Do we hear the same music?

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Introduction

Musical Communication

musician(s) -> audience

- structure
- emotion/expression

listener

- different backgrounds (cognitive)
- perceptual differences?
Communicating Syncopation

Musicians were asked to play the same short melodies in a syncopated and in a metrically regular version.

-> audio analysis shows a large number of strategies, involving timing, dynamics and articulations.
Communicating Syncopation

Listeners with musical background were asked to identify the rhythmic type in both audio and video excerpts

Results

• Correct answers slightly over chance (55.5%)
• Confidence relatively high (3.34/5)
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  - correct: 53.5% - 57.4%
  - confidence: 3.5 – 3.3 confidence
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-> Listeners can not identify the performers’ intentions, despite the efforts of the musicians
Tempo perception

Listeners were asked to tap along with the perceived tempo of 120 ‘ternary’ musical excerpts

Results

• all the pieces have more than one interpretation
• in a large majority this includes a binary-ternary conflict
• huge individual differences, e.g. binary/ternary ratio 0.13 – 25.6
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-> our basic metric interpretation can differ from person to person
Conclusion

-> listeners:
   can not always identify performers’ intentions
   can have different interpretations of basic musical structure

-> musical communication is problematic!
   (but is this a problem?)