

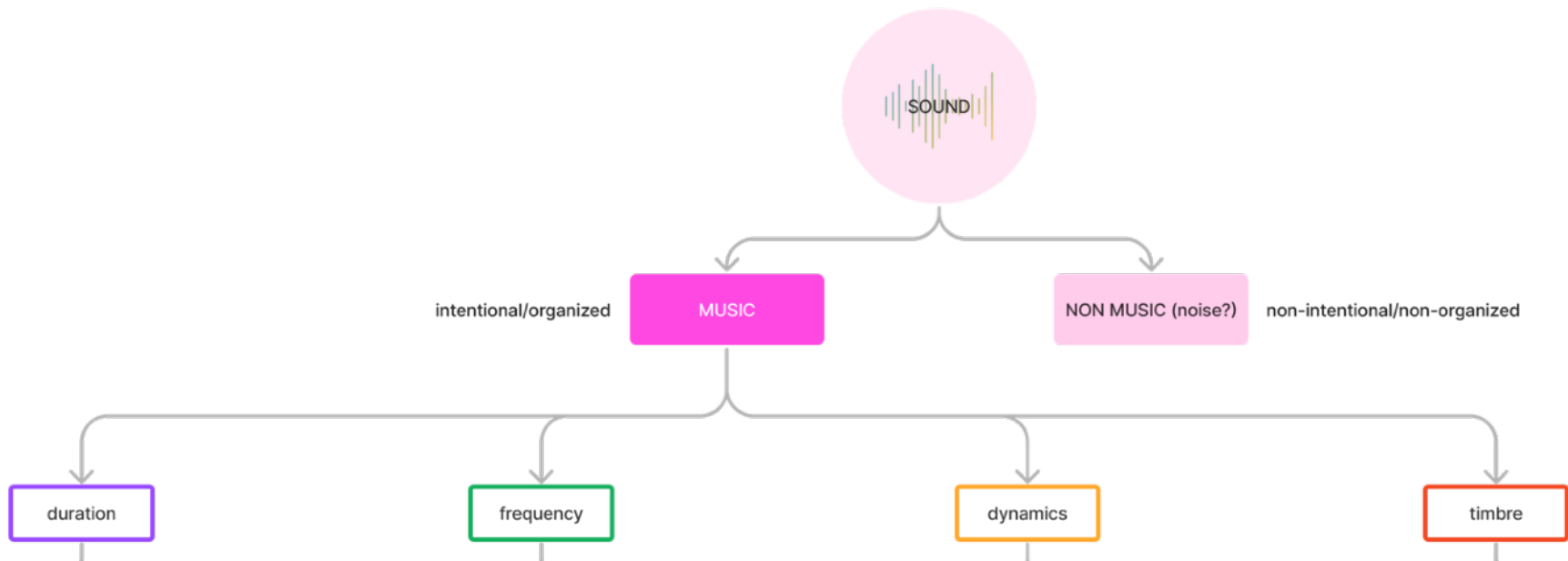
TOMMASO ROSATI
SOUND ART

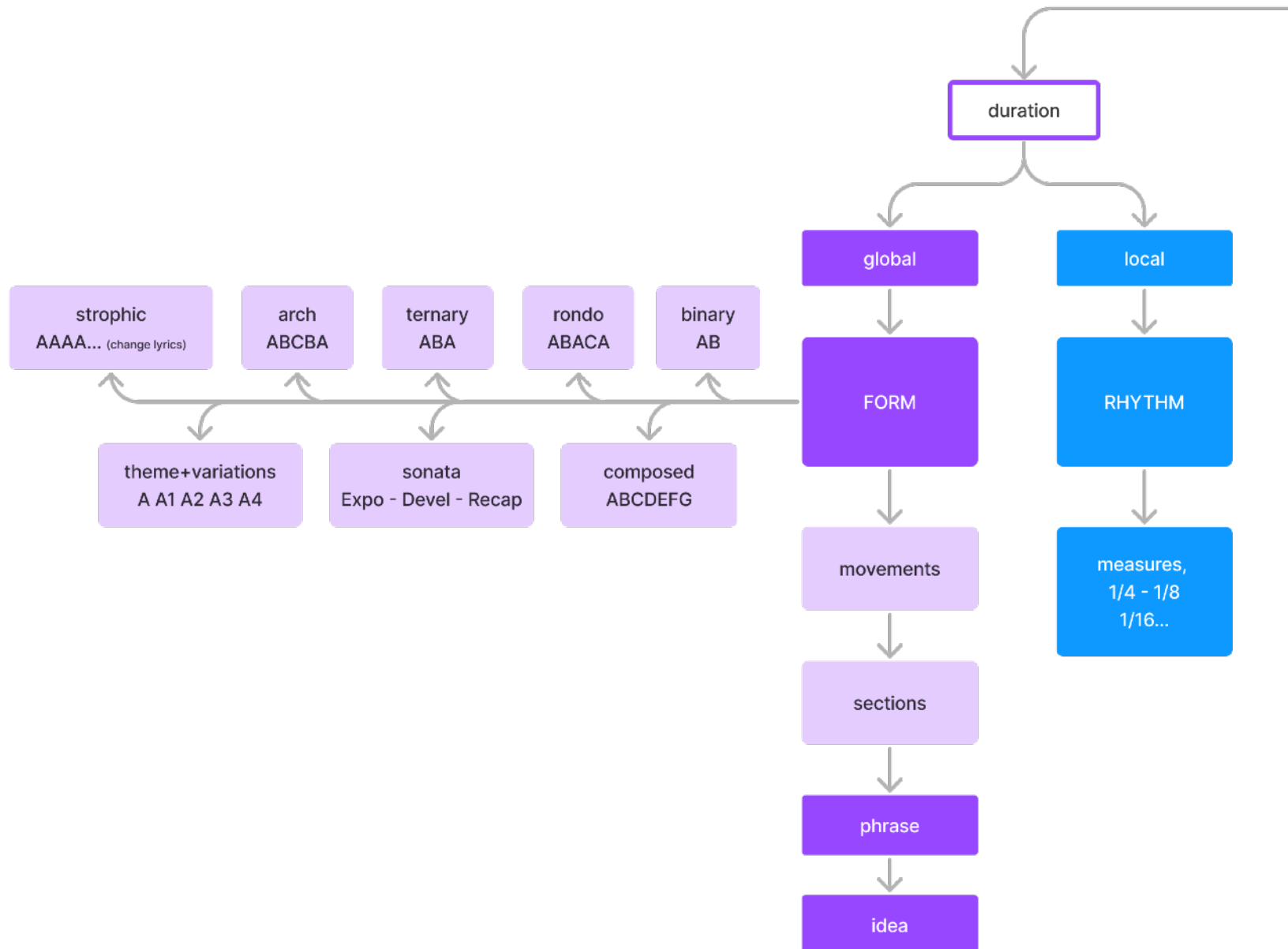
MUSIC?

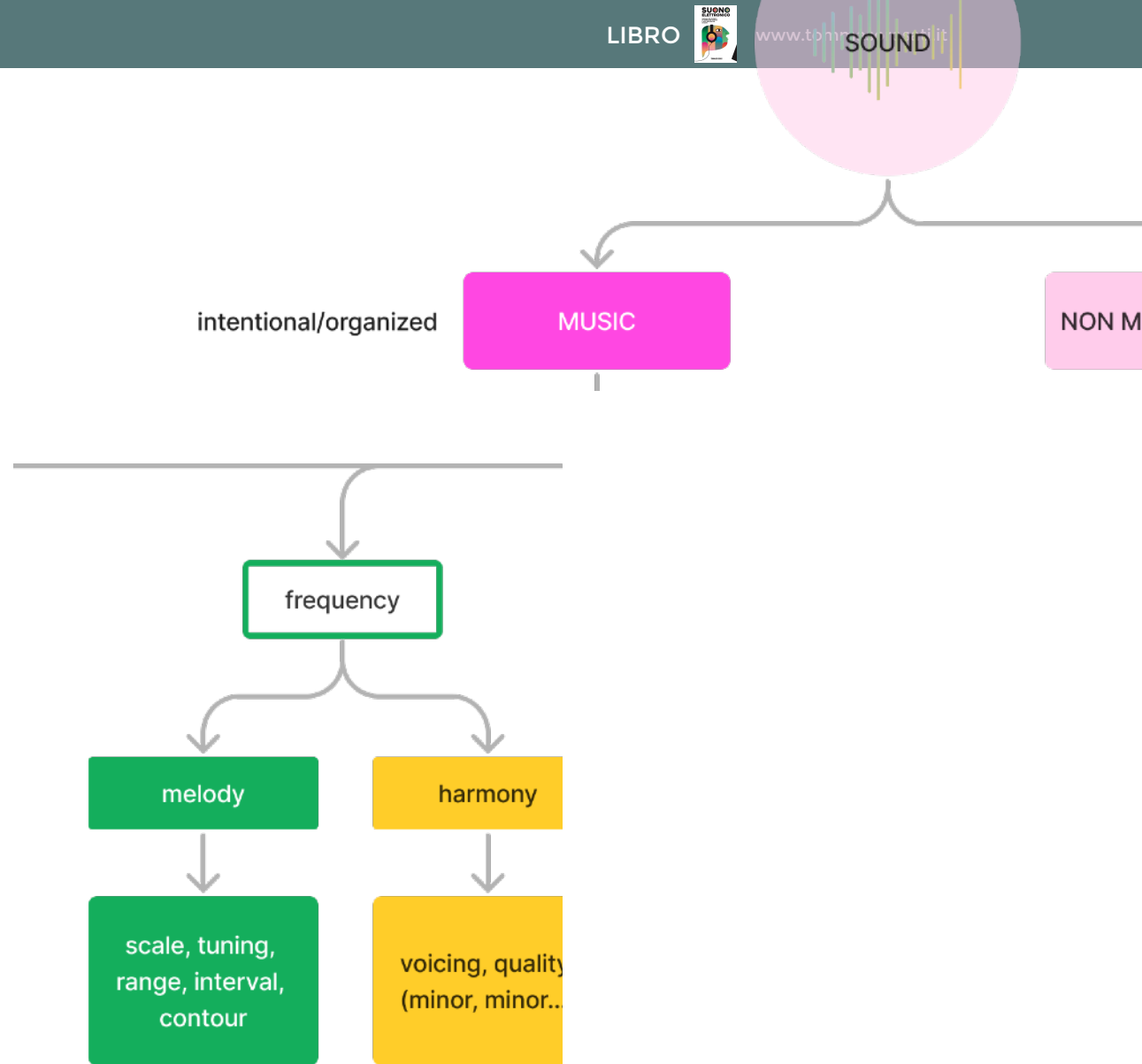


What is music?

Many things.







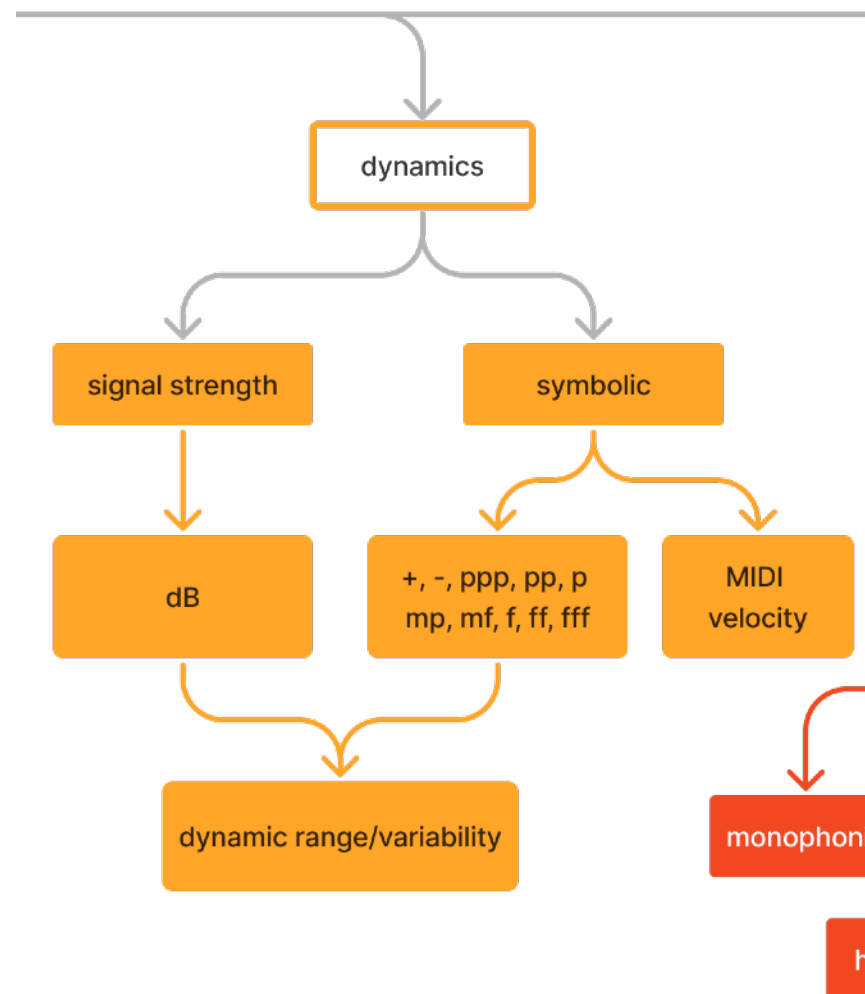


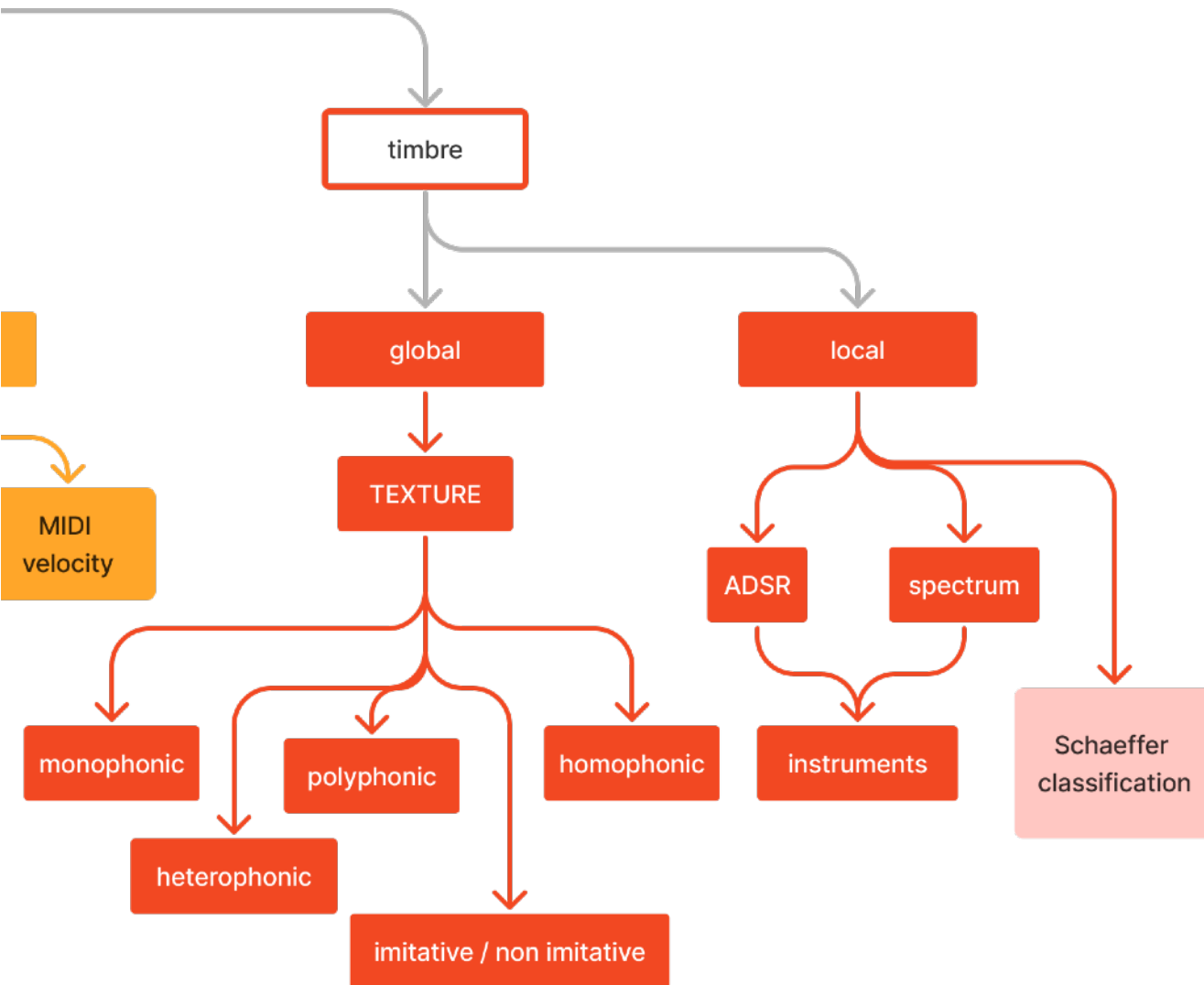
intentional/organized

MUSIC

NON MUSIC (noise?)

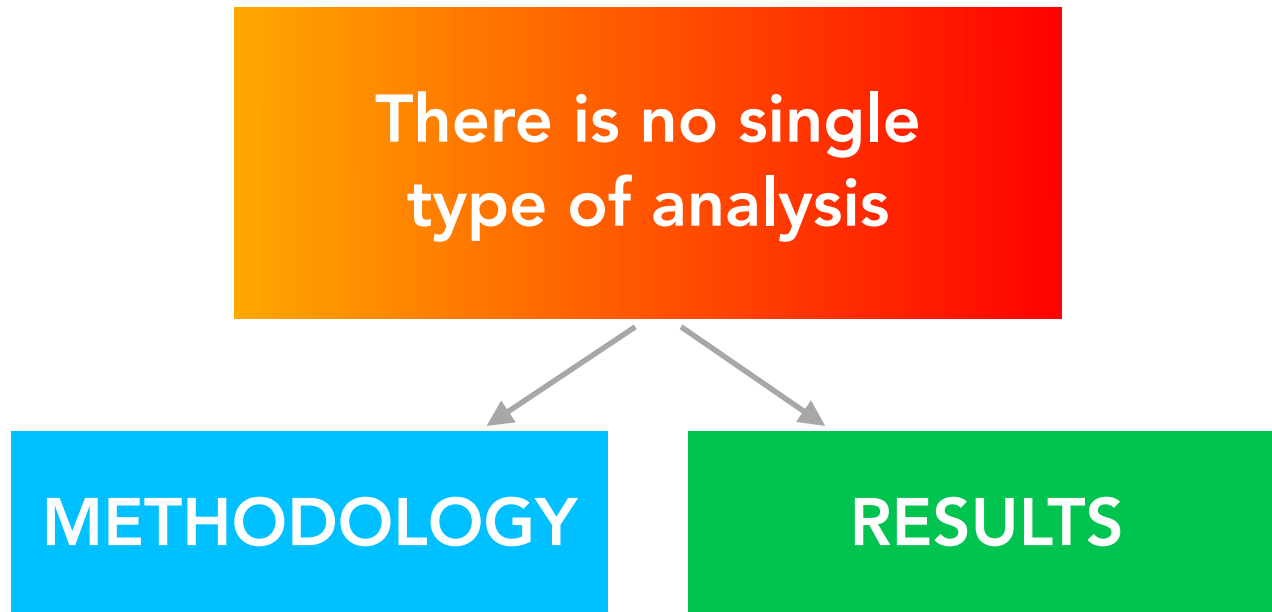
non-intentional/non-organized





Analysis

Musical analysis is the discipline that investigates individual musical works in terms of their form, their internal structure, the compositional techniques employed, or the relationship between these aspects and narrative and dramatic aspects.



Lady Gaga - **Just Dance** (2008)

Xenakis - **Diamorphoses** (1957)

The analysis method is influenced by:

- The historic period of the opera
- The style of the opera
- The analyst

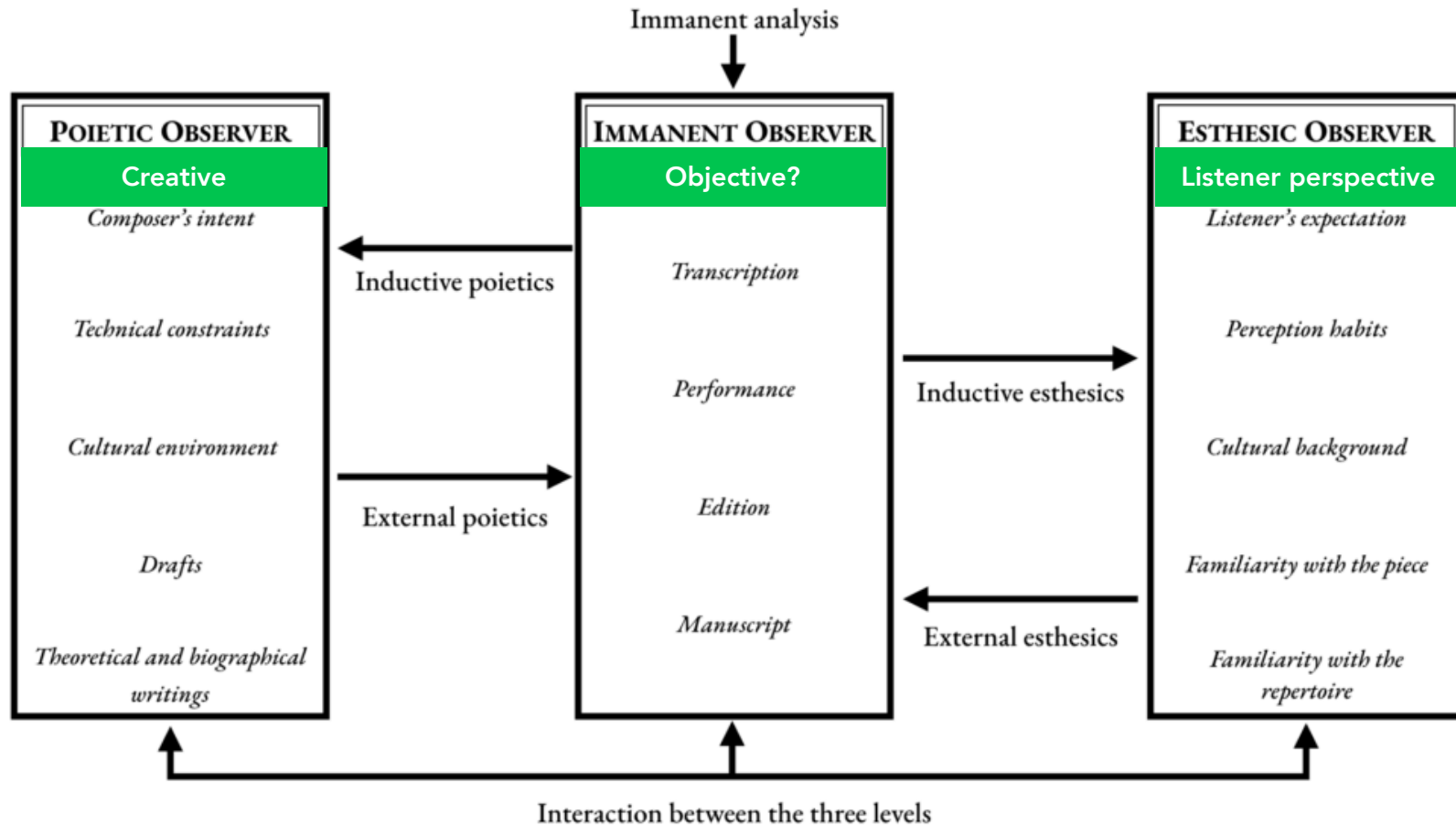


**Analysis is always
both an
interpretation
and a
systematic
approach.**

Nattiez focuses on 3 layers of investigation in music analysis:

- **poietic**: all determinants of its production: cultural environment, technical constraints, author's intent...
- **aesthetic**: all determinants of its reception by listeners, its interpretation by musicologists, critics, and (even) performers.
- **neutral/immanent**: the methodological artifact called a neutral level that makes it possible for the aesthetic interpreter, to hypothesize a repertory of syntactic relationships from which, in a second step, elements of poietic and/or aesthetic relevance.



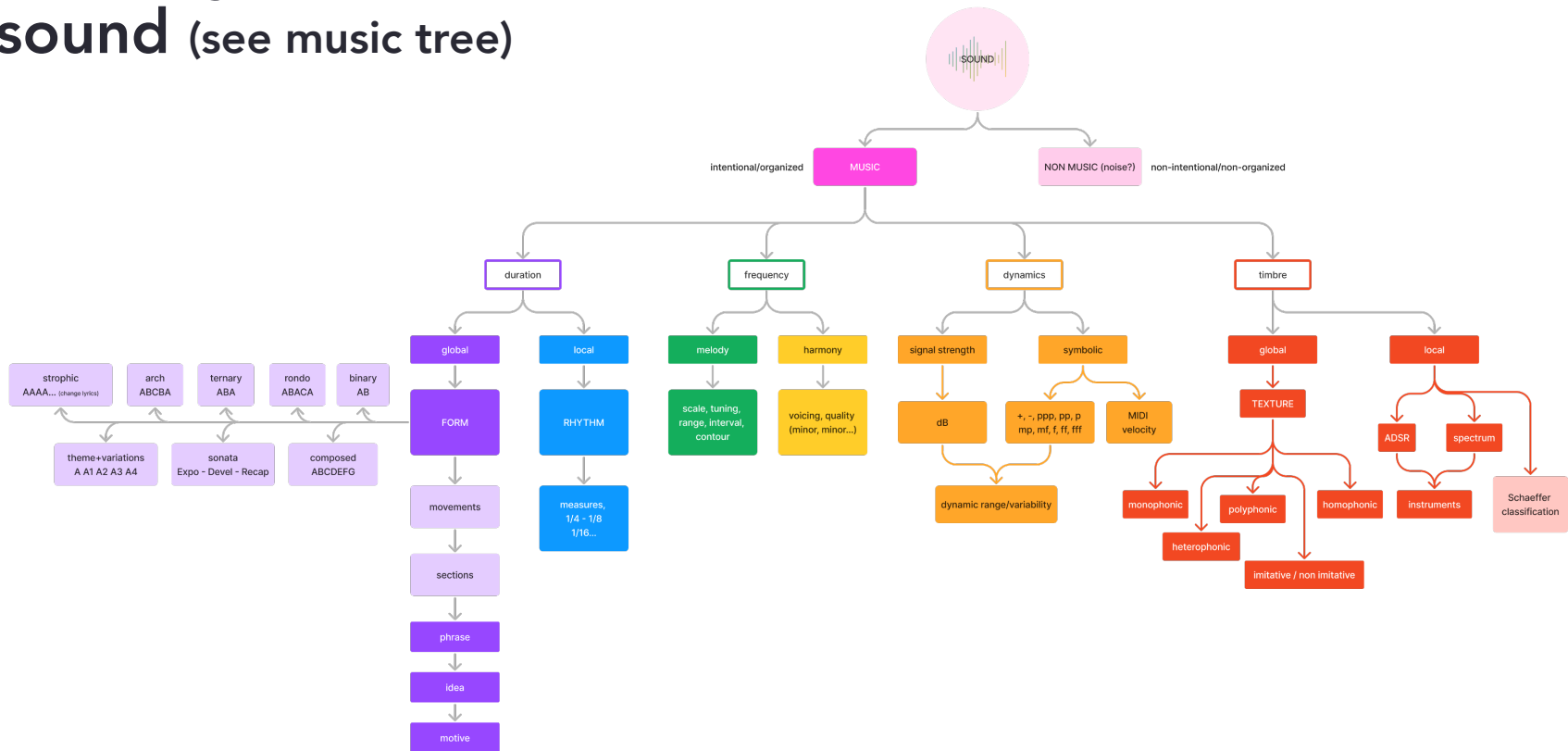


The tripartition of the analytical observer (Nattiez 1990: 135–36)

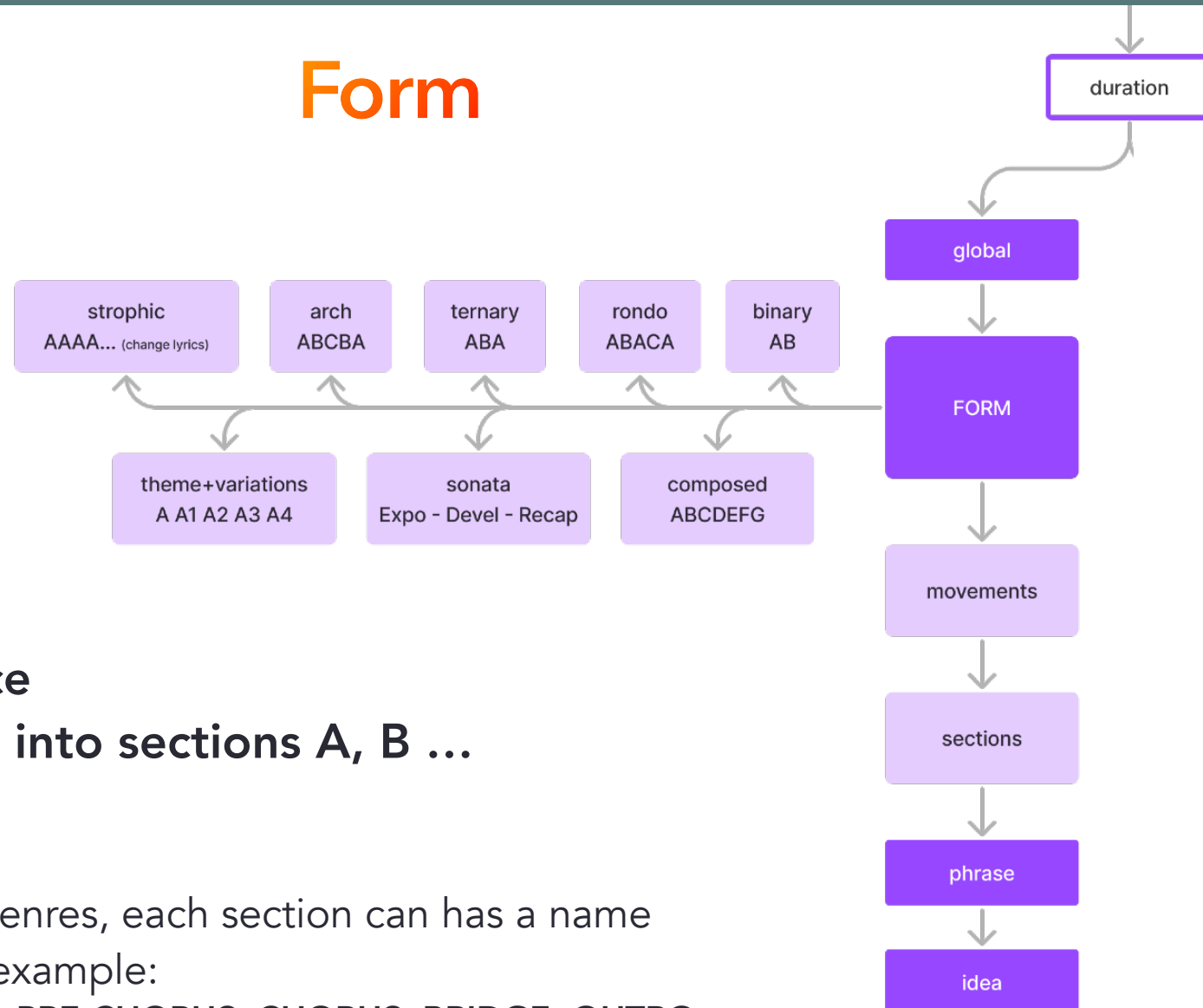
This tripartition of musical relationships is taken from the writings of J. Molino

ARTICLE

Analysis can be focused on many aspects of sound (see music tree)



Form



1. Take a piece

2. Segment it into sections A, B ...

In different genres, each section can have a name

In songs for example:

INTRO, VERSE, PRE-CHORUS, CHORUS, BRIDGE, OUTRO

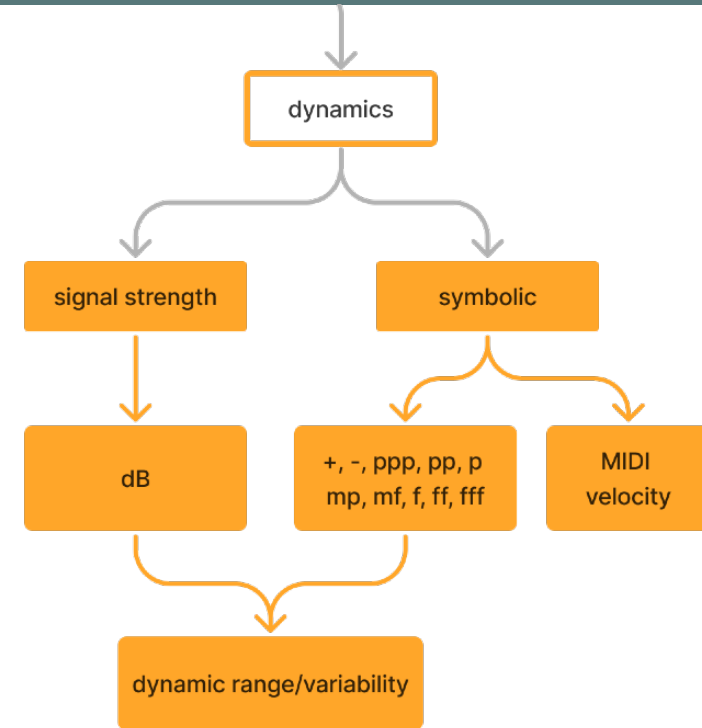
[LINK](#)

Dynamics

Dynamics is the articulation of signal strength in a piece of music.

Range: the range of the dynamics

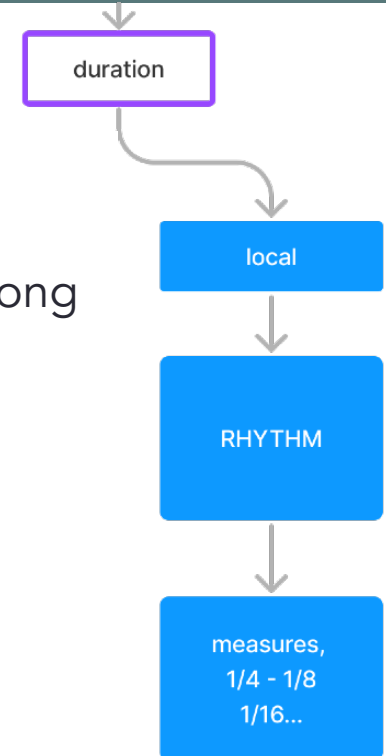
Contour: the trend of dynamics



C. Debussy - **Prélude à l'après-midi d'un faune** (1891)
 Death - **Scavenger of Human Sorrow** (1998)
 Alva Noto Sakamoto - **Microon III** (2011)

Rhythm

Rhythm is the pattern of sound, silence, and emphasis in a song



Western music

Time signature: indicates the number of beats per measure

Meter: duple meter (where beats appear in groups of two), triple meter (of three), and quadruple meter (of four)

Tempo: speed at which a piece of music is played

Strong beats and weak beats

Syncopation: do not align with the downbeats of individual measures

Accents: special emphasis on certain beats

Polyrhythms: layers one type of rhythm on top of another

General concepts

[LINK](#)

Rhythm can be:

METRONOMIC

Algorithmic

Alea

Stochastic

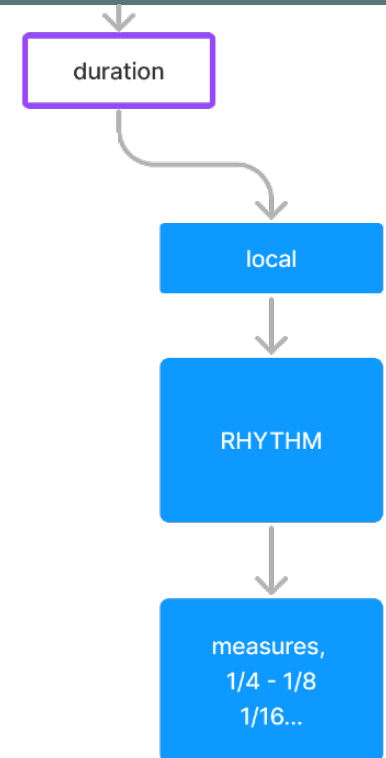
...

Director (human or not)

Interpreted

Performer

Machine



- Kraftwerk - **The robots** (1978)
- Boulez - **Répons** (1980)
- Mark Fell - **Multistability 1-A** (2010)
- Autechre - **Fold4,Wrap5** (1998)

Melody HORIZONTAL

A **Melody** is a succession of single tones

Tuning: the process of adjusting the pitch of one or many tones from musical instruments to establish typical intervals between these tones

*Equal temperament,
Microtonality...*

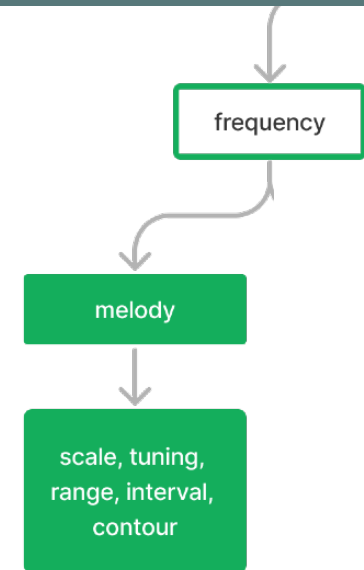
Scale: any set of contiguous musical notes

Range: the range of the notes

Interval: the distance between a note and the following

Contour: the trend of a melody

Gliding: the continuity between a pitch and the following



Spectrogram

Find the range

Pitch detection

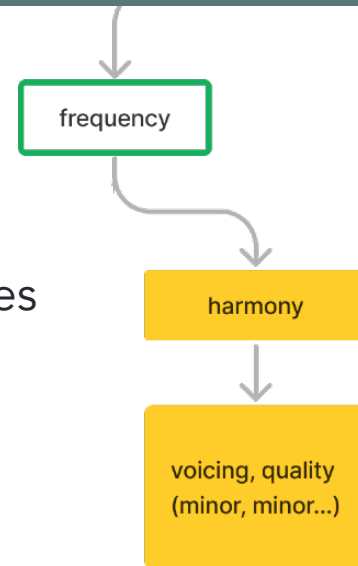
Find the contour of some phrases

Chet Baker - **I fall in love too easily** (1980)

Baths - **Miasma Sky** (2013)

Harmony

VERTICAL



An **harmony** is the combination of simultaneously sounded notes

Tuning: the process of adjusting the pitch of one or many tones from musical instruments to establish typical intervals between these tones

Chord: the minimum part of a harmony. Composed of three or more notes in Western music

Quality: the qualities of the component intervals that define the chord

Voicing: the order of the set of musical notes

Range: the range of the notes

Articulation: the micro-distance in time between the notes

NB we are still talking about the macro level but there's a superimpositions of sounds also at a micro level: timbre!

Maria Schneider - **Sputnik** (2020)

Olivier Messiaen - **Prelude 1: La colombe** (1928)

Radiohead - **The National Anthem** (2000)

Timbre GLOBAL

Texture

It's not only about timbre

texture is the local configuration that music takes on, moment by moment, generated by the values and structures of all musical parameters: pitches, durations, dynamics, timbres, spatial arrangement.

Western music

Monophonic: made of one-single melodic line

[LINK](#)

Polyphonic: consisting of two or more simultaneous melodic lines.

Homophonic: a main melodic line is supported by one or more additional musical lines that add harmonic support.

Heterophonic: created by simultaneously varying a single melody.

Micropolyphonic: many lines of dense canons moving at different tempos or rhythms, thus resulting in tone clusters vertically.

Ligeti...

General concepts

What if we focus on the timbres? A new classification?

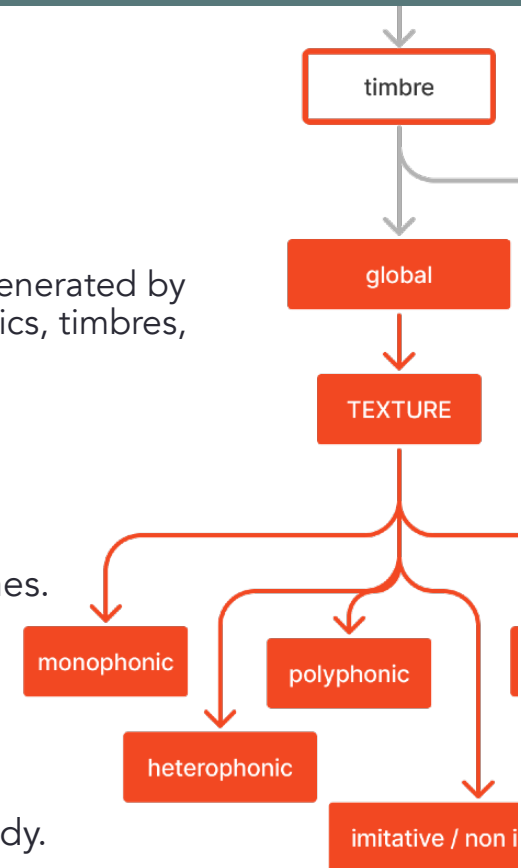
The **spectromorphology** approach.

Article: "Spectromorphology: explaining sound-shapes" by Dennis Smalley

György Ligeti - **Atmosphères** (1961)

Autechre - **Caliper remote** (1998)

Fennesz - **Happy audio** (2001)



¹Balance approach

When we listen critically to music, it is always useful to try to mentally divide the various aspects of it. Compared to the historical period and musical genre the music analyzed refers to, some aspects are more innovative while others are more conservative. The composer's ability is to innovate but simultaneously remind the listener of something with which they are familiar. There are composers whose innovation is more prominent in one aspect of music than others in another. It is generally challenging to find innovative or conservative authors on all elements. Recognizing where the composer innovates and where he 'conserves' helps to understand better and contextualize what we are hearing.



1 Balance approach

What is comfortable and what is innovative in a piece?

Interesting music tends to research a balance.

Valuations need to take account of:

- the historical period
- the artist's production
- the genre

SONG

AUTHOR

YEAR

CONFORTABLE	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	FORM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	INNOVATIVE
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RHYTHM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MELODY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	HARMONY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TIMBRE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

2 Focus approach

Which are the focus of the author of a piece?

This approach starts by assessing the relevance of the aspects that make up a piece of music.

It helps us to analyze the piece and the author, his compositional techniques and style, contextualising it to the period of composition and genre.

SONG

AUTHOR

YEAR

FORM

RHYTHM

MELODY

HARMONY

DYNAMICS

TIMBRE

fill 15 square

2 Focus approach

Which are the focus of the author of a piece?

SONG

AUTHOR

YEAR

FORM

RHYTHM

MELODY

HARMONY

DYNAMICS

TIMBRE



www.tommasorosati.it