César Franck, Restrained Pioneer: Formal Deformations and Harmonic Transformations in Les Djinns

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ABSTRACT

The inclusion of innovative practices in Franck's compositions led to works that blurred traditional models of form and harmony. Among these works is *Les Djinns*, a symphonic poem for piano and orchestra based on a poem by Victor Hugo. Written in 1884, the work was premiered at the Société National de Musique in 1885. Franck wrote *Les Djinns* with a unique structural layout. However, the work still resembles a sonata form with "deformations." This anomaly, standing in between innovation and classical form, makes it difficult to label *Les Djinns* within a particular structure. Additionally, the harmonic behavior of the piece, deeply rooted in chromatic voice leading, suggests a musical language that goes beyond the reach of diatonic syntax.

This project will provide an analysis of *Les Djinns* focused on its formal structure and harmonic procedures using recent scholarly work. The analysis of its form will outline in what ways the work deviates from conventional models of structure, particularly sonata form. In order to do so, this research will apply the theories of sonata form developed by James Hepokoski and Warren Darcy. The harmonic analysis will rely on Richard Cohn's writings on chromatic harmony. Throughout this research, I will employ models of graphic representation used by Cohn to explain how some of these innovative harmonic operations work. While other scholars have applied this theoretical approach in other compositions by Franck, no research has applied these in *Les Djinns*.

This paper will be introduced by a brief section that will provide all the necessary terminology to fully comprehend the analysis. Then, the following section will provide a formal analysis of *Les Djinns*, with a special emphasis on the deformations of sonata form that make the work unique. The last section will provide a discussion of some

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harmonic procedures that suggest a pan-triadic harmonic language. In this last section, I will examine the usage of hexatonic cycles as unifying devices for triadic coherence in the two expositions, address the importance of the augmented triad in *Les Djinns*, and discuss how Franck's harmonic style features cross-type transformations between triads and seventh chords as a result of chromatic voice leading.

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Chapter 1: Summary of Terminology Employed

The following chapter provides an overview of the concepts and terminology applied in this analysis of *Les Djinns*. The first part of the chapter deals with essential Hepokoski and Darcy's sonata form terminology.¹ The second part describes basic Neo-Riemaniann operations and models of transformational theory cited and expanded in Cohn's work.²

Hepokoski and Darcy's Sonata Theory Analysis

The most straightforward layout of a sonata form, the type 3, consists of a rounded binary scheme and features three sections—the exposition, development, and recapitulation. The primary function of the entire structure is to achieve a tonal resolution in the recapitulation. This accomplishment is called the essential structural closure (ESC), and it requires a prior interaction between two thematic zones, P and S, throughout the sonata.

P, or primary-theme zone, generally launches the exposition, although it may be preceded by an introduction. The main goal of P in the exposition is to lead to S, or secondary-theme zone. In order to do so, a transition (TR) usually facilitates this transition, either in a modulatory or a non-modulatory way. A medial caesura (MC) may function as a hinge or breath mark between TR and S.

¹ James A. Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata* (Oxford: Oxford University Press, 2006). ² Richard L. Cohn, *Audacious Euphony: Chromaticism and the Triad's Second Nature* (New York: Oxford University Press, 2012).

S initiates the second half of the exposition in a new key, and its goal is to secure a perfect authentic cadence (PAC) in order to grant an essential expositional closure (EEC). An EEC becomes the main goal of the exposition—to accomplish a tonal resolution in the new key brought by S. After the EEC, a closing space (C) may conclude the exposition, usually ending in a strong cadence.

The development features a combination of the material deployed throughout the exposition, although some new material may appear. Often dominated by P or TR, the development ends in a dominant of the home key in order to prepare the return of P. Sometimes, an interruption may be articulated between the development and the recapitulation. The developmental usually becomes the space that provides greater freedom for the composer's compositional desires.

The recapitulation generally brings back P in the tonic key, although the P space may be shortened. The goal of P this time is to secure a transition to S again. However, the S space will be centered in the main key rather than in a new key. This will facilitate arriving to an ESC and provide a sense of tonal closure. After the ESC, a C area may follow to provide a final cadence. Additionally, a coda may add a few more bars conventionally, although some codas may be longer—to confirm the harmonic resolution.

Initially, both parts in the sonata form layout were repeated. Later models of sonata repeated only the exposition and not the development-recapitulation.³

³ Hepokoski, 16–22.

Updated Harmonic Transformations of Neo-Riemannian Thought

Cohn has studied multiple types of triadic transformations in works of the nineteenth century. To do so, he uses and expands models of analysis by other authors, such as Leonhard Euler's Tonnetz, Carl Friedrich Weizmann's cycles, Hugo Riemann's transformational operations, and Jack Douthett's Cube Dance.⁴ Cohn expands this body of knowledge by adding new ways of mapping the triadic universe.

A hexatonic cycle comprises a group of six triads obtained after moving from an initial triad by minimal-work relation (see Figure 1.1). The twenty-four triads, including major and minor and excluding enharmonizations, are evenly distributed in four cycles.⁵ A triad can travel to any other triad in the hexatonic region by using one of the five available transformations as conceived by Neo-Riemannian theory: L, P, LP, PL, and H.⁶ The L transformation, or Leittonwechsel, is achieved when one voice moves a semitone while the remaining two keep a minor third relationship. P is a parallel transformation between "two consonant triads that share a root."⁷ LP and PL are combinations of Leittonwechsel and parallel transformations that result in a balanced voice leading of two

⁴ Jack Douhett and Peter Steinbach, "Parsimonious Graphs: A Study in Parsimony, Contextual Transformations, and Modes of Limited Transposition," *Journal of Music Theory* 42, no. 2 (1998): 241–63; Otakar Hostinsky, *Die Lehre von den musikalischen Klängen: Ein Beitrag zur aesthetischen Begründung der Harmonielehre* (Prague: H. Dominicus, 1879); Hugo Riemann, *Musikalische Syntaxis: Grundiβ einer harmonischen Satzbildungslehre* (Leipzig: Breitkopf und Härtel, 1877), *Skizze einer neunen Methode der Harmonielehre* (Leipzig: Breitkopf und Härtel, 1880), *Katechismus der Harmonielehre (theoretisch und praktisch)* (Leipzig: Max Hesse, 1890), *Katechismus der Musik (Allgemeine Musiklehre)*, 2nd ed. (Leipzig: Max Hesse, 1897); Carl Friedrich Weitzmann and Janna K. Saslaw, "Two Monographs by Carl Friedrich Weitzmann: Part I: 'The Augmented Triad' (1853)," Theory and Practice 29 (2004): 133–228.

⁵ Richard Cohn, *Audacious Euphony: Chromaticism and the Triad's Second Nature* (New York: Oxford University Press, 2012), 18.

⁶ Cohn, 105.

⁷ Ibid., 212.

units of work. H, the hexatonic pole, is the furthest region in a hexatonic cycle from a given triad and requires semitonal displacement in the three voices of the triad.

Hexatonic cycles operate in synergy with the tools mentioned above to create an analytical system for pan triadic music. These mechanisms become an essential tool in the analysis of Franck's *Les Djinns* to determine how the work features triadic operations and if there exists non-diatonic syntax.

Figure 1.1: Hexatonic cycle and minimal unit work transformations. Triads circled; arrows indicate single-pitch unit of work.⁸



Like the hexatonic cycle, a Weitzmann cycle functions on triadic relationships. It originates after choosing an augmented triad and doing a semitonal displacement in one of its voices. After this operation, and depending on the semitonal displacement executed,

⁸ Borrowing Cohn's terminology, I will use uppercase letters followed by the + sign to refer to major triads and lowercase letters followed by the - sign to refer to minor triads.

six different consonant triads may emerge (see Figure 1.2). Interpreting an augmented triad as the pillar that sustains a triadic cycle reinforces Cohn's idea that an augmented triad is a "perfectly even" chord since it divides the octaves into three equal parts. Consonant triads are considered small deviations from an augmented triad and therefore are considered "nearly even."⁹ A triad within a Weitzmann region can travel to any of the other five triads by using PL, LP, R, N, or S.¹⁰ R is a transformation to a triad that shares the same major-third dyad; N, or *Nebenverwandt*, features a transformation "between a major triad and the minor triad whose root lies a perfect fourth above it."¹¹ The S transformation operates within two consonant triads that share the same third.

Figure 1.2: Voice-leading interaction between hexatonic cycles and the four augmented triads. Lines indicate both possible directions. Source: Cohn, 85.



⁹ Cohn, 17.

¹⁰ Ibid., 105.

¹¹ Ibid., 212. R and N transformations are not available in a hexatonic cycle, but they are common operations in Weitzmann regions.

Cohn relies on Brandon Derfler's scale of parsimony to establish a hierarchical order between the different operations of voice leading, ranking higher the ones that use fewer units of work.¹² Considering this approach, <u>H</u> transformations would become the most optimal, since they require either one or two units of work, except for the hexatonic pole, H, which requires three units of work.¹³ <u>W</u> transformations would rank second as the minimum required for a transformation is two units of work. "Odd-value transpositions" use three units of work since all voices move by a semitone.¹⁴ The lower-ranked transformations would require six units of work, as one can observe in a C \rightarrow Bb transformation. Jack Douthett's Cube Dance helps to trace interactions between <u>H</u> and <u>W</u> that are in distant regions (see Figure 1.3). The Cube Dance offers the possibility of creating a complete system of all twenty-four triads and the four augmented triads, therefore offering a map through which we can identify any triadic transformation.

¹² Brandon Derfler, *Single-Voice Transformations: A Model for Parsimonious Voice Leading* (Cambridge Scholars Publishing, 2010), 3.

¹³ Borrowing Cohn's terminology, I will use <u>H</u> to address hexatonic groups and <u>W</u> to address Weitzmann groups.

¹⁴ Cohn, 89.

Figure 1.3: Jack Douthertt's Cube Dance. Solid lines represent hexatonic cycles. Dotted lines represent Weitzmann regions. <u>0</u>, <u>3</u>, <u>6</u>, and <u>9</u> represent augmented triads. Source: Cohn, 104.



Chapter 2: Problematized Sonata Form in Les Djinns

The following analysis applies Heposkoski's theories of sonata form to reveal the extent of the formal deformations present in *Les Djinns*. Despite its numerous deviations from the conventional layout of a type 3 sonata, *Les Djinns* still carries a considerable load of sonata-like rhetoric. This analysis may serve as a demonstration of how composers in the late nineteenth century were successful at writing music that stepped out of tradition, while still being deeply rooted in it.

The snake-like design in Figure 2.1 represents the formal map of *Les Djinns*, organized in three large sections. The outer sections, the S-shaped sections of the snake, are based on the same motivic material. Each of these two sections are split into two smaller parts, the rotations, that merge into each other. The central section, the belly of the snake, is mainly based on new material, therefore its different shape. Additionally, a small addendum on the right side, the "rattle" of the snake, represents the coda that concludes the piece.

Figure 2.1: Formal Map of Les Djinns.



The resemblances to sonata form are obvious. The three-part layout reminds us of an exposition-development-recapitulation structure in the most conventional sense. However, once examined deeper, the three-part scheme of *Les Djinns* reveals unique deformations, which are discussed in this chapter.

First Expositional Rotation

The primary-theme zone (P)

The first issue is delineating where P starts. *Les Djinns* opens with a musical gesture that suggests the possibility of an introduction before P launches. Mm. 1–12 feature a repetitive three measure pattern with a two-note motif due to semitonal voice leading. Mm. 13–24 feature the same material with an incorporated ostinato rhythm in the strings. This rhythmic pattern is Franck's attempt to coat the piece with an exotic air,

since it reminds of a Middle Eastern *darb* or *usul*.¹⁵ The first 24 measures introduce a musical gesture in chromatic motion and a haunting rhythmic pattern, but may lack material identifiable as thematic, since no clear melodic material has appeared yet. **Example 2.1**: Franck, *Les Djinns*, mm.1–12 (piano transcription).



Example 2.2: Franck, Les Djinns, darb or usul rhythm, mm.14–16, (piano transcription).



One could argue that P begins in m. 25 when the melodic theme in the clarinets is introduced. If so, the initial bars should be considered introductory material. Hepokoski states that a theme needs to be a "leading musical idea," but the term should not be used only to define a self-contained melodic idea.¹⁶ His interpretation of what a theme is suggests that the primary-theme zone should encompass the entire succession of themes

¹⁵ Ralph Locke, "Cutthroats and Casbah Dancers, Muezzins and Timeless Sands: Musical Images of the Middle East," *19th-Century Music* 22, no. 1 (1998): 39.

¹⁶ Hepokoski, 65.

instead of relegating some gestures—mm.1–12—to an introductory status only due to their lack of melodic linearity.

Consequently, we shall create a series of labels for all musical gestures comprised in the P space. Table 2.1 offers a list of the entire P zone, dedicating a sublevel of P to each new musical idea.

		, 9	,		
P ^{1.0}	P ^{1.1}	P ^{1.2}	P ^{1.3}	P ^{1.4}	P ^{1.5}
Mm. 1–24	Mm. 25–48	Mm. 49–61	Mm. 61–72	Mm. 73–84	Mm. 85–
					126

Table 2.1: Sublevels of P. Franck, *Les Djinns*, mm. 1–126.

The initial bars bear the P^{1.0} label instead of ^{P1.1} due to their preparatory status yet still allegiance to the P rhetoric. P^{1.0} gains the status of "accompanimental figuration (rhythmic stream)", meaning that it features an accompanimental pattern (the *darb* or *usul*) on which the next theme is superimposed later.¹⁷ A P⁰ label would imply that the initial bars are not a necessary component of the musical rhetoric to follow. This is not the case in *Les Djinns*, given that the rhythmic pattern continues appearing in its exact form or varied throughout the entire P space.

The cumulative effect achieved in the P space due to the lingering of $P^{1.0}$ in other sublevels of P obscures the boundaries of each section. Also, the similarities between musical gestures within the P space contribute to this effect—the motivic figures in $P^{1.2}$, $P^{1.3}$, $P^{1.4}$, and $P^{1.5}$ are all based on a dotted eighth note followed by a sixteenth note.

¹⁷ Hepokoski, 86–7.

The cadenza as a problematizing agent in P

Franck's inclusion of a piano cadenza in mm. 85–96 problematizes P. Due to its bold and solo-like behavior, the cadenza may suggest to the listener that the piece follows a concerto-sonata scheme proper—i.e., a type 5 sonata form—in which the cadenza marks the beginning of the second exposition after the expositional tutti. Conventionally, the first rotation or R1 in a type five sonata features a complete expositional rotation R1:\P, R1:\TR, R1:\S, and R1:\C.¹⁸ If one were to consider the piano cadenza the beginning of a new rotation, the prior space played by the orchestra in mm. 1–84 would have been an incomplete rotation, since it does not feature any S material. Additionally, the initial tutti in *Les Djinns* operates uniquely in one key area, F# minor, as it is the norm in a traditional R1. However, R1 fails at displaying a complete expositional layout.

Therefore, the material that appears after the piano cadenza—P^{1.5}—is a continuation of the P rhetoric, required to complete part one of the exposition. Although the scent of a type five sonata is present because of and orchestral tutti before the piano arrival, the structural framework is closer to the typical layout of a type three sonata form.

The arrival of S

One of the main features of a secondary-theme zone is the migration to a different key area. In conventional sonata form, the most straightforward harmonic procedure consists of a modulation to the dominant key for major-mode sonatas. In minor-mode sonatas, the modulation usually leads to the major mediant (III) or the minor dominant

¹⁸ Hepokoski, 472.

(v).¹⁹ Composers often experimented moving to non-related key areas for S. Even though a transition to the dominant key was still perceived as the default procedure by midnineteenth century, modulations to other areas such as mediants and submediants occurred more often.²⁰

In *Les Djinns*, S begins in m. 135 when D major, the major submediant (VI) of the tonic key F# minor, is established. Compared to P, which was centered in the same key area, S has a slightly more modulatory behavior, as it becomes more centered towards the parallel D minor in m. 151 and finishes the S space in B major. A similar harmonic procedure can be observed in the first movement of Beethoven's String Quintet in C Major, op. 29. The S zone begins in m. 41 with VI, A major, and moves to the parallel A minor in m. 52. Additionally, A minor moves to IV, F major, just as D minor moves to IV, B major, in *Les Djinns* to finish S in m. 175. Hepokoski refers to S zones with more than one key area such as the ones explained above as "tonally migratory."²¹

On the existence of a TR space

Once outlined the entirety of the S area, let us examine how P transitions towards S and why it does so in an unconventional fashion. First, the lack of a Perfect Authentic Cadence (PAC) concluding P makes it hard to determine when the TR begins, if there is any. The strongest cadence, an Imperfect Authentic Cadence (IAC) in m. 103, could be an optimal departure point for TR. If so, the result of such approach would be dealing with a TR space that makes P still resonate because of its smooth, continuous trajectory.

¹⁹ Hepokoski, 16.

²⁰ Ibid., 120.

²¹ Ibid., 120.

Second, the material of P^{1.5} remains in mm. 109–34 to modulate and finally reach D major, the key of S, in m. 121. Using thematic material of P during TR instead of a new musical idea is proper of a "merged transition."²² TR behaves as a "dissolving restatement" by starting with a tutti that confirms P^{1.5} but soon engaging into modulatory operations—the solo piano statement is repeated by the orchestra immediately after and modulates to A# minor in m. 109.²³ A "tutti affirmation" is often a clear indicator that a TR begins.²⁴ With this procedure, Franck is able to build a TR with faded boundaries based on material already heard that gradually reaches D to open the S space. The ultimate goal of such approach is to provide continuity to the music instead of compartmentalized sections.

Third, TR does not successfully reach a dominant cadence before entering S. Instead, P^{1.5} features two transformations in which the root moves up a major third, F# minor \rightarrow A# minor \rightarrow D major. These transformations occur with diminished seventh chords acting as passing sonorities. In m. 108, a G* diminished seventh chord, enharmonic with an A diminished seventh, transitions to A# minor. In m. 120, a C# diminished seventh chord is used to transition to D major. The arrival of P^{1.5} in D major in m. 121 is followed by a pedal point extension that lasts until the beginning of S in m. 135. The continuity of this section and the lack of a clear articulation or spot that separates when TR ends and where S begins makes P lead into S in an almost unnoticeable way. Additionally, the absence of a half cadence to prepare the arrival of S makes it hard to locate a medial caesura.

²² Hepokoski, 95.

²³ Ibid., 101.

²⁴ Ibid., 113.

Caesura fill (CF) instead of a medial caesura (MC)

Traditionally, a medial caesura (MC) is an articulation point that divides the exposition into two parts, usually the fruit of a pause created by a half cadence in the new key.²⁵ In *Les Djinns*, the new key area does not provide a half cadence or a dominant suspension of any kind since its arrival in m.121. Instead, mm. 121–34 sustain D major until S begins in m. 135. More particularly, mm. 127–34 abandon P^{1.5} but sustain both D major and the drive of P. For this reason, mm. 127–34 become a substitute of a MC, creating an MC–gap that we shall call caesura fill. Additionally, the CF extends the energy and vigorous drive of P, suggesting that mm. 127–34 act as a "caesura fill of the juggernaut type".²⁶

By using a CF instead of an MC, music keeps its continuous feel and maintains its drive. Moreover, the caesura fill makes TR a "de-energizing" one, a common procedure in the nineteenth century. In a "de-energizing" TR, the CF features a decrescendo before reaching S, therefore encouraging a linear and smooth way. This presents additional challenges, given that a CF of this sort, still using the energy and thematic rhetoric of TR, could be still considered as part of TR. If so, we would be dealing with a TR of greater proportions that deflates, in a "Romantic" manner, until reaching S.²⁷

The lack of success of S

The S area deals primarily with two key areas—D major and D minor. Each key area owns its own motivic idea, which results in a change of texture and color in the

²⁵ Hepokoski, 24.

²⁶ Ibid., 44.

²⁷ Ibid.

piano writing starting in m.151. A migratory S area such as this can produce two separate launches of new themes. Typically, an S section with two different thematic ideas creates a "trimodular block" (TMB).²⁸ In a TMB, a MC precedes each launch of a new theme in S. However, as noted above, the first thematic idea of S was not properly introduced by a MC. Instead, a caesura fill made a continuous arrival in S. Moreover, the secondary thematic idea of S in m. 151 is not preceded by a MC either.

The first module of S, S^{1.1}, comprises mm. 135–150 and does not end on a PAC, therefore failing at reaching a successful essential expositional closure (EEC). Instead, a new module, S^{1.2}, begins in the parallel key D minor in mm. 151–83. S^{1.2} is able to migrate to a distant region of D-, ending the S space in B major in mm. 175–83. Because of the extension of a tonic pedal and the gradual decrease of intensity at the end, the ending of S may recall the CF that led to S in mm. 127–34, therefore creating a smooth way in and out of S.

Traditionally, S should end on a PAC in the new key to secure an EEC. However, neither a PAC is articulated nor S ends in the same key. The lack of conventional landmarks for an EEC makes it challenging to determine where the S zone ends and where the closing zone begins, if there is any. The primary mission of S is to reach a PAC in the new key. When an S space lacks a PAC that secures the EEC, the entire exposition may depict a sense of unresolvedness, affecting the natural rhetoric discourse of the entire sonata form. Additionally, the lack of an EEC in the exposition may subsequently lead to an unresolved recapitulation as well, jeopardizing the essential structural closure (ESC).²⁹

²⁸ Hepokoski, 170.

²⁹ Hepokoski, 177.

that the conventional sonata form was no longer able to satisfy the creative needs of composers.³⁰

Rather than analyzing the lack of closure in S solely, it is of greater significance for the performer to discover how this structural layout affects the musical trajectory of the piece. Hugo's poem features a perpetual feeling of unrest due to the imminent arrival of the djinns in the opening, the chaos and fear depicted in the middle stanzas, and the reminiscence of the entire experience towards the end. In an attempt to find a parallelism between the poem's mood and Franck's music, an unresolved rotation may strategically fit better than a rotation that hints at a feeling of accomplishment, as it would be unrelated to the atmosphere of the poem.

Closing zone versus transition to the next rotation $(S \Rightarrow C)$

The failure of S to reach a PAC makes it hard to determine if there is a closing zone. Conventionally speaking, C should not begin until an EEC has arrived.³¹ A weak D major in S^{1.1}—due to the high degree of chromaticism—is interrupted instead of securing a PAC and shifts to D minor for S^{1.2}, starting in m. 151. D minor does not reach a successful cadence either, given that it modulates to B major through a series of major third related transformations—explained in greater detail in the next chapter.

The only moment that suggests a solid tonal arrival is the extension of a B major pedal point a few bars before the orchestra returns in m. 183. However, this presents an issue, given that B major is not the key that started the S section. B major is the arrival point of S due to Franck's modulatory behavior. From a tonal standpoint, there has been a

³⁰ Ibid., 178.

³¹ Ibid., 180.

resolution due to the settling into B major. From a sonata-form standpoint, the "journey" takes an unplanned detour.

Normatively, C only exists as a post cadential EEC. In the nineteenth century, composers often experimented with sonata forms in which S did not reach a PAC, making it impossible to label an EEC.³² The return of P^{1.0} clearly symbolizes the beginning of the second expositional rotation, which determines that the first expositional rotation concludes whenever S^{1.2} ends in m. 182. However, the continuation of the B-centered sonority and the pianissimo dynamic may make the return of P^{1.0} feel like a natural closing of S. Additionally, harmonic operations occur in a smooth, subtle way, as the B major that ended S becomes a seventh chord enharmonic with the augmented sixth chord of E@ minor, the new tonal goal. In conclusion, P^{1.0} in mm. 183–194 participates both in abandoning S as a "pseudo closing zone" and introducing the next rotation. It becomes a merging agent instead of a clear-cut section to blur the transition from one rotation to another.

Second Expositional Rotation

 $P^{1.0}$ in mm. 183–94 features a return to the opening material, therefore launching a second rotation. This new module lasts until the reappearance of $P^{1.0}$ in m. 307, where a new module starts. The second rotation features an almost exact repetition of the structural layout seen in the first rotation (see Table 2.2). The relatedness between these two modules results in an expositional rhetoric said twice. However, instead of being an exactly repeated exposition, the second module presents some alterations. Unusual forms

³² Hepokoski, 190.

with an expositional area that repeats with slight variations became more common during the nineteenth century. Hepokoski has observed alterations of this fashion in Berlioz's overture *Le carnaval romain*, a piece that predates *Les Djinns* by forty years.³³ The following lines focus on discussing such differences in the expositional design of *Les Djinns*.

	P ^{1.0}	$P^{1.1}$	P ^{1.2}	P ^{1.3}	P ^{1.4}	P ^{1.5}	$S^{1.0}$	S ^{1.2}
First	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
Exposition	1–24	25–	49–60	61–	73–	97–	135–	151–
(f#-		48		72	96	134	50	82
centered)								
Second	mm.	mm.	mm.	mm.	mm.	mm.	mm.	
Exposition	182-	195–	219-30	231-	243-	261-	279–	
(e@-	94	218		42	60	78	306	
centered)								

Table 2.2: Sublevels of P and S in both expositional rotations.

Differences in P: piano role and abrupt transition to S

P in the second expositional rotation keeps an identical sequence of P sublevels if compared to the first rotation. Although the structural framework of P remains unaltered, the orchestration behaves in a new way, given that the piano assumes a different role. In this second rotation, the piano participates into the musical discourse earlier, by joining forces with the orchestra in m. 195 to engage in a dialogue with the melodic theme of $P^{1.1}$.

From m. 195 onward, the piano participates with melodic interactions and mostly textural accompaniment, rather than engaging in a more soloistic rhetoric. This role is considerably different than the behavior of the piano part in the expositional rotation—a

³³ Hepokoski, 20.

bright, powerful cadenza signaling the arrival the piano and a vigorous P^{1.5} in *fortissimo*. The piano becomes one more instrument of the orchestra until the cadenza in mm. 255– 60 which parallels the soloistic behavior of the first rotation in mm. 85–96. This does not last long, since the piano returns to accompanimental writing in m. 273 for the rest of the rotation.

In conclusion, one of the main differences between the P spaces of the two expositional rotations is the involvement of the piano, switching from a soloistic presence to an accompanimental one. What started with the potential for piano concerto writing end up switching to a piano obbligato thread that connects all sublevels of P in a continuous stream of, mostly, sixteenth-note writing.

Structurally speaking, the main modification is the lack of a CF. Mm. 261–78 feature P^{1.5} and are followed by S immediately after in m. 279. The lack of a short pedal point that helps transition to S like in the first exposition—mm. 127–34—makes the *molto diminuendo* in mm. 277–9 especially important, as it becomes the only expressive device available to find the new mood that S requires. Using Hepokoski's terminology, the transition to S in the second exposition is less "merged" than the first one.

Lack of $S^{1.2}$ and success of exposition

One of the boldest deformations in the second rotation is the absence of $S^{1.2}$. In the first expositional rotation, $S^{1.2}$ was the consequence of $S^{1.1}$ failing at reaching a successful EEC. Additionally, $S^{1.2}$ had to migrate to a different key are and end the rotation in B major, which diluted the main goal of an exposition, reaching an EEC in D major—if one wishes to follow conventional sonata form rules.

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In the second rotation, $S^{1.1}$ carries the task of modulating by itself instead of waiting for $S^{1.2}$ to do so. $S^{1.1}$ starts in E@ major in m. 279, then centers itself in B major in m. 291 as a predominant of B@ major, expected to resolve into E@ major and therefore finishing the rotation in the same key as S begun. However, the B@ seventh chord in mm. 303–6 resolves in C@ major through a T¹ transformation by semitone of a seventh chord.³⁴ C@ major, enharmonic with B major, becomes the same arrival point for both expositional rotations—developed further below.

A new tonal outline for a new rotation

As seen above, the first and second expositional rotations reveal a great deal of similarity if their structural layouts are compared. Both rotations feature the same subsections of P and half of the S material. However, when it comes to their tonal journey, they behave differently. The repetition of the same musical material but in a different key is a familiar procedure in Franck's writing. In the first movement of his Symphony in D minor, an interruption right after the sonata form launches brings back the entire introduction, this time in F minor. Franck goes one step further in *Les Djinns* by transposing an entire rotation instead of only a section like in the symphony.

The second rotation launches in the foreign key of E@ minor. E@ minor arrives after the B major triad that ends S in m.183 becomes a B seventh chord and operates as the augmented sixth of E@ minor, leading to a B@ seventh chord in m. 194 that jumps to the new tonic in m. 195 through an IAC. P maintains E@ minor as a tonal center until $P^{1.5}$, just as the first rotation kept F# minor for all sublevels of P. The first rotation

³⁴ Cohn, 89.

achieved a secondary key area for S—D major/minor—through a series of third transformations in P^{1.5}. The second rotation, however, transitions directly to E@ major in m. 273 through a P transformation, causing that S^{1.1} is centered in E@. In order to parallel the modulatory trajectory of the first exposition, S^{1.2} in m. 279 should have begun in B major instead of remaining in E@ for the beginning of S^{1.2}.

Arrival to same key area in both expositional rotations

Despite S taking a different route in the second rotation, both expositions end in the same triadic center. The first rotation finishes $S^{1.2}$ with B major in m. 182. Similarly, the second rotation finishes $S^{1.1}$ by deceptively resolving into C@ major, enharmonic with B major. Figure 2.2 shows how the trajectory of both expositions ends in the same triadic region.

Figure 2.2: The two S zones of the exposition landing in the same triad. Blue circle represents departing key of $S^{1,2}$ in the first rotation. Red circle represents departing key of $S^{1,1}$ in the second rotation.



The rhetorical significance of a repeated exposition

The second rotation features a repeated exposition. Both rotations are mainly driven by a similar structural layout and motivic material usage. However, the second rotation manifests some variations when it comes to the role of the piano, the treatment of S, and the tonal journey.

After discussing the formal intricacies of both rotations, it becomes essential to examine to what extent these formal deformations modify or alter the storyline of the work in a greater scale. The soft ending of the first rotation overlaps with the beginning of the second rotation. From $P^{1.5}$ onward, the first exposition gradually deflates until

returning to the somber tone of P^{1.0}. The second exposition, however, retreats to *pianissimo* for S^{1.1} in m. 287 but grows again in mm. 301–7 to reach a *fortissimo* that opens the next pseudo-rotation.³⁵ Regardless of whether we attempt to justify parallelisms with the narrative in Hugo's poem, the elision of S^{1.2} in the second rotation has allowed the rotation to narratively progress instead of creating another decay that brings back the mood of the opening bars.

Middle Section/Pseudo-Rotation

The third rotation consists of three sub-sections, as seen in Table 2.3.

Table 2.5. The unce sub-sections within the induce section.					
Sub-section 1	Sub-section 2	Sub-section 3			
Mm. 307–42 Mm. 343–86 Mm. 387–408					
P-influenced tutti					
	Piano melody	Absence of P			

Table 2.3: The three sub-sections within the middle section.

$P^{1.0}$ ff as the confirmation of a successful second rotation

In the expositional area, the orchestra initiates each new rotation with $P^{1.0}$ *pianissimo*. On the one hand, the first expositional rotation introduced the piece mysteriously and begins a cumulative growth. On the other hand, the beginning of the second expositional rotation continues the fade-out carried by S^{1.2} in mm. 151–82.

Since the beginning of the second rotation brings back P^{1.0} *pianissimo*, retreating to the initial mood of the piece again, we can say that the first expositional rotation was unable to successfully progress. However, the beginning of the third rotation in m. 307

³⁵ A justification for the "pseudo" label will be given in the next section.

features a larger and more energetic *fortissimo* tutti. As stated before, using a shorter S space in the second rotation and disposing of $S^{1.2}$ allowed the piece to engage in a crescendo that led into a *fortissimo* tutti. Because of this strategy, the dramatic path parallels Hugo's poem, where chaos and destruction increase as the reader approaches the middle part of the poem.

The "pseudo-rotation" status

The third rotation breaks from sonata form in a more palpable way because it does not suggest a developmental space. First, a substantial change of tempo brings the music to a much slower *pathos*. Second, there is an absence of S material and P is at times excluded. Third, new and unrelated material emerges, bringing us to an atmosphere that is hard to perceive as a continuation of the course proposed in the exposition.

The rotation starts in m. 307 with a return of P^{1.0}. P^{1.2} and P^{1.5} appear in mm. 331–42 and interact in a question-and-answer manner. After these P appearances, an abrupt chromatic transformation in mm. 343–4 brings the rotation to a slow section in B minor introduced by a dramatic theme played by the brass and double basses. The newly established mood remains until the third sub-section begins in m. 387.

The main problematic aspect of the third rotation is the absence of S material after the P rhetoric. Still, some slight resemblances with the writing in S can be appreciated. The chromatic two note slurs featured by the winds section in mm. 345-56 might be a reminiscence S^{1.1}. Within the participation of the piano, some moments of the melodic discourse in the second sub-section, such as mm. 377, 381, 385, and 387 are full of semitonal motion that could recall S^{1.2}. However, none of these participations suggest a

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relevant involvement. Instead, it should be regarded as Franck's writing, typically rich in chromaticism, rather than a thematic recall.

In place of a developmental space, Franck presents a rotation initiated by P and then switches to completely new material in a slower tempo. Therefore, we label this section as a "pseudo-rotation," given that it does not satisfy the needs of a developmental space proper of a type three sonata form.

Slow movement versus developmental space

Exceptionally, first movements or overtures in the eighteenth century might include a space midway through the piece in a slower tempo, featuring new material instead of a traditional developmental space. Hepokoski argues that Mozart's overture to *Die Entführung aus dem Serail* features an exposition, a slow, thematic-unrelated movement, and a recapitulation.³⁶

By the time Franck wrote *Les Djinns* in the late nineteenth century, composers had already noticed that adding a slow section instead of a developmental space was an effective strategy to dress a single movement piece with a "multimovement" appearance. One of the most known works in the piano repertoire that features such design is Liszt's Sonata in B minor. Closer in time to *Les Djinns*, some of Richard Strauss tone poems apply a similar approach.³⁷ Regarding solo and orchestra repertoire contemporary to *Les Djinns*, Hans Sitt's Konzertstück for viola, Op. 46, written in 1892, features a slow Andantino as a middle section instead of a traditional developmental space. Upon the

³⁶ Hepokoski, 220–1.

³⁷ Ibid.

conclusion of such a second movement in disguise, Tempo I returns, continuing the sonata-form-based rhetoric.

The role of $P^{1.0}$

In sonata form, P is most likely the agent responsible of launching a new rotation. Moreover, the "opening module" of P—P^{1.1}, but P^{1.0} in our case—is the one that indicates with more clarity that a new rotation has begun.³⁸ P^{1.0} plays a significant role structuring the form of *Les Djinns*. It appears every time a new rotation launches, assuming the function of a "generative agent" in charge of starting the creative process of a new musical section.

However, the third rotation problematizes the role of $P^{1.0}$, given that the *darb* or *usul* theme is embedded in mm. 369–72 and mm. 377–86 although it does not initiate a new rotation. From an interpretive standpoint, one should understand the appropriate significance to such theme.

 $P^{1.0}$ in mm. 369–72 presents the original harmonic sequence borrowed from mm. 1–12, although compressed in four bars due to the meter change. This time, instead of having a generative role, the participation in this rotation is supportive, blending with the piano instead of initiating a tutti. However, the uncertainty inherent in the theme remains. Its appearance in the background may be interpreted as a sudden reminiscence of the danger portrayed by the menacing rhythm which symbolizes the djinns. Each time $P^{1.0}$ appears, it ends the melodic freedom of the piano part and it restricts it to a steadier path. The piano part regains the lyrical style once the rhythm stops in m. 373, but it recoils

³⁸ Hepokoski, 65, 256.

again in m. 377 once the march-like theme reappears a second time. Instead of disappearing after four measures like earlier, P^{1.0} continues in m. 381 in a need to increase the dramatic trajectory of the piano melody, reaching an expressive peak in m. 383, followed by a quick decay that facilitates a transition to the third section of the rotation starting in m. 387.

In conclusion, $P^{1.0}$ in the middle rotation adds an additional function to the main one seen in the double exposition. Earlier on, $P^{1.0}$ had portrayed the *darb* or *usul* rhythm as a generative agent to begin a new rotation. In the second sub-section of the middle section, $P^{1.0}$ reappears in a supportive role influencing the dramatic trajectory of the melodic passage the piano plays in unison.

Ending key area

The third section, which concludes the rotation, features a return to B major. The piano solo in mm. 387–94 features a dominant pedal functioning as an expanded cadential six four due to the chromatic voice leading in the chordal accompaniment. This resolves in tonic in m. 395 and the rotation ends in m. 408.

The return to B major to close the rotation is a feature worth analyzing, given that the previous two rotations also ended in B. Because of the constant deformations of the conventional sonata form outline, S was not able to solidify the secondary key area when concluding the expositional rotations. However, as shown in Figure 2.2, there is a tendency to return to the same triadic region, which gives some structural coherence from a tonal standpoint. Figure 2.3 shows the arrival in B+ in the middle section.

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Figure 2.3: Cube Dance. Voice-leading transformations, *Les Djinns*, mm. 357–409. Departure from b- indicated in blue. Return to B+ indicated in red.



Recapitulatory Rotations

The structural parallelisms between the expositional and recapitulatory rotations strengthen the hypothesis that, although in an unorthodox fashion, one can perceive a "sonata-like" behavior in *Les Djinns*. The following lines discuss both these parallelisms and some deformations.

Shorter P space

As opposed to the previous pseudo-rotation in mm. 307–408, the next section in mm. 409–80 offers enough P and S material to consider it a full rotation. Furthermore, the orderly succession of P and S parallels the first expositional rotation, hinting a recapitulatory function within this space.

The new rotation begins in m. 409 with the reappearance of $P^{1.0}$. However, Mm. 409–32 feature a shortened P space if compared with the first expositional rotation, as it only uses $P^{1.0}$ and $P^{1.5}$, avoiding other sublevels of P. In a conventional layout, P^1 is the element that best articulates the beginning of a new rotation, and more precisely, $P^{1.1}$.³⁹ The lack of $P^{1.1}$ weakens the recapitulatory effect of this rotation, even though it articulates clearly defined P and S spaces. $P^{1.1}$ does not reappear until mm. 493 in the second recapitulatory rotation, which means that the recapitulatory responsibility falls into the second recapitulatory rotation's hands.

Piano appearances

The piano part enters the expositional and recapitulatory rotations with different characters—*fortissimo* in mm. 85–96 and *pianissimo* in mm. 433–6. Such discrepancy occurs because the first rotation introduces the piano while P is still taking place, whereas the piano in the recapitulation initiates the S area. The second expositional rotation incorporates the piano in m. 195 after $P^{1.0}$ for a lengthier involvement in P, a practice mirrored by the second recapitulatory rotation when $P^{1.1}$ returns with the piano in m. 492 after a brief interlude of $P^{1.0}$.

An earlier discussion showed how the first recapitulatory rotation had a weakened effect of return due to the shorter P section and the omission of some of the sublevels of P. In order for P to escalate to the climatic peak reached in the exposition, P requires a cumulative succession of all its sublevels. For this reason, P^{1.5} becomes a powerful moment in the expositional rotation after a gradual buildup of P. Given that the

³⁹ Hepokoski, 231, 256.

turbulence in the poem's storyline declines after the middle section, shortening the length of P and using less sublevels becomes a strategic action in order to adjust to the narrative trajectory.

Return to the home key

The second rotation brings the structural closure that a sonata-form layout requires. It does so by committing to return P to the tonic key, one of the most essential operations of an effectively articulated recapitulation. In the first rotation, F# appears only as a weak tonal center in mm. 433–44. However, the dominant-tonic relationship briefly established between C# and F# does not suffice to clearly establish a return to $F#.^{40}$ Additionally, the brief F# appearance occurs first within S instead of participating in P first and continuing into S after, as one would typically expect in a recapitulatory rotation.

The second rotation features $P^{1.0}$ in mm. 481–92 and transitions to $P^{1.1}$ in m. 493. The $P^{1.1}$ theme introduces the home key of the piece, F# minor, offering a sense of return and strengthening the sonata-form rhetoric. It is essential to indicate that the two recapitulatory rotations are required to fulfill the needs of a sonata form. P and S reappear in the first rotation. However, the return of P in the tonic key and an S space based in F#—two necessary components for formal closure—are exclusive features of the second recapitulatory rotation.

⁴⁰ Paralleling how the home key delays its appearance in the recapitulation by not participating into the first recapitulatory rotation, the first movement of Schubert's Piano Quintet in A major, D. 667 "Trout" features a return to P in a different key, D major. The home key, A major, does not reappear until later in the rotation.

Given that P^{1.1} returns in the second recapitulation only, the space comprised between mm. 409–80 could be interpreted a developmental space instead of a first recapitulatory rotation. However, the precision with which this section articulates a Pbased and an S-based area turns it into a first attempt of recapitulation, although unsuccessful because it followed the same steps of the failed first expositional rotation.

The F# major closure

The ultimate goal in a recapitulatory rotation is to deliver an ESC.⁴¹ In order for the task to occur, S needs to feature a return to the tonic key. The above discussion showed how P^{1.1} appeared in F# minor in m. 493. Afterwards, S appears centered in F# major, the parallel major of the home key, starting in m. 537.⁴²

In the second recapitulatory rotation, S remains in the triadic region of F# major instead of initiating modulatory procedures like in the expositional rotations. A successful cadence to achieve and ESC should be the goal of S. However, after a long dominant pedal in mm. 561–70, a switch to the parallel minor, F# minor, occurs in m. 571. the lack of a PAC blurs the transition to a new rotation, which launches in m. 571 with the return of P^{1.0} under a long F# minor pedal point.

Accomplishment of the sonata form

The two recapitulatory rotations bring back P and S. Even though many deformations exist, we have identified enough idiosyncratic elements to interpret these

⁴¹ Hepokoski, 232.

⁴² This analysis considers F# major an equivalent of the home key, F# minor. Despite the mode difference, both triadic centers have the same root. Instead of a different key, F# major shall be interpreted as a "new coating" of our already known F# minor.

sections as recapitulatory rotations. Particularly, the second rotation focuses on reassuring F#, the triadic pitch of our home key, because of its ending in F# major. $S^{1.1}$ in the second recapitulatory rotation is based on the parallel major, F# major, and switches back again to F# minor when P^{1.0} reappears in m. 571 for the coda. The main issue at hand is to decide whether the recapitulation is successful or not, first because there was not a clear ESC, and second because the ending features a major/minor instability, a sign of uncertainty that mirrors the mood with which the piece opens.

Coda

The "non-rotational" role of the coda

The appearance of $P^{1.0}$ typically announces a new rotation with an orchestral tutti. The dramatic impact of P builds up cumulatively, as it gains more momentum if more sublevels of P are used. By using only $P^{1.0}$ and not delivering any more levels, the following module is unable to build a sufficiently solid P narrative, followed by an S space. Just as it happened during the middle section, this module—mm. 571–98 behaves as a pseudo-rotation. Even though it suggests the launch of a new rotation due to the return of $P^{1.0}$, it does not gain enough momentum for a fulfilling rhetoric. Therefore, we shall demote the module to the status of coda. Such coda presents a "de-energizing" quality, as it gradually ceases to accumulate motivic elements, decreasing the level of action until a pleasant F# major plateau arrives in mm. 587–98 to conclude the piece.

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The need of a coda for closure

An earlier discussion explained how the recapitulatory portion did not offer a clear ESC that fulfilled the needs of a standard sonata form outline. Hepokoski argues that the lack of an EEC in the exposition and the lack of an ESC in the recapitulation is a common type of "nonresolving" recapitulation, as seen in the finale of Beethoven's Symphony No. 5 in C Minor, op. 67.⁴³ In scenarios as such, the coda is the agent responsible for bringing formal closure to the piece.

Hepokoski considers a recapitulation to be "failed" if S is unable to deliver an ESC that provides tonal unity.⁴⁴ Despite the lack of a PAC and therefore an ESC in the recapitulation, certain sense of closure is granted by the coda of *Les Djinns* because of its ending in F# major, continuing the key of S in the recapitulation. However, a more complex issue remains unsolved—an explanation to why there was no resolution in the recapitulation, but there was in the coda instead. Hepokoski describes clearly how such a turn of events affects the pathos of the music:

The hermeneutic burden of the analyst is to explore the inner logic of this inadequacy. Merely to claim that all turns out well because a resolution is eventually secured in the coda is to miss the point. It is more compelling to suggest that the closure in the coda only reflects on what did not happen in the preceding sonata—at times a disillusioned lamenting of the absence of closure in the proper structural space; at times an "external," after-the-fact corrective in s necessarily appended, often discursive surplus-space; at times a desperate attempt to recover from a difficult situation through bluff and bravado.⁴⁵

⁴³ Hepokoski, 246.

⁴⁴ Ibid., 245.

⁴⁵ Ibid., 246.

Recycling material

Despite its short span—28 measures—the coda brings back some of the musical ideas heard earlier in the piece, such as P^{1.0} and part of the material presented in the middle section. The return of P^{1.0} in mm. 571–6 generates a dominant-like tension that leads into a brief cameo of the melodic piano theme from the middle section in mm. 577–80. Immediately after, mm. 581–98 feature a return to the writing used in mm. 395–408 to conclude the piece. Table 2.4 presents some of the musical ideas heard before reappearing in the coda.

Table 2.4: Overlapping of motifs in the coda.

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The process of recycling musical ideas heard earlier in the piece confirms that *Les Djinns* employs a cyclic treatment. Considering Wagner's strong influence on Franck, one could argue that his cyclical thematic usage is derived from Wagner's leitmotivic approach, based on using themes or ideas in a recurrent way.

Cyclic unity became a fixation for composers during Franck's time. Some of his most accomplished compositions rely on cyclic treatment to provide structural coherence in large pieces. In the Violin Sonata in A Major, written two years after *Les Djinns*, the opening theme returns in the third movement. His Symphony in D Minor, also finished in 1888, recycles themes within the three movements.

Cyclic unity is accomplished when a motivic unit returns in later movements. Since *Les Djinns* does not feature separate movements, it offers cyclic procedures within the same, uninterrupted stream of music. However, as noted earlier, the middle section behaves as a separate movement given its non-rotational role. In this way, the expositional rotations can be interpreted as a first movement, followed by a second slow movement, followed by a third movement that comprises the recapitulatory rotations and the coda. Under this approach, the usage of motivic ideas from the middle section into the coda becomes a strategy to project a remembrance of an earlier "movement" while being all part of the same unit.

Music and text parallelisms during the coda

An additional aspect to discuss is the possibility of a relationship between the return of some musical ideas and the narrative of the poem. The presence of the threatening and haunting $P^{1.0}$ until almost the very end of *Les Djinns* suggests that the closing of the piece may not reveal a positive outcome, given that the signifier of danger remains. If we observe one of the last stanzas of Hugo's poem, a debris of destruction still echoes even after the djinns disappear:

Each deadly Djinn, Dark child of fright, Of death and sin, Speeds in wild flight. Hark, the dull moan, Like the deep tone Of Ocean's groan, Afar, by night!⁴⁶

⁴⁶ Translated by John L. O'Sullivan, from William Raymond James, "César Franck's Works for Piano and Orchestra." DMA diss., University of Miami, 1988, 118.

Regarding the return of earlier material and looking for a connection with Hugo's poetry, there is no evidence in the poem of a reinstatement in the coda of certain words or events seen earlier in poem that prove Franck mirrors Hugo's poetic scheme. For instance, the reinstatement of the melodic passage on the piano and the closing material of the middle section is not linked to a restatement done in the poem for the conclusion of it. Instead, Franck recycles such musical ideas to depict a remembrance, although not literally related to the narrative trajectory of the poem. As Carolyn Abbate has pointed out, composers in the nineteenth century often experimented with a musical gesture or theme even when it was not directly connected to the narrative that had priorly attributed a connection between the signifier and the signified. In the case of *Les Djinns*, the recycled material from the middle section used in the coda "no longer signifies the word and floats without anchor or fixed meaning."⁴⁷

In conclusion, many composers in the historical period at hand were fond of writing music after gathering inspiration reading a literary source. However, most of the works that were the fruit of this trend were not written in an attempt to literally describe every word of the text that influenced the work. For example, the title of Liszt's Sonata *Après une Lecture du Dante* does not specify which of Dante Alighieri's works Liszt read that sparked his inspiration to write his Fantasia. In *Les Djinns*, one may perceive a certain leitmotivic approach when some musical gestures are attributed only to a certain word, feeling, or event. However, the musical gesture ends up emancipated from the literally source that inspired the creation of it and can be used with more liberty.

⁴⁷ Carolyn Abbate, "What the Sorcerer Said," 19th-Century Music 12, no. 3 (1989), 223.

Chapter 3: Harmonic Transformations in Les Djinns

Hexatonic Cycles

Hexatonic cycles and voice leading strategies

When dealing with the structural design of *Les Djinns*, we revealed Franck's tendency to blur transitions to provide a continuous, uninterrupted stream of music. If we search for an equivalency regarding voice leading, we observe that harmonies or chords are product of horizontal, almost counterpoint-like individual movements of voices. Brent Jones points out that, sometimes, it becomes impractical to attempt a chordal analysis of sonorities in *Les Djinns* because these are of a different nature.⁴⁸ Despite Jones' accurate observation, his research predates Cohn's terminology and therefore is unable to discuss harmonic transformations using the more recent terminology this research applies.

In *Les Djinns*, the very first musical gesture is a two-note motive based on semitonal displacements (see Example 2.1). Jones indicates how the second chord of the sequence is an augmented sixth, but it does not operate as such because it is all based on voice leading, suggesting a more horizontal behavior of independent voices than a vertical sonority with a predominant effect.⁴⁹ Therefore, we encounter music heavily based on chromatic voice leading. Cohn calls this a language based on "maximum common retention" and "minimal-voice leading work," two properties that are equivalent to each other.⁵⁰

⁴⁸ Brent Jones, "An Analytical Study of 'Les Djinns' by Cesar Franck," DA diss., University of Northern Colorado, 1988, 63–4.

⁴⁹ Ibid., 67.

⁵⁰ Cohn, 7.

Hexatonic cycles are a consequence of minimal voice leading between triads. As explained earlier, each cycle comprises six triads that can be reached with semitonal displacements, or P, L, PL, LP, and H Neo-Riemannian transformations.⁵¹ Applying this system based on semitonal displacements to travel between triads, we unveil a new language that goes beyond the limited capacities of diatonic syntax. Tonality is no longer restricted to closely related keys only, given that chromaticism opens the door to other triadic areas. Tools such as the Tonnetz and the Cube Dance become valuable allies in order to map the displacements among distant key regions. Figure 3.1 shows how to map the triadic areas of the first exposition in a Tonnetz. Earlier figures, such as 1.3, 2.2., and 2.3, have shown the efficacy of the Cube Dance.

Figure 3.1: The main triadic centers of the first exposition in *Les Djinns* represented in a Tonnetz.



⁵¹ Cohn, 17.

Using a pan-triadic language offers new possibilities not only in a local level, but on a macro level, as basis for new structural models. Large sections become "tonally coherent" because their triadic centers are close in units of work. The most evident example of this technique in *Les Djinns* occurs in the two expositional rotations. Table 3.1 below shows the main triadic centers in the two rotations:⁵²

tion us tonui conte	
Measures	Triad
1-108	f#-
109–20	a#-
121–46	D+
147–50	B@+
151–66	d-
167–70	E@+
171–74	G+
175–94	B+
195–272	e@-
273–90	E@+
291-330	B+/C@+

Table 3.1: Triads that function as tonal centers in the double exposition of *Les Djinns*.

Tonal coherence in Les Djinns through hexatonic cycles

The first expositional rotation in mm. 1–182 explores the areas of F# minor, A# minor, D major, B@ major, and D minor. Using Cohn's terminology, the triadic map stands as f#-, a#-, D+, B@+, and D+. The group of triads obtained generates an entire hexatonic cycle, except for F#+, which appears later in m. 537 and in m. 581 towards the end of the piece (see figure 3.3). The second exposition in mm. 183–306 uses E@ major, G major, B major, and E@ minor, four triads of a new hexatonic cycle not used before.

⁵² Only triads heard as solid tonal centers are included in this table. Triads that operate as passing sonorities between more stable centers are omitted for simplification purposes.

The triadic map of the second exposition stands as E@+, G+, B+, e@-, E@+, B+/C@+.⁵³ The fact that each exposition is centered around a different hexatonic cycle reinforces the idea that these operate not only harmonically, but also structurally, outlining the shapes of these two sections with two different tonal maps. Therefore, the tonal areas reached in the expositional rotations are not related if one wishes to follow a traditional tonal journey from sonata form outlines. However, tonal coherence is still reached through a new model based on hexatonic cycles.





 $^{^{53}}$ Throughout the last triadic center, Franck does an enharmonic transformation shifting from B+ to Cb+, therefore my inclusion of both.

⁵⁴ The operations shown in the graphic are not an exact representation of the harmonic transformations in *Les Djinns*, but an ideal model of Neo-Riemannian operations. In *Les Djinns*, passing chords interact in between triads, offering a bridge from which to transition from one to another.

Triadic neighborhood through pitch retention loops:

Another way of representing harmonic coherence when moving within tonal centers relies on Galeazzi's concept of common tone retention. Despite being distant from each other regarding diatonic equivalence, two triads—take C major and E major, for instance—can be considered related because of the common note shared.⁵⁵

As noted earlier, some of the transformations in *Les Djinns* do not occur at a local level, given that bridge chords operate between the triadic centers. However, if we design a map in which we outline some of the most relevant triads in the piece, we observe that these share a common pitch. Hostinsky's model of a Tonnetz, represented in Figure 3.4, reveals how all the triads revolve around F#, a crucial pitch in *Les Djinns*—the root of both the starting and ending triads of the piece.⁵⁶

Figure 3.3: Hostinsky's Tonnetz around the F# pitch. Blackened area represents pitch class. Labels inside of triangles represent triads.



⁵⁵ Francesco Galeazzi, *Elementi teorico-pratici di musica, con un saggio sopra l'arte di suonare il violino analizzata ed a dimostrabili principj ridotta*, vol. 2 (Rome: Michele Puccinelli, 1796), seen in Cohn, 5.

⁵⁶ Cohn, 113–21.

As seen above, the triads around the F# pitch are familiar regions. The piece starts in F# minor and ends in F# major. D+ is the main key of S in the first expositional rotation. B+ is the triad that ends S in the first expositional rotation and launches the pseudo-rotation in m. 307—through the enharmonic C@+. E@- is the first triadic center that operates in the second expositional rotation. B- plays a central role in the slow middle section, as it is the main tonal center starting in m. 345.

The Sound of Supernatural: Augmented Triads and Major-Third Relations

Augmented triads provide a distinctive sonority. Some scholars have documented how composers use augmented triads in musical gestures that attempt to evoke the supernatural.⁵⁷ Such semiotic interpretation is commonly used in narrative theory. Abbate points out that it parallels the "leitmotivic approach" in Wagner's music. However, she states that, often, no actual connection between the sonority and the meaning is in view, making a direct relationship between music and text unviable.⁵⁸

To Cohn, augmented triads play a significant role shaping the triadic universe. Instead of a sonority derived from a consonant triad, he refers to augmented chords as more perfect sonorities than major or minor triads due to their "perfectly even" status. A perfectly even chord is one that divides the octave into equal parts with the pitches that it contains. Furthermore, major and minor triads are "nearly even chords," as they are obtained after a semitonal displacement of a perfectly even sonority. When pursuing a

 ⁵⁷ R. Larry Todd, "The 'Unwelcome Guest' Regaled: Franz Liszt and the Augmented Triad," *19th-Century Music* 12, no. 2 (1988): 112; Timothy McKinney, "Melodic Pitch Structures in Hugo Wolf's Augmented-Triad Series," *Indiana Theory Review* 14, no. 1 (1993): 41.
 ⁵⁸ Abbate, 222.

system of triadic transformations based on smooth voice leading, augmented triads become a fundamental element to consider, given that using augmented triads within triadic transformations guarantees smooth voice leading either by a small amount of voice leading work or by one single semitonal displacement.⁵⁹

In *Les Djinns*, augmented triads allow hexatonic cycles and Weitzmann cycles to work in synergy to offer smooth voice leading.⁶⁰ The piano solo section that concludes the first expositional rotation in mm. 151–83 abandons for the first time the hexatonic cycle formed by f#-, F#+, a#-, B@+, d-, and D+. A new hexatonic cycle comprising E@+, e@-, B+, b-, G+, and g- begins its operations in m. 163. In order to transition from one hexatonic cycle to another one, the augmented triad formed by the pitches B@, D, F# in mm. 161–2 acts as a bridge, providing a smooth voice leading of only two units of work (see Example 3.1 and figure 3.5).

Example 3.1: Simplified representation of mm. 160–3. Two units of voice required on each transformation, semitonal voice leading only.



⁵⁹ Cohn, 33–4.

⁶⁰ Ibid., 83–5.

Figure 3.4: Migration to a new hexatonic cycle through an augmented triad. Both triads belong to the same Weitzmann area. *Les Djinns*, mm. 160–3.



Figure 3.5: Cube Dance representation of the harmonic transformation through an augmented triad. *Les Djinns*, mm. 381–2.



Another example of the same practice appears in the middle section of the piece. In m. 381, an augmented triad is able to transition from A+ to f#- by single semitonal displacements in two phases, exhibiting idealized voice leading—using as little motion as possible. (See Figure 3.6 above).

The last example shows the augmented triad as a provider of tonal instability. In the final bars of the coda, mm. 587–98, F# major settles to provide a stable ending. However, rather than expanding a single tonic sonority, the friction between F#+ and the augmented triad formed by pitches F#, A#, and D in mm. 591–5 unveils an uncertain mood (see Example 3.2).

Example 3.2: Simplification of mm. 591–8 in *Les Djinns*. Major and augmented triad friction to conclude the piece.



The last issue regarding augmented triads involves the tonal outline of the first expositional rotation. Instead of focusing our attention to a particular chord spelled through the section, we will extract the roots of the first three tonal centers in the first expositional rotation, F#, A#, and D. Doing so reveals a perfectly even chord in disguise, the south region of the Cube Dance.⁶¹ This augmented triad is the center of a Weitzmann region that encompasses an important number of crucial key centers in the first expositional rotation. Locally, it was the augmented triad that switched hexatonic cycles

⁶¹ If the Cube Dance is understood as a clock, the augmented triad mentioned would be in number six. See Figure 3.2.

in mm. 160–3. Even if, perhaps, unintended by Franck, one can attest the importance of the perfectly even sonority in the modulatory plans of the composer.

Based on the tradition of attributing magical properties to the augmented triad, and considering the djinns supernatural creatures, one could aim to attribute augmented triads in *Les Djinns* leitmotivic qualities. However, this could cause additional complications, given that the lack of a direct parallelism between music and text would only strengthen Abbate's idea regarding the emancipation of the signifier from the signified.⁶² Instead, augmented triads in *Les Djinns* should be examined more as a result of chromatic voice leading between triads rather than a bearer of narrative content. For instance, in its semitonal displacements, P^{1.0} reveals an augmented triad formed by A#, D, and F#, but just as a result of three voices each moving momentarily to a non-chord tone for harmonic tension (see Example 2.1). Therefore, we conclude by saying that Franck does not use the augmented triad in *Les Djinns* with leitmotivic purposes, but it is a result of his writing style.

Besides augmented thirds, some triadic transformations are thought to suggest the supernatural world. Cohn attributes the same quality to major-third relations.⁶³ His study of triadic progressions in Sergei Prokofiev's *Peter and the Wolf*, Op. 67 proves how a triadic ecosystem organized by hexatonic cycles promotes major-third relations, and these relations amplify the supernatural effect that the wolf is expected to portray in the story's narrative.⁶⁴

⁶² Abbate, 223.

⁶³ Cohn, 17, 19, 21.

⁶⁴ Cohn, "Peter, the Wolf, and the Hexatonic Uncanny," In *Tonality 1900–1950: Concept and Practice*, edited by Felix Wörner, Ullrich Scheideler, and Philip Ernst Rupprecht (Stuttgart: Franz Steiner Verlag, 2012), 52–61.

Franck recurs to a similar harmonic treatment in *Les Djinns*. After all, the tonal organization in hexatonic cycles throughout the piece facilitates major-third transformations, as described earlier. The harmonic progression in P^{1.5} evokes the maleficent spirit of the djinns through an $f\# \rightarrow d- \rightarrow f\#$ LP transformation—a Leittonwechsel followed by a parallel transformation—of two units of work in contrary motion (see Figure 3.7).

Figure 3.6: An LP transformation in $P^{1.5}$ evokes the supernatural aura of the djinns. Tonnetz representation.



Cross-Type Transformations

Because of Franck's reliance on using seventh chords in chord transformations, often Neo-Riemannian notation falls short at identifying and studying voice leading interactions. In *Les Djinns*, seventh chords are often used as gates to transition to a section of new material.

For instance, mm. 107–9 feature an f#- \rightarrow a#- transformation. However, a diminished chord in m. 108 operates as a passing chord in between. With no such seventh chord, the modulation could have been labeled as a PL transformation—a parallel

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transformation followed by a Leittonwechsel—with two units of work. Therefore, at a global level, we can observe how the main key centers belong to the same hexatonic cycle, as described earlier. However, at a local level, many of the transformations occur with seventh chords in between that function as bridging sonorities.

Such harmonic behavior in which a hybrid interaction between triads and seventh chords exists has been labeled as cross-type transformations.⁶⁵ Julian Hook reminds us of Robert Cook's transformational analysis of Franck's Piano Quintet in F minor, where an $E@+ \rightarrow c$ - transformation takes place with two seventh chords in between as passing sonorities for semitonal voice leading. The same approach appears for a $C \rightarrow a$ transformation a few measures later.⁶⁶

The second recapitulatory rotation in *Les Djinns* operates in a similar behavior when P initiates transformational procedures to reach S. Mm. 523–7 feature a D+ \rightarrow E@+ transformation with three seventh chords working as passing sonorities in between the two triads. These chords are approached by semitonal voice leading only, granting a smooth modulation with minimal voice leading work.

Example 3.3: Reduction of mm. 523–7 of *Les Djinns*. According to Hook, first transformation features an L' transformation.⁶⁷



⁶⁵ Julian Hook, "Cross-Type Transformations and the Path Consistency Condition," *Music Theory Spectrum* 29, no. 1 (2007): 1–40.

⁶⁶ Ibid., 3–4.

⁶⁷ Ibid., 2.

Immediately after, mm. 533–7 feature a E@+ \rightarrow F#+ transformation that also includes three seventh chords in between.

Example 3.4: Mm. 533–7 of *Les Djinns*. An A dominant ninth, G# seventh and a French augmented sixth chord stand in the way of an otherwise $E@+ \rightarrow F#+$ transformation.



As seen above, Franck engages into a language of triadic transformations that need additional theoretical models such as Hook's cross-type transformations in order to map the additional seventh chords that grant a smooth voice leading interaction.

CONCLUSIONS

In this research, I have discussed issues of form and harmony in Franck's *Les Djinns*, an exotic symphonic poem for piano and orchestra neglected from the standard repertoire. As a result, I have shown how Franck's musical style features a unique way of manipulating sonata form through deformations and a harmonic syntax that goes beyond diatonic limitations. The innovative approach but the adherence to classical tradition makes Franck's music display a constant friction between the old and the new.

To carry out my research, I have relied mainly on the theories of sonata form developed by Hepokoski and Darcy in *Elements of Sonata Form* and Cohn's writings on chromatic harmony in *Audacious Euphony*. Both sources provide current knowledge on the issues of form and harmony, which makes this project relevant because of how up to date these tools are. Previous attempts to discuss the formal and harmonic behavior of *Les Djinns*, although necessary, have proven to be incomplete because they antedate the development of the necessary analytical tools. This research sheds new light on some of these unfilled gaps.

Regarding the formal advances of *Les Djinns*, I explained that, despite the multiple deformations, the piece still conserves many parallelisms within the type 3 sonata outlined by Hepokoski. The goal of my formal analysis of *Les Djinns* shall not be judging if it exhibits a sonata form or not, but to use it as a pedagogical example of how composers in the late nineteenth century, and more particularly Franck, blurred the boundaries between classical tradition and innovative practices.

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With respect to harmony, I conclude that Franck's harmonic syntax in *Les Djinns* is mainly driven by semitonal voice leading between chords. This unveils a series of pantriadic transformations that are the fruit of common tone retention and chromatic voice leading. This research demonstrates that, when analyzing these types of chromatic transformations, models of graphic representation such as the Tonnetz or the Cube Dance are effective tools. Also, current contributions such as Cohn's triadic organization in hexatonic cycles can help in understanding harmonic layouts that abandon the diatonic universe. This analytical approach is uncommon in the analysis of Franck's music and had never been applied to *Les Djinns* prior to this research.

I hope that the discoveries made in this project encourage other musicians to rely on recent developments in music theory to expand their vision of form and harmony and fully comprehend some of the decisions made by composers in their music. I also hope that my renewed analytical approach of *Les Djinns* stimulates performers to address this work more often.

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