

Musical Symbols at the Digital Age

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Good, less good, . . .

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Express:

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

Arranging parts within a score

Expressing:

- *sequential processes,*

Arranging parts within a score

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- *parallel processes,*

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Expressing:

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

What is a Typesetting System for Music?

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Digitalising works of the past?

MusiX_{TEX}

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

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

Other typesetting systems

LilyPond, MuseScore, . . .

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Planned. . . not planned. . .

Musical symbols in Unicode

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

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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*.

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OK for jazz ornaments.

Missing ornaments

Many Baroque ornaments are missing. (Show.)

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Controversial!

Music, not books!

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

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Music: OK for information about:

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

Stems!

All the stems figured are up.

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Often, but not always! (Show.)

Chords

Putting stems up or down, again.

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Repeated notes. (Show.)

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