

**Film and Video**  
**as tools in the**  
**Structural Analysis of Music**

An Ethnomusicologist/Filmmaker's Investigation

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## Introduction

In the documentation of music, does the moving image have the power to capture and communicate the real essence of what has occurred? Can film and video be utilized to not only document musical things – musical cultures, musical performers, musical performances of musical works – but also to reveal and illuminate the underlying structure of the music itself?

In this paper I'll offer brief reflections on why this matters, and what some well-known researchers and filmmakers have had to say on the subject. I'll examine scenes from several noted musical documentaries with an eye toward their respective success in revealing musical structure. And, I'll consider a method of film and video analysis that may help us to look at any film on a musical subject *in terms of its own underlying structure*, and how that structure, properly understood and used to best advantage, can play a role in the pursuit of real musical understanding.

## Background

In my previous career, my own work in film and video largely concerned matters of business and industry: companies and other organizations telling stakeholders – their employees, customers, vendors and others – about why their people or products or process were first rate, how to install some widget or another, how to achieve some institutional goal, or how to get along better with the worker in the adjacent cubicle.

Occasionally, the need would arise to more intimately document human interactions – even musical ones – and on these occasions the work felt more vibrant, more relevant, more truthful. I began to sense that using visual media to reveal the true nature and quality of human interactions and human structures – or, for that matter, *musical* interactions and *musical* structures – does not happen by accident, and that in using film and video in this way, an

understanding of their own language and structure is paramount. In producing documentary film and video, you don't often get a second chance to capture a singular human interaction or musical event.

Hugo Zemp suggested in 1987 that film on musical subjects should “respect the music and the musician.” And, he critiqued specific cinematic issues and techniques – how to shoot, from what distance or angle, when or whether to move the camera, when to cut, when not to cut, how to edit words, pictures and sounds – concerns that had arisen in the making of his own films, including *Shaping Bamboo* from 1979 and *Yootzing and Yodelling* from 1986. “Shooting strategies”, he advised, “should be adapted to the local situation and the main focus of the film.” (1987)

Zemp's words amplified those of Steven Feld a decade earlier, who said, “We are not talking about a film shooting style that exists independently of the events to be filmed”. “*The filmer*”, he stated, “must know how to see the event in order to show, with film, how the event can be seen.” (1976)

Feld also described the remarkable work of Gerhard Kubic, who, starting in 1962, performed analyses of East African xylophone music by executing intricate, note-by-note transcriptions of entire musical performances *from silent film* – using a detailed frame-by-frame examination of what keys were struck when (to determine pitch) and a calculation of the music's tempo by (believe it or not) counting the number of frames of film between key strokes. Surely it didn't have to be done this way – in the early 60's, the technology was available to do it more simply, more efficiently – but that's what Kubic did. He used a highly technical, highly detailed method of film analysis to reveal vitally important levels of musical data from film. More importantly he showed, on an elementary level, that using a method of analysis as detailed as this

can reveal important information about musical structure – information that might otherwise be difficult to discern.

Likewise – and this is the point of my work on this subject – might we utilize a similarly detailed method to examine and analyze films about music, to better understand *the structures of those films*, to identify why and how they are most successful in their efforts to reveal *musical structure*?

A word of clarification: I'm not talking here about didactic films – films that are conceived, shot, edited and screened as basic instructional tools regarding musical theory, technique, or performance practice. I'm addressing films we make *about* music – music-focused ethnographic and documentary films primarily – whose aims are to reveal the importance of music in human communities (the kinds of films I aspire to create). Examples include films such as those by Zemp, Feld, Kubic and others, which address (often ethnographically) the role of music as a human endeavor. How successful are such films in simultaneously enriching our understanding of the music itself, its inner qualities, its structure? How much more successful might they be ethnographically if they did a better job in this regard (without lapsing into didacticism)? How can we measure their success? What lessons can we learn from other film genres – concert films or music videos, for example? And, eventually, how might our enhanced understanding of these issues transform our approach to the making of musical ethnographic films?

### Research Model/Modality

In a class on Structural Analysis of World Music, taught by Professor Janet Sturman at the University of Arizona, I was exposed to an analysis of Balinese gamelan music, written by Steven Tenzer. As a culmination of his report on the work, he utilized a complex chart (devised,

I believe, for this particular research effort) that sorted, collated and displayed the complex data gathered in his research, regarding the layered musical elements that unfolded over time. The chart -- referred to as “Illustration 6.6” – drew a great deal of attention in the class. For me, it amplified Tenzer’s emphasis on the elusive quality of time in Gamelan music, and it also very neatly offered a kind of “coded analysis compilation” of what occurred over time during the gamelan performance, assembling a unique identifier for each musical element in each layer and each segment of time in the musical performance.

It struck me, as a musician and filmmaker, that films about music, like music itself, can be seen primarily as a series of “layered events in time” – still and moving images of musical performance and related topics layered over the audio components such as the music itself, accompanying voice-overs, interviews with the performers, background sound, and so on. As such, it’s possible to examine, record, collate and display the visual and aural qualities of a film that occur over time – camera technique, editing technique, varied uses of synchronous and non-synchronous sound, graphic or titling reinforcement, and the myriad possible combinations of all these. And, that interest became this subject of this inquiry: the examination and analysis of the elements (in essence, the structure) of selected sequences from documentary and ethnographic musical films, and a subsequent consideration of how those elements, uniquely combined, reinforce (or don’t!) the audience’s understanding of the structure of the musical being presented.

Are you with me so far? To summarize: *Music has structure which can be analyzed and understood. Films also have a structure, which can likewise be examined and understood. How can a deeper understanding of the structure of a film about music help us to, in turn, better understand the structure of the music it’s examining?*

I'm not so naïve as to think that no one has done this sort of structural analysis of film. But, given the unique nature of what I wanted to investigate, I created my own set of “coded film analysis data points”. The codes included roughly fifty specific aspects of what we see and hear when watching a film about music, in twelve distinct categories, as follows:

1. A simple verbal description of what's seen on screen
2. The framing of the image – how close or wide a shot is used to see the performance?
3. Camera technique – fixed, hand-held, steadicam
4. Camera angle – high or low angle, or point-of-view, for example
5. Camera movement – panning, zooming, dollying, or none of these
6. Transition to the subsequent scene: a cut, dissolve, wipe, or other effect
7. The motivation for the transition: To coincide with a musical phrase?  
To see more closely a featured ensemble member or section? For the truncation of time? To draw attention to related or supportive non-musical footage?
8. The use of inserts – cut-ins or cutaways, to material within the musical setting or elsewhere
9. Specialized treatment or manipulation of the image. Examples include slow motion, colorization, a split-screen effect, or the “pan and scan” technique.
10. General sound quality, that is, synchronous or non-synchronous
11. The presence of other audio elements, like narration, interviews, or significant ambient sound, and...

12. Recording technique: Does the footage utilize a single-source omnidirectional feel, close miking, selective miking, or a fully-mixed multi-track approach?

I used these data points, categorized and coded, to create a “Tenzer-like” illustration of the compiled information from a scene within a film.

Then I chose segments of three films to examine using these data points:

*Genghis Blues*, the story of blue singer Paul Pena’s travels to a Tuvan throat-singing competition, from 1999,

*Djabote*, about Senegalese master drummer Doudou N’Diaye Rose and his ensemble, from 1993, and

*Shotguns and Accordions*, about the music of marijuana-growing regions of Columbia, produced in 1983.

These films are quite distinct from one another. *Genghis Blues* tells the story of a remarkable journey to a faraway place. *Djabote* documents a complex outdoor recording session with Rose, and includes a spectacularly well-recorded musical sound track. *Shotguns and Accordions* is the most ethnographic of the three, examining a musical genre within a wider anthropological context.

My results of the data point-based examinations of each of the films were compiled and collated (available for your review upon request). In looking at the compiled data, patterns start to emerge, recognitions of the specific decisions made by the respective filmmakers in their aim to achieve their own documentary, ethnographic or analytical objectives.

My own sense of the films, confirmed to some degree by the data, is that the footage from *Djabote* tells us the most about the structure of the music. The filmmaker’s conscious effort

to transition to featured performers within the ensemble – transitions motivated by the musical phrasing itself – goes the furthest toward revealing musical structure. In *Shotguns and Accordions*, the brief but very revealing scenes of performance, supported in one case by translations in the form of superimposed titles, work quite well in this regard, and the cutaways to scenes of the neighborhoods and surrounding regions where the marijuana is grown, transported and traded somehow illuminate the meanings, and to some degree the underlying structure, of the music. The segment from *Genghis Blues* is perhaps the least supportive of an examination of musical structure, since what we see while the music plays is intended more to summarize the adventures (and misadventures) of Mr. Pena and his troupe of global travelers than anything else.

With this data in hand, using members of Dr. Sturman's Structural Analysis of World Music class as subjects, we inquired as to how well they felt these scenes conveyed the structures of the musics they were examining. The class observed the three segments and were provided time to make written responses to what they saw and heard, as well as participating in a brief discussion during which they could compare notes and share insights.

My development of this analytical model for examining methods for recording, shooting and editing documentary footage of musical performance, I believe, lays the groundwork for a more detailed examination of this aspect of musical ethnographic filmmaking.

I welcome your inquiries regarding more detailed information on the results of this preliminary effort, comments and feedback on my approach, objectives and methodologies, and suggestions for furthering this line of research.