

# Three by Three: reflection and dialogue on a model for interdisciplinary collaboration

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**Abstract:** This paper discusses a collaborative interdisciplinary project that brings together dance, gamelan and interactive media. Beginning with gamelan and dance the three artists performing *Three by Three* work together to explore juxtapositions between live movement/music and that which is normally unnoticed/unheard. Live and processed streams are presented together in ways that allow the integration and exploration of the iconic versus the contemporary. Discussions of media flow and embodiment serve to foreground the project's concerns.

## 1 The Three

When three artists join together to create a work there is a necessary discussion of how the collaboration will treat the various perspectives that each artist brings. As with many interdisciplinary efforts, those working on the project are themselves interdisciplinary. In our case we bring together a dancer, a gamelan musician and a new media artist. Each of us engages in performance practices that blur traditional distinctions between scholarship and art making. New media artist Don Sinclair explores relationships between movement and sound in interactive contexts. Gamelan musician Nur Intan Murtadza's ethnographic research is radically empirical and privileges localized non-Western epistemologies. Dancer, Yves Candau, has a background in martial arts, studied mathematics and has a Masters in Cognitive Sciences.

## 2 Emphasizing Difference

The approach to this work stems from exploring processing live video of movement. Instead of using the video to elaborate on the movements of a dancer we decided to focus on techniques that allowed us to see that which is normally invisible or unnoticed. For example we might choose to see only stillness while motion is blurred. With both the dancer and the processed video projected on stage, we are able to integrate two very different views on a choreography in such a way that what emerges is greater than the sum of the two. Our approach to the gamelan starts with this same idea of emphasizing what is normally unheard or unnoticed, again when live and processed are combined, the combination of sound layers is unique.

## 3 What is Going Where?

Within the three performers, there are several roles being played. Both musician and dancer perform live, generating visual and auditory streams to the audience. In tandem with each live stream are processed streams consisting of video projection and amplified sound. The new media artist manipulates the two streams. As with any well-functioning trio, there is constant listening/seeing and response to each other's actions. Figure 1 describes these relationships.

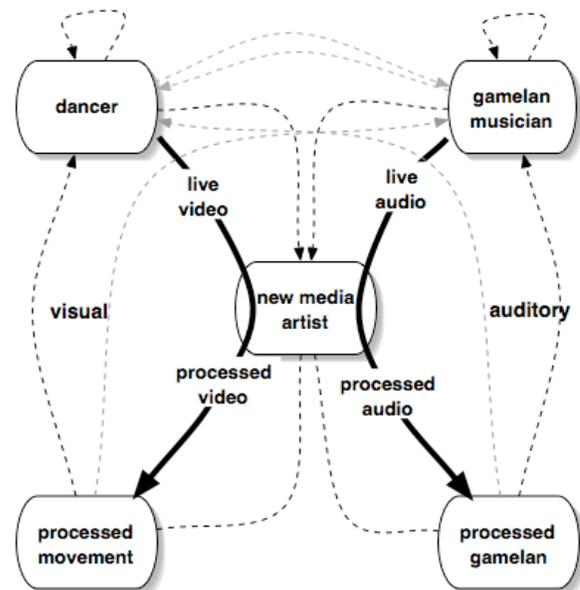


figure 1: performance flow

## 4 Interface

The flow and manipulation of performance data is centered around the new media artist but responses to live sound, processed sound, live dance, and processed dance are shared by all. In this model there are two virtual performance

instruments: a visual processor and an audio processor. The idea of the interface in this case depends on perspective. The dancer's and musician's performance gestures are heard/seen/felt and in real time, the processed media is layered with the live events. It is the relationship between the live and processed streams that challenge the performer to both cling to known methods and respond to radically different manipulations of those methods. The interface is a mirror in Bolter and Gromala's sense [Bolter and Gromala, 2003], but one that transforms the original into what was once unimaginable.

The new media artist sitting in the middle of it all manipulates the visual and audio instruments both providing a kind of remix of each stream and providing opportunities for the musician and dancer to explore their layers somewhat like a drummer drives the beat.

## 5 In Performance

Interactions between the physical and the virtual open up possibilities for contrast, enhancement and isolation. Listening to or watching the 'other' when you are both the other and the primary agent of production calls for a quality of attention that is *mindful* in practice. One's breath, the texture of one's skin as it resonates with the vibration of bronze gongs flow into fleeting instances of pure awareness. Phrases of music and movement grow by realizing, by letting go, by just settling down in the moment.

Our choice of using gamelan instruments makes present our past memories with this particular music tradition. In the late 1980's, Don Sinclair briefly studied electronic music and gamelan. Intan Murtadza's formal study of gamelan music making in the 1990's brought her to Java where learning and making music assaulted her senses of taste, smell, sight and sound as much as it did on her intellect. Yves Candau's introduction to gamelan came through a dance project that featured a whole Javanese gamelan live on stage. As a dancer, he had to listen carefully to what was for him a strange and unusual music, yet he had an immediate strong attraction to its qualities, in spite of the unfamiliar scales and melodies. To him gamelan evokes cycles within cycles and circles within circles endlessly

revolving in cosmological bliss. There is a mathematical beauty in some of the compositional techniques used by gamelan musicians. For example, in "irama changes", when the speed slows down, and the elaborating instruments suddenly shift to double time, while the colotomic instruments go on unchanged. It feels as if the music is speeding up and slowing down at the same time while new layers and complexities are being revealed in the original melody. Yves occasionally plays gamelan in a Toronto community group.

For us, gamelan is a particular way of playing and thinking about music. Sometimes described as a negotiation between musicians, our piece expands these negotiations, resulting in a set of complex dimensions and interactions to dance and interactive media. The music is newly composed and in the moment, but it is also informed by the layering of rhythmic and melodic (balungan) frameworks integral to gamelan music. One hears the patterned striking of hanging gongs initiating layers within layers of beginnings and endings. Another interpretive layer between process and feedback is thus added by grounding improvisations within cyclical, formal music structures inherent in traditional gamelan music.

In summation, our work explores the ways in which our techniques of processing sound and image processing can add contemporary meaning and depth to the iconic sound representation of these gamelan instruments [Becker, 1998]. We continue to reflect on the significance of our collaboration, the path taken.

## References

Bolter, Jay David and Diane Gromala. *Windows and Mirrors: Interaction Design, Digital Art, and the Myth of Transparency*. Cambridge, Massachusetts: MIT Press, 2003.

Becker, Judith. "Earth, Fire, Sakti and the Javanese Gamelan." *Ethnomusicology* 32/3:385-391, 1998.