

TEXTURAL CONSTRUCTIONS IN MUSIC

MONTE TUBB

By and large, constructions of music are in the form of concurrent strands of activity, acting in relation to each other. The study of texture in music aims at distinguishing these concurrent strands, identifying them, and analyzing their interrelations. It also involves tracking changes of textural construction within a piece so that corresponding patterns of broad design can be considered.

My intent here is to present a flexible system of concepts and terms by which textural constructions can be described and studied with a reasonable amount of detail and precision; and following that, to present some examples.

PRELIMINARY STATEMENTS

Among musicians, the term *texture* has acquired a history of blurred meanings. The question of using the term here was not easy for me. On one hand, the inherited confusion surrounding it was clearly a liability; on the other, arguing for a new term—say *fabric* or *webwork* or *reticulation*—seemed inappropriate to me. As you proceed, then, bear in mind that my eventual choice was arbitrary, but that the basic meaning to be installed here is both discrete and critical.

TEXTURE: the organization of music with respect to its concurrent strands of activity and their interrelations.

Traditional classroom teaching maintains five basic categories of musical texture. Although they will not be used in the vocabulary to be proposed here, review them now as comparative references:

MONOPHONY: texture with only one line.

HOMOPHONY: texture with only one primary line along with one or more strands of concurrent supportive activity.

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POLYPHONY: texture with at least two interdependent and concurrent strands of linear activity.

IMITATIVE POLYPHONY: polyphony in which similar or identical melodic configurations appear in at least two concurrent strands, and in displaced juxtaposition (i.e., one part of the configuration concurrent with another part).

COUNTERPOINT: (1) Generally, a synonym for polyphony or imitative polyphony; (2) the study of either the composition or analysis of polyphony, or of both.

My approach to textural analysis begins with the assumption that texture is neither a compositional style nor a stylistic premise, but is an element of musical organization subject to change from moment to moment within pieces from *all* genres of our traditional concert music. Given this initial premise, bear in mind as you proceed that the conventions of assuming homophony and polyphony as antipodal categories of texture, or as mutually exclusive textures, or as delineations of basic textural differences, must be regarded here as suspended from active duty.

Texture—unlike pitch, duration, meter, dynamics, etc.—is an element of musical organization that cannot be explicitly conveyed by orthodox notation. A substantial amount of textural information is usually nested in notation, however, and can be extrapolated from clues such as stem positions, note-stem configurations, and note-staff deployments. The ability to read these textural clues is an intrinsic part of music literacy.

Some questions about textural construction—e.g., the assignment of particular notes to particular strands, the assignment of strands to different levels of prominence—are essentially issues of artistic interpretation linked to knowledge of styles, and lie in the performer's domain. My intent here is not to propose a theory of interpretation, but to propose a language by which such issues can be explored and discussed.

INTRODUCTION TO THE CONCEPTS AND TERMS

Textural constructions are formed from concurrent interrelated strands. A strand can be formed with one or more of these five types of activity: (1) lines; (2) chords; (3) figures; (4) ostinatos; (5) pedals.

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1. **LINES:** a line, in the most general sense, is a succession of tones one at a time. Most textures contain at least one line; it is common for a texture to contain two or more concurrent lines; some textures have no lines. Also, two lines can converge to become one, or can split to become two or more. I distinguish five types of line:

Primary lines: if a construction has only one line, I call that a *primary line*. If a construction has two or more concurrent lines, I usually regard the line of greater complexity as the primary line, and the other line or lines as subordinate. I gauge linear complexity in terms of differences-over-time: the more fluctuations of pitch, interval, duration, amplitude, and contour a line has, the more complex it is. [See "Amplifications".]

A construction *can* have two or more concurrent primary lines, but such instances are uncommon and even then, only momentary. [See "Lines with Alternating Activity".]

Subordinate Lines: by definition, a texture with only one line cannot have a subordinate line. Subordinate lines are always less complex than the primary line with which they are concurrent.

Bass Lines: a bass line is a subordinate line that is below the other concurrent strands (i.e., at the bottom of a texture). Bass lines earn particular distinction because of their role in framing textures, and because of their heavier resonances. If the bottom of a texture is carried by a subordinate line predominantly above middle C, I do not regard it as a bass line, but simply as a subordinate line. Some textures have a primary line at the bottom, but in such instances I do not use the term *bass line*, since it is not subordinate.

Lines with Alternating Activity: textural constructions seldom sustain two or more concurrent lines with equal and simultaneous levels of complexity. There are often instances, however, of two or more lines engaged in a turn-taking of activity: that is, one line is active while the other is, or others are, momentarily static. In constructions of this sort, the level of complexity of each line will rise and fall from moment to moment, and the locations of primary and subordinate will shift correspondingly.

Doubled Lines: there are instances of textural construction in which a linear strand is not a succession of tones *one* at a time, but a parallel flow of groups of simultaneous tones. The appearance is that of two or

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more concurrent lines with the same durations and contours, but with different successions of pitch. In a doubled line the intervallic structure of each group may be identical or only similar to those of the other group. [In some music, what appears visually to be a single line may actually be heard as two or more lines implied by or embedded in a succession of tones. I will deal with this in the section of examples.]

2. CHORDS: a chord is a group of tones—ordinarily a tertian group—involving at least three pitch classes. Chords can appear in two forms: (a) *blocked*, when the chord members occur simultaneously; or (b) *broken*, when the chord members occur in a succession. Note from this that a broken chord can appear within a line, and that chord progressions can have embedded lines (i.e., the members of one chord can have linear connections with the members of an adjacent chord, etc.). A single tone, therefore, can simultaneously be a member of a chord and a line. [See Amplifications.]

3. FIGURES: a figure is a brief linear or chordal image that has been included in a textural construction, usually to punctuate or modify another strand, or as an interjection or interpolation of another strand. Figures are too brief to be considered lines or progressions, and they may appear singularly or intermittently. (A periodic figure is an *ostinato*.) Brief, here, is obviously an arbitrary distinction; ordinarily, however, in this context it means no more than two or three beats. I distinguish four types of figure:

Punctuating Figure: a figure used to emphasize or articulate the end of a segment of activity.

Modifying Figure: a superimposed figure used to modify a concurrent segment of activity.

Interjected Figure: a figure used to interrupt the continuity of an activity.

Interpolated Figure: a figure used—often like a conjunction—between two adjoining segments of activity.

4. OSTINATOS: an ostinato is a pattern of tones or events repeated in a succession, usually at least three times. The pattern's length can

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range from two or three notes to several measures. The repetition need not be exact so long as the shape and character of the pattern stays perceptibly intact. The most frequently encountered types of ostinato are: (a) linear ostinatos; (b) blocked-chord ostinatos; and (c) broken-chord ostinatos. Some ostinatos are formed by combinations of chordal and linear patterns. Chordal ostinatos, for example, often include a conjoined bass line.

5. PEDALS: a pedal is a sustained or repeated tone or pitch class, used as a static element in relation to some form of change in another strand. In some instances, a pedal is formed by sustaining or repeating something more elaborate—a chord or figure, for example. In any case, the element must be sustained or repeated enough to become static in a context that is otherwise dynamic.

AMPLIFICATIONS

Strands: textural analysis begins by identifying the strands of a construction. Ordinarily, a strand is formed by a single activity: a line, a series of chords, a string of figures, an ostinato, a pedal, etc. In some instances, however, two or three activities may be conjoined to produce subdivisions of a single chord.

Delineating Primary and Subordinate Lines: in distinguishing primary from subordinate lines it is predictable that the question of relative complexity will sometimes be apparent or enigmatic. In approaching this problem, begin with an understanding that the tone-to-tone procession of a line produces sequences of pitch, interval, duration, amplitude, and contour—and that each of these sequences is subject to differing amounts of redundancy and fluctuation.

This concept is critical: the relative and overall amount of fluctuation in a line defines the level of its "linear complexity." If, for example, a line or segment of line has a series of notes of equal duration, a "no fluctuation" summary on the issue of duration is produced, but may be offset by a "high fluctuation" summary of the issue of pitch. Or if a line or segment of line is comprised of a back-and-forth alternation between two pitches, a "no fluctuation" summary on the issues of interval, and a "low fluctuation" summary on the issue of pitch is produced; but these may be offset by a "high fluctuation" summary of the durations . . . and so forth.

Keep in mind, incidentally, that "linear complexity" is not an

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aesthetic issue. In other words, my premise is not "the more complex, the better." (Indeed, what we regard as "good melodic lines," on the whole, tend to have balanced mixtures of fluctuation and redundancy.) The point is, when differing patterns are combined, they merge and become one, or failing that, form a hierarchy in which elements of redundancy become subordinate to the presence of fluctuation.

Lines with Intermittent Activity: although "line" is generally defined as "a succession of tones one at a time," linear strands often include rests as well as tones. A line, in other words, may contain segments of activity punctuated with pauses or momentary suspensions of activity. Keep in mind, incidentally, that a line with intermittent activity maintains continuity through its rests, and is thus distinct from intermittent figures, which are individual, discrete, and used to modify, punctuate, etc.

Chords: in most pre-twentieth-century and some twentieth-century concert music, chords are of tertian construction. This means that the method for identifying a group of tones as a "chord" presumes a knowledge of the pitch-class patterns that can be generated by the tertian principle. (In essence, this principle states that the pitch classes of a chord are initially established by stacking notes in a series with only major or minor thirds between the adjacent members of the series. It is assumed that once the pitch classes of a series have been established, any rearranged deployment of those pitch classes, simultaneously or successively, will not change the tertian identification of the series.)

In much twentieth-century music all or part of the chordal vocabulary may be other than tertian. In such contexts, the identification of the non-tertian chords must be preceded by an understanding of the premise(s) underlying the employed chord constructions.

Chorale Texture: in its basic form, the traditional chorale is a piece for mixed voices, written with four parts: soprano, alto, tenor, and bass. Ordinarily, the soprano line of a chorale is assumed to be the primary line, and the other lines, although composed to have linear integrity, assumed to be concurrent subordinates. It is also assumed that all four voices of a chorale will move somewhat independently of each other, especially with respect to contour and pitch, but will generally move with the same pace (i.e., the lines will be generally dominated by the same durations), and that the concurrency of the four lines will ordinarily produce changes of chord from beat to beat.

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What is of particular significance here is the textural model of chorales in many other kinds of pieces. In the language proposed here, I use the term "chorale-like texture" as a generic term, appropriate whenever the texture of a passage with three or more voices is chorale-like in the ways listed above.

Textural Ambiguities: ambiguity—the simultaneous presence and mixture of multiple meanings or functions—is a familiar and aesthetically effective element in all art forms. Ambiguities of texture are an integral part of virtually all genres of music.

One of the most common forms of textural ambiguity is created by the interdependent duality of chords and lines. Because a chord progression can also be viewed as a flow of multiple concurrent lines, and because these lines inevitably generate chords, discrete separation of the two is often neither possible nor appropriate.

Because linear and chordal strands can share tones, and because a single tone can have both linear and chordal functions, does not mean, however, that "chordness" and "lineness" are indistinguishable concepts. (Consider, for example, a crossword puzzle: when one letter belongs to two words, the distinction between the two words is not impaired.) In any series of chords there will be linear connections between members of one chord and members of the next (i.e., chord progressions always have embedded lines). Conversely, the concurrence of multiple lines will always produce chords. Given this as axiomatic, the textural analysis of such constructions can proceed along either or both of two lines:

- 1) View the construction as multiple concurrent lines; evaluate their levels of complexity, assign them to their primary and subordinate roles, and simply take for granted the presence of an inferred chord progression that will not be explicitly identified as a strand.

- 2) View the construction as a series of chords, identify the series as a single strand and examine the embedded lines for linear complexity. In some instances, an embedded line may be of substantial significance; in others, it (or they) may be only a negligible side effect of the chord progression, and too insignificant to earn distinction as a strand.

Another common form of textural ambiguity comes from the occurrence of broken chords. Since a broken chord is a succession of tones, it is therefore a line, and classification can therefore be enigmatic. To resolve this, proceed with one of three outcomes: a broken chord is

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either a line that incidentally includes an embedded chord; or it is essentially a chord and the line is incidental; or it is an ambiguous mixture of both. Keep in mind that if the members of a broken chord are in a line concurrent with a background sustaining a different chord or chords, the broken chord is to be regarded as incidental to its linear identity. Conversely, if a line contains a broken chord that is the prevailing chordal background of the moment, it is the line that is incidental to the chord. Keep in mind too, that lines dominated by seconds (i.e., conjunct lines) are virtually never experienced as broken chords.

Changes of Texture: studying the changes from one textural construction to another within a piece is an important part of textural analysis. Patterns of change determine the overall picture of a piece's textural architecture. In some pieces there may be only one or two changes of construction. In some there may be a back-and-forth alternation between two constructions. In others, the vocabulary of constructions may be extensive, and changes from one to another relatively frequent.

Keep in mind that there are various types of textural change. Some produce a difference in the number of strands: new strands can be added, and strands can evaporate; or one can split and become two; or two can converge and become one.

Some textural changes produce no difference in the numbers of strands, but involve change in a strand's type of activity: one activity can replace another; or an activity can experience gradual modifications and become a similar or different strand.

Some changes produce sharp contrasts of textural construction, and some produce only subtle modifications of a previous construction. In some instances, a change may involve the retention of certain parts of a previous construction while the other parts change or are replaced.

EXAMPLES

The next section contains a series of excerpts from the standard concert repertory along with brief explanations of their textural constructions. Below each excerpt are the extracted strands of activity, and related definitions and comments.

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Figure 1. Bach: French Suite in D minor



Number of strands: 3

Definitions:

- (1) = primary line
- (2) = subordinate line
- (3) = bass line

Comments:

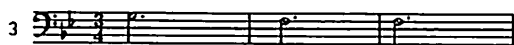
- (1) has more fluctuations of duration, contour, and interval than (2) or (3).
- (2) is the least complex of the three.
- (3) and (1) are about equal with respect to pitch fluctuation, but (3) is less complex in other respects.

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Figure 2. Handel: Minuet



allusion to doubled subordinate line (embedded in ost.)?



Number of strands: 3

Definitions:

- (1) = primary line
- (2) = broken chord ostinato
- (3) = bass line

Comments:

Each tone of (3) has two roles: one as a member of the ostinato, and one as a member of the bass line. Note the reference to a possible doubled subordinate line embedded in the broken chords.

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Figure 3. Mozart: Minuet, K.355



Number of strands: 2

Definitions:

- (1) = doubled primary line
- (2) = bass line

Comments:

Note the mixture of major and minor thirds in the doubled primary line.

Figure 4. Bach: Invention 13 (mm. 1-2)



This passage contains a rapid back-and-forth alternation between two textural constructions.

The first construction has two strands: a primary line (1), and a bass line (2).

The second construction also has two strands: a subordinate line (3) and a primary line (4).

I also view all four as "lines with intermittent activity."

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Figure 5. Schubert: Impromptu, Op. 90, no.4

Allegretto

1 *p*

allusion to a doubled sub. line?

1

2

3

Number of strands: 3

Definitions:

- (1) = broken chords
- (2) = primary line
- (3) = bass line

Comments:

In this instance, (1) is more "active" than (2), but still less complex; i.e., there are more fluctuations of interval, duration, contour, and pitch in (2).

Note the reference to a possible doubled subordinate line embedded in the chords.

Is (1) an ostinato? Possible, but we would have to see more of the piece to decide.

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Figure 6. Beethoven: Bagatelle, Op. 119, no. 1



Number of strands: 2

Definitions:

- (1) = doubled primary line
(2) = subordinate line

Comments:

The subordinate line in this texture is "couched" inside the doubled primary line.

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Figure 7. Haydn: Sonata in D major, Hob. XVI: 37

Presto ma non troppo

1

2

3

Number of strands: 3

Definitions:

- (1) = doubled primary line
- (2) = ostinato
- (3) = bass line (embedded in ostinato)

Comments:

You could argue that this is a two-stranded construction by regarding the ostinato and embedded bass line as components of the same strand of activity. (?)

Figure 8. Chopin: Prelude, Op. 28, no. 6



Number of strands: 2

Definitions:

- (1) = primary line
- (2) = a repeated block chord

Comments:

Some of the tones of the primary line also act as members of the blocked chord.

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Figure 9. Chopin: Mazurka, Op. 24, no. 3

Moderato, con anima

The image displays a musical score for Chopin's Mazurka, Op. 24, no. 3, in 3/4 time and B-flat major. The tempo is marked 'Moderato, con anima'. The score is presented in three parts, labeled 1, 2, and 3. Part 1 is the primary line, written in treble clef. Part 2 is a blocked-chord ostinato, written in bass clef. Part 3 is the bass line, also written in bass clef. The first three measures of the piece are shown. Part 1 begins with a quarter note B-flat, followed by eighth notes A and G, and a quarter note F. Part 2 consists of a series of chords: a B-flat major triad in the first measure, and a B-flat major triad with an added fourth (D-flat) in the second and third measures. Part 3 begins with a quarter note B-flat, followed by eighth notes A and G, and a quarter note F.

Number of strands: 3

Definitions:

- (1) = primary line
- (2) = blocked-chord ostinato
- (3) = bass line

Comments:

The tones of (3) act as both a bass line and as part of the ostinato.

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Figure 10. Ravel: Mother Goose Suite, The Magic Garden

Lent et grave

The musical score is written for piano and consists of three systems. Each system has a treble and bass staff. The first system is a single line. The second and third systems are each preceded by a measure number '1' and '3' respectively. The music is in 3/4 time and features a slow, expressive tempo. The melody is primarily in the treble staff, while the bass staff provides harmonic support with chords and single notes. The notation includes various note values, rests, and dynamic markings.

Number of strands: 3

Definitions:

- (1) = primary line
(2) = subordinate line
(3) = doubled bass line

Comments:

Note the shift of location of the subordinate line in the third bar. In this instance I assume that chords are generated by the lines.

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Figure 11. Beethoven: Sonata, Op. 109

Andante molto cantabile ed espressivo

1

2

split converge split

3

Number of strands: 3

Definitions:

- (1) = primary line
- (2) = subordinate line
- (3) = bass line

Comments:

Note how the subordinate line splits and converges and thus alternates between being a single and doubled line. This passage is similar to "chorale" texture, except for the splitting and converging of the subordinate line.

Figure 12. Mozart: Rondo, K. 485

Allegro

1

2

pedal?

Number of strands: 2

Definitions:

- (1) = primary line
- (2) = broken chord ostinato

Comments:

The ostinato could also be viewed as a doubled subordinate line inter-locked with a pedal. (?)

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Figure 13. Schönberg: Suite für Klavier, Op. 25, Gavotte



Definition:

Two primary lines with alternating activity.

Comments:

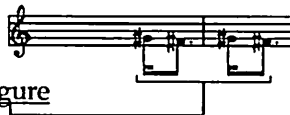
Note the longer durations in one line when the other line becomes active.

Figure 14. Stravinsky: Petroushka, Scene 2



Definition:

A doubled primary
line and a punctuating figure



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Figure 15. Bartok: Mikrokosmos, no. 101, Diminished Fifth

Con moto $\text{♩} = 110$

Two primary lines with alternating activity Two concurrent primary lines

Figure 16. Hindemith: Piano Sonata No. 2, First Movement.

Mässig schnell $\text{♩} = 108$

1 2 3

Number of strands: 2

Definitions:

- (1) = primary line
- (2) = broken-chord ostinato
- (3) = pedal

Comments:

The pedal is embedded in the ostinato; the ostinato also has an embedded double subordinate line. (See dotted line above.)

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Figure 17. Schumann: *Poor Orphan Child* from Album for the Young, Op. 68



Definition:

"Chorale-like" texture. (See pages 206-207.)

Figure 18. Bach: *Chaconne* from Partita No. 2 in D minor for Violin Solo (mm. 33-35)



Definition:

Two lines with alternating activity embedded in a single succession of tones.

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CLOSING REMARKS

That concepts of textural construction are treated superficially—or ignored—in the classrooms and studios of many music schools seems odd to me. Knowledge of texture is a significant part of understanding and making music. I regard it as an essential component of any analysis aimed at broad-based investigation, and as an indispensable part of music literacy.

To performers, textural savvy is crucial. Each passage of a piece must be regarded not as a general flow of tones, but as a weave of discrete, concurrent strands, each usually requiring a different level of prominence. This, of course, presumes an ability to distinguish the strands, identify their primary and supportive roles, and make artistic decisions about how to play each one in relation to the others. To the composer, textures are strategies by which images are presented and illuminated, and a resource for articulating broad morphic patterns. Since textural constructions are part of what must be composed, the ability to invent, design, and control them is clearly one of the basic crafts of composing.

The idea of developing better ways to study and explain texture seems worthwhile to me. Just as architects frequently talk about joists, beams, footings, cantilevers, and girders, the classroom teacher may have need to discuss "a doubled primary line over a repeated-tone pedal"; or the studio teacher may need to point out that "when the subordinate line becomes an ostinato in bar thirty-two, the bass line evaporates"; or the ensemble conductor may need to tell the trombones, "in bar sixteen, don't let the modifying figure mask the entrance of the new subordinate line." The approach I have presented here—with its premise of viewing strands in terms of five kinds of activity—may use definitions you regard as rebuttable. It does, nonetheless, suggest a language with which reasonably vivid descriptions of texture can be formed so that communication about musical processes and relationships can be initiated—and perhaps even enhanced.

SUGGESTED FURTHER READINGS

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DeLone, Richard. "Timbre and Texture in Twentieth-Century Music." Chapter 2 in *Aspects of Twentieth-Century Music*. Edited by Gary Wittlich. Prentice-Hall, 1975, pp. 66-207.

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