

Musical Symbols at the Digital Age

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Contents

Musical Symbols

Musical Symbols in Unicode

Good, less good, . . .

Writing music, not texts

Conclusion

Musical Symbols

Express:

- pitches \iff *accidentals*,
- rhythms,
- dynamics, ■
- ornaments (Baroque music, ■jazz), ■
- additional information.

Arranging parts within a score

Expressing:

- *sequential processes*,
- *parallel processes*, with *synchronisation points* or *randomly*,
- *linking* meta-information.

What is a Typesetting System for Music?

Developing new works? ■ Often, *workarounds* are to be put into action. ■

Digitalising works of the past?

MusiX_{TEX}

Any symbol may be pictured. Users are wholly in charge of placement.■

But source texts are very difficult to maintain without a pre-processor (Bacho_{TEX} 2011).

Other typesetting systems

LilyPond, MuseScore, . . . ■

Planned. . . not planned. . .

Musical symbols in Unicode

A large place is given to other (historical) systems, e.g., Gregorian chant.■

Unicode categories:

- So \Leftarrow **S**ymbol, **O**ther,■
- Mc \Leftarrow **M**ark, spacing **C**ombining,■
- Cn \Leftarrow other, not assigned (extra-symbols).

(Show.)

Symbols

More modern than MusiX_TE_X or LilyPond \Leftarrow *micro-accidentals*.■

OK for jazz ornaments.


Missing ornaments

Many Baroque ornaments are missing. (Show.) ■

Replace them by corresponding realisations? ■

Controversial!

Music, not books!

Text \implies accented letter = combining accent + letter (possibly already accented).

Music: OK for information about:

- slur, accents, bow positions,
- dynamics,
- grace notes,
- . . .

Stems!

All the stems figured are up. ■ Putting such a stem up or down is a matter of style, isn't it? ■

Often, but not always! (Show.)

Chords

Putting stems up or down, again.■

Repeated notes. (Show.)

Conclusion

Good effort, but:■

presently, no musical typesetting system uses it, as far as I know,■

rules for combining marks are not fully explicated, except for very simple cases.■

Unicode's musical symbols are supposed to belong to left-to-right writing systems, whereas the process specified has many dimensions.