

**ORCHESTRATION**  
**TRANSFIGURATION ENSEMBLES**  
**'TABLE OF THE ELEMENTS'**  
**INSTRUMENTS    ENSEMBLE DESIGN**

**TRANSFIGURATION ENSEMBLES**

**SUMMARY**

Transfiguration when applied to orchestration - a "recognizable instrumental aesthetic" with an external rationale - either monochromatic, having some perceived unity, is historically referential, or plural/anthological. Through "table of the elements" it is taken farther: pure sine waves are the basic/neutral material, then monochromatic ensembles represent elements, progressing to compounds and eventually toward the total set. These ensembles are somewhat archetypal, while "unique timbre" takes the opposite track - transfiguration through particularization/individuality, and "diversified monochromaticism" envisions shades within a unified ensemble.

Generalization/New Style significance:

NS:

"Stock modification" ideal  
 Table of the elements metaphor  
 Part of transfiguration strategy  
 Timbre/instruments used defines the object and language, the "color or material" of the world (2001) (combines w/ harmony)

Generalization:

Sine wave, perfect waves                      All overtones                      All parameters of sound  
 The "optimum" transfiguration ensemble given a particular object/work/idea                      By transfiguring potential  
 "Sound worlds"  
 All applicable/appropriate ensembles (by "cohesiveness" or "axiomatic" qualia)                      All historically hallowed ensembles  
 Diversified monochromaticism: all instruments/timbre variants of sufficient relation to sound/family/character  
 + Negative generalization: no...

Also: "historical ensembles" (a subheading of transfiguration ensembles)

Full commitment: use one instrument/timbre or a firmly legitimized compound and investigate it to its fullest

Introverted Transfiguration: articulations as transfiguring - what about "singing" or "sensitive" (expressive) instruments, for example?

FX: "Penderecki is better for lack of electronics (richer, warmer, more sinewy textures)"

+ EQ and spacing is much better (wide panning, fullness/hall sound)

**From Axiom: Instrumental aesthetic** (way of orchestrating) (see transfiguration ensembles)

see: transfiguration ensembles (this evolved into transfiguration ensembles)

Independent of axiom (in organic domain), but orchestration can be axiomatic

Recognizably monochromatic (Psycho OST)

One-instrument ensemble (Herrmann "Sea Garden", Evans 'Conversations with Myself')

Odd instrument combinations (Thomas Crown Affair, Herrmann)    odd percussion ("Chess Game")

Orchestral pluralism/constantly shifting combinations (American in Paris)

Especially expressive soloist, esp. of a unique instrument or timbre

Self-conscious use of an instrument's character (flute/piccolo, solo trombone/trumpet, tuba, bassoon etc.)

Solo of an odd instrument (anvil blows, piccolo, triangle, timpani etc.)

High-select/low-range select (melody only or entire part) (Vivaldi Spring break)

Extended technique as central (pizz in Handel Passacaglia, runs/gliss etc., all tremolo)

Way of playing melody: excessive tremolo, vibrato, legato, swell, port, *violently* (Handel Passacaglia), harmonics etc.

Cocktail piano ("His Eyes, Her Eyes") (genre)

Virtuosic solo piano (Tatum, Peterson) non-genre/open

Low-range pedal rumbling - non-genre/open - generalize to low-range/rumbling in general

Certain personality given to each instrument, with a "way to act" throughout a piece

A way to act; react versus other instruments/events

Vocal polyphony (fugue, scales etc. executed by voices - written as instrumental parts would be) (Baroque)

Sectional monochromaticism

Extreme pointillism, where *each note* is played by a different instrument (would need thousands of instruments)

each instrument only gets one note (a metaphor for life?)

**Sine Waves, "Original Waves":** mathematically derived

1. Sine Wave

2. Square, Triangle, Sawtooth, Pulse: non-sinusoidal (not pure sine waves)

**Piano/Rhodes:**

Bill Evans - Spartacus Love Theme: 3 pianos, panned

Leo/My Funny Val idea: low range piano w/ pedal

Ahmad Jamal - I Love Music: solo piano (upright bass/jazz drums at end)  
(any sonata, etude etc. for piano)

Joni Mitchell - Woodstock, Marvin Gaye - In Our Lifetime (Outro): Rhodes (intermittent sustain pedal)

Lonnie Liston – Garden of Peace: solo piano and Rhodes duet (Rhodes with optional echo)

Joni Mitchell - Ludwig's Tune: solo piano (intermittent: string quartet, close wind ensemble)

Joni Mitchell - Blue: solo piano (intermittent sustain pedal)

Chet Baker: upright bass, distant reverbed piano (mostly low), rides/hats (very low volume, intermittent), piano (low range only, pedal)

**Strings:**

Penderecki: string full orchestra (60+) (Penderecki)

all violin (high) all cello (low) all contra (low)

Beethoven Layer Test: 50 violins, 25 violas, 25 cellos

Psycho OST: string chamber orchestra (monochromatic)

JC Superstar - Judas Betrayal, Japanese Sandman: Soloist against tremolo close-mic strings

Salome: timpani and cello section (possible contrabasses) – deep sound

**Guitar:**

Radiohead - Faust Arp: acoustic guitar (2?), string quartet (or octet)

Beatles - Julia, Bob Dylan: acoustic guitar

Fleet Foxes - Tiger Mountain Peasant Song: 2 acoustic guitars, interlocking/panned

**Harp:**

General:

harp ensemble

Bernard Herrmann - Sea Garden: 12 harps, cello, low brass/strings

**Organ:**

Godfather 3 - Marcia Religioso, Herrmann - Obsession Main Theme: church organ and choir

**Brass/Wind Combo:**

Gil Evans - Miles Ahead: flugelhorn/lead trumpet, 4 trumpets, 3 trombones + bass trombone, tuba, 2 horns, 2 flutes, alto sax  
2 clarinets + bass clarinet, upright bass and drums

Porgy and Bess: +2 alto flutes, +1 horn

**Brass:**

Sweeney Todd: bass drum, timpani and trombone section (possibly deep French horns too)

**Synth:**

General:

'70s retro-futurism aesthetic

Switched On Bach: all-synthesizer (Moog)

True Progressives beat: unison stab saw

**Voice:**

General:

choir (Palestrina, madrigals, etc.)

choir and orchestra (Masses)

antiphonal choirs (several groups of vocalists)

Verdi Aida Duet: female soprano, male tenor, mixed choir (mostly in low range)

optional: high strings (high-line)

optional: string orchestra (soft)

Madrigals, Fleet Foxes: reverbed choir

Dr. Strangelove: male humming and marching drum

**Solo Drums/Perc:**

General:

solo timpani

timpani "choir"

Xenakis -Persephassa: “percussion ensemble”, bass drums, timpanis, tom-toms (pitched), tam-tams, thai gong, sirens, metal pipes, woodblocks, conga, piccolo snare drum, orchestral snare drum, cymbal (26”, 30”, 72”, ), maracas

Varese - Ionisation: 3 bass drums (medium, large, very large), 2 tenor drums, 2 snare drums, tarole (piccolo snare drum), 2 bongos, tambourine, field drum, crash cymbal, suspended cymbals, 3 tam-tams, gong, 2 anvils, 2 triangles, sleigh bells, cowbell, chimes, celesta, piano, 3 temple blocks, claves, maracas, castanets, whip, güiro, sirens (high/low), and a “lion's roar”

Drum Battle: solo drummers (3 antiphonally)

Johnny Got His Gun: drum group

Dr. Strangelove: male humming and marching drum

Pink Panther: hats and triangle

### Other:

#### Nature Specimens:

solo sub-bass	sub-bass and drummer	sub-bass and timpani
bongos, pitched		
808 and china cymbal (layered)		
female voice sample		
guitar strum, echoed (chord)		
saw synth	saw synth cluster	
marimba, pitched		
harp glissando		
obersweep synth		
Rhodes and bass object		
ride, pitched		
clap, pitched		
vibes and glock		
string fall and tambourine (layered)		

Echo Setting Suite: echoed piano, Rhodes, staccato strings

Chord Bend Experiment: synth and timpani

Afternoon of a Faun: 2 flutes, 2 oboes, english horn, 2 clarinets, 2 bassoons, 4 horns, 2 harps, 2 crotales and strings (10-10-8-10-6?)

Repons: glockenspiel, harp, vibraphone, cimbalom, 2 pianos, 3 violins, 2 violas, 2 cellos, contrabass

+ “large chamber orchestra” (2. flutes, 2 oboes, 2 clarinets in B, bass clarinet, 2 bassoons, 2 French horns, 2 trumpets in C, 2 trombones, tuba

Quartet for the End of Time: clarinet in Bb, violin, cello, piano

#### Le Marteau Sans Mairte:

1. alto flute, vibraphone, guitar, viola
  2. alto flute, xylorimba, tambourine, 2 bongos, viola
  3. voice, alto flute
  4. xylorimba, vibraphone, finger cymbals, agogo, triangle, guitar, viola
  5. voice, alto flute, guitar, viola
  6. voice, alto flute, xylorimba, vibraphone, maracas, guitar, viola
  7. alto flute, vibraphone, guitar
  8. xylorimba, vibraphone, claves, agogo, 2 bongos, maracas
  9. voice, alto flute, xylorimba, vibraphone, maracas, small tam-tam, deep tam-tam, low gong, large suspended cymbal, guitar, viola
- Total:
- alto flute, xylorimba, vibraphone, guitar, viola  
2 bongos, finger cymbals, agogo, triangle, maracas, claves, small tam-tam, deep tam-tam, low gong, large suspended cymbal

Penderecki -Partita: harpsichord, electric guitar, bass guitar, harp, double bass, glock, triangle, celesta

orchestra: 22strings, trombone/brass, 9 woodwinds

metallic: triangle, glock + harpsichord

possible additions: bell tree, ‘triangle tree’, tam-tam, cymbals

WTC, Continuum: solo harpsichord

Horizon Test 1: vibraphone (reverbed), marimba (for bass) (reverbed), triangle, chimes, gong

adds: glock

Shimmer Collage Test 1:

## Objects:

Lonnie Liston Smith - Garden of Peace: piano (arp/shimmer, lead), Rhodes (shimmer)Stylistics - People Make The World Go Round: wind, bell treeLegrand - Chess Game:

guitar melody      guitar strum + maracas shake      ratchet      harpsichord rolled chord + guitar

guitar strum + tamb shake      tamb roll      ride shimmer (high, light)

harp rolled chord + tamb shake      harp rolled chord      harp chord + ride/hat work

Norman Connors - Starship: Rhodes gliss/arp (desc) + underlying tamb and cymbal rolls, echoedRoy Ayers - Butterfly of Love: Rhodes shimmer + electric bass note, bell tree/chime, echoed

also: slight sibilance "s" from female vocal

also: full outro - Rhodes gliss, electric bass tremolo, big cymbal roll, chimes

Bill Evans - Spartacus Love Theme: 3 panned pianos - lead melody, accompaniment, bg runs, jewels, high rangeBobbi Humphrey - Baby's Gone: celesta (or Rhodes) run (up/down)

also: fuller sample w/ maraca shakes and electric bassline, piano

On The Waterfront: vamp: harp rolled chord + flute chord (alto?) + ambient from movieFugitive Kind: vamp: guitar strum, possibly contrabassoon in distance, bell/ring (cash register)In Our Lifetime Outro: chords + improv/arps, chopped Rhodes, reverbedKing Crimson - Moonchild: Rhodes (or vibes), guitar improv (2, panned?), harmonics, rolled chords, subtle ride work

later: tom rolls, vibes

Xenakis - Concert PH: glass cresc (long) - used as climax (actually burning charcoal?)Xenakis - Persephassa: timpani, tom-tom rolls, tam-tam shimmer, gong (possibly) - used as climaxRavel - Barque (Mirrors): piano, accompaniment pattern and melodyDFH samples: ride shimmer, echoed, low ride shimmer (lower pitch)Edirol: chime (upward), echoed, chime 2Culture: chime "glint" (upward, small), larger gliss up/down, chime "glint" (down), chimes (sustained incline), chime hits sustained 1 and 2 (beds)Sound Ideas: bell tree shake (long) - sounds glassyQuarter Flash beat: sine wave bass and piano + muted saw synths chordsInfamous 2 beat: organ (pitched), marimba (reverbed), sine bassBlack Gold beat: string quartet, 5th synth, French horn**Pop, Pluralistic Ensemble:**General:

easy listening reverbed (low drums)

symphonic soul (Isaac Hayes, What's Goin' On)

Marvin Gaye - Life Is A Gamble:

sax lead, low-volume reverbed soft trumpet), moog lead, vibes, cello(s), bell tree/rides, low strings, soft brass, tenor vocalist

Marvin Gaye - Trouble Man:

hard jazz drums/rides/low-volume congos, electric bass, guitar (countermelody), horns: sax lead/brass/low brass

vibes (doubling horn breakdown), moog (doubling horn breakdown), low-volume piano comping,

low vol close-mic strings (high lines and tremolo end)

Marvin Gaye - Shadow of Your Smile:

jazz brushes (barely audible), upright bass, string section (various ranges - high line, block/swell, countermelodies)

harp (gliss, strums), French horn (section?), flute/piccolo, oboe, glockenspiel jewels

Michel Legrand - Chess Game: harpsichord (jewel), acoustic guitar, string section (tutti, low soft/block, pizz, trem), harp, trumpet/soft brass section

jazz section: jazz brushes/rides, upright bass, piano comping, sax lead

perc: guiro, tambourine, shaker

2nd lull: xylophone, french horn, string section, vibes, bassoon, jazz guitar, piano accomp, harpsichord

adds towards end: hat-work, muted trumpet, upright bass (pizz), low/soft strings, contrabass line, flute line

Piccioni - Easy Lovers: rides/rim, electric bass, soft strings/brass, alto flute and soft tenor sax leadsMichel Legrand - F Is For Fake (Picasso Scene): electric piano/high strings (melody, later doubled by glock), electric bass, harp gliss

background: distant winds or pedaled Rhodes chords (barely audible), alto flute ornamented countermelody

later: full string section, glock, jazz drums

Barbieri - Last Tango: loose percussion and bass ensemble (raw) against small but powerful orchestra (audible texture), jazz soloists

(chamber music) odd percussion      timpani      upright bass (or electric) plus contrabass

Franco Micalizzi - Jessica's Theme 2: sax (alto/soprano?), drum set (rides/cymbals/some toms), congos/woodblock

electric bass (moog bass?), electric piano comping/chords

Isaac Hayes - Runnin Out of Fools: French horn (or trombone) and electric bass, female close chorus, bell tree + wah-wah guitar

**With Pop Drums** (main use of kick/snare)Cortex: voice, drums, electric bass, piano, rhodes, synth lead (also: sax, mellotron strings)Led Zeppelin - No Quarter:rock drums, distorted/fuzz bass (or synth?), guitar (fuzz fx, jeweled strum, solo), piano (reverbed/sustain-pedal), chopped Rhodes  
synth/tape FX (gliss, clusters)Led Zeppelin - Since I've Been Loving You: rock drums (room mic), bass, guitar (fuzz, pedal FX, ext'd technique), organ (mod to Hammond)Led Zeppelin - Rain Song: guitar (strummed/picked), vox, Mellotron strings (intermittent: drums/toms, bass, rock drums at end)Jimi Hendrix - 1983: rock drums, distorted guitar (picking/strumming lead + ext'd tech/fx), bassSantana - Every Step of The Way: drums, percussion (cowbell, timbales, congos/bongos), upright bass, distorted guitar, lead guitar, organ  
orchestral: flute, orchestral horn section (trumpets, French horns?), wind section, string clustersAl Green - Still In Love With You: "dead" drums (plus tom, rides), bass, organ (soft, low volume), jazz guitar, dead horns, close-mic violins  
low Rhodes comping (2nd verse)?Dorothy Ashby beat: drums, electric bass, harp (and harp overlays)**With Jazz Drums:** (main use of kick/snare)Classical Jazz Quartet: marimba (alt. w/ vibes), piano, upright bass, drums

# ORCHESTRATION

## 'TABLE OF THE ELEMENTS'

### SUMMARY

An analogy and organizing heuristic for timbre and ensemble - seeing single timbres as elements, since updated into an expansion to 2nd-generation chemicals (compounds, substances), and seeing the continuous growth/invention of chemicals from the basic elements as a metaphor for music and a reification analogue. As harmony is emotion/color, timbre is material/color. The orchestration of reification objects gains inspiration from this gateway - rendering a shimmer in glockenspiel could represent diamonds, for example. The most basic element is the pure sine wave, with the power to render "objective" objects. As each element has its own properties, each timbre has its own symbolic associations and character.

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#### Generalization/New Style significance:

NS:

Reification metaphor - as "material" or "chemical composition" of object (POTU(G))  
 "Stock modification" ideal  
 Tone-edit palette

#### Generalization:

Sine wave, perfect waves	All overtones	All parameters of sound
All possible timbres (discovered/undiscovered)	Future timbres	Impossible timbres
All combinations and ensembles	All applicable combinations/ensembles	All possible doublings/shadings
"Sound worlds"		
"Table of the elements" - systematic taxonomy		
All uses of timbre/ensemble		
Monochromaticism	Totalized plurality	
+ Negative generalization: no...		

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Heuristic for timbre: table of the elements is better represented as 2nd-generation chemicals (compounds, substances) (out of 100+ basic elements, continuous growth/invention of chemicals.)

Single/monochromatic (atom > element: made up of one type of atom)  
 Compound (molecule > compound: more than one type of atom/element at the smallest level)  
 Compound ensembles are potentially endless (combinatory)  
 Ensembles (akin to medium combinations)  
 = Analytic chemistry      Mixtures, compounds, elements      Molecular proportion  
 = Chemical formulas  
 = CAS number + unknowns (UVCB's)  
 Theoretical chemistry  
 56 million registered substances, 62 million sequences.

*See how many there are* - this is not an easy task simple task - there are probably thousands of *basic* timbres  
 Dictionary of timbres (should be 1000's)

see: Smithsonian gem collection      "forged out of one material/element" (also: compounds, etc.)

see: Audio Benchmarks

"Material" analogues: in the abstract art metaphor, orchestration is somewhat like medium

Still, it would be incorrect to strip the instruments of their autonomy by wedding them to a physical medium (i.e. deeming flute "gold"...)

They are their own world, *not exact analogues*

Make subsidiary list of artistic mediums

wax	rubber	wood	glass	pen and ink	metal (bronze, silver, gold, platinum)
gems (diamonds, rubies, turquoise, amber, crystal)			plastic	pencil	charcoal
paint	lace	etching	etching in glass		
photography					

Nature specimens imply that every timbre-object could be 'developed out' to a full composition (nature specimens generalized)

Like piano and quartet, every monochromatic family or specimen has the potential to represent whole worlds (Diabelli in vibes/glock? etc.)

Any timbre can be 'expanded' into a whole work

Timbre objects (one note): able to be sampled to render an entire composition in single, unique timbre  
 (more akin to art's more highly differentiated mediums)

+ Articulations - behaviors/articulations as sub-category (e.g. words for voice, etc. strum vs. guitar note (very different))

Differentiate between ranges (low selection/high selection)

Also: unique descriptions as sub-category (esp. w/ hyperlinked sample)

FX on them, EQ etc.      "sinewy", etc.

+ Pitchless timbres (metallic percussion, fx etc.)

"Casting" any piece vs. composing a piece around an articulation (Nature Specimens)

Instrument + technique = pervasive axiom cast in a medium creates an "timbre object"

It would be difficult to cast a polyphonic piece using an articulation (esp. if it has multiple notes, like a strum/chord)

## ORCHESTRATION IDEAS

**Exponential treatment:** A work is subject to multiple orchestrations, changing its nature each time  
 Interchangeability: Sub in different instruments that can perform the same function or effect  
*Counterintuitive Treatment (Emotion):* Treat musical material in a contrary/contrasting way to its emotion (emotional complexity)  
 Soften intensity, lighten darkness, darken lightness, etc. Genre treatments to thwart a certain emotion for counterintuition  
 Instrument/Sound Invention: Pioneer new sounds – invention  
 Musical Texture:  
     polyphonic (distinct lines)                      homophonic (melody and accompaniment)                      monophonic (no harmony)  
     thick/thin  
 Unplayability as Future Technique: Unplayability is not a problem - it will be resolved in future generations  
 Make sure the difficulty is warranted (i.e. avoid being difficult for no reason)  
 Music Profile: How much use of acapella – does music dot a canvas of silence or cover it? (lower or higher “music profile”)  
 Acapella parts/arias? Verses? Sections? Etc.  
 Orchestra Size  
 Balance in Expansion/Reduction: Maintaining or modify original/optimal ratios when expanding/contracting number of overall players  
 Clarity of Orchestration: Use arrangements/choices with clarity *as goal* - small ensemble, well-defined instruments, spacing  
 Orchestral Balancing: “EQ’ing” the orchestra with dynamic markings  
 Dynamic Limiting: Limiting the dynamic range of a piece (entirely Piano and less, etc.)  
 Instrument Range (Size): The range of an instrument – large or small? Possibilities to exploit big or small/restricted range?  
 Full Range: Create phrases/objects that go the full scale of the instrument’s range  
 Timbre as theme (Debussy)

**Spacing:** How melodies/harmonies are split amongst ensemble

*Split Parts:* Sections in orchestra can be split, esp. with monophonic instruments (i.e. in section of 4 oboes, each plays different line)  
 Visual Split Parts: Onstage (in orchestra), low strings are separated from violins etc., creating potential for splits/interaction  
 Distribution of Tones: Especially when working with large ensemble  
 Space between voices (close vs. open etc.)  
 Doubling: Double lead vocal with another instrument  
     Interval/Octave Doubling: Double instrument(s) with others at higher/lower octaves/intervals  
     Unison Doubling: Layer two or more instruments on same melodic line, creating a unique sonority  
 Chord/harmony tones (“broken chords”)  
 Ranges of instruments involved/tessitura  
 Voice crossing

**Solo/Tutti:**

Ensemble vs. Sub-Ensemble (a subset of the original/total ensemble)  
 Ensemble vs. Soloist  
 Sub-Ensemble 1 vs. Sub-Ensemble 2 (2 or more subsets of the total ensemble *interacting*)  
 Percussion/Drum vs. Melodic Instruments  
 Concerto Aesthetic: Solo vs. Tutti, Soloist and Tutti, soloist vs. sub-ensemble, soloist as part of sub-ensemble vs. sub-ensemble etc.  
 The one versus the many (dramatic construct)  
 Soloist as the “decisive” element in concertos (as the “intelligent individual”, interpreting, resolving, clarifying, commenting etc.)  
 Geometries: Sectional or constant interaction, interruption etc. (many interaction geometries possible)  
 Preparing for entry of soloist: How does the orchestra/ensemble “set up” the soloist?  
 Solo/Tutti Reversal: Reversing roles of tutti and soloist in a later section (reinterpretation, they play each other’s parts)  
 Solo/Tutti Phrase Division: Dividing phrase between solo and tutti (one completes the other)  
 Solo/Tutti Competition: Solo and tutti parts in escalating competition  
 Solo/Tutti (Percentage): The amount of each within a composition – primarily solo or tutti? Even? Only certain moments of one/other?  
 Tutti (Accent): The presence of tutti on weak beats creates syncopation/shift of weight

**Orchestral Variance:** Varying of orchestral color/distribution of parts throughout piece

Orchestral Juggling: Orchestration play, intense recombination/recasting of ensemble/instrument throughout piece (Stravinsky-esque)  
 Layering, staggering, voice inversion, application of voices in counterpoint, pointillism/breaking up lines  
 Avoiding literal repetition of a melody – give it to a different instrument/combo each appearance  
 Pointillism: Parts of a single phrase applied/given to different instruments (each note?)  
 Orchestral Part Distribution: Distribute musical material among different instrument parts (fragment>distribute)  
 “Only” Parts (Symphonic/Orchestra): Parts featuring one section only (string, brass, wind, percussion), then add the others back in

**Polyphonic Build (Vocal or Instrumental):** Adding/building successive vocal parts over time within a part/piece – layering etc.

Polyphonic Build (Whole Piece): Build over whole piece, collage/layering (especially effective when drumless) – relatively static?  
 Outside options: New section, breakdown and begin build again, new ensemble/instrument, re-interpret build w/ different idea/emotion  
 Sub-Ensemble: Isolate certain elements from ensemble as a sub-ensemble  
 Octave Layering (Build): Building on a riff using octave doubling w/ new instruments to increase energy and build

Breaks: Dropouts/silence for vocal/soloist emphasis                      Break for *dramatic entry* of a soloist/vocalist

**Dialogue:**

Instruments As Characters: Each instrument/group of instruments cast as a character/group

Accompaniment Orchestration: Role of accompaniment passes to different instrument groups/families

Instruments in ensemble transform/"convince"/impact another instrument throughout the piece, changing its nature by the end

Full Ensemble Delay (Climactic): Ensemble appears together for the first time at a climactic moment/part

(having previously been divided into solos or duets/subsets) – or consistently breaking up the ensemble and reuniting

Sung Countermelody: Melody taken by instruments while countermelody is sung as lead

**Elastic Scoring:** Flexibility of music in being played/performed by varying ensembles

Lateral Scoring: Re-scoring for a similar ensemble, resulting in tone color change only

Expansion Scoring: Re-scoring from a smaller score to a larger one

Contraction Scoring: Re-scoring from a larger score to a smaller one (Reduction)

Non-Instrument Composition: Composing w/o regard for ranges of instruments – then orchestrating later based on range need

Pure Sound: Sound for sound's sake

Re-orchestration of current/past works

**Timbre/Sonority Variation:** The different sonorities possible within each instrument (more varied than you think)

low/high velocity

playing technique

extended technique

modifiers inherent in the instrument (mutes, pedals, resonators)

Electronic instruments

Pitch Variance (Organic): String instruments adjusting pitch note-note (sharpening leading tones for instance), bending etc.

**Extended Technique:** Counterintuitive/unnatural/nontraditional ways to play an instrument

Unusual Registers

**Pitch Level Choice:** Selecting a high-register ensemble for part (or a low one) for a part/section etc.

Transposition of material to a certain register (high, low) for effect

Register Exaggeration: Transposing high and low features to higher and lower registers respectively

The highest octaves of the piano

Low Section (Orchestration): Range-limiting a section of music to only low instrumentation

High Section (Orchestration): Range-limiting a section of music to only high instrumentation

High-Low Section (Orchestration): The presence of high instruments recedes, leaving lower instruments

Low-High Section (Orchestration): Beginning with low instruments, the presence of high instruments gradually increases to climax

Naked Minimalism (Orchestration): Purposely bare orchestration (such as vocalist and one instrument) to *concentrate focus*

Drops: Events on downbeat, esp. on beat 1 of a measure

Wah-Wah Drop: Sustain beginning on beat 1, with wah-wah or chopped effect

Fall Drop: Instrument fall on beat 1

Echo Drop: Instrument echo all on beat 1

Stab Drop: Instrument staccato stab on beat 1

Notch Stabs: Staccato 'stabs' for emphasis on an accent

**Transition** (Beat 4 and before)

**Build** (Before bar 1): Build to the bar-one with a transition effect (how early to start it?)

Glissando, timpani/tom roll, echoing build, shimmer, reverse cymbal, FX

**Articulations:**

Articulation Change: Gradual change in articulation, such as staccato>Legato, vice-versa – communicating a change in idea

Speed of vibrato (Strings, guitar)

Tremolo Bed

Staccato Value/Amount: Note-value or extent of staccato

Familiar Over the Experimental: Juxtapose a familiar theme/idea/style/form/melody/prog against odd/avant-garde/different genre conventions

Layer over the experimental aspect or maintain its prominence?

Chord progressions: how to freshen typical progressions?

Harmony Delay (Orchestration): Delay reinforcement of harmony under melody: (at quarter or half bar etc.)

**Physical/Spatial:**

Physical Thinking: Think physically/tangibly about what can be done on an instrument – think in terms of the physical action

Bowing styles, articulations, physical musician gestures

The Performance:

Visual/Physical Interaction (Musicians): The visual effect/information from the physical movement and interaction of players

Ensemble/instrument/performer placement

**Tuning:** Temperaments

Microtones

Detuned/off-key



## INSTRUMENT OVERVIEW ORCHESTRATION IDEAS CONT'D

### V O C A L S :

#### Singer/Solo Voice (Word/Wordless):

Male: Countertenor      Tenor      Baritone      Bass  
Female: Soprano      Alto/Mezzo-Soprano      Contralto

**Chorus/Choir (Word/Wordless):**      Choir (Men, Women, Children)      Background Singers      Sampled (original, pitched up/down).

Types: Words/Lead, Wordless/Scat, Pop/Operatic/Ethnic, Sampled (original, pitched up/down)  
soloist, background soloist/duet, solo/tutti, ensemble (small/large), polychoral/antiphonal (why??)

#### Vocal Spectrum:

Speaking: Whispering, spoken word/dialogue/narration, acting, movie clip, oration, rap, chanting

Speech-Song: Recitative, sprechstimme, sing-song rap

Pop-Singing, scatting, wordless etc.

Operatic Singing

Transgressive: Yelling/shouting, screaming

FX: Crying, laughing, acting, imitating instruments/nature

#### Behaviors/Concerns:

Solo/duet/ensemble/split parts

Wordless (Aa, Ba/Bop, Da/Doo, Ee, La, Oh/oooh, No/na, Woo/wow/wah/whoa etc.), scatting  
(any behavior can be imitated by chorus/choir)

Slurs/bends, melisma, ornamentation, mimicking the articulations of most instruments, programmatic

open-mouth, closed mouth

Register (chest, head, falsetto/whistle)

Acapella

Call/response

Harmonization (w/ other instruments, with each other)

Vocal Emotion/Effect: Any emotion can be expressed through manner of singing

Voice Inversion: SATB etc. alternate who has the main theme, *thus an accompaniment parts turn into main theme,*

while the main turns accompaniment – all seamlessly?

SATB Phrase Orchestration Echo: Phrase/figure is echoed through all voices, similar to a canon (layered or not?)

Acapella Break: After build, accompaniment cuts out for an acapella section with one/more singers

Vocal Layering

Vocal doubling/'stacking'

Octave-Dividing (Vocal Layering): Layering high, mid range and low vocals for effect

Layering vocals/undertones/doubles (whispering – yelling)

Underlying whispers (overdubbed)

Overlapping: Layer verse over chorus etc. for climax of song

Scatting

Vocal Scatting vs. Instrument Solo/Line: Exact imitation/overlap (singer imitates soloist), or counterpoint to it/question-answer?

Instrument Imitates Singer: Instrumentalist imitates or answers phrase/statement by singer

Talking/Narrating as Central: Throughout a large part of the piece, perhaps juxtaposed with a background singer (singing chorus or title)?

Call and Response: Between singers, singers and chorus/background singers or instruments (affirming the call? answering it?)

Background Singer Question/Answer: Background singers ask a question, answered by a lead singer (or vice versa)

Background Singer Repetition: Background singers repeat ending parts of lines by lead vocal, or a single word (can be a mantra effect over time)

Background Singer Leading: Background singers *sing the leading vocal lines* while the lead vocalist responds or improvises on their line

Straight Chorus: Background singers sing the normal (as written) lines, while the lead vocalist improvises/responds/embellishes

Background Singer/Lead *Interplay*: Background singers filling in/alternating/completing words/phrases with lead singer

Background Singer Intro: Background singers as prominent in intro, perhaps singing word from title

Instrumental Section with Background Singers: Lead vocal missing, background singers still do the parts as if it's there (or modify/improv)

Background Singer Bridge/Break: Arrangement for background singers, words or wordless, as bridge or break

Background Singer/Choir Build: Add build by bringing in background singers

Acapella Aesthetic: SATB choir must act as all elements in a piece – bassline, accompaniment, imitation of instruments, lead voices, background

Vocal layering      musical pictorialism      alternation

Speaking vs. Singing: Speak a verse/chorus (etc.) for a non-literal repetition, after it has already been sung

Echoed Vocals: Lead and/or background vocals echoed

Vocal Stabs: Words or wordless

Chants

Ad-libs: memorable talking/skits between verses (intro/outro, bridge etc.)

“Punching in”/overlapping vocal takes on different lines/words (Cormega)

**INSTRUMENTS :****Strings:**

Violin(Fiddle) Viola Cello Contrabass  
 Asian/Middle-Eastern Strings Erhu (China) Sarangi (India) Mellotron

Expressive Devices: (preferably a variety and/or layered) soloist, background/countermelody, block, divisi/polyphonic, tutti  
 Timbre/Tone  
 Dynamics (forte, piano, dim/cresc) Crescendo/swell/fade-in, diminuendo/fade-out, swells  
 Range (bass, mid, high) high-line Tessitura vs. extreme high/low ranges harmonics  
 Sustain/legato  
 Marcato/martele staccato/spiccato  
 Pizzicato (Bartok/col legno)  
 Bowing (up/down, point vs. heel), positions, open strings, double/triple+ stops, harmonics, with mute  
 Tremolo (measured tremolo), deep tremolo + cresc/dim (scream)  
 Vibrato/expression, tremolo  
 Pitchbend, portamento/approach portamento, grace note/slur, falls, microtones (between notes)  
 Glissando (up/down), approach glissando, swirling (up/down alternating glissando), wails  
 Trill (half/whole note/octave+), forte/mass trill,  
 Rhythmic device/ostinato, arpeggio  
 Clusters  
 Doubling (interval/octave)  
 doubled with percussive instrument (glock, jazz guitar, etc.)  
 Definition: close-mic/quartet etc. vs. background/reverbed/nebulous/ambiguous  
 FX/extended technique: harmonics/mass harmonics, bowing, hits on wooden part w/ bow, transgressive

**Winds:**

Piccolo Flute Alto flute Folk flute Ney flute  
 Oboe English Horn  
 Clarinet Bass Clarinet  
 Bassoon Contrabassoon  
 Recorder Bagpipe/Uilleann Pipes Accordion/Concertina Harmonica Whistle (Human, Irish)  
 Duduk (Armenian) Shakuhachi (Japan) Shehnai (Persian) Didgeridoo

Expressive Devices: (preferably a variety and/or layered) soloist, bg/countermelody, solo/tutti, block, divisi, choir/polyphonic  
 Timbre/Tone  
 Dynamics (forte, piano, dim/cresc) Crescendo/swell/fade-in, diminuendo/fade-out, swells  
 Range (bass, high-range select) Tessitura vs. extreme high/low ranges  
 Sustain/legato/piano forte staccato/short staccato  
 Vibrato/expression  
 Accent/attack rapid repetition  
 Run/glissando (up/down), swirling (up/down alternating glissando)  
 Trill (half/whole note/interval)/flutter tongue, layered trills/trill masses  
 Grace note/slur, bends, drops/falls  
 Organic action  
 Doubling (octave), rhythmic device/ostinato, arpeggio, see-saw interval alternation, interval ostinato  
 Definition: close-mic/chamber etc. vs. background/reverbed/nebulous/ambiguous  
 Clusters  
 FX/extended technique: harmonics, key click, echoed

**Horns (Pop & Orchestral):**

Trumpet Soft Salsa Muted Flugel Horn  
 Sax: Soprano Sax Tenor Sax Alto Sax Baritone Sax  
 French Horn (Horn) Wagner Trombone Tuba

Expressive Devices: (preferably a variety and/or layered) soloist, bg/countermelody, solo/tutti, block, divisi/polyphonic  
 Timbre/Tone, air/tone  
 Dynamics (forte/bright, piano/soft, dim/cresc) Crescendo/swell/fade-in, diminuendo/fade-out, swells  
 Range (low/high, low vs. high) Tessitura vs. extreme high/low ranges  
 Stab/staccato/short stac/honk (stabs) Sustain/legato/piano forte Sforzando  
 Vibrato/expression/modulation, vibrato vs. straight  
 Grace note/slur/slide, falls, run/scales, glissando (up/down)  
 Trill (half/whole note/interval), shake  
 Organic action  
 Rip, scream/growl (forte/air), descent after phrase (sax), smear/transgressive  
 Muted  
 Definition: close-mic/quartet etc. vs. background/reverbed/nebulous/ambiguous  
 Rhythmic device/ostinato, arpeggio  
 FX/extended technique: Wah-wah/plunger, false fingering, harmonics, honk/transgressive, echoed

**Guitar:**

Acoustic Guitar (Acoustic, Folk, Classical, Spanish)  
 Electric Guitar (Rock/Electric, Distorted/Fuzz, mute, slide, Wah-Wah, LA plucked)  
 Jazz Guitar  
 Sitar (traditional, electric)                      Ukulele                      Banjo                      Mandolin

<p><u>Expressive Devices:</u> (preferably a variety and/or layered)                      guitar as chord holder, guitar as comping soloist, guitar soloist</p> <p>Timbre/Tone</p> <p>Dynamics (forte, piano, dim/cresc)</p> <p>Range (bass, high-range select (Layla outro effect), low-range strumming vs. high</p> <p>Vibrato</p> <p>Melody instrument (main, riffs etc.) (see grace note, pitchbend etc.)                      lilting/bottle melody (Layla etc.)</p> <p>Strumming patterns (on intervals or chords) - usually varied throughout work depending on feel)</p> <p>                    strummed comping/voicing (strumming chords that contribute to voicing, not just root-chords)</p> <p>                    strummed “drops” (intermittent strums) (MJ, others)</p> <p>                    open-string strum vs. interspersed chops</p> <p>                    pitchbended strums</p> <p>                    block chords (strum on beat 1 only)</p> <p>Picking/arpeggio patterns (pick or finger?)</p> <p>Grace notes, grace note “chips”, anticipations, falls/chorded falls</p> <p>                    trills, mordents, turns, chirps</p> <p>Pitchbend (string bend/neck slide/bottle) - pitchbend on melody, intervals and chords                      neck-slide after phrase</p> <p>                    (half-note to many octaves)</p> <p>Runs (ornamented/straight), glissando, crossfire, echoing glissando (up/down), cascades (down)</p> <p>                    chorded/interval runs/ornaments/bends</p> <p>Jewelling/rolled strums (up/down)</p> <p>Chops/mutes (hits on upbeats, often doubling snare)</p> <p>Muted picking</p> <p>Tremolo/fast strum (“mandolin” FX - on chord and one-note)</p> <p>Forte playing</p> <p>FX/extended technique: bowed, wah-wah, harmonics, wails/screams, sustained note, echoed</p>
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**Bass:**

Upright Bass                      Fuzz/Electric                      Slap                      Contrabass/Upright Bass                      Contrabassoon                      Tuba

<p><u>Expressive Devices:</u> (preferably a variety and/or layered)                      bass as foundation/ bass as doubling/ bass as soloist</p> <p>Timbre/Tone</p> <p>Dynamics (forte, piano, dim/cresc)</p> <p>Range (high/low)</p> <p>Vibrato</p> <p>Sustain/legato vs. staccato (and how much staccato)</p> <p>Pluck/slap/finger/pick, pulsing/literal repetition (4ths, 8ths, 16ths etc.)</p> <p>                    pedal-hand pluck (upright/walking bass) - slapping/pulling</p> <p>Patterns (walking/see-saw/octave alternation, same-note)</p> <p>Pitchbend/grace notes (string bend/ neck slide)/octave bends, “rev”, glissando</p> <p>Trills/Ornamentation</p> <p>Pedal point/root playing (cementing tonality), melody or riff doubling</p> <p>Arpeggio/rhythmic device</p> <p>FX/extended technique: bowed vs. plucked, harmonics</p>
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**Plucked:**

Harp                      Dulcimer                      Cora                      Koto                      Shamisen

<p><u>Expressive Devices:</u> (preferably a variety and/or layered)                      as chord-support / as doubling/ as soloist, as comping (like guit)</p> <p>Timbre/Tone                      Vibrato</p> <p>Dynamics (forte, piano, dim/cresc)</p> <p>Range (low/high)</p> <p>Hand used (L/R)</p> <p>Plucking (short/med/long), plucking pattern</p> <p>Arpeggio, accompaniment patterns</p> <p>Melody/melody doubling, chorded melody                      grace note/ornamentation</p> <p>Jewelling/rolling, strumming, chording</p> <p>Glissando (up/down, diatonic/chromatic, chord-based, other scale), runs (up/down)</p> <p>                    swirling (up/down alternating glissando), cross-fire (L/R opposition), contrary-motion gliss, accelerando/decel gliss</p> <p>Trill (half/whole note/interval), ornamentation,</p> <p>Tremolo</p> <p>Harmonics, cluster, muted</p> <p>Ostinato/rhythmic device</p> <p>FX/extended technique</p>
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**Keys:**

Piano (Classical/Grand, Upright/Honky tonk)                      Rhodes/Wurlitzer  
 Harpsichord                      Clavinet  
 Organ (church, Hammond B3/B4, Rock etc.)

Behaviors/Concerns:

Pedal (sustain etc.) vs. staccato (dry)  
 Velocity (percussive/soft)  
 Left/right-hand placement/spread, right hand chording  
 Broken chord/arpeggio/pattern/ostinato/rhythmic device, inversion  
 Spacing/keyboard range (wide/narrow)                      high range selection, low range selection  
 Jewelling/rolling  
 Grace note(s) (upper, lower), anticipations, appoggiaturas, octave-double stagger  
 Glissando/run (up/down), trill (half/whole note/interval)  
 Crescendo/swell/fade-in, diminuendo/fade-out  
 Tremolo (bass/treble)  
 Tone cluster  
 FX/extended technique

**Percussive:**

Glockenspiel                      Celesta                      Xylophone  
 Marimba                      Vibraphone                      Music Box                      Crotales                      Chimes/Tubular Bells                      Steel Drums

Behaviors/Concerns:

Left/right-hand placement/spread  
 Spacing/range (wide/narrow)  
 Arpeggio/pattern/rhythmic device  
 Sustain /staccato/block  
 Jewelling/rolling, glissando/run (up/down), trill (half/whole note/interval), grace note  
 Tremolo (bass/treble)  
 Melody/instrument doubling  
 Tone cluster  
 Crescendo/swell/fade-in, diminuendo/fade-out,  
 Velocity (percussive/soft)  
 FX/extended technique

**Synth:**

Leads (Moog, Sweep, Saw, Square)                      Pads (Sweep, Morph, Saw, Square, etc.)  
 Instrument Imitations (brass/strings/voice, Mellotron etc.)  
 Bass(bass, sub-bass)  
 Sequences/Arpeggios (woodblock-like/staccato, bell/crystal)  
 Currents/motion synths  
 FX                      Theremin

Behaviors/Concerns:

Mono vs. poly  
 Type of synth  
 Sustain/legato vs. staccato  
 Mod wheel/expression  
 Pitchbend (half-tone to extreme 2+ octave), portamento (off-key)  
 Crescendo/swell/fade-in, diminuendo/fade-out  
 Doubling  
 Drone  
 Current/slow pitch incline/decline, background/distant harmony  
 Rhythmic device  
*Instrument imitations/behavior imitations*  
 Arpeggio, Glissando/runs, swirling, ornamentation  
 FX

**FX:**

Wind Machine  
 Nature (birds, wind, rain)  
 Environment Sounds (recorded from real life)  
 Scratching/DJ'ing  
 Vintage Needle Scratch

# PERCUSSION

## Traditional:

Kits: Close/Damped, Ambient/Overhead/"Gutbucket", Jazz/brushes

Individual: Kick Snare/Rim Toms Hi-Hat (closed/open) Ride Crash/Cymbal/Splash

**Secondary:** Clap/Snap, Tambourine, Cowbell, Triangle, Woodblock, Vibra Slap, Washboard, Chimes/Bell Tree/Bells

**Orchestral:** Timpanis/Timpani Rolls, Orchestral Cymbal, Snares (march/field ensemble), Mahler Hammer, Metal Plates/Thunder Sheet, Orchestral Ratchet, Anvil/Artillery Shells

**Human:** Stomps, Handclaps, Snaps, Beatbox/Mouth FX, Heartbeat, Chants, Vocal Shouts ("whoop" etc.), Male, Female Vocal Sounds

**Asian:** Taiko/Kokiriko, Gong, Gamelan Chimes, Tam Tam (metal)

**Middle Eastern/African:** Tablas, Darabuka/Djembe/Doumbek, Framedrum/Tambourine, Dunun, Rainmaker

**Spanish/Latin:** Agogo Bells, Angel Heart, Cabasa/Afuche/Shaker/Maracas/Shekere, Cajon/Yamboo, Castanettes, Claves, Congo/Bongo, Guiro, Sourdo/Bagarabou, Tam Drum, Timbales  
Samba Ensemble

**Synthetic/Sampled/Found:** Kits: Drum Machine/Synthetic: 808 etc., Power, Boom-Bap, Breakbeat (sampled/one shot, chopped/industrial) Industrial, Bare/Minimalist Kit

Individual: Synth/"Space" Toms, Claps/Snares: Drum Machine/Processed, zaps, Buckets/Trash Cans/Junkyard, Metal Grid/Shopping Cart, Impact FX, Transition FX, Found Sounds, Metronome etc.

### Behaviors/Concerns:

Timekeepers (constant)(vs. variation overlaid)/syncopation/polyrhythm

Size/gate, thickness (full vs. high or low-select)

Solos

Rolls/shimmer/glissando

Hits, hand vs. stick

Swing (unified vs. juxtaposed), staggering

Velocity (percussive/soft)

FX/extended technique

## Drums/Percussion:

see also: Drum Process Killing Drums

Breakbeats (Intermittent): Design, notate and include in score – challenge expectations of 'classical' and 'orchestral'

Drum Solo

Drum Break: Break in work for percussion/drums, possibly w/ sub-ensemble over it, or just singers

Drumrolls

Ghosts

Climactic Density Increase (Drum): Patterns become *more dense* at same tempo, implying more action/intensity (8ths to 16ths)

For instance, normal kick-snare to 4-on-the-floor to 8-on-the-floor

3/4 Swing Break: Waltz-esque swing – typically for switches to up-beat/optimistic parts

Binary Form (No Drum/Drum): Dualism represented by no-drum sections/verses juxtaposed with drum-sections (chorus?) – drums more amped

Calm Music vs. Drum Action Injection: Drumless harmonic/melodic elements enlivened by sudden inclusion of *drum action*

Shimmer (Percussion): Rolls/glissandos by instrums/perc/drums

Shimmer Break: Rolls/glissandos by instrums/perc/drums act as break in rhythmic momentum

(timelessness?) how long to sustain? Build/fade? With free improvisation?

Drum-Fade Out: Drums fade out, leaving the orchestration in suspension/isolation (leaving same tempo or free tempo?)

Percussion Stripping: Transfer musical material to atonal percussion instruments, thus preserving only the rhythmic qualities

Drums vs. no drums

Options Rides vs. hi-hat Rim or snare?

Rolls: Congo rolls, timpani rolls, drum rolls

Substitution: substitute anything for anything else (percussion/drums)

Drum variation throughout song: think like a drummer

Consistency of Rhythm: Drummer consistent, small variations (small fills and notches) or unpredictable?

Timekeeping: Percussion as dividing/clarifying beats, element of consistency

Hi-hat or other percussion is consistent, while everything else flows/freeform/notching

Variations over a constant background rhythm (Taiko's, jazz)

Internal meter variation against timekeeper

Timekeepers: Hat, rim, cowbell, etc. (keep simple time or polyrhythm/syncopation)

Layered hi-hat with other percussion

Drum Machines: Objective timekeeper (w/o snare/kick, just hats, toms, perc etc.)

Secondary Percussion: Congos/bongos, shakers, tambourines, claps Taikos: Multiple Taiko's play at once – hi-end: cymbals

Percussion Texture:

Metallic: Triangle, bells, chimes etc. add detail and texture

Wooden: Woodblocks, guiro, etc.

Staggering: Stagger percussion to humanize/naturalize it (with anything)

Drum/percussion Solos: Showcase rhythm section

Toms as Main Drum: Toms used as main percussion, divorced from kick/snare subservience (“Maria” Jackson 5, “We’re Going Wrong” Cream)

Custom Toms: Can be any piece of percussion, pitched and panned

Relative Size/Weight (Snare/Kick): Relative Size/weight of snare and kick – accent/emphasis on 1’s or 2’s?

Low-Volume Backbeat (underlying main beat, breakbeat etc.)

Toms: (Invention): Anything can be pitch divided, panned for use as toms

Drops (low “whoa”, impact FX)

Snaps replacing drums signaling a breakdown in tension

Rim-work, ride-work, hat-work and tom-work artful

Vibraslap as snare

# ENSEMBLE DESIGN

## SUMMARY

A formal name/category for assembling and evaluating orchestration combinations, an early Ideas Original document. When listening to and thinking about music, I'm always accumulating ideas about the use and combination of instruments. This can be parsed into ideas for objects or contexts (like orchestration combination/doubling ideas for lead melodies) or entire ensembles (which led to the "transfiguration ensemble" list) and "table of the elements" in NS, where instrument and their combinations are seen as analogous to elements, substances and materials.  
see: transfiguration ensembles

Ensemble Design: Create an ensemble for a particular purpose or effect

Unusual/unique sonorities (orchestration)                      With drums/perc or without? Intermittent drums/perc?  
Unusual instrument combinations/ensembles  
Doubling or opposing? Try both on all  
Combine different ideas together (different for song parts? solo/tutti? different weights?)

(to be expanded/revised)

### 1-Instrument/Solo:

Vocal soloist  
Wordless female soloist (reverbed)  
Heavily reverbed lead vocal  
Heavily reverbed background singers  
Ethnic Operatic Singing (wordless?) ("Gladiator", "Crash")  
  
Close-mic'ed horn section    Heavily reverbed horn section  
Piano: pedal (wet) or without (dry)?  
Piccolo: Lower register  
Clarinet: Low register  
Soft trombones  
Pitched timpanis as bass and rhythm  
Xylophone as soloist  
Solo harp  
Echoing woodblock/rim  
Electric sitar  
Wah-wah clavinet  
Celesta (high register) as background  
Reverbed/nebulous bass (i.e. indirectly mic'ed)  
Organ/Hammond lead  
Rhodes as bass  
Bass as soloist  
French horn (distant/reverbed)  
Bassoon as soloist (higher range)

### 2-Instrument: (emphasize polyphonic interaction)

Vocal duet  
Vocalist doubling a jazz soloist (scat?)  
Vocalist and vibraphone  
Vocalist, metal percussion, claps  
Wordless female chorus and tremolo strings  
Choir and church organ  
  
Alto flute and flute  
Flute (or alto flute) and muted trumpet section  
Echoing flute (and harpsichord/piano?)  
Oboe and flute as dueling leads  
2 saxophones in duet  
Saxophone soloist over wordless chorus  
Oboe or English horn and piccolo above  
  
Vibraphone and echoing woodblock  
  
Cello against harp background  
Cello (high register) as soloist with contrabass  
Cello (as bass vs. electric) and drums  
Cello soloist against oscillating/chopped synth chords  
String section and timpani (as rhythm – syncopation?)

Low brass juxtaposed under high violins – leaves mid-range for soloist  
 Brass section and staccato wordless chorus  
 Brass section vs. timpani (trumpet soloist?)

Piano and upright bass  
 Piano and congos  
 Piano (pedal) and droning/one-pitch timpani or tom  
 Piano (low range) and crystal synth  
 Chopped Rhodes + Rhodes soloist

Jazz/blues guitar soloist over strings w/ wah-wah effect  
 Jazz Guitar and harp  
 Harpsichord and electric bass  
 Harpsichord and wah-wah/comping guitar (their interplay as rhythm section)  
 Dual Acoustic Guitars: Panned left and right (“Space Oddity”)  
 Sitar lead with acoustic/classical guitar accompaniment  
 Spanish/Classical guitar and solo violin

Gutbucket drums (room amb) and taiko (or samba) drumline (polyrhythm)

Timpani and harp (esp. timpani under glissandos)  
 Bongos and jazz guitar

### Doubled:

#### Electric Bass Doubling:

Fuzz organ?/organs	Trombone/French horn/Wagner tuba (low range)	cello	jazz guitar	alto flute
wah-wah clavinet	wah-wah guitar	Low saxophone		
Timpani doubling electric (or upright bass) (throbbing effect)		vibraphone		

Fuzz guitar and saw synth (doubled) - even more fuzz  
 Jazz guitar, vibes and bass (doubled)  
 Toms (or any other pitched percussion) and pizzicato strings (doubled)  
 Pizzicato strings doubled by contrabass (gives them gravity)  
 Cello doubling piano bass  
 Flute and French horn/muted trumpet/trombone (doubled)  
 Flute and wordless singer  
 Flute (or piccolo) and glockenspiel  
 Flutes and soft horns  
 Flute(s) and tremolo strings (doubled)  
 Glockenspiel and high strings/tremolo strings  
 Synth lead w/ heavy vibrato doubled by human vocals (soloist or chorus)  
 Vibes and flute (doubled)

Horn Stabs:

Percussion: Timpani	snare hits	toms	rides
Melodic: Xylophone			

Low Brass (Trombone/French horn/Wagner tuba) doubled by snare hits (marching effect), kick, toms or timpani  
 Electric sitar and strings (melody line)

Trombone/French horn/Wagner tuba (low range)  
 Clarinet over brass section (pop)

Nov 22nd, 2010 add:

pitched down ride (sounds like an anvil)+ contrabass marcato growl + cello stab  
 uglier Augurs ensemble

### Ensembles: (emphasize polyphonic interaction)

see: Transfiguration Ensembles

“\_\_\_ Only”: String-only, brass only, wind only

Percussion-Only (Orchestration): Chromatic only, rhythm-section percussion only, or both? Drum only?

Vocal quartet/trio

Vocalist, harp, ghostly female chorus

Cortex: Wordless female vocalist, drums/electric bass, Rhodes, piano, samba perc (also: synth lead, saxophone, Mellotron)

String quartet      String trio (violin, viola, cello)      String quintet (2 violin, viola, cello, contrabass)

String quartet/ensemble and wind machine (with drums?)

Ghostly chorus (vibrato) and string quartet/small string section (10-ish) – vocal properties vs. different string articulations



String quartet and drums

String quartet and harpsichord

Octet (Various Instruments): Properties of quartet/chamber and orchestra, potential for exaggerated tutti effects

Isaac Hayes: Orchestra (French horn, strings), piano, bass, drums and background singers (and lead vocalist)

Dreamlike: Heavily reverbed strings, chorus and upright bass (and possibly jazz brushes), harp?

Clarinet (harmonized by bass clarinet) and strings

Piano Trio (piano, bass, drums) + Soloist (any instrument)

Piano, drums and tambourine (no bass)

Chopped Rhodes, piano and fuzz bass (celesta doubled with Rhodes?), drums with rides/cymbals

Echoing staccato flute against low piano/bass – and set against staccato Rhodes?

Echoing or chopped jazz guitar (strumming/comping), drums/bass and Rhodes, soloist

Santana: Chopped guitar strum, congos/bongos, organ, bass and soloist

Acoustic guitar, percussion and flute

Spanish/Classical guitar, solo violin and solo cello

Vibes and glockenspiel (doubled or opposed?) Celesta as bass? Marimba?

Vibes, harp, bass and wordless chorus

Vibes, string section and upright bass

#### Bass and Drum Combos:

Jazz guitar	Rhodes	Electric/fuzz guitar	organ and guitar	congos, perc and guitar
piano	piano/high strings	harp		
synth lead	synth lead and jazz guitar		synth pad/synth lead	
string trio/quartet	string section		string section and harp	
wind section/flute lead	horn section (pop, small)	flute section		
mandolin (tremolo of chords)	vibraphone and glockenspiel	Mellotron		(strings, choir)
organ/steel drums				

Fuzz guitar/fuzz bass and flute section (flutes for figurating/counterphrasing)

Drums/bass/guitar + piano or Rhodes soloist (w/ pedal)

Fuzz guitar, fuzz bass and glockenspiel

80's Rock: Synth pad, power chords and distorted guitar lead, power toms/drums

All-Synth (also: all Moog/all Korg Legacy etc.)

Reverbed sign lead, soft Rhodes, Moog bass (and synth pad? woodblocks?)

80's R&B: Harp, synth pad or synth horns, bass (slap?), drums (808?), soft staccato trumpet

Hummelin lead, congos and electric bass

Harp, French horn, congos and synth lead

Moog lead, saxophone, cello and electric bass

Synth bass, space toms and tremolo strings

Rhodes, bass, chopped guitar strums, spacetoms

Distorted synth bass, high strings and Mellotron chorus

Woodblock-style synth arpeggios under flute/ethnic wind solo, contrabass or synth bass

Moog lead, echoing Rhodes and electric bass

Horn section (New Orleans), rides/shimmers/toms, upright piano, bass

Flute, percussion (congos, etc.), and singer/toaster

Small horn section, congos, drums/bass, and brass soloist – soft brass vs. hard

Synth bass, timbales/cowbell, claps, drums

Drums and congo/bongo (pure percussion – any melody comes from drums/perc)

Drum machine, congos, bass, jazz guitar and saxophone

Bell tree, triangle, rides and wind machine

Shimmer percussion (bell tree, cymbals, shakers and tamb) and echoing Rhodes

Indian Ensemble (tablas, sitar, Sarangi)

Asian Ensemble (Erhu, cello, gong/tam-tam, taiko etc.)

Marching band

#### **Sections/Solo/Tutti:**

Overdrive guitar (solo) vs. string section (tutti)

Lead violin (solo) vs. rest of string quartet (tutti)

Wind section vs. brass section (soft vs. hard textures)

Soaring strings vs. orchestral horn section

Low/mid strings vs. High (or low volume vs. high) – low for chords, high for phrases/counter melody

Wind/strings/congos/guero vs. Brass/low horns and electric bass (for breakdowns)

**Instrument-Specific Ideas:**

Electric Bass: Trills/ornamentation

Guitar: Mandolin effects (electric, acoustic)

Pitchbend Aesthetic: Consistent use of bends for a lilting effect

Timpani:

Velocity (low distant rumble – up-front thundering)

Timpani Rolls: As bass

Bass Drum:

Bass Drum Rolls: As bass element - bass drum rolls deeper and more nondescript than timpani

String Tension/Texture: Being able to hear the physical properties of the instrument

Strings/Violin:

Violin positions (1-8)

Double/triple/quadruple stops

“Multiple stopping” (double, triple, quadruple) – stopped on neck, like guitar, while being bowed or plucked

forte = force to make triple stop, quad must be played arpeggio/rolled

more important in solo violin pieces Pizzicato Section: Sections/phrases made out of pizzicato articulations

String falls

High trills fading in/out (siren-like)

The effect of double/triple stops (what are the harmonies?)

Horn (Grace Notes): Grace notes giving illusion of bends on horns

Sax: False-Fingering: Two or more ways to play one note: alternate, exploit (sax)

Harp Bed: Background harp glissandos for texture and harmonic reinforcement

Flute:

Flute Drop

Flute figurations (see-saw, trills)

Flute or piccolo as birds (unpredictability and rapidity of true bird calls)

Oscillating/chopped synth

Horn section on beat-4 riffs

Harpsichord “strum”

Piccolo embellishments (“chirps”, fleeting solos, ornamentation)

Celesta glissandos (up/down)

High Sign lead as ornamentation

Clarinet w/ blues scale

Piano:

One-note staccato piano melody

Piano bass

Distant string glissando/slur

Cello/contrabass staccato as bass (for orchestra)

Bongos in an orchestral context

Distant human whistle

High-Lines: Violin, organ