Preliminary Models for a Database of Composition Styles of Twentieth Century Composers

by

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ABSTRACT

The Contemporary Music Subject Access Roundtable, last year identified a problem: genre terms for twentieth century music are needed by the users of the bibliographic utilities and other music librarians. This is the first step. Now we must strive toward a structure for the data.

This paper presents two models for preliminary consideration by the Roundtable. The well-known usage as discussed in the MARC Formats Subcommittee meeting of the Music Library Association in 1991 at Indianapolis centered on the individual bibliographic record as the store of information.

My proposals are for a separate database for this material. The first is an authority record based system, similar to or integrated with those authority control systems of the Library of Congress, OCLC, and several local systems. Data is added in a variable field, with the source of the stylistic identification given. This puts the identification at the composition title level rather than at the edition level, since the form/genre is unlikely to change from the original composition to an arrangement, but the medium of performance, date of revision, etc. may change.

The second consists of a thesaurus, list by composer and work, with indexes by term, date of compositions, and medium performance.

An alternative is to use a relational database, such as PARADOX, to store the information relating to individual compositions. A secondary relational file may contain the bibliography of sources used to define the forms/genres. Other relational files can be used to hold the various definitions of a genre and identify the sources of these definitions. Presently, this appears to be too complex or cumbersome for convenient use.
Originally this was to be an analysis of the structure needed for a database of contemporary music and its genres. However, I discovered that the list that had been developed lacked vocabulary control. Such a thesaurus of terms needs to have the controlled vocabulary approach to be effective. For example, is aleatoric a narrower term for indeterminacy? Does Indeterminacy encompass chance, aleatory, and other terminology, or are these related terms, or yet still interchangeable terms?

Musique concrete is now interchangeable with electronic music, but this was not true in the 1950s. But is there a desire to state the nature of the sounds in an electronic piece, such as Otto Luening's *Fantasy in Space* with flute sounds or Vladimir Ussachevsky's *Piece for Tape Recorder* having piano sounds?

I see the need for coordinated efforts with the thesaurus committee and the electronic music subject headings working group. We can draw on the terms they develop, plus contribute to them. This approach will give our terms the uniformity they need in the definitions.

I will propose two alternatives to the bibliographic record. Not all libraries index or even input data from the MARC 045, 047 and 048 fields. Therefore we need a system all can use, the Library on Congress Name Authority File.
Last year's MARC Formats Subcommittee meeting discussed codes(1991). Today with the advent of 486 and higher personal computers, written text can be indexed and searched.

The Library of Congress Name Authority File offers a simple solution to the placement of the information. These records are available widely, and used for a variety of purposes. They provide a central point for information about a particular composition. One reason for using the authority record is that you can add the source of information to the record in the 678 or other field between 670 and 680. In this way, we will know that a published reputable source, like John Vinton's *Dictionary of Contemporary Music*, describes Earle Brown's 25 *Pages* as "Open form."

Some modified and created Name Authority Records would appear like this:

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670 Babbitt, M. Composition for four instruments, 1949.


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670 Boulez, P. TroisiŠme sonate pour piano, 1961-1963

Boulez, Pierre, $d 1925- $t Structures, $n book 1
670 Boulez, P. Structures : premier livre [pur] 2 pianos `a 4 mains.

Brown, Earle, $d 1926- $t December 1952
400 $p December 1952
400 Brown, Earle, $d 1926- $t December
670 Pro Musica da Camera. Prima vista [SR] 1982?: $b label (December) container (December 1952 aus Folio)
670 New Grove $b (Folio. December 1952)
Brown, Earle, d 1926 -

Pro Musica da Camera. Prima vista [SR] 1982?: $b label (November) container
(November 1952 aus Folio)

New Grove $b (Folio. November 1952 (Synergy))


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010  n  86130495
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100  10  Cage, John. $t Mesostics re Merce Cunningham
400  10  Cage, John. $t Sixty-two mesostics re Merce Cunningham
400  10  Cage, John. $t 62 mesostics re Merce Cunningham

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040  DLC $c DLC
100  10  Cage, John. $t Musical changes

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040  DLC $c DLC
100  10  Cage, John. $t Theater piece
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040 DLC $c DLC
100 10 Cage, John. $t Water music

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400 10 Feldman, Morton, $d 1926- $t Intermission VI
400 10 Feldman, Morton, $d 1926- $t Intermission six
670 Feldman, M. Intermission VI, 1963

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010 n nnnnnnnn
040 DLC $c DLC
100 10 Foss, Lukas, $d 1922- $t Elytres
670 Foss, L. Elytres
100 10 Foss, Lukas, $d 1922- $t Fragments of Archilochos
670 Foss, L. Fragments of Archilochos

ARN:     nnnnnn            Rec stat:    n
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100 10 Kaygel, Mauricio. $t Transiciones, $n no. 2
678 b. 1931

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010 n nnnnnnnnn
040 DLC $c DLC $d DLC
100 10 Kagel, Karlheinz, $d 1928- $t Stcke, $m piano, $n no. 11.
670 His Nr. 7: Klavierstcke XI, 1957

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Ser num:  n      Auth/ref:    a      Name:     a       Rules:    c
010 84011803
040 DLC $c DLC $d DLC
100 10 Stockhausen, Karlheinz, $d 1928- $t Stcke, $m piano, $n no. 11.
670 His Nr. 7: Klavierstcke XI, 1957
Stockhausen, Karlheinz, $d 1928-$t Studien, $m electronic music, $n no. 1


Stockhausen, Karlheinz, $d 1928-$t Zyklus, 1961

His Zyklus, 1961


Stravinsky, Igor, $d 1882-1971 $t In memoriam Dylan Thomas.

His In memoriam Dylan Thomas.

We also need to define our terms in a more standard fashion, using published sources as references, sources which are considered "expert" in the field of the musicology of contemporary composers. Sources like John Vinton's *Dictionary of Contemporary Music* will offer many headings we desire.

We must set a hierarchy for the terms and the sources from which they are derived. I believe we should use as many terms as possible which are already established for use in the bibliographic utilities. LCSH has established Chance compositions as a valid MARC 650. *New Harvard* states that "the term chance music is preferred by many composers." Aleatory and Indeterminacy would then be cross references.

Do we use Microtonic music, the LC subject heading, to describe the composition or Microtonal notation to describe the graphic qualities? Do we subdivide Microtonic music by division per octave or by tone, semitone, or quarter-tone?

To make a more uniform selection of terms, the order of choice for terms could possibly be LCSH (when compatible), John Vinton's *Dictionary of Contemporary Music*, Paul Griffiths' *Thames and Hudson Encyclopaedia of 20th Century Music*, Reginald Smith Brindle's *The New
Music, and New Harvard Dictionary of Music, then other sources. I must say that I was initially disappointed with Stuart Smith’s Words and Spaces.

We then construct the thesaurus of terms and the list giving the evaluative source for our decision regarding individual composers and works.

A selection of thesaurus entries might look something like this:

**Chance compositions**
- UF Aleatory
- Indeterminacy
- NT Chance compositions (Pitch)
- Chance compositions (Rhythm)
- Happenings
- I Ching
- Open form
- Stochastic
- RT Complete determinacy
- Mixed media

**Chance compositions (Pitch)**
- UF Indeterminacy (Pitch)
- BT Chance compositions

**Chance compositions (Rhythm)**
- UF Indeterminacy (Rhythm)
- BT Chance compositions

**Frame notation**
- BT Notation

**Graphic notation**
- UF Aleatoric notation
- BT Notation

**Happenings**
- BT Chance compositions

**I Ching**
- BT Chance compositions
Microtonic music
   NT  Microtonic music (19 per octave)
   NT  Microtonic music (24 per octave)
   NT  Microtonic music (31 per octave)
   NT  Microtonic music (36 per octave)
   NT  Microtonic music (Variable Temperaments)
   BT  Notation

Microtonic music (19 per octave)
   BT  Microtonic music

Microtonic music (24 per octave)
   UF  Quarter-tone microtonic music
   BT  Microtonic music (Quarter-tone)
   BT  Microtonic music

Microtonic music (31 per octave)
   BT  Microtonic music

Microtonic music (36 per octave)
   UF  Sixth-tone microtonic music
   BT  Microtonic music (Sixth-tone)
   BT  Microtonic music

Microtonic music (Variable temperaments)
   UF  Variable temperaments microtonic music
   BT  Microtonic music

Notation
   NT  Frame notation
   BT  Graphic notation
   BT  Proportional notation
   RT  Microtonal notation

Open form
   BT  Chance compositions
   NT  Open form (Variable pitch)
   NT  Open form (Variable phrase sequence)

Open form (Variable pitch)
   BT  Open form
       Variable pitch open form

Open form (Variable phrase sequence)
   BT  Open form
       Variable phrase sequence open form
Pointillism

Proportional notation
  UF  Proportionate notation
  Time-space notation
  BT  Notation

Prose music

Serialism
  NT  Serialized articulation
  Serialized duration
  Serialized dynamics
  Serialized pitch
  Serialized range
  Total serialism

Serialized articulation
  BT  Serialism

Serialized duration
  BT  Serialism

Serialized dynamics
  BT  Serialism

Serialized pitch
  BT  Serialism
  Serialized pitch (5 note)
  Serialized pitch (9 note)
  Serialized pitch (12 note)
  Serialized pitch (Variable number sets)

Serialized pitch (5 note)
  BT  Serialized pitch

Serialized pitch (9 note)
  BT  Serialized pitch

Serialized pitch (12 note)
  UF  Twelve tone system
  BT  Serialized pitch
Serialized pitch (Variable number sets)
  BT  Serialized pitch

Serialized range
  BT  Serialism

Total serialism
  UF  Integral serialism
  BT  Serialism

Stochasticism
  BT  Chance compositions
  UF  Controlled aleatorism
      Controlled chance
      Controlled indeterminacy
  RT  Complete determinacy
A list of compositions could be thus constructed from such a thesaurus. All of these were verified in the Vinton dictionary:

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At this point, a relational database would be less standard than a word processing program such as Word, WordPerfect or ASCII. It requires, from my early observations, a more complicated approach.

In conclusion we should take the following steps:

1) Create a thesaurus of terms;

2) Create a list by composer of works and their characteristics, because multiple stylistic terms may be applied to one composer;

3) Create indexes by terms used to describe the music, date of composition, and medium of performance where known. We need to give source, in a fashion similar to that used by Aaron I. Cohen in the *International Encyclopedia of Women Composers*. Usage of the name authority file as the location of information should also be explored.

References:


