

THE CONTRAPUNTAL LEGACY OF THE FRENCH *FIN-DE-SIÈCLE*: A LOOK AT DUKAS'S PIANO SONATA IN E-FLAT

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Abstract. This essay takes a look at Paul Dukas's Piano Sonata in E \flat , a piece exhibiting a rich array of formal and contrapuntal detail. In contrast to other analytical studies of French *fin-de-siècle* pieces, which focus on the purely chordal aspects of the music, we propose an analysis that emphasizes the contrapuntal dimension. The paper first develops what we call the "Combined Melodic String Hypothesis" (CMSH), and it does so by drawing on the writings of both Théodore Dubois and Heinrich Schenker. It then explores Dukas's own use of contrapuntal principles in the second and third movements to his sonata, using the CMSH and other Schenkerian-derived techniques. In the end, the paper aims to bridge the gap between the training composers like Dukas received at the Conservatoire and the works produced as a result of that training.

KEYWORDS AND PHRASES: Dukas, Piano Sonata in E \flat , counterpoint, Dubois, Schenker.

PAUL DUKAS (1865–1935) is among the most famous composers active in *fin-de-siècle* France. His reputation rests largely on three scores: the orchestral work *L'Apprenti sorcier* (1897), the opera *Ariane et Barbe-bleue* (1899–1907), and the ballet *La Péri* (1912). He earned his living writing music criticism and teaching at the Paris Conservatoire and École Normale de Musique. An accomplished pianist, Dukas also edited keyboard works by Beethoven and Scarlatti, and even wrote several pieces for the instrument: the Piano Sonata in E \flat (1899–1900); *Variations, Interlude and Finale on a Theme by Rameau* (1899–1902); *Prélude élégiaque sur le nom de Haydn* (1909); *La Plainte, au loin, du faune* (1920); *Allegro* (1925); and *Modéré* (1933/1936).

The most remarkable of these is surely Dukas's Piano Sonata in E \flat . Monumental in scale, the work was much admired by Debussy:

[Dukas] is master of his own emotions and knows how to avoid unnecessary outbursts; consequently he

never lets himself be led into unnecessary developments that often spoil otherwise beautiful pieces. If you look at the third part of this Sonata, you'll find, beneath the apparently picturesque exterior, a powerful force that controls, almost imperceptibly, the rhythmic tension as if by a steel spring. A similar force is to be found in the last piece, which shows the art of controlling the emotional content at its best. You could say that the emotions themselves become a structural force, for the piece evokes a beauty comparable to the perfect lines found in architecture—lines based on natural forms that blend so well with the open spaces of the sky that is all a perfect and total harmony.¹

Debussy was by no means an easy man to please: his enthusiasm for the work was doubtless colored by his long-standing personal friendship with Dukas and by their common training at the Paris Conservatoire.

¹ Debussy (1977, 22–23).

8	9			7	8
5	7	♭7	6	5	5
3	4	3	4	4	3
				2	
I		V/IV	IV	V	I

Figure 1a. Stepwise descending soprano line over a pedal.

That training was, in fact, dominated by instruction in counterpoint. This paper shows how this grounding in counterpoint influenced Dukas while he was composing the Sonata in E \flat . The paper begins by describing the state of counterpoint instruction at the Paris Conservatoire in the late nineteenth century and offers some general remarks about figured bass and fugal theory (especially as regards pedal tones), harmonizing ascending and descending scales, invertible counterpoint, and imitation. Among other things, we introduce the Combined Melodic String Hypothesis, an interesting extension of Schenkerian theory. The paper then shifts focus to the second movement of Dukas's Sonata in E \flat and shows how it not only exploits many of the contrapuntal devices taught at the Paris Conservatoire, but also relies heavily on chromatic voice leading and hidden motivic repetitions. The paper ends with some brief remarks about the sonata's third movement, a virtuosic toccata and fugue.

1. DUBOIS, SCHENKER, AND THE "COMBINED MELODIC STRING HYPOTHESIS"

Ever since the time of Antoine Reicha and François-Joseph Fétis in the 1820s and 30s, counterpoint enjoyed a privileged place in the curriculum of the Paris Conservatoire. Central to this curriculum is the notion that counterpoint is an abstract discipline, devoid of any historical or stylistic underpinnings. Budding composers were only allowed to develop styles of their own once they had mastered these abstract principles. Following Fuxian models, distinguished teachers such as Luigi Cherubini, François-Emmanuel-Joseph Bazin, Théodore Dubois, and André Gédalge began the students' instruction with the five species in two or more voices. They then dealt with the principles of imitation, invertible counterpoint, and the scholastic fugue. Once these techniques were firmly under their belts, stu-

dents could enter the *prix de contrepoint et fugue* and eventually compete for the even more prestigious *prix de Rome*.²

This was precisely the path that Dukas took when he entered the Paris Conservatoire as a sixteen-year-old student in 1881. Over the next eight years, Dukas enrolled in a wide range of classes, including piano lessons with George Mathias, harmony classes with Théodore Dubois, and composition classes with Ernest Guiraud. The main purpose of the latter was to provide students with a firm grounding in counterpoint through close study of figured bass and fugue. This much is readily apparent from Dubois's own theoretical writings, such as his *Notes et études d'harmonie*, which appeared in 1889 during Dukas's last year at the Paris Conservatoire, and his *Traité de contrepoint et de fugue*, which appeared in 1901 during Dubois's directorship of the institution (1896–1905).³ For his part, Dubois used figured bass to teach students the basic rules of tonal voice leading and harmony. Figure 1 illustrates this point with three figured-bass exercises. In all cases, the upper voices mainly move by step. First, Figure 1a shows a basic stepwise descending soprano from C to G. Figure 1b then indicates Dubois's basic elaboration of such a pattern, in which C proceeds to A before returning to C: the continuation to G occurs in the tenor voice, which includes a chromatically-inflected A \flat .⁴ In both cases, the various non-harmonic tones all arise from contrapuntal motion between two stable C harmonies, and the descent $\hat{8}-\flat\hat{7}-\hat{6}-\hat{5}$ implies a motion I–V/IV–IV–V (VII)–I. To avoid parallel octaves and fifths, the upper voices proceed in parallel thirds and sixths in Figure 1a and a mixture

² For the state of contrapuntal instruction at the Paris Conservatoire in general and of the *prix de contrepoint* in particular from 1858 to 1905, see Bergerault (2011).

³ Dubois (1921, 1918, 1901, 1889, n.d.).

⁴ Dubois (1889, 126). Dubois's immediate purpose in showing this example in his text is to indicate the freer metrical placement of chords that create a dissonance with the pedal bass tone.

8	7	8	8	9		8	7	8
5	6	5	5	7	b7	6	5	b6—5
3	4	3	3	5	3	4	3	4
I				V/IV	IV	(I)	V	I

Figure 1b. Dubois, *Notes et études d'harmonie* (1889), 126.

Tonic Pedal

Dominant Pedal

Figure 1c. Dubois, *Petit Manuel théorique de l'Harmonie* (1918), 26.

of parallel and contrary motion in Figure 1b. Finally, Figure 1c gives an even more complex example from Dubois's *Petit Manuel théorique de l'Harmonie*, using both tonic and dominant pedals.⁵

Figure 2 takes these ideas a step further. In Figure 2a the pedal tone appears in the soprano and is accompanied by ascending scales in parallel thirds. Figure 2b then replaces the soprano pedal with a descending scale, and Figure 2c adds another parallel scale in the upper register. Notice how each pattern complies with standard settings of the Rule of the Octave.⁶ Figure 2d gives a more elaborate working out by Dubois of the same principal, this time with the pedal tone in the middle voice.⁷

⁵ Dubois (1918, 26).

⁶ For an overview of the rule, see Christensen (1992). The rule circulated widely in France, thanks in part at least to the publication of François Champion's *Traité d'accompagnement et de composition selon la Règle des Octaves de musique* (Champion 1976 [1716]).

⁷ Dubois (1918, 26).

These figures support a couple of simple generalizations. First, if two neighbor tones appear in parallel thirds or sixths, then it is always possible to add another pair of neighbor tones in contrary motion (set in parallel thirds or sixths against each other). Figure 2e, for example, shows that the upper neighbor motions E/C–F/D–E/C can always be supported by the lower neighbor motion E/C–D/B–E/C. The converse is also true: if two neighbor tones appear in contrary motion, then it is always possible to add another pair of neighbor tones in parallel thirds or sixths. Figure 2f shows that the contrary motion pattern E/C–F/B–E/C can be supported by the parallel neighbor motions E/C–D/D–E/C. Such combinations are possible because the first and last sonorities form an incomplete triad and the middle sonority forms a complete triad whose root is a step below that of the surrounding sonorities, e.g. I–VII–I. Second, when two linear progressions are set in parallel thirds or sixths, they can always support other linear progressions set in contrary motion. For example, the parallel ascending third progressions E–F–G and C–D–E can be supported by the

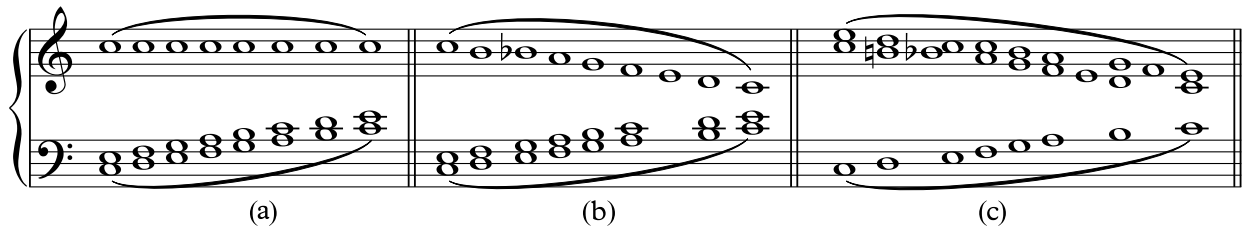


Figure 2a-c. Combined Melodic String Hypothesis.

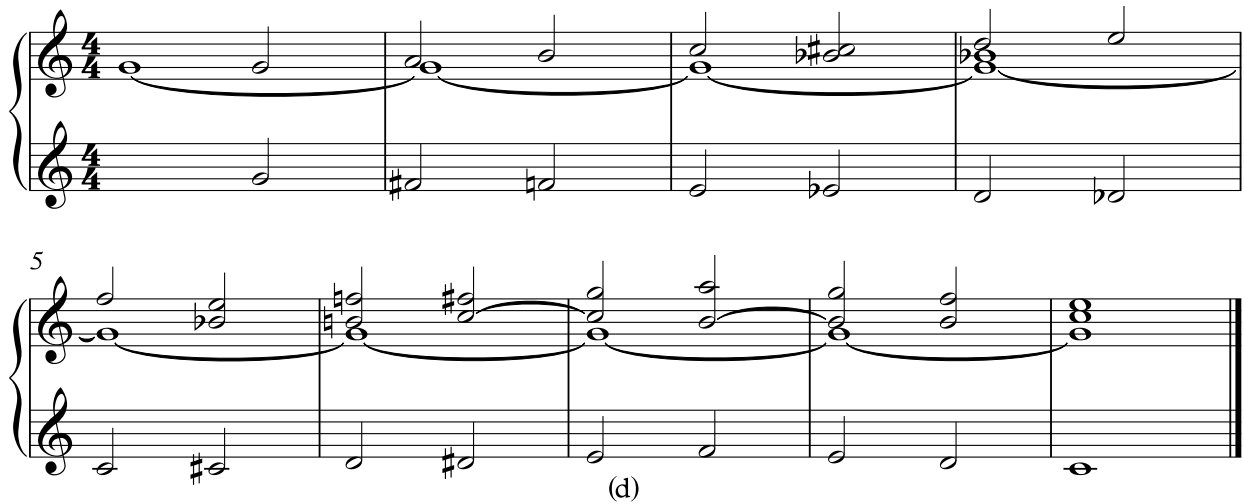


Figure 2d. Dubois, *Petit Manuel théorique de l'Harmonie*, 26.

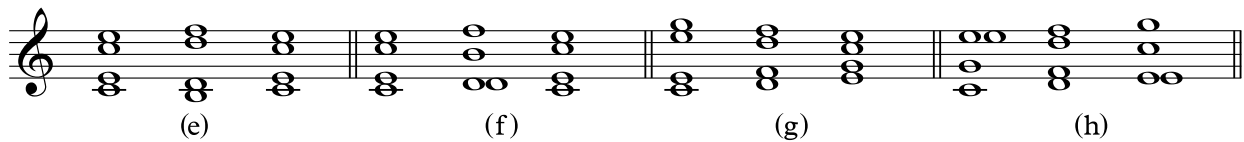


Figure 2e-h. CMSH further generalized.

descending linear progressions G–F–E and E–D–C (see Figure 2g). Conversely the contrary-motion spans E–F–G and E–D–C can be supported by the linear progressions G–F–E and C–D–E (see Figure 2h). Once again, the passing tones create a sonority whose root is one less than the surrounding sonorities, i.e., I⁶–VII⁶–I.

These two generalizations, which we will refer to collectively as the “Combined Melodic String Hypothesis,” extrapolate from Schenker’s remarks about combined neighbor and passing tones in *Kontrapunkt II* and combined neighbor motions and linear progressions in §§198–202 and §§221–229 of *Der freie Satz*.⁸ In §198 of *Der freie Satz*, for

instance, Schenker noted: “The neighboring motion 3–4–3 can be combined with 5–6–5 and 8–9–8 simultaneously, provided the fifth is not in the soprano—such a position would of course produce consecutive fifths.”⁹ A few pages later, he not only drew attention to the significance of combined linear progressions (§221), but he described combined linear progressions in parallel thirds/tenths (§224), parallel sixths (§225), parallel thirds or sixths where the outer parts move obliquely (§226), in contrary motion (§227), and in mixed motion (§227). Schenker did not, however, state the Combined Melodic String Hypothesis explicitly and did not demonstrate how it covers combinations of linear progressions of all possible

⁸ Schenker (1987 [1922], 179–181, 208–209), Schenker (1979 [1935], 72–73, 78–82). See also Rothstein (2001), Brown (2005, 123–126), and Franck (2007, 47–58).

⁹ Schenker (1979 [1935], 72).

(a) two-voice model

(b) invertible cpt. @ 8ve

(c) invertible cpt. @ 10th

(d) invertible cpt. @ 12th

Figure 3. CSMH applied to invertible counterpoint.

lengths (third spans, fourth spans, fifth spans, sixth spans, and octave spans) or of any combination of lengths.

When teaching the scholastic fugue, Dubois followed tradition and introduced his students to the general principles of invertible counterpoint and imitation. Invertible counterpoint involves restacking and transposing simultaneous lines so that those lines do not violate the basic rules of tonal voice leading and harmony. Although Dubois was well aware that melodies can be inverted at any interval, he focused on the three most common intervals, namely invertible counterpoint at the octave, tenth, and twelfth.¹⁰ Imitation also involves restacking and transposing melodic lines, though it presents those lines or transformations of those lines successively rather than simultaneously, again without violating the basic rules of tonal voice leading and harmony.

The Combined Melodic String Hypothesis is important because it sheds light on the principles of invertible counterpoint and imitation. Figure 3a presents two stepwise lines in contrary motion: a descending tetrachord C–G in the upper voice and an ascending pentachord C–G in the lower voice. Figure 3b then inverts these lines at the octave and, according to the Combined Melodic String Hypothesis, adds another voice in parallel thirds with the descending tetrachord. Next, Figure 3c inverts the descending tetrachord and the ascending pentachord in Figure 3a at the tenth so that the ascending pentachord now rises from E through F, G, and A, to B. It then harmonizes these voices in parallel thirds according to the Combined Melodic String Hypothesis: the descending tetrachord C–B–A–G with the tenor voice E–D–C–B and the ascending pentachord with the alto voice C–D–E–F–G. The new alto voice corresponds to the lower voice in Figure 3a inverted at the octave. Finally,

Figure 3d inverts the descending tetrachord and ascending pentachord in Figure 3a at the twelfth so that the ascending pentachord now rises from G through A, B and C, to D. It then harmonizes these voices in parallel thirds according to the Combined Melodic String Hypothesis: the descending tetrachord C–B–A–G with the tenor voice E–D–C–B and the ascending pentachord with the alto voice E–F–G–A–B. The new alto voice corresponds to the lower voice in Figure 3a inverted at the tenth.

Figure 4 then shows how simultaneous lines might be staggered imitatively. Figure 4a begins by presenting two lines built entirely from neighbor tones: the upper voice elaborates C with its lower neighbor tone B and its upper neighbor tone D, whereas the lower voice elaborates C with its upper neighbor tone D and its lower neighbor tone B. Having presented these lines simultaneously, Figure 4a then shows how the lower voice can be treated imitatively transposed up an octave starting on C, a tenth starting on E, and a twelfth starting on G. Next, Figure 4b staggers simultaneous scale patterns. In Figure 4b those scales are stacked in parallel thirds. If, however, the upper voice is extended back two notes so that it starts on C, then it appears to imitate the original ascending scale on C. And if the scale starting on C is transposed to G and delayed by two notes, then it appears to imitate the original ascending scale on C at the fifth. Figure 4c shows a similar process for descending scales. Finally, Figure 4d shows how a pair of voices built from contrary-motion scale patterns can be staggered imitatively and Figure 4e shows how three voices built from a neighbor motion followed by a passing motion can be staggered imitatively. In other words, the Combined Melodic String Hypothesis allows us to derive a more generalized picture of the principles of tonal counterpoint, which can then be brought to bear on either a historical treatise or (as we will show below) on a piece of music.

¹⁰ See Part III of Dubois (1901).

Figure 4 consists of five musical staves, each illustrating a different counterpoint technique. Staff (a) is divided into three sections: 'at the unison', 'at the third', and 'at the fifth', showing two voices moving in parallel motion. Staff (b) shows two sections: 'upper voice starts early' and 'upper voice starts late', where the upper voice begins before or after the lower voice. Staff (c) shows a single staff with a complex, rhythmic pattern. Staff (d) shows two staves with a rhythmic offset between the voices. Staff (e) shows two staves with a rhythmic offset and a different texture, possibly involving chords or more complex rhythmic figures.

Figure 4. CSMH applied to imitation.

2. DUKAS'S PIANO SONATA, MOVEMENT II

Dukas's training in counterpoint clearly had a direct impact on his future success. Most obviously, the classes in fugue proved vital in his bid for the *prix de Rome*, for which he won second place in 1888. Dukas's mastery of figured bass likewise helped him edit Rameau's *Les indes galantes* for Durand in 1902. It also came in handy while he was composing the Sonata in E \flat , a work of extraordinary contrapuntal complexity. Dukas's nod to tradition is particularly interesting in the second movement, where his fascination with such devices reinforces the work's rather conventional formal scheme. Indeed, as shown in Figure 5, the movement is a textbook example of sonata form.¹¹ The exposition begins innocuously enough with a statement of the first theme in the tonic A \flat major. A brief digression leads to a restatement of the theme over a tonic pedal (mm. 19ff) and an authentic cadence (mm. 29–31). A short transition sets up the second

theme in m. 37: this new gesture finally stabilizes E \flat major via a cadence in mm. 52–53 and again in mm. 65–66, the latter rounding off the exposition. The development section then starts unambiguously in m. 72 with the first theme in G \flat major, over a dominant pedal. The second theme returns in m. 91 and lands on the retransitional dominant E \flat in m. 105. This dominant is quickly broken off by the statement of the main motive in G major in mm. 110–115, but then returns in mm. 116–117 to herald the start of the recapitulation in m. 118. This section unfolds quite predictably, recalling the first theme (mm. 118–148 = mm. 1–31), a slightly-expanded transition (mm. 148–154 = mm. 32–36), the second theme (mm. 155–160 = mm. 37–42), and a conflation of the first and second themes (mm. 161–169). Following the cadence in A \flat major in m. 169, the movement ends with a short close (mm. 169–181), repeating once more the principal theme of the movement.

Although the formal structure of the second movement is not very remarkable, the two main themes certainly demand closer scrutiny. The first theme, given with its analysis (up to m. 8) in Figures 6a–6b, has a fairly simple structure,

¹¹ For further discussions of form in Dukas's piano sonata, see Keym (2012) and Schubert (1988).

Exposition (1 - 71)								
First Thematic Group (1 - 31)			Trans. (32 - 36)			Second Thematic Group (37 - 71)		
1-4, 5-8, 9-18, 19-23, 23-6, 27-31			32-36			37-42, 43-53, 53-8, 59-65, 66-71		
=1-4 Ab major (I)			cad. in Ab (29)			cad. in Eb (53)		
Tonic Pedal						cad. in Eb (66)		
Development (72 - 116)								
First Theme (72 - 90)			Second Theme (91 - 105)			Retransition (105 - 117)		
72-7, 78-82, 83-90			91-6, 97-105			105- 110-15 116-17		
=1-5 (=9-18?)						V7... 1 st Group ...V7		
Gb major			F major; (G minor)			Ab major (G major!) Ab major		
Recapitulation + Coda (118 - 181)								
First Thematic Group (118 - 148)			Trans. (148-154)			Second Thematic Group (155 - 181)		
118-21, 122-5, 126-35, 136-40, 140-48			148-54			155-60, 161-69, 169-75, 175-81		
=1-4, 5-8, 9-18, 19-23, 23-31			32-36			37-42 Th. 1/2 Closing ———→ combined		
Ab major (I)			cad. in Ab (146)			cad. in Ab (169)		
						cad. in Ab (179)		

Figure 5. Formal overview of Dukas' *Piano Sonata in Eb, II*.

almost like that of a homophonic chorale. Rhythmically, it establishes triple meter with even quarters notes that are arranged into regular two- and four-measure groupings. Melodically, the theme elaborates $E\flat$ ($\hat{5}$) with its upper neighbor F ($\hat{6}$) in mm. 1, 3, 4, and 5, and includes a local stepwise descent from $E\flat$ to $A\flat$ (mm. 1–2), and then from F (m. 5) through $E\flat$ and $D\flat$ to C (m. 6). Tonally, it establishes the global tonic $A\flat$ in mm. 1–5 before modulating locally to G minor in m. 8.

In contrast to that of the first theme, the structure of the second theme (starting at m. 39) is elusive to say the least. As shown in Figure 6c, its rhythmic profile is very irregular, superimposing duplets in the right hand over running triplet eighth notes in the left hand. Melodically, the

second theme is extremely angular and includes an array of accented dissonances, many of which resolve chromatically. Dukas uses these details to disguise an underlying stepwise pattern in the upper voice that ultimately descends from $B\flat$ through $A\flat$, G , and F to $E\flat$ (as shown in Figure 6d). Tonally, the first phrase (mm. 37–41) articulates a motion from V to I in $E\flat$ before shifting to the half-diminished sonority $F-A\flat-C\flat-E\flat$ (m. 52). The second phrase, now governed by a dominant pedal in $G\flat$ (mm. 43–46), presents a sequential version of the first phrase. Finally, the third phrase (mm. 48–53) winds its way circuitously back to $E\flat$ and ends with the cadential progression II^7-V^7-I (note the return to the half-diminished seventh chord, abandoned at m. 42). Overall, Dukas mirrors the stepwise descent of the melody

Calme _ un peu lent _ très soutenu

9

13

p *espress.* *retenu*

p *cresc.* *mf* *dim.* 3

p *pp* *cresc.* *sf* *p* 3

Figure 6a. Dukas, Piano Sonata, II, mm. 1-19.

I I⁵ II⁷ V I⁶⁻⁵ V I III
 G minor: IV (I) VII⁷ I

Figure 6b. Sketch of mm. 1-8.

with an analogous motion in the bass: B \flat (mm. 37 and 45), B $\flat\flat$ (mm. 47 and 50), A \flat (m. 51), G (m. 51), F (m. 52), and E \flat (m. 53). This overarching stepwise descent in the bass even has the tendency to overshadow the more local motion in fifths that concludes the phrase (G–C–F–B \flat –E \flat).

Besides creating the movement out of two very different types of themes, Dukas also exploits many of the contrapuntal techniques described earlier in this paper. To begin with, he uses several prominent pedal tones and treats them in much the same manner as those given in Figures 1 and 2.

Transition

32
cresc. poco
cresc.

Second Theme
au mouvt.

37
p bien chanté
cresc.

41
più f
dim.
p bien chanté

45
cresc.
più f
marc. p

Figure 6c. Dukas, *Piano Sonata, II*, mm. 32–53.

The first theme is case in point: having presented it in mm. 1–8, Dukas subsequently restates the first two phrases over a tonic pedal in mm. 19–23 (see Figure 7a). He follows

the same strategy in the recapitulation, presenting a varied reprise of the first theme in mm. 118–125 and then recasting it over a tonic pedal in mm. 136–140 (see Figure 7b). Later

Figure 6c. (continued).

Figure 6d. Sketch of mm. 37–53.

in the recapitulation, Dukas also brings back the second theme over a tonic pedal in m. 155 (Figure 7c), which gives it an entirely different feel than its first instantiation in the exposition. In m. 158 the alto descends $\hat{6}-\hat{7}-\flat\hat{7}$ over the pedal tone, just like Figures 1a and 1b. The alto continues its downward trajectory through $\hat{6}-\flat\hat{6}-\hat{5}-\hat{4}-\hat{3}$ but, instead of extending the pedal, Dukas articulates the progression I–V/IV–IV–V–I. Figure 7d then shows how mm. 110–111 (the

interpolated section within the retransitional dominant of the development) project pedal tones in the upper voices against a descending scale in the bass. This configuration resembles the one shown in Figure 2a.

In addition to using pedal tones, this movement also relies heavily on extended scales or scale segments in both the upper voices and the bass. Figures 6b and 6d have already shown such phenomena in the first and second themes:

Tonic Pedal \longrightarrow Ab G Gb etc.

Figure 7a. Dukas, *Piano Sonata, II*, mm. 19–23.

Figure 7b. Dukas, *Piano Sonata, II*, mm. 136–140.

the former including a stepwise descent from $E\flat$ to $A\flat$ in mm. 1–2, and the latter with staggered descents from $B\flat$ to $E\flat$ in the soprano and the bass in mm. 37–53. A particularly good example occurs in the restatement of the first theme in the exposition. As shown in Figure 8a, the theme initially returns over a tonic pedal in mm. 19–23, but the pedal soon dissolves into a descending scale $A\flat$, G, $G\flat$, F, $E\flat$, D, C, B, ($B\flat$), $A\flat$ in mm. 23–29. Dukas then repeats this strategy in mm. 140–146 of the recapitulation.¹² Next, Figure 8b shows the descending octave progression in the transition of the recapitulation (mm. 147–155), connecting it to the pedal at m. 155. Finally, Figure 8c demonstrates how the bass de-

scends $E\flat$ – $D\flat$ –C– $C\flat$ – $B\flat$ – $A\flat$ –G–F– $E\flat$ across the entire development section (mm. 72–117).

Such a fondness for scale patterns underscores Dukas's skill at invertible counterpoint and his tacit reliance on the Combined Melodic String Hypothesis. Take, for example, the short digression within the first group (sketched in Figure 9a; refer back to Figure 6a for the score). Having shifted locally from $A\flat$ major to G minor in mm. 5–8, the soprano ascends chromatically from $E\flat$ (m. 9) through $F\flat$ – $F\sharp$ – $F\sharp/G\flat$ –G– $A\flat$ – $B\flat$ – $C\flat/B$, before descending back through $B\flat$ to $A\flat$ in m. 11.¹³ Meanwhile, the alto voice ascends from $B\flat$ via F to $E\flat$ and the tenor ascends from G to D before sliding

¹² Modified scales like this one are discussed in several historical treatises, notably in C.P.E. Bach's *Versuch über die wahre Art das Clavier zu spielen*. See Bach (1974 [1759], 432). For a brief discussion of C.P.E. Bach's alternatives to the Rule of the Octave, see Brown (2010).

¹³ Note the breaking off of the octave doublings in the right hand at m. 10, where the literal highest voice rests on $G\flat$ in order to build up tension towards the eventual resolution $G\sharp$ – $A\flat$ in m. 12. This detail lends to the soprano line a brief yet highly expressive polyphonic character.

155

158

161

164

pp

poco cresc.

p

rinfz

I

V^7/IV

IV^9_4

I^8_7

I^8_7

I^8_7

IV^b

V^8_7

I

V^8_7

I

9 8 7 6 5 (=o3)
4 3 b 4 5 6 5
1 ————— 4 1

3 2 1

(N)

4 3 b3 (2) 1

b6 5 4 3)

(o3)

8 7 I

Figure 7c. Dukas, Piano Sonata, II, mm. 155–166.

RETRANSITION

105

109

112

115

...V⁵

Figure 7d. Dukas, *Piano Sonata, II*, mm. 105–117.

back down through $D\flat$ to C. Dukas highlights the arrival on $A\flat$ (I^6) in m. 11 using an inverted augmented sixth chord (a “German $\frac{4}{3}$,” as it were), in which $D\flat/F\flat$ resolves down to $C/E\flat$, G resolves up to $A\flat$ and $B\flat\flat$ resolves down to $A\flat$. Figure 9b (score also in Figure 6a) shows how Dukas then

inverts these voices in mm. 15–19, with the soprano descending from $A\flat$ back to $E\flat$, the alto ascending from $E\flat$ to $B\flat$ to F and back down to $A\flat$, and the tenor from $B\flat$ down to $A\flat$ (via an ascending sixth to G, which takes on the character of a neighbor note similar to that of mm. 3–4). Dukas

FIRST THEME RETURNS

Bass: Tonic Pedal → Ab G Gb F Eb

D C B (Bb)

Ab
Cadence in Ab

Figure 8a. Dukas, *Piano Sonata, II*, mm. 19–31.

uses similar strategies in the restatement of the first theme in mm. 23–29 (Figure 9c, score in Figure 8a), in the transition section leading into the second theme of the exposi-

tion (Figure 9d, score in Figure 6c), and at the end of the second theme in mm. 59–66 (Figure 9e, score shown in Figure 11).

Figure 8b. Dukas, *Piano Sonata, II*, mm. 147–155.

Development

End of Exposition	First Theme	Second Theme	Retransition
Mm. 66	72	83 91 95 97	102 105 116

Key Area: Eb V/Gb V/F V/G Ab (G) V

Figure 8c. Bass line of the development section.

The second movement also includes several other examples of invertible counterpoint. As mentioned earlier, the second group theme first appears in the local tonic of $E\flat$ in

mm. 37–39 and then sequentially in $G\flat$ in mm. 43–46 (refer back to Figures 6c–6d). Instead of presenting the sequence exactly, Dukas inverts the melody and the bass line so that

(a) $\text{Ger} + \frac{4}{3} \quad \text{I}^6$

(b) $\text{V}_5^6 \quad \text{I}$

(c)

(d) $\text{V}_{7-5}^9 \text{---} \frac{8}{5} \quad \text{I}$

(e) $\text{V} \quad \text{I}$

Figure 9a-e. CSMH applied to Dukas's Piano Sonata, II, select segments.

Figure 10a. Dukas, *Piano Sonata, II*, mm. 163–171.

Figure 10b. *Contrapuntal analysis of mm. 163–171.*

running triplet eighth notes now appear in the upper register and the theme itself is in the alto voice. A more remarkable example appears in the recapitulation of the second group in mm. 163–171 (see Figures 10a and 10b): whereas mm. 164–166 support the soprano string $D^b-B^b-(A^b)-G-A^b$ with the bass string $D^b-D^b-E^b-A^b$, mm. 166–171 invert these lines at the octave, thereby placing the bass string $D^b-D^b-E^b-A^b$ in the soprano and the soprano string $D^b-B^b-G-A^b$ in the bass.

It should be clear from the preceding examples that Dukas’s training in counterpoint held him in good stead while he was composing this movement. On the surface, the use of three- and four-part texture prevails, underlining a concern for clearly differentiated lines. And de-

spite the eventual chromaticism that comes to saturate the surface and the use of suspensions, passing tones, and neighboring tones, the individual melodic strands can clearly be heard, as can larger harmonic *Stufen*. The various voices in the texture also display an affinity for contrapuntal coordination. The opening measures are instructive in this regard. The progression in mm. 1–3 (discussed above), while clearly showing a descending fifth span in the soprano voice, also demonstrates a counterpointing in thirds with the inner voice and a bass line in melodic inversion to the melody. Also revealing about this passage is the way it emphasizes first-inversion chords on the surface for both the tonic and the dominant.

Inner voice: Bb ——— (Bb Cb C Db D) ——— Bb ——— B C Db D Eb E F Gb G Ab A

53 au mov't

pp *cresc.* *dim.* *pp* *cresc.* *dim.* *cresc.* *dim.*

Eb: I V/F V/Bb

(Cb C Db D Eb)

58 en serrant **cédez**

Bb avoided! *p* *cresc.* *p* *diminuendo*

G Ab A BbCb Db D EbFb F F# G

Gb! o3 V (pedal) →

63 en élargissant **calme**

Ab A Bb achieved! *molto* *pp* *pp* *pp marc.*

V I

cadence in Eb (close of Exposition)

67

Gb major →

Figure 11. Dukas, Piano Sonata, II, mm. 53–71.

175

$\hat{5}$ $\hat{4}$ $\hat{3}$ $\hat{2}$ $\hat{1}$

pp *pp*

V^7/Bb $II^{\circ 7}$ $V^7/G!$ V^7 I_4^6 — 5 — 3

Figure 12. Dukas, *Piano Sonata, II*, mm. 175–181.

Beyond the local significance of the opening progression and its repetition in m. 19, the global consequences of such writing can be seen across the movement. For one thing, both the initial upper-voice melodic structure (E \flat –F–E \flat) and the introduction of two chromatic notes, D \sharp and B $\flat\flat$, underscore the importance of neighboring motion, both in its diatonic and chromatic forms. For another, the opening E \flat can be heard throughout the opening as a mentally-retained upper voice (a *Kopftön*), whose descent by fifth in mm. 1–3 sets in motion the subsequent ascending and descending linear spans of the first part. In the first thematic group, E \flat maintains its aural significance via an ascending register transfer at m. 29 and then gradually finds its way to B \flat using another chromatic linear progression in thirds in the transition. The opening neighboring motion E \flat –F–E \flat manifests itself at various points in the movement, and can be seen to motivate a number of other factors, for instance the move to G minor in mm. 7–8 (D–E \flat –D), the return to A \flat at mm. 11 and 13–14 (E \flat –F–F \flat –E \flat), the surface gestures of mm. 15–17 prolonging the middleground upper-voice descent to E \flat (using the technique of reaching over) and the final appoggiatura D–E \flat at mm. 29–31 that helps articulate the *Kopftön* E \flat in the upper register following the cadence.

Neighboring figures also appear in the second thematic group, this time around B \flat , $\hat{5}$ in E \flat major. B \flat asserts its prominence across this area and is accompanied by its own neighboring figuration, especially in the build-up to the structural close of the exposition (see Figure 11). Beginning at m. 53, a chromatic double-neighbor figure around B \flat emerges in the middle voice (A \sharp –B \flat –C \flat –B \flat), following the completion of the descending upper line mentioned earlier. This double neighbor accompanies another linear progression, this time beginning on B \flat and ascending through the octave to m. 58; a number of other techniques such as voice exchange punctuate it along the way. But the expected arrival of B \flat on the downbeat of m. 58 is avoided (both the note and the chord), and from here Dukas sets off an even more

elongated ascending line arising out of the inner voice at m. 59 (starting on the note G), which now spans a tenth (note how the line finally emerges from the inner voice at m. 62 to complete the ascent to B \flat , while simultaneously reinstalling the initial neighboring figuration). Both the upper-voice B \flat and the neighbor figuration around it continue in the small codetta that follows the cadence at m. 66, bringing the exposition to its close.

On a more abstract level, the upper-neighbor figures around E \flat and B \flat , which use F/F \flat and C/C \flat respectively, raise the issue of Dukas's manner of connecting chords and key areas. One of these, G, was alluded to earlier. This chord, along with its chromatic counterpart G \flat , can be generated contrapuntally as a voice-leading transformation of the neighboring figure. The contrapuntal complex that is created using the neighboring figure is manifest throughout the movement. At a number of crucial junctures Dukas employs chords on E \flat , G, and G \flat , in rapid succession. In the first group, this includes not only the already-mentioned motion to G minor in mm. 7–8, but also the *sforzando* chord before the return of the initial theme at m. 8 and the *sforzando* chord on G (first inversion) at m. 27, just before the cadence. This voice-leading transformation can also explain the move to G \flat major at the onset of the development section and the insertion of the G chord in first inversion at m. 110, which temporarily diverts the retransitional material but simultaneously anticipates the recapitulation. To be sure, this technique could account for Dukas's preference for first inversion chords throughout the movement.

The significance of E \flat and the fifth descent can be seen at the very end of the movement, mm. 175ff, when it is reharmonized (see Figure 12). Three aspects of this reharmonization are noteworthy. First is the chorale-like harmonization presented in a quasi hemiola figure. Second is the choice of chords: a secondary dominant of B \flat over the first three notes of the melody (E \flat –C–F) followed by the striking B \flat $^{\circ 7}$ and D 7 chords that harmonize $\hat{4}$ and $\hat{3}$ —the latter reminding us

212 Plus lent - mystérieusement

pp

douxment marqué

221

Figure 13. Dukas, *Piano Sonata, III*, mm. 212–227.

once again of G. The third aspect involves the cadence itself, which elides the concluding V–I motion with a neighboring $\frac{6}{4}$ chord over the final tonic. Unquestionably, the descending fifth progression can be seen as the progenitor of all of the descending spans pointed out earlier; the neighbor note, for its part, provides the means by which to prolong those linear progressions.

3. THE FUGUE

Given the central place awarded to fugue in Dukas's training, it seems only apt to close our paper with a brief discussion of the fugue of the third movement. Marked *mystérieusement*, the fugue is written in three voices and evokes a sound world far removed from that of the rest of the sonata; it even borders on the non-tonal. Like much of the sonata, Dukas lets counterpoint become the driving force of the music. In the case of the fugue, it helps to explain the absence of any readily-perceivable tonal center, since Dukas can rely more on combining lines and motives. For instance, the fugal subject gives us little information about its possible tonal implications, and the introduction of the countersubject only obscures the sense of key even more so (see Figure 13). Stylistically, it is built in an almost pointillistic manner, with melodic intervals of the semitone, minor and major third, tritone, and diminished seventh, hardly the kinds of intervals one would use to establish a key (note the absence of any melodic leap of perfect fourth or fifth in both the subject and countersubject). The exposition thus sets

the tone for a fugue of a dark, mysterious, and in the words of Alfred Cortot even “nightmarish” character.¹⁴

That said, behind this densely woven contrapuntal web lies an underlying tonal and formal scheme not far removed from the kinds of schemes described by counterpoint authors like Dubois.¹⁵ It can even be shown to have a conceptual tonal plan in the key of C# minor, though if it is nearly impossible to hear such a plan. A short chorale introduces the head of the subject (mm. 193ff). It then employs all the standard kit of fugal design: a three-voice exposition with subject and countersubject (mm. 212–235); an alteration of episodes and re-entries, eventually landing in the key E major (m. 273); a short retransition over an obscured dominant pedal G# (m. 281); and a reprise of the principal subject head and countersubject, the latter now a mere shadow of its occurrence in the exposition (m. 290). The whole fugal section of this third movement concludes with a return to the chorale-like passage of the introduction (mm. 316ff).

Though Dukas's fugue is certainly no scholastic fugue, it is worth taking note of some of the features that might link it to the treatise of Dubois. In particular, Dubois saw the use of *stretto* and pedal as being of vital importance in the

¹⁴ Cortot (1981, 231–232).

¹⁵ While it is beyond the scope of this paper, a good future point of comparison with Dukas's fugue would be the fugue to Maurice Ravel's piano suite, *Le Tombeau de Couperin* (published in 1918). For a discussion of this piece and its relation to the writings of André Gédalge (Ravel's counterpoint teacher at the Paris Conservatoire), see Helbing (2004) and Gonnard (2001).

fugue, not simply as techniques but also as integral formal junctures. The primary purpose of the *stretto*, he writes, is “to condense, to reunite, and to tighten.”¹⁶ While usually drawn from the subject or answer, the *stretto* for Dubois may also be composed of the countersubject or even from freely-developed material. The pedal then works in tandem with the *stretto*: a short and subsidiary pedal may precede a *stretto*, but the structural dominant inevitably must join or follow the *stretto*.¹⁷ While Dubois saw these as the freest elements of the fugue, he sought to highlight their importance in bringing a fugue to a convincing close.¹⁸

The passage beginning at m. 247 echoes those recommendations of Dubois (see Figure 14). While hearing a pair of entries beginning on G \sharp and D \sharp , the countersubject transforms from two-note pairings into a rhythmically-displaced three-note pairing, heard most clearly in the middle voice at m. 251. The episode beginning at m. 255 uses both ascending and descending melodic sequences and develops this three-note rhythmic motive. When Dukas introduces a pedal tone on E at m. 262 he continues to set the soprano voice in sequential motion by descending second, now using a three-note ascending semitonal figure (A \sharp –B–C; G \sharp –A–B \flat ; and G–G \sharp –A). The pedal is aborted at m. 265 and the semitonal figure fuses with the three-note rhythmic figure, at which point Dukas begins a small *stretto* passage of this transformed countersubject. Rounding this off is a new entry of the subject at m. 270 and a cadence in E major three measures later. But this moment of repose is short-lived: Dukas brings in the subject once again at m. 280 in the soprano voice in rhythmic diminution as a way of anticipating the retransitional “dominant” pedal on G \sharp one measure later, which signals the conceptual return to C \sharp minor and the final statements of the subject and countersubject. Even the use of a chorale to frame the fugue is something that Dubois mentions in his discussion as giving the fugue a sentiment of *grandeur* and majesty.¹⁹ All this is to show how ver-

satile Dukas was in his treatment of counterpoint, whether it was used to motivate various stepwise linear progressions, invertible counterpoint, and neighboring motives in the context of the largely tonally-stable second movement; or used in writing an extremely contrapuntally-dense fugue in the middle of a virtuosic toccata, pushing the boundaries of tonal sensibilities.

A final, striking compositional detail at the end of the fugue even recalls the end of the second movement (Figure 15). In the fugue, a motivic gesture C \sharp –D–E \sharp at mm. 333–335 (Figure 15a) sounds in the upper register and is accompanied by a pedal C \sharp , to which Dukas writes the expressive marking *perdendosi* (“dying away”). In its local context, this motive outlines two notes of an underlying C \sharp dominant seventh chord, which prepares the arrival of F \sharp (V/B) at m. 336. More globally, it reminds us of the “head tone” of the initial fugue subject (E \sharp). This same figure, transposed down a step to C \flat –C–E \flat , arrives just before the final *dénouement* of the structural fifth progression of the second movement, mm. 174–175 (Figure 15b; mm. 173 and 176 are given for context); it too includes the expressive marking *perdendosi*, and is the only other place in the entire sonata to do so. In this case, the motive occurs locally above the dominant of A \flat , and it reminds us more globally of the *Kopfton* E \flat of the entire movement. In both cases, then, the motive serves as an anticipatory gesture and as a reminiscence of a head tone; taken together, they form a large-scale associative link between the second and third movements. The motive can even be seen to motivate the fugue subject itself (albeit presented in inversion).

CONCLUSION

This paper has described the contrapuntal legacy of the French *fin-de-siècle* from the perspective of Paul Dukas and his Sonata in E \flat . It represents but a first step towards explaining the interactions between the educational background of composers like Dukas, the treatises in circulation during their formative years, and the extensions described by later theorists, notably Heinrich Schenker. Obviously, the discussion does not suggest any simple one-to-one correspondence between the instruction Dukas received at the Paris Conservatoire and the music he subsequently composed. Indeed, after being awarded second place for the *prix de Rome*, Dukas actually admitted that he gained little from his studies with Dubois and Guiraud. But it seems

present the end of the fugue in the form of a chorale; this gives a sentiment of *grandeur* and of majesty to the piece, which is nicely suited to certain subjects.” “Enfin, si le sujet s’y prête, il peut être très bon de présenter la terminaison d’une Fugue en forme de Choral; cela donne alors un sentiment de *grandeur* et de *majesté* qui convient fort bien à certains sujets” (ibid., 168).

¹⁶ “The *stretto* is, as I explained in the general plan, the place in the fugue where the most interesting elements come together (as it were, meet) to condense, to reunite, and to tighten.” “Le Stretto est, comme je l’ai dit dans le Plan général, la partie de la Fugue où les éléments les plus intéressants se donnent pour ainsi dire rendez-vous pour se condenser, se réunir, se serrer” (Dubois 1901, 158).

¹⁷ “Sometimes a short pedal precedes the *stretto*, but the true place of the low dominant pedal is in the course of the *stretto*, towards the end of the fugue.” “Quelquefois une Pédale courte précède le Stretto, mais la vraie place de la Pédale grave de dominante est dans le courant du Stretto, vers la fin de la Fugue” (ibid., 110).

¹⁸ “A certain liberty of appearance, as we have already said, is admitted, above all in the *stretto* passage, during the pedal, and towards the end of the fugue, but always remaining within the style and character of the themes.” “Une certaine liberté d’allures, comme nous l’avons dit déjà, est admise, surtout dans le Stretto, sur la Pédale et vers la fin de la Fugue, mais toujours en restant dans le style et dans le caractère des thèmes” (ibid., 112).

¹⁹ “Finally, if the subject allows for it, it can be very effective to

247 *espress.* **Entry on D#** **Episode**
p *marqué* **Entry on G#**
poco più f **transformed countersubject**

256 *dim.* *cresc.* **ascending semitonal figure**
Pedal on E

264 **Stretto passage** **Entry** *dim.*
p subito **semitonal figure and new countersubject fused** *le thème doucement marqué*
Pedal aborted

273 *p* *p*
Cadence in E

278 **Entry in diminution** **Retransition** *rinfz.*
V/C#

Figure 14. Dukas, Piano Sonata, III, mm. 247–282.

330 en retenant

Figure 15a. Dukas, *Piano Sonata*, III, mm. 330–336.

173

Figure 15b. Dukas, *Piano Sonata*, II, mm. 173–176.

implausible to suppose that the techniques he learned as a student were irrelevant to his future aspirations as a composer, especially in light of the ways in which Schenkerian theory extends them. In this respect, Dukas's experiences are not unlike those of his chum Debussy, who denounced the Paris Conservatoire's curriculum but nonetheless persisted in writing contrapuntally-driven music.²⁰ Perhaps the last word should go to Dukas himself who, long after completing the piano sonata, announced to his own composition class at the Paris Conservatoire: "What will be art's new form of expression? It will be necessary to return to the sources themselves, to simplicity, in order to find something of genuine novelty... . Counterpoint? Without a doubt, that is where the future lies."²¹

²⁰ See Brown (forthcoming), Bonds (1977).

²¹ "Quelle sera la nouvelle formule d'art? Il faudra retourner aux sources mêmes, à la simplicité, pour trouver quelque chose de véritablement neuf. [...] Le contrepoint? Là, sans doute, se trouve l'avenir." (Favre 1969, 103).

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