Agbadza:
The Critical Edition
By David Locke

Part I Context

Introduction to Agbadza

In its songs and drum language Agbadza talks about war, struggle, survival, leadership, bravery, patriotism, triumph, and death. These heavy, profound themes make Agbadza suitable for occasions in Ewe society such as funerals, memorial services, and rituals of chieftaincy. In contemporary multi-ethnic settings in West Africa, Agbadza is performed on any occasion calling for an emblem of Ewe identity since it is widely regarded by members of other ethnic groups as the main type of music and dance of the Ewe people.

Agbadza provides an excellent path into the heart of West African musical style. The music of Agbadza bears the imprint of the 2+2+1+2+2+2+1 bell pattern, a time line phrase that is widespread in West Africa and famously well known among international aficionados of African music (see Figure 1).

Figure 1 Agbadza bell phrase as 2+2+1+2+2+2+1

The music of Agbadza consists of singing and drumming. Energized by the ensemble's exciting music, the message of the drumming fuses with images in the song text, seizing the listener with the passionate spirit of Agbadza. In the vocal music, poems are set to tunes that have a variety of call-and-response arrangements between song leaders and a larger choral group. Song lyrics express themes of life and death, heroism and cowardice, and a warrior ethos for both males and females. In Agbadza, Ewe poets sang of battle during a tumultuous era (1600-1900) of migration, conquest, and imperialism, including the trans-Atlantic African slave trade (see Agbodeka, Fage). Songsmiths designed beautiful pentatonic melodies that add greatly to the overall

rhythmic power of the drumming. Agbadza's instrumental music for drum ensemble features drum language compositions for the low-pitched lead *sogo* drum and medium-pitched response *kidi* drum that are set within a texture sounded by *gaŋkogui* bell, *axatsɛ* rattle, high-pitched *kagaŋ* support drum, and handclap (*asikpekpe*) (see Figure 2).

Figure 2 Agbadza drumming -- multipart texture of instrumental ensemble

In Ewe communities, Agbadza can be heard at wake-keepings and memorial services. Wake-keeping ceremonies last from about 10 PM to sunrise; memorial services typically run for several hours in the late afternoon. Agbadza is usually performed outdoors in a circular area defined by chairs and benches around its perimeter. Drummers sit on benches--sogo between kidi and kagaŋ, rattles spreading out on both sides, bell standing behind. Standing near the drummers a core group of singers faces the song leaders who move about within the central area to inspire and interact with the singers. Other people at the performance actively participate by singing, clapping hands and/or dancing. Lovers of traditional music, the "audience" so to speak, may quietly participate through contemplation and critical observation.

The dance of Agbadza, which features contraction-expansion of the torso and bird-like arm motion, is the "Ewe national dance." Its form is quite simple. People rise to dance as the mood strikes them, usually in a small group of two to four people. At first they dance in place at the perimeter of the performance area, marking time until the sogo plays a rolling passage that signals them to get ready. When the sogo raises up the drum language the dancers move forward with small footsteps while vigorously working their arms and torso. At the far side of the performance area the dancers execute a cadence,

turn around, and repeat the same sequence back to where they started. At any given moment many independent groups fill the dance zone, giving the performance a decentralized appearance.

An ensemble of drummers plays the instrumental music of Agbadza. The recurring phrase played on the bell provides a reference that enables everyone to play in correct polyrhythmic alignment. The bell phrase also links players to an implicit matrix of beats and pulses that helps organize the musical surface of Agbadza. Musical phrases sounded by the ensemble's "rhythm section" of handclaps, rattles, and the kagaŋ drum create a dense musical texture of high energy. Sogo and kidi drums give voice to Agbadza's drum language in distinctive phrases whose musical design is a central feature of the drumming composition. Sogo is the soloist and ensemble leader.

Human interaction explicitly structures the singing. The basic idea is interchange between the song leader part (*henɔ*), which is sung by only a few voices, and the group part (*haxelawo*), which has the thicker louder sound of many voices. Each Agbadza song deploys leader and group in its own way; among the aesthetic pleasures of the singing is the variety of given-and-take in this call-and-response style. At the beginning of each drum-song, the song leader freely lines out the tune and text. After this brief introduction, the instrumental ensemble's "time parts," or rhythm section, start the phrases that they continue without variation for the duration of the item. The melo-rhythmic energy generated by this multi-part texture powers the singing and drumming. Guided by the bell phrase, the song leader raises the song in tempo, offering it to the group of singers who reply with gusto. In the recorded performance each poem is sung several times with subtle musical variation in tune, rhythm and harmony. When the song and the

time parts are going nicely the lead drummer plays the drum language phrases on the sogo using his two bare hands. The kidi response drummer answers the leader's call, using two wooden sticks to fashion the medium-pitched drum's recurring phrase. The lead drummer's solo line complements the singers' tune and weaves around the response drum's phrase.

Project Narrative

Gideon Foli Alorwoyie

Born with a drumstick in his hand, clear omens signaled that great musicians had come to earth through Gideon Foli Alorwoyie (see Davis). As a child he cast his net in the Keta Lagoon and hauled in a bag of drum sticks, a miracle that confirmed what the elders had divined: his life mission is to serve society as a "natural born" drummer. Since youth he has played a leading role in various customs of the Ewe people that entail drumming, singing, and dancing including chieftaincy ceremonies, religious worship, ethnic festivals, funerals, and social events.

What distinguishes Alorwoyie from other gifted drummers is his lifelong employment as a professional in modern Africa. As a teenager in the early 1960s he starred in folkloric groups that had been formed during the anti-colonial period by visionary cultural nationalists, notably the Gbeho Research Council started by Philip Gbeho. After Kwame Nkrumah lead the pro-Independence forces in the Gold Coast Colony to victory in 1957, Alorwoyie joined the state-sponsored performing arts companies whose purpose was to maintain the nation's cultural heritage and foster inter-ethnic solidarity. In these settings Alorwoyie not only learned from great Ewe drummers

like Husunu Afadi but he was systematically exposed to a multi-ethnic repertory. In the 1960s Alorwoyie also worked for himself as an independent entertainer. His signature act was a one-man-band routine in which he would be carried on stage in a coffin, only to rise from the dead to play Agbadza as if at his own funeral. When his fans became sated with this vaudeville act, he started playing drums behind his back while balanced upside down on his chair. This Agbadza project is sedate in comparison!

The Agbadza Project Begins

In 1997 Alorwoyie had been in the USA for several decades and was employed as an Assistant Professor in the percussion faculty at the University of North Texas. Having received a grant to document Ewe drum language, Alorwoyie conducted fieldwork in Ghana among elders. Research on Agbadza inspired him to revive an "old school" style in which songs and drumming are intimately connected. He presented his research findings artistically in a sound recording and asked me to assist in its written documentation. Alorwoyie's scholarly work has included writing down the language of the song lyrics and drum texts and contributing to their translation and annotation. His energy has kept the project constantly in motion and his passion for the value of traditional culture is at the project's core.

In 2003 I first heard the sound recording of Agbadza on which this project is based. For me, the key is that I really like this music--I like to listen to it, to perform it, and to think about it. I enjoy Agbadza's composed features--tunes, lyrics, drumming--and I am moved by the specific performance captured on the recording. My role has been to mediate Agbadza into written form.

Alorwoyie's Perspective on the Agbadza Project

Alorwoyie clearly set forth his vision for this project in tape-recorded ethnographic interviews that I have transcribed and edited (June 3, 2005). Rebecca Sacks, then an undergraduate student at Tufts University, also participated in the interview. Quotes from these interviews enable readers to hear directly from him about the project.

Remembering an Old Style

Alorwoyie intends to contribute to the continued vitality of Ewe music through this Agbadza collection.

This project is something like a guideline. If other drummers want to follow, fine; if they want to do their own thing, hey, they have their own aspect. My idea is that until now no format has been laid down from the older generations for the younger generations. We, the scholars, are trying to do that now. We are just trying to let everyone know that there was a format before, but because it was not written as a documentary for us to read in ABCD, we are lost. We are just doing things on our own. This Agbadza project is something to start with. That is the main idea.

Concerned that his cultural heritage is being lost, Alorwoyie is reviving a style of Agbadza that has fallen out of fashion among younger drummers.[1] In Agbadza performances nowadays sogo players do not use the lyrics of a song as the basis for the drum language compositions they play.

[1] See Burns 2009 for an excellent discussion of contemporary Ewe attitudes towards the received heritage of the traditional performing arts.

Yes, that is what we do, that is what is happening, what I am trying to prevent. My uncle talked to me about Agbadza in the olden days. Let me give you one factor. There is no way a drummer will start the drum before the song; that would be wrong. Drum rhythm patterns are put on songs, not the drum before the song. When the song comes first, the drummer has his own idea. If he has a good memory, a natural drummer can take the words from the song to do what? To create his own rhythm so they match. As he sits down listening to the song, some idea will come to him. The song will give him something to say on the drum, his own rhythm to make up. My elderly uncles told me that in the history of Agbadza, that is how they did it. They will play one drum pattern and sing one song until it is done. Then, the composer or the song leader will bring another one. He will sing the words to the song by himself before bringing it out for the group to join. While he is going through the song, if you are a talented gifted drummer, you should get your rhythm ready. That is how the whole thing was brought from the past. With my memory of the olden days, that is what exactly what I want to do.

What I am trying to say is that I am not just making this up. This is what I heard about Agbadza from the elders. Younger general drummers, we hear and play Agbadza differently now because we don't have those formalities. If you go to any town to help somebody to play Agbadza, maybe the songs will not be the same familiar ones that your hometown people are doing; maybe they are singing certain songs that you don't even know. What are you going to do? You have so many Agbadza rhythms in your mind. You have to think, "What kind of rhythm can I put on these songs?" This is the statement I am trying to give to you; this is the thing I am trying to let people know. If you want to play a good Agbadza drumming, you have to listen…to understand where the song is

coming from. Then, you can make good music for yourself and the people in the community. This is better than just playing something for no particular reason.

Linking Songs and Drumming

Alorwoyie wants people interested in Ewe music to realize that drumming, in addition to having wonderful value as abstract instrumental music, also is intimately connected to Ewe culture, especially language. In the dialogue quoted below he says that although he could have arranged the drumming and singing to convey a historical narrative, for this project he had another goal.

Alorwoyie: *My focus, what I am trying to do here, is to let people know that we have language and meaning in Agbadza drums--not only rhythms. There are certain words for the drum calls; that is my first focus. Later on we can look on it like a battlefield. We can link it up in a different format; then we are talking about the scene at Adzigo, or what happened at the Sangraty war in 1887. Then we are talking about history.*

Locke: *It would be something like a dance drama using Agbadza*

Alorwoyie: *Exactly, to tell a story*

Locke: *This one is not doing that?*

Alorwoyie: *No, this one is just to introduce the importance of language in Agbadza. For now, I want people to know that it is not only the rhythms that matter, but that there is language on drum calls.*

Locke: *Is this the way it would be played in the natural community? They would play one and then the henɔ would choose the next song according to how he feels it?*

Alorwoyie: *Exactly. That is exactly what Mr. Dewornu and I are thinking about. Agbadza tends to be a funeral thing, so all these songs are going to be sung at the event. Yet the drummers come with anything they want to play. In other words, the drummers just play any rhythm that comes to their mind. This project will give them a different approach. I hope people will listen to it carefully. First, I want drummers to have patience for the singer to come with the song. "Think of the song first, before you put your rhythm on it," that is my first advice.*

Locke: *And, you are saying to them, "Chose drumming with meaning that makes sense with the meaning of the singing."*

Alorwoyie: *Exactly. Play something that will make the people in the community react to the music and the songs, to get them out to dance.*

Locke: *The way you combined the drumming and singing reminds me of the way traditional medicine works; you put different things together to create more energy.*

Alorwoyie: *Exactly. This is something like a small injection I want to give to the drummers [everyone laughs].*

Research with the Elders

African drummers with exceptional knowledge have worked hard to get it. They realize that their knowledgeable elders must be cultivated before they will reveal their secrets. Even a drummer with Alorwoyie's gifts and experience did research, using good-natured guile to obtain results.

Locke: *You say that the source of your information for drum language #1-#6 and #11-17 is Mr. Besa Gbolo Agbokeme and for #7-#11 is Azeglo Afeke. Do these gentlemen have a particular knowledge of Agbadza?*

Alorwoyie: *Oh yes they do. They have a big knowledge about this. When I was young and growing up, those people were always under my bigger uncles who played all these drums. My older uncles used to pass them their drumsticks when they wanted to go on break. Besa Gbolo and Azeglo would be playing until the others came back to take over from then again. They actually matured with the older drummers so they have knowledge from them. The drum thing was in the family already, but those leading the drums passed information to them. I am sure than when old people were playing, sometimes they could forget to keep secrets and would be singing the language when they were drumming. If my uncles were clever, they could hear those secret words. You can steal a man's drum patterns, the meanings of the kidi part, because the word is coming from his mouth.*
Alorwoyie: *I didn't tell them I was going to ask them for the language because if I had, they would be running away from me. After they had put down the drum rhythms then I said, "Now I want you to tell me the language of each drum part. That is what I need." They went off under the tree for about thirty minutes, putting their heads together, each one thinking about his rhythms, before they came back and said they were ready. I am sure they went into their deep thoughts to come out with the drum language. I didn't create it for them. They were not thinking of the language during the time they were playing the rhythm but they have the rhythms in their minds. When I raised the question, "I want the language of each pattern that you played," they had to go back to our memories.*

Creative Process

Having assembled the two ingredients--songs and drum compositions--how did Alorwoyie pair them up? As his remarks indicate, quiet contemplation was a significant

component of the creative process. He functioned like a composer, even using writing to list the songs and drum language compositions. Having spent his life around composers, choreographers, playwrights, and poets both in Africa and abroad we need not be surprised that Alorwoyie worked this way or that he envisioned this Agbadza project in the first place. The key to understanding his rationale is the meaning of the song lyrics and the drum language and Alorwoyie's sensitivity to Ewe culture and Ewe history.

I started writing down the drum language. I was sitting down, thinking, trying to put things together. This song, I'll be singing it and playing the drum in my mind, and then I will say, "No, this one, I have to put this one with this one." I will be putting it into my memory. You see, the more drumming and singing that I did, the combination, the more ideas came to me. Then, I put them together. The closeness of the language of the song and the language and the feeling of the rhythm--that is what I focus on. Most songs and drum language have feelings…with only a little gap…not that much. That is the closeness I want. All this was something that I planned before putting it on the CD. I'd be getting all these ideas, taking them home, sharing them to certain people, before I said, "Well, this is how I am going to do it."

Back home in Ghana, when people listen to the drum patterns and the songs on the CD they ask, "How did you match all these things together?" As if I was the creator! I said, "No, it is just a matter of the way I play my drums, the way I listen to the song, the concept. I try to match them up." I may be getting sixty years old now but these songs have been here for maybe 500 or 800 years, I don't know. I used my own way of thinking about how to put them together. Some of them may not be right but this is my personal way, the way I feel about it.

Locke: When you made the order from 1-25, did you think, "We should start with this one and then use this one and then the next?" Could you mix them up and play them in a different sequence? Did you want them in this particular order?

Alorwoyie: When I was doing the songs, I didn't just make it 1-2-3. First I wrote the titles of each song. Then I looked at the drum patterns and tried to put them with the songs…which fits what…which fits what. It took me a long time to add the drum language to the songs. First, I put all the drumming music the way I wanted it. Then I tried to select songs that have a close relationship with this drum language. I thought closely about it. I played the drums and I sang the songs, trying to match their meanings. The drum language should have a relationship with the song. Basically, that is the way I initiated it. In the olden days, they usually sang one song with one drum rhythm pattern; that is how Agbadza was being played. They didn't play continuously, one after the other, as long two hours before stopping the way we do now. I tried to do this project according to the old form.

Musical Aesthetics

Despite the clear emphasis on the meaning of the words as the basis for his arrangement of Agbadza, Alorwoyie was cognizant of musical relationships as well. In the recorded performance, he listened closely to the song, especially with regards to the musical form of his sogo playing. Whenever he would roll and then restate the drum language he made sure that the kidi's statement of the drum language came in proper alignment to the song. Musical factors did play a role in his compositional decisions as the following discussion indicates.

Locke: Another question: what about the musical relationship between the drumming and the singing, the shape of the rhythm and the way the song also is carved. Were you thinking about how the music of the song and the music of the drumming go together? Or, were you mostly thinking about the meaning of the Ewe language for the drumming and the singing? My question is about comparing the musical aspect and the language aspect; how did you think about the music relationship between the drumming and the songs? Was that a factor when you chose which ones to put together?

Alorwoyie: When I listened to the songs and then thought about the rhythm part of it, I found that they have a kind of relationship. Looking at the background of the song and the rhythm, I always like to make sure they are similar so that if I bring them together they will have the same sort of feeling. The drum language should make the song's feeling stronger. The two of them should have the same calibration. They cooperate.

Locke: For those of us who do not understand the Ewe language, when we listen to the recording, we admire the way the drumming and the tunes seem to go together very nicely. We think that the music of the drums and songs goes together in a sweet way.

Alorwoyie: Oh, yes that is what I did. I saw them very well. I sang all these songs, I looked at my drum language, and I decided to put this one with that one, this has to be #1, this has to be #2, this has to go with this. After I first did it, I took it home to show the former Inspector General of Police, Mr. C.K. Dewornu, together with other drummers. They asked, "How did you go about it?" I said, "Well, because of the song's context and the drum's context, that is why I put this with this, this with this." They said, "You are born differently," because they would not think of that. These days, back home, they play the rhythm just the way everybody feels at the moment. I just sat down, played the drum

myself, sang the songs myself, and thought about which one matches which. Your question is good.

The Value of Analysis

In my view, the music of Agbadza is interesting just in terms of its sonic patterning as music. Certainly I am drawn towards analyzing the sources of its musical appeal and structure. Rebecca Sacks questioned Alorwoyie on his attitude towards approaching Agbadza with what we might call "a music theory paradigm." His answer indicates an open-minded attitude towards international communication and modern schooling, a confident pride in the resilience and appeal of Agbadza, an awareness of the possibility of its being degraded, and his own clear priority for solidifying Agbadza's continuity into the future.

Sacks: *You have a clear focus on what you want this book to be like. Prof. Locke and I plan to do a musical analysis of the songs and drumming, but I am wondering how important that is to your concept since it is a very intellectual, scholarly type of thing.*

Alorwoyie: *To me, I don't think it is useless, in terms of preparation, to analyze musical things like that because it is very important for certain people to have an idea about what goes on with African music. We need to expand knowledge so that people know the importance of it. Your way of analyzing the musical aspect is part of our collaboration. Actually, I told David that I want this book to be a fundamental instrument for the future generations. People want to learn about African drumming, especially Agbadza which is very popular for all Anlo Ewe people. This is the fundamental form of it for use from elementary schools up to the university level. People who cannot read may hear the CD, buy the book, and ask their children to read it to them so that they can understand what*

Agbadza is about. Now, people can say, "Oh, we like hearing them play the Agbadza rhythms, but this is giving us the basic understanding, the complete picture." That is the sense behind this project that we are trying to do.

Making Sense of the Music

Multidimensionality

Listeners unfamiliar with Ewe music may have trouble "making sense" of the sound of Agbadza. A lot of contrasting things happen at the same time; each different part competes for a listener's attention; the music is polyrhythmic, in other words. Sounds from different drums blend together in kaleidoscopic combination into composite phrases that resist uniform interpretation. Phrases that repeat with little change enable the mind's ear to hear them from different musical perspectives depending on how their phrasing and meter is perceived. Rhythms accentuate different time-feels that may cause a listener to hear the music a new configuration.[2] The leading sogo drum, in particular, constantly shifts chameleon-like among a variety of rhythmic structures. For the player or listener, 3:2 and constant offbeat accentuation create the sensation of multiple centers of rhythmic gravity, so to speak. Multideterminancy is tonal, too. All the tunes are pentatonic in nature but a melody confers tonal resolution on more than one scale degree in the same song.

An outsider's need for answers about musical structure cannot be solved by direct questions. The drumming and singing of Agbadza developed in an oral tradition or what

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since 1975. He was a primary source of information for my doctoral dissertation on the Ewe piece Atsiagbekor (Locke 1978).

[2] Rather than invoking comparison to Western music by using the term "time signature," I prefer the term "time-feel." My goal is for Agbadza to be understood in concepts that arise from close engagement with its phenomena of sound and motion. As it turns out, the differences between Agbadza and various types of Western music are not vast. For example, time-feel differs from time signature primarily in accentuation. The concept of time-feel multidimensionality, however, seems foreign to Western music.

can be termed a "writing-free" culture, so it is not surprising that Ewe drummers discourage analytic talk about music. Drummers are loath to reveal their secrets for good reason since as the songs of Agbadza attest, Ewe history was dangerous and violent. Not only was this part of West Africa was at the center of the Atlantic slave trade, Ewe territory was the scene of invasion by neighboring African ethnic groups and local Ewe communities fought each other, as well. Even today, the Ewes are well known as a forceful people, quick to defend themselves. Ewe culture values deception and accepts enigma. Ewe traditional religion, which strongly embraces spirit possession, ritualizes shape shifting between the tangible here-and-now and the immaterial, timeless spirit realm. In the Ewe worldview a human being can become a spirit, a male can become a female, the dead can reappear, a termite mound can be the home of a divinity, the ocean can respond to prayer. Similarly, in Ewe music three can become two, a phrase can begin and end at the same time, beats in a set simultaneously can be all equivalent and each unique, and listeners can hear phrases that no one actually plays. Such paradoxes are normal facets of an Ewe reality that is multideterminant in its very essence. My challenge here is to explicate the implicit musical system that is hidden underneath in its musical surface

Transcription in Staff Notation

Sensitized to the Ewe cultural milieu and aware of the multideterminant conditions of the music, a person embarks with caution on a project to mediate a recording of Agbadza into an internationally accepted, standardized mode of written communication like staff notation. After all, the musical notation should be responsive to the nature of the music and the outlook of the musicians. No matter how many projects

like this I have undertaken, I remain humbled by an awareness of its limitations. Trying to pin down Ewe music inevitably distorts its multivalent nature.

Well prepared by experience of the need to make intelligent decisions about the Agbadza melodies, I offer this written music as an accurate representation of the singing and drumming on the recording. The notation reveals significant structural features about the music and guides an international readership towards the ability to perform Agbadza. The musical notation addresses the systematic and rational dimensions of Agbadza, while the sound recording itself is the best resource for the aspects of the music that give Agbadza its Ewe style.

Pitch for Songs

Staff notation was developed for Western music and its representation of pitch assumes Western temperament. As any listener to the recording soon discovers, however equal temperament is not happening in Agbadza. Not only are the singers at variance with a piano's pitches, their intonation of pitch consistently drifts upward over the course of a song. In fact, since there are no Ewe traditional musical instruments with consistent fixed pitch, the singers tune to each other rather than an external standard. They rely on their memories and shared expectations about how songs should sound. These transcriptions of Agbadza singing, therefore, associate pitches intoned in the Ewe manner to a near equivalent note on the conventional 5-line staff. I have notated using G clef. In order to facilitate comparison among songs, I set a melody's final pitch, which usually is an important tonal center) on G above middle C (g4). In a few cases the final pitch is given as D in order to reduce ledger lines above the staff. Key signatures change to show different scales and pitch sets.

Pitch and Timbre for Musical Instruments

Staff notation is able to visually represent the music played by bell, handclaps, rattles and the three different drums. The instrument name associated with a given staff indicates the timbre of the notes; by listening to the audio of Agbadza a reader can know the timbre of the instruments. The percussion clef indicates that pitch is indefinite and/or relative, as follows. Each bell has its own unique, yet definite pitch; rattles make an indefinite pitch; the three drums are not tuned to specific pitches, but they are carefully tuned in relationship to each other--high-pitch for kagaŋ, medium-pitch for kidi, and low-pitch for sogo. I use a one-line staff for all the instruments. All strokes of the high-pitched kagaŋ drum are shown with regular noteheads; for the medium-pitched kidi drum, open-toned bounce strokes get regular noteheads and mute-toned press strokes get x-shaped noteheads; the low-pitched sogo lead drum needs a larger set of noteheads to represent its palette of four different timbres, and places noteheads below, on, and above the one-line staff to show its three registers of pitch--low, mid, and high (see **Error! Reference source not found.**).

Timing

Staff notation works well to represent the timing of Ewe singing and drumming. Temporal values can be calculated in terms of the music's steady pulse, its foundation in dance, and each part's reference to the bell phrase. Furthermore, the shape of note heads and their placement on a percussion staff elegantly signifies the timbre of drum strokes, an essential aspect of drumming technique.

The challenge in notating Ewe musical rhythm is its multideterminancy of meter, accentuation and phrasing (see below). My approach is to organize the notation around

the music's deep underlying temporal structure, which in Agbadza is shaped by the four ternary beats within one bell phrase (see Figure 3).[3]

Figure 3 Agbadza's ternary-quadruple temporal structure

This is the flow of time that competent Ewe musicians use when another performer becomes unsteady or disoriented. The problem is that this manner of notating Agbadza necessarily limits the representation to only one of the many ways a phrase's rhythm can be interpreted. Moreover, fixing bar lines and beaming to the ternary beat may disguise the music's surface lilt when it runs counter to the underlying flow. Responding to the one-dimensionality of the rhythmic notation, my commentary on each item points out patterns of accentuation and phrasing design that I don't want a reader to miss. Readers attuned to the manifold potential of Ewe musical rhythm who learn to interpret the notation in a multideterminant manner will get the most from these materials.

Since one phrase has many interpretations, how should it be written? A transcriber must establish conventions for bar lines, beaming, ties, rests and slurs. My solutions are as follows: bar to the bell, beam to the ternary beats, show phrasing with slurs, tie over beats, and use rests to indicate silence.

My goal is to facilitate communication among persons from different cultures, so two questions are germane: Does the notation accurately represent Ewe musicians' intentions and the sounds they make? Does it enable the people not born and raised in

[3] Rather than using the terminology of Western music--compound time or 12/8 time signature--I will designate this temporal structure as ternary-quadruple, i.e., beats hold three equal units, with four beats within one occurrence of the bell phrase. The temporal units within beats are termed fast pulses or time points.

Ewe culture to hear and play Agbadza with sensitivity to Ewe ideas about music? A proverb comes to mind, "The proof of the pudding is in the eating."

Part II Musical Analysis

Musical Time in Agbadza

The Agbadza Dance and the "Four-Feel"

The dance for Agbadza is so closely identified with Ewe ethnic identity that many English-speaking Africans simply call it "the Ewe movement." The Agbadza dance movement creates the kinesthetic context for Agbadza and helps establish its temporal framework. The dance movement molds time into various recurring units and confers a variety of qualitatively different feeling tones to the experience of musical time. The following detailed discussion of the dance will introduce important systematic features of the music.

My teacher Godwin Agbeli told me that in the Ewe language the word for this dance is "dzimeɣe" or "back dance" (dzi-me-ɣe, back-in-dance), a name that reveals the dancers' torso focus.[4] The central feature of the Agbadza dance movement is a two-part contraction-expansion movement in the torso. In contraction, the front of the chest is tucked and the shoulder blades are spread apart; one foot bears the body's weight and the other foot lifts slightly off the ground; the elbows flare out like a bird's wings while the wrists reach down toward the hips and the chin is slightly raised. In expansion, energy pushes back-to-front through the sternum, the shoulder blades close up, the raised foot touches the ground, the elbows come in toward the ribs while the hands rise and the chin is lowered. Normally, expansion is the time to expend energy--to work--and contraction

[4] I studied traditional Ghanaian music and dance with Godwin Agbeli during my doctoral dissertation fieldwork from 1975-1977. From 1987-1998 Mr. Agbeli made annual residencies in Greater Boston. We on projects that included a multi-media project on the Ewe piece Kpegisu, performances and community classes with a study group called the Agbekor Drum and Dance Society, and team-teaching in courses in music and dance at Tufts University. Agbeli died an untimely death in 1998. May he rest in peace.

is a moment of recovery, although this pattern can be inverted for artistic effect. In Agbadza, the typical temporal proportions are 2:1, that is, the expansion is twice as long as the contraction (see Figure 4).[5]

Figure 4 Agbadza dance timing

In other words, the dance shapes the flow of time into a series of ternary beats (dotted quarter-notes). The contraction, which comes as a pickup that anticipates the subsequent onbeat, lasts for one fast pulse (eighth-note); the expansion, which begins on the beat, lasts for two partials (quarter-note).

Four contraction-expansion units happen over the span of one occurrence of the bell phrase (one "cycle"). Based on patterns of foot movement and weight transference, these four units can be grouped into two sets of two units each. The footwork in each set goes like this (see Table 1):

(1a) While bearing weight on the left foot, touch the right foot flat on the ground while doing an expansion; (1b) without transferring weight off the left foot, lift the right foot off the ground while doing a contraction.

(2a) Step down and transfer weight onto the right foot while doing an expansion; (2b) without transferring weight off the right foot, lift the left foot while doing a contraction.

(3a) While bearing weight on the right foot, touch the left foot flat on the ground while doing an expansion; (3b) without transferring weight off the right foot, lift the left foot off the ground while doing a contraction.

[5] When the music is based on a binary beat (quarter-note), the temporal proportion of contraction to expansion is 1:1 (each taking an eighth-note).

(4a) Step down and transfer weight onto the left foot while doing an expansion;
(4b) without transferring weight off the left foot, lift the right foot while doing a contraction.

Table 1 Agbadza dance footwork

The Agbadza dance is a simple two-step that is repeated on each side of the body's midline (bilateral symmetry). If one starts with the right foot being active, the four-count footwork sequence is (1) touch with the right, (2) step on the right, (3) touch with the left, (4) step on the left. Just before the foot goes down and the body does the expansion, there is always an upward foot gesture while the body does the contraction.

The dance maps four equidurational ternary units onto the time span of the bell phrase. In other words, Agbadza is "in four" with time flowing ONE-two-three, TWO-two three, THREE-two-three, FOUR-two-three. The equation 4 x 3 = 12, describes Agbadza's basic musical period, that is, four beats each containing three fast pulses (see Figure 3).[6]

Within each count the dancer's expansion "pop" achieves mind/body prominence by its longer duration (agogic accent) and by virtue of coinciding with the onset of the count (onbeat); the dancer's contraction on the third unit within each beat (pickup) also achieves a particular feeling tone by being the moment for the snapping torso "tuck" that leads to expansion on the next onbeat. The second fast pulse within each count

[6] In the written analysis that follows the set of three pulses within each of the four ternary beats will be given as 1.1, 1.2, 1.2, 2.1, 2.2, 2.3, etc. In other words the marking 4.2 indicates the second time point, or fast pulse, within the fourth beat. Similar marking will designate the two fast pulses within the six-beats (quarters) and the four fast pulses within three-beats (half-notes).

inherently is less prominent because nothing of kinesthetic significance happens. For a dancer, time in Agbadza flows in a lop-sided, short-long manner "a-**1**-y, a-**2**-y, a-**3**-y, a-**4**-y" (see Table 2).

a	1	y	a	2	y	a	3	y	a	4	y
tuck	pop	--	tuck	pop	--	tuck	pop	--	tuck	pop	--

Table 2 Agbadza dance timing

In terms of the dance, each onbeat moment in the set of the four counts within each cycle of the bell phrase is unique (see Figure 5). Structurally, count one is distinguished from the others as the first beat (downbeat), count three is the midpoint (upbeat), count four is the turnaround that leads back to the downbeat of the cycle, and count two fills in between the downbeat and upbeat. Because the dance reflects the bilateral symmetry of the human body (right-right/left-left), the four counts are shaped into two pairs: 1-2 + 3-4. These two-beat sets shape the four-beat cycle into two halves; the first half of the cycle calls for the response of the second half that follows. Within each two-beat set there is an antecedent-consequent progression from 1 to 2 and 3 to 4. There is more. Since counts two and four (backbeats) bear the body's weight, they literally feel heavy in contrast to the lighter quality of the non-weight bearing counts one and three. From this perspective the pattern of accentuation in the four counts is one-TWO-three-FOUR.

Figure 5 Agbadza dancers' counts--patterns of structure, grouping, motion, and accentuation

The choreography of the Agbadza dance is quite simple. People rise to dance as the mood strikes them, usually in a small group of two to four people. At first they dance

in place at the perimeter of the performance area, marking time until the lead sogo drum plays a rolling passage that signals them to get ready. When the sogo raises up the drum language the dancers gradually move forward, dancing dzimeɣe with short steps. At the far side of the performance area they execute a cadence and turn around to face where they started. Then they dance back to where they started with the same sequence, that is, (1) waiting step, (2) dzimeɣe, and (3) cadence. Life-of-the-party types may constantly invite people out to dance, while a shy or sick person may infrequently venture out into the dance area. At any point of time during an event many small groups independently fill the dance zone giving the performance a decentralized appearance. From up close the scene feels like many people are doing their own thing but from a distance it is the performers' synchrony that stands out.

The waiting step adds an important dimension to Agbadza's temporal framework (see Figure 6).

Figure 6 Agbadza waiting step--grouping and accentuation

On counts two and four dancers gesture backwards to touch the ground with one foot as they swing their elbows backwards; on counts one and three they step in place on the active foot as they swing their elbows forward. Repeating this four-count sequence while waiting for the sogo to cue them to start the Ewe movement, the dancers shape the flow of time 4-1, 2-3. When the sogo brings the drum language, the dancers shift their flow to the 1-2, 3-4 pattern discussed above.

Dancers tend to develop a personal trademark for the cadential dance phrase. Everyone does the basics-- stop moving forward and while dancing with the feet in place,

gesture with the upper body towards the right and left before leaning back and front and then finally "killing" the dance with a strong forward motion of the upper body and downward thrust of the arms. The cadence moves within three cycles of the bell phrase (see Table 3); top row: dancers' count; bottom row: upper body gesture). Among the ways dancers put personality into their cadence is to move at a rate of 3:2 to the basic counts (see Table 4).

1	2	3	4	1	2	3	4	1	2	3	4	1
R	R	L	L	R	R	L	Back	Front	-	-	Back	Front

Table 3 Agbadza dance cadence "in four"

1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1
R		R	L		L	R		R	L		B	F					B	F

Table 4 Agbadza dance cadence "in six"

The shift in the dancer's timing shows that good performers are not limited by the two- and four-count patterns found in the basic form of the Ewe movement. They fluently can go with another flow of beats, just as they can artistically pattern their accentuation and grouping of the four counts. Yes, the dance provides important insight into core patterns in Agbadza's music but Ewe performers are not limited by or restricted to those patterns. Like competent singers and drummers, good dancers understand the implicit dimensions of Agbadza's musical system. In the musical world of Agbadza, the silent dimension is a network of temporal units that I dub the metric matrix (see below).

Hand Clapping and the "Six-Feel"

Hand clapping (asikpekpe, literally, asi-kpe-kpe, hand-clap-clap) has a central musical function in Agbadza. Far from being insignificant or incidental, hand clapping is

the main way that singers, dancers, and members of the audience actively participate in the music making at an Agbadza performance. Everyone is free to contribute to the drumming by clapping hands. Clapping needs no extraordinary special skill, experience, training or equipment. You simply do it.

A person who has grown up in Ewe society and imbibed its culture--a process termed "enculturation"--is highly likely to have learned how to clap hands in an appropriate manner. Gender has an impact: females clap with crossed hands, men with aligned palms and fingers. The entire physical clapping motion-- spreading the arms in preparation and then bringing them together to make sound--is done with style and rhythmic grace. Those who are clapping listen to the singers and drummers to know when to start and stop, as well as when the energy level of the performance is sagging and might benefit from an injection of hyper-charged musical life. Sometimes people clap more vigorously to honor a special group of dancers for whom they have affection. Musically as well, there are clear expectations.

Generally speaking, a small set of rhythms is used for hand clapping in Ewe music that uses the Agbadza bell phrase (see Figure 7).

Figure 7 Agbadza hand clapping phrases

Claps A, B, C and D (4, 6, 3-then-2, and 3-4-1) closely relate to the basic dance of Agbadza: (A) sounds the dancers' four counts, (B) references the dancer's counts indirectly via a 3:2 ratio, (C) treats the time span of the bell phrase in two halves, triple-then-duple, and (D) sounds only the third, fourth and first of the dancers' counts. Claps E and F occur less frequently. Clap E is cousin to clap C but moves twice as fast in its second half; clap E, an energized version of A, is entirely is in double-time. Whenever

music using the Agbadza bell is being played, a person may join the music-making by adding these claps to the overall multi-part texture.

This project is devoted to Agbadza from the town of Anlo-Afiadenyigba, the hometown of Alorwoyie. A defining feature of this style is hand clapping "in six" (phrase B) as is clearly heard in the recorded performance by Alorwoyie and the Afrikania Troupe. No matter how the song goes or what the drum language composition is like, the clapping marks the six-feel beats. Since the basis of timing in Agbadza is the four-feel beats (dotted quarters), the claps (quarter-notes) have the wonderful musical affect of always bringing into sonic prominence the feeling of 6:4 (two sets of 3:2) within the time span of one bell cycle.

Beat: Three-In-The-Time-Of-Two

Here is a point whose importance cannot be overstated. The clap part does not mean that the music is felt in six. Not at all! On the contrary, the in-four groove given constant kinesthetic manifestation by the dance always is present in the musical consciousness of the players. The in-six clap gets its power from its relationship to the four-feel flow. Because of the constant performance of the clapping in six, the entire performance is suffused with the musical duality of three-in-the-space-of-two (3:2). Although the handclap part makes an important contribution to the multi-part surface texture of Agbadza's music, the timing of the hand clapping does not determine music's flow nor does it provide a special clue to the subjective orientation of performers. In order to listen to the recording with culturally informed sensitivity and to appreciate the

musical artistry of the performers it is absolutely essential to be able to feel the music in four.

The Measure and "Where is ONE?"

The steadily recurring bell phrase may be regarded as equivalent to the idea of measure; the equidurational units marked by the dzimeɣe movement are equivalent to the idea of beats. Equating the duration of a bell phrase to the concept of measure makes good sense for a concept of meter in Agbadza. Ewe musicians say that every aspect of performance is timed in relation to the bell phrase. "Listen to the bell," is the cardinal rule for drummers, singers and dancers. But where should bar lines be drawn? Since the bell plays over-and-over without change, on which of its seven strokes does the phrase begin and end? Even if this question has one correct answer, must bar lines be drawn on the basis of the bell's phrasing? Perhaps the bell is phrased over the bar line. The time values of bell strokes notes never change but as the phrase repeats over-and-over and combines with the drum parts and the songs, a listener's perception of the phrase may undergo shape-shifting musical transformations. Can ONE move to different time-points within the cycle? In the musical world of Agbadza the simple question, "Where is one?" has a complex answer.

The dance and the handclaps provide strong indications but as discussed above ultimately are inconclusive about how to frame the bell phrase within measures and structure time into beats. The decision about where to draw bar lines cannot be made on the basis of empirical evidence alone. Why limit ourselves to empirical evidence when a more obvious approach would be to consult Ewe experts? In classes for students

unfamiliar with Ewe music, African teachers typically point to one moment within the bell phrase as a moment of initiation and closure, using it as a basis to orient their students. African scholars confirm the perspective of African performers that the Agbadza bell phrase is in four; they position bar lines in their scores as I have done in these materials. But we overlook very significant features of Agbadza if we think this ends the story.

I have never witnessed an African teacher who encourages students to count time in a Western sense. African performers often resist their students' apparent need to single out one moment as the basis for organizing rhythmic perception; instead, they encourage students to understand musical time as circular and advise them to form composite wholes out of separate parts. Facial expressions and body gestures indicate that Africans delight in the shape-shifting potential of the music they play.

Both in the structure of its musical design and in the style of its performance, Agbadza suggests that "*Where* is ONE?" is a question of only limited significance. African teachers sometimes seem to resent the question because it requires them to submit to their students' cultural perspective. A more pertinent question might be, "*What* is ONE?" If and when Ewe experts say, "This is ONE," they likely mean something like this: "This is the moment on which rhythmic forces of initiation and closure are strongest but other moments also partake of these forces. As the music repeats and ONE passes by, we register it in our musical consciousness but we do not rely upon it for our musical orientation. It is but a single musical dimension among many that we use to express ourselves."

Ewe Meter as a Matrix

Although the concepts of measure and beat have counterparts in Ewe dance-drumming, meter for the Ewe musical system needs to be understood on its own terms. Meter in Agbadza needs to be understood as a multidimensional dynamic condition in which several beat streams coexist simultaneously (see Locke 2009). I suggest thinking of meter as a matrix of different streams of beats (metric fields). The power of a specific beat within a measure derives from the interplay among temporal layers rather than simply its relationship to ONE.

The metric matrix in Agbadza arises from the duality of two and three, i.e., the simultaneous interpretation of a span of time as having two equal parts and three equal parts. On its surface the pattern of accentuation in a musical motive may be in three or in two but the underlying multidimensional condition is ever-present. Musical acts can be felt either in two, in three, or in both simultaneously. Two sides of the same coin, so to speak, the time-feels are inextricably intertwined and define each other.[7]

As shown in Figure 8, the 3:2 ratio occurs at different speeds--twice per bell phrase (the 6:4 standard), four times per bell phrase (double time), and once per bell phrase (cut time). The idea of meter as matrix means that all three layers are always latently present in the music's implicit background. In Agbadza the ratio of 3:4 is less prominent than 3:2 but important nevertheless. I think of 3:4 as a derivative of 3:2.

Figure 8 3:2 relationships within two spans of the bell phrase

[7] In terms of how the mind's musical ear organizes musical rhythm into coherent patterns there is an important distinction between 3:2--three-in-the-space-of-two-- and 2:3--two-in-the-space-of three. Consider the hand clap. When oriented to the underlying four-feel beats, the clap is 6:4 (six quarters in-the-span-of four dotted quarters) but when oriented to the clap the four-beats are 4:6 (four dotted quarters in-the-span-of six quarters). When the lead drum plays two even strokes within one four-feel beat (dotted quarter), I consider it as 2:3 (two dotted eighths : three eighths) since the most typical internal morphology of a four-feel beat is ternary.

These sets of 3:2 are generated by the interplay of streams of beats at four levels--four-feel beats, six-feel beats, three-feel beats, and eight-feel beats (see Figure 9).

Figure 9 Matrix of beats within time span of Agbadza bell phrase

Each four-feel beat contains three fast pulses (ternary morphology); each the six-feel beat contains two fast pulses (binary morphology); each three-feel beat contains four fast pulses (quaternary morphology); each eight-beat contains three super-fast pulses (ternary morphology using sixteenth-notes). The unshifted positions (onbeat time-points) of the four-feel, six-feel and three-feel beat streams within the twelve-pulse span of one bell cycle are as follows (see Table 5).

beat type	onbeat fast pulses
four-feel beats	1, 4, 7, 10
six-feel beats	1, 3, 5, 7, 9, 11
three-feel beats	1, 5, 9

Table 5 Onbeat fast pulses of four-feel, six-feel and three-feel beat streams

Eight-feel beat onsets 1, 3, 5 and 7 are in unison with the four-feel beats but eight-beat onsets 2, 4, 6 and 8 cut between the twelve-pulse flow, implying a faster structuring of the bell phrase into twenty-four super-fast pulses (sixteenth-notes). Significantly, the eight-feel beat, which sets up quick motion with the other metric levels, is accentuated much more frequently in drumming than in singing.

The matrix of four different streams of beats--four-feel beats, six-feel beats, three-feel beats and eight-feel beats--also occur in shifted, displaced positions within the time span of the bell phrase (see Figure 10). The durations of shifted beats are identical to their unshifted counterparts but their onsets happen on different time-points within the

twelve-pulse span of the bell cycle.[8] The four-feel beats have two displaced possibilities--shifted from the first time-point to the second or third fast pulses within ternary beats (dotted quarters); the six-feel beats have one displacement--shifted from the first time-point to the second fast pulse within binary beats (quarters); and the three-feel beats have three displaced positions--shifted from the first time-point to the second, third, and fourth fast pulses within quaternary beats (half-notes). Since 3:2 or 3:4 can occur between streams of beats in their onbeat and displaced positions, quantity and type of such relationships within the time span of the bell phrase is vast. Put differently, the metric matrix is deeply multidimensional.

Figure 10 Agbadza beat matrix with displacement positions

The double-time "eight-feel" is especially important in drumming (see Figure 11). In the leading drum's rolling passages Alorwoyie explores many varieties of extremely fast action that entail fitting four strokes within each four-beat. He usually works within the eight-feel using uneven timing that I have notated with sixteenth and eighth-notes; these "rolling" rhythmic figures, which imply a super-fast twenty-four pulse flow, are suggested by the composite of the eight-feel beats and the seven bell strokes. Within the span of a four-feel beat, two eight-feel beats create 2:3 with three twelve-pulses. Sometimes, as in item #16, it appears that Alorwoyie distributes the four strokes more evenly, a process that yields 4:3 within each four-beat (four dotted sixteenths : three eighths) . Theoretically, the eight-beats have a displaced position but musical action at this metric level seems more about temporary offbeat accentuation than displacement.

[8] Displacement of four-feel, six-feel and three-feel beats could theoretically occur at the sixteenth-note level but, in practice, this is very rare.

However: even numbered eight-beats function as the duple upbeats of the four-beats, that is, they occur half way between one four-beat and the next. Extended drumming passages "in eight" imply a shift of temporal morphology from ternary to duple, i.e., from 12/8 to 4/4 time signature.

Figure 11 Eight-feel structure within one span of the bell phrase

Agbadza music rewards the active listener. The music makes sense in different ways depending on the temporal structure of a listener's basis for orientation. Thinking in terms of the figure-ground concept of gestalt psychology, when the ground changes the figure assumes a new configuration. Below is a set of instructions for creative listening to Agbadza (see Table 6).

▪ Monometer	Attend to one time-feel; for example, hear the music in four.
▪ Multimeter	Shift among time-feels sequentially; for example, hear one phrase in four and the next in six.
▪ Cross-rhythm	Join two or more time-feels into a composite rhythm pattern.
▪ Polymeter	Hear more than one time-feel at the same time.

Table 6 Different temporal approaches to creative listening

When many people are playing and listening to music at the same time, not everyone necessarily hears the music from the same temporal point-of-view. All that matters is that a drummer must not "go off," that is, make a timing error. Temporal multidimensionality, in other words, easily occurs among a group of musicians. Depending on the individual, one person may also experience the music in what may be termed a multidimensional manner.

The concept of metric matrix has heuristic value for understanding the music of Agbadza. In their onbeat and offbeat positions, the beats and fast pulses within the time

span of one bell phrase, in proportions of threes and twos, provide a basis for organizing the aural and kinesthetic perception of Agbadza's music. The metric matrix is a tool that directs attention to significant features in the music while also providing a theoretical basis to explain its syntax.

Resultants and Composites

A composite phrase results from a creative act of listening that combines sounds from separate parts into a new musical phrase. Polyphonic music grounded in repetition is especially suited for this approach to making music so it is not surprising that many of Africa's musical traditions have developed it with great sophistication. In Agbadza, melody is deliberately tuneful rather than assembled from mosaic fragments as is done in other African traditions such as Shona mbira music. The African propensity for forming wholes from parts has a strong impact on Agbadza's instrumental music, however, and composite combinations play a significant role in fostering the music's multideterminant character. Each of the six instruments in Agbadza--bell, rattle, handclap, high-pitched drum, medium-pitched drum and low-pitched drum--has a sufficiently distinctive sound quality and musical identity to be able to stand out on its own. But since the sound of the drum parts is relatively homogeneous and their phrases interlock so tightly, these three parts may seem to blend together into various combinations.

In the unsounded realm of the metric matrix, beats from the four main time-feels readily mix together to form composites. For example, the fusion of four-beats and six-beats in the listener's mental ear may result in patterns whose notes are drawn from the two separate ways of feeling time (see Figure 12). Implicit resultant phrases like this

help explain the musical logic of phrases that are actually sounded in performance. Rhythms in the singing and drumming may be understood as tangible counterparts of these abstract resultants.

Figure 12 Composite rhythms made from four-feel and six-feel beats

The concept of metric matrix assumes that the beat streams are continually recycling in a never-ending temporal circle. Not only does the matrix have many time-feel levels in their onbeat and displaced positions, it also can be understood as an array of marked moments in time within dynamic steady-state. From this array of time-points the listener actively forms meaningful wholes.

Simultaneous Multidimensionality of Accentuation and Phrasing

Accentuation

The concepts of cross-rhythm and polymeter involve how the mind's musical ear hears metrically multideterminant music that simultaneously shapes musical rhythm into 3:2 temporal proportions. *Cross-rhythm* indicates that the musician stays grounded in one time-feel perspective, equivalent to time signature in Western music, while *polymeter* means that the metric background shifts. The listener's inner difference in musical gestalt changes how a phrase is perceived and, consequently, may affect a musician's accentuation or subtle micro-timing.

In Agbadza, the typical issue is whether the musical accentuation is felt "in four" or "in six," to use a colloquial expression. As a simple demonstration, Figure 13 shows the six-feel beats written in terms of the four-feel background and in terms of their own time-

feel. To illustrate the impact of shifting implicit time-feels on the perception of the explicit musical surface,

Figure 14 shows the response drum theme for item 21 written in four different time-feels.

Figure 13 Six-feel beats written "in four" and "in six"

Figure 14 Response drum theme 21 written in four different time-feels

In this collection, I consistently notate "in four," i.e., according to the 4 x 3 = 12 framework of beats and pulses (equivalent to 12/8 time signature). Occasionally, I write in the six-feel (equivalent to 6/4 time signature) to eliminate inelegant graphic clutter and to visually evoke the music's multideterminancy. In other words, most always I beam and tie to the dotted quarter beat, but occasionally I go with the quarter-note flow. Readers of these materials should realize that notation guided by the ternary-quadruple basis of beams and ties often disguises patterns of accentuation that run counter to, or "interweave with," the four-feel groove (see Burns 2010).

In Agbadza, the simultaneous presence of multiple time-feels creates a distinctive type of accentuation. A unison moment occurs when beats in different streams occur simultaneously: a special musical feeling arises when separate timing flows meet. Beats also are offset from each other in predictable rhythmic relation: each offset moment has a distinctive musical quality or rhythmic feeling tone.

What is the relevance for action "on the musical surface," so to speak, of these implicit metric patterns? Consider the relationship between the flow of "shifted" six-feel beats and the onbeat flow of four-feel beats (see Figure 15). Whereas "onbeat six" and "onbeat four" come together on four-feel beats 1 and 3, "upbeat six" falls in unison with

"onbeat four" on four-feel beats 2 and 4. Thus, when a motive of singing or drumming accentuates the upbeat six-feel, the music acquires a backbeat flavor (accent on 2 and 4).

Figure 15 Accentuation between the onbeat four-feel and upbeat six-feel

To site another example, a favorite rhythmic structure in Agbadza joins the onbeat four-beats to the three-beats (half-notes) displaced by three pulses (see Figure 16). In this case, the moment of unison is on four-beat 2. Rather than sounding the tacit theoretical structure on the musical surface, so to speak, Ewe musicians artfully employ it; for example, the "three feel" rhythmic motion of bounce strokes in kidi phrase #13 moves from beat three towards beat one, with beat two going unmarked. Contrametric accentuation, sometimes termed "cross rhythm" or "polymeter" by scholars of African music, are implied as an enriched way of listening to the overall texture without destabilizing the "in four" foundation of the music (see Kolinsky and Locke 1982).[9]

Figure 16 Accentuation and motion between four-feel and three-feel beats in response theme #13

Phrasing and Temporal Motion

The characteristic feeling of rhythmic motion in Agbadza is a progression towards moments of unison between time-feels. Frequently, moments of unison occur between the implicit four-feel and the six-feel that is made explicit by the handclap part. Such moments of unison serve as a temporary point of arrival at a musical destination. An important reason why the concept of ONE makes sense in this music is that three critical aspects of the music--four-feel, six-feel and bell phrase--all come into unison on that

[9] Many scholars dispute the value and accuracy of the terms cross rhythm and polymeter (see Agawu, Burns 2010 and Nzewi).

time-point. In the context of this fundamental sense of temporal motion, the music of Agbadza has a various ways that phrases move from their beginning to their ending.

In Agbadza the shape and motion of explicit phrases often draws upon the rhythmic interplay of implicit 3:2 relationships (see Figure 12). Motives whose accentuation is "in three" can move 1-2-3, 2-3-1 or 3-1-2, while motives "in two" can move 1-2 or 2-1 (see Figure 17). Permutations in 3:4 phrasing work in the same manner, that is, 1-2-3-4, 2-3-4-1, 3-4-1-2 or 4-1-2-3. Since 3:2 type relationships occur between streams of beats in their onbeat and displaced positions, phrases with this sort of accentuation pattern can begin on all twelve fast pulses within the span of one bell phrase.

Figure 17 Variety of phrasing in 3:4 and 4:3

Many phrases begin on an offbeat time-point and move towards an onbeat completion. In my opinion, this motion from contra-metric to co-metric is a progression from metrical tension to metrical resolution (see Kolinsky). In other words, offbeat notes create a musical quality of instability and motility whereas onbeat notes convey a sense of stability and stasis.

Singing and drumming are artfully designed and except for the handclap it is rare for a musical phrase to accentuate an implicit set of beats in a simplistic, obvious way. Indeed, it is the essence of Agbadza for the music to convey multiple possible interpretations. Listeners familiar with the 3:2 matrix of implicit beats become sensitive to the musical potential of a phrase's rhythmic shape. Because I have notated according to the four-feel, my commentary on each item in the collection highlights patterns of accentuation that might be overlooked if the notation is interpreted in only one way.

The musical condition of steady repetition provides a creative resource for shaping musical phrases. A musical circle can be parsed in many ways. Many potential phrases lie within a recurring pattern depending on how it is heard. As listeners experience the same array of sounds recurring in the mind's musical ear over-and-over, their perception of may change depending on how they hear when the phrase begins, when it ends, and what happens musically during the journey.

The Metric Matrix in Practice

Many non-Ewes feel the Agbadza bell rhythm in six. This way of hearing was so prevalent among his students that Abraham Adzinyah, my first teacher at Wesleyan University, termed the four-feel the "hidden beat" when trying to teach them to feel the music in four.[10] Over a period of many years' experience I have trained my aural perception so that I can "flip" among the many latent metric layers. Having struggled with the challenges myself I can empathize with my students when they report being mentally stuck in one perceptual field.

Newcomers to Ewe music often become rhythmically disoriented. They perceive offbeat moments as being onbeat, causing a shift in overall musical gestalt. This seldom happens to adept Ewe musicians and Ewe scholars have cautioned against exaggerating the importance of this effect (see Anku, Agawu). Although non-African writers have characterized this musical situation as an aggressive "clash" (see Jones), an African

[10] As stated above, it is highly likely that Ewe musicians themselves primarily feel the music "in four" but they care much more about what people actually play than their inner subjective experience. As Godwin Agbeli used to say, "Think about it anyway you like, just play it correctly." Once at an Agbadza performance in an Ewe village, when I pointed out to him that a dancer's feet were not falling on the four-feel he said, "If drummers plays off, it affects others so we will correct them. No one will bother to correct an Agbadza dancer at a social event like this but our better dancers know where the time should be."

scholar has describes it in cooperative terms as a "rebound effect" (see Nzewi). The emotional resonance sparked by Ewe musical structures, in other words, is both personal and cultural

More than one speed of 3:2 usually is happening at the same time in the music of Agbadza. In song, 3:2 typically spans two four-feel beats (three quarters : two dotted quarters); the support and response drums, which use shorter time values than the songs, regularly display 2:3 within one four-beat; the lead drum often shifts gears between levels, contrasting spacious and dense qualities of rhythmic play. A slower 3:2 over two spans of the bell phrase--three whole notes : two dotted whole notes--occurs sparingly (see item #25).

The bell and rattle phrases balance offbeat and onbeat accents, moving from strokes that are syncopated from the fundamental four-beats and suggestive of 3:2 to strokes that occur in unison with the four-beats (see below). Like the bell and rattle, most songs do not repeatedly accentuate one flow of beats. Although some songs do have a consistent and recurring pattern of accentuation that stamps a tune with an overall rhythmic signature, most songs are composed with a more rhythmically eclectic set of phrases, each with its own rhythmic design (see below). The high-pitched support drum continuously accentuates 3:2 and displaced contra-metric beats (see below). Compositions for the medium-pitched response drum are highly varied in metric quality. We hear different layers of 3:2 and 3:4, constant co-metric or contra-metric accentuation, and a mix of these qualities.

The rhythmic accentuation of the leading sogo drum part varies according to three types of passages that are keyed to musical form. First, passages devoted to stating the

drum language usually balance co-metric and contra-metric motives in the four-beat feel and frequently emphasize six-feel and eight-feel beats. Second, passages in which the lead drum interacts with the response drum often employ constant offbeat accentuation and 3:2 over the span of one or two four-beats. Third, rolling passages by the lead drum dramatically increase the music's density and suspend of the morphology of the drum language. As far as the concept of metric matrix is concerned, sogo's rolling passages usually dart from one type of beat stream to another rather than accentuating the same underlying metric structure.

Supporting Instruments--Time Parts

Bell Phrase

The bell phrase is both a tangible, audible part of the music of the drum ensemble and an abstract musical idea that is a source of creativity for composers and performers. Ewe musicians invariably tell students, "Listen to the bell," or "Take source from the bell." Ewe teachers say that the bell phrase is the music's metronome and the conductor of the performance. Players keep the bell phrase in mind at all times. Even when it is not actually being played, the bell serves as the players' basis for musical orientation and as a stimulus for musical ideas.

The bell phrase gives shape to temporality, molding musical time for every other aspect of the performance (see Pantaleoni). Its interaction with the metric matrix establishes the basic conditions of musical rhythm. The bell phrase is the foundation upon which the music is built, the spare skeleton that is fleshed out by the other parts.

Every action of singing, drumming and dancing is conceived in duet with the bell phrase. To learn Agbadza one must master the bell.

Musically, the bell phrase exists at the boundary of the music's explicit surface and its implicit "underneath" (see Feld). In order to understand Agbadza we must analyze and study the bell but the bell resists analysis and can never be fully understood. The bell phrase is additive and divisive, symmetrical and asymmetrical, and in all time-feels simultaneously. No metric framework binds the bell phrase. Its motion is eternally circular but also a linear experience in elapsing time (see Anku). The musical force of the bell phrase derives both from its sequence of time values in elapsing time and from its simultaneous relationships to beats in the metric matrix. To employ a spatial analogy, the bell phrase exists in horizontal space as a musical line and vertical space as the intersection of that line with the layers of beats in their 3:2 proportions. Both axes deserve explication.

Seven strokes with a wooden stick produce one cycle of the bell phrase (see Figure 18). One of these strokes may be played on the larger of the double bell's two bells, its different pitch marking a special time-point in the circling rhythm. This moment is notated as ONE. For purposes of communication and analysis, I assign numbers to the other six strokes in sequence. The bell's strokes, one to seven, mark proportions of time in a distinctive sequence: long-long-short-long-long-long-short. Calculated in terms of the fast twelve-pulse, bell strokes are either one or two pulses in duration and the phrase may be understood additively as 12 = 2+2+1+2+2+2+1.[11] Onsets of notes in the bell phrase occur on pulses one, three, five, six, eight, ten and twelve.

[11] Agawu forcefully denies the value of additive rhythm for theorizing African music (see Agawu). Not only am I unconvinced by his argument, but I find positive value in the concept of grouping short temporal

Figure 18 Agbadza bell phrase as seven strokes--additive perspective

The question, "Where does the bell phrase begin?" could be answered with a rhetorical question, "Where does a circle begin?" or an Ewe proverb about unsolvable enigmas, "Who can trace the footprints of an ant?" (see Locke 1978). As the sequence of seven strokes repeats without change, notes from other instrumental phrases intersect with the bell's notes in all configurations. When I was studying with Godwin Agbeli in the 1970s, he would intentionally start the bell on each of its seven strokes to train me to recognize the pattern of time values in the phrase rather than mechanistically finding ONE and counting strokes from there. He knew that in a player's ear the seven notes reconfigure their phrase shape like a musical chameleon.

There is a direct answer to the sincere and important question about the where the bell phrase begins: either on stroke 1 or stroke 2 (see Figure 19). If the bell phrase is conceived to begin on stroke 1, the phrase moves towards a goal moment on stroke 6, with stroke 7 functioning as a pick up to the ONE of the next cycle. If the bell phrase is conceived to begin on stroke 2, the phrase moves like an arrow towards its target on stroke 1, which is the ONE of the next measure (phrasing forward over the bar line). I favor interpreting the phrase as starting on stroke 2 and ending on stroke 1 because it evokes a significant quality of Ewe musical aesthetics--goal-oriented phrasing. Musical phrases tend to begin in a musically unresolved condition and move towards tonal and rhythmic resolution at their conclusion.

Figure 19 Phrasing of the bell pattern -- two alternatives

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units. It is revealing, I think, to observe grouping patterns in Agbadza's musical rhythm like (12 = 7 + 5) or (12 = 8 + 4).

The bell's seven strokes suggest rhythmic fragments that appear in other drumming parts and songs (see Figure 20). Ewe musicians personify the bell part as the source of their musical creativity, their "muse," as it were. When Godwin Agbeli would implore, "Take source from the bell," I believe he was referring to seminal rhythmic figures he could extract from its ongoing play. The following table highlights some of these significant motives (see Table 7).

A	The way Freeman Donkor taught the bell phrase at Wesleyan University (1972)
B	Cadential motion from stroke 6 to stroke 1 (see discussion of four-feel beats, below)
C	Grouping strokes 1-3 and 4-7 (see discussion of six-feel beats, below)
D	Figures starting with short strokes as pickups
E	Figures using only long strokes
F	Inversion of figure E
G	Motion from stroke 1 to stroke 6 (see discussion of four-feel beats, below)
H	Two-note figures starting on short strokes

Table 7 Agbadza bell phrase; inherent rhythmic ideas

Figure 20 Agbadza bell phrase--inherent rhythm figures

The bell phrase functions as an interface to the metric matrix, a go-between that connects the explicit and implicit dimensions of the music (see below). As in geometry when two points define a line, two bell strokes in the same timing position may be regarded as defining a flow of beats. In this way the bell phrase alludes to the matrix of beats in their onbeat and offbeat positions. When I struggled to correctly fit drumming parts to the bell, Godwin Agbeli counseled me not to count bell strokes but to use the bell as a means to feel the music's underlying temporal framework.

When tracking vertical relationships to the matrix of beats that are felt but unsounded, it helps to think of the beats as stationary time markers over which the phrase's notes pass (see Figure 21). In four, the bell summarizes Agbadza's inventory of offbeat and onbeat positions and the phrase makes time seem to slow down-speed up or expand-contract. Motion through the phrase feels elusive and mysterious. In six, on the other hand, the bell pushes straight ahead with contagious momentum.[12] Ewe musicians often play the bell phrase with one hand and a flow of beats with the other. The bell's fit with the four-beats and the six-beats is second nature to an adept Ewe drummer. As discussed below, the bell's interaction with the ensemble's other "time parts" adds further depth to its rhythm.

Perception of the rhythmic motion of the bell phrase differs depending on the time-feel (see Figure 21). In the four-feel perspective, the bell starts on the third partial of beat one (stroke 2, 1.3, pulse 3), articulates both offbeat partials within beat two (strokes 3-4, 2.2- 2.3, pulses 5-6), glances off the second partial of beat three (stroke 5, 3.2, pulse 8), before landing with authority squarely on beat four (stroke 6, 4.1, pulse 10), an onbeat hook up that is reinforced with the final move to ONE (strokes 7-1, 4.3-1.1, pulses 12-1). In the six-feel perspective, the bell starts with three onbeat strokes (strokes 1-3, six-beats 1-3, pulses 1, 3, 5) and then suddenly shifts to the upbeat six-feel for the next four strokes (strokes 4-7, upbeat six-beats 3-6, pulses 6, 8, 10, 12). The strokes of short duration (strokes 3 and 7) are like rhythmic switches that toggle the bell phrase back and forth between the two locations of six-beat time. Table 8 charts the position of each stroke in the bell phrase in relation to pulses and beats in the metric matrix.

[12] Although the bell also shares moments of unison with the three-feel beats, this timing orientation only becomes prominent when the drum language composition gives it accentuation. The four-feel and six-feel, on the other hand, are always in play.

Stroke	In Twelve	In Four	In Six	In Three
1	1	1.1	1.1	1.1
2	3	1.3	2.1	1.3
3	5	2.2	3.1	2.1
4	6	2.3	3.2	2.2
5	8	3.2	4.2	2.4
6	10	4.1	5.2	3.2
7	12	4.3	6.2	3.4

Table 8 Agbadza bell phrase; unisons to beats in metric matrix

Figure 21 Agbadza bell phrase and bell-beat composite "in four" and "in six"

Rattle Part

The spare texture of the bell phrase enables it to morph shape among the various beat frameworks within the metric matrix. The rattle part, on the other hand, has a more dense texture and very strong phrase shape (see Figure 22). The player moves in distinctive kinesthetic pattern--down-up-down-down-up-down-up-down-up-down-down; upstrokes strike the player's hand and downstrokes strike the thigh. All downstrokes are in unison with the bell, while upstrokes occur between bell strokes. Coming at the end of the phrase, the rattle's only long tone reinforces the impression that the bell phrase starts on stroke 2 and moves to conclusion on stroke 1. As is true of everything in Agbadza's music, the rattle phrase flows to both the six-feel and the four-feel beat. The rattle's pattern of physical motion naturally makes the part feel in six; the four-feel requires more mental effort to bring into focus. The rattle teams with the handclap to accentuate the six-feel, putting that temporal framework prominently front-and-center in the Afiadenyigba style of Agbadza that is featured in the collection.

Figure 22 Rattle phrase in duet with bell phrase, in four and in six

Because of their shared kinesthetic and timbral identity, the rattle's upstrokes create a counter-rhythm to the downstrokes (see Figure 23). They accentuate a two-then-three pattern that is the inverse of the three-then-two beat framework that often occurs as a hand clapping theme and is normative in Ewe dance-drumming.

Figure 23 Two-then-three accentuation in the rattle phrase

At least as significant as these rhythmic dimensions, the rattle contributes a tremendous amount of sonic energy to the music of Agbadza. In African performances usually there are benches filled with female rattle players who also sing. The loud volume and noisy timbre of so many rattles being played at the same time usually drowns out the sound of the solitary bell.

Kagaŋ

The relatively high pitch of the slender kagaŋ support drum differentiates it from the more resonant mellow-sounding medium-pitched kidi response drum and the low-pitched sogo lead drum. Two long thin sticks hit flat on the skin, giving the drum crisp articulation and contributing to its dry "rim shot" timbre that cuts through the ensemble's overall sound. The kagaŋ's rhythm contrasts intensely with the other drum parts and the singing.

In Ewe dance-drumming as a whole, the main musical function of the kagaŋ part is to mark offbeats within each four-feel beat. A widely known kagaŋ part, for example, uses a two-note figure that places strokes on the second and third eighths within every dotted quarter. The phrase in Agbadza accomplishes this essential offbeating function in

a more complex way (see Figure 24). Six fast pulses in duration, the kagaŋ phrase occurs twice over the span of one bell phrase.

I think of the kagaŋ phrase in Agbadza as one motive made up of two figures--one with three notes and the other with two notes. Exemplifying their circular approach to musical time, Ewe musicians begin the kagaŋ phrase on either of the two figures. As discussed below, the drum language for the part starts on the three-note figure (see Table 9) but on the recorded performance the player always begins with the two-note figure.[13]. Over the span of one bell phrase the first strokes in the three-note figures match four-beats two and four, creating backbeat accentuation.

If conceived to start on the two-note figure, the two occurrences of the phrase sit within four-feel beats one-two and three-four, thus framing the bell in two halves. On the other hand, if the kagaŋ phrase is conceived to begin on the three-note figure, the part is offset from the normal morphology of the bell phrase. By "phrasing over the bar," so to speak, the kagaŋ part weakens the sense of arrival inherent to ONE and keeps the music moving forward on its circular path. Over the first half of the bell, kagaŋ's strokes tend to be offset from the bell strokes; over the second half of the bell the two parts share moments in unison. Because the polyrhythm of kagaŋ and bell is different for each kagaŋ phrase, the two parts keep each other fresh and full of interactive energy.

Figure 24 Agbadza kagaŋ and generic two-note offbeat figure

The kagaŋ phrase sounds out many of the beats in the implicit metric matrix (see Figure 25). The strokes in the three-note figure flow with the twelve-pulses, thus bringing that implicit timing referent into explicit sonic reality. The kinesthetic pattern of the

[13] Alorwoyie says that it is best if a kaganu player phrases the part according to the drum language.

strong hand steadily accentuates the upbeat six-feel.[14] From an "in four" perspective, kagaŋ accents the second time-point within every four-beat, i.e., displacement by one eighth. In four-beats one and three, the timing of the second onset in the two-note figures brings the eight-feel perspective into sonic reality, which enables 3:2 relationships between kagaŋ, the twelve-pulse and the eight-beats. The two figures in the Agbadza kagaŋ oscillate between 2:3 in four-beats one and three and 3:2 in four-beats two and four.

Figure 25 Agbadza kagaŋ phrase's accentuation in the metric matrix

Drum Language of the Time Parts

In Africa, the instrumental music of a community usually is grounded in the local language. We can say that many instruments "talk," not just so-called "talking drums" such as the *atumpan* of the Akan-speakers of Ghana or the *dùn-dún* of the Yoruba-speakers of Nigeria (Nketia, Euba, Villepastour).[15] Alorwoyie teaches the following texts in the Ewe language for phrases played on gaŋkogui bell, axatsɛ rattle and high-pitched kagaŋ support drum in Agbadza (see Table 9).

[14] For clarity, I refer to a player's two hands as strong and weak; the right hand is the strong hand of a right-handed drummer.
[15] Personal communication, 2005, Emmanuel Agbeli. Agbeli is the son of Godwin Agbeli and Director of the Dagbe Center, Denu, Ghana, a cultural tourism facility.

	Implicit Ewe Text	English Translation
gaŋkogui bell		
▪ first time	Do mayi makpo tefe mava mayi!	Get out and see for yourself.
▪ all other times	Mayi makpo tefe mava mayi.	I will go to witness the thing and return.
axatsɛ rattle		
▪ first time	Tsia mayi makpo tefe mava mayi!	Get up quickly and see for yourself.
▪ all other times	Mayi makpo tefe mava mayi.	I will go to witness the thing and return.
kagaŋ support drum		
	Míayi ava yia afia	We shall go and show (our bravery).

Table 9 Supporting Instruments--Implicit Ewe Texts

The implicit texts of the Agbadza time parts relate to the context of urgent action, which makes sense given Agbadza's first and original use in times of war. The texts of bell and rattle say that the speaker will meet the challenge and then return alive and presumably victorious. When Alorwoyie starts the bell and rattle parts, he usually begins with a stroke on time-point 1.1, a style explained by the implicit text (see Figure 26). The drum language of the first notes--the bell's "do" and the rattle's "tsia"--change the sentence to a command: "Get up!" and "Go quickly!" The text of subsequent passes through the temporal cycle is phrased to end on time-point 1.1, which accords with my musical analysis of these parts (see Figure 19 and Figure 22). The text of the high-pitched support drum continuously affirms that the Ewes will face the danger and prove their bravery. We notice that even though Alorwoyie teaches his drumming students to begin

the phrase on the three-note figure, the implicit text starts on the two-note figure. In a writing-free music-culture, consistency sometimes is sometimes regarded as simplistic and rigid.

Figure 26 Music setting of drum language of the time parts

Lead and Response Drums

Kidi

The medium-pitched kidi drum has two main functions in Agbadza: (1) sounding out the melo-rhythmic drum language in answer to sogo's calls; and (2) contributing to Agbadza's polyrhythm by playing many different rhythmic patterns. Kidi's bounce strokes highlight moments within the flow of musical time, creating points of accent that energize the rhythm of the songs.

The kidi uses only bounce and press strokes. The steady flow of kidi strokes gives sonic reality in Agbadza's musical texture to the implicit twelve-pulse (eighth-notes) in the metric matrix. Kidi's uniform time values make its rhythms especially susceptible to shape shifting between the four-feel and the six-feel; each phrase has at least two metric identities. Since each phrase's array of bounce and press strokes fits differently on the bell phrase, the kidi player must master many distinct duets with the bell. The kidi phrases work closely with the high-pitched kagaŋ support drum.

Inventory of Response Drum Themes

Although each composition in this collection of twenty-five has a different sogo-kidi combination and its own drum language, there are only twenty-one different kidi musical themes in this collection (see Figure 27).

Figure 27 Response kidi drum -- themes 1-25

Five pairs of items use the same kidi rhythm (1 and 12, 4 and 14, 6 and 18, 7 and 17, 9 and 19), while item 10 has two different kidi phrases (see Figure 27). Features for analysis include the duration and placement of a kidi phrase on the bell phrase (alignment), design of bounce strokes and press strokes (morphology), stroke-for-stroke interaction with the bell (polyrhythm), and pattern of onbeat-offbeat accentuation (displacement, polymeter).

Duration of Response Drum Themes

The key aspect of duration is the relationship between the time span of a kidi phrase and the time span of the bell phrase (see Table 10). Twelve kidi phrases are one bell cycle long (twelve fast pulses). Phrases that are either half (six fast pulses) or twice a bell cycle (twenty-four fast pulses) are the next most common. One phrase is short (three fast pulses). Finally, one kidi phrase must be played three times over the span of two bell phrases (8 pulses) before it comes around to where it started.

Duration	Item	Qty
12 pulses	4, 5, 7, 8, 10.1, 10.2, 11, 13, 15, 22, 23	11
6 fast pulses	1, 9, 16, 20	4
24 fast pulses	2, 3, 6, 24	4
8 fast pulses	25	1
3 fast pulses	21	1

Table 10 Agbadza kidi phrases; duration in fast pulses

What is the musical significance of phrase duration? In short phrases, as in the three-pulse item 21, the kidi bounces and presses repeat exactly but in each repetition they fit with different bell notes. In long twenty-four pulse phrases, on the other hand, the bell phrase stays steady over two cycles as the kidi strokes change. Bell and kidi

exert reciprocal influence on each other: a six pulse kidi phrases can make it seem like the bell is playing two different six-pulse patterns, while a twenty-four pulse kidi phrase can reshape the bell into one twenty-four pulse phrase. The unique theme of item 25 can totally reshape a listener's perception of the twelve-pulse bell pattern into three eight-pulse motives.

Relationship of Response Drum Themes to Bell Phrase

When do kidi themes enter the time span of ever-circling bell phrase (see Table 11)?[16]

12-Pulse	Time-point Function[17]	Time-point	Beat Zone[18]	Bell Stroke	Item	Qty
12	pickup	4.3	1	7	-	0
1	onbeat	1.1	1	1	11	1
2	afterbeat	1.2	1	-	1, 15, 21	3
3	offbeat	1.3	1	2	7, 9, 16, 25	4
3	pickup	1.3	2	2	7, 16, 25	3
4	onbeat	2.1	2	-	-	0
5	afterbeat	2.2	2	3	20, 21	2
6	offbeat	2.3	2	4	24	1
6	pickup	2.3	3	4	6, 10.2	2
7	onbeat	3.1	3	-	2, 25	2
8	afterbeat	3.2	3	5	1, 10.1, 21	3
9	offbeat	3.3	3	-	9	1
9	pickup	3.3	4	-	16	1
10	onbeat	4.1	4	6	4, 8, 14	3
11	afterbeat	4.2	4	-	3, 5, 20, 21, 25	5
12	offbeat	4.3	4	7	13, 22	2

Table 11 Agbadza kidi phrases; location of first bounce

[16] Although the drum language sometimes begins on a press stroke, I will regard the first bounce stroke in its kidi's dialogue with the sogo lead drum as the beginning of the kidi phrase for the purposes of musical analysis.

[17] Fast pulses that lead toward a highly accentuated onbeat are considered to be pickups; if the subsequent onbeat is not accentuated, a third fast pulse is not a classified as a pickup but rather as an offbeat.

[18] In order to grasp the beat-by-beat logic of the placement of a kidi phrase, the concept of beat zone expands the three-pulse time span of each beat to include the pickup pulse.

Seven kidi phrases begin in alignment with the phrasing of the bell part that starts on stroke 2 but the others are out-of-phase with that shape of the bell phrase. Kidi phrases begin on every bell stroke and on every twelve-pulse except pulse 4 (beat 2.1). In terms of a beat's three-pulse time span (beat zone), kidi phrases are launched from all four beats with slight preference for beat 4. Strikingly, two kidi phrases begin with a highly syncopated solitary bounce that highlights bell stroke 7 (see kidi phrases #13 and #22). In contrast, only one kidi phrase starts on ONE. A kidi phrase initiated on ONE, in other words, carries an unexpected musical quality. The moment most frequently used to start a kidi phrase comes between bell strokes 6 and 7 on pulse 11 (4.2)? Why? Perhaps it is because pulse 11 is the sixth beat in the six-feel, which often functions as a quarter-note pickup that leads to ONE.

The difference in durations and moments of entry between the kidi phrases and the bell, that is, their offset phrasing relationships, infuses Agbadza with dynamic energy that keeps the music moving forward through elapsing time. Like the constantly reiterated phrase of the high-pitched kagaŋ support drum, each of the great many kidi phrases recasts the overall polyrhythm from its distinctive musical perspective.

Patterns of Bounces and Presses in Response Drum Themes

All kidi notes have the same time value (eighths). When considered in isolation from other ensemble factors therefore, the rhythm of a kidi phrase comes from the pattern of bounce and press strokes.[19] The resonant sound of bounce strokes contributes to the overall melo-rhythm of the ensemble. Although press strokes may actually be part of the

[19] From the performer's perspective, "handedness" has an impact on the musical quality of a kidi phrase. As a rule, the kidi player alternates hands. As a consequence, six-feel time--two fast pulses per beat--is carried in successive strokes of strong and weak hands, while four-feel time--three pulses per beat--emerges from the crossover between strong and weak hands.

drum language, they are much quieter than bounces and for purposes of musical analysis could be represented with rests. Table 12 displays the patterns of bounce and press strokes as formulae whose total equals the duration of the phrase. As was true of their duration and alignment, variety once again is the outstanding feature of the kidi phrases in Agbadza. The only patterns that occur more than once are 6=3+3 and 12=(2+3)+(2+5).

#	duration	bounce+press
21	3=	1+2
9	6=	1+5
16	6=	2+4
1	6=	3+3
20	6=	3+3
25	8=	2+6
15	12=	(1+1)+(2+8)
22	12=	(1+1)+(3+7)
11	12=	(1+2)+(2+6)
13	12=	(1+3)+(1+7)
7	12=	(2+2)+ (2+2)+(2+2)
10.1	12=	(2+2)+(1+7)
4	12=	(2+3)+(2+5)
5	12=	(2+3)+(2+5)
14	12=	(2+3)+(2+5)
8	12=	(3+2)+(3+4)
10.2	12=	(3+3)+(1+5)
23	12=	(3+3)+(2+4)
24	24=	(1+2)+(1+2)+(1+2)+(2+2)+(2+3)+(1+1)+(1+3)
6	24=	(2+1)+(2+1)+(2+4)+(1+1)+(2+2)+(1+1)+(2+4)
3	24=	(2+4)+(2+4)+(2+10)
2	24=	(2+7)+(1+2)+(2+10)

Table 12 Agbadza kidi phrases; patterns of bounce and press strokes

Bounce strokes on kidi weave in and around strokes on the bell. These timing relationships of *coming before*, *coming after*, or *matching exactly* are at the heart of the polyrhythmic experience. Unison between kidi and bell strokes creates a moment of weight or accentuation in the music's overall texture but an offset relationship also can

produce a powerful effect. The impact of the kidi phrase on the bell depends on the specific musical conditions of their polyrhythm. For example, a bell stroke matched by a solitary kidi bounce receives a powerful zap of energy. Since each bell stroke has its own special quality the musical flavor of a given kidi-bell polyrhythm will be affected by the particular bell strokes involved, as well.

In kidi phrase #22, for example, the solitary bounce that matches bell stroke 7 attracts a listener's attention by matching this pickup to bell stroke 1. The kidi stroke also has special power due to its offbeat position just before ONE on the third partial of four-beat 4. Each of the kidi's next three bounce strokes is affected by polyrhythmic relationships: stroke one fills the gap between bell strokes 1-2, stroke two matches bell stroke 2, and stroke three is the onbeat (2.1) goal moment in the figure. Overall, kidi #22, which obliterates ONE, is an excellent example of "phrasing over the bar line." Every kidi rhythm participates in this sort of dynamic interaction with the other components of the performance.

Bounce strokes in kidi phrases also give and receive rhythmic accentuation from the beats in the metric matrix (see Table 13). In terms of the four-feel beats, consistent accentuation of unshifted onbeats is a little more common than consistent accentuation of displaced offbeat positions (twelve versus nine). Kidi phrases that push the beat three occur much more frequently than phrases that highlight ONE and three (five versus one). Three kidi phrases accentuate several successive four-feel beats, creating a sense of continuity among the accented beats. In terms of offbeating in four-feel time, second-pulse and third-pulse accentuation occur with equal frequency. Five kidi phrases have consistent offbeat accentuation, while four mix offbeat and onbeat accents. From the

four-feel temporal perspective, constant offbeat accentuation puts a lot of pressure on the steady flow of beats but does not necessarily create powerful polyrhythm with bell, since only two bell strokes (6 and 1) are onbeat.

Accentuation in the Metric Matrix of the Response Drum Themes

Given the multideterminant nature of Agbadza, no phrase will have just one pattern of accentuation, but each kidi phrase can be analyzed in terms of how it works with the four-feel beats in their onbeat and displaced positions (see Table 13A).

A	
theme #	accentuation "in four"
1	on 2 and 4
4	on 2 and 4
5	on 2 and 4
8	on 2 and 4
16	on 2 and 4
20	on 1 and 3
23	on 4 and dis 1.5
11	on 1and 2
7	on 2, 3, and 4
6	on 3, 4, 1, 2, 3, 4, and 1
2	on 3, 2, and 3
25	on 3, 2, and 4
3	dis 4.2, 2.2, and 4.2
21	dis n.2
9	dis 1.3 and 3.3
10.1	dis 3.2 and 4.3
10.2	dis 2.3, 3.2, and 4.3
15	dis 1.2 and on 2.1
24	dis n.3 and on 3.1
13	dis 4.3 and on 2.1
22	dis 4.3 and on 2.1

B	
theme #	accentuation "in six"
11	on 1 and 3
7	on 2, 4, and 6
16	on 2 and 5
9	on 2 and 5
20	on 3-4 and 6-1
25	on 4, 2, and 6
3	on 6, 3, and 6
15	up 1-2
1	up 1-2 and 4-5
10.2	up 3-4 and 6
23	up 4-5 and 2
10.1	up 4 and 6
22	up 6 and 1-2
13	up 6 and 2
4	both
5	both
8	both
6	both
2	both
21	both
24	both

Table 13 Agbadza kidi phrases; metric accentuation

For example, kidi phrase #24 has nine bounce strokes distributed over twenty-four pulses, that is, the span of two bell phrases (see Figure 28)

Figure 28 Item #24 kidi phrase in four and in six

In measure 1, bounces 1-3 accentuate third fast pulses within four-feel beats two, three and four. In measure 2, bounce 4 prolongs the idea of placing a stroke on the third fast pulse, but is followed quickly by bounce 5 that is right on the second four-feel beat; bounce 4 treats the third fast pulse within four-feel beat one as a pickup, in other words. Bounces 6-7 repeat the two-note figure idea sounded by bounces 4-5, but shift its metric position. Whereas bounces 4-5 move pickup to onbeat, the two-note figure of bounces 6-7 move onbeat to afterbeat. In the phrase's final rhythmic gesture, bounce 8 returns to the idea of third fast pulse timing (4.3) that characterized measure 1; stroke 9, however, confounds expectations with a delayed landing on an afterbeat (1.2). Strokes 8 and 9 dramatically surround ONE, imparting a highly offbeat, syncopated and unresolved feeling to the phrase. Not only is the pattern of onbeats and offbeats well designed, the polyrhythm between bell strokes and kidi bounces is an artful arrangement of unisons and offsets, as well. Relationships to four-feel beats and the bell phrase are a vital aspect of the musical personality of every kidi phrase.

From the six-feel perspective (see Table 13B), three types of accentuation occur with equal frequency: (1) consistent accentuation of onbeats (nine phrases), (2) consistent accentuation of upbeats (8 phrases), and (3) movement between onbeat and upbeat accentuation (9 phrases). Consistent accentuation makes a kidi phrase feel rhythmically homogeneous and unified. Conversely, phrases like kidi #24 that have both onbeat and upbeat accentuation have an elusive, slippery rhythmic quality (see Figure 28).

From the three-feel perspective, four kidi phrases strongly accentuate 3:4 (half-notes: dotted quarters) through bounce-press patterns based on some variety of the

formula 12 = 4 + 8. Kidi #7 and #17 accentuate the three-feel displaced by two pulses, and kidi #10.1 and #13 accentuate the three-feel displaced by three pulses. The offbeat bounce 1 matches bell stroke 7 on time-point 4.3; bounce 2 is onbeat, coming right on time-point 2.1 but between bell strokes 2-3; the tacit third beat of the three-feel comes in unison with bell stroke 5 on time-point 3.2. In terms of this theory for Ewe music, the pattern of accentuation in this kidi phrase is three beats-in-the-time-of-four beats (3:4), phrased 3-**1**-2 (4.3-**2.1**-3.2), with the moment of unison between the four-feel beats and three-feel beats set on the second four-feel beat in the time span. As mentioned above, the polyrhythm of kidi's two bounce strokes and bell strokes in kidi #13 is found in many kinds of Ewe dance-drumming that use this bell phrase, such as *Atsiã* or *Ageshe* (see Figure 16).

Finally, theme #25 is uniquely polymetric to the four-feel groove (see Figure 29). Its additive morphology groups the twelve-pulse into three sets of eight--two bounces followed by six presses--arrayed over the span of two bell phrases, i.e., 24 = 3 x (2 + 6). As a cross rhythm, this is 3 : 8 (three whole-notes in-the-time-of eight dotted quarter-notes)

Figure 29 Kidi theme #25 accentuation as 3:8 with the four-feel beats

Sogo

Musical Role

The low-pitched sogo drum is the leader of the drum ensemble. Its main musical functions are (1) to state drum language compositions, (2) to improvise melodic-rhythmic lines that connect with the medium-pitched kidi response drum and make exciting interaction with the other instrumental parts in the ensemble, and (3) to provide a musical

line that moves in tandem with the song melody. In full performance with dance, the sogo drummer keeps close eye on the dance space, using rolling figures to cue dancers to begin the Agbadza step and controlling his musical energy to maintain the overall momentum of the entire event. Compared to all the other musical instruments in the ensemble, the sogo part has the greatest range of musical effects and the sogo player has the most freedom for musical inventiveness. Sogo is the "master drum" for Agbadza, to invoke a widely used term.[20]

Palette of Sounds for Lead Drum

With two bare hands the sogo player makes four types of sound. This tonal palette enables the drummer to play themes whose nature is melodic, timbral and rhythmic. Ewe drummers vocalize the lead drum part using vocables represent the types of strokes played on the drum itself. These recitations are a system of oral notation. Table 14 shows a standardized set of vocables that represent the variety of timbres and pitches played on sogo. As seen on the lyrics line in the lead sheets of lead-response themes Alorwoyie uses other mnemonic sounds, as well.

[20] I prefer the term "lead drum" because it more specifically designates the performer's role. The title "master drummer" designates a social role and status. Typically, the master drummer of a group is an elder who knows much about the music and is regarded as the steward of musical quality. A master drummer might not even play at a performance, but rather will listen carefully and oversee the younger players. In my view, the term "master drummer" is too freely used in today's international musical marketplace, often to mean simply a proficient, experienced performer who is trying to make a living as a professional musician/dancer. As this project demonstrates, Gideon Foli Alorwoyie really is a "master drummer."

ga (strong hand) *da* (weak hand)	bass tone	low pitch	palm bounce	full volume
de (strong hand) *gi* (weak hand)	open tone	middle pitch	finger bounce	full volume
dzi (strong and/or weak hand)	mute tone	high pitch	finger press	full volume
tsa (strong and/or weak hand)	slap tone	high pitch	finger slap	variable volume[21]

Table 14 Low-pitched sogo drum--palette of strokes

Staff notation can represent the different timbres of lead drum strokes by type of notehead and by location of notehead on the staff. The drumming lead sheets use only oval noteheads but place low-pitch notes below the line, middle-pitch notes on the line, and high-pitch notes about the line. In the full scores, timbre is symbolized both by location and shape of notehead (see **Error! Reference source not found.**).

Figure 30 Kidi theme #25 accentuation as 3:8 with the four-feel beats

Drum Themes

For each of the twenty-five songs in this collection Alorwoyie has selected a composition for sogo and kidi whose drum language text enriches the message carried by the song lyrics. The total number of musical compositions is different from the total number of items, however, because four musical themes are used twice (1 and 12, 4 and 14, 6 and 18, 7 and 17) and several items have more than one sogo theme (4, 10, 14). This collection presents twenty-three different musical themes for the sogo part (see Figure 31).

[21] Alorwoyie employs a lightly struck slap tone (tsa), usually marking time in a 3:2 manner, when laying back to allow the other parts to stand out. He plays accented slap tones in composed themes, often in two-note mute-slap combinations that match bounces on the kidi response drum, as well as in his improvised passages to increase the intensity of the sogo's sound.

Figure 31 Lead sogo drum -- themes 1-25

Although Alorwoyie selected and rehearsed this pre-composed set of sogo calls and kidi responses for this project, in real life situations new drum language and musical themes can be invented on the spot. For example, if the song leader raises an unexpected song, the sogo player may quickly invent drum language text appropriate to the meaning of the lyrics. In the event, the sogo player may convey the phrase he wants from the kidi drummer either musically with cuing strokes on the sogo or verbally with vocables, which is known as "beating the drum with your mouth." Experienced response drummers listen for mute strokes (dzi) on sogo that outline the shape of the kidi phrase.

Drumming Melody

The sogo melody arises from the contrast of pitches at low, mid, and high register made by bass, open, and mute strokes, which are given in vocables as ga, de, and dzi.[22] Within a rhythmic figure tonal motion can be upward, downward, flat, down-up, or up-down (see Figure 32). Upward motion is by far the most common: fifteen of twenty-three themes use upward or up-down motion. The tendency towards rising melody in the lead drum part contrasts with the overall descending melodic contour of the vocal tunes. The melody in most lead drum themes arises from a heterogeneous mix of short figures, each with its own tonal contour.

Figure 32 Lead drum themes --melodic motion

[22] The contour of speech tones in the drum language guides the drum's melody but the pattern of intonation in the drum texts is not a rigid mandate. As is true of vocal tunes, musical melodic factors often override the dictates of language. Furthermore, the sogo's improvised passages need not be based on the text of the drum language.

Form in Lead Drumming[23]

The music of the lead drum has a three-part form, as exemplified in the following brief excerpt taken from the complete score of item #1 (see Figure 33).

Figure 33 Lead sogo part--form; excerpt from complete score of item #1

Rolling passages of quick notes, notated in sixteenths and eighths, signal that the drummer is about to play the drum language theme (see A, mm. 1-2). When the roll ends and the theme is announced, dancers begin the tuck-pop torso dance movement that characterizes Agbadza (see B, mm. 3-4). After playing the theme a few times, the lead drummer cuts off the statement of the drum language (see C, m. 4) and begins a section of improvisation (see D, mm. 5-9). Alorwoyie counsels that these passages must be guided by the sogo-kidi interaction and should not go on so long as to diminish the primacy of the drum language theme. When the sogo does come back to the drum language theme, it may herald its return with a rolling passage. In the recorded performance, Alorwoyie carefully aligns his rolls to the musical form of the song, usually timing the theme to coincide with the beginning of the poem/tune. Although the recording session occurred without dancers, Alorwoyie played with dancers in mind and he reports that in Ghana listeners often are moved to get up and dance.

Ending Signal

An important feature of the Alorwoyie's Agbadza project is the close linkage of song and drumming, as mentioned above. Each of the twenty-five items begins with the song and then introduces the drumming that Alorwoyie selected on the basis of the meaning of the drum language. Accordingly, each item comes to a complete stop before

[23] See Burns 2012 for an excellent discussion of the impact on form of the cultural context of a live performance.

the next song-drum pairing begins. A special lead drum theme, which is identical in all twenty-five items, serves as the ending signal (see Figure 34). Interestingly, the final cadential figure occurs in the middle of the bell's time span, not on ONE.

Figure 34 Ending signal played by sogo drum

Musical Relationship of Lead and Response Drums--Overlap and Interlock

Lead and response phrases overlap and interlock. Interlock refers to cases in which the loud strokes on both sogo and kidi are offset from each other (see items 2, 4a, 4b, 5, 8, 9, 10.1, 10.2, 16, 19, 25). Themes like this have exciting quick interchange between the two drums. Overlap indicates themes in which sogo and kidi play in rhythmic and melodic/timbral unison (see items 1, 3, 6, 7, 11, 13, 15, 20, 21, 22, 23, 24). Themes like this create less musical pressure between sogo and kidi. Some themes sound interlocked but their drum language texts actually overlap. In other words, even when kidi bounce strokes are offset from sogo's loud tones, the two drums may share identical drum language that kidi begins with a quiet mute stroke (see items 1 and 15). Nevertheless, since kidi's open tones sound much more loudly in the ensemble mix, drummers usually start a response phrase on its first bounce stroke. Interlock between sogo and kidi is a prominent characteristic of Agbadza drumming. After stating a drum theme, the sogo player's improvisation usually weaves the loud sounds of bass-toned "ga" strokes and open-toned "de" strokes before and after the kidi's bounce strokes that usually match the sogo's quieter mute "dzi" strokes.

Morphology of Lead Drum Themes

Sogo themes are constructed by using shorter figures as building blocks. Most themes contain more than one short figure (eleven themes have three figures, seven themes have two figures, one theme has four figures), whereas only four themes consist of just one figure. Themes composed in this segmented fashion have strongly defined internal shape that facilitates clear interaction with the other instruments, especially the kidi. Moments of silence in themes allow sound from other instruments to form composite melo-rhythmic figures with sogo. Although these silences usually are brief, six themes have periods of inactivity that last over two successive four-feel beats. Three themes are quiet during four-feel beats three and four (items 11, 13, 15), two are silent within four-feel beats one and two (items 3, 10.1) and one is inactive over four-feel beats four and one (item 2).

Rhythmic figures of two notes timed to the flow of the fast twelve-pulse occur frequently in lead drum themes. These brief figures move through the underlying four-feel beats in all of the three possible ways: pickup-to-onbeat (thirteen themes), onbeat-to-second time-point (eleven themes), and second-to-third time-point (nine themes). The offbeat two-note figures, which are reminiscent of the high-pitched kagaŋ support drum, tend to occur within four-feel beats two and four, thus adding emphasis to the backbeats within the basic time span of Agbadza. Pickup-to-onbeat figures likely will remind listeners of the motion of bell stroke 7 towards bell stroke 1 or the timing of the torso dance movement. On the other hand, a two-note figure with onbeat-to-offbeat motion stands out because it has no analog in the timing of bell or dance.

Rhythmic figures of three notes also occur frequently. These figures typically move at the rate of the twelve-pulse (eighths) but occasionally flow on the eight-feel and

six-feel beats, as well (dotted eighths and quarters). The first note in a three-note figure tends to be placed on the first of the three time-points in a four-feel beat, giving the figure a strong initial impetus (see items 2 and 10a). When the second or third note in a three-note figure lands on a four-feel beat, the figure acquires a different rhythmic character: if the second note is onbeat, the accentuation is unresolved since the figure begins and ends on an offbeat time-point (see items 3 and 21); if the third note is onbeat the figure feels strongly goal oriented (see item 22). When two- and three-note figures occur in succession, the 2:3 temporal proportion often is invoked (see item 9).

Many rhythmic figures use more than three notes. Sometimes strokes in longer figures all are timed to the twelve-pulse (see items 4a, 7, 15, 23), which gives them a sense of smooth fast motion. Figures whose strokes mix time values in 2:3 ratios usually articulate a linear version of this core temporal feeling (see item 11 or 20). Theme 25, which is distinctive in many ways, mixes time values to move elusively over each eight-pulse span of the three identical phrases that are embedded within two cycles of the bell (24=8x3).

Disciplining Frameworks--Bell Phrase and Metric Matrix

The unknown Ewe composers of these twenty-three sogo themes likely were inspired and constrained by the musical framework established by the bell phrase and the metric matrix. They could assume that their audience would understand the dynamic discipline established by these well-known frameworks. For example, the time span of a sogo theme must be proportional to the duration of the bell phrase (twelve pulses). In this collection, the most common duration of a lead drum theme is one bell phrase (thirteen themes). Themes that are either twice or half the duration of the bell phrase

occur with equal frequency (five themes of twenty-four-pulse duration, four themes of six-pulse duration). One unique theme is a very short three pulses in duration (see item 21). Listeners familiar with Ewe music respond with aesthetic affect to these musical differences.

In the music of Agbadza, the interplay of symmetry and asymmetry looms large, the prime instance being the asymmetrical bell phrase set within the symmetry of the implicit metric matrix. Lead drum themes in this collection exhibit both properties with equal frequency (11 symmetrical themes, 12 asymmetrical themes). Asymmetrical themes occur in two additive patterns: 12=7+5 (see items 4a, 5, 13) and 12=4+5+3 (see items 4b, 8, 15, 16, 22). Two themes treat a 6-pulse period as 6=4+2, which I feel as symmetry (ditto the 2+1 pulse structure of item 21).[24] Symmetrical themes usually are based on ternary pulse structure: 6=3+3, 12=6+6, or 24=9+6+9 (seven themes). Two themes segment their musical period into three quaternary units, thus producing strong 3:2 and 3:4 effects: 12=4+4+4, 24=8+8+8 (see 7 and 25 respectively). Again, listeners attuned to Ewe music will experience distinct aesthetic feelings according to the treatment of this musical parameter.

Sogo themes tend to be offset from the phrasing of the other instruments in the ensemble, thus enhancing the forward drive of the drumming. By far the most common moment within the bell phrase for a sogo theme to start is its midpoint, that is, four-feel beat three or its pickup (eleven themes). Two themes of 6-pulse duration start on both four-feel beats one and three. Other moments within the four-feel framework on which sogo themes start include the second time-point within beats one and three (two themes),

[24] Simha Arom has proposed a formula to account for asymmetry in African music: N=(1/2N + 1) + (1/2N - 1). The math works for the equation 6=4+2 but I still hear it as symmetrical (see Arom).

beats two and four (two themes), the second time-point of beats two and four (three themes), and the third time-point of beat four (one theme). Sogo themes, in other words, overwhelmingly confer structural significance to the third four-feel beat, which marks the mid-point of the bell's time span; fourteen of the twenty-three themes enter the bell phrase on those crucial moments (pulses 7 and 1). A sogo theme that starts on ONE is rare, indeed.

How do lead drum themes move within the ternary-quadruple temporal framework, i.e., the four dotted quarters per time span, that under girds the bell phrase of the bell phrase? Only three themes begin and end within a single bell phrase. Most themes begin within one bell phrase and then move beyond the subsequent bell stroke 1, to end somewhere within the next bell cycle. This staggered fit of sogo theme on bell phrase serves to enhance the forward-feeling drive of the music.

Lead drum themes often accent successive four-feel beats. Although sogo phrases tend to add a fresh sense of motion to the ensemble's music, rather than reiterating qualities of motion that are structurally embedded in Agbadza's temporal framework, some themes do pick up on these familiar patterns. Motion from four-feel beat one toward beat four occurs in two themes (see items 1 and 7); motion from four-feel beat three to beat one is found in two themes (see items 6 and 24). Surprisingly, four-feel beat two often serves as the cadential moment towards which a theme moves (seven themes).

In addition to accentuating the motion of four-feel beats, sogo themes frequently accentuate beats of other duration, as well. The 8-feel framework enables the sogo drummer to move through the ternary four-feel beats in binary fashion (notated as dotted eighths rather than duplets). Six themes use this type of rhythmic motion (see 2, 4b, 8, 9,

11, 20), predominantly within four-feel beats one and three. Nine themes regularly and consistently place accented strokes on the six-feel timing (see items 3, 4a, 5, 7, 10a, 15, 16, 23, 24). Significantly, it is more common to articulate six-feel beats over the second half of the bell phrase, which creates an interlocking relationship between strokes of sogo drum and bell. Six themes highlight the upbeat six-feel flow (see items 4b, 8, 10b, 13, 20, 25). Only four lead drum themes have strong three-feel beat flavor (see items 7, 10a, 13, and 25): theme 7, which features pairs of identical strokes timed to the six-feel beats, simultaneously accentuates both onbeats and upbeats of three-feel beats; theme 10.1 and theme 13 accentuate the three-feel beats displaced to their fourth time-point; and theme 25 accentuates the three-feel-beats displaced to their third time-point. Of course, these patterns of surface accentuation notwithstanding, listeners may hear all themes in all timing orientations. This sort of freedom in figure-ground perception is the essence of the concept of simultaneous multidimensionality. Even a familiar item of traditional music can sound fresh in this dynamic temporal setting.

Variety in Accentuation

The drum language themes sounded by the lead drum and its response drum partner put pressure on all moments within the music's temporal framework. Patterns of accentuation derive from clever use of features of their compositional design, including setting on bell, overall duration, morphology of shorter figures, melodic/timbral contour, and patterned use of different time values. Each theme works with the bell phrase in a distinctive manner--placing notes before, after, or on bell strokes, echoing rhythmic figures made by several successive bell strokes, or highlighting several non-successive bell strokes. Item 10a, for example, draws attention to bell strokes 5 and 7; in subtle

contrast, item 10b attracts attention to bell strokes 4, 5 and 7. Many themes accentuate the onbeat positions of the four-feel and six-feel beats, sometimes consistently over the entire theme but often in heterodox fashion by first accenting one time-feel and then switching to another. A few themes so persistently accentuate offbeat moments that a listener may feel that the position of the onbeat has shifted or been displaced. Items 3 and 19, for example, strongly accentuate second time-points of four-feel beats, while item 6 confers accentuation to third time-points. Either quietly marking time or loudly energizing the ensemble, Alorwoyie regularly places improvised slap "tsa" tones on the flow of eight-feel or six-feel beats in both onbeat and upbeat positions, as if to intentionally keep in play all strata of the metric matrix.

Relationship of Drum Themes to Songs

The sogo and kidi phrases in drumming themes are musically compelling in their own right, but also they interact beautifully with the songs. The Ewe ancestors who composed the drum themes are anonymous; Alorwoyie is responsible for pairing them with specific songs in this collection. He put them together on the basis of language, not musical aesthetics, but since every musical act is timed to the bell's ever-recycling phrase, a tune and its associated drum theme inevitably will have a systematic musical relationship. In interview, Alorwoyie said that while musical relationships were a secondary consideration in his creative process, he certainly was aware of them.

As a closer listener, I find many wonderful facets to Alorwoyie's arrangement of Agbadza compositions for singing and drumming. In item 19, for example, drummers and singers both work with time-point 1.2, which is the structurally weakest pulse within the implicit temporal framework (see Figure 35). For one of the only times in this

collection, the lead singer's call begins on that supremely offbeat moment and, as if to lend support to this unusual timing, the phrases of sogo and kidi both accentuate the same pulse. Even if this brilliant rhythmic fit was not Alorwoyie's primary intention, we can be thankful that this sort of musical serendipity.

Figure 35 Song-drum affinity in Item 19--time-point 1.2

Aligned or Offset

Two types of musical relationship occur between the drum language themes and the tunes: phrases of singers and drummers are either aligned together or offset in an interlaced fashion.[25] Tunes and drum themes in alignment enter the bell phrase together, use phrases of identical duration, have many moments of unison, and flow to the same time-feel. For example, in item 24 both song and drum have phrases that are twenty-four pulses in duration, enter on bell stroke 4, employ pick-up-to-onbeat rhythmic motion, accentuate third partials, and are "in four." On the other hand, tunes and drum themes in offset relationship begin on different moments within the bell cycle, use phrases of contrasting duration, place accents and cadences in contrapuntal fashion, and accentuate alternative time-feels. For example, in item 2 the song begins on four-feel beat three exactly when the drumming theme ends, the kidi's first bounce figure enters just after the chorus' first reply, and the sogo uses duplet figures when the song has triplet rhythms. In item 17, the song's time values strongly accentuate the ternary four-feel beats while the drumming unmistakably accentuates the binary six-feel and three-feel beats (see Figure 36). The expressive modes of poetry and music intensify each other when the two metric

[25] Items I hear as being in alignment are 1, 6, 12, 18, 20, 21, 24 and 25. Items that I hear as being offset are 2, 7, 8, 9, 13, 15, 17, 19, and 23.

feelings overlap on time-points 3.1 and 3.2: the lyric "'hɔ 'ɖe" (literally, war/some) matches the two kidi bounces that mean "let's go" and the two sogo bass tones that mean "war belt."

Figure 36 Alignment of language and music in Item 17

When song tune and drum language theme are offset, phrase entrances sometimes are nested in sequence; for example in item 8, the song enters on four-feel beat two, the sogo enters on beat three, and the kidi follows on beat four. Another pattern finds the end of one part overlapping with the beginning of the other; again in item 8, the chorus phrase enters just when the sogo completes its phrase. Rhythmic hocket between drums and melody also occurs, as in item 2.

Mutual Enhancement of Lyric Meaning and Musical Excitement

As with any classification, many items do not neatly fit wholly within only one category. In many items, drum theme and song tune are in overlapping alignment as well as contrasting interlock. In item 20, for example, drums and tune both accentuate four-feel beats three and one but there are many moments when their relationship is intricately interwoven. Aesthetically pleasing moments arise from a shift from interlock to alignment; for example, in measure two of item 11, the tune and drums move from 2:3 interlock to unison within four-feel beats one and two.

If the sogo and kidi phrases themselves are offset from each other, it is likely that each drum will have different relationships to the tune; in such situations, usually the lead drum is aligned to the song while the response part is offset. Sometimes the drums align with the lead singer but contrast with the chorus (see item 10.1). Since tunes can be

multi-sectional, the drummers may line up with singers in the first section of a song but be offset in its second section (see item 22).

When the drum theme is two bell cycles in duration (items 2, 3, 6, 18, 24), there is a usually is preferred fit to the tune, although it seems that in item 18 several relationships are acceptable. When the duration of a tune's phrases match the length of the drumming phrases, a pleasing symmetry results (items 3, 24). On the other hand, interesting changes in rhythmic relationships occur when the durations differ.

In both singing and drumming, a rhythmic motive that uses an uninterrupted string of identical time values does not unambiguously fit within any one time-feel. In such musical situations, a strongly shaped motive in another part will cast influence upon its more indeterminate companion. In item 16 for example, kidi clearly accentuates the six-feel (2 bounces + 4 presses) and confers a similar shape of time to the steady flow of eighth-notes in the tune. Songs with strong rhythmic personality can create vivid counterpoint with the drums. For example, in measure one of item 15, the tune's melodic rhythm is three-then-two (quarters : dotted quarters) while the sogo theme pushes the four-feel, yielding 3:2 over four-feel beats one and two (see Figure 37). Making matters even more intense, kidi's first open tone on time-point 1.2 is tightly interlaced with the leader's entrance on time-point 1.3, which also matches bell stroke 2 and the second six-feel beat.

Figure 37 Rhythmic relations of singing and drumming in Item 15

The moments when singing and drumming come together may help drive the music forward; in song 13, for example, the first note of the drum theme comes precisely when the chorus' first response ends and the second leader call enters. This highly

offbeat moment within the temporal framework--fast pulse 12, bell stroke 7, and beat 4.3 or 6.2--becomes the focal point of the entire composition for singers and drummers. One rhythmic figure within a drum theme can be in synchrony with a short motive in a tune, while another can be powerfully offset (see item 23). Drum themes like this, which feature single offbeat accents, add angular rhythmic excitement to the tune.

The bell, support parts and metric matrix provide a predictable rhythmic setting for all the songs, while the different drum themes create distinctive moments of intensity and patterns of accentuation. I get an aesthetic charge when words in a poem occur in unison with rhythmic figures in the drumming theme. For example, in item 16 tune, sogo, and kidi enter in cascading sequence (see Figure 38). A pair of bounce strokes on kidi that mean "gbidim" (finish him off) match the lyric "menye" (is not), while the sogo open tones that mean "koko" (by all means) match the singers' "gbɔgbɔ" (journey). The drums thus give special attention to words in the song lyrics that are crucial to the poem's message: Soldiers must accept that going to war may be a journey of no return. Thus, even when tune and drum theme are rhythmically independent, their fleeting unisons may significantly enhance the semantic meaning of Agbadza's music.

Figure 38 Song and drums in Item 16--reinforcement of lexical meaning

Songs

Agbadza songs are poems set to tunes. The poems deal with issues related to the wars and battles fought by the Anlo Ewe during the 17th-19th centuries. Some of them address actual people and events in history (see items 20, 24, 25), while others engage

broader issues like patriotism, courage, sabotage, revenge, and loyalty.[26] The songsmiths who created these lyrics expressed themselves poetically with language rich in sonic play, figures of speech, allusion, and proverbs. The musical setting of the words also is crucial to their effectiveness.

Many of these songs are widely known among contemporary Ewes who involve themselves in traditional music. People sing them not only when Agbadza itself is performed but also on formal occasions related to chieftaincy, festivals that celebrate ethnicity, or informally for personal pleasure. Although Alorwoyie himself did not compose any of these twenty-five songs, he selected them and coached the performers in how he wanted them sung. They may be regarded as "folk songs" in the sense of being common knowledge among the general population. I suspect that many local people enjoy them primarily as works of art without much knowledge of their original references or inner meaning. By singing these old Agbadza songs, the living connect to those who have come before, bringing a heritage from the past into world of the present.

Every song has a distinctive musical identity but no song is sung in an identical way twice. Stable factors include lyrics, form, rhythm, and tonality; variable factors include melodic contour, intonation, and harmony. In performance, the tune should be recognizable but rendered with tasteful variation. In this project, I have prepared complete scores that show how Alorwoyie and the Afrikania troupe actually performed these songs on the occasion of the recording session. In the lead sheets, mainly prepared to assist those who would learn and teach this style of Agbadza, I have taken the risk of representing a standard version of each tune, even though there actually is no such thing.

[26] For discussion of the meaning of the words to the songs see interviews with Alorwoyie and my commentaries below.

Men and women usually double each other at the octave. They sing loudly with a somewhat nasal and cutting timbre since they need to be audible over the strong sound of drumming. In order to maintain energy and passionate intensity, female singers periodically interject non-melodic exhortations. Singers may clap hands, play rattles, and dance. Drummers may sing if they wish but it is not expected.

Call-and-Response as a Creative Resource

Agbadza songs are not designed to be sung by one person alone. On the contrary, the musical sociability between song leader (henɔ) and singing group (haxelawo) is central to the experience of Agbadza. Exchange between the few people who sing the lead part and the many people who sing the group part establishes the basic condition for the form of the poems and tunes. This musical act of offering-and-receiving, which is usually termed "call-and-response" in the literature and oral tradition of African music studies, has deep impact on the form, melody and tonality of the tunes. The henɔ decides the order in which songs are performed, sings the introductions in free rhythm, and bears the main responsibility to raise the song leader's portion of the call-and-response. After the instruments have started, one or two other singers act as assistant lead singers, helping to carry the tune and/or intertwining a contrapuntal line (see item 10, for example). The song leader part lifts the melody up, putting it in motion for the hand-off to the larger chorus whose words and tune may echo, amplify or comment upon the leaders' message. The timing of this switch in texture from the light sound of one or two voices to the heavy sound of many voices is a core feature of every song's rhythm.

Composers find a great many different ways to use this antiphonal exchange as a resource for the setting of melody and lyrics, giving each song a distinct aesthetic

personality (see Table 15 and Table 16). In some songs, a musically complete phrase by the leader is answered by a similarly whole phrase by group (see item 9). In others, a complete melodic idea requires the hand off of melodic fragments between leader and group (see item 13). The nature of the song lyrics exerts impact. Short poems provide an opportunity for rapid trading of phrases, while longer poems enable development of contrastive musical sections. In its classic arrangement, a song opens with a section of longer phrases in smoothly flowing rhythm; next comes by a passage whose call-and-response moves in shorter phrases with more percussive rhythmic quality; lastly, leader and group join together to close the song with material drawn from its first section (see items 4, 5, 10, 11, 18, 19, 20, 22).

Form--Linear and Rounded

Two types of musical form describe these twenty-five tunes: (1) linear progressive form, and (2) ternary rounded form (see Table 15). In twelve songs, the overall tune is created from phrases exchanged by leader and group without repeats or reprises (see items 1, 3, 6, 7, 8, 9, 13, 14, 15, 21, 23, 24). Another twelve songs have some type of return, as follows.[27] Three songs begin with two contrasting sections of call-and-response and then close with a reprise of material from the opening section that may be song together by all the singers (items 2, 11, 16). Nine songs extend the middle portion of the song with additional melodic material (items 4, 5, 10, 12, 17, 18, 19, 20, 22).

item	melodic form[28]	call-and-response[29]	bell cycles[30]

[27] Song 25 is a unique hybrid of an oft-repeated part A in linear form, followed by a second oft-repeated part B in linear form, followed by one occurrence of the tune from part A.
[28] In column B, A cohesive melodic unit receives its own capital letter, with its constituent shorter phrases identified with a number. Linear form is thus marked with one letter only, but a sequence of numbers.

1	Linear: A1-A2-B1	LG-LG-A	4
2	Rounded: A1-B1-A2	LG-L-G	4
3	Linear: A1-A2	LG-LG	4
4	Rounded: A1-A2-B1-A3	LG-LG-A-A	16
5	Rounded: A1-A1-B1-B2-A1	LG-LG-LG-LG-A	23
6	Linear: A1-A2	L-G	4
7	Linear: A1-A2	L-G	4
8	Linear: A1-A2-A3	LG-LG-A	4
9	Linear: A1-A2	L-G	8
10	Rounded: A1-A2-A3-B1-A4	LG-LG-A-A-A	10
11	Rounded: A1A2-A1A2-B1-A2	LG-LG-A-A	14
12	Rounded: A1A2-A1A2-B1B2-C1-A2	LG-LG-LG-LG-A-A	9
13	Linear: A1-A2	LG-LG	2
14	Linear: A1-A2-A3	LG-LG-A	6
15	Linear: A1-A2-A3-A4	L-G-L-G	4
16	Linear: A1-A2-A1	LG-LG-A	6
17	Rounded: A1A2-A1A2-B1B2-A2	LG-LG-LG-LG-A	14
18	Rounded: A1A2-A1A2-B1B2-A1A2	LG-LG-LG-LG-AA	19
19	Rounded: A1-A2-B1-C1-A1	LG-LG-A-A-A	13
20	Rounded: A1-A2-B1-B2-A3	LG-LG-A-A-A	12
21	Linear: A1-A2	LG-LG	4
22	Rounded: A1A2-A1A2-B1B2-A1A2	LG-LG-LG-LG-A	16
23	Linear: A1-A2	L-G	4
24	Linear: A1-A2-A3-A4	LG-LG-A-A	8
25.1 25.2	Special A1A2A3-A4 B1-B2	LLL-G L-G	na

Table 15 Agbadza Songs--Musical Form, Call-and-Response, and Duration in Bell Cycles

Varieties of Melodically-inflected, Socially-interactive Music Form

The social nature of Agbadza singing creates opportunities for composers to distribute a tune's phrases between song leader and singing group in many different ways. A sense of the formal and melodic variety in these songs emerges when call-and-response

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Rounded form is marked ABA, but typically expanded to show phrases within each lettered section. Hyphens are correlated to the marking of call-and-response in column C.

[29] In column C, the letters L, G, and A mark material sung respectively by Leader, Group, and All (leader and group together). Hyphens are correlated to the marking of melodic form in column B

[30] In column D, the duration of a song is measured in number of time spans of the bell phrase. Item 25 is marked "not appropriate" because its duration is dependent upon the impromptu decisions of the lead singer about how many times to repeat its two separate parts 25.1 and 25.2.

and melodic form are combined. Nine types of "nuanced" form emerge from this more complex analysis (see Table 16).

1. Leader sings a melodically complete phrase; Group sings another melodically complete phrase (4 songs, items 6, 7, 9, 23).
2. Leader and Group alternate twice to make one complete melodic unit (1 song, item 15).
3. Leader and Group alternate phrases to make a first complete melodic unit and alternate again to make a second complete melodic unit (3 songs, items 3, 13, 21).
4. Leader sings three phrases in melodic sequence; Group responds with one phrase that completes the progression (1 song, item 25; compare to item 10, which also repeats its opening phrase three times).
5. Leader and Group alternate to complete a melodic idea; Leader sings a new idea; Group sings a new phrase that reprises the first section (1 song, item 2).
6. Leader and Group alternate to complete a melodic idea; this happens again to make a second complementary melodic phrase; then Group (or All) sings a third phrase that completes the tune (3 songs, items 1, 8, 14).
7. Leader and Group alternate phrases to complete a first section; they alternate again to complete a second section; then Group (or All) sings two or three additional sections (7 songs, items 16, 24, 4, 11, 10, 20, 19).
8. Leader and Group alternate phrases to complete a first section; they alternate again to complete a second section; then Group (or All) reprise from opening section (4 songs, items 5, 17, 22, 18).
9. Leader and Group combine to sing two sections twice each; then Group (or All) adds a new section before singing reprise from opening section (1 songs, item 12).

Table 16 Agbadza Songs--Nuanced Form of Melody with Call-and-Response

Temporal Frame

The length of songs varies greatly. As shown in Table 15, nine songs are four bell cycles long, but no other duration is shared by more than two songs. Short songs have a drone-like tonal quality and insistent drum-like rhythm (see items 13 and 21). In medium length songs, four to eight bell cycles in duration, leader and group usually exchange complementary phrases. Typically, the leader's phrase lies within a higher register and ends without achieving rhythmic or tonal closure; the group's phrase lowers the tune towards the final pitch, which usually comes in four-feel beats one or two. Longer songs feature repetition and extended sectional form. No matter what their duration, songs tend

to have downward melodic motion both in terms of the progression of tessitura and phrase finals, as well as direction of melodic intervals.

Location within the temporal framework, that is, when phrases start and end, is highly variable. As is true of lead drum phrases, the most frequent position for a phrase to start is four-feel beat three, followed in order by beats two, one and four. On the other hand, most phrases end within four-feel beat one, followed in frequency by beats two, four, and three. Interestingly, more phrases end on the second twelve-pulse (time-point 1.2) than on pulse one (time-point 1.1 or ONE).[31]

Melodic Rhythm

Rhythm in song is as cleverly designed as rhythm in the instrumental ensemble. The rhythmic interaction of song and drumming is of core importance in the music of Agbadza. Rhythm in song involves features of call-and-response, meter, duration of phrases, patterns of temporal and tonal accentuation, and the motion of time values in rhythmic figures. The basic rhythm of the words to a song is pre-set and shared by all singers. Although the songs are sung in rhythmic unison, precise treatment of certain rhythmic figures is open to an individual's nuanced inflection, especially in the lead singer's part; for example, singers often stretch a short-long triplet figure toward a duplet interpretation, that is, an eighth-quarter figure "swings" towards two dotted eighths.[32] As ever in Ewe music, the duet with the bell phrase is a core feature of a song's rhythm.

Each song has a strong rhythmic personality. Through their use of time values and the nature of their melodic movement, some songs consistently accentuate one time-

[31] Data on phrase entrances is 128 for beat three, 84 for beat two, 58 for beat one, and 24 for beat four. Data on phrase finals is 154 for beat one, 70 for beat two, 59 for beat four and 44 for beat three. Phrase finals within beat one are 43 directly on the first partial (1.1) and 84 on the second partial (1.2).
[32] The word "swing" references the musical practice in jazz of interpreting in performance the time values written on a lead sheet or score. Time values, as performed, follow stylistic norms within a tradition.

feel; for example, song 13 strongly articulates onbeat six-feel time by its use eighths and quarters and the timing of its pitch changes (see song 23 for a song "in four"). More commonly, composers artfully shift between consistently accentuated time-feels. For example, song 12 is entirely "in six" until it surprisingly shifts to an "in four" feeling in order to musically dramatize the poem's comparison of male and female death. The song returns to six-feel time at the reprise of the opening section.

Rather than this type of consistent articulation of one time-feel, most songs move more freely among layers of the metric matrix or else have timing that readily can be felt in several meters simultaneously. Rhythmic figures drawn from the bell phrase are a ready source of rhythmic ideas in songs, as is 3:2 between quarters and dotted quarters in its many phrasing shapes. Song rhythm may articulate displacements of four-feel or six-feel beats; for example, in song 20 the song leader's opening phrase flows with the upbeat six-feel on bell strokes 4-1.

Pitch

The "writing free" music-culture of Agbadza operates without abstract systems of tuning (temperament), standardized sets of pitch classes (scales), or scales inflected with melodic and tonal function (modes). Singers remember how a melody should go and how the overall musical result should sound. At the moment of performance, the song leader's introduction establishes the specific tonality (key) that is then picked up by the whole group. Although there may be a short period during which the group finds it's tonal "comfort zone," so to speak, the singers soon enough conform their choice of notes to a finite set of pitch classes so as to achieve the appropriate melodic motion and tonal coordination. In other words, from one rendition to the next a song's exact pitches may

change, but the shape of the tune always is kept in mind. Melodic intervals and a sense of tonal motion give a tune its identity.

Attentive listeners to the Agbadza sound recording performed by Alorwoyie and the Afrikania Troupe undoubtedly will notice that the actual pitches are frequently "sharper" or "flatter" than any standardized tuning system. Furthermore, the tendency is for pitch classes to drift upward during repetition of a song. The recording is typical of singing in southern Eweland. Despite this non-Western pattern of intonation pattern in Ewe vocal music, most scholars--African and non-African alike--find staff notation to be a reasonably accurate tool for transcription and analysis. In this work, notes written on the five-line staff approximate the Agbadza tunes heard on the sound recording.[33] In order to facilitate comparison the songs consistently are set on G above middle C, except for several songs that are transposed down to D to minimize ledger lines.[34]

Melodic Shape

Register is an important resource in the construction of melody. Long melodic lines, sometimes lasting over several bell cycles, are built from shorter phrases whose notes are limited to a modest portion (tessitura) of the overall range of pitches. Typically, a tune begins towards the upper end of the song's gamut of pitches and works downward to a low pitch that usually feels like the overall tonal center of the pitch set (tonic). In the majority of songs, the tune never descends below the low tonic but six songs do explore tonal territory in this lower end of the range (see items 2, 6, 9, 10, 19, 23).

[33] When Alorwoyie has listened to my singing, he does not find fault with intonation even though, to my ear, I fail to achieve verisimilitude with the sound recording or his live versions. Given his instant correction of a temporal miscue, however, evidence indicates that a pitch class in Ewe music-culture spans a frequency band, whereas the norms for timing are much more finely calibrated.

[34] When needed for clarity, notes and octaves above middle C are numbered c1, c2, c3. In these notations the lowest note is d1, the highest note is c3.

Just as the final note of the whole tune (finalis) establishes the song's central tonal gravity, each phrase has its own tonal goal. However, since the songs are rather short and always are repeated, the tonal stasis of the final phrase is short-lived and quickly followed by another trip through the tune's progression of phrases. Tunes that do not end on a tonicized pitch feel propelled forward into the song's next iteration (see items 2, 4, 12). Motion between tonal goals is an important component to the melodic identity of any particular song. Songs with longer ABA forms often modulate upward during the shorter second section before reestablishing the tonal feeling of the song's first section in the closing reprise. Singers show creativity and skill by improvising their melodic path through a song's predictable sequence of tonal expectations.

The melodies of Agbadza songs are pentatonic in nature. In other words, a tune makes only three consecutive "steps" (seconds) in ascent or descent before it "leaps" an interval of a third or greater. Other characteristic pentatonic melodic action includes steps or leaps away from and back to a pitch (pendular motion), descending or ascending motion via interlocking leap-steps figures, successive leaps, or step-leap sequences. Although composers may use additional pitch classes as a means to create melodic sequence or to enable cadential motion toward a new tonal center, melodic motion remains pentatonic even if a song has more than five pitch classes.[35]

Scale and Mode

Ordering a song's pitch classes within an octave frame yields its scale. Songs in this collection conform to two basic types of scales: (1) five pitches without a minor second interval (semitone), i.e., anhemitonic pentatonic scale (see Figure 39), and (2) five

[35] This sort of melodic information suggests that these songs are not "hexatonic," even if their set of pitch classes has six different items (see Dor).

pitches with a minor second interval (semitone), i.e., hemitonic pentatonic scale (Figure 40). Two different hemitonic scales may be found in this collection of Agbadza songs. In any given song, certain scale degrees serve as pitches of tonal stability and melodic repose, while others serve as pitches of tonal instability and melodic action. When scale degrees are weighted with this information about their melodic and tonal functions, we find different modes in both types of scale. In Agbadza songs, emotion seems to derive more from language than from musical sound. Unlike an Indian raga, for example, the melody itself does not convey a distinctive meaning or feeling state. In other words, affect is not correlated to key, scale, modal type, or melodic intervals; in particular, what in Western music would be termed "minor" modes and intervals do not necessarily convey sadness.

Figure 39 Agbadza songs--modes of anhemitonic pentatonic scale
Figure 40 Agbadza songs--modes of hemitonic pentatonic scales

Tonality Expressed in Melody

Tunes range over a gamut of an octave plus a fourth. This range allows composers to craftily use tessitura and the progression of tonal centers to reinforce the musical form established by call-and-response and poetic lyrics. The pentatonic tonality facilitates cadential melodic motion towards pitches separated at intervals of thirds, fourths and fifths (trichords, tetrachords and pentachords). Significantly, pentatonic melodic action, together with repetition of the tune as a whole, minimizes the strength of the tonal gravity of the song's finalis. Although triadic melodic and tonal relationships sometimes occur--for example, E♭-G-B♭-D (see item 23)--the melodies more frequently build on fourths and fifths. For example, the most frequent competitor to G as tonal

center is A, whose tonal force can be analyzed as reminiscent of "secondary dominant" melodic motion, i.e., D as dominant of G, A as dominant of D.

The Ewe predilection for thickening a melodic line further complicates the tonality. Although simultaneous notes (harmony) often arise from contrapuntal motion that seems melodic in origin, sonority affects singers' decisions about varying the tune. In other words, a singer may design a melodic variation in order to achieve a particular simultaneous interval with a pitch class in the main tune. Singers often create parallel melodic phrases at the interval of a fourth or fifth, which may require use of pitches not in the song's main pentatonic mode. Just as many features of the drum ensemble music are multi-dimensional, the tonality of these songs frequently can be heard in several different ways simultaneously.

The intervals found in the various scales and modes have impact on the characteristic motion of melodies. In hemitonic pentatonic scale A mode I (G-A♭-C-D-E♭, 1-2♭-4-5-6♭), for example, fourths (G-C and D-G) frame ascending and descending motion, while descending motion often is guided by the fifth relationship of E♭-A♭ (see items 11, 17, 18, 24). Tunes make use of the opportunity for similar minor second motion between G-A♭ and D-E♭. The descending phrase D-C-A♭-G creates strong cadential feeling towards G. Tunes in mode II of this scale, which has a 1-2-3♭-5 intervallic pattern in its lower G-D pentachord, have consecutive third leaps and make strong use of A as a phrase final, often supported by ascending fourth motion from E (see items 12, 15, 23). Even though song 12 ends on A, I feel G as the overall tonal center.

Melodies in the hemitonic pentatonic scale B--G-B-C-D-F♯ (see items 1, 2) use the minor third frame of B-D and the affinity between the minor second steps B-C and G-F♯.

Even though they do not have minor seconds, tunes with anhemitonic pentatonic scales also can have a minor mode feeling, especially if they have "flattened" degrees. Only one song is in mode type II, which has both flat thirds and sevenths (see item 9), although the flat third (B♭) is added in song 5 as a lower neighbor to C and in song 20 to enable a descending minor third leap B♭-G. Tunes in mode IV begin and end by strongly establishing G as tonal center; phrases in the middle of the songs move towards C, a trend seen clearly in the middle "B" section of longer songs with ternary rounded form (see items 5, 7, 8, 10, 20). Song 5 nicely illustrates a style of melodic construction used in all songs: similar melodic motion in different portions of the range to accomplish similar tonal function. For example, the powerful cadential function of the downward motion D-C-A-G in the Group's phrase in section B1 (measures 9-10) shifts the tonal center to C when it reappears a fourth higher as G-F-D-C in section B2 (measures 12-13). Mode type V (G-B♭-C-E♭-F, 1-3♭-4-6♭-7♭)--seems to be unusual in Agbadza music. It occurs only in one song and uses added pitches on degrees 2 and 5 that blur its modal identity (see song 25). Furthermore, this song's call-and-response structure and melodic form are unique, as well.

Modes I and III of the anhemitonic pentatonic scale feel "major" to ears accustomed to Western music. Tunes in mode I use the similar descending intervallic patterns A-E-D-A and G-D-C-G to contrast phrases that end on A and then on G (see items 14, 16, 19, 21, 22). Stepwise motion above and below D is contrasted with the cadential quality of the descending major second from A to G. Downward motion D-C-

A-G occurs frequently to create a strong tonic feeling to G. Finally, songs in the mode III treat the octave as built from conjunct fifth-fourth intervals G-D + D-G (see items 3, 4, 6). The tonal strength of D seems to open the door for song 4 to end on A, even though I feel G as the overall tonic.

The presence of pitch classes not in a pentatonic mode--what I have termed "added pitches"--opens the analytic door to alternate perspectives. For example, rather than analyze the tonality of song 6 as a mode built on one tonal center, it might be heard as the same 1-2-3-5-6 mode first set on D (D-E-F♯-A-B) and then set on G (G-A-B-D-E). Song 13 presents another opportunity for multiple views. Although it uses all five diatonic steps (1-2-3-4-5) within its unusually limited range of a fifth (G-D), the pentatonic melodic character is retained since the melody always moves in steps and leaps. I think the B is added so that the tune can have pendular second motion on A and then G (A-B-A, and G-A-G).

Conclusion

I have offered a confident analytic description of the music of Agbadza. My assurance grows from my study since 1969 of several kinds of African music including various types of West African singing, drumming and dancing, as well as mbira music of the Shona people of Zimbabwe. Although I was not born and bred within any African cultural milieu, I do have significant experience performing and teaching this music together with Africans. African expressions of praise and criticism, usually delivered non-verbally, have shaped my way of understanding African music. I assert that this analysis really is about African music, rather than a non-African way to understand African music. I believe that the musical patterns I hear in the music of Agbadza are also

perceived by Ewe people. Clearly, however, except for a small cohort of schooled academic musicians, the way I write about the music and visualize it in staff notation is alien to Ewe culture. My position is that the content is truly Ewe, although the means of communication are not.

But as is true of so many aspects of life in Eweland, one can never be too sure. Ewe culture seems to thrive on uncertainty, ambiguity, disputation, and rivalry. These themes permeate the poems and drum language of Agbadza. As my musical analysis has emphasized, the sonic surface of a song or drum phrase can be heard in different ways. The dynamic interplay of figure and ground creates an iridescent image. In the contemplation of the music of Agbadza, the interface of the tangible world of the senses and the intangible world of the mind retains its mystery.

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