

## INTRODUCTION

**Chair: Daniel Pressnitzer**

There is at least one undisputable universal related to music: in all the cultures that we know of, and throughout recorded history, people all around the world have engaged in music. Music has also been the focus of much study, placing it at the convergence of Art and Science. The aim of this session is to illustrate the current interdisciplinary investigations of music, combining the new approaches of cognitive neuroscience on the one hand and ethnomusicology on the other hand. Specifically, the questions asked revolve around the presence or absence of universals in music. It is clear that there exists a very wide range of musical practices and systems across cultures and epochs. It is also clear, however, that each of these systems obeys a complex set of rules, explicit or implicit. So, is music a universal language, or a mosaic of musical idioms? Are there some fundamental building blocks to be found under the musical surface of all systems? Is it possible to interpret musical practices in the light of our current knowledge about human cognition and brain function? How relevant for the description of musical systems is the consideration of their social context?

The first speaker is Satomi Oshio, who has applied her musicology and ethnomusicological training to the study of, notably, Japanese and Vietnamese music. Her approach stresses the importance of relating music to social context, by actually visiting the places where music is made. Such a method allows her to observe the processes involved in music making and listening, and to describe the relation that establishes itself between the people and the music. She will show that even though most musical cultures have a coherent musical system, the rules are not always explicitly explained by the bearers of the tradition. This observation tallies nicely with the ideas of implicit learning. Satomi Oshio also reports that the concepts of "scale" and "harmony" in the Western sense might not be suited to the cross-cultural analysis of all possible systems, and that other potential candidates in the search for musical universals may reside in the attitudes of people towards music.

The second speaker of the session is Barbara Tillmann, who uses behavioral experiments on musical sounds as well as functional brain imaging to uncover the way

people with or without musical training perceive music. She will review various features that have been proposed as candidates for musical universals, and discuss their link to underlying cognitive constraints. For instance, the use of a restricted number of sounds combined into scales and rhythmic units might be paralleled with current knowledge about working memory. Her approach takes the perspective of the listener, who has to build mental representations of music. She will talk of her influential findings about the intricate implicit knowledge that people acquire by simple immersion in a given musical culture. Most neuroscientific studies to date have focused on the Western classical tonal system, but Barbara Tillmann will discuss the idea that other traditions and systems are important to consider in order to test for the generality of the musical cognitive processes identified so far.

We hope that the two speakers of the session will contribute to highlight a new framework for approaching the age-long questions pertaining to universals in music, in a constructive dialogue between cognitive neuroscience and anthropology.