

Thoughts on Sutton SignWriting as Musical Notation

Ron Shalom

The diagram illustrates the mapping of Sutton SignWriting symbols to musical notation. It consists of two horizontal lines. The top line features four symbols: a smiling face, a dashed line, a neutral face, and another smiling face. Below these symbols are the labels 'ei', 'a', 'ei', and 'ei' respectively. The bottom line is a musical staff with a key signature of one sharp (F#). The notation includes a whole note (F#), a beamed eighth-note pair (F# and G#), a quarter rest, and a whole note (F#) with a fermata.

Overview

- Standard and non-standard musical notation
- Notational techniques for composing movement and gesture
- *Problem Child* and Sutton Signwriting
- Possibilities for SSW in a musical context

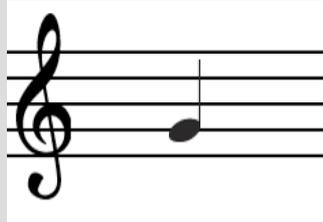
Standard Notation

- *Musical notation*:
 - To record instructions for a performer (e.g., score)
 - To document musical activity in a non-musical modality (e.g., transcription)
- Western art music notation:
 - Visual notation predominates
 - systematic, symbolic, iconographic and linguistic



Standard Notation

- *Pitch*: how “high” or “low” a sound is (e.g., on a keyboard)
- *Rhythm*: when and for how long a sound occurs

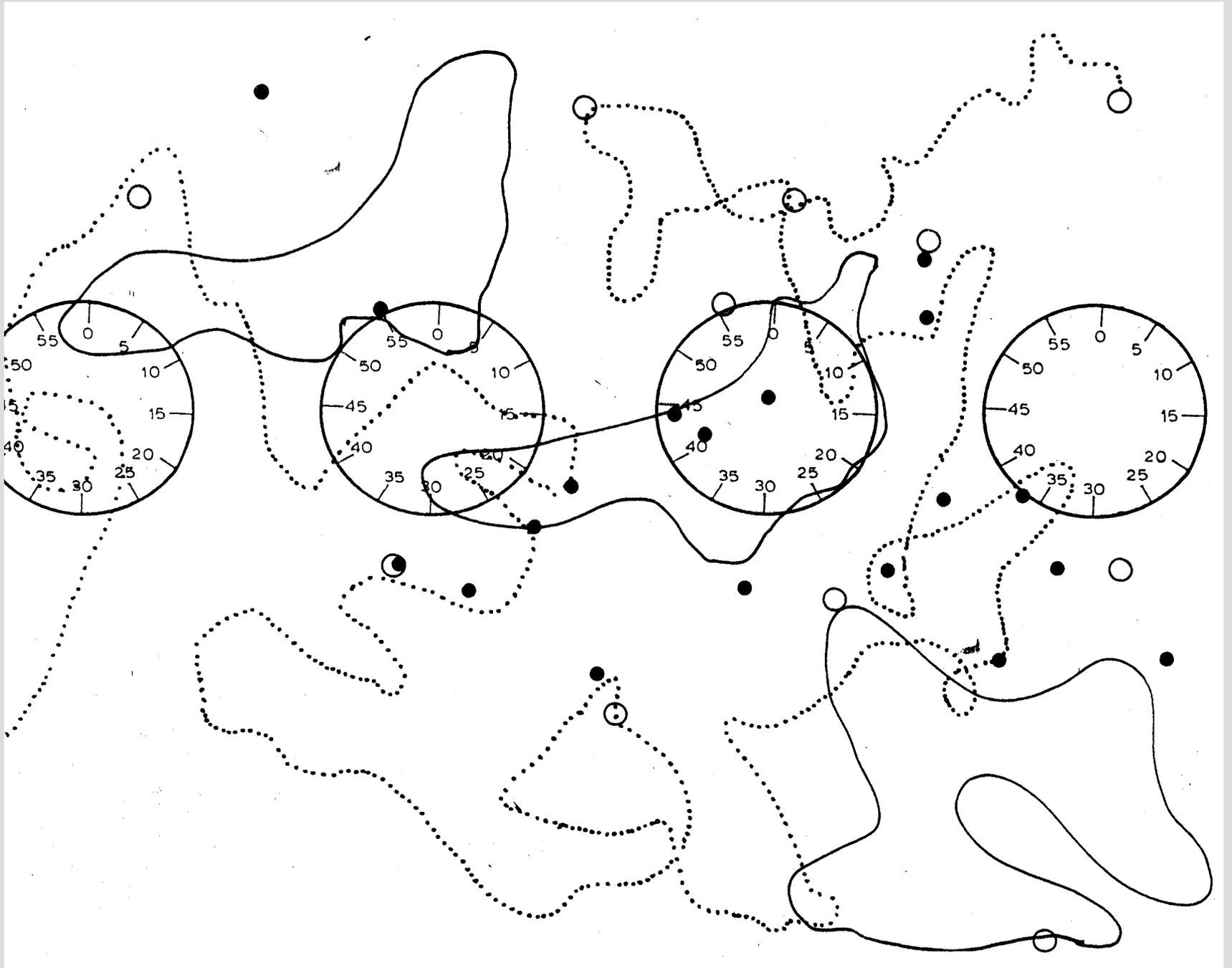


- A *note* conveys both pitch and rhythm

Common Practice Era music (ca. 1600-1900)

Non-standard Notation

- Shift in musical practices:
 - Changing interests and values in Western art music
 - Growing use of Western notation in other musics
 - Awareness of musical features and parameters not accommodated by traditional notation



Composing for Movement and Gesture

- Not readily incorporated into standard notation
- No schema popularly favored among composers

Composing for Movement and Gesture

George Aperghis, *Les Guetteurs du Sons* (1981)

G. APERGHIS :
"LES GUETTEURS DE SOUS"
pour J.J. Brunel, Gaston Palustris
et Willy Capuillet

avec le plat de la main
à la main
avec le plat de
la main droite
ensemble

NOIR

1. Main droite / Main gauche
sur Toile Toile
BASSE attende
GÉOMÉTRIE
A PÉRIODE (basse)

2. Main droite / Main gauche
sur Toile Toile
BASSE attende
GÉOMÉTRIE
A PÉRIODE (basse)

3. Main droite / Main gauche
sur Toile Toile
BASSE attende
GÉOMÉTRIE
A PÉRIODE (basse)

avec le plat de la main, sur son (sonnet).
à mouvement ascendant ↗ à mouvement descendant ↘

M.D.
M.G.
qm.c.

Composing for Movement and Gesture

Marek Poliks, *tress/burl* (2012)

“All graphemes or other signs deployed in this work function prescriptively; they denote or inform a physical action. Given the normative hermeneutics of musical notation, prescription in this context must be defined negatively – the notation here does not describe the consequences of the activity it commands, nor does it bespeak a modality of performance oriented towards sonic ends. Conventional logographs positioned upon a staff mark positions and intensities of finger pressure along a string [or a tablature shorthand indicating fingerings], not sounding pitches. Conventional dynamic markings indicate a balance between bow speed and bow pressure [or a level of breath intensity and embouchure control]. Such compromises facilitate an intuitive or idiomatic execution of the score while, through a number of complicating factors, maintaining critical distance from the conventions of performance practice.”

Marek Poliks, *tress/burl* (2012) (excerpt)

as if transfixed by an unrepresent object

15

Pc

*f*_{max}

7:6^b

3[†]

4[†]

3

7:6^b

4[†]

3

5:4^b

3

Cbcl

*f*_{max}

3[†]

4[†]

3[†]

4[†]

7:6^b

3

Pno

*f*_{max}

7:6^b

3

5:4^b

3

(harm. G₄ - A₄+) (a) (b) (c) (d) (e) (f)

(f, unclear)

Composing with Sutton SignWriting

- What SSW affords:
 - Ready-made script system for nonmusical, paramusical or extramusical gestures
 - Usable in relation to musical instruments
 - Compatible with “horizontal” (temporally sequenced) and “vertical” (simultaneous) elements of standard musical notation

Composing with Sutton SignWriting

- Limitations of SSW:
 - SSW symbols retain vagueness
 - Feature shared with all symbolic systems, including musical notation.
 - Phonemes
 - Pitch (in Western music)

Composing with Sutton SignWriting

- Limitations of SSW:
 - SSW symbols retain vagueness
 - Also an advantage.



- “Eyes half open, open-mouthed smile, head tilted towards wall”
 - Open how many millimeters? Tilt angle? Jaw position? Mouth shape? Etc.

Problem Child (2014)

- Written for double bass and facial expression (two performers, with facial expressionist positioned in front of bassist). Score available online
- Utilizes standard musical notation for bass, and SSW for face along with International Phonetic Alphabet for expressionist's mouth shape
- Intended to explore illusory effect of sounds coordinated with mouth shapes

Problem Child (2014)

- “One of my compositional aims was that the facial expression observed by the audience would change their perception of the sound of the double bass occurring at that moment. Through a sort of suspension of disbelief, the audience might choose to ‘hear’ the sound of the bass as issuing from the expressionist's mouth, and thus ‘hear’ the formant of the vowel suggested by the expressionist's mouth shape. Likewise, they may also ‘hear’ sounds that the bassist is not making when the expressionist holds an expression for longer than the bassist holds a note.”

I.

Face

Double Bass

p

p

p

pp *f*

bow scrape

The score consists of five systems, each with a 'Face' staff and a 'Double Bass' staff. The 'Face' staff contains icons of faces with different mouth shapes and expressions, often with phonetic symbols below them. The 'Double Bass' staff contains musical notation in bass clef, including notes, rests, and dynamic markings. A waveform diagram is present in the second system. A 'bow scrape' symbol is at the bottom right.

System 1: Face icons show a sad face with a downward curve, a neutral face with a flat line, and a sad face with a downward curve. Phonetic symbols: u , u , a u . Double Bass: *p* dynamic, notes on a whole note, followed by a bow scrape.

System 2: Face icon shows a sad face with a downward curve. Phonetic symbols: u , a u a u a u . A waveform diagram is shown below the phonetic symbols. Double Bass: *p* dynamic, notes on a whole note, followed by a bow scrape.

System 3: Face icons show a sad face with a downward curve, a happy face with an upward curve, and a sad face with a downward curve. Phonetic symbols: γ , γ , u , æ æ æ æ æ æ æ æ æ . Double Bass: *p* dynamic, notes on a whole note, followed by a bow scrape.

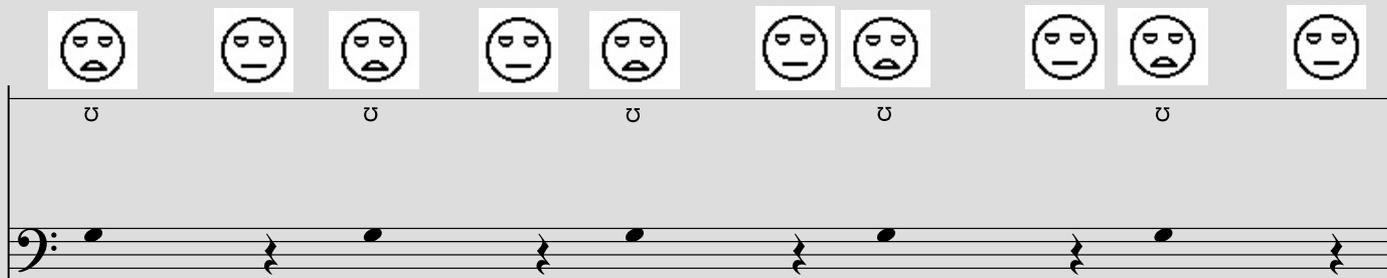
System 4: Face icons show a sad face with a downward curve, a sad face with a downward curve, a happy face with an upward curve, a happy face with an upward curve, and a happy face with an upward curve. Phonetic symbols: u , pull cheek , ja . Double Bass: *pp* dynamic, notes on a whole note, followed by a bow scrape, then *f* dynamic, notes on a whole note, followed by a bow scrape.

Problem Child (2014)

- Challenges:
 - Facial expressionist in front of bassist amplifies illusory effect, but requires that performance decisions be planned and internalized rather than spontaneous

Problem Child (2014)

- Challenges:
 - Interest in composing musical situations rather than prescribed activities, leaving wide interpretive range.
 - No temporal grid: trade-off of precise coordination between performers



Problem Child (2014)

- Interest in composing musical situations rather than prescribed activities, leaving wide interpretive range.
- Vagueness of SSW symbols
 - No established tradition of interpretation in a musical context
 - What will be the difference between  and ?



∩

α

∩

α

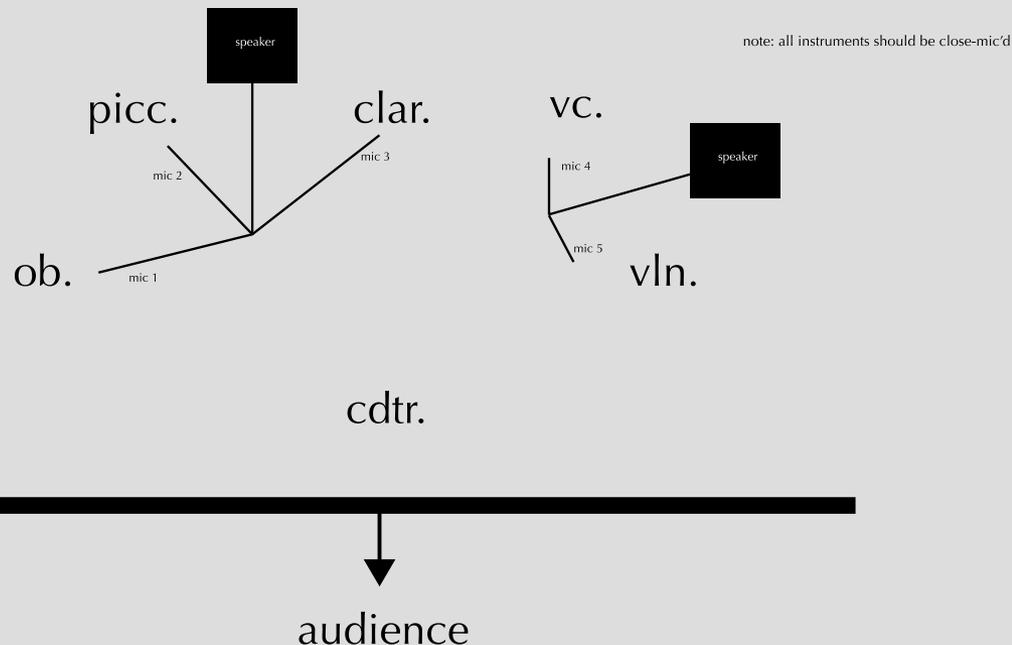
- Are α and ∩ sufficiently visually distinct?

Problem Child - video

Possibilities for SSW in a musical context

- Theatrical considerations, e.g. staging, directions, multi-performer instructions

SETUP



Poliks, *mrlrr* (2010), staging instructions

Possibilities for SSW in a musical context

- SSW as augmentation to standard musical notation, to indicate spatial or physical specifications

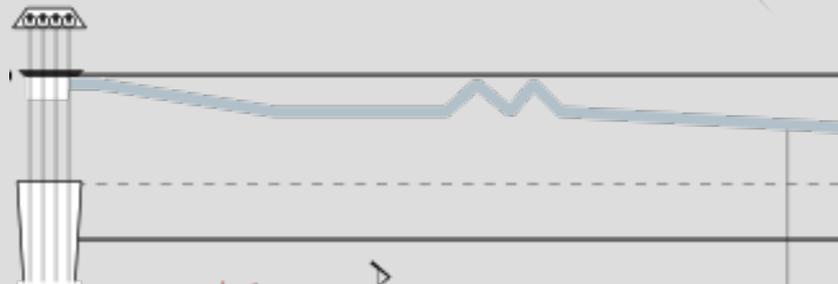
Possibilities for SSW in a musical context

- Use of SSW symbols within a grid or other visual structure, appropriate to scale of body movements of musicians in relation to their instruments

Possibilities for SSW in a musical context



Attention to range of mouthshape/head tilt in *Problem Child*



Poliks, *a tabulation/an unmarking* (2013), indication of bow placement on 'cello

Thoughts?