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# Observational Hierarchy for Analysis

[Aural Impressions](#)  
[Levels of Analysis](#)  
[Analytical Process](#)

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## *Overview*

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Analysis may be defined as gathering and interpreting significant, meaningful information about music. Analytical abstractions and theoretical models are valid only to the extent that they bear a direct relationship to the perception of sounds in music. In light of this, all observations about music must be directly related to the aural experience.

The aural experience is the cumulative effect of individual events that occur in the music and impressions which arise from the movement of the music. It has been postulated (Meyer, Randall) that the listener carries some experiential baggage into the music encounter, and that familiarity with a style or syntax becomes a frame of reference. A style is defined by conventions which are learned and culturally determinant. These conventions are identifiable patterns of organization and relationships in musical materials that are shared by similar pieces in a given style. Characteristic processes, relationships, norms, and principles identify the music of influential composers and schools of composition in particular style periods. These characteristic principles have been codified by traditional theorists, and the recognition of such factors as resolution and distribution of voices, structural molds and cadential formulations is used to identify styles. Discovering the conventions of a style should be an initial consideration in music analysis, since the expectations of the listener are a product of conditioning to musical materials and their organization within a particular style.

Style analysis employs a set of abstractions or general operative principles associated with a particular idiom. Assumptions can be made about pieces of music that fit within the context of a codified idiom. However, a contemporary work which does not use traditional harmonic or formal vocabulary exhibits its own structure and language. Therefore, assumptions must emerge from materials and relationships that form the conceptual basis of each new work. The unique characteristics of a composition offer more significant clues in explaining its structure than do the characteristics it has in common with similar pieces of music. This is particularly true of post-tonal music, since individual composers have developed styles which are highly personalized, and systems which may have direct applications for their works exclusively.

After initial consideration of the style period to which the music belongs, and comparison with other works by the composer and contemporaries, general observations should then be made based on aural impressions of the piece as a whole. Developing a broad overview of the composition as a complete entity rather than a collection of parts is the first objective.

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## *Aural Impressions*

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As a first step in analysis, experience the emotional impact of the music as a whole without focusing on details. Make general observations, or mental notes, regarding the important events in the broad

dimensions of rhythm, pitch, texture, and shape. Principal gestures and the statements of thematic materials in each dimension are sensed in this process. In the dimension of rhythm, the duration of the work (brief vs. protracted) and the pace (forward movement vs. static inactivity) are immediately evident. Regarding pitch, the overall level of consonance or dissonance is a key factor, as are the primary vertical combinations and linear contours. In the dimension of sonic texture, note the source of the sounds (instrumentation) and density (layers). Contrasts in dynamics have a strong impact, as do unique tone colors and special effects. The most immediately identifiable aspect of shape is recurrence in any dimension. The articulation of large sections or events can be grasped aurally, and degrees of unity and variety create strong impressions. States of stability and unrest are highly noticeable, and smooth transitions between contrasting elements affect the differentiation in their perception.

Ideally, preconceptions and expectations should be minimized in experiencing the emotional impact in order to reduce the referential bias. The true structural basis of the music may be obscured if a listener imposes organizational constructs that are not inherent in the music. Processes and relationships should be deduced from the music itself. Some inductive reasoning provides insight and is a basic analytical tool; but if principles or concepts are not correctly induced, the structure of a work is rendered meaningless through efforts to force it to conform to a prescribed system. On the other hand, the inability to identify all of the processes and relationships in a piece of music is no reason not to stipulate as many as possible. To obtain greater understanding of how individual elements or subfactors in the music interact to produce the perceptible impact, levels may be addressed individually.

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## *Levels of Analysis*

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Armed with general observations regarding features of a piece of music which have a strong impact and capture the listener's attention, specific inquiries can be made into the processes and relationships of subfactors which produce the dominant effects. Once identified, the principal gestures and thematic materials can be assessed in detail. These details exist of what might be referred to as the "micro" level. Pitch source, methods of vertical and linear pitch organization, specific elements of timbre and texture, and rhythmic motives are the subfactors of concern. The shape results from their interaction. Once a status has been established or stipulated, the frequency and degree of contrast, direction of movement, and means of development can be observed. The subfactors are intrinsically correlated and focusing on the separate individual qualities of subfactors without subsequently establishing their relationship to the whole is counterproductive. The following inquiries are designed to elicit observations on the micro level, to determine the building blocks. Their relationships are investigated at higher levels.

### **Micro Level**

The elements on this level are primitive and fundamental.

#### **RHYTHM**

**Meter:** pulse and rate; additive or divisive; active or inactive

**Accents:** placement of stress; symmetric or asymmetric; syncopation  
**Motives:** smallest basic figures or patterns on the surface  
**Non-metric:** proportional notation; static  
**Silence:** articulative interruption of sound; frequency

## PITCH

**Source:** Scales, Modes, PC sets, 12-Tone Rows; interval content

### Linear:

Profile: steps, leaps; direction of contour

Motives: segments of rhythmically defined combinations

Lines: well-defined or absent

Focal tones: emphasized by recurrence, elongation, stress, or dynamics

### Vertical:

Sonorities: interval content, density, common structures

Spacing: wide, clustered, or evenly distributed

Consonance: dominated by perfect 4<sup>th</sup> and 5<sup>th</sup>; 3<sup>rd</sup> and 6<sup>th</sup>

Dissonance: dominated by 2<sup>nd</sup>, 7<sup>th</sup>, and tritone

## SONIC TEXTURE

**Sound source:** instruments, voices, or synthesis

**Density of layers:** number of parts; weight

**Spectral content:** register of concentration: high, low, or centered

**Dynamics:** overall levels; terraced or tapered

**Special effects:** complex envelopes or timbres; vibrato, microtones

## INTERRELATIONSHIPS

Nominal correlation discerned between elements

Motivic factors in rhythm and pitch

Interval content in linear and vertical fields

Spectral content factors in linear profile and vertical spacing

## Middle Level

Dimensions on this level include functions, groupings, and proportions.

## RHYTHM

**Patterns:** extended or combined motives; broad accentual basis

**Polyrhythms:** simultaneous patterns of varied accents

**Rate of modulations:** harmonic, timbral, metric, spatial, combined

**Durations:** length of spans

## PITCH

**Functions:** symmetry, centricity, axial polarity, transposition levels

**Linear:**

Phrasing: grouping of motives; articulations  
Direction: arrival and closure; growth and resolution  
Tensions: convergence and separation; relationship to vertical sonorities

**Vertical:**

Progressions: direction dictated by increase or decrease of dissonance  
Levels of tension: functions of composure and tension  
Cadences: relaxation at points of articulation; return to tonal centers

**SONIC TEXTURE**

**Dynamics:** contrast between sections  
**Levels of activity:** figure-ground distribution  
**Combined tone colors:** mixture; foreground compared to background

**SHAPE**

**Structural functions:** may exist in any dimension  
O: original materials, principal themes, or gestures  
R: repetition (literal)  
D: development or variation  
N: new or contrasting material  
S: secondary materials, contrasting but not necessarily new  
T: transitional material  
I: introductory material  
K: closing, articulative functions  
**Recurrence:** partial or total repetition in any dimension (determines recognition of shape)  
**Contrast:** balance of unity and variety; degrees of differentiation

**INTERRELATIONSHIPS**

**Strong interaction among elements, correlations identified:**  
Rhythmic patterns and phrase groups in linear motion  
Rate of modulations and parameters which are involved  
Direction of lines and vertical progressions; cadences  
Levels of texture and linear/vertical reconciliation; contrast  
Structural functions dependent upon activity in any or all dimensions

**Macro Level**

This level consists of a single dimension, the entire composition.

**RHYTHM**

**Duration:** relative length of large spas to the whole

**PITCH**

**Tonal elements:** combined interaction of linear and vertical parameters; overall direction and collective features of phrasing and tension; skeletal reduction

### **SONIC TEXTURE**

**Characteristic sounds:** primary textures, sonorities, timbres, and dynamics; overview of contrasts

### **SHAPE**

**Organization:** relationships of sections or spans to the whole; growth and balance; proportion

### **INTERRELATIONSHIPS**

Fundamental aspect and primary consideration in understanding a piece of music

Cumulative effects of multiple relationships create the total experience

Combined interaction in all dimensions reveals unity and variety in the work

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## *Analytic Process*

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Initially, aural impressions are gathered to determine which parameters weigh most heavily in the construction of the piece. Observations are then made regarding the dimensions of rhythm, pitch, and sonic texture on the **Micro** level. These observations are then grouped or combined to define their functional relationship to the structure on the **Middle** level. Some associations, such as phrase construction and tension levels achieved by degrees of dissonance are perceived on both Micro and Middle levels. The organization and shape of the music is illuminated by correlating the interacting elements and groupings identified on the Middle level and defining their relationships on the **Macro** level.