

Score Textures and Tracks

Music 253/CS 275A
Stanford University

Textural types

□ Ensemble texture



A musical score for an ensemble texture, consisting of five staves. The top staff is in treble clef and contains a melodic line with slurs and a dynamic marking of *p*. The second staff is in treble clef and contains a rhythmic accompaniment of quarter notes with a dynamic marking of *p*. The third staff is in treble clef and contains a rhythmic accompaniment of quarter notes with a dynamic marking of *p*. The fourth staff is in alto clef and contains a rhythmic accompaniment of quarter notes with a dynamic marking of *p*. The fifth staff is in bass clef and contains a rhythmic accompaniment of quarter notes with a dynamic marking of *p*. The key signature is one sharp (F#) and the time signature is 2/4.

□ Keyboard texture

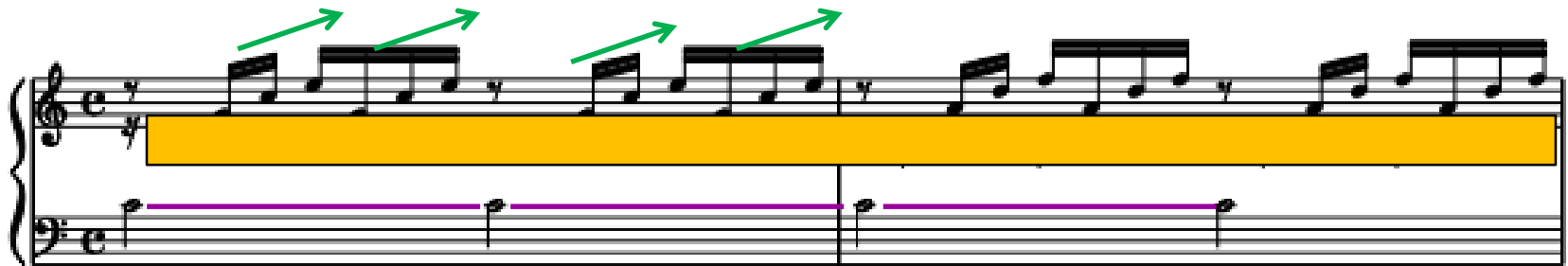


A musical score for a keyboard texture, consisting of two staves. The top staff is in treble clef and contains a melodic line with slurs and a dynamic marking of *p*. The bottom staff is in bass clef and contains a rhythmic accompaniment of quarter notes with a dynamic marking of *p*. The key signature is one sharp (F#) and the time signature is 2/4.

Beyond MIDI core examples

Tracks in keyboard music

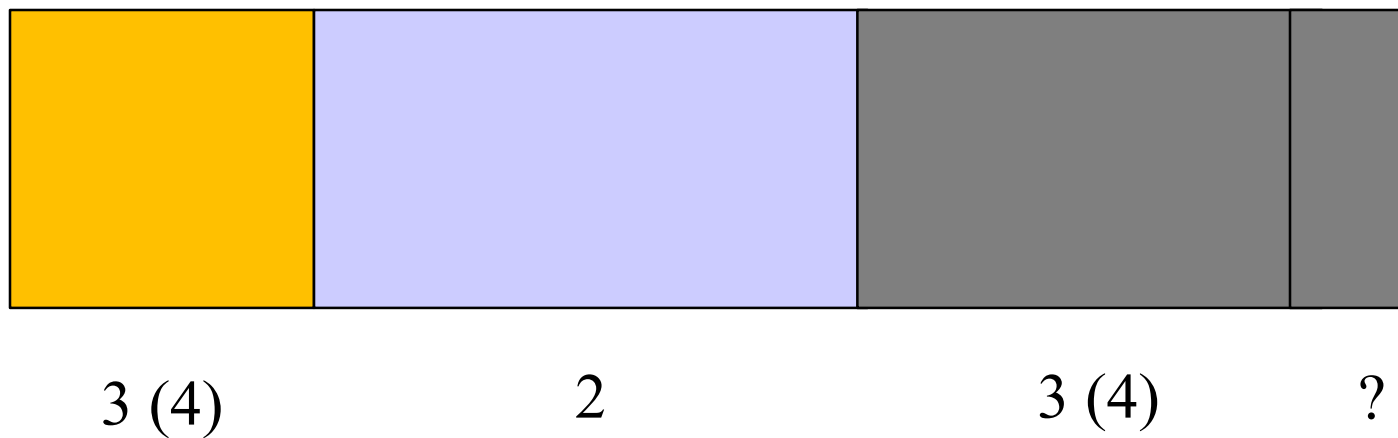
- How many voices?
- When?



Bach: WTC I, C-Major Prelude: plucked arpeggios

Tracks in keyboard (harpsichord) music

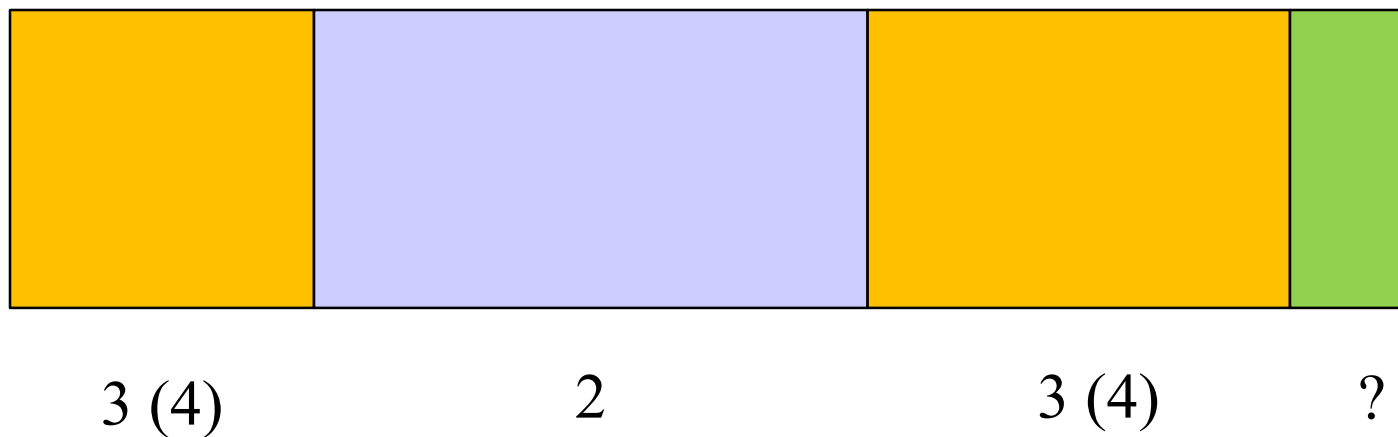
- How many voices?
- When?



Bach: WTC I, D-Major Fugue

Tracks in keyboard (harpsichord) music

- How many voices?
- When?



Bach: WTC I, D-Major Fugue

Well-behaved [consistent] tracks (organ)



Bach: four-voice chorale

Tracks in keyboard (piano) music

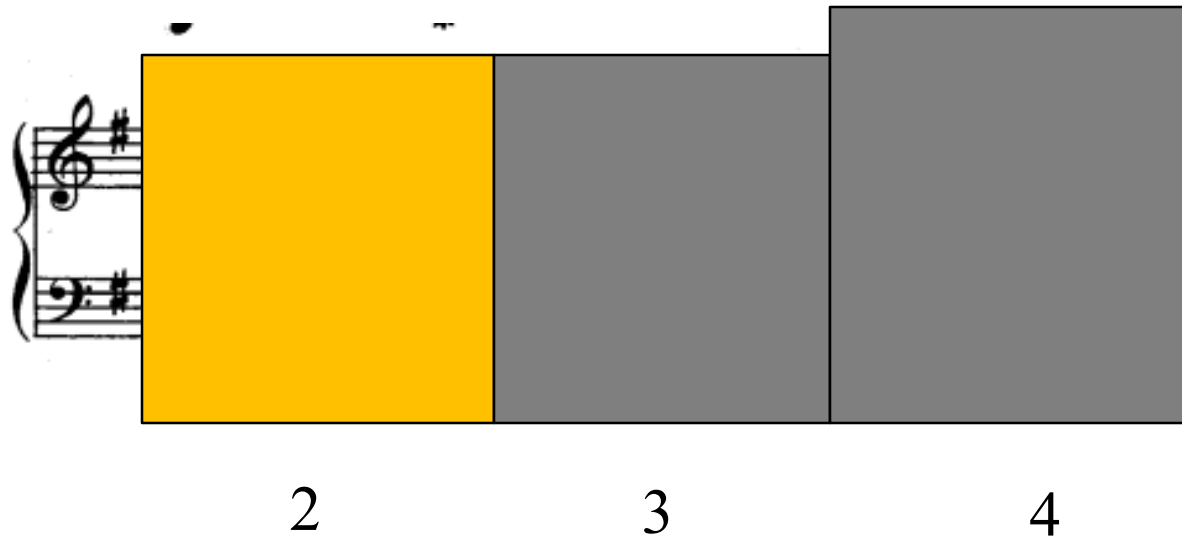
Harp-like
passage

The image displays three systems of musical notation for a piano piece. The top system features a treble clef staff with a yellow rectangular box covering the first two measures. The middle system shows a grand staff with vocal lyrics: "cre - scen - do". The bottom system is marked "assai allegro" and "ff", featuring a complex, multi-measure passage with many notes and fingerings. The score includes various musical notations such as slurs, accents, and dynamic markings.

2-voice?

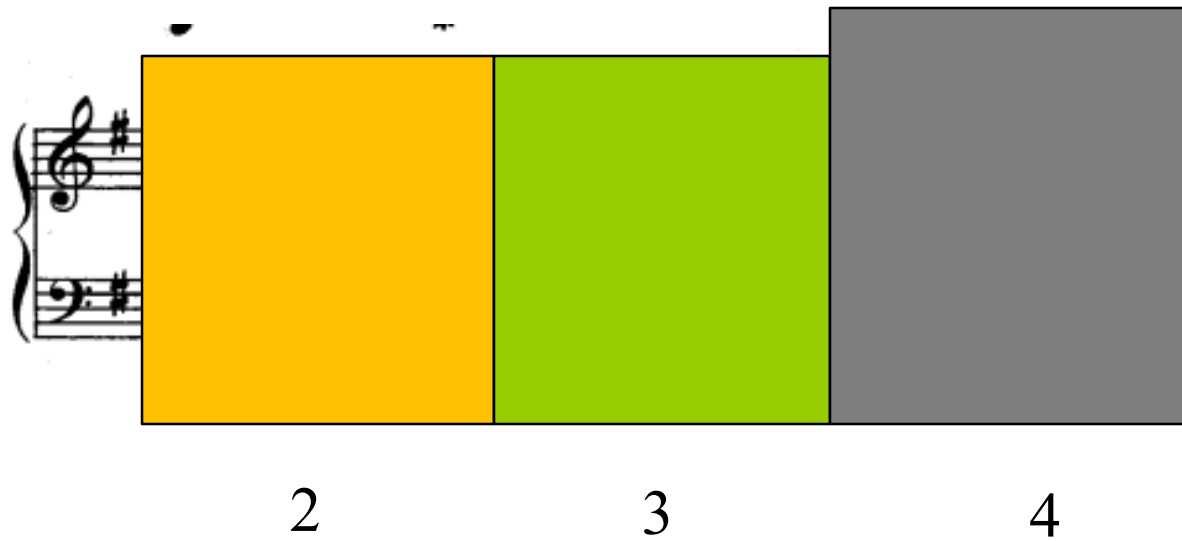
Hummel: Prelude No. 19

Tracks in keyboard (piano) music



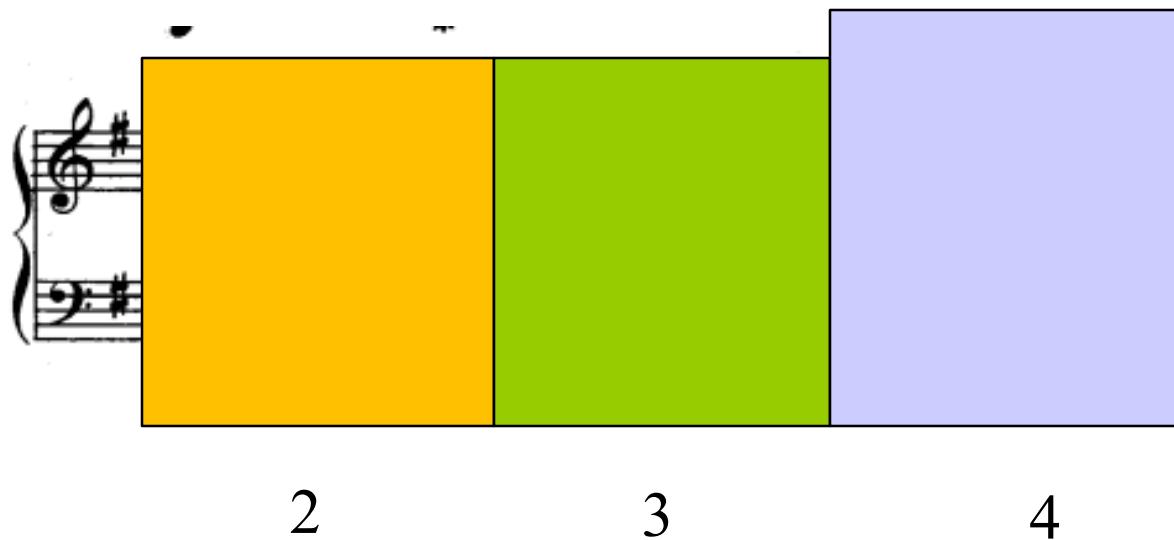
Chopin: Mazurka, Op. 67, No. 1

Tracks in keyboard (piano) music



Chopin: Mazurka, Op. 67, No. 1

Tracks in keyboard (piano) music



Chopin: Mazurka, Op. 67, No. 1

Braille score typologies

- Ensemble texture =
“open score”



A musical score for five staves, illustrating ensemble texture. The score is in 2/4 time and G major. The top staff is a vocal line with a melodic line and a dynamic marking of *p*. The second staff is a piano accompaniment with a dynamic marking of *p*. The third staff is a piano accompaniment with a dynamic marking of *p*. The fourth staff is a piano accompaniment with a dynamic marking of *p*. The fifth staff is a piano accompaniment with a dynamic marking of *p*.

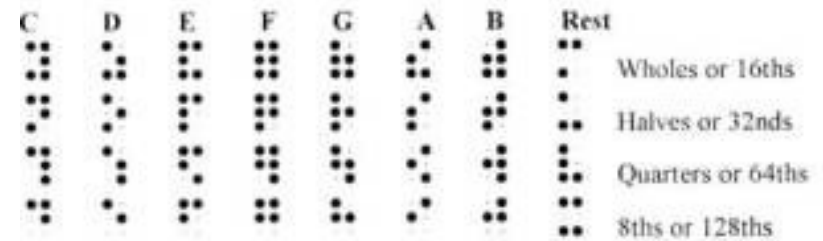
- Keyboard texture =
“bar over bar”



A musical score for two staves, illustrating keyboard texture. The score is in 2/4 time and G major. The top staff is a piano accompaniment with a dynamic marking of *p*. The bottom staff is a piano accompaniment with a dynamic marking of *p*.

Braille music codes (in general)

- Braille MN developed in *c.* 1850
- **Six-dot cell**
- Many symbols redefined by context
- Has national dialects
- Has international governing body
- Dependent on impact printing



Data dots



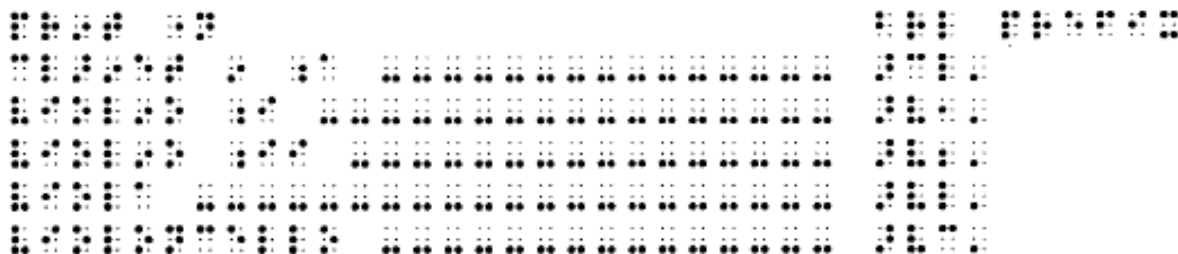
Switches

Braille MN: score types

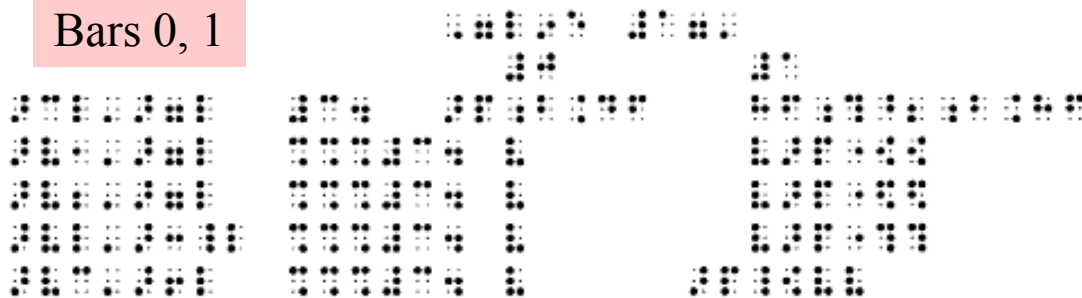
- **Bar-over-bar**: piano music
- **Open-score**: intended for sight-singing
- *Short-score*: choral analogue of bar-over-bar
- *Section-by-section*: piano music or score
- *Single-line*: single instrumental part

Braille: Mozart trio encoding (clarinet only)

Setup data



Bars 0, 1



Mozart “Turkish March” in Braille MN

Musical score for measures 89-93 of Mozart's "Turkish March". The score is in treble and bass clefs with a key signature of two sharps (F# and C#). Measure 89 features a chordal texture in the right hand and a rhythmic pattern in the left hand. Measure 90 shows a melodic line in the right hand and a rhythmic pattern in the left hand. Measure 91 features a chordal texture in the right hand and a rhythmic pattern in the left hand. Measure 92 shows a melodic line in the right hand and a rhythmic pattern in the left hand. Measure 93 features a chordal texture in the right hand and a rhythmic pattern in the left hand.

Bar 89



Bar 90



Bar 91



Bar 92



Braille notation for measures 89-92. The notation is arranged in four rows, each corresponding to a measure. Each row consists of two lines of Braille. The notation is connected to the musical score above by arrows pointing from the right-hand side of the Braille to the corresponding measure in the score.

R.H.

Mozart “Turkish” March: domain dissection

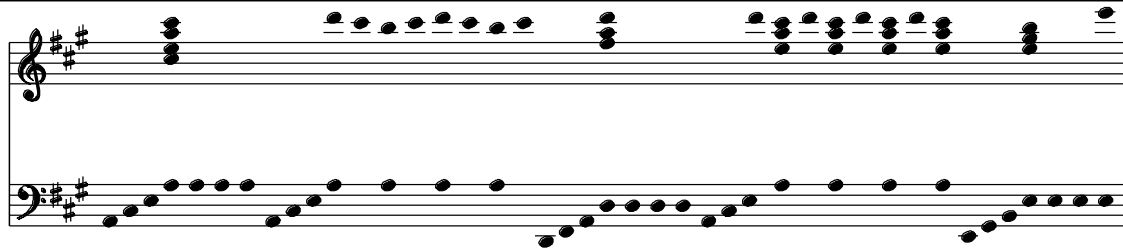


MIDI (pitch) data

Mozart “Turkish” March: domain dissection



MIDI (pitch) data



Mozart “Turkish” March: domain dissection

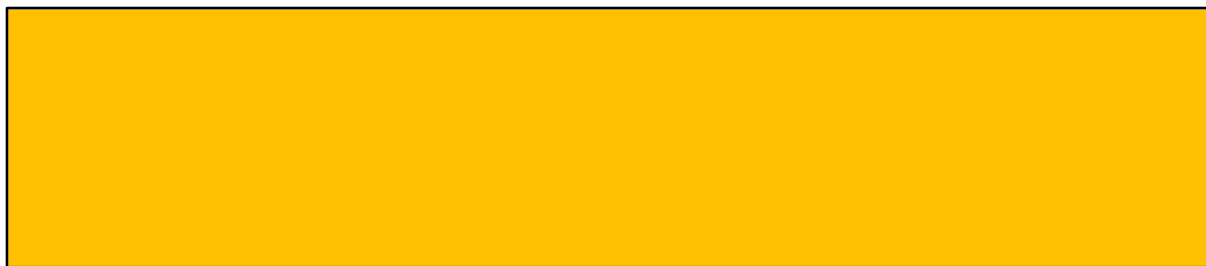


MIDI (pitch) data

Slurs

Slur orientations

Mozart “Turkish” March: domain dissection



MIDI (pitch) data

Slurs
Slur orientations

Beams
Beam slopes*
Beam lengths*

Musical structure: notation-sound conflicts

Score structure

- Da capos
- 1st, 2nd endings
- Upbeat complements

Notation > sound
translation

Sound specs precise,
Graphics specs free to modify

Sound file-structure

- Recap point?
- Repeats happen **or not***
- 2nd endings with transitions may not **compute****

* affects total number of bars

** where 1st time has upbeat,
repeat point has downbeat

Encoding transposing instruments

clarinet in A

violino I

violino II

viola

violoncello

The image shows a musical score for a clarinet in A and a string quartet. The clarinet part is written in treble clef with a key signature of one sharp (F#) and a time signature of 4/4. The string parts are written in their respective clefs (violin I and II in treble, viola in alto, and cello in bass) with a key signature of one sharp (F#) and a time signature of 4/4. The clarinet part features a melodic line with slurs and accents, while the strings provide a harmonic accompaniment with sustained notes and some rhythmic patterns.

- MIDI: sounding pitch

Clarinet in A

- Score/part: written pitch

Strings in A,

Clarinet in C

8

The image shows a musical score for a clarinet in C and a string quartet. The clarinet part is written in treble clef with a key signature of one sharp (F#) and a time signature of 4/4. The string parts are written in their respective clefs (violin I and II in treble, viola in alto, and cello in bass) with a key signature of one sharp (F#) and a time signature of 4/4. The clarinet part features a melodic line with slurs and accents, while the strings provide a harmonic accompaniment with sustained notes and some rhythmic patterns. A vertical double bar line is present in the middle of the score, indicating a section change or a specific measure.