Book Review

***Tele-Improvisation: Intercultural Interaction in the Online Global Music Jam Session*, Springer Series on Cultural Computing**

Roger Mills
Springer International Publishing, 2019
ISBN: 9783319710396
ISBN: 9783319710389
214 pages

Reviewed by David Lane

Author and trumpeter Dr. Roger Mills¹ is a research associate and lecturer at the University of Technology Sydney. As musical director of the Ethernet Orchestra, an “Internet-based networked music ensemble exploring intercultural improvisatory collaboration,”² Mills builds upon his experiential foundation to write his 2019 book *Tele-Improvisation: Intercultural Interaction in the Online Global Music Jam Session* (“*Jam Session*”). *Jam Session* navigates a range of conceptual and research domains including musicology, ethnography, improvisation, cognition, and information technology. Mills’s enthusiasm, ambition, and multidisciplinary perspective as a performer, collaborator, and academic permeate throughout *Jam Session*.

The three dynamic interpersonal disciplines integrated throughout *Jam Session* (telematics, improvisational practice, and interculturalism) are each experiencing a blossoming of scholarship and practice. In Chapter 1, “Intercultural Interaction Tele-Improvisation: Inside the Online Global Music Jam Session,” Mills presents the key concepts and ideas explored in the book’s eight chapters. He begins with the historical practices and conceptual principles that ground his work and then broadly introduces the research practice that informs his theory of tele-improvised intercultural practice. His research practices employ a multimodal theoretical and analytical framework, grounded in models largely built upon the notions of conceptual metaphor and embodied cognition. These foundations set up his concluding discussions that relate to considerations for future research and scholarship.

Throughout *Jam Session*, the navigation through diverse fields of study provides fertile ground for exciting scholarship and practice including digital networking/telematics, virtual space, metaphor, social semiotics, cognition, and meaning-making. In Chapter 2, “Telematics, Art and the Evolution of Networked Music Performance,” Mills discusses the opportunities and challenges associated with historical and contemporary uses of telematic platforms in artistic collaborations. Mills begins the chapter by examining the broader history of telecommunications and telematics then narrows his discussions to focus upon networked musical performance. He spotlights a range of telematic arts collaborations, detailing some limitations in the emerging technologies, particularly the challenge of network latency. The tools and platforms highlighted throughout the book will be of interest to practitioners seeking to engage in telematic collaborations. In Mills’s case study work, he makes use of [eJAMMING](#), but also discusses other platforms such as [UpStage](#) and [make-shift](#).

In Chapter 3, “Intercultural Tele-Improvisation: Multi-idiomatic Approaches,” Mills describes improvisatory music traditions in a diversity of cultural contexts, noting its ubiquity across musical cultures. He briefly describes a history of free improvisation in Western music from its emergence out of Black American jazz to the European free improvisation scene. He then

describes music improvisation in non-Western settings, such as the formalized nature of some Persian and Indian improvisatory music traditions. It is in this chapter where Mills begins to lay the theoretical and philosophical underpinnings of his own research framework and intercultural theorizing. He makes extensive reference to the concept of embodiment, drawing heavily from Jason Stanyek's 2004 dissertation on diasporic improvisation. He further elaborates on the notion of embodiment in Chapter 4, referencing Marc Leman's 2012 work on music gesture and embodied cognition. Both Stanyek and Leman draw upon Maurice Merleau-Ponty's seminal work, *Phenomenology of Perception* (1945). As described by Leman, embodied cognition is built on the understanding of "the body of a person . . . as the mediator between the person's environment and the person's subjective experience of that environment" (5). I would assert that embodied cognition is the most salient theoretical premise through which Mills produces his findings.

In Chapter 4, "Intercultural Tele-Improvisatory Performance in Action," Mills describes the methodological design of his primary research then presents the key findings from his case study work. He builds his analysis upon his Distributed Interaction Analytical Framework (DIAF), a multidisciplinary frame that makes use of complementary, but independent, notions of embodied cognition, conceptual metaphor, and social semiotics. The DIAF applies a "multimodal discourse analysis" (85) to a diversity of data points, including Musicological Analysis; Participant Observation; Video Cued Recall (VCR); Audio-visual recordings and musical score transcripts; Data tables and memos; VCR Transcripts and follow-up interviews; Improvised Music and Sound; Performative Gestures; and Verbalised Experience (85). Mills generates his findings through a mapping of correlations and interrelations across these datasets.

The research case studies in *Jam Session* consist of three networked music performances each with an increasing number of musicians performing with a focus musician, who participates in all three case studies. Mills directed his principal analysis through the focus musician (Australian guitarist Michael Hanlon) "to gain an in-depth understanding of how the culture and numbers of collaborating performers impacted the interaction, as well as his growing familiarisation with the conceptual and technical aspects of telematic music making" (90). The first case study performance consists of Hanlon performing with Iranian ney player, Sina Taghavi. The second performance includes Hanlon, Indian tabla player Shaun Premnath, and Iranian tanbur player Peyman Sayyadi. The third and largest collaboration engages Hanlon with Mongolian morin khuur player and throat singer Bukhchuluun Ganburged, French saxophonist and percussionist Hervé Perez, and German percussionist Martin Slawig (Perez and Slawig both supplement their performances with electronic processing). Each musician performs remotely in a private, isolated studio, receiving no visual cues from their fellow networked tele-improvisors, only networked audio. Mills takes full advantage of the digital version of his book by embedding hyperlinks to the case study performances directly into the text. The links direct the reader to online video recordings of the full case study performances, as well as to specific excerpts, allowing the reader to engage directly with the performances and sequences that Mills describes.

Building on the works of Lakoff and Johnson, and Steven Larson, Mills makes interesting use of "metaphors of bodily experience" (88) to interpret the verbal descriptions of musical experiences by the case study musicians. From his analysis of post-performance interviews, Mills provides specific examples of these metaphorical schemas, such as when case study musicians used "metaphors of VERTICALITY" (107) to describe rising musical movement or the experience of having been above or below another musician's sound. In another example, he describes how a musician's description "of being inside the music" is enabled by the use of a "metaphor of

CONTAINMENT” (99). Through Video Cued Recall and follow-up interviews, Mills and case study participants would seek to draw meaning from gesture and embodiment during their performances. Fewer analytical examples of social semiotics and the assessment of symbolic movement and gestures are explicitly offered in Mills’s analysis of the musical interactions that occurred in the case studies.

In Chapter 5, “Towards a Theory of Tele-Improvisatory Collaboration,” Mills applies his multimodal DIAF framework to his case studies and builds upon multidisciplinary literature as the foundation of his theory of intercultural tele-improvisation. His largely qualitative analysis identifies six common temporal stages across all three case study performances, which he labels as: Initiation, Development, Progression, Recapitulation, Conclusion, and Deconstruction. Mills acknowledges that these stages are not particularly novel and will be familiar to many improvisers. Building upon his findings, Mills develops a diagram of conceptual relationships embedding “shared experience of difference,” “perception,” “interpretation,” “response,” and “expression” within a broader environment of culture (127). He further elaborates on a typology that consists of three types of tele-improvisatory experiences: tele-aesthetic, tele-sensus, and tele-intellectual (129). The tele-aesthetic experience is characterized by Mills as the sensory reception of “meaning” and “significance,” tele-sensus as the artists’ “social” and “creative” feeling of the experience, and tele-intellectual as the intentional, cognitive awareness of the experience (129). Mills describes this conceptual framing and the tele-aesthetic typology as a schematic through which to understand “how cultural significance is presented in aural modality and the ways in which its representation influenced performer expression, interpretation, and response” (130).

Throughout Chapter 6, “Liminal Worlds: Presence and Performer Agency in Tele-Collaborative Interaction,” Mills conceptualizes virtual and sonic spaces through a reinterpretation of Edward William Soja’s theory of “thirdspace,” which Soja conceives of as a liminal space of intersecting identities. Mills extends this notion of thirdspace into the telematic realm, conceptualizing it as a virtual, imaginary space, shared cognitively by telematic performers. Chapter 7, “‘What’s that Sound?’ Culture, Significance and Interpretation of Electronic Sound and Noise” looks at the interpretation of electronic sound and how sound and noise might be conceived in diverse cultural contexts. Mills contrasts the embrace of extra-musical sound in non-Western traditions (particularly sounds that emulate nature) with Western efforts to eliminate sounds (particularly electronic noise) that obscure musical pitch. He then characterizes the sonic and musical innovations in 20th century Western music practice, such as the works Pierre Schaeffer and John Cage, as the basis for an embrace electronic and extra-musical sound. Further discussing intercultural, tele-improvised space, Mills recalls his own experiences with the Ethernet Orchestra and offers more reflection from the case study musicians. When discussing the virtual space, he describes how the intentions of collaborators and the distinction between electronic and acoustic sound are obscured and lead to changes in perception and creative choices. Chapter 7 concludes with a brief exploration of Interactive Music Systems, highlighting how the agency of a human musician can be challenged by the perceived intentions (or lack thereof) of an artificial intelligence.

I was immediately engaged by the innovative scholarship presented in Mills’s book. It feels as though he takes his multimodal approach to heart. However, upon completion of the book, despite its engaging premise and intriguing explorations, I am left pondering several inconsistencies and wrestling with a sense of unrealized promise. At times, perhaps as a consequence of the multidisciplinary nature of the text, Mills’s ideas don’t always feel as though they’ve been given space to breathe, nor do they always feel fully integrated with the other core concepts explored throughout. Intriguing artistic and research practices are sometimes

introduced only to become largely inconsequential to the broader themes and theoretical arguments in the book. In Chapter 2, for example, Mills offers an intriguing history of telecommunications. On its own, the technological review offers several interesting historical narratives and anecdotes, but ultimately seems to contribute little to the broader theoretical and cultural premises presented in *Jam Session*. In Chapter 3, he refers to heavyweights in the world of improvisatory music, including George Lewis, Pauline Oliveros, and Derek Bailey, but the references feel tangential to his theorizing on networked music performance and intercultural, embodied cognition.

Additional inconsistencies and questions emerge from Mills's research design. For example, in Chapter 4, Mills describes the conditions of his case study approach as "experimental" (91). This label feels inappropriate, as the overall design lacks the type of rigour and control that would normally be expected in an experimental research design. His casual use of the term "experimental" increased my scrutiny of his overall research design and caused me to be somewhat less receptive to some of his findings and theories. When further describing his design, Mills asserts that the inclusion of a "focus musician" in all his case studies did not "diminish the rich data provided by the collaborating cross-cultural performers" (90). While the intercultural exchanges and the reflections are appreciably intriguing, the unsubstantiated claim that the use of a focus musician does not diminish the data cannot not be simply accepted at face value. How can we dispel the possibility that key findings and lessons drawn from across the three case studies were heavily influenced by the inclinations of the focus musician? The performance conditions for each case study introduce additional limitations. Performers did not interact visually with their fellow musicians. Performers were physically constrained (to a greater or lesser extent) by wearing headphones and by being dislocated in remote studio settings. These conditions will have actively contributed to the choices made by performers. Mills draws intriguing lessons from the case study performances, but seems to rely heavily on these three performances, generated under specific conditions, as the testing ground for his generalized theory of networked, intercultural improvisation, as described in Chapter 5 (127). It becomes difficult for the reader to understand how these case studies offer the range of data and experience upon which Mills can formulate and test the broader concepts he has explored throughout the rest of the book.

As noted, the theoretical arguments and research design in *Jam Session* use embodied cognition as a foundational concept. While embodiment offers some intriguing lines of thinking, there are incongruities between embodied cognition and the multimodal concepts and methods used in *Jam Session*. Mills's use of gestural, dialogical, and metaphorical concepts offers more to the reader than embodied cognition as a means of investigating interpersonal conveyance, and interpreting meaning from the tele-improvised, intercultural experiences of performers. From an intercultural perspective, diverse performers may bring other concepts of the mind, such as Cartesian or spiritual notions, that conflict with theories of embodiment. In the absence of a shared intercultural conception of embodiment by collaborators, the use of cognitive embodiment seems to be an ill-suited, externally imposed theory that does not contribute substantively to the investigation and interpretation of intercultural, improvisatory exchange. Further limiting how embodied cognition is applied in *Jam Session* is the fact that the networked performers in the case studies were unable to see one another's physical gestures. Without intercorporeal exchange, I would argue that the embodied cognition of performers would become deeply intrapersonal. This intrapersonal embodiment presents a conceptual incongruity with the intercultural, collaborative exchanges that Mills seeks to explore in the imagined, virtual "third space." At times, the emphasis on embodied cognition obscures some of the more intriguing concepts and findings shared in *Jam Session*.

While *Jam Session* does reflect on the musical cultures and expressions of the non-Western case study participants, these can feel overshadowed by the Western thinking in Mills's overall design and theoretical framework. In Chapter 6, when discussing physical experience, imagination, and sound, Mills states, "there can also be blindness to these ideas amidst the rationality of the Western philosophical and cultural traditions" (158). While the statement on its own seems agreeable, it resonates awkwardly in a book built predominantly on Western philosophies and theories, and that uses Western qualitative research methods, Western notation, and Western musical terminology in its analyses and findings. Intercultural voicing was further limited by the engagement of the focus musician, which resulted in an amplification of his voice above the other case study musicians. In and of themselves, the Western techniques, analysis, and theoretical thinking may not be inherently inappropriate, but the lack of a clear acknowledgement of the Western frameworks used as the foundation of the research is a notable omission in a book exploring intercultural exchange. Affording more space and more opportunity for non-Western voices and non-Western philosophy would have lent weight to *Jam Session's* intercultural narrative.

Despite what I have characterized as unrealized promise and underdeveloped theoretical propositions, *Tele-Improvisation: Intercultural Interaction in the Online Global Music Jam Session* provides readers with a plethora of avenues for scholarly and practice-based investigation. In Chapter 8, Mills clarifies that his "research makes no claims to universality of the findings" (202), seeming to offer an invitation to readers for further research and exploration. This conclusive chapter, entitled "Intercultural Tele-Improvisatory Interaction: Applications and Contexts of Jam Session," ends hopefully, looking toward explorations of virtual performance and networked music education, offering new and exciting opportunities for networked cross-cultural and intercultural dialogue. Ultimately, *Jam Session* offers building blocks for an emergent dialogue on creative practice and intercultural learning in an increasingly networked world.

Notes

¹ Dr. Rogers Mills's personal website: eartrumpet.org/

² As quoted from the Ethernet Orchestra website: ethernetorchestra.net/

Works Cited

- Leman, Marc. "Musical Gestures and Embodied Cognition." *Actes des Journées d'Informatique Musicale (JIM 2012)*, Mons, Belgique, 9–11 mai 2012, pp. 5–7.
- Mills, Roger. *Tele-Improvisation: Intercultural Interaction in the Online Global Music Jam Session*. Springer, 2019.
- Stanyek, Jason. *Diasporic Improvisation and the Articulation of Intercultural Music*. 2004. University of California, San Diego, PhD dissertation.
- Ponty-Merleau, Maurice. *Phenomenology of Perception (Phénoménologie de la perception)*. Translated by Colin Smith. Routledge, 1962.