

025:250 COMPOSITION: ELECTRONIC MEDIA I

Fall 2009

Formalizing Gestures

A musical gesture¹ can be formalized² as a set of musical parameters³ that are vectors⁴ composed of neighborhoods⁶.

1. Musical gesture
2. Formalized
3. Musical parameter
4. Vector
5. Neighborhood
6. Consider the 5 neighborhoods A, B, C, D, E, where $A < B < C < D < E$.
7. Gesture 1, from Item 6 in the pitch domain:
A = G#3
B = C4
C = C#4
D = E4
E = F#4
8. Gesture 2, from Item 6 in the pitch domain:
A = D4
B = Eb4
C = F4
D = F#4
E = G#4
9. Gesture 3 in pitch set domain:
A = {G0, Bb0, B0}
B = {C1, D1, Eb1}
C = {F1, A1, B1}
D = {C#2, Eb2, F2}
E = {G2, A2, Bb2}
- Comments on Gesture 3:
 - a. One realization is to place the notes within each set in order, producing:
G0, Bb0, B0, C1, D1, Eb1, F1, etc.
 - b. Another realization is to place the notes within each set in any order, producing:
Bb0, G0, B0, Eb1, C1, D1, etc.
Or:
G0, Bb0, B0, Eb1, D1, C1, etc.
 - c. Yet another realization is to randomly select one note from each set, producing:
Bb0, D1, B1, C#2, A2
Or:
B0, D1, A1, C#2, Bb2
10. A rule about placing the neighborhoods:
Let the neighborhoods be placed in any order as long as they do not skip over one or more neighborhoods.
For example: C, D, E, D, C, B, C, B, A, B is good
But: C, E, D, C is bad
11. Item 10 demonstrates two other rules:
The number of neighborhoods in a gesture is unlimited.

The gesture may begin on any neighborhood, change directions any number of times, and end on any neighborhood.

2. What is formalizing?
 - a. Example of pitch. Informal characterization of pitch (“descending run”). Formal representation of pitch (“C4, Bb5, etc.)
 - b. Example of loudness. Informal characterization of loudness (“loud” “not-as-loud”). Formal representation of pitch (pp, mf) or (30, 46, etc.).
1. Gesture: a set of neighborly parametric points vectors
1. Working definition of musical gesture: A set of musical parameters that are vectors represented by neighborhoods.
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3. Why formalize gestures?
4. Components of formalization:
 - a. Define parameters (pitch, loudness, etc.)
 - b. Define parametric points
 - c. Define topological concept of neighborhood
 - d. Discuss incremental change, direction, tendency
 - e.
2. Gesture Rhythm
 - a. Non-equal
 - b. Beginning
 - c. Fast-Slow-Fast
 - d. Fast-Faster-Fast-Not-So-Fast-Slower-Slow-Not-So-Slow-
 - e. Medium
3. A = Slow
B = Medium-slow
C = Medium
D = Medium-Fast
E = Fast
T = Transition
4. A = Low
B = Low-middle
C = Middle
D = Upper-middle
E = High
5. A = Soft
B = Medium-soft
C = Medium
D = Medium-loud
E = Loud
6. Choosing a sound
 - A = Sound 1
 - B = Sound 1 and Sound 2
 - C = Sound 2
 - D = Sound 2 and Sound 3

E = Sound 3

- 7. A = Tuplet Type 1
- B =
- C =
- D =
- E = Tuplet Type 2

- 7. A = Sparse
- B =
- C =
- D =
- E = Dense

- 8. Examples of Patterns
 - a. ABCDEDCBA
 - b. ABCDE
 - c. EDCBABCDE
 - d. EDCBA
 - f. CDEDCBA
 - g. EDCDEDCDEDCDE
 - h. ABCBABCABCBA

- 9. Rules of sequencing:
 - a. Any 2 adjacent letters in the sequence must be AB, BA, BC, CB, CD, DC, DE, ED

- 10. Transitions
 - a. Any letter can contain a transition from the state of the previous letter to the state of the following letter.
 - b. Alternatively, a transition t can be inserted between adjacent letters to change transition from the state of the first letter to the state of the second letter.

- 1. Gestural parameters
 - a. Pitch
 - b. Density
 - c. Loudness
 - d. Location
 - e. Timbre

- 2. Parametrical relations
 - A = Least
 - B = Smidgeon more
 - C = Average
 - D = Pretty much
 - E = Most

- 3. Loudness parameter relations on a 5-point scale from pp to ff:
 - A = pp
 - B = p
 - C = mf
 - D = f
 - E = ff

- 4. Loudness parameter relations on a 5-point scale from p to fff:
 - A = p
 - B = mp
 - C = mf
 - D = f
 - E = ff

5. Pitch parameter relations on a 5-point scale from D4 to C#5:

A = D4

B = E4

C = G#4

D = Bb4

E = C#5

Sept. 21-23 Assignmet #1 Presentations of Hybrids

Sept. 28-30 Creating Sound Masses

Oct. 5-7 Assignment #2 Presentations of Gestures

Oct. 12-14 Reverberation and spatialization in Pro Tools.

Oct. 19-21 Assignment #3 Presentations of Sound Masses

Oct.

1. Gesture 1