

GLOBAL ACCESS TO ETHNIC MUSIC: THE NEXT BIG CHALLENGE?

Olmo Cornelis, Dirk Moelants, Marc Leman
olmo.cornelis@hogent.be

Ethnic music
is not relying on
common Western
musical concepts.

Only few attention
from MIR last
decade

Fragile heritage
under pressure of
Westernization

Digitized ethnic
archives are
awaiting research

Abstract: During its first decade of existence, Music Information Retrieval approached several musical parameters and many musical styles using different methodologies. However only little attention was given to ethnic music. Given the huge variety of styles found in ethnic music, this field of study might bring new challenges for MIR. In every region of the world, music is found with specific characteristics, often not relying on Western musical structures and concepts. If we want to apply MIR tools here, they need to be adapted or even redesigned starting from other concepts.

Ethnic music is very broad concept. It is rather a meta-category.

Strict sense: music from *cultures without written traditions*

Broader: latter + *non-Western classical music*: religious music, court music, from cultures with a written musical culture (e.g. China, Japan, India, Middle-East)

Also: including (European) *folk music*

=> Music that it is intentionally not meant for distribution outside the community

=> Limited commercial distribution, stored in institutional archives, important cultural heritage

Low level signal processing

- No a priori need of music theory
- Potential: similarity analysis, classification, query-by-example, ethnomusicological research,...
- Not very different from current MIR

High level research on interpreted and structured audio data

Model driven paradigm

- refining the tool towards the model
- ideal for small audio sets
- specific research purpose

Serendipity paradigm

- ideal for large audio sets
- relying on merging elements
- no intentional analysis purpose

Metadata based retrieval

- Different focus metadata (Geographical information, social relevance)
- Need for flexible data querying because lack of spelling standardization
- Strong combination with seredipity paradigm

Research opportunities combining the the fields of ethnomusicology and MIR are huge (cf. Tzanetakis' "Computational Ethnomusicology"). Many new challenges arise as we have to leave the safety of our own cultural frame of reference: Both the ideas about music and its structural characteristics can widely vary. For example, in some cultures sound and dance/gestures can not be separated, or pitch is not conceived of as a succession of discrete pitches, but rather as series of complex (gestural) patterns. These fundamental differences necessitate a thorough rethinking of MIR paradigms.

Ethnic music and Music Information Retrieval generate new challenges for interdisciplinary research and can give new impulse to the study and dissemination of a rich cultural heritage.