

Textural Contour: Relations between Textural Progressions and Melodic Contour in Claude Debussy's *Prélude à l'après-midi d'un Faune*

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Introduction

The Musical Contour Theory (Morris 1993) is constructed from abstractions of levels, ordered from zero (lowest level) up to $n-1$ (where n is the number of different levels in the structure), and assessing the relations between the levels.

The transposal of such abstraction to field of musical texture can formalize the movements of textural complexity, allowing the measurement and the comparison between different textural configurations. This proposal is called here as *Textural Contour*.

The methodological tools and concepts provided by the Partitional Analysis (PA) by Gentil-Nunes (2009) can handle textural organization using numeric representations (read as integer partitions) that express the relations of concurrent musical components in the texture. PA is a new analytical tool for the study of musical texture considering the approximation of Wallace Berry's (1976) proposal and the Theory of Integer Partitions, building a partially ordered organization that relates partitions by its transformational process in an exhaustive taxonomy that encompasses all partitions from 1 to a "pre-defined number using mainly the inclusion relation.

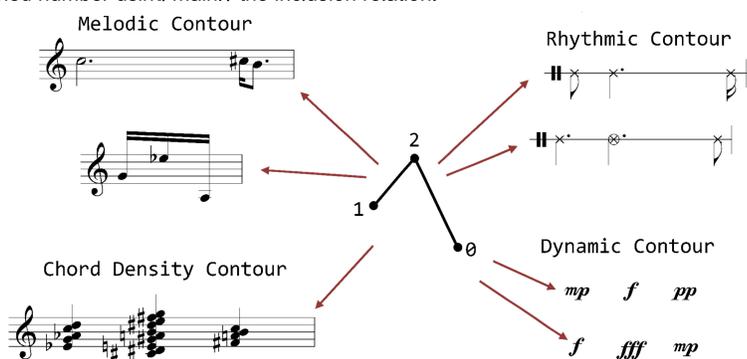


Figure 1: Application of contour $\langle 1\ 2\ 0 \rangle$ to different musical structures.

Textural Contour

Textural Contour is developed from the ranking of the partitions ordered from simplest to the most complex, therefore establishing a textural progression curve. The partitions form a partially ordered set, which implies that its ranking is not totally linear and some partitions are incomparable. Incomparable partitions receive the same level in Textural Contour.

The ability to compare and relate two distinct textural progression to a single contour is an important feature provided by Textural Contour. Textural Contour, as an vectorial abstraction, not only express textural behavior, but also allows the objective connection of other musical parameters (such melody and rhythm) with textural progression and with the recurrence of musical gestures (see more about Textural Contour in: Moreira 2013 & 2015; Moreira and Gentil-Nunes 2014).

Conclusions

The differences between the textural treatment and the melodic contour suggest an compensatory equilibrium. The melody, with a chromatic and linear movement and a tonal center well defined, articulated by a simple and metrical rhythm, leads to a simplification of the melodic flow. Textural progression, on the other side, is more complex, with many abrupt changes of textural configuration.

The investigation of the relations between the flute theme and the overall textural progression, including other parameters are subject to future research

Results

The flute theme of Debussy's *Prélude* draws a linear and flowing waveform, with a predominance of movements between adjacent melodic levels in the contour. The last part of the theme presents a sudden sectioning caused by the biggest gap between sequential levels (8 and 1), just after the melodic apex (level 9), followed by a sense of relaxation.

Textural Contour of the first 10 measures of Debussy's *Prélude* shows different treatment compared to the melody. Textural motion concerns predominance of non-adjacent movements between levels, with only one adjacent movement (from level 14 and 15). The alternation of conjunctions and gaps between levels implies textural complexity, with abrupt changes between the textural configurations. This is also reflected in the recurrence of levels, where most of the levels are articulated only once.

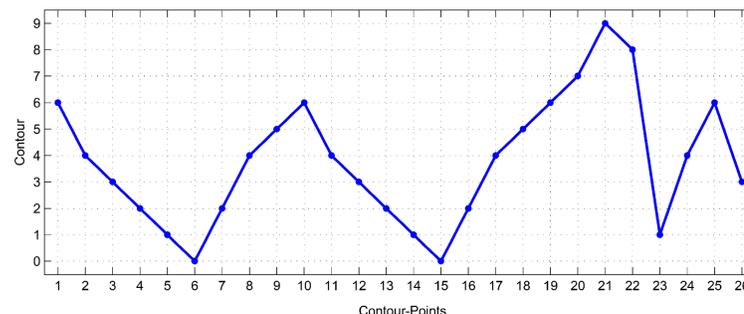


Figure 2: Melodic contour of flute theme from Debussy's *Prélude à l'après-midi d'un Faune*.

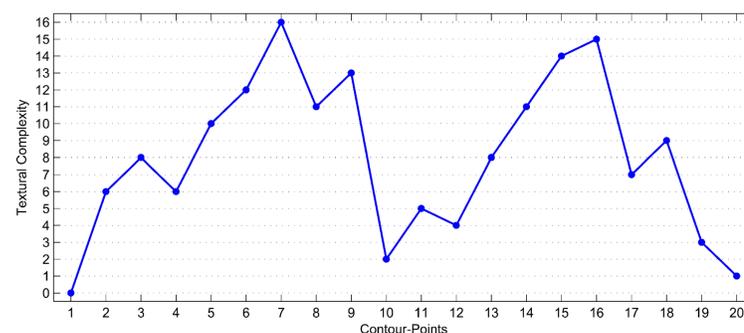


Figure 3: Textural Contour of first ten measures from Debussy's *Prélude à l'après-midi d'un Faune*.

The analyzed section presents 19 different partitions, with 2 groups, each one with 2 incomparable partitions (indicated by brackets), totaling 17 different levels in only 10 measures, leading to a more complex textural progression.

Both melodic and Textural Contour present expansion and relaxation curves (waveform), but while the melodic contour performs descending curves toward the lowest level (zero), the Textural Contour performs upward curves toward the highest level (level 16).

Level	Partitions
0	1
1	1 ²
2	1 4
3	1 ² 2
4	2 4
5	1 ² 4
6	1 ² 2 ²
7	1 2 5
{ 8	1 ³ 2 ²
{ 8	2 ² 4
9	1 ² 2 5
10	1 ² 2 ³
{ 11	1 2 ² 7
{ 11	2 ³ 4
12	1 ² 2 ⁴
13	1 ² 2 ² 7
14	1 2 ³ 5
15	1 ² 2 ³ 5
16	1 2 ⁴ 7

Table 1: Levels and Partitions of first ten measures from Debussy's *Prélude à l'après-midi d'un Faune*.

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