# Response to "Global Notation as a Tool for Cross-Cultural and Comparative Music Analysis"

# George Worlasi Kwasi Dor

THE author's global notation and its supporting advocacy article have the power to provoke a spirit of modernism for our intellectual community, specifically in the area of methodological tools. Certainly, such a novel effort deserves our appreciation. Given that readers will have access to details of the global notation system in the article, I elect to use my response to express support for the global notation, critique some of the author's arguments, and corroborate the salience of his other perspectives. Further, I draw attention to the *melekket* notation system, aiming to argue that culture-specific and old notational systems or analytic tools are as important as global and newer ones, thereby making the toolbox richer. Although I am aware my background as an African ethnomusicologist, composer, and a teacher and performer of world music reflexively informs my response, I am positive that readers will find my quick overview, support, and critique of the article useful.

A critical matching of musical transcriptions in most world music textbooks with their accompanying audio recordings should readily suggest the challenges ethnomusicologists face in using staff notation and other notation systems for transcribing diverse music genres. These include the daunting task of notating the microtones in Indian classical music and a tuning practice in Balinese gamelan<sup>1</sup> in which "the intentionally 'out-of-tune' pairs of metallophones are perceived to be 'in tune' (that is, 'culturally correct') in Bali" (Sutton 2009, 339). Beyond the preceding traditions that the author of the original article has privileged in his sampling, one may add Sioux grass dance songs, Navajo Yeibichai songs, African American blue tones, Chinese Shange (folk songs), for example, to validate the problem the inventor of the global notation system intends to solve. Certainly, providing a new notation system that is more accommodating of the sonic and rhythmic nuances of the preceding and manifold music genres deserves applauding. Even though a more representative sampling from other regions of the world beyond Europe and Asia would have strengthened the author's advocacy, I admire the ingenuity and the innovative drive of the inventor of the global notation system. The author's insightful article reads more like a review essay on notation and transcription, and which he has used to argue the inadequacy of the staff notation system, and yet the paucity in agency regarding developing new notational tools. After articulating his aim, the inventor explains the features of his global notation system before his advocacy for it.

### FORCEFUL ADVOCACY FOR AND "MARKETING" OF THE GLOBAL NOTATION SYSTEM

As a great "marketing" strategy, the author of the global notation system has identified

I. Often notated in a cipher system rather than staff notation.

several challenges that may militate against the acceptance of the new system over staff notation, and then deflates each of those challenges. Honestly, the author admits this challenge by writing, "Staff notation has come to be so widely used around the world, and for such a wide range of purposes, that any call for a new alternative struggles even to be heard" (Killick 2020, 236). Yet, the fact is that such landscapes in the global music community—intellectual and artistic—remain realities, if not also resolute regimes of practice.

The global popularity of staff notation as a medium of representation compares broadly to the function of widely spoken major languages. In most music schools or departments, for example, graduate students pursuing degrees in composition, performance, music theory, music education, and musicology, who are not in ethnomusicology, take seminars in ethnomusicology/world music, be it required or as electives. It is important to consider the asset that these students' foreknowledge in staff notation constitutes for them when they enroll in a transcription seminar, for example. Certainly, a considerate instructor will most likely assign articles that privilege familiar notation systems in which descriptive transcriptions of music traditions appear as course readings. It follows that the global notation among other systems can be discussed complementarily in a transcription seminar. However, one is uncertain whether the global notation will substitute for the staff notation that these students already use in their respective programs, symphony orchestras, jazz, marching, and steel bands.

While the invention of a new global notation is a great innovative effort, the inventor's advocacy article contains several overgeneralizations, reifications, and more concerning, some conjectural assertions that tend to weaken his argument. For example, the author writes:

When new forms of notation have been devised, they have generally been designed for some particular form of music and/or some particular practical or analytical need. Examples include the Time Unit Box System (TUBS) often used for African percussion-based music (Koetting 1970) . . . The large-scale adoption of these systems among specialists in the relevant traditions indicates that the new systems are felt to have a advantages over alternatives such as staff notation. (Killick 2020, 238)

Although the partial purpose the author has given to explain people's design of new forms of notation is convincing, the truth is that African music scholars have never adopted TUBS on any large scale. Discussing TUBS in his review essay on African rhythm, Kauffman (1980, 396) contemplates: "Density referent is useful as an analytical tool, but is it in any way an organizing factor for the performing musicians?" Moreover, subsequent scholars who discussed the fastest moving beats in African rhythm have used different approaches and nomenclature. Willie Anku rather calls the smallest time units time cells and grids, thus differentiating the 16-grid, consisting of sixteenth notes, from the 12-grid that comprises a time cycle of eighth notes, as well the combination of both time grids as they occur in African musical practices (Anku 2000; Dor 2010). Yet, Rainer Polak's analytical approach to the

measurement of the shortest metric subdivision in West African drum music has nothing to do with TUBS (Polak and London 2014; Neuhoff, Polak, and Fischinger 2017).

Taking a glance through critical scholarly texts on African music will reveal that Africanist music scholars never preferred TUBS over staff notation. Even when Gerhard Kubik used TUBS to explain a few time-line patterns in his *Africa and the Blues* (1999, 54–56), he had used staff notation in the same book and more copiously in his other and subsequent publications. Similarly, Ruth Stone used TUBS in her *Music in West Africa* while discussing "Time and Polyrhythm" (2005, 80–83). But the absence of staff notation in the preceding book must be attributed to the author's decision to exempt melodic and multipart organization in West African music traditions in her coverage, so it should not be mistaken as a preference of TUBS over staff notation. Furthermore, writing under "Strict Polyrhythms," Simha Arom draws upon TUBS for some of the illustrations in his book (Arom 1991, 278–305). However, this 668-paged publication contains an incredible volume of transcriptions of both polyphonic and polyrhythmic African musical examples that appear in staff notation, and which is relatively disproportionate to the fewer examples notated in TUBS. Moreover, authors of several dozens of major publications on African rhythm have not used TUBS. As such, the global notation's author's claims about the currency and popularity of TUBS are simply misleading.

#### RAMIFICATIONS OF PROVENANCE, SAMENESS, AND DIFFERENCE

While I welcome the invention of a new tool that will facilitate the comparative analysis of the world's diverse music genres, it is important to observe that for most music scholars, the provenance of a musical notation or an interpretive framework does not constitute a big concern. What matters is the extent to which the privileged notation system or paradigm works as a useful tool for their respective projects. Even within contexts of cultural politics whereby the construction of national identity may be implicated in cultural policies, the symphony orchestra, just as the English language, can be appropriated as a medium to communicate cultural discourses that are not Western in conception and origin. The author of the global notation system's argument about provenance of notation systems reminds me of a resonant experience I would like to share. I have elsewhere grappled with how it seemed difficult for a Ghanaian playwright, who wrote his plays in English, not to comprehend the similarities between the symphony orchestra and the English language. Operating as the Chairman of the National Commission on Culture, he critiqued the provenance and the instrumentation of the Ghana National Symphony Orchestra, as though the orchestra was more foreign than the English language he used for his plays (Dor 2003). Certainly, the ideas adequately expressed through a ubiquitous medium are equally important as the medium itself, not forgetting to mention the target audience.

The author's quotation of Agawu to support his advocacy for the implicated sameness being evoked through the use of his global notation for "all music" deserves some comments. As the author asserts, "Using the same notation system for all music would seem a good start

toward overcoming the assumption of difference that underlies much ethnomusicological research and 'proceed[ing] from a premise of sameness,' as Agawu advocates (1995, 393)" (Killick 2020, 271). It is worth noting that even in an era of globalization, cultural communities still experience and celebrate their idiosyncratic local and indigenous phenomena, including music cultures. Hence the invention of a global notation should not deceive us into a wishful thinking that sameness and homogenization could predominate over realities of cultural specificity and its attendant recognition of difference in ethnomusicological discourse.

Further, global notation's inventor has cited and discussed the Hornbostel-Sachs taxonomy for musical instruments as a scheme that has worked for classifying the corpus of the world's instruments. Accordingly, he envisages that his invention similarly works globally. Yet, it is equally intriguing to draw our attention to what the same Agawu, whom he invoked to legitimize his positioning, had to say about the Hornbostel-Sachs classification system. Writing under the subheading "Against the Hornbostel-Sachs System of Classification," Agawu (2016, 79) notes among other things that

the classificatory system was not developed with Africa in mind; rather, it had global or universal aspirations from the beginning.... The Hornbostel-Sachs system is so prominent in Africanist ethnomusicology that it is easy to forget that it was developed not exclusively to depict African realities but to accommodate virtually all known musical instruments.

As may be seen from the above excerpt, Agawu was not advocating any sameness here. Rather, he was longing for a taxonomic scheme that will promote a better understanding of African musical instruments from Africans' own perspectives beyond the focus on timbre, which was the sole determinant of the Hornbostel-Sachs (H-S) classification. The phrase "African realities" implicitly suggests overarching peculiarities of African instruments, including their ethnically perceived and constructed artistic, functional, and symbolic meanings. Here, difference, rather than the quest for sameness through a global scheme that sacrifices "African realities," was Agawu's wish, I think. The preceding resonates with a conclusion I reached elsewhere, while examining the "universalist" and "particularist" debate on knowledge, that "I believe in the existence of both 'difference' and some broader attributes of 'sameness' that govern the world" (Dor 2015, 153). Whether one judiciously privileges difference or sameness over each other depends on what works for a given context or subject matter at hand. As such, it follows that the feasible decision of ethnomusicologists to favor global notation or another system for their transcriptions will hinge on similar considerations as well as transcribers' respective aims.

Returning to the H-S classification system, I must admit that I have always used it in my world music classes, not necessarily because it works, but because that is the framework used in world music textbooks. However, I always pay special attention to ensure class discussion of the eight families of instruments—silk, bamboo, metal, stone, gourd, earth (baked clay), leather, and wood—recognized by Chinese taxonomy that places a premium on

the materials used in making the instruments. It not only constitutes a sweet relief and a break-away from the H-S system we use throughout the entire semester but also offers additional knowledge on classification that is based on local Chinese perspectives.

As observed earlier, the global usage of the same medium of communication in disseminating knowledge does not emasculate the differences in ideological positions—philosophy, worldviews, ethos, and other ideation—conveyed through those languages. Hence the use of global notation will never homogenize the peculiarities of genres from different musical traditions whose transcriptions it will enable. Permit me to suggest ways in which a culture-specific notation system can better serve certain needs of composers, performers, and analysts. I cite two cases that involve the *melekket* notation system of Ethiopia.

### INVENTION, PRESENCE, AND IMPORTANCE OF AN INDIGENOUS AFRICAN NOTATION SYSTEM

Because Ethiopians invented the *melekket*, an indigenous notation system, in the sixteenth century, the presumed generalization that every traditional African music genre exists in an oral tradition is false. For several centuries, Ethiopian Orthodox Christians had transmitted their liturgical music in Ge'ze language orally. However, after Muslim forces invaded Ethiopia and destroyed monasteries and churches along with important literary sources in the early sixteenth century, Ethiopian clerics developed the melekket system as an aftermath agency to this landscape, with the aim of preserving and perpetuating this sacred tradition. Consistently, melekket remains a quintessential medium for the transmission of *Zema* "chant" (Shelemay 2008, 25–30).

According to Kay Kaufman Shelemay, an authority in Ethiopian music scholarship, melekket consists of 650 signs developed from Ge'ze syllables to represent well-known melodic phrases. Placement of a specific sign over a word or phrase in the song texts matches it with the melodic phrase to be selected and sung. Moreover, the system includes prescribed signs for articulation and performance behavior, including continuity of sustained tones, notes that must have melisma, accents, vocal style, tessitura (throaty sound), slides on tones, bend of voice, acceleration in tempo, abrupt cut-offs, cadences, and accompanying physical motion. A substantial knowledge of the liturgical tradition is acquired orally and blended with knowledge of the melekket system. Beyond the history of this liturgical genre, the performance practice, including the notation system, represents what Neuman (1991) calls "immanent history," or how the historical legacy of a particular group of people at a given time can be accessed through the historicity of music.

Furthermore, Kimberlin (2005) documents how, in his formation of the Orchestra Ethiopia, Halim El-Dabh revitalized the melekket notation system that members of this national ensemble used as part of their performance practice. Given that El-Dabh is a world-renowned composer of art music who had used staff notation for his works prior to his establishment of the orchestra, he could have privileged a more global notational system for his group. Moreover, as anywhere in the world where the regime of Western art music is

compellingly current and ubiquitous, Ethiopian music conservatories and departments similarly use staff notation. However, El-Dabh placed a high premium on the construction of the national identity that Orchestra Ethiopia would be articulating. As such, considerations of the indigenous instruments that constituted the pan-Ethiopian orchestra, foreknowledge of member instrumentalists, and the Ethiopian-rooted melodic idioms that predominated their repertoire definitely informed El-Dabh's decision to favor the melekket notation, a more culture-specific notation. I strongly argue that El-Dabh would still have favored the melekket system for his orchestra had this new global notation even been in existence by then. Perhaps, the editors of *Analytical Approaches to World Music* could invite three experts to write articles on culture-specific notations from different music traditions and regions of the world. Perspectives from such essays can be richly instructive in explicating the factors that dictate the peculiarities of such privileged notation systems.

#### BEYOND NOTATION SYSTEMS: OTHER CRUCIAL DETERMINANTS OF TRANSCRIPTION

# Perception

Beyond a transcriber's knowledge of how to use a particular notation system, the required musical knowledge, and the capabilities necessary to ably notate works from a specific musical tradition, other quintessential considerations are inevitable in achieving any authentic transcription. Accordingly, it is appropriate that the author of the global notation system discusses "perception" as a key to transcription. Yes, the author rightly pointed out how listening and the listener's perception are important. But what elude his attention are the questions, Who is the listener? Whose perception should the listening transcriber use? To what extent is the listener's perception in sync with that of the indigenous carriers of the music to be transcribed?

The title of a Willie Anku article, "Inside a Master Drummer's Mind" (2007), then, best and readily captures and corroborates the premium that researchers need to place on ethnic perception, should fair representation of the music being transcribed be the goal of the transcriber. It is common knowledge that any ethnomusicologist who may be transcribing a musical piece goes into such an activity with what we may call either an a priori partial cultural consciousness or a cultural baggage of perception. A high probability exists for a transcriber to hear a piece of music differently from how the performers perceive it, especially when the transcriber is from a foreign culture and lacks sufficient knowledge of the music they are studying (Agawu 2003, 73). As such, ethnographers need to ask their research consultants—including performers and composer-poets—perception-related questions. For, answers to these questions will help researchers in their future transcriptions of recorded music.

Perhaps sharing an experience will throw more light on the place of perception as a determinant of credible transcription. A few years ago, I had the opportunity to review an article that focused on transcription of a Ghanaian dance drumming genre for a journal. In my

reviewer's report, I observed that the author did not perceive some aspects of the dance appropriately. While notating the time-line played on the bell, his placement of accents was unconvincing. As may be imagined, I advised for its revision. Yet, after neglecting to seek his Akan drum teacher's opinion on the perceived accents in *Adowa* drumming, and failing to accept a reviewer's advice to revise the transcription to reflect Akan local perception, he and the editors of a particular journal still published the paper. Coincidentally, we both met later in Ghana where he presented the same paper at a symposium. After he projected the scores of his transcription during the presentation, it became obvious that he never corrected his misrepresentation of the Adowa time-line, which he notated by beginning on the first strong beat of the measure, rather than on an off-beat. Strangely, the presenter being discussed herein remembered to quote Agawu to legitimize his transcription. To paraphrase the transcriber, he reminded his audience that Agawu has encouraged African music researchers not to be afraid of analyzing African music in their own ways. Accordingly, the Agawu dictum motivated him to notate the time-line his own way. Indeed, Agawu is a world-class astute thinker whom we all like to cite. However, we should make sure we are not taking his assertions out of context. For, Agawu will never compromise ethnic perception in the analysis of any traditional African music genre. Furthermore, is it not difficult to comprehend how this transcriber could suggest his ignorance of how the same Agawu has transcribed the Adowa time-line in two different publications?2

Whereas the presenter contested the previous transcriptions of the genre by Anku and Kongo Zabana in his article, the legitimizing authority of the integrity of any transcription is the practitioners of the tradition and their own perception of their music; this was what informed the representative transcriptions of Zabana, Anku, and Agawu more than anything else. And while we may have competing transcriptions of the Adowa time-line, local perception will definitely authenticate only one.

Finally, Agawu draws traditional African dance music transcribers' attention to the dancers' feet or what he calls the "choreographic supplement." Discussing time-lines of Sub-Saharan African dances, Agawu observes that "the key to understanding the structure of a given *topos* is the dance or choreography upon which it is based. . . . No one hears a *topos* without also hearing—in actuality or imaginatively—the movement of feet" (2003, 73). The preceding is really true for those who have informed cultural knowledge of specific African dances. For the ethnographer who is new to the dance tradition, careful observation of the performance of the dance, participation in dancing during fieldwork, or a video-recording of the dance drumming will be crucial for matching the dancers' feet in "identifying the gross pulse or the 'pieds de danse' ('dance feet')" (73). So, multiple ways exist for any researcher who seeks to obtain the authenticating local perception to underpin their transcription of African dance rhythms, for example.

<sup>2.</sup> Agawu's transcriptions appear in Agawu (2003, 75) as "D" of "Example 4-I Eight common time lines" and in Agawu (2016, 175) as number 4 of "Example 4.I Twelve time-line patterns."

# **Descriptive and Prescriptive Notation**

It is worth noting that the author did not leave out Charles Seeger's (1958) distinction between descriptive and prescriptive kinds of notation in his review essay. By extension, the global notation system's author notes that ethnomusicologists engage in descriptive transcription while composers' notations are prescriptive. I want to add that some ethnomusicologists are also composers. So, creative ethnomusicologists—ethnomusicologistcomposers, in Akin Euba's terms—practice both descriptive and prescriptive forms of notation. For, when they conduct research into their indigenous music, they first analyze data, which often involves transcription, before progressing from "analysis to synthesis" (Euba 2014) by applying the pre-compositional resources derived from research in their creative works; and while composing, they prescribe their creative intentions for their target performers. In addition to culture-specific notation systems, certain composers' individualistic stylistic idioms have become prescriptive determinants of their own notation systems for their compositions. A classic example is the twentieth-century Greek composer Iannis Xenakis. A good question to ask the inventor of global notation is whether he thinks Xenakis's works can be transcribed into his new notation system, since he advocates that it can accommodate "all music."

# **Target Audience**

A major goal of the global notation system's inventor is to provide a tool that will facilitate comparative analysis of world music genres from varied traditions. Yet given that target audiences are quintessential determinants of most journal publications, and until a time that the main readership of *Analytical Approaches to World Music* becomes well informed about the global notation system, how intelligible and accessible will the first set of articles containing transcriptions in the new notation be for this journal's target audience? I hope these are candid questions rather than expressions of pessimism.

#### CONCLUSION

The invention of a global notation is really commendable, and we thank this innovative author for adding another invaluable tool to the world's music notational toolbox. Yet, as the preceding cases of melekket's use may reveal, the appropriate choice of any tool depends on the given relevant context and work at hand. Truly, however, tool users' full appreciation of a particular tool is contingent on their practical knowledge of how to use that tool. Thus, technical ignorance about global notation can lead to its underutilization. Accordingly, I encourage members of our community to familiarize themselves with this new notation system and study it so that they will be better positioned to consider exploring its contextual suitability as a tool for representing and analyzing world music genres.

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