Polytonality and the Emergence of Tone Fields in Germaine Tailleferre's Pastorale (1919)

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Digital and Cognitive Musicology Lab – École Polytechnique Fédérale de Lausanne 21. Jahreskongress der Gesellschaft für Musiktheorie (GMTH) – Tonsysteme und Stimmungen 30 September–3 October 2021, Basel, Switzerland



- 1. What is polytonality?
- 2. The problem of polytonality
- 3. Tone fields to the rescue
- 4. Analyzing Tailleferre's Pastorale
- 5. Conclusions

Polytonality vs atonality

"Il existe entre la polytonalité et l'atonalité les mêmes différences essentielles qu'entre le diatonism et le chromatisme." (Milhaud, 1923)

"The same differences exist between polytonality and atonality as between diatonism and chromaticism."

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	enharmonicism	enharmonicism
old:	diatonism	chromaticism
new:	polytonality	atonality

Diatonitism

"Le diatonisme implique la croyance en l'accord parfait (composé de sa fondamentale, de sa tierce majore ou mineure, et de sa quinte) comme en une réalité fixe reposant sur une gamme majeure ou mineure que le musicien utilisera dans la composition de ses thèmes."

"Diatonism implies the belief in the perfect chord (composed of its root, its major or minor third, and its fifth) as a fixed reality that relies on a major or minor scale that the musician in the composition of his themes."

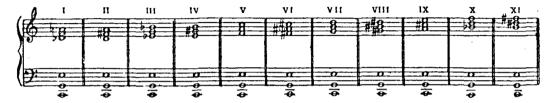


Figure 1: 11 possible combinations of two chords, one being C major.

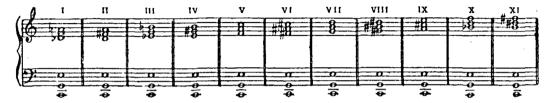


Figure 1: 11 possible combinations of two chords, one being C major.



Figure 2: Major/minor combinations (left). Inversions (right).



Knowing what you can do doesn't tell you what works well. You need to know how to put the pieces together!

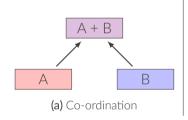


Figure 3: Three scenarios.

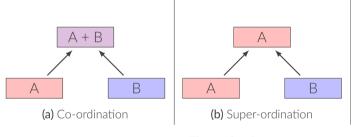


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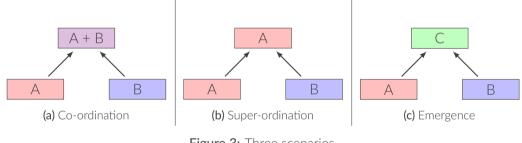


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Limitations

"D'ailleurs l'analyse d'un accord est une question conventionelle et arbitraire [...]."

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"The analysis of a chord is a question of convention and arbitrariness anyway [...]." \rightarrow A description of the combinatorics of polytonality is not sufficient!

Tone fields to the rescue

Tone field theory (Haas, 2004; Polth, 2006) proposes a framework for **extended tonality** that analyzes pieces on several **layers** (foreground, middleground, background) using **structured analytical concepts**.

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• Series of fifths: $\dots - Bb - F - C - G - D - A - \dots$

Tone field theory (Haas, 2004; Polth, 2006) proposes a framework for **extended tonality** that analyzes pieces on several **layers** (foreground, middleground, background) using **structured analytical concepts**.

- Series of fifths: ...- Bb F C G D A ...
- Functions:

 $\begin{array}{cccc} \mathsf{F} \sharp & \mathsf{A} & \mathsf{C} & \mathsf{E} \flat \\ \mathsf{B} & \mathsf{D} & \mathsf{F} & \mathsf{A} \flat \end{array}$

The Album des Six (1920)

- 1. Prélude (Georges Auric)
- 2. Romance sans paroles (Louis Durey)
- 3. Sarabande (Arthur Honegger)
- 4. Mazurka (Darius Milhaud)
- 5. Valse (Francis Poulenc)
- 6. Pastorale (Germaine Tailleferre)



Figure 4: The Groupe des Six.

PLAY

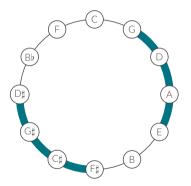
Overview

Bars	Form	Bass
1-8	4 + 4	D
9-16	4 + 4	G# – G
17-28	(8 + 2) + 2	F – E
29-36	4 + 4	D
37-48	4 + (4 + 4)	B – Bþ
49-53	5	D

The foreground



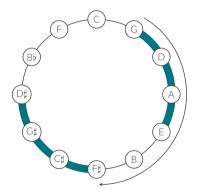






The two pitch-class sets *X* and *Y* can be related through transposition:

$$Y = T_5(X) = X + 5 \mod 12$$



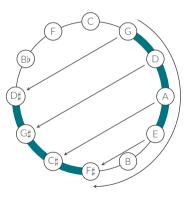


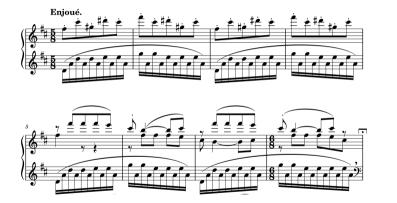
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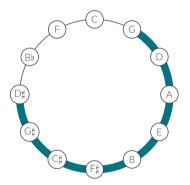
$$Y = T_5(X) = X + 5 \mod 12$$

or through inversion:

$$Y = I_{10}(X) = 10 - X \mod 12$$

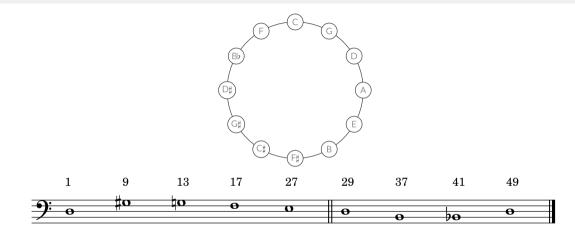


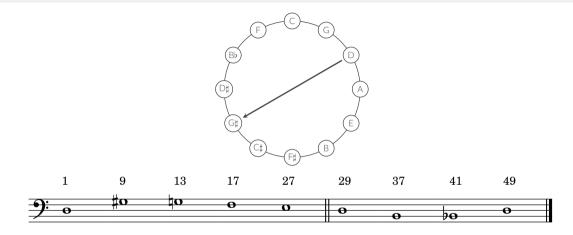


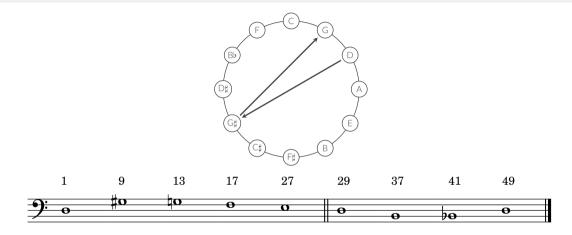


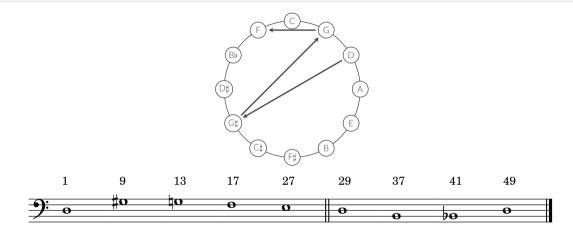


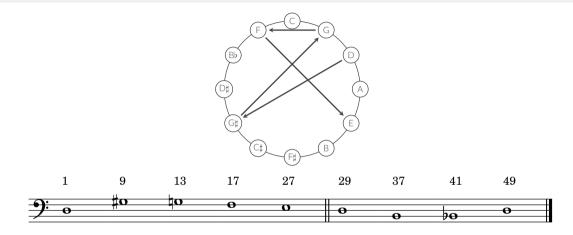
On the **foreground**, the first 8 bars establish two disjunct **tetratons**; connected by B to form an **enneaton**

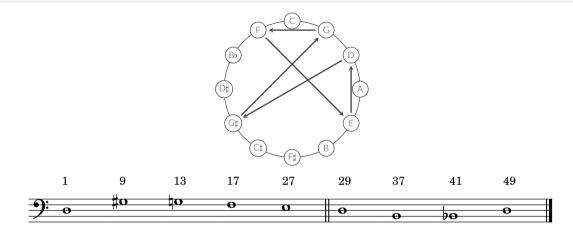


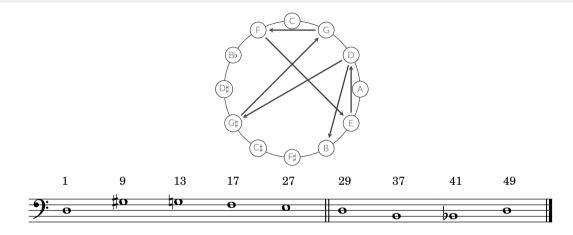


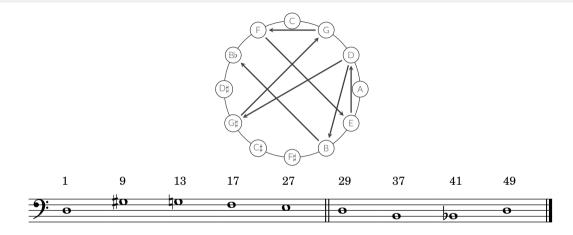


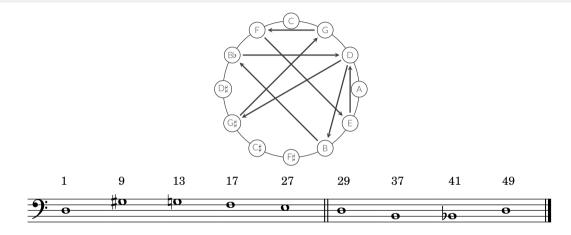


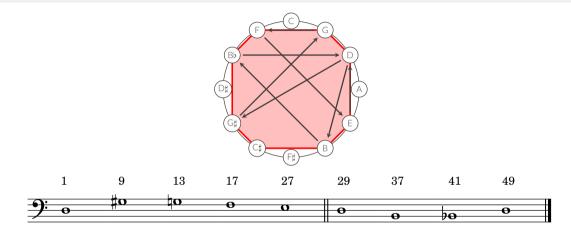


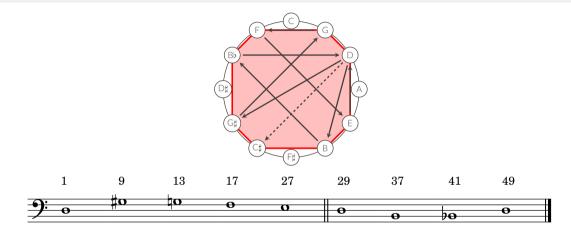


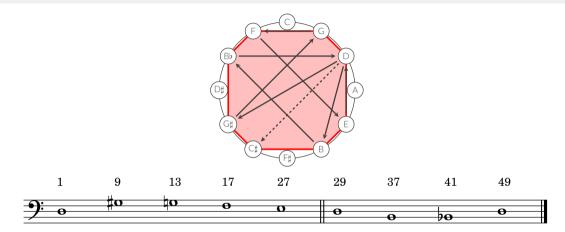




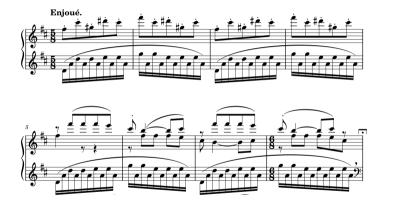


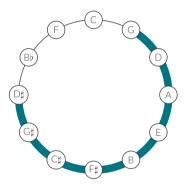


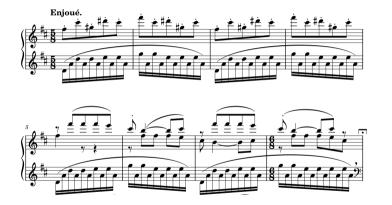


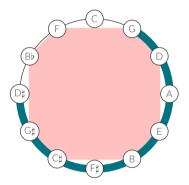


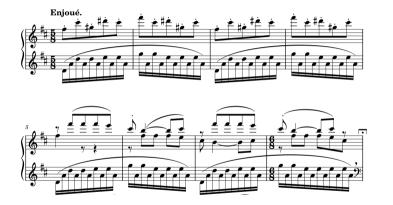
The background tonal structure of the Pastorale is given by an octatonic scale.

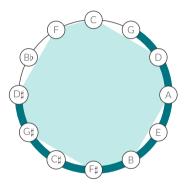


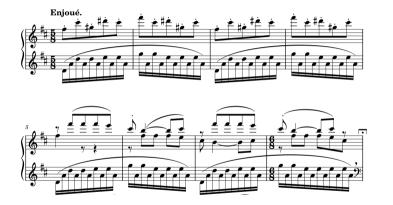


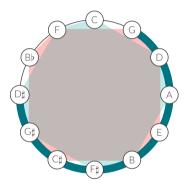


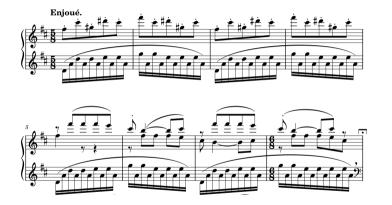


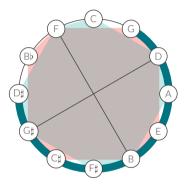












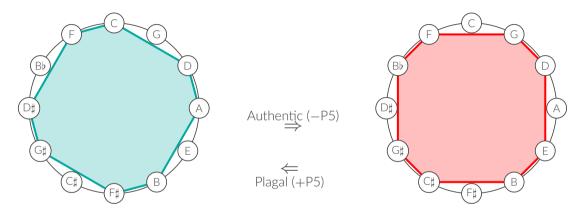
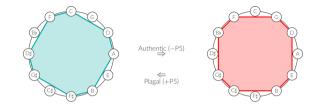
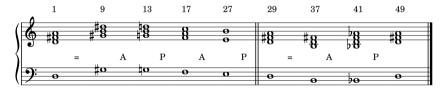
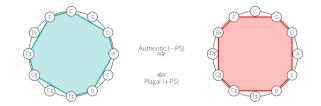


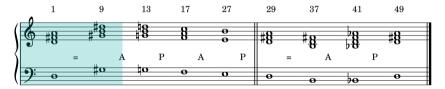
Figure 5: Function on {D, G[#], B, F}.

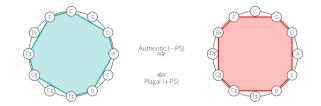
Figure 6: Function on {G, E, Bb, C#}.



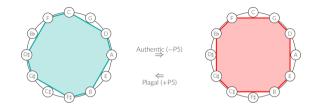


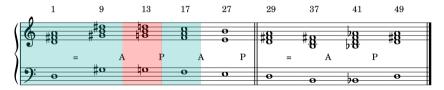


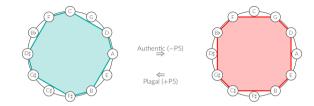


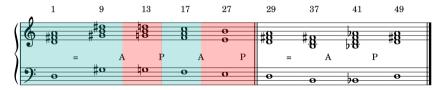


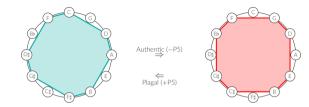


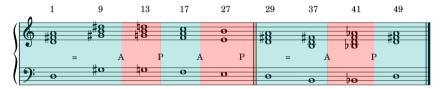


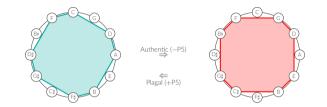


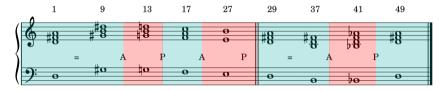












Two alternating Functions form the middleground structure of the piece.

Conclusions

Summary

Layers

D# F# A C G# B D F C# E G B♭

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• foreground: series of fifths (tetraton and enneaton)



Layers

- foreground: series of fifths (tetraton and enneaton)
- middleground: octatonic on D and octatonic on G

D#	F#	А	С
G#	В	D	F
C#	Е	G	Вþ

Layers

- foreground: series of fifths (tetraton and enneaton)
- middleground: octatonic on D and octatonic on G

D#	F#	А	С
G#	В	D	F
C#	Е	G	Bþ

Layers

- foreground: series of fifths (tetraton and enneaton)
- middleground: octatonic on D and octatonic on G
- background: octatonic on G

D#	F‡	А	С
G#	В	D	F
C#	Е	G	Вb

Conclusion?

Francis Poulenc to Paul Collaer (July 1922):

"Believe me, *polytonie* is a dead end that will go out of fashion within five years, unless it is the means of expression for some type of genius, like Darius [Milhaud]. I will not speak of atonality. It's shit [sic!]."

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Germaine Tailleferre in a letter to Poulenc (August 1923):

"Je suis tes bons conseils et je ne fais plus de polytonie." "I follow your good advice and don't write anymore polytonality."

Cited after: de Médicis, F. (2005). Darius Milhaud and the Debate on Polytonality in the French Press of the 1920s. *Music & Letters*, 86(4), 573–591 Thank you very much!

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