

The Cavaillé-Coll Organ and César Franck's *Six Pièces*

by

Anna Sung

A Research Paper Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Musical Arts

Approved December 2012 by the
Graduate Supervisory Committee:

Kimberly Marshall, Chair
Russell Ryan
Rodney Rogers
Caio Pagano

ARIZONA STATE UNIVERSITY

December 2012

ABSTRACT

Nineteenth-century French organ builder Aristide Cavaillé-Coll and organist-composer César Franck established a foundation for the revival of organ music in France. Following the French Revolution, organ culture had degenerated because of the instrument's association with the church. Beginning with his instrument at St. Denis, Cavaillé-Coll created a new symphonic organ that made it possible for composers to write organ music in the new Romantic aesthetic.

In 1859, Franck received a new Cavaillé-Coll organ at the Parisian church where he served as organist, Sainte-Clotilde. He began experimenting with the innovations of this instrument: an expressive division, mechanical assists, new types of tone color, and an expanded pedal division. From about 1860, Franck began composing his first pieces for the Cavaillé-Coll organ; these were published in 1868 as the *Six Pièces*. With these compositions, Franck led the way in adapting the resources of the French symphonic organ to Romantic music.

In this paper, I provide an analysis of the structure of each of the *Six Pièces* as a foundation for exploring ways in which Franck exploited the new features of his Cavaillé-Coll organ. I have made sound recordings to demonstrate specific examples of how the music fits the organ. Thanks to Cavaillé-Coll's innovations in organ building, Franck was able to write large-scale, multi-thematic works with the sonorous resources necessary to render them convincingly. The *Six Pièces* reveal a strong creative exchange between organist and organ builder, and they portend many of the subsequent developments of the French symphonic organ school.

TABLE OF CONTENTS

CHAPTER	Page
1 INTRODUCTION.....	1
2 ARISTIDE CAVAILLÉ-COLL AND HIS SYMPHONIC ORGAN..	4
The Characteristics of the Cavail l é-Coll Organ.....	4
3 ARISTIDE CAVAILLÉ-COLL AND CÉSAR FRANCK	8
The Sainte-Clotilde Organ.....	8
4 FRANCK'S <i>SIX PIÈCES</i>	14
<i>Fantaisie in C Major</i>	14
<i>Grande Pi èce Symphonique</i>	17
<i>Pr élude, Fugue et Variation</i>	19
<i>Pastorale</i>	20
<i>Pri ère</i>	23
<i>Final</i>	24
5 THE CAVAILLÉ-COLL ORGAN AS VEHICLE FOR FRANCK'S	
<i>SIX PIÈCES</i>	26
Registrations	26
The use of different divisions.....	30
Dynamics	31
Touch	34
Expansion of the R écit and Pedal Divisions.....	35
Summary of Franck's Use of the Cavail l é-Coll Organ in his <i>Six</i>	
<i>Pi èces</i>	36

CHAPTER	Page
6 CONCLUSION	38
REFERENCES	40
APPENDIX A MUSICAL EXAMPLES FOR LECTURE RECITAL	42

CHAPTER 1

INTRODUCTION

Music changes and develops according to contemporary social, political and cultural influences. The eighteenth century was a period of drastic changes and industrialization. In the second half of the eighteenth century, these rapid transformations led to new views on music, art, and literature that challenged classical concepts in Western Europe. Artists, poets, writers and musicians expressed emotional freedom and nationalism through their works, creating a new musical style. Romantic composers devised long melodies of irregular phrase lengths instead of the more symmetrically proportioned lines of the Classical style. The music of Romanticism contained a heightened use of chromaticism, vivid contrasts, and a variety of melodic ideas within one movement to express changing emotions. Frequent changes of tempo and meter suggested the unpredictability of human emotions.

The piano was an ideal vehicle for music in the new Romantic style because of its flexible dynamics. Virtuoso composers such as Frédéric Chopin (1810-1849) and Franz Liszt (1811-1886) personified the Romantic artist, steering piano music towards previously unforeseen directions. Unfortunately, the piano's keyboard antecedent, the organ, had been victimized by the Revolution. A symbol of clerical and political power, the organ became an easy target for destruction by angry mobs of revolutionaries. Although some instruments were saved when they sounded patriotic tunes, most French organs were in a state of disrepair by the

early nineteenth century. The instrument's design was firmly rooted in Classical traditions and was not equipped to accommodate the new stylistic features of Romantic music. Organists at this time tended to play facile variations on secular tunes rather than to cultivate music of artistic significance. Having blossomed during the Baroque period with composers such as Francois Couperin (1668-1733) and Nicolas de Grigny (1672-1703), French organ music degenerated after the 1790s.

This situation changed dramatically after mid-century, largely due to the efforts of César Franck (1822-90) and Aristide Cavaillé-Coll (1811-99), regarded as the leading French Romantic organist/composer and organ builder. Together they forged a new aesthetic for organ music in France. Franck led French organ music in a new direction, combining formal Classical structures with rich Romantic expression. He restored the French organ music to a place of respect in contemporary cultural life. In the 1840s, the French organ builder Aristide Cavaillé-Coll created a new "symphonic" style of organ that emulated Romanticism's most powerful vehicle, the symphony orchestra. Cavaillé-Coll worked closely with leading organist-composers in early nineteenth century France, including Louis-James-Alfred Lefebure-Wely (1817-69), Jacques-Nicolas Lemmens (1823-81), César Franck (1822-90), and Charles-Marie Widor (1844-1937). Whenever he built new organs, Cavaillé-Coll invited these renowned players to perform concerts to introduce his instruments. The concerts offered a wide range of performance opportunities for organists and encouraged their collaboration.

Franck and Cavaill Coll met for the first time when Franck played at Notre-Dame-de-Lorette in 1847. They maintained close relations, and in 1858, Franck welcomed a new Cavaill Coll organ into his Paris church, Sainte-Clotilde. During the 1860s, Franck explored his new instrument, ultimately composing his *Six Pi ces*, published in 1868. These works revealed the possibilities of the new symphonic organ and served as models for a new symphonic style of organ composition. In each of these organ pieces, Franck employed the registration aids that Cavaill Coll pioneered, such as hitch-down couplers, ventils controlling divided windchests, and the expression box. This study assesses the impact of Cavaill Coll’s innovations in organ building on the genesis of Franck’s unique style of composing for the instrument as revealed in the *Six Pi ces*.

CHAPTER 2

ARISTIDE CAVAILLÉ-COLL AND HIS SYMPHONIC ORGAN

Aristide Cavallé-Coll was born in 1811 into a family of organ builders. His early instruments followed the traditional ways of organ building that had been pursued by his father and uncle. By developing the organ's foundation and reed sounds and by adapting innovative technology, he was able to develop a new aesthetic. Cavallé-Coll's first significant instrument was a large organ for the Basilica of St. Denis in 1841. This became a model for many later French organs because of its ambitious tonal design, described below. Following Saint-Denis, Cavallé-Coll built about 500 organs, exporting instruments all over the world and establishing himself as the leading organ builder of his time. His organs have influenced French organist-composers until the present day.¹

The Characteristics of the Cavallé-Coll Organ

The Cavallé-Coll organ design has three main areas of innovation: mechanical **assists**, new types of tone color, and expansion of the pedal division. These features were already present on the St. Denis instrument. Cavallé-Coll applied to organ building the swell box (boîte expressive), Barker machine (for the action) and a ventil system for easier manipulation of large groups of stops. The musical demands of Romanticism required both gradual and sudden dynamic contrasts. In order to make it possible for the organist to shape a melodic line dynamically, Cavallé-Coll included a division of pipes that was enclosed in a

¹ Douglas Bush, ed. *Encyclopedia of the Organ* (London: Routledge, 2004), 98.

wooden box with louvers. When the louvers were opened by a pedal at the console, the sound would swell; when the louvers were closed, the sound would diminish. Both English and Spanish organ builders had utilized swell boxes in the 18th century. Cavaillé-Coll took this idea to a much larger level in his organs, so that the swell division (called *Récit* in French) included an ensemble of reed stops that could produce a significant crescendo of sound, especially when coupled to other divisions. In order to imitate the power of the full orchestra, Cavaillé-Coll furnished his instruments with large ensembles of pipes on relatively high wind pressure that could be coupled together for maximum effect. The greater resistance generated by large amounts of wind would create an excessively heavy keyboard action. Cavaillé-Coll solved this problem by adapting the Barker machine, a pneumatic device designed to lighten the organ's manual key action.² The invention of the Barker lever made it possible for the organist to couple all manuals together and play on the full organ without expending three times the effort.

To allow the organist the possibility of making quick, dramatic changes of timbre, Cavaillé-Coll introduced a divided windchest system controlled by vents, metal hitchdowns located just above the pedals. He divided each chest in two parts: one for the organ's foundation stops (principals, strings and flutes), and the other for upperwork and reeds, generically referred to as "anches." In this way, the stops for powerful tutti could be pulled out in advance by the organist ("anches préparées"), but would not sound until the vent was depressed,

² Fenner Douglass, *Cavaillé-Coll and the French Romantic Tradition* (New Haven and London: Yale University Press, 1999), 17-18.

allowing for a sudden surge of sound, or a similarly quick decrescendo when the ventil was released, thereby blocking wind from entering the “anches” windchest.

To maximize the resources of his organs, Cavaillé-Coll invented a combination pedal system to couple divisions together and to add octaves mechanically.³ These combination pedals include the *Tirasses* (pedal couplers), *Octave graves* (adding notes an octave below those being played), and *Accouplements* (manual couplers). As with the ventil system, these pedals permitted the organist to control with his/her feet the combining of manual and pedal divisions, enabling a heretofore unimaginable control of large forces by one organist from the console. Through these mechanical innovations, the Cavaillé-Coll organ allowed the organist to achieve a crescendo from pianissimo to full organ without having to change manuals or take hands away from the keyboard because all dynamic nuances could be controlled by the feet.

The second main area of innovation in Cavaillé-Coll's instruments was the creation of new tone colors and organ registers to imitate orchestral sounds. Specifically, Cavaillé-Coll reduced the number of mutation stops and mixtures (used for polyphonic music in the Classical period), adding more eight-foot foundation stops such as the Montre, Gamba, Bourdon and Harmonic Flute.⁴ He voiced these ensemble sounds so that they were warm and full, imitating the large string sections of the Romantic orchestra. He also successfully voiced pipes to imitate the sound of specific orchestral instruments, such as the bassoon, the oboe

³ Rollin Smith, *Towards an Authentic Interpretation of the Organ Works of César Franck* (New York: Pendragon Press, 1983), 50.

⁴ *Ibid.*, 48.

and the English horn. He invented an overblown flute stop (flute harmonique) to reproduce the rich tone of the orchestral flute. Through his tonal innovations, Cavaill Coll succeeded in making the organ more expressive and versatile according to the symphonic model.

One of the Cavaill Coll's most significant contributions to the symphonic organ was an expanded pedal division. Classical French organ usually had a board of small pedals controlling only two or three stops: an eight-foot reed and flute with perhaps a four-foot flute. In this tradition, pedals were mostly used for plainsong melodies on the trumpet or for playing a soft lower voice. The only way a sixteen-foot sound could appear in the pedal was via the Great-Pedal coupler. However, in the nineteenth century, Cavaill Coll expanded the pedal division by adding a full chorus of foundation and reed stops.⁵ With this expansion, it became possible for French organists to play the music of Bach for the first time and to develop pedal parts in their improvisations and compositions.

⁵ Ibid., 47-48.

CHAPTER 3

ARISTIDE CAVAILLÉ-COLL AND CÉSAR FRANCK

César Franck was clearly influenced by the new instruments of Cavallé-Coll. According to many reports, Franck became one of the organ builder's closest friends, and he was often engaged for public appearances on the recommendation of Cavallé-Coll. The two first met in 1847 when Franck took up his first post as organist at Notre-Dame-de-Lorette. In 1851, Franck played a two-manual Cavallé-Coll organ with eighteen stops at St. Jean-Saint-Francois in the Marais.⁶ In 1854, the organ builder invited Franck to perform in a concert with Jacques-Nicolas Lemmens, Peters Carvallo, and Auguste Bazille. The concert was designed to introduce the new Ducroquet organ at the church of Saint-Eustache, and Franck played his *Fantaisie in A Major for Grand Orgue*, which was never published. He wrote the *Fantaisie* for this concert and for the large Ducroquet organ with four keyboards and pedals.⁷ From 1859 until his death, Franck presided as titular organist of the Cavallé-Coll instrument at the church of Ste. Clotilde. Inspired by this organ, Franck composed and published the *Six Pièces*.

The Sainte-Clotilde Organ

Designed by Théodore Ballu, the Ste. Clotilde church was built in the neo-Gothic style in 1857, and Cavallé-Coll installed an organ there in 1859. Typical

⁶ Douglass, 102.

⁷ Marie-Loise Jaquet-Laglais, "The Organ Works of Franck: A Survey of Editorial and Performance Problems," in *French Organ Music: From the Revolution to Franck and Widor*, ed. Lawrence Archbold and William J. Peterson (Rochester, NY: University of Rochester Press, 1995), 157.

of his style, the Ste. Clotilde organ had three manuals of fifty-four keys and a pedalboard of twenty-seven notes.⁸ The Grand-Orgue was played by the lowest keyboard, the Positif by the middle, and the Récit by the top. The first specification for Ste. Clotilde includes forty stops, ten *Pédales de combinaison* and 2,484 pipes. After Franck was appointed as organist in late 1858, six stops and four *Pédales de combinaison* were added to the original stoplist.⁹

The Récit, placed on the back of the organ case, is the organ's most dramatic division because of its dynamic capabilities. The division has ten stops, including a Montre and a mixture, but without a sixteen-foot. As described above, louvers in the box surrounding the Récit are controlled by a ventil, allowing for the expressive use of gradual crescendo and diminuendo. Wallace Goodrich described the Récit division at Ste. Clotilde: "The Récit is a manual of ample resources and great power when the box is open, affecting materially the whole ensemble of the organ."¹⁰ The timbres of the two solo reeds of the Récit are very distinctive: the Hautbois-basson (Oboe-bassoon) has a dark, brooding quality, while the Trompette imparts a strong palette of overtones to solo lines. Both of these Récit reeds can be used as a solo or coupled into the organ's foundation stops, resulting in a rich ensemble sound.¹¹ The Positif division is louder than the Récit, but less powerful than the Grand-Orgue. It has foundation stops voiced as

⁸ Rollin Smith, *Towards an Authentic Interpretation of the Organ Works of César Franck* (New York: Pendragon Press, 1983), 55.

⁹ *Ibid.*, 58.

¹⁰ Wallace Goodrich, *The Organ in France, A Study of Its Mechanical Construction, Tonal Characteristics, and Literature, with Suggestions for the Registration of French Organ Music Upon American Instruments* (Boston: Boston music Co, 1917), 22.

¹¹ Smith, 74.

Principals (Montres), flutes (Bourdon) and strings (Gambe), and a Clarinette, as well as fiery reeds in the Trompette and Clairon. The registers of the Grand-Orgue are similar but voiced to be louder so that there is an increase in intensity from the Récit to the Positif to the Grand-Orgue.

Like many of Cavaille-Coll's instruments, the Ste. Clotilde organ does not have a 16' Bourdon in the Pedal; rather, the Contrebasse 16' provided clarity in the bass, while the Soubasse 32' added depth. Figure 1 shows the specification of the Ste. Clotilde organ during Franck's tenure (the organ was rebuilt in 1933 and in 1962):¹²

¹² Douglass, *Cavaill é Coll*, 141.

Figure 1. The Specification of the Ste. Clotilde Organ in Franck's Time

I. Grand-Orgue (A-f3)	II. Positif (C-f3)
Montre 16	Bourdon 16
Bourdon 16	Montre 8
Montre 8	Gambe 8
Gambe 8	Unda maris 8
Flûte harmonique 8	Flûte harmonique 8
Bourdon 8	Bourdon 8
Prestant 4	Prestant 4
Octave 4	Flûte 4
Quinte 2 2/3	Quinte 2 2/3
Doublette 2	Doublette 2
Plein-Jeu VI	Plein-Jeu V
Bombarde 16	Trompette 8
Trompette 8	Clarinette 8
Clarion 4	Clarion 4

III. Récit expressif (C-f3)	Pédale (C-d1)
Gambe 8 Voix Céceste 8 Flûte traversière 8 Bourdon 8 Flûte octaviante 4 Octavin 2 Trompette 8 Clarion 4 Hautbois 8 Voix humaine 8	Soubasse 32 Contrebasse 16 Basse 8 Octave 4 Bombarde 16 Basson 16 Trompette 8 Clarion 4
	Pédales de combinaison Tirasses et Accouplements Grand-Orgue and Positif to Pédale; Positif to Grand-Orgue; Récit expressif to Positif Tremolo

Printed indications in Franck's scores suggest that he compared the Cavallé-Coll organ to an orchestra and composed with the organ of Sainte-Clotilde in mind. His contemporaries also refer to the importance of this instrument in the genesis of his compositions: "All of his organ music was written

for this instrument: this explains their structure and the particular registrations.”¹³

Franck documented his ideas about sound through the registrations and dynamic markings in his scores. He produced the dynamic nuances using the swell box and the combination pedals. After these music activities, Franck was considered one of the leading organists and composers in France.

¹³ Smith, 53 quoting Louis Vierne, *Journal* (Paris: Les Amis de l’Orgue, 1970) 155; and Joseph Bonnet, “Preface,” César Franck’s *Three Chorals*, dated New York, July-September 1942, but published in 1948 (New York: Fischer) 2. Smith also provides a quote from Joseph Bonnet: “It is obvious that, in writing his organ works, *César Franck* was much impressed by this special organ, and planned his registration according to the resources of the Sainte-Clotilde instrument.” (Smith, 53)

CHAPTER 4

FRANCK'S *SIX PIÈCES*

Franck composed the *Six Pièces* between 1860 and 1862, although they were not published until 1868. He performed the complete set on November 17, 1864 at Sainte-Clotilde. The pieces treat different genres and textures and probably stem from Franck's improvisations in exploring his new organ. In order to better assess the impact of the Cavaillé-Coll organ on the genesis of these works, we will discuss them individually.

Fantaisie in C Major, Op. 16

The *Fantaisie in C major* is the first of Franck's *Six Pièces* and was dedicated to the organist and composer Alexis Chauvet (1837-1871), who studied with François Benoist at the Paris Conservatoire. Chauvet was a friend of Franck, and his music includes polyphony in a baroque style influenced by Johann Sebastian Bach. Franck also admired Bach and played Bach's music in public concerts. The *Fantaisie in C major* demonstrates influence from Bach through its use of counterpoint and canonic writing. Other features of the *Fantaisie* include chromaticism, simple melodic lines, and imitation.

Franck came back to this piece several times, ultimately making 4 distinct versions each with a similar structure in three sections. The three variants to the version Franck published as the opening of the *Six Pièces* composed over ten

years from 1854 to 1864 and published in a modern edition in 1980.¹⁴ Of these variants, versions I and III open identically to Franck's published *Fantaisie in C major*; version II has a different opening, but the same second and third sections. Each section features different textures with different registrations. Franck played the first version of the *Fantaisie in C major* at the Cavaille & Coll factory; Franck played the second version to inaugurate the new organs in Saint-Sulpice, on April 29, 1862, and the third version at Notre-Dame Cathedral, on March 6, 1868.¹⁵

¹⁴César Franck, Jesse Eschbach, and Robert Frederick Bates. *Fantaisie: für die Orgel in drei Versionen*. Bonn-Bad Godesberg, West Germany: R. Forberg, 1980. Preface

¹⁵The historical information concerning the *Six Pièces* in this section is based on Rollin Smith, *Playing the Organ Works of César Franck* (NY: Pendragon Press, 1997, 61-63.

Figure 2. Structure of the *Fantaisie in C*, published version

Section				Tempo	Key	Time Signature			
1 (from version I and III)	A	a	mm. 1-8	Poco Lento	C Major	4/4			
		a1	mm. 9-16						
	B	b	mm. 17-28						
		b1	mm. 29-40						
	A1	a2	mm. 41-48						
		a3	mm. 49-56						
	Transition		mm. 57-64						
2 (from version II)	A	a	mm. 65-73	Allegro Cantando	F Minor	2/4			
		a1	mm. 74-82						
		b	mm. 83-91						
		b1	mm. 92-100						
	B	c1	mm. 100-117				A b Minor C# Minor (m. 123) F# Minor (m. 130)		
		c2	mm. 117-132						
		c3	mm. 133-147					C# Minor (m. 141)	
	Episode		mm. 148-153				Ab Major (m. 148)		
	A1	a	mm. 154-162				F Minor		
		a1	mm. 163-171						
		b	mm. 172-189						
	Transition		mm. 190-205				Quasi Lento	F Minor	4/4
	3 (from version II)	A	a				mm. 206-213	Adagio	C Major
a1			mm. 214-221						
B		b	mm. 222-229	A Minor					
		b1	mm. 230-237						
A1		a2	mm. 238-245	C Major					
Cad. Ext.		mm. 246-248	C Major						

Grande Pi èce Symphonique, Op. 17

Perhaps no work better exemplifies the use of the Cavaillé-Coll organ as an orchestra than Franck's *Grande Pi èce Symphonique*, the second of the *Six Pi èces*. This piece is considered to be the antecedent of his Symphony in D minor, and it had an important impact on the development of the French symphonic school. Composed before September 16, 1863, it was dedicated to the pianist and composer Charles-Valentin Alkan (1813-1888), who wrote the first symphony for a solo keyboard instrument.¹⁶

The *Grande Pi èce Symphonique* consists of three main movements heard as continuous sections. The work is cyclical, with the appearance of themes in more than one movement, creating an overarching sense of cohesion. Franck takes as his model a sonata form that he alters and abbreviates.

The lengthy introduction is a dialogue between the first theme in F-sharp minor and a syncopated idea heard initially in the dominant C-sharp major. After the introduction, a pedal solo presents the principal theme followed by a dignified, legato second theme. The section closes softly after a passage which functions as a bridge to the lyrical second movement. This *Andante* comprises three sections: the first contains short echo phrases; the middle section in B minor represents the scherzo of the "symphony," in which Franck used one of his most frequent unifying devices, a canon between the outer voice parts; and the final section

¹⁶ The 12 études in all the minor keys op. 39 (1857) contains the first piano symphony. Hamilton, Kenneth. "Alkan, (Charles-)Valentin." *The Oxford Companion to Music*. Ed. Alison Latham. *Oxford Music Online*. Oxford University Press. Web. 27 Oct. 2012. <<http://www.oxfordmusiconline.com/subscriber/article/opr/t114/e176>>. Rollin Smith, *Playing the Organ Works of César Franck*, 79-81.

returns to the thematic material of the *Andante* with the addition of a double pedal part (m. 416). An extended interlude after the second movement incorporates four different themes from the preceding two sections to introduce the piece's culmination. In the last movement, the principal theme of the opening is heard in its parallel major key (F-sharp major) over an active pedal part in eighth-notes. An impressive fugue closes the work. This structure is outlined in the diagram below:

Figure 3. Structure of the *Grande Pi èce Symphonique*

Mvt		Tempo	Key	Time Signature
1	mm. 1-59	Andantino serioso	F# Minor	4/4
	mm.60-260	Allegro non troppo e maestoso		2/2
2	mm.261-302	Andante	B Major	4/4
	mm.303-401	Allegro	B Minor	2/4
	mm.402-423	Andante	B Major	4/4
3	mm. 424-433	Allegro non troppo e maestoso	B Minor	4/4
	mm. 434-440	Andantino serioso	G Minor	
	mm. 441-450	Allegro non troppo e maestoso	D Minor	
	mm. 451-457	Allegro	Bb Minor	
	mm. 458-461	Poco Lento		
	mm. 462-464	Andante	C Major	
	mm. 465-471	Tr ès Lento		
	mm. 472-501	Beaucoup plus largement que pr é c édemment	F # Major	
	mm. 502-594	Fugue		

Prélude, Fugue et Variation, Op. 18

One of Franck's most popular works, the *Prélude, Fugue et Variation* was composed in 1862 and is dedicated to Camille Saint-Saëns, who also studied with François Benoist at the Paris Conservatoire. Franck and Saint-Saëns had a close relationship, and they were both invited to the inaugural recitals of the most important organs in Paris such as Saint-Sulpice in 1862, Notre-Dame Cathedral in 1868, La Trinité in 1869, and the Trocadéro in 1878. The composer played his *Prélude, Fugue et Variation* on December 15, 1881 at the church of Saint-Léonard in Fougères, Brittany. Franck later transcribed this piece for two pianos, four hands, and for harmonium and piano. This former of these transcriptions was published at the same time as the *Six Pièces* in 1868, and was dedicated to his students Mademoiselles Louise and Geneviève Deslignères. Franck played the version on harmonium with pianist Vincent d'Indy on February 7, 1874 at a Société Nationale concert.¹⁷

The Prelude genre was developed as a form of introduction in the earliest music for organ. During the Baroque era, the prelude became one of the most important keyboard forms. In his *Prélude*, Franck introduces an expressive melody on the Récit Hautbois, and he finishes the piece with a *Variation* that uses the same theme with an embellished accompaniment. The *Fugue* that connects them is based on a subject that is related to the opening and closing melody so that the overall work has a structural unity.

¹⁷ Rollin Smith, *Playing the Organ Works of César Franck*, 103-105.

Figure 4. Structure of the *Prélude, Fugue et Variation*

Mvt		Tempo	Key	Time Signature
Prelude	mm. 1-50	Andantino	B Minor D Minor (m.23) F# Minor (m.31)	9/8
Transition	mm. 51-59	Lento	V/B Minor	3/4
Fugue	mm. 60-140	Allegretto ma non troppo	B Minor	3/4
Variation	mm. 141-190	Andantino	B Minor F# Minor (m. 154) B Minor (m. 157) D Major (m. 174) B Minor (m. 179) Ends on B Major (Picardy 3 rd)	9/8

Pastorale, Op. 19

The manuscript of the *Pastorale* was completed on September 29, 1863, and dedicated to Aristide Cavallé-Coll. This piece was played not only by Franck but also by other organists such as Victor Nant and André Messager in public organ concerts.

The pastorale is a musical genre that evokes a rural mood, and it was used for oratorios, cantatas and Christmas music. Pastorale music for organ was especially associated with the nativity and the music of the shepherds. These

pieces are usually in compound meters such as 6/8, 9/8 and 12/8, almost invariably employing a drone bass. Franck's *Pastorale* depicts bucolic Christmas scenes using the three-part song form ABA. He opens with two four-measure themes, and these subjects are expanded with several modulations. The B section, in fughetta form, provides a sharp contrast to the A section by using different keys and tempi. In the last A section, the two four-measure themes reappear together.

Figure 5. Structure of the *Pastorale*

Section			Tempo	Key
A	a	mm.1-8	Andantino	E Major
	a	mm. 9-16		C# Minor
	Transition	mm. 17-24		G# Major B Major (m. 22)
	b	mm. 25-37		E Major
	Bridge	mm. 38-40		
B	Intro. c	mm. 41-44	Quasi allegretto	A Minor
	d	mm. 45-56		
	Transition	mm. 57-68		
	d1	mm. 69-80		
	c1	mm. 81-97		
	d1	mm. 98-109		E Minor
	Transition	mm. 110-120		E Minor G Minor (m. 118)
	d1	mm. 121-126		G Minor
	Transition	mm. 127-142		G Minor A Minor (m. 130) B Minor (m. 138)
	closing c2	mm. 143-146		B Major
A'	a1	mm. 147-154	Andantino	E Major
	bridge	mm. 155-158		
	a2	mm. 159-166		C# Minor
	a3	mm. 167-178		E Major
	Codetta	mm. 179-187		

Prière, Op. 20

Franck's *Prière* is dedicated to his teacher François Benoist and is inspired by Alexandre P.F. Boëly's *Larghetto un poco sostenuto*.¹⁸ The composer played this piece for Albert Mahaut on July 6, 1889 for his organ jury at the Paris Conservatoire. As its title implies *Prière* ("Prayer") is a meditative piece inspired by religious faith. The *Prière* was not an established form, but several nineteenth-century French composers such as Saint-Saëns and Jacques Lemmens used this title for pieces of a similar character. Franck's *Prière* is written in a lush, five-part texture. This piece should be played legato, but there are many places where a complete legato touch is impossible because of the large reaches.

Figure 6. Structure of the *Prière*

Section			Key
Exposition A	Theme 1	mm.1-50	C# Minor
	Transition	mm.51-62	➔ V/G# Major
	Theme 2	mm.63-78	G# Major
	Closing	mm.79-113	
Development B	a	mm.114-148	G# Major
	b	mm.149-158	
Recapitulation A'	Theme 1	mm.159-189	C# Minor
	transition	mm.190-232	C# Major
	a''	mm.233-254	

¹⁸ Rollin Smith, *Playing the Organ Works of César Franck*, 134.

Final, Op. 21

The *Final* was composed around 1859 and was dedicated to Louis-James-Alfred Lefébure-Wély, one of the greatest French organ virtuosos. Cavaillé-Coll admired Lefébure-Wély, and he invited him to show off his organs at many inauguration concerts. Because of Lefébure-Wély's astonishing pedal technique, he was the dedicatee of not only Franck's *Final* but also of the *Douze Études d'Orgue pour les pieds seulement* by Charles-Valentin Alkan.

Franck played his *Final* on December 19, 1859 at Sainte-Clotilde. The piece opens with extended pedal solos made possible by Lefébure-Wély's pedal technique and the extended range of Cavaillé-Coll's organ. Long pedal solos were unusual for the organ in Franck's time because pedal divisions contained only two or three eight-foot stops, mostly for playing a pedal *cantus firmus* in Classical-era France. Franck used foundation stops with sixteen-foot, eight-foot, and four-foot reeds stops on all manuals and pedal for the declamatory solos of the beginning. The opening fanfare theme contrasts with a new flowing melody line in m. 29.

Figure 7. Structure of the *Final*

Section			Key
Introduction	a	mm. 1-28	Bb Major
A	b	mm. 29-44	Bb Major
	Transition	mm. 45-66	G Minor (m. 43)
	b1	mm. 67-74	G Minor
	Transition	mm. 75-80	D Major (m. 74)
Introduction	a1	mm. 81-94	D Major
	Transition 1	mm. 95-114	
	Transition 2	mm. 115-122	
B	c	mm. 123-164	F# Major
	Bridge	mm. 165-172	
A	b2	mm. 173-196	F# Major G Major (m. 188)
B	c1	mm. 197-208	E Major
A	b3	mm. 209-216	A Major A Minor (m. 212)
	Transition	mm. 217-224	D Major G Major (m. 219)
Introduction	a2	mm. 225-236	B Minor
	Transition	mm. 237-256	Bb Major
Introduction	a3	mm. 257-284	Bb Major
B	c	mm. 285-314	
	Transition	mm. 315-328	Bb Major D Major (m. 213) F# Major (m. 320) Bb Major (m. 327)
Closing	a4	mm. 329-397	Bb Major

CHAPTER 5
THE CAVAILLÉ-COLL ORGAN AS VEHICLE FOR
FRANCK'S *SIX PIÈCES*

When Franck composed the *Six Pièces*, he fully understood the resources of the Ste. Clotilde organ, and he reflected them in his music. Having studied the works from a structural point of view, we will now examine how Franck used the possibilities afforded by Cavallé-Coll's new symphonic organ in his *Six Pièces*.

Registrations

Franck exploited the rich eight-foot foundation stops as an ensemble to imitate orchestral string divisions. Whereas the Hautbois had been used as a solo sound in the Classical tradition, Franck incorporated it to add clarity to the foundations. Because the Hautbois stop is relatively small and located in the back of the Récit case, it has a warm, mild and smooth sound. Therefore, the foundations with Hautbois are one of the most characteristic registrations used by Franck. The Ste. Clotilde organ had only three eight-foot stops on the Récit (except for the Voix Céleste), so Franck frequently added the Hautbois to the foundation stops for fullness. Both *Fantaisie in C major* and *Prière* open with the foundations with Hautbois as shown below.

Figure 8. *Fantaisie in C major*, Op. 16, mm.1-16. Franck, 1.

R. Fonds de 8 pieds et Hautbois.
P. Fonds de 8 pieds.
G.O. Fonds de 8 pieds.
PED. Fonds de 8 et 16 pieds.
Claviers accouplés.
Tirasses.

R. *p*

Poco rall.

Figure 9. *Prière*, Op. 18, mm.1-10. Franck, 74.

R. Fonds de 8 pieds et Hautbois.
P. Fonds de 8 pieds.
G.O. Fonds de 8 pieds.
PED. Fonds de 8 et de 16 pieds.
Claviers accouplés
Tirasses du G.O.

MANUALE

PEDALE

Andantino sostenuto

G. O. *mf*

Franck used several reeds for solo stops, taking into account the features and location of each division:

1. Hautbois of the Récit

He only utilized the Hautbois as a solo stop in one of the *Six Pièces*. In *Prelude, Fugue et Variation*, the Hautbois for the treble solo is strengthened by the addition of the Bourdon and Flute.

Figure 10. *Prélude, Fugue et Variation*, Op. 18, mm.1-7. Franck, 47.

R. Bourdon de 8 pieds, Flûte de 8 pieds, Hautbois de 8 pieds.
P. Flûte de 8 pieds.
G.O. Bourdon de 8 pieds.
PED. Flûtes de 8 et 16 pieds.
Claviers séparés.

Andantino

R.
p cantabile
G.O.

MANUALE

PEDALE

2. Trompette of the Récit

The Trompette was Franck's preferred solo voice; he used it with the Bourdon and Flute in two of the *Six Pièces*: the *Fantaisie in C major* and the *Prière* as shown below.

Figure 11. *Fantaisie in C major*, Op. 16, mm.65-76. Franck, 4.

Allegretto cantando

R. Flûte et Bourdon de 8 pieds
Trompette
P. Flûte de 8 pieds
G.O. Flûte de 8 pieds
PED. Flûte de 8 et 16 pieds
Claviers séparés

The musical score for Figure 11 consists of two systems. The first system shows the flute part (R.) and the piano part (P.). The flute part begins with a 'dolce' marking and a 'p' dynamic. The piano part begins with a 'p' dynamic. The second system continues the flute and piano parts, with a 'cresc' marking in the flute part and a 'dim' marking in the piano part.

Figure 12. *Prière*, Op. 18, mm.114-119. Franck, 81.

Quasi recitativo
Ajoutez la Tromp. du R.

R. *p*

The musical score for Figure 12 consists of two systems. The first system shows the flute part (R.) and the piano part (P.). The flute part begins with a 'p' dynamic. The piano part begins with a 'p' dynamic. The second system continues the flute and piano parts, with a 'p' dynamic in the flute part and a 'p' dynamic in the piano part.

3. Cromorne of the Positif

Franck used the eight-foot Cromorne stop as a solo with eight-foot foundation stops and Hautbois and Trompette of the Récit as accompaniment in the first Andante section of the *Grande Pièce Symphonique*. It may be considered as unbalanced combination, however, it works perfectly at Ste. Clotilde because the Positif division is located in the center of the façade, which makes it possible to bring out a full and abundant sound similar to the Grand-Orgue. The Récit is far behind the Positif, helping it function as an accompanimental division.

Figure 13. *Grande Pièce Symphonique*, Op. 17, mm.269-278. Franck, 29.

R. Fonds et jeux d'Anches.
P. Cromorne 8, Bourdon 8, Flûte 8.
G.O. Fonds 8 et 16.
PED. Fonds 8 et 16.
 Claviers séparés.
 Tirasses du G.O.

The use of different divisions

Franck frequently used different musical themes to exploit different divisions of the organ. The *Fantaisie in C major* consists of three parts, each with a distinctive theme that is heard on a different registration: the broad foundation tone of the first movement, the clear duo of the second (*Allegretto*) with the Trompette and Flûte thrown into relief by the full swell of the bridge section, which introduces the ethereal Adagio of the third movement on the Voix humaine.¹⁹

¹⁹ Rollin Smith, *Playing the Organ Works of César Franck* (NY: Pendragon Press, 1997), 76.

Figure 14. *Fantaisie in C major*, Op. 16. Franck.

1.

R. Fonds de 8 pieds et Hautbois
 P. Fonds de 8 pieds.
 G.O. Fonds de 8 pieds.
 PED. Fonds de 8 et 16 pieds.
 Claviers accouplés.
 Tirasses.

2.

Allegretto cantando

R. Flûte et Bourdon de 8 pieds
 Trompette
 P. Flûte de 8 pieds
 G.O. Flûte de 8 pieds
 PED. Flûte de 8 et 16 pieds
 Claviers séparés

3.

Adagio

R. Voix humaine, Bourdon, Flûte
 et Gambe de 8 pieds.
 P. Bourdon de 16.
 PED. Bourdon de 16, 8 et 32.
 Accouplement du R. au P.

Dynamics

Franck exploits Cavaille-Coll's *boîte expressive* in many ways, most notably to underscore tension in his melodic lines. To enhance the intensity of increasingly large ascending intervals, the composer indicates opening the expression pedal, as shown below. Each crescendo reaches its high point at the largest interval, and is then gradually subdued to prepare for the next phrase with increasing intervals. This is shown in Figure 15:

Figure 15. *Prelude, Fugue et Variation*, Op. 18, mm.32-35. Franck, 50.

The image shows a musical score for three staves. The top staff is in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. It contains a melodic line with a crescendo, marked 'più f'. The middle staff is in treble clef with a key signature of one sharp and a 4/4 time signature, marked 'P.'. It contains a rhythmic accompaniment. The bottom staff is in bass clef with a key signature of one sharp and a 4/4 time signature, containing a bass line.

He also augments the voice parts gradually to achieve a smooth crescendo, as seen in Figure 16 from the *Fantaisie in C*.

Figure 16. *Fantaisie in C Major*, Op.16, mm.190-199. Franck, 11.

The image shows two systems of musical notation. The first system is for a 4/4 time signature, marked 'Quasi lento'. It includes organ registration instructions on the left: 'R. Fonds de 8 pieds Hautbois et Jeux d'Anches.', 'P. Fonds de 8 et 16', 'G.O. Fonds de 8 et 16', 'PFD. Fonds de 8 et 16', 'Claviers accouplés', and 'Tirasses.'. The notation shows a gradual crescendo in the organ sound. The second system is for a 4/4 time signature, marked 'molto cresc' and 'f'. It shows a further increase in volume and intensity.

An aspect of the Cavallé-Coll organ that Franck exploited in every one of the *Six Pièces* is the large-scale crescendo using the expression box and ventsils. As its name implies, his *Grande Pièce Symphonique* treats the organ like an orchestra, providing an excellent example of a massive crescendo.

Figure 17. *Grande Pièce Symphonique*, Op.17, mm.464-482. Franck, 39-40.

The image displays three systems of musical notation for a piano and organ. The first system shows the piano part with dynamics *ppp* and *cresc.*, and the organ part with *ppp*. Performance instructions include "Rall. Andante" and "Très lent". A box lists organ registrations: "R. Voix céleste", "P. Fonds de 8 et 16", "G.O. Fonds de 8 et 16", and "Accouplé du R. au P. et du P. au G.O.". The instruction "Otez la Tirasse" is written below the organ part. The second system continues the piano part with dynamics *ppp* and *cresc.*, and the organ part with *ppp*. It includes instructions like "Jeux d'anches au R.", "R. Tirasses du P. et du G.O.", "Anches du P.", and "Anches des Ped.". The tempo marking "Très lent" is repeated. The third system shows the piano part with dynamics *ff* and *ff*, and the organ part with *ff*. It includes the instruction "Beaucoup plus largement que précédemment" and organ registrations "G.O." and "G^d Chœur".

Figure 17 shows how Franck made the extensive dynamic changes from *ppp* to *ff* in five stages:

1. Close the swell box, removing the pedal coupler (Ôtez las *Tirasse*) for *PPP*
2. Add the *Anches R écit* (*Jeux d'anches au R*) and couple the Positif to pedal and Grand-Orgue to Pedal (*Tirasses du P. et du G.O.*)
3. Move to Positif manual and open the swell box all the way for *forte*
4. Add the *Anches Positif* (*Anches au P*) and Pedal (*Anches des Ped*)
5. Move to Grand-Orgue with its *Anches* for *fortissimo*

This specific example from the *Six Pièces* led to a more general formula for crescendos in Franck, based on the possibilities of the Cavallé-Coll organ:

1. Start with eight-foot foundations on all manuals coupled (including the Haubois of the Récit) with the swell box closed
2. Add *Anches Récit*
3. Open the swell box
4. Add *Anches Positif*
5. Add *Anches Grand Orgue*
6. Add *Anches Pedal*

Touch

One of the most innovative developments in Cavaille-Coll's organ building is that he introduced the Barker machine to lighten the manual key action in the organ. Before, organists needed to overcome heavy keyboard action when they used the full sound of the organ with all manuals coupled. However, thanks to the Barker machine, Franck was able to use the full sound of the organ with all manuals coupled without making the touch heavier. In his *Final* he wrote a nine-part chord progression with staccato and *fortissimo*, shown in Figure 18. It would not have been possible to play such large harmonies, which demand high wind pressure, on the French Classical organ.

Figure 18. *Final*, Op.21, mm.115-122. Franck, 97-98.



Expansion of the Récit and Pedal Divisions

The Récit division of the French Classical organ had a short compass of only three octaves (c1-c3). Cavallé-Coll considered the Récit to be as important a division as the Grand-Orgue, so he extended the compass from c1-c3 to c-f3. Franck used the full range of the Récit compass, as seen in Figure 19, an excerpt from the *Fantaisie in C Major*:

Figure 19. *Fantaisie in C Major*, Op.16, mm.178-189. Franck, 10.

The musical score consists of three systems of staves. The first system has three staves: the top staff is labeled 'R.' (Récit), the middle staff is labeled 'P.' (Pedal), and the bottom staff is a continuation of the Pedal part. The second system also has three staves, with the top staff labeled 'Rall.' (Ritardando). The music is in C major and 4/4 time. The Récit part features a melodic line with various ornaments and a 'Rall.' marking. The Pedal part features a complex rhythmic pattern with many sixteenth notes and rests.

French organ music during the Classical period was usually composed for the Catholic Mass, where the pedal did not have an important role. However, Cavallé-Coll treated the Pedal division as an independent part and made significant changes to the pedal. He extended the pedal compass, added independent ranks for the pedal and changed the shape of the pedal-board, from the small keys of the *pedalier à la française*, which could only be played by the organists' toes, to longer keys that would permit the use of both toes and heels.

Cavaillé-Coll's expansion of the pedal division made it possible for Franck to write powerful pedal lines. Franck had a practice pedalboard delivered to his home in 1858 so that he could practice his pedal technique in preparation for the Sainte-Clotilde inauguration. The *Final* opens with virtuosic pedal solos to display the organist's technical skills, as shown in Figure 20.

Figure 20. *Final*, Op.21, mm.1-10. Franck, 91.

R. Fonds et Anches de 4,8 et 16 pieds.
P. Fonds et Anches de 4,8 et 16 pieds; sans prestant.
G.O. Fonds et Anches de 4,8 et 16 pieds; sans prestant.
PED. Fonds et Anches de 4,8 et 16 pieds.
 Claviers accouplés.
 Tirasses du P. et du G.O.

Allegro maestoso

The musical score consists of three systems. The first system shows the MANUALE (right hand) and PEDALE (pedal) parts. The MANUALE part has rests, while the PEDALE part begins with a series of eighth and sixteenth notes. The second system shows the grand staff (left and right hands) and the PEDALE part. The grand staff parts have rests, while the PEDALE part continues its rhythmic pattern. The third system shows the grand staff and PEDALE part, with the PEDALE part ending on a long note.

Summary of Franck's Use of the Cavaillé-Coll Organ in his *Six Pièces*

As illustrated in the many examples above, Franck utilized Cavaillé-Coll's innovations in the composition of the *Six Pièces* to create works of rich Romantic expression. In registration, Franck created a new combination of eight-foot foundation stops with Hautbois to benefit from Cavaillé-Coll's ensemble sound, and he used the Hautbois (Récit), Trompette (Récit) and Cromorne (Positif) for solo registrations. He was able to make large dynamic changes using the

expression box and vents. Cavaillé-Coll's expansion of the Récit and Pedal divisions made it possible for Franck to broaden his compositional techniques for the organ. This symbiosis between organ and composer enabled Franck to forge organ music in the new Romantic style, thereby helping to restore French music to its former glory.

CHAPTER 6

CONCLUSION

Nineteenth-century French musical culture was dominated by opera and programmatic music; serious compositions for the organ were rare. One cause for this was the decline in organ culture following the Revolution. Remnants of the old Classical style could not accommodate the new demands of the Romantic aesthetic, and organists were often content to improvise music on popular tunes and operatic airs. The organ builder Aristide Cavaill é-Coll rejuvenated French organ building by introducing a new symphonic concept. His designs made it possible to imitate orchestral sounds by combining warm foundation stops with fiery reeds. He improved the organ's winding system to provide high pressure for maximum power; to compensate for the added manual resistance, he applied the Barker machine to lighten the key action. Cavaill é-Coll invented combination pedals to help the organist change registrations easily, utilizing the swell box for gradual dynamic changes. Cavaill é-Coll's advanced organ building provided composers with the means to execute a new symphonic style of organ music.

Because of his transformative work, Cavaill é-Coll provided a source of inspiration to many organ composers and organists, including César Franck, who ultimately benefited from a new Cavaill é-Coll organ in his church, Sainte-Clotilde. The Ste. Clotilde organ inspired some of the most significant music in the new Romantic vein, enabling Franck to pioneer new genres of organ music in France.

Franck's *Six Pièces*, published in 1868, reflect the resources afforded by Cavaillé-Coll's symphonic organ, opening new avenues for French organ music.

Franck fully understood the characteristics of the Cavaillé-Coll organ, and he included detailed registrations and dynamic markings in his score. His *Six Pièces* include a variety of ideas for registrations as well as new compositional techniques. He used eight-foot stops together with the Hautbois to imitate an orchestral ensemble. He often utilized the Trompette of the Recit as a solo voice with the Bourdon and Flute. Second, he accomplished detailed and colorful dynamic changes using the *boîte expressive* that controlled the pipes in newly expanded the Récit division. Third, he used different musical themes reflecting the various sonic levels of the Cavaillé-Coll organ, including enhanced pedal parts. Lastly, he completed large-scale crescendos using the expression box and ventsils.

With his first published compositions for organ, the *Six Pièces*, Franck led the way in adapting the resources of Cavaillé-Coll's symphonic organ to Romantic music. Thanks to Cavaillé-Coll's innovations in organ building, Franck was able to write large-scale, multi-thematic works with the sound necessary to render them convincingly. The *Six Pièces* are the fruits of Franck's first exploration of the new instrument installed at Ste. Clotilde in 1859. They are a potent testament to an organist's ability to formulate a new compositional style from the resources of a new instrument. They portend many of the subsequent developments of the French symphonic organ school.

REFERENCES

- Archbold, Lawrence, and William J. Peterson. *French Organ Music: From the Revolution to Franck and Widor*. Rochester, NY: University of Rochester Press, 1995.
- Arnold, Corliss Richard. *Organ Literature: A Comprehensive Survey*. Metuchen, N.J.: Scarecrow Press, 1973.
- Bush, Douglas. *Encyclopedia of the Organ*. Encyclopedia of Keyboard Instruments, v. 3. London: Routledge, 2004.
- Cross, Milton, and David Ewen. *Encyclopedia of the Great Composers and Their Music*. Garden City, N.Y.: Doubleday, 1953.
- Douglass, Fenner. *Cavaillé-Coll and the French Romantic Tradition*. New Haven and London: Yale University Press, 1999.
- _____. *Cavaillé-Coll and the Musicians: A Documented Account of His First Thirty Years in Organ Building*. Raleigh, NC: Sunbury, 1980.
- Eck, Ton Van, and Kurt Lueders. "Franck, Cavaille-Coll, and the Organ of Sainte-Clotilde." *The American Organist* 24 (Dec. 1990): 115-119.
- Fairbank, Nicholas. "The Romantic Organ in France and Its Influence on Nineteenth-Century French Literature." *The American Organist* (June 1994) pp.75-77.
- Fanning, Emory Moore, Jr. "The Nineteenth-Century French Organ of Cavaillé Coll and the Organ Works of César Franck." PhD diss., Boston University Graduate School, 1964.
- Franck, César. *Organ works*. New York: Dover, 1987.
- Franck, César, Jesse Eschbach, and Robert Frederick Bates. *Fantaisie: für die Orgel in drei Versionen*. Bonn-Bad Godesberg, West Germany: R. Forberg, 1980.
- Goodrich, Wallace. *The Organ in France, A Study of Its Mechanical Construction, Tonal Characteristics, and Literature, with Suggestions for the Registration of French Organ Music Upon American Instruments*. Boston: Boston music Co, 1917.
- Grace, Harvey. *The Organ Works of César Franck*. Handbooks for Musicians. London: Novello, 1948.

- d'Indy, Vincent, and Rosa Newmarch. *César Franck; A Translation from the French of Vincent D'Indy*. London: J. Lane, 1910.
- Murray, Michael. *French Masters of the Organ: Saint-Saëns, Franck, Widor, Vierne, Dupré, Langlais, Messiaen*. New Haven: Yale University Press, 1998.
- Ochse, Orpha Caroline. *Organists and Organ Playing in Nineteenth-Century France and Belgium*. Bloomington: Indiana University Press, 1994.
- Smith, Rollin. "Cavaillé-Coll's Influence on Organ Composers." *Organists' Review* 92, no. 2, 362 (May. 2006): 15-19.
- _____. *Toward an Authentic Interpretation of the Organ Works of César Franck*. New York: Pendragon Press, 1983.
- _____. *Playing the Organ Works of César Franck. The Complete Organ*, no. 1. Stuyvesant, NY: Pendragon Press, 1997.
- Stove, R. J. *César Franck: His Life and Times*. Lanham, Md: Scarecrow Press, 2012.
- Tournemire, Charles, and Ralph James Kneeream. *A Translation/Edition of Charles Tournemire's César Franck*. Thesis (D. Mus.)--Northwestern University, 1983, 1983.
- Website
 Association Aristide Cavaillé-Coll. <http://www.cavaille-coll.com/uk/index.html>
- Geoffrey Chew and Owen Jander. "Pastoral." In *Grove Music Online. Oxford Music Online*, <http://www.oxfordmusiconline.com/subscriber/article/grove/music/40091> (accessed September 13, 2012)

APPENDIX A

MUSICAL EXAMPLES FOR LECTURE RECITAL

MUSICAL EXAMPLES FOR LECTURE RECITAL

Recorded on the Schantz organ at Trinity Episcopal Cathedral, Phoenix, Arizona

Track 1. César Franck. *Fantaisie in C major*, Op. 16, mm.1-16.

Track 2. César Franck. *Prière*, Op. 18, mm.1-17.

Track 3. César Franck. *Prélude, Fugue et Variation*, Op. 18, mm.1-10.

Track 4. César Franck. *Fantaisie in C major*, Op. 16, mm.65-82.

Track 5. César Franck. *Grande Pièce Symphonique*, Op. 17, mm.269-283.

Track 6. César Franck. *Fantaisie in C major*, mm.206-221.

Track 7. César Franck. *Prelude, Fugue et Variation*, Op. 18, mm.32-39.

Track 8. César Franck. *Fantaisie in C Major*, Op.16, mm.190-205.

Track 9. César Franck. *Grande Pièce Symphonique*, Op.17, mm.464-505.

Track 10. César Franck. *Final*, Op.21, mm.115-122.

Track 11. César Franck. *Fantaisie in C Major*, Op.16, mm.172-189.

Track 12. César Franck. *Final*, Op.21, mm.1-2

