Compositional Design
some PRINCIPLES OF DESIGN

REPETITION
VARIATION
CONTRAST
BALANCE – symmetry/asymmetry
PROPORTION
ECONOMY
SCALE
Rhyme in poetry
TO THE STONE-CUTTERS

Stone-cutters fighting time with marble, you foredefeated
Challengers of oblivion
Eat cynical earnings, knowing rock splits, records fall down,
The square-limbed Roman letters
Scale in the thaws, wear in the rain. The poet as well
Builds his monument mockingly;
For man will be blotted out, the blithe earth die, the brave sun
Die blind and blacken to the heart:
Yet stones have stood for a thousand years, and pained thoughts found
The honey of peace in old poems.

Robinson Jeffers, 1924
Andy Warhol, 
*Orange Disaster No. 5, 1963*
Eadweard Muybridge, photographer
Some repetition in music

PHILIP GLASS

EINSTEIN ON THE BEACH

(an opera)
Monet *Poplars* . . .
Monet *Poplars* . . .
Monet *Poplars*.
Charles Demuth,  
*The Figure 5 in Gold*, 1928
Cimabue, *Madonna Enthroned*, 1280-90
CAILLEBOTTE, Gustave

*Paris: A Rainy Day*, 1877, Oil on canvas, 83 1/2 x 108 3/4"
Mozart Symphony No. 40 in G minor

The **motif** is repeated and varied – the music is built with this motif (aka motive)
VARIATION:
the alliance between repetition and surprise

The extensive poem, moreover, satisfies another two-fold requirement, one that is closely related to the rule of variety within unity: repetition and surprise. Repetition is a cardinal principal in poetry. Meter and its accents, rhyme, the epithets in Homer and other poets, phrases and incidents that recur like musical motifs and serve as signs to emphasize continuity. At the other extreme are breaks, changes, inventions - in a word, the unexpected. What we call development is merely the alliance between repetition and surprise, recurrence and invention, continuity and interruption.

Octavio Paz, “Telling and Singing” in *The Other Voice*
dancers
Repetition/Variation in Music

Small-scale repetition creates a sense of pulse, rhythm and meter

Motific repetition is used to build phrases

Large-scale repetition creates FORM
Repetition/Variation in Music

Small-scale repetition creates a sense of pulse, rhythm and meter

AAAAAAAAAAAAAAAAAA

AAA AAA AAA AAA AAA

repetition creates patterns and ostinati
Repetition/Variation in Music

Motific repetition is used to build phrases

ABCD ABCD EFGH ABCD

Motives can be varied

A a A A A a a A A A

Repetition is combined with variation

AABC AABC
Repetition/Variation in Music

Small-scale repetition creates a sense of pulse, rhythm, and meter.

Motific repetition is used to build phrases.

Large-scale repetition creates FORM:
- 4-bar units common
  - combine to 8, 12, 16 even
    32-bar patterns
- Classical forms can extend for many minutes

Classical forms can extend for many minutes.
CONTRAST
Martin Munkacsi
Black Boys on the Shore of Lake Tanganyika (1931) photograph
Night Attack on the Sanjo Palace (detail)
Japan, Kamakura period, second half of the 13th Century
Handscroll; ink and color on paper

16 1/4 x 275 1/2 in.
David Hockney, *Portrait of an Artist (Pool with Two Figures)*, 1971
Contrasts & Oppositions in Hockney’s *Portrait of an Artist*

- Diagonal/horizontal
- Straight/curved lines
- Air/water/Earth/*fire*?
- Natural/artificial
- Clothed/(nearly) naked
- Tint/shade (light/shadow)
- colors
CONTRAST IN MUSIC

ACROSS TIME

-OR-

SIMULTANEOUS
CONTRAST IN MUSIC

Contrasting melodic styles (rhythmic v. lyrical, reinforced by text & timbre) presented separately and then

SIMULTANEOUSLY

Example: polyphony in “Tonight” quintet from *West Side Story*
CONTRAST IN MUSIC ACROSS TIME

IMMEDIATE (JUXTAPOSITION)

TRANSITION

Example: Ravel String Quartet IV, vigorous 5/8 and lyrical ¾ sections
Giving or withholding in time
David,

*Death of Marat*,

1793
Withholding/giving example

Värttinä – Finnish folk-rock band

Diagram:

- **HIGH**
- **MIDDLE**
- **LOW (BASS)**

Axes:
- **TIME**
- **PITCH SPACE**
CONTRAST IN MUSIC

LOW – HIGH (contrast in register)
LOUD – SOFT
SHORT – LONG
articulation
TIMBRE
METER
MAJOR – MINOR
FAST – SLOW (TEMPO)

These are often used in combination
Listening to music
Listening *across* music
CONTRAST IN MUSIC

Mozart -- first movement from Symphony No. 35 in D Major, K. 385, "Haffner"
LOW/HIGH (contrast in register)

Contrast in timbre (sound color):
DOUBLE REEDS/BRASS/VOICES+PIANO
(double reeds = woodwind instruments: oboe, English horn, bassoon)
Leonardo da Vinci, *Proportions of the Human Figure* ("Vitruvian Man")
Shiva, bronze temple sculpture, Chola Era (9\textsuperscript{th}-13\textsuperscript{th} C.), South India
Frida Kahlo, *The Two Fridas*, 1939
Durer
*Dancing Peasants*
1514
BALANCED PHRASES

Eine Kleine Nachtmusik, 1st mvt

This could also be considered . . .
PROPORTION

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PROPORTION
Shahn, Ben, *Vacant Lot*, 1939
Watercolor and gouache on paper mounted on plywood panel, 19 x 23 in
Proportion in music

A matter of time, usually lots of time.

Example: 3 Beethoven string quartets (Op 59, 1, 2 & 3). Each in 4 movements.

No. 1 – BIG 1<sup>st</sup> mvt
No. 2 – nervous 1<sup>st</sup> mvt, BIG 2<sup>nd</sup> mvt
No. 3 – BIG finale (4<sup>th</sup> mvt)
ECONOMY

Picasso, *Guernica*, 1937
ECONOMY

limitation of a composition to a few essential elements; usually a voluntary constraint that is part of the creative process

SPECIFIC TO AN INDIVIDUAL WORK, NOT THE GENRE, TYPE OR MEDIUM

Examples in music: deriving everything from a single theme (musical idea), limiting the number of pitches, type of instrument, etc.

Steve Reich, *Music for Pieces of Wood, Clapping Music*, or other pieces


SCALE

SCALE - the size of a work compared to the environment: miniature, human, monumental. The term can also apply to musical works, although it has an entirely different meaning than “musical scale.” Then it is a matter of DURATION. (“A symphony is a large-scale musical work when compared to a song.”)
Claes Oldenburg, *Knife Ship I*, 1985

Vinyl-covered wood, steel, and aluminum with motors, dimensions variable, maximum height **31 feet 8 inches x 40 feet 5 inches x 31 feet 6 inches.**
Leaf from *Futuh al-Haramain* (Description of the Two Holy Cities of Mecca and Medina), mid-16th century; Ottoman, 8x5 in.
a bit bigger . . .
Some examples of time scales in music

Less than a minute - Miniatures – Chopin, Webern
Pop songs – 3-6 minutes
Early symphonies – 25-35 minutes
Later symphonies – 45 min - 1 hr
Longest – Mahler – 1 ½ hrs
Short opera – 2 hours
Average opera – 3-4 hours (including intermissions)
Long opera – 5 hours
Longest traditional opera – Wagner’s RING – 18 hours
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