



Bartók recording folk songs from Slovak peasants in 1907.

*“In a book on ethnomusicology, we cannot avoid adding the example of our principal tool: the phonograph.”*

Curt Sachs

# *Abstract*

Correlation analyses of encoded music performance by a large and diverse international community of amateur performers afford insights into fundamental questions of musical behavior. By observing demographic data associated with a corpus of performance recordings, we can conjecture about cultural, geographical, topographical, socio-political, economic and other potential influences, and explore possible ‘universals’ in musical thought and practice.

A century ago, Béla Bartók visited what were then remote regions to identify and characterize folk music at its sources. Subsequent investigators and collectors, with a growing awareness of the effects of colonialism and with a variety of objectives, sought to describe and categorize music from a broad spectrum of cultures and regions [Agawu \[1992\]](#). In some cases western music was introduced to an indigenous populace specifically in order to observe and record listener reaction [[Sachs, 1962](#), p. 17].

Although studies of this sort are fraught with issues<sup>1</sup>, there is a great deal to gain by examining how a particular populace interprets a foreign object. In terms of cultural objects such as a work of music, inferences can be drawn as to what (if anything) is ‘universal’, as well as how to characterize cultural differences.

As music delivery, through increasingly pervasive mobile devices, becomes more available as well as more interactive, new opportunities arise to study musical practices. Interactive applications merge audio playback with recorded performance, effectively providing users novel musical instrument interfaces that are amenable to mastery by amateurs. These software instruments are limited in their acoustic richness and expressive control. Their available sounds and tunings are also generally biased towards mainstream western musical practice. On the other hand, within a relatively short time and with minimal frustration, users both young and old can learn to perform a wide range of pre-composed works in diverse styles and genres. More importantly, despite (perhaps, because of) these instruments’ limitations, two aspects of performance that are especially revealing of competence and style — tempo and agogics — are accurately recorded and efficiently stored.

The underlying premise of this thesis is that, embedded in the encoded music performances by this diverse community of amateur performers is a wealth of information about musical performance practices. Correlation analysis of these performances can

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<sup>1</sup>Ultimately, the study of what (if anything) unites the seemingly vast and diverse musical practices amongst humans, as well as how to characterize difference, is hampered by what Agawu calls the ‘us/them’ dichotomy.

provide insight into musical behaviors as a whole, as well as comparative observations on the cultural, social, economic and geopolitical influences on music performance.

This study attempts to address questions of musical practices from an entirely novel perspective, specifically taking advantage of massively popular game-oriented music performance programs on mobile devices.