular questions generally are not." Taken by itself, "play" (in the sense of "a crooked line to the end") is perhaps best characterized as a curricular (i.e., a longer-term) goal and thus, is perhaps not especially well suited to Popham and Baker's four-step model. However, since the instructional (i.e., the shorter-term) goal of "getting the *kumbengo* in the hands," is very definitely suited to their system, it is to this task that the empirical model of instruction is most readily applied—and indeed, once a student has the ability to play a few iterations of a *kumbengo* (that has been simplified along lines of pattern density), they can more easily undergo a shaping process toward "playing" (i.e., "gallumphing") in a culturally idiomatic way.

In Chapter 5, I articulated three different approaches for learning to play a *kumbengo*: (1) note-by-note/phrase-by-phrase, (2) one hand, then the other, and (3) density analysis. Of these, I hypothesized that the "density analysis" approach will (in most cases) be the most effective. My rationale for this hypothesis is rooted first, in the claim by Eric Charry (2000: 342) (which is supported by a litany of empirical evidence), that "no matter how simplified an exemplar may be made, it is still considered to be the

piece," and second, in the principles and procedures of behaviour analysis. If a *kumbengo* in one guise is too complicated to be learned quickly (and painlessly) by the student, it can be simplified in any number of ways so that the learning is made less "work-like." This increases the reinforcement potential of the learning process, decreasing the likelihood of extinction.<sup>281</sup>

Even if, in the end, the work of testing this hypothesis with controlled, measurable, and methodologically sound teaching trials has yet to be undertaken, and so, the validity of the pedagogy of "play" remains theoretical, I have herein laid the groundwork for a pedagogical approach that would stand up to more rigorous serious methodological scrutiny.<sup>282</sup>

### **Applying "Play" to Digitally Mediated Bala Study**

In the introduction to this study (see Chapter 1), I proposed that at least three factors were at play in occasioning a "pedagogical loss" when traditional apprenticeship teaching methods were adapted to digitally mediated interfaces. First, the curricular goals of bala study (that are normally extrapolated through the student's role as accompanist to the teacher) are less apparent when learning from DVDs, CDs, and books. Second, because there is no teacher present to gauge when appropriate simplification<sup>283</sup> would facilitate acquisition, the process of learning—of getting patterns, sequences, and melodies "in the hands"—is made more onerous than it might be when

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<sup>281</sup> Recall that it was in this sense that "play" was conceived of as a *means* through which to achieve short-term behavioural goals.

<sup>282</sup> As a point of interest, I have begun to implement the approach in my own studies as well as in my teaching of others and can report (informally) that I have thus far met with significant success. Students report a higher degree of positivity about the instruction given, they appear to be learning faster (and more soundly) than with other approaches, and their overall level of ability appears to be improving at a faster rate.

<sup>283</sup> Such as Lassi Diabate illustrates teaching *Bajuru* (Durán, 2013a-vid), as Lassana Diabate illustrates teaching *Lasidan* (Durán, 2013b-vid), and as is reported in Charry (2000: 176). (Each of these examples is discussed in Chapter 4 above.)

face-to-face learning can take place. Finally, the lack of an articulated improvisational "grammar" obliges self-directed students to learn bala music almost exclusively as verbatim expressions of "vocabulary," thereby limiting their own expressive input—which was observed in Chapter 3 to be an indispensable characteristic of Mande music making.<sup>284</sup>

Notwithstanding the observation (made in the previous section) that the pedagogy of "play" is, as yet, an untested approach, a case has been made here that its application to digital pedagogical materials would mitigate this pedagogical loss in all three areas. This very dissertation—in which general educative bala playing goals are articulated, examples of "density analyses" are furnished and explained, and a "grammar of bala music" is expounded—should be enough to equip students with the knowledge necessary to avoid the pitfalls of using currently available digitally mediated instructional material in self-directed bala study.

But not everyone who uses digital pedagogical materials (such as those listed in Table 2 [see Chapter 4]) will be aware of the existence of this dissertation. So are there also ways in which new pedagogical materials could be designed, or existing materials "fine-tuned," so as to incorporate these (theoretically) more effective methods? To begin with, as was discussed in Chapter 4, there is a relative paucity of supplementary

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<sup>284</sup> Generally speaking, the more complicated and unwieldy bala vocabulary is, the greater its limiting effect on expressive input, and often the vocabulary presented in digital pedagogical material is more complicated than it is simple. (See [Transcription 19](#) and [Transcription 20](#), for example.) Bala music is typically learned through its vocabulary—and there are advantages to doing so—but there is also, ultimately, an underlying mechanics according to which much bala vocabulary is expressed and developed. I would argue that students who are familiar with bala grammar stand a better chance of (a) learning new vocabulary more quickly and more effectively, and (b) achieving the long-term curricular goal of being able to "galumph" in a way that is idiomatic to the tradition. With an understanding of the bala's grammar, autodidact students can also develop exercises to overcome individual weaknesses and deepen their interactive capabilities. Using the more simplified guises of the *kumbengolu* (that have been learned along the shaping process of the "density analysis" approach), aspects of this grammar (such as the teasing out of embedded melodies or the application of rolls and runs), can be implemented earlier in the learning process, which again increases the likelihood that a student will adhere to their practice regimens and decreases the likelihood of their suffering extinction and abandoning their studies entirely.

information accompanying the musical examples that are provided in the DVDs, CDs, and books about bala music.<sup>285</sup> So the inclusion of more substantial guidelines for self-directed bala study in new pedagogical material would be a considerable improvement. Beyond this, however, there may be other, far more fundamental modifications that could be made to the existing digital pedagogical materials in order to bring about improvements in their pedagogical efficacy—especially where "play" (understood behaviourally) is concerned. First, as was considered in Chapter 2, owing to the difficulty of working with a time-dependent medium like video or audio, supplementary transcriptions (whether rendered in TUBS, WAM notation, JV4 screenshots, or some combination thereof) would almost certainly be a help to the self-directed student.<sup>286</sup> Second, in addition to the raw musical data, some sort of density analysis (whether executed by the *balafola* in the time-bound medium, in an accompanying time-independent notation, or both) would also be hugely beneficial—especially if concise, high-quality explanatory notes accompanied the analysis. Third, illustrative examples of some of the many ways that the patterns presented in instructional materials can be applied to "real" music-making situations, including an illustration of the way that individual patterns relate to one another,<sup>287</sup> would be a boon for users of those materials. Fourth, rather than emphasizing breadth, as "Coyah" (2010-vid) does, giving two or three *kumbengolu* for eight pieces, or as Jessup (1983) does, giving one or two *kumbengolu*

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<sup>285</sup> This is less true of Jessup's (1983) book and Abou Sylla's (2014-disc) CDs, but it is very definitely the case with Naby "Coyah" Camara's DVD series and web material. For instance, the one page insert (shown at [Figure 8](#)) that accompanies Camara's *Balaphone Instruction Vol. 1* (2010-vid) is wholly inadequate for guiding students to an understanding of how best to use the musical information provided in the video playback.

<sup>286</sup> I say this recognizing that the process of transcribing can itself be an extremely powerful tool both in facilitating acquisition, and in deepening one's understanding of musical material. For this very reason some of my online bala students have opted not to receive transcriptions that I have made, preferring instead to make transcriptions of their own. Nonetheless, not every bala student will have the skill (nor the drive) to transcribe—especially in the early stages of their learning.

<sup>287</sup> In Chapter 4, I explained that both Jessup (1983) and "Coyah" (2010-vid, 2012-vid) failed to do this, sometimes even presenting patterns in a way that inaccurately implied relationships where none exist.



for fourteen pieces, it may be more amenable to a pedagogy of "play" to focus instead on depth, giving enough material to allow the student to more fully develop their inner-circle playing with a smaller number of pieces.<sup>288</sup> In addition to multiple *kumbengolu*, students could be shown "stock ornamental phrases" and "piece-specific tokens," as well as songs, and a means to "move between" any of these.<sup>289</sup> Finally, I suspect that the effectiveness of the material would improve if information were presented with a more consistent pedagogical intent: a steady tempo; slow, deliberate playing; and a clear demarcation between "teaching" and "performing."

### **Merits and Drawbacks**

Nearly all of the data in this study, as well as the notions postulated, have some sort of empirical basis.<sup>290</sup> Primarily, I have used transcriptions as an illustrative tool to bolster arguments and explain ideas—the transcriptions are not merely a "cute" addendum to the study; they figure inextricably into its argumentation. As well, I have tried to be as thorough as possible, and I have highlighted areas where further study might be required (see below). Despite these strengths, the study does also have a few weaknesses. For instance, although I have touched on some of the most salient aspects of bala grammar, there may be other, perhaps even more foundational grammatical elements that I have overlooked. Charry (2000: 187), for instance, highlights four "theoretical possibilities for offbeat and onbeat phrasing." Although I think Charry's list may be incomplete, it is a

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<sup>288</sup> Again in Chapter 4, I reported the following as a common complaint among users of "Coyah's" *Balaphone Instruction* Vol. 1 (2010-vid): "Okay, I've learned it, but . . . what am I supposed to do with it?" Focusing on depth (or at least finding a better balance between breadth and depth) would help mitigate this problem. An articulation of the grammar of bala music (see Chapter 6) serves this same end.

<sup>289</sup> Here, too, a balance must be sought. The student needs enough vocabulary to be able to cultivate strong inner-circle playing, but not so much vocabulary that their own creative input is stifled.

<sup>290</sup> In cases where assertions are not backed up empirically, or where the strength of the empirical evidence is questionable, I have done my best to clearly indicate this. I additionally offer caveats to any conclusions that might have been drawn on "shaky" evidence.

good start, and I have all but omitted this aspect of bala grammar from my Chapter 6 summary. In addition to this, I have only superficially touched on the importance of technique<sup>291</sup> to bala learning. Bala playing, like jembe playing, is a very physical activity. And master players of both instruments take technical proficiency very seriously. During the first few weeks that Sory Diabate (2012-per) spent with me in Toronto, his pedagogical focus was almost entirely on technique. He sought in particular to troubleshoot the technical shortcomings of my left hand and together we designed exercises to control upstroke height and improve grip. Also not considered in much depth here is the prominent place that listening has in the learning process.<sup>292</sup>

Another weakness of the study is that of a lack of weight given to discussions of values.<sup>293</sup> Williams (2006: 58) has signalled that an important feature of the traditional apprenticeship approach, and to face-to-face learning more generally, is that in addition to transmitting the knowledge of how to play the instrument, *jelilu* teachers "reaffirm and recontextualize important social networks that bind the Mande together and ensure the preservation of their core beliefs and values that facilitate communal interaction." In this respect, by providing a means for non-Mande students to learn bala music via non-traditional media, it may be that this study comes up shy to the extent that it has a mandate to honour (and perpetuate) Mande traditions. Again, as per Rice's (2008) notion of a *mutually influential* mediation between members of a shared ontology, this may be unavoidable. But to disregard the importance of what is lost when face-to-face interaction is no longer a part of the learning process could be (potentially) grossly

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<sup>291</sup> By "technique," here, I am referring to the physical and proprioceptive development needed to improve skill and refine one's command of the human-instrument interface.

<sup>292</sup> Addressing my isistent (and oft confounding) questions about the "grammar" of rolling, both Famoro Dioubate and Sory Diabate many times emphasized the important role that their "ear" played in their own learning process, encouraging me to pursue a similar approach. For a discussion of the importance of listening to music learning more generally, and for various applications of oral/aural techniques, see Campbell (2004: 9–12, 54–190).

<sup>293</sup> The importance of the Kurukan Fuga Charter to the historical expression of the Mande value system, for instance, was only very briefly considered.

irresponsible. Although Charry (2000: 344) has clarified how “the speech-related aspects of the jeli's profession are more politically powerful, and to be more judiciously guarded, than the instrument-playing aspects,” flinging the door open to people who may seek to abuse the instrument-playing knowledge that they would acquire could have serious real-world consequences for the very individuals that I have come to love and admire. As James Kippen (2008: 138) has highlighted: “one must always remember that musicians and their families may be harmed by certain revelations, and that their livelihoods could be compromised.” This important aspect of bala learning—namely, the concomitant acquisition of Mande values—is surely one that requires further consideration and additional study. In the meantime, I continue the dialogue with my Mande teachers and, working together, we anticipate potential problems and consider possible solutions.

### **Contributions and Directions for Further Research**

In many places throughout this dissertation (often in footnotes), I have given indications as to some of the kinds of additional research from which bala studies, and more generally, Mande music studies, would benefit. In note 231, for example, I suggested that further study would be required to reveal the extent to which *kumbengolu* that are more typically expressed in one time feel (a ternary one, say) can be (or are) additionally expressed in other time feels (a quaternary one, for example). In note 76, I observed that additional research would be required to reveal whether pedagogical approaches successfully applied in one sphere could be applied in other spheres. And in note 272, I proposed that one of the primary goals of bala research should be to trace and document the historical genealogy of musical phrases. In addition to these recommendations (and there are others, to be sure), there are several ways that the

work undertaken in the present study might be linked to other areas of ethnomusicology, as well as to fields outside of ethnomusicology and Mande studies.

The ease with which behavioural principles may be applied to the teaching and learning of bala music hinges in part on the latter's inherent characteristics. It is largely thanks to the scalability of bala *kumbengolu* that the shaping procedure used in the "density analysis" approach can be employed to acquire greater stimulus control over the learning process. But even with musics that are not based on scalable *kumbengolu*, the principle that various kinds of pedagogical simplification can facilitate greater control over intrinsic reinforcers and punishers holds true. In fact, this principle is a pedagogical universal. Most teachers—or perhaps I should say, most good teachers—understand this intuitively. When a skill is too daunting to be learned all at once, good teachers break the skill up into smaller steps that can then be learned individually.<sup>294</sup> Referring to music teaching specifically, Patricia Campbell (2004: 6) has made a similar observation:

Good teachers know their music, and they understand the musical needs of their students. . . . They can *shape* the musical knowledge and skills of their students *step-by-small-step*, fashioning a sequence that fits individual and collective learning paces and styles. (Emphasis mine.)

Campbell (ibid: 10) further observes that pedagogical simplification happens in musics the world over:

From Chicago to Shanghai, and from London to Lima, teacher-to-student practices aimed at achieving a satisfactory level of performance follow a modeling-and-imitation strategy whereby the expert or master musician-teacher sings or plays a musical section with the intent of demonstrating to the student not only rhythm and/ or melody but every intricate expressive element that cannot be fully captured in notation. . . . Repeated demonstration and imitation of musical segments may be necessary, *as well as the breaking down of what may seem to the teacher as brief and easily comprehensible phrases, if students are confused or unable to imitate them accurately.* (Emphasis mine.)

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<sup>294</sup> Indeed, this principle extends to the accomplishing of daunting tasks of nearly any kind.

Mande music's inherent scalability allows for each step to be viably applicable to social music-making situations (see note 208), but there is no reason that this could not be true for other musics also, provided that the steps were cleverly-enough designed (and perhaps also, that audiences were sufficiently charitable). Although fundamentally different from ostinato-based musics, scored musics, such as pop songs or the pieces composed in the WAM idiom, could undergo a kind of linear dissection (along the lines of a Schenkerian analysis) and the instrumentalist could first learn to play just the *Hintergrund* (background) elements (or *Ursatz*), then the background plus middle-ground (*Mittelgrund*) elements, and finally the completed work, including its foreground (*Vordergrund*) elements. At each step, a (theoretically) viable performance could be given. Indeed, many jazz musicians may already proceed along a similar line, first learning tunes according to their chordal structure—the chart—and then filling in the melody in subsequent run-throughs. Further research would be required to bring such a notion to realistic fruition, but the idea is worth exploring.

In addition to its contribution to Mande music pedagogy, the present study has also played a role in updating the ethnomusicological record for Mande music more generally. The world we live in today is by now quite far removed from the world that existed at the time that previous scholars—King, Knight, Durán, Jessup, Charry and others—undertook their work. Although deeply rooted in a tradition that stretches back more than eight hundred years, Mande music appears to evolve relatively quickly. Situating my study in a world in which digital mediation (via DVDs, CDs, and websites) is even possible, I bring the study of Mande music more squarely into the twenty-first century.

Rice (2014: 86) reminds us that, as part of their research undertakings:  
"ethnomusicologists routinely learn to sing, to play musical instruments, and to dance in

the traditions they study."<sup>295</sup> Considering Campbell's (2004: 5) observation that "[t]he making of music strongly reflects *how it has been learned*, and is informed by *the particulars of its transmission*—the what, who, why, when, where, and how of music's teaching," (emphasis mine) the ethnomusicologist conducting research and reporting on characteristics of a given musical tradition must also take into account the processes by which their own learning tendencies and preferences have shaped their relationship with and their understanding of the object of their studies—and this includes the use of technological aids in the learning process. This is not the only path to follow. And depending on the path pursued, a different result may be achieved. But the work undertaken here charts one possible way forward for students of the bala.

As to whether the work undertaken here might be linked to other fields, one way relates to the performance orientation that was articulated in Chapter 3, namely, that I do not seek to improve my bala skills solely in order to become a better performer, but rather, do so as a meditative exercise.<sup>296</sup> The repetitive nature of the *kumbengo*, and the concentration required to "keep the ball in the air" (i.e., to keep inner-circle playing interesting, listenable, and engaging), may well have auxiliary benefits of the kind revealed in studies that investigate the effects of meditation on attention and brain function.<sup>297</sup> Such studies have positively correlated meditation, "mindfulness" training, and an engagement in precisely the kinds of repetitive tasks that ostinato-based music making entails with increased impulse control, mental focus and attention, and reduced stress. In addition to this, I envision countless applications for Mande music to the

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<sup>295</sup> Mantle Hood (1960) first referred to this aspect of the ethnomusicologist's task as the cultivation of bi-musicality (or, in a different formulation, of "musicality"), observing that different musics require the cultivation of different kinds of sensibilities. For further consideration of bi-musicality in the learning of unfamiliar musics see Edet (1966), Mensah (1970), Davis (1994), and Baily (2001).

<sup>296</sup> Again, as regards the difficulty of separating the emic from the etic, this notion, though my own, is echoed in statements made by Famoro Dioubate (2016) when teaching students: "You see? When you play, it's like . . . meditation; you feel calm—at peace."

<sup>297</sup> See, for instance: Tang et al. (2007), Kozasa et al. (2012), and Posner et al. (2015).

fledgling field of music therapy, precisely due to the scalability of its foundational *kumbengolu*. In one application, Schneider et al. (2007) correlate the learning of drum and piano music among stroke victims with an increased speed and precision of their regaining of motor function. An internally scalable music like bala music could increase the control that therapists have over the pace of their rehabilitation programs, and the increased stimulus control afforded by a pedagogy of "play" could serve to promote program adherence. Again, more research is required, but the possibilities are promising.

## Final Words

The genesis for this work lay in a frustrating imbalance between what Charles Seeger (1977: 16) described as "speech knowledge" (knowledge about music expressed through speaking), on the one hand and "music knowledge" (knowledge about music expressed through music making itself), on the other. For a long time I was able to say many things about the Mande bala and about Mande music, and I had strong inklings about how best to approach teaching and learning it (or at the very least, about how not to), but lacking the skills—i.e., the "music knowledge"—to *demonstrate* these inklings, I lacked credibility—especially among my own Mande teachers. Having finally managed to put forth these ideas in a reasonably coherent way, and having finally begun to successfully implement the pedagogy of "play" in my own practicing efforts, I am now seeing the fruits of a more behaviour-analytic *modus operandi*.<sup>298</sup>

But paradoxically, one of my principal objectives in developing a behaviour-analytic pedagogy for the Mande bala was precisely to facilitate a move *away* from the emphasis placed on performance-oriented goals that tends to characterize formal music studies in North America. Presumably, there is something about music—about listening to it, dancing to it, playing it—that is intrinsically rewarding. People "get into" music for (at least some of) the same reasons they might do video games, or surfing, or skateboarding. That is, they do so because many of the reinforcers involved are so highly immediate. World renowned professional skateboarder Tony Hawk (2013-web), in a video interview with TransWorld SKATEboarding magazine, answers the question "Why do you think [skateboarding is] more accepted now?" as follows:

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<sup>298</sup> On a recent trip to New York, Famoro Dioubate (2015c-per) gave me extremely positive feedback on the new direction that my playing was taking and strongly (and jovially) encouraged me to continue along this new line.



Kids were, you know, raised on MTV . . . instant gratification . . . quick edits . . . like, they want action, right away . . . and skateboarding absolutely provided that. You step on a skateboard and . . . you go. And it's on. You're not waiting for someone to throw a pitch.

It seems to me that music, and perhaps Mande music especially, shares this feature with skateboarding (and many other similarly immediately-rewarding activities). With just two notes Lassana Diabate was able to provide his son Check Oumar with the means to get involved in the action (Durán, 2013b-vid). To de-emphasize this characteristic of bala music by prolonging the time between the initiation of studies and the natural, social reinforcers involved in playing with others (i.e., by focusing on the performance at the end of the practice rather than on the intrinsic rewards of the practice itself), is a serious pedagogical blunder. And this is true for at least two reasons, the first, practical, the second, philosophical:

1. Applying a "density analysis" approach to patterns, and teaching not only vocabulary but also grammar, the bala teacher acquires greater control over the rate of student reinforcement. This makes the process of learning more attractive for students—particularly today's "instant gratification; quick edits" students—and decreases the likelihood that their practicing endeavours will suffer extinction. While I agree that pandering to student apathy can be problematic, the power of competing reinforcers (such as those provided by social media, video gaming, or television broadcasting) compels us to devise strategies that make the musico-academic project more attractive—and more effective.<sup>299</sup>

When learning to play an instrument becomes impenetrably labour intensive, students simply disengage. After all: "don't nobody wanna lift no heavy-ass weight." A behaviour-analytic pedagogy of "play"—whether for the bala or for some other

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<sup>299</sup> Again, Mande-born children of jeli patronym have an obligation to learn. For non-Mande learners there is no such obligation.

instrument—provides the means to ratchet up the immediacy (and the overall efficacy) of the active reinforcers involved in the learning process. By tweaking stimulus control, we insure that every time students leave a learning session, they are eager to practice, eager to pursue further study, and eager to come back to the next session. I suspect that nearly all music teachers—and perhaps teachers of all kinds—would rather see their students actively engaged in the self-directed pursuit of knowledge (and, hopefully, self- and community-betterment), than see them succumbing to a project of sloth, torpor, or disengagement.

2. At the time that I was last in Ghana (2002–2003), municipal public transportation consisted primarily of the privately owned mini-bus "trotros"<sup>300</sup> that operated as shared taxis along predetermined routes throughout the urban areas. Colourfully painted, the trotros often bore popular local maxims (printed in English, Twi, or one of the regional languages), such as "God's time is best" or "Observers are worried." Of these, one of the more ubiquitous was "Who knows his end?" In an unstable and rapidly changing world, the course that any individual has laid out for him or herself can be easily turned upside down in a matter of moments. Emphasizing the ends entirely at the expense of the means, one runs the risk of putting in effort (and often, time, money, and other resources), without ever achieving the payoff they were expecting. Balancing ends with means, however, we can find more joy in "the doing." Practicing a musical instrument invariably involves hard work. But practicing need not feel "work-like." Music study can be more than merely that thing that one needs to do in order to get ready for "the performance." It can also be that thing that one wants to do, that one looks forward to doing simply because it is enjoyable—whether there is an upcoming performance or not. (Does anyone you know play video games because "practice makes perfect?") When the goals sought are the only thing that maintains practicing behaviour, not only are we

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<sup>300</sup> These are called "magbana" in a Guinean context.

less likely to do the work, we additionally run the risk of (wastefully) investing ourselves in an activity that will never see a fruitful outcome. After all . . . "who knows his end?"

The solution? Practice both for the future *and* for the now. Work hard, of course. We have to work hard—and consistently. But if a chief goal of Mande bala music is "play" (inner-circle galumphing) and if "play" (a process of behaviour-analytic shaping for the steps of a density analysis) is also an effective means through which to achieve that goal, then even mediating through digital interfaces, dreary drudge work gives way to a learning trajectory that is, by definition, more enjoyable at every stage.

## GLOSSARY

### I. Mandenkan Terms

#### BALA (BALAFOLA, BALAFOLALU)

A heptatonic xylophone with usually between seventeen and twenty-two keys played by Mande *jelilu* (see also: *koni* and *kora*).

#### BIRIMINTINGO

Improvisatory ornamentations on, or variations to the *kumbengo*; on the bala, these are often rendered as descending "flurries" called rolls; one of the four basic elements of *jeliya*.

#### BOTE

A kettledrum played with a stick; played with the *tolonyi* in the bala/*bote* ensemble; often played in sets of two.

#### DONKILO

Song; strophic singing that can be rendered in chorus; one of the four basic elements of *jeliya*.

#### FINA

Koranic and genealogy reciter; one of the four rolls fulfilled by Mande peoples of *nyamakala* status (see also: *garanke*, *jeli*, and *numu*).

#### -FOLA

A suffix indicating "player"—a *jembefola* is a player of the jembe.

#### FOLI

Instrument playing.

#### GARANKE

Leather-worker; one of the four rolls fulfilled by Mande peoples of *nyamakala* status (see also: *finu*, *jeli*, and *numu*).

#### HORON (HORONNU)

Non-artisan freeborn social status in Mande; *horonnu* are landowners, warriors, rulers, and traders (see also: *jon* and *nyamakala*).

JELI (JELILU, JELIMUSO)

Oral historian, musician, genealogist, storyteller, advisor, mediator, translator, and diplomat; one of the four rolls fulfilled by Mande peoples of *nyamakala* status (see also: *fin*a, *garanke*, and *numu*).

JELIYA

The art of the *jeli*; what *jelis* do; the essence of being a *jeli*.

JEMBE (JEMBEFOLA, JEMBEFOLALU)

A goblet-shaped drum played with two hands.

JON

Slave; a largely extinct social status in Mande (see also: *horon* and *nyamakala*).

JULO

A "piece" in the Mande repertory.

KONI (KONIFOLA, KONIFOLALU)

A four- or five-stringed boat-shaped lute played by Mande *jelilu* (see also: *bala* and *kora*).

KONKONDIRO

Rhythmic tapping on the side of a *kora*, usually by the apprentice; especially common among Senegambian *kora* players.

KORA (KORAFOLA, KORAFOLALU)

A twenty-one- or twenty-two-stringed harp-lute played by Mande *jelilu* (see also: *bala* and *koni*).

KUMA

Speech.

KUMBENGO

Instrumental ostinato accompaniment; one of the four basic elements of *jeliya*.

-LU

A suffix that acts as a plural marker; one *balafola*, several *balafolalu*.

-MUSO

Woman; also a suffix that indicates femaleness; a male *jeli* is a *jelike*, a female *jeli* is a *jelimuso*.

#### NUMU (NUMULU)

Blacksmiths; one of the four rolls fulfilled by Mande peoples of *nyamakala* status (see also: *fin*, *garanke*, and *jeli*).

#### NYAMAKALA

Freeborn artisan social status in Mande; the *nyamakalalu* work with spiritually imbued materials (wood, clay, leather, metal, words, and music), and fulfil four distinct rolls: *fin*, *garanke*, *jeli*, and *numu* (see also: *horon* and *jon*).

#### SATARO

Non-strophic, speech-rhythm singing that cannot be rendered in chorus; one of the four basic elements of *jeliya*.

#### TOLONYI

A metal bell struck with rings worn on the fingers; played with the *bote* in the *bala/bote* ensemble.

#### -YA

A suffix that translates as "—ness" or "—hood."

## II. Behaviour-Analytic Terms

#### ANTECEDENT STIMULUS

A stimulus that occurs just prior to the emitting of a behaviour; the first component of an ABC behavioural assessment (see also: behaviour and consequence).

#### AVOIDANCE CONDITIONING

A type of conditioning in which the emitting of a behaviour averts the presentation of an aversive stimulus, thereby strengthening that behaviour.

#### BEHAVIOUR

Anything that a person says or does; more technically, any muscular, glandular, or electrical activity of an organism; the second component of an ABC behavioural assessment (see also: antecedent and consequence).

## CHAINING

A procedure by which an individual learns to perform a specific series of steps that are linked together, one after the other, and always in the same order.

## CONSEQUENCE

The immediate and delayed effects (rewards, punishers, etc.) of having emitted a behaviour; the third component of an ABC behavioural assessment (see also: antecedent and behaviour).

## ENVIRONMENT

The people, objects, and events currently present in one's immediate surroundings that activate one's sense receptors and that can affect behaviour.

## EXTINCTION

(See operant extinction.)

## ESCAPE CONDITIONING (NEGATIVE REINFORCEMENT)

A type of conditioning in which the emitting of a behaviour terminates or removes an aversive stimulus, thereby strengthening that behaviour.

## OPERANT BEHAVIOUR

Voluntary behaviour that operates on the environment to generate consequences and is in turn influenced by those consequences; more generally, operant behaviour is behaviour that is affected by immediate rewards or punishers; operant behaviours are influenced by operant conditioning.

## OPERANT CONDITIONING

A type of learning in which a stimulus comes to influence a behaviour as a result of that behaviour's consequences.

## OPERANT EXTINCTION

The process by which behaviours are "weakened" as a result of no longer being followed by reinforcers; in general terms, behaviours that no longer "pay off" gradually decrease.

## POSITIVE REINFORCEMENT

The application of a positive reinforcer to strengthen a behaviour (see also: positive reinforcer).

## POSITIVE REINFORCER

A stimulus occurring immediately following a behaviour that causes the behaviour to increase (see also: positive reinforcement).

#### PUNISHER

A stimulus occurring immediately following a behaviour that causes the behaviour to decrease (see also: punishment).

#### PUNISHMENT

The application of a punisher to "weaken" a behaviour (see also: punisher).

#### REFLEXIVE BEHAVIOUR

(See respondent behaviour.)

#### RESPONDENT BEHAVIOUR

Involuntary behaviour that occurs automatically to prior stimuli; respondent behaviours are influenced by respondent conditioning.

#### RESPONDENT (PAVLOVIAN, CLASSICAL) CONDITIONING

A type of learning in which a stimulus comes to control a behaviour because that stimulus has been appropriately paired with another stimulus that already controls that behaviour. Respondent conditioning begins with unconditioned responses.

#### REINFORCEMENT

(See positive reinforcement.)

#### SHAPING

A procedure for gradually refining and improving a skill through the reinforcement of successive approximations of, or increasingly close attempts at, correct execution, one approximation at a time, until the desired end result is achieved; shaping can operate on the form, force, frequency, or duration of behaviour.

#### STIMULUS

The specific people, objects, and events that make up a person's environment and that can influence behaviour.

#### STIMULUS CONTROL

The degree of correlation between a stimulus and a behaviour.

#### STIMULUS DISCRIMINATION



The reinforcing of a response in the presence a particular stimulus when that response is not reinforced (or a different response is reinforced) in the presence of another stimulus that is different in at least one respect.

#### STIMULUS GENERALIZATION

An increased probability that a response will occur in the presence of one stimulus as a result of having been reinforced in the presence of similar stimuli.

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