Music Informatics

Alan Smaill

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Some examples of different representations and musics
What would we like to be able to do?
Which representations are good for which purposes?
Example 1

- Solo voice from traditional music
- Ishbel MacAskill singing “An Innis Àigh”
  (CD Essentially Ishbel, 2000)

From an oral tradition, handed from singer to singer; more recently also written in WTM style with melody and words.
Example 2

- Classical WTM notation, music usually played from individual parts.
- Mozart Quintet no 2 in C minor, K406
- Versions of score and performance are on-line.

There is a lot of associated music theory about how music in this style (sonata form) fits together — notions of tonality (key), metre and rhythm, but also organisation of material on contrasting subjects, development, recapitulation . . .
Example 3

- Jazz harmonies, as in “real book”
- Succession of harmonies (not notes) in specialised notation
- Looks like grammar symbols?
- Can “substitute” rather than just follow what is given
Example 4

- Vocal music in non-tonal idiom
- Part of description of the piece, as given by the composer.

Does information at this level help with hearing the music? ... with creating new music?
Example 6

- HighC, mentioned briefly earlier in the course.
- on-line demo at www.highc.org,samples,demo.html (requires IcedTea plugin).

Visual interface involves a visual representation of music (not directly in terms of discrete symbols).

There are also internal representations holding musical information, and allowing transformations.
What might we want to do with Musical Informatics?

- Possible aims:
  - analysis of music as sounds, as scores, . . .
  - transforming music as sounds, as scores, . . .
  - generating new music, as scores, as sounds
  - involvement in performance, participant, real-time issues

Let’s fix on a few aims, then think what sorts of representations might be most helpful to achieve those aims.