THREE RECITALS OF MUSIC BY GERMAN AND DANISH COMPOSERS, J. S. BACH, AND CONTEMPORARY NORTH AMERICAN COMPOSERS, AND A LECTURE RECITAL ON THE REGISTRATION OF ORCHESTRAL TEXTURES IN ORGAN MUSIC

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF MUSICAL ARTS

by

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Denton, Texas
August, 1969
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INTRODUCTION

Four contrasting recitals were presented to fulfill the requirements for the degree Doctor of Musical Arts.

The first recital contained music of miscellaneous composers. Two Preludes and Fugues by the North German Baroque composers Vincent Lübeck and Dietrich Buxtehude were separated by Samuel Scheidt's Variations on the Netherlands folk song "Ach du feiner Reiter". The Brahms Chorale Prelude "O wie selig seid ihr doch, ihr Frommen" and the Louis Vierne "Intermezzo" from the Third Symphony represented Romantic-style composition. The major work of the program was the Carl Nielsen Commotio, a large work in orchestral style.

The second recital consisted completely of music by J. S. Bach. Four works of contrasting styles were presented: Concerto, Opus 3, No. 8, composed by Antonio Vivaldi and transcribed by Bach, Partita on Sie gegrüsset, Jesu gülig, Sonata IV, and Fantasy and Fugue in G Minor.

The third recital was the lecture recital: Registration of Orchestral Textures in Organ Music.

This lecture was an attempt to deal with the contemporary problem in performance practice of registration of Romantic organ music. The trends in organ building in the twentieth century have ranged from a deeper exploration of the
possibilities of the Romantic organ to the reevaluation
of and rerededication to principles of organ building popu-
lar in the seventeenth and eighteenth centuries.

For a perfectly proper performance of Romantic organ
music, existing organs of the nineteenth century should be
used. Since this is usually not possible, the lecturer
attempted to show two feasible adaptations of two Romantic
organ compositions; one with Romantic-style registration and
one with Classic-style registration. The two works were
Roger-Ducasse's *Pastorale* and Karg-Elert's "The Mirrored
Moon" from *Seven Pastels*. Both versions of the works were
performed on the Sipe-Yarbrough organ at Texas Woman's
University, Denton, Texas.

Besides showing feasible solutions to the registration
of Romantic organ music on either Romantic or Classic organs,
the lecturer raised two questions concerning the direction
of future organ planning and building: what is the value of
an elaborate registration for a Romantic organ work, and
what elements must the organ of the future comprise in order
to be able to present all types of important organ litera-
ture without sacrificing the integrity of the instrument.

The fourth and final recital consisted of music by
twentieth century composers of North America. Four composers
were represented: Graham George, of Canada, by the Passacaglia
on *Lobe den Herren*; Vincent Persichetti, of New York, by the
Chorale Prelude: "Drop, Drop Slow Tears" and the Shimah B'Koli; Gardner Read, of Boston, by the Eight Preludes on Old Southern Hymns; Bruce Simonds, of Yale University, by the Preludes on "Iam sol recedit igneus," and "Dies Irae."
NORTH TEXAS STATE UNIVERSITY
SCHOOL OF MUSIC

presents

William P. Haller

in

Graduate Organ Recital

in

partial fulfillment of the requirements
for the degree Doctor of Musical Arts

Tuesday, September 24, 1968  8:15 p.m.  Main Auditorium
PROGRAM

Vincent Lübeck (1654-1740) .......... Präludium und Fuge in E dur

An illustrious contemporary of J. S. Bach, Lübeck followed the established trends of the middle baroque rather than indulging in the pre-classic idioms of the rococo. This prelude and fugue follows the typical Buxtehude five-part form: an opening section in toccata style, a fugue in duple meter, a middle movement in lighter style, and a second fugue in triple meter with a toccata close.

Samuel Scheidt (1587-1654) .............. Niederländisches Lied, "Ach du feiner Reiter"

Scheidt's variations on secular tunes retain the style of Sweelinck, Scheidt's teacher. This style is based on the application of a set pattern as an accompaniment to the melody in each variation. The melody and harmony of this folksong, "Ah, Fine Knight," are preserved intact in each of the seven variations. The fifth variation is a bicinium which imitates the sound of an organ tremolo.

Dietrich Buxtehude (c. 1637-1707) .. Präludium und Fuge in A moll

In this very intense piece, the composer has drawn on the variation canzona as a basis for his fugue. In true North German style there are two fugues; the second of these has a subject that is a more sober variant of the first subject, having less repetition of tones. The fugues are preceded and followed by toccatas.

Johannes Brahms (1833-1897) .......... "O wie selig seid ihr doch, ihr Frommen"

Brahm's chorale preludes were composed in the spring of 1896, during Clara Schumann's declining months. Archibald Farmer believes that preoccupation with the death of his friend and thoughts of his own advancing years led Brahms to the selection of solemn chorale melodies as bases for the preludes and to the achievement of unparalleled depths of expression.
Louis Vierne (1870-1937) ......................... Symphony III
Intemzzo

This weird little dance is a typical product of Vierne, a 20th-century composer who wrote in the style of the 19th. The inclusion of a movement in this style is justified because it is an adaptation of the form of the symphonic scherzo for use in a symphony for the organ. In a free rondo form, a grotesque hopping motive alternates with a smooth chromatic melody.

Carl Nielsen (1865-1931) ......................... Commotio

This large work is a unique contribution to the organ repertory by a composer primarily known for his symphonic music. This work represents an adaptation of his conception of the orchestral symphony to the organ. The work consists of several contrasting sections which are played without pause. According to Finn Viderp, commotio "means movement, and Nielsen in order to emphasize the impersonal nature of the piece chose this title which says something essential about the generating force behind all music ... a constant flow, now increasing, now decreasing." The long lines and slowly unfolding concepts of the work result in a panorama which covers a wide spectrum of expression and tonal color.
NORTH TEXAS STATE UNIVERSITY
SCHOOL OF MUSIC

presents

William P. Haller

in

Graduate Organ Recital

Tuesday, January 14, 1969  8:15 p.m.  Recital Hall
CONCERTO, Opus 3, No. 8, by Antonio Vivaldi (c. 1676-1741) BWV 593

(Allegro)
Adagio
Allegro

In answer to the interesting question of why Bach chose to transcribe concertos of Vivaldi and others for the organ, there are two possible and likely suppositions: he was highly impressed by the medium of the concerto and wanted to become more familiar with it, and he saw possibilities for greater sonority and unity in a transcription for organ. The latter is particularly true in this work which is more unified and highly effective as an organ composition in its own right. Here Bach has shown his genius for transcription by thinning the texture so that great ease of playing is possible, but he has also invented new counterpoints (incidental though they are) and new accompanimental figures which fit the organ better and do not compromise the sound of the original in any way. The pedal functions both as a supporting bass and an accompanimental voice. Bach has neither shortened nor lengthened the concerto, nor has he changed the harmony. Vivaldi's labelling of the second movement is, however, Larghetto e spiritoso. A study of Bach's transcriptions could lay the groundwork for interesting suppositions concerning registration, touch, phrasing, and tempo in Bach's other organ works.

PARTITA ON SEI GEGRÜSSET, JESU GÜTIG BWV 768

This partita is a set of ten choral preludes framed by harmonizations of the chorale melody. In each of the ten variations Bach has made use of a figure or an idea which germinates the accompaniment of the cantus firmus. The variety of these figures supplies the imagination necessary for this work to emerge as a beautiful tour de force of variation technique. Though undoubtedly these figures originally were suggested to Bach by the text of the chorale, it would be impossible for us to speculate with accuracy as to the text for each variation since the tune was used by Bach for two sets of words and the partita itself is found in several different versions, with differing numbers and orders of variations. The opening harmonization is in four voices while the closing harmonization, which forms the eleventh variation, is a sweeping free harmonization in five parts, in organo pleno.
Sonata IV  (BWV 528)

Adagio—Vivace
Andante
Un poco Allegro

The six trio sonatas, written to perfect the musicianship and technique of Wilhelm Friedemann Bach, have since been used by organ students as staples of their musical diet. The first movement of this sonata is another transcription, from Bach’s own Cantata No. 76, one of the first cantatas composed for use at St. Thomas church in Leipzig. This movement is the sinfonia introducing the second part of the cantata and is scored for Oboe d’amore, Viola da gamba, Basse, and cembalo. The second movement is an excellent example of how Bach took the Corelli fortspinnung technique and disciplined it into more distinct phrases and sections creating a highly unified and complete development of a few germinal ideas.

Fantasy and Fugue in G Minor  (BWV 542)

Both fantasy and fugue were written in Bach’s young days, though the two were probably not meant to be played together at first. The bold harmony in the fantasy includes neapolitan chords, diminished sevenths, augmented sixths, rapid modulations, and deceptive cadences: the complete chromatic palette of the eighteenth and part of the nineteenth centuries. Max Seiffert in 1924 discovered a Netherlands folksong whose theme is virtually the same as the fugue subject. The joy of this theme is enhanced by a contrasting counter subject, which in turn is the source of the episode material. About midway in the fugue another motive is added whose activity propels the work to its dynamic conclusion.

In partial fulfillment of the requirements for the degree Doctor of Musical Arts
NORTH TEXAS STATE UNIVERSITY
SCHOOL OF MUSIC

presents

WILLIAM HALLER

in

Graduate Organ Recital

Monday, July 21, 1969  8:15 p.m.  Main Auditorium
PROGRAM

TWENTIETH CENTURY ORGAN MUSIC OF
NORTH AMERICA

Graham George ................. Passacaglia on Lobe den Herren

A resident of Canada, Graham George was born in Norwich, England in 1912. He has been organist at a number of important churches in Canada, including Christ Cathedral in Montreal.

The passacaglia is a form well-suited to the organ. Stating a simple theme, combining it with various contrapuntal devices, and spinning out a forceful climax are passacaglia procedures, all of which, with imagination, succeed well on the organ. The theme for this passacaglia is original and is stated after a brief trumpet fanfare. The first phrase of the theme “Praise to the Lord, the Almighty” is stated twice during the composition, both times in the pedal and both times accompanied by textures in which are hidden the skeleton of the same phrase. Other fragments of the hymn tune also appear in the trumpet fanfares and at the conclusion of the work. The contrapuntal development of the passacaglia theme is skillful throughout. While the work is highly chromatic, the recurring theme keeps it centered around one tone. The work was published in 1967.

Vincent Persichetti ...... Chorale Prelude: “Drop, Drop Slow Tears” Shimah B’Koli (Psalm 130)

Persichetti was born in 1915, was educated at the Curtis Institute and Philadelphia Conservatory, and is presently head of the composition department at the Juilliard School of Music. He has composed many large works, has received numerous honors and citations, and has written a book on twentieth century harmony. Besides the two organ works on this program, he also has composed a Sonatine for pedals alone and a Sonata.

The Chorale Prelude is the most recent work, having been published in 1968. It is based on a hymn of Persichetti’s (found in “Hymns and Responses for the Church Year”). The text for this hymn is a mystical poem about the birth and death of Christ written by e. e. cummings. The tune is very short, only three phrases, and is stated after a short pedal introduction. The plan of the prelude is to use fragments of the tune to build a resolute climax and then to taper off to a pensive conclusion.

Psalm 130 was commissioned by the Lincoln Center for the Performing Arts inaugural concert of the Acolian-Skinner Organ in Philharmonic Hall, New York. This took place in February, 1963. Besides being composed in the twelve tone method, the work is also complex rhythmically. Timings are detailed to the
fullest extent, even to incomplete metronomic beats. The work appears to be a free improvisation on moods of the Psalm. It begins and ends with mystic quietness. Three large sections in the middle are labelled Quasi recitando, Tempestoso, and Pesante. The Psalm is paraphrased below:

Out of the depths I cry to thee, O Lord!
If thou, O Lord, shouldst mark iniquities,
Lord, who could stand?
My Soul waits for the Lord more than watchmen for the morning.
O Israel, hope in the Lord.
And he will redeem Israel from all his iniquities.

Gardner Read ............. Eight Preludes on Old Southern Hymns

I. My Soul Forsakes Her Vain Delight
II. Thou Man of Grief, Remember Me
III. David, the King, Was Grieved and Moved
IV. On Jordan's Stormy Banks I Stand
V. Alas! and Did My Saviour Bleed?
VI. Do Not I Love Thee, O My Lord?
VIII. Once More, My Soul, the Rising Day

Gardner Read was born in 1913. He was educated at Northwestern University and the Eastman School of Music. He is now composer-in-residence and professor of composition at the Boston University College of Music.

These preludes are based on hymn-tunes found in the 1902 edition of "The Sacred Harp," a collection of white spirituals and Southern hymns, first published around 1850. All but one of these tunes are in Aeolian mode and retain their pure form by omitting the raised 6th or 7th. The harmonizations are consequently modal. Read has injected the lively tunes with a spare, forthright vigor and the melancholy tunes with a smooth langour. Quite appropriately, most of the settings use imitation.

Bruce Simonds .............. Prelude on "Iam sol recedit igneus"

Dorian Prelude on "Dies Irae"

Bruce Simonds, born in 1895, has been known primarily as a pianist and university professor. He was for many years associated with Yale University, both as a student and as a teacher. He also studied at important schools in Europe and has appeared with leading orchestras. Besides these two organ preludes, he has published a Hababera for Violin.

Both of these works are based on Gregorian melodies; the Iam sol recedit igneus is an evening hymn and the Dies Irae is a sequence which forms part of the requiem mass. Both works use traditional harmonic procedures which are
duly influenced by the modal characteristics of the melodies. Texturally and rhythmically the pieces are outstanding. The pianist Simonds shows an excellent understanding of what "sounds" on the organ: melodies that sing through accompanying arpeggiated passages, soloing out of passages in various registers of stops, the function of the reed and string stops, and massive buildup of sounds for effective climax. Rhythmic nuances, including a final *accelerando*, are many times written into the music.

*Presented in partial fulfillment of the requirements for the degree Doctor of Musical Arts*
NORTH TEXAS STATE UNIVERSITY
SCHOOL OF MUSIC

presents

WILLIAM P. HALLER

in

LECTURE RECITAL

Sunday, April 13, 1969   8:00 P.M.
Texas Woman's University Main Auditorium
THE REGISTRATION OF ORCHESTRAL TEXTURES IN ORGAN MUSIC

"The Mirrored Moon" .......... Sigfrid Karg-Elert (1877-1933)

Karg-Elert is the last of the German organ composers to compose in nineteenth century style. He studied at the Leipzig Conservatory with Reinecke and Jadassohn and later taught there himself. "The Mirrored Moon" comes from Opus 96 Seven Pastels from Lake Constance, composed in 1919. Impressionistic in its intent, it is also orchestral in color. The specified registrations usually require adapting, as few organs extant possess a Harmonia Aetheria, string-tone mutations, narrow scale celestes, or other devices of the orchestral organ of the 1920's and 30's.
Roger-Ducasse was a composition protégé of Gabriel Fauré. His favorite medium of expression was the orchestra, for which he wrote character pieces and symphonic poems. The organ Pastorale, composed in 1909, is a unique piece of music: well suited to the organ as a polyphonic instrument, it uses imitation, augmentation, and diminution; orchestral in conception, it provides endless possibilities for fancy registration.

Presented in partial fulfillment of the requirements for the degree Doctor of Musical Arts.
Registration is the selection of appropriate organ stops for the presentation of organ music. Before making decisions about what organ stops are most appropriate to any passage of music, the organist must have an understanding of the composer's intentions for the music, the feasibility of the registration indicated by the composer, the general science and art of registration, and stylistic considerations which might warrant using registration differing from those indicated.

The function of registration is to enhance what is inherent in the music, and to make it clear to the listener. Like all means of interpretation, it should be suggested by the music, not superimposed on the music.¹

The great majority of the standard repertoire for the organ uses a style of registration which was well established in the seventeenth and eighteenth centuries. The music for all instruments was influenced by the advent of the large orchestra in the nineteenth century. The repertoire of the organ also has a number of important works which, while they are true organ music, are conceived in

an orchestral style. This orchestral style is associated
with the concepts of orchestration popular in the nineteenth
century. Thus most of the orchestrally conceived organ
works demand an organ which will imitate the Romantic
orchestra: a large body of strings with woodwinds added
for color and solo voices, and brasses for powerful climaxes.
Many organs built in the late nineteenth and early twentieth
centuries strived to copy the Romantic orchestra. These
will be referred to in this paper as Romantic organs.

With the rise of the Organ Reform Movement in the early
decades of this century, trends in organ building stretched
in several directions. The Organ Reform Movement was at
first a reaction against organ-building practices of the
late nineteenth century and later an impetus to build new
organs which resembled in certain ways the best (or classic)
examples of seventeenth and eighteenth century organ builders.
The re-emergence of the Classic Organ has developed an
interesting performance practice problem: can orchestrally-
conceived organ music be performed on a Classic Organ, and
if so, how; or, if not, should the orchestral-style organ
music be excluded from the repertoire.

It is the belief of this writer that orchestrally con-
ceived organ music can be played on a Classic Organ and that
it should not be excluded from the repertoire. This recital
will demonstrate two possible methods of registering two
representative pieces: each work will be played in a manner
near to that intended by the composer (that is, an elaborate imitation of Romantic orchestration), and also in a classic style, using only the stops commonly found on a classic instrument.

Since it has been the conclusion of at least two contemporary organ reformers (John Fespermann and Erich Goldschmidt) that, if necessary, Romantic organ music should be excluded from the repertoire since it does not sound appropriate on the Classic Organ, the writer hopes to make appropriate suggestions as to what type of instrument might be able to play all types of organ music without compromising any style severely.

The purposes of this recital are four in number:

1. To discuss and demonstrate two opposing possibilities for registering two orchestrally conceived works originally written for organ;

2. To chronicle the rise in popularity of the Romantic Organ and to show the reappearing of the Classic Organ as a result of the Organ Reform Movement;

3. To question the necessity of the performance practice of an elaborate orchestral-style registration; and

4. To ask what type of instrument is best suited not only to play the bulk of organ literature which was intended for the Classic Organ, but also the orchestrally-conceived organ works of the Romantic Era.
The History of the Romantic Organ and Performance Practices Relating to It

The Romantic Organ did not appear suddenly but was the result of a gradual transition. Early trends began with the breakdown of polyphonic composition in the eighteenth century Galant and Empfindsamer styles. To provide only a solid bass and not an ensemble voice in a polyphonic composition was the goal of the Silbermann\(^2\) brothers in the construction of the pedal division, resulting in a decrease in the resources of the organ pedal. More variety of stops of 8' pitch was provided and more tonal differentiation of the various keyboards was featured.

The art of organ building became subservient to the science of sound. Treatises of Wilke,\(^3\) Helmholtz,\(^4\) and others declared mixtures to be unscientific because they did not follow the harmonic series.

\(^2\)Andreas Silbermann, 1678-1734; Gottfried Silbermann, 1683-1753.

\(^3\)Christian Friedrich Gottlieb Wilke, 1769-1848, Über die Wichtigkeit und Unentbehrlichkeit der Orgelmixturen (Berlin, 1839).

\(^4\)Herman Helmholtz, 1821-1894, Die Lehre von den Tonempfindungen als physiologische Grundlage für die Theorie der Musik (Brunswick, 1865).
The uniform scalings, such as one to the square root of eight for areas of pipe sections at the octaves, as given by Töpfer, and which were such a feature of organ-building in the nineteenth and early twentieth centuries, resulted from a number of considerations:

1) The German physico-philosophical desire to generalize in terms of the physics of sound. Hence the quasi-scientific work of Töpfer, which avoided the real problem of the psychology of hearing.

2) The need for thousands of new organs at competitive prices in nineteenth-century Europe. There was a commercial mass production of ranks of pipes to a limited number of stereotype scales and even fewer pipe shapes. Even gemshorns were sometimes made of cylindrical shape!

3) The production of organs in factories without reference to the acoustical environment of the instruments in their final homes. Thus, the organ builder cut down the time which he had to spend in churches. No longer did the organ grow from its raw materials in the building in which it was to speak. All idea of organic evolution and ecological equilibrium was lost. Thus did the "factory organ," as Schweitzer calls it, replace the art works of the Renaissance and Baroque periods.5

The travels of the notorious George Joseph Vogler (1749-1814) did not help the organ to retain qualities which had made it the King of Instruments for centuries.

In 1784 he built a portable organ, known as the orchestrion, and toured Europe with it. It contained 900 pipes, and was enclosed in a swell-box. He used free reeds instead of reed pipes, and it is difficult to know how these stood in tune with the flue pipes.6

Vogler's programs often consisted of a "Pastoral Festival Interrupted by a Storm," by J. H. Knecht, and several pieces...

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of descriptive and program music of his own composition. His attempts to make the organ more economical and simpler only served to lower its status as an instrument.

With the advent of patent-bellows containing magazines or reservoirs allowing increased wind pressures, various experiments with pipe construction were carried out. The work of Edmund Schulz (1823-1878) shows wide extremes in pipe scaling: big Diapasons, sweet Lieblich Gedeckts, and very narrow Gambas.

With higher wind pressures, harmonic or overblown stops became possible. The great nineteenth-century French organ builder Aristide Cavaillé-Coll (1811-1899) developed and built the Flûte harmonique. Pipes of this stop contain a hole about midway along the pipe. With overblowing, the pipe sounds its first overtone, the octave. Cavaillé-Coll placed a Harmonic Flute in the organ of the church of St. Denis in 1841. Because of its characteristic anticipatory sound it was considered to be the best imitation of the modern transverse flute. Cavaillé-Coll also developed harmonic trumpets of great power and other orchestral imitations such as the English Horn. Later, other unusual reed stops were invented and produced: French Horn, Clarinet, Euphonium, Kinura, and Physharmonika.

One of the fundamental developments of Romantic organ building was the multiplying of the number of string-tone stops. The sound of the violin, and later, of several
violins together, was copied. Though the stop Viola da Gamba had existed in Bach's day, it was only a narrow scale Principal and named Gamba only because of a vague resemblance to the sound of the old Renaissance instrument. Its speech was slow in starting and its usefulness limited to accompaniments. The nineteenth-century builders prompted the speech of the string stops with harmonic bridges, permitting pipes of even smaller diameter to be used. George Ashdown Audsley, the great champion of the American Romantic Organ, divides string tone into two classes: imitative and non-imitative. The non-imitative strings include such stops as Aeoline, Fugara, Salicional, and all types of Gamba. Imitative strings include the Viol, Viol d'Orchestre, Violin, and Violoncello.

Beating stops, known as celestes, were present on nineteenth-century instruments but became most popular in the early twentieth-century organs. Any stop could be made into a celeste by providing an identical stop and tuning it slightly sharp or flat to the original. String celestes provide a delicate shimmer, while flute celestes are liquid. Combining several of these celestes produces a sort of imitation of massed orchestral strings.

In order to obtain an orchestral crescendo more and more of the organ was enclosed in tightly fitting boxes which could be opened and closed by foot pedals.
What is the remedy? The day is coming, as surely as time shall last, when every speaking pipe in the entire organ shall be enclosed and given some degree of flexibility: for even though a crescendo may not be demanded, flexibility and gradations of power will inevitably be required.

Most organs in the 1930's were built so that the entire organ was enclosed in swell boxes.

As organs became larger and wind pressures higher, opening the pallets became more and more a problem to the organist. The improvements of the pneumatic lever by C. S. Barker in the early 1800's allowed manuals on high wind pressure to be coupled together without undue physical strain. "Barker took out a French patent to the action in 1839, and Cavaillé-Coll thereafter applied it to all his important instruments."8

Mechanical action saw a periodic decline with the invention of tubular-pneumatic action in 1835. This type of action operated completely by the pressure of air. The long distances between some of the pipes and the console often necessitated very long tubes for air. The farther away from the console, the slower the pipe spoke. The development of electro-pneumatic action by Dr. Albert Peschard (1836-1903) erased the problem of slow-speaking pipes at great distances. Electricity was the power source for the opening of the

7 Godfrey Buhrman, "The Swell," The Diapason (August 1, 1913), p. 3.
8 Sumner, The Organ, p. 338.
pallets under the pipes, and the impulse for opening them was transmitted immediately.

Methods for controlling the turning on and off of combinations of stops were developed in the nineteenth century. Though the Spanish and French organs possessed ventil levers which allowed certain stops to be drawn but to remain silent until the ventil pedal was lowered, the standard mechanism for the mechanical organ was a small number of pedals which threw out various combinations of stops. Pneumatic thumb pistons for controlling large numbers of stops and couplers were installed in the organ for St. Georges' Hall in Liverpool by the English builder Henry Willis in 1851. These pistons were adjusted only by the organ builder and were more or less permanently set. The American builder Hilbourne Roosevelt patented the first adjustable combination action in an organ in Great Barrington, Massachusetts, in 1882. Experiments with the crescendo pedal and sforzando pedal were also carried out in the nineteenth century.

One of the main causes for the changes in nineteenth-century organ building was the change in the literature of the organ. Secular organ recitals came into vogue in the nineteenth century. At the same time, nineteenth-century organ music for use in church generally did not equal the standard of that of the eighteenth century. The Concerts
Spirituels had opened to a public audience in the Paris Tuileries in 1725. Vocal and instrumental music was the fare of the program.

The Tuileries organ was used as a basso continuo instrument only until the mid-eighteenth century, when famous church organists such as Louis-Claude Daquin (1694-1772) and Claude Balbastre (1729-1799) began improvising spectacular solo works for the gratification of the concert goers. The hearty reception of these feats of skill led to similar practices in the church.

The nineteenth century brought higher standards for organ playing because of the development of more systematic teaching methods of manual and pedal technique by Jacques Lemmens (1823-1881), W. T. Best (1826-1897), and others. The virtuoso works of Franck, Guilmant, Liszt, and Reger require the use of a well developed organ technique.

America, always susceptible to the vicissitudes of European tastes, welcomed the flashy style of the improviser.

Showy improvisers such as John H. Willcox (1827-1875) of Boston became enormously popular as recitalists, and theatrical effects in organ recitals became desirable, resulting in such dramatic improvisatory displays as the "Thunder Storm" (often with lighting effects) and the "Midnight Fire Alarm" (produced in one New York Church with real firemen). This was without doubt the beginning of the modern organ recital.9

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This type of playing, much of it orchestrally conceived, was influenced by, and in turn, influenced the art of Romantic Organ building.

Since many of the standard virtuoso works of the nineteenth century were considered too serious or too boring for the general public in the early twentieth century, organists were attracted en masse to the orchestral transcription.

Secondly, I would accuse the anathema placed by our fathers on playing any music except that which was originally written for the organ. I am not an ancient by any means, still I remember distinctly the scorn vented by most of the brethren on those organists who first played Wagner. Most of them would now be ashamed of their remarks, as almost every program just before the war was not complete without its Wagner number. But the spirit of the thing is alive yet.10

This fad has nearly disappeared today, but in the early part of the century, a recital consisting only of original organ works was considered snobbish. Orchestral transcriptions were performed with all the mechanical devices of the organ and technical proficiency of the performer in full utilization. Constant changes of tone color, thumbing out solo melodies on another keyboard, use of multiple celestes, tremolos, and Vox Humanae are hallmarks of the style of playing required for transcriptions.

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If I may be permitted to say it with all seriousness and charity, and with no disposition to cavil, there is very little music of real worth being written for the organ. Here in America we are having the finest development of organ building with no seeming disposition on the part of real composers to follow it up. We are having organs with wondrous and diverse colors, with actions capable of any demand made upon them; but our organ music is written with no more demands than that of fifty years ago. So why not the best of modern music regardless as to whether it was written for the organ or not? And let us not be narrow about it.\textsuperscript{11}

A few words should be spoken here about the honest aims and ideals of the orchestral-style registration. This type of creative work endows the organist with the same challenge as an orchestrator. The organist must look at the work to be colored as an orchestrator would, searching for every opportunity to use exotic tonal color, imaginative sound effects, and particular attributes of the organ being used at the time. He must find all possibilities for soloing out melodies, obvious and hidden ones alike, and find a method of bringing them out on separate manuals and contrasting colors.

Alexander McCurdy, organ professor at the Curtis Institute, has published recollections of Lynnwood Farnam's outlook on registration.

\textit{It must be understood that every change must be made quickly, and smoothly. If one finds it difficult to make some of the changes in stops, one should try to do one more thing--try to put}

\textsuperscript{11}\textit{Ibid.}
two stops on in place of one; or having a penknife at the side of the console, put it over to the other side and make the change also in the given amount of time; that is, make it more difficult, then perhaps the impossible will be easy. Every change that is made must look simple. As he said to me many many times: "Do it again, and make it look easy." 12

McCurdy goes on to show in detail a registration plan for Karg-Elert's "Legend of the Mountain" (another of the Seven Pastels) made for him by Lynnwood Farnam. Farnam, an outstanding Canadian-American organist who dies in 1930, had a great deal to do with the Romantic (orchestral) style of registration. His registration schemes, to judge from examples of his students, and evidence such as that given in the above-quoted article, were very elaborate. Some of his selections of stops might be called into question today, but at the time were considered ingenious.

Here is an art which may be rapidly vanishing in America today, not only because the Romantic Organ has fallen into the low esteem of purists, but also because this orchestral style of registration (which, admittedly, tries to make the organ an imitation of the orchestra) is also going out of style.

The organ has not been helped as a musical instrument by its period of trying to make it resemble a symphony orchestra, with everything un-normal about it from English and French horns to chimes! It is good to remember that anything imitative immediately admits inferiority, that it

cannot ever be as good as the original. It also immediately loses its integrity, and consequently its self-respect.  

Much of the music written for this type of organ registration is no longer considered worth the effort of learning and registering, both because the nineteenth-century style of composition tends to sound dated today, and because the Romantic Organ is slowly disappearing in America.

Ernest White, for many years a prominent recitalist in America, was criticized for his imaginative registration of the Karg-Elert "Legend of the Mountain."

In the modern department, the Elmore ("Pavane") is quietly moving, bringing forward many of the softer effects and single stops, while the Karg-Elert is overpainted with opulent colors, lush and variegated. Here White turns from the music of line and form to a style in which the color is the raison d'être. With cunning he rings the changes on the celestes, solo voices, bizarre combinations and bland, concluding with a descending passage on 16' Krummhorn bases with 2' flute. At the very end, nothing remains except the subterranean growl of the single Krummhorn. This is unquestionably the oddest sound ever to get onto a record, and we doubt not that Mr. White is pleased with himself for having done it.

Tonally, an orchestral-style registration seeks to find the softest and loudest effects, exotic color combinations, kaleidoscopic changes of registers, and the most exciting climaxes by the use of swell boxes and crescendo pedals. Duplication of 8' pitch is common. Use of high mixtures is

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avoided. Crescendos are very carefully graduated so that each addition of stops is tempered by a closing of the swell box. In a long buildup of the organ, such as in the Roger-Ducasse Pastorale, the swell box might be closed four or five times, only to be opened again after an addition of stops.

Much of the music of Sigfried Karg-Elert (1877-1933) was intended for this type of organ and this type of technique. Many organists feel that the music of Karg-Elert is no longer worthy of programming on public recitals. Admittedly, the harmonic style is dated and the whole approach is eclectic (German Romanticism influenced by Nationalism and Impressionism). Nevertheless, included among Karg-Elert's voluminous output are several worthy works which teach the student the valuable art of managing the console. There is also a considerable musical challenge to bring off this music, which is complex in the extreme. Without perfect timing, the Pastels are a dismal failure.

Karg-Elert has left us thoughts about the Pastels, included in a letter to his English friend, Godfrey Sceats.

Seven Pastels (Lake Constance) represents the acme of Impressionism and are [sic] perhaps a little overloaded in technique and colouring. This is certainly not the ideal organ style, for the limitations of the instrument as a medium of expression must cause much to be lost. Much more can be accomplished on the Art Harmonium (Kunstharmonium) with percussion, double expression, double key touches, with many tone-colours and polydynamics to each touch. However this may be, I myself studied and played these things on a very small two-manual organ at Radolfszell on the
Bodensee. They are possible under these conditions, but a few little alterations here and there have to be made according to the circumstances—the resources of the instrument and the accessories available. The last number ("To the Stars") is the simplest and therefore sounds the most natural. These Seven Pastels have been very well received in America and Australia and, to my astonishment, have brought me many expressions of approval. Nevertheless I have felt impelled to turn back from this point to a more reposeful and self-contained style.19

"The Mirrored Moon" will now be presented with an honest attempt to realize the mood and style intended by the composer. In this procedure, the registration markings in the music were used as a starting point and after consideration of the sound probably intended by the composer, suitable substitutions were made when necessary.

The opening registration is Swell Voix Celeste 8' and Harmonia Aetheria, Echo Bourdon and the octave coupler, with tremulant. The Harmonia Aetheria is a very rare stop. It is a "compound harmonic-corroborating stop, composed of two or more ranks of very small-scaled and delicately voiced metal pipes. In its most desirable form it is composed of Aeoline labial pipes."

Karg-Elert indicates that the pitches are to be 2 2/3', 2', and 1 1/3'. Since all the mutations are full-bodied on the Sipe organ at Texas Woman's University, it is not practicable to use these exact pitches. Karg-Elert's

16 George Ashdown Audsley, Organ-Stops and Their Artistic Registration (New York, 1921), p. 156.
marking *luminoso ed argentino* (luminous and silvery) would indicate the need of a delicate shimmering sound. The combination of flute and string celestes with the Nazard 2 1/3' on the Enclosed division was used for the opening.

At bar 3, the Pedal is to consist of the Harmonicabass 16' and the Swell to Pedal coupler. Audsley defines the Harmonicabass as a Pedal Organ labial stop, of 16 foot pitch, formed of small-scaled open pipes of wood, voiced on a low-pressure wind, and yielding (like the Harmonica, 8 foot, to which it is the true bass) a tone in which both refined flute tone and string-tone are combined.17

On the TWU organ, the combination of the Contre Gambe 16' and the Quintadena 16' makes an appropriate substitution.

At bar 5, Karg-Elert calls for Gedeckt 8' and Vox Angelica 4'. Audsley defines the Vox Angelica as "an open metal labial stop, of 8 foot pitch, the pipes of which are cylindrical and of very small scale, voiced to yield the softest unison tone in the manual department of the Organ."18

At TWU, the best realization of this indication seemed to be the Holzgedeckt from Manual I and the Enclosed Viole de Gambe coupled at 4' pitch.

At bar 7, the right hand is to play on the Cor de Nuit, "an open or covered stop of metal or wood,"19 and at TWU the Manual III Rohrflöte 4' was used and played an octave lower.

17Ibid., p. 159. 18Ibid., p. 285. 19Ibid., p. 159.
Bar 8 calls for a right hand solo on the Clarabella or Quintation [sic] 8'. For this performance, the Quinte 1 1/3' was added to the Rohrflöte 4'. Since the right hand is playing an octave lower, the resulting pitches would be 8' and 2 2/3'.

At bar 9, the right hand is to assume the opening registration. Instead of this, a combination of two 8' flutes was chosen, for thickness and warmth. The left hand is to play on the Great or Solo, but no stop is specified. At TWU, the Principal 8' on Manual II was used.

At bar 10, the hands were switched.

At bar 11, Karg-Elert calls for a combination without Mixture and octave coupler. Had the opening registration been assumed at bar 9, this would have left the celeste and the Echo Bourdon. At this performance, the flutes were left on and the flutes of 4', 2', and 2 2/3' were added. Also the Subbass 16' was added to the pedal. These selections were made to make a larger contrast possible between bars 11 and 13 with the boxes to be first opened and then closed.

Bar 15 does not call for a change of registration for the right hand, but the arpeggiated chords suggest a harp effect. This is produced successfully by a combination of 16' and 4' flutes. The Flûte Harmonique 8' was used with super- and sub-octave couplers and unison off. The left hand (Karg-Elert calls for characteristic reeds) was played by the Krummhorn and Gedeckt on Manual I.
The left hand in bar 16 was played on Manual II, where a combination of two soft 8' stops was set.

At bar 19, a change of texture and speed calls for a change of registration. The first two sixteenths are played on the flute 16' and 4' combination. The next two sixteenths, though Choir reeds were specified, were played on the Gedeckt on Manual III. The Choir reeds desired by Karg-Elert would have been Clarinet-like and also enclosed in a swell box. There is no Clarinet on the TWU organ and since Manual I is unenclosed, the Krummhorn did not appear to be a likely choice. The 2' Nachthorn is also added to the pedal for this measure.

Measure 20 was given a contrasting registration, though not specifically called for by the composer. The first two sixteenths were played on the Viole de Gambe 16' and 4' and the rest of the measure on the Manual II Gemshorn 8'.

Measure 21 asks for a right hand registration of 8' plus a Ferncornett or Dulciana Mixture (2 2/3' and 2'). The selection made here was the Enclosed Viole de Gambe 8', the Nazard 2 2/3' and the Doublette 2'.

Measure 24 calls for a combination of 16', 8', and 2 2/3' pitches on Choir or Great. For this performance, the Enclosed Gambe 16', Bourdon 8' and Nazard 2 2/3' was selected.

Measure 25 had three contrasting sounds in it (though Karg-Elert indicates only two): the first two sixteenths
on the previous registration, the second two on the Manual III Gedeckt, and the last two on the Manual II Gemshorn.

Measure 26 involves a complete change of registration. Karg-Elert calls for a Solo flute for the right hand. For this performance, the two 8' Enclosed flutes were selected. The left hand consisted of Manual II Rohrflöte 8' and Gemshorn 8'.

At Measure 27 the pedal enters on a combination of moderately heavy 16' stops coupled to the Enclosed. The hands are switched.

Measure 28 calls for a General Crescendo. This is effected by opening the crescendo pedal, a device for adding stops one at a time. This measure was played on the Enclosed manual, so that completely full organ would not be reached and also so that the swell box could be used to moderate the crescendo.

At measures 29 and 30, similar methods of registration were used as in bars 27 and bar 28.

Measure 31 calls for Voix Celeste 8' and 4' with octave coupler. At this performance, the flute and string celestes on the Enclosed were used, with the super-octave coupler.

At bar 33 the Harmonia Aetheria is to be added. The Nazard 2 2/3' was added for this performance.

Bars 35 through 38 have the same musical material as bars 15 through 18 and the same registration was used.
Bar 37 indicates only that the Swell is to be used. Karg-Elert undoubtedly desires string stops, since the registration would be the same here as at bar 14. The Enclosed celestes with super-octave coupler was used.

Bar 41 calls for the Solo or Great manual (piano) to be used for the right hand. At this performance, the Manual III Regal 8', Gedeckt 8', and Rohrflöte 4' with tremulant was used.

Bar 43 is marked the same as bar 5. For the sake of contrast, this bar was registered with the Manual I Holzgedeckt 8', Enclosed celestes and Nazard 2 2/3' coupled to Manual I an octave higher.

Bar 44 returns to the original substitute for Karg-Elert's intended registration: the Manual I Holzgedeckt 8', and the Enclosed Viole de Gambe coupled at 4'.

For bar 45, calling for Voix Celeste and octave coupler, both celestes with super-octave coupler were used. At bar 46 the Viole Celeste was removed, leaving the Flute Celeste.

At bar 47, no change was made for the left hand and the right hand was played on the Manual III Rohrflöte 4' an octave lower than written.

Karg-Elert calls for a Bourdon doux or Rohrflöte at bar 48. Here the Manual I Spitzflöte 4' was used an octave lower.
From bar 49 to the end, the **Flute Celeste** 8' was used alone. The Enclosed to Pedal coupler was removed, leaving the **Contre Gambe** 16' by itself.

This performance demonstrated a possible solution to Karg-Elert's suggestions applied to a rather untypical instrument. The Sipe-Yarbrough organ at TWU has many Romantic stops on it, yet it is more a Classic than a Romantic instrument. Even when the exact stops called for are present, sometimes the organist decides not to use them for reasons of taste, effect, or contrast. Mendelssohn expressed this problem in the preface to the *Six Sonatas, Opus 65*.

In these Sonatas much depends upon a proper selection of the organ-stops. As every organ with which I am acquainted, however, requires its own mode of treatment---stops of the same name in different instruments not always producing a like effect---I have indicated, in a general way, only the kind of effect required, without specifying names of stops. . . . It is, therefore, left to the organist to make such combinations as are appropriate to the various movements, but he should take care, when employing two manuals, that they differ in tone-color, without, at the same time, standing out in too great contrast.\(^\text{20}\)

ORCHESTRAL VERSION OF "THE MIRRORED MOON" BY KARG-ELERT AS PRESENTED ON THE SIPE-YARBROUGH ORGAN AT TEXAS WOMAN'S UNIVERSITY

Set the following combination pistons:

<table>
<thead>
<tr>
<th>Gen.</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV(Encl)</th>
<th>Pedal</th>
<th>Couplers</th>
</tr>
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<tbody>
<tr>
<td>2</td>
<td>S.Fl. 4</td>
<td>Blank</td>
<td>R.Fl. 4</td>
<td>Viole 8</td>
<td>Subbass 16</td>
<td>E-P 8</td>
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<tr>
<td></td>
<td>Trem.</td>
<td></td>
<td></td>
<td>Celeste 8</td>
<td>Quint. 16</td>
<td>E-II 8</td>
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<td></td>
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<td></td>
<td></td>
<td>Fl. Cel. 8</td>
<td>Gambe 16</td>
<td>E-II 4</td>
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<td></td>
<td></td>
<td>Coup. 4</td>
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<tr>
<td>3</td>
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<td>Ged. 8</td>
<td>Viole 8</td>
<td>Subbass 16</td>
<td>E-P 8</td>
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<td></td>
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<td></td>
<td>Celeste 8</td>
<td>Quint. 16</td>
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<td>Fl. Cel. 8</td>
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<td>Trem.</td>
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<tr>
<td>4</td>
<td>Ged. 8</td>
<td>R.Fl. 8</td>
<td>Ged. 8</td>
<td>Fl. Harm. 8</td>
<td>Subbass 16</td>
<td>E-P 8</td>
</tr>
<tr>
<td></td>
<td>Krum. 8</td>
<td>Gems. 8</td>
<td></td>
<td>Coup. 16</td>
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<td>E-P 4</td>
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<td>Coup. 4</td>
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<td>Unis. off</td>
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<tr>
<td>5</td>
<td>Blank</td>
<td>R.Fl. 8</td>
<td>Blank</td>
<td>Bour. 8</td>
<td>Subbass 16</td>
<td>II-P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gems. 8</td>
<td></td>
<td>Fl. Harm. 8</td>
<td>Quint. 16</td>
<td>E-I 8</td>
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<td>Trem.</td>
<td>Gambe 16</td>
<td>E-III 8</td>
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<td>Coup. 4</td>
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<tr>
<td>6</td>
<td>Ged. 8</td>
<td>Prin. 8</td>
<td>R.Fl. 4</td>
<td>Viole 8</td>
<td>Quint. 16</td>
<td>E-P 8</td>
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<td></td>
<td>Celeste 8</td>
<td>Gambe 16</td>
<td>E-I 4</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>Naz. 2 2/3</td>
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<td></td>
<td></td>
<td>Trem.</td>
<td></td>
<td></td>
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</tbody>
</table>

**Ped.4**
- Gambe 16
- III 1
- R.Fl. 4
- III 1 1/3
- Quint. 1 1/3
- Trem.

**Ped.3**
- Subbass 16
- II 2
- Gems. 8

**IV 1**
- Viole 8
- IV 3
- Bour. 8
- Fl. Harm. 8
- Trem.

**IV 2**
- Gambe 16
- IV 4
- Viole 8
- Naz. 2 2/3
- Doubl. 2
Opening Registration: General 6, play on IV.

Measure
5 - Push IV 1, play on I.
7 - Play l.h. on I, r.h. on III an octave lower.
8 - Push III 1, continue r.h. on III an octave lower.
9 - Push IV 3, play r.f. on IV, l.h. on II.
10 - Switch hands.
11 - Push Ped. 3, add IV Fl. 4, Naz. 2 2/3. Doub. 2; play on IV.
15 - Push Gen. 4, play r.h. on IV, l.h. on I.
16 - Play r.h. on I, l.h. on II.
17 - Play r.h. on IV, l.h. on I.
18 - Play r.h. on I, l.h. on II.
19 - Play both hands on IV, take off pedal coupler on first 16th. On third 16th, play both hands on III. On third 16th, add Nachthorn 2 to pedal. Before beginning bar 20, take off IV Fl. Harm., and add Viole.
20 - Play both hands on IV, on third 16th push II 2 and move hands to II.
21 - Play l.h. on II, push IV 4 and play r.h. on IV.
22 - On third 16th, play both hands on IV.
24 - Push IV 2, play both hands on IV.
25 - Both hands on IV. On third 16th, move both hands to III. On fifth 16th, move both hands to II.
26 - Push Gen. 5 before beginning bar. Play l.h. on II, r.h. on I.
27 - Play r.h. on II, l.h. on IV.
28 - Play both hands on IV, use crescendo pedal to bring on full Swell by end of measure. Add stops simultaneously with beginning of notes, not during notes.
29 - Close cresc. ped., play r.h. on II, l.h. on IV.
30 - Same as measure 28.
31 - Push Gen. 3 before beginning bar, play both hands on IV.
33 - Add. IV Naz. 2 2/3 by hand.
35 - Push Gen. 4, play r.h. on IV, l.h. on I.
36 - Play r.h. on I, l.h. on II.
37 - Play r.h. on IV, l.h. on I.
38 - Play r.h. on I, l.h. on II.
39 - Push Gen. 3 before beginning bar, play both hands on IV.
41 - Move r.h. to III.
43 - Push Gen. 6 before beginning bar, play both hands on I.
44 - Push IV 1 before beginning bar.
45 - Push Gen. 2 before beginning bar, play both hands on II.
46 - Take off Viole and Celeste before beginning bar.
47 - Move r.h. to III, play an octave lower.
48 - Move r.h. to I, play an octave lower.
49 - Push Ped. 4 and remove E-II before beginning bar, play both hands on II from here to end.
The History of the Organ Reform Movement and
Its Implications as to Registering Romantic
Organ Music on Reform Instruments

While the Romantic Organ was rushing to its nadir of
decadence (the theater organ); another movement, hoping to
recapture for the organ some of the glory of its golden
years, was gaining a foothold in Europe.

Albert Schweitzer actually began the trend which ended
in the revival of the Classic Organ. In his musicological
studies and travels he became more and more displeased with
the rough, heavy qualities of contemporary organs. His 1906
pamphlet, Deutsche und französische Orgelbaukunst und Orgel-
kunst (The Art of the German and French Organ and Organ-
building), listed a number of prejudices and convictions that
he had arrived at in his studies. Contemporary organ pipes
were constructed of too cheap materials, he felt, with too
small diameter and too thin walls. He disparaged the prac-
tice of building stops imitating string tone, which, he
said, "must only be hinted at, and not be allowed to make
itself conspicuous in the combined sounds of the whole
instrument." 21 He felt that the gains in volume resulting

21 Albert Schweitzer, Out of My Life and Thought (New
from higher wind pressures of the day caused a poorer tone quality. Mechanical action was definitely preferred by Schweitzer for small and medium sized organs. Pneumatic action was preferred to electro-pneumatic, which was to be used only as a last resort. The slider wind chest, where all the pipes of a key share a common windway, was advocated by Schweitzer to replace the chest popular at that time, the ventil chest, where every pipe on the chest has its own wind valve.

Fig. 1--Thomas Byers, "Fundamentals of Organ Construction," Organ Institute Quarterly, V (Winter, 1955), 23.
Observe that the pipes are not fed directly by the valve, but from the large key chamber which is filled when the valve opens. In the traditional form as depicted, there is no escape for the wind after the valve is closed other than through the pipes and via incidental leakage. The musical characteristics of the slider chest can surely be attributed to the complex manner in which the wind enters the key chamber, cushioned by the atmospheric pressure already there, and to the slow cutoff as the chamber empties.\textsuperscript{22}

The practice of housing several divisions in swell boxes was disparaged since "so many sets of shutters in the case hinder the spread of the sound."\textsuperscript{23} The ideal organ contained three manuals. The Choir, or Positif was to be placed on the rail of the gallery. The other two divisions were to be stacked one above the other in the balcony opposite the chancel. Schweitzer did not idealize the organ of Bach's day, thinking it to be a predecessor of the perfect organ. He thought the best organs were made between 1850 and 1880 and that the best builder was Cavaillé-Coll. This prejudice does not go along with his other convictions, because Cavaillé-Coll practiced consistently some of the evils which Schweitzer spelled out.

Quite a bit of discussion occurred about the relative merits of organs of Arp Schnitger (1648-1719) and those of the Silbermann brothers; Andreas (1678-1734) and Gottfried (1683-1753).


\textsuperscript{23}ibid., p. 67.
In Schnitger's organs there was not only a distinction in the pitch, position, radiation areas of each of his manual and pedal sections, but each of his larger decisions contained families or choruses of stops. In the Silbermann organs, much of this versatility was to go. Everything was to be sacrificed for a smooth, sophisticated and well-knit chorus. Silbermann "puts his goods in the window." There is no denying the magnificence of the Silbermann conception, but it is significant that when the German organ of the nineteenth century, with its hyper-trophied romantic tonal schemes, had cloyed, and had failed to satisfy such scholars as Straube, Schweitzer and Jahnn, it was the Schnitger organ in Saint Jakobi, Hamburg to which they turned in 1922, even in its then neglected and somewhat mutilated state.

Erich Goldschmidt, an outspoken advocate of the Classic Organ, has outlined quite thoroughly the major events of the Organ Reform Movement. They are summarized below.

1. The writings of Albert Schweitzer and Emile Rupp champion the Silbermann-type organs.

2. In 1909 the International Orgelregulative influences the building of several organs which are based on certain of Schweitzer's principles.

3. The Praetorius Organ, built in 1921 from specifications from Praetorius' Syntagma Musicum reawakens interest in the pre-Silbermann type organ. Scherer and Schnitger organs become the ideal instruments.

4. Formation of the German Organ Council (headed by H. H. Jahnn, restorer of the Schnitger organ at the Jakobi-Kirke in Hamburg), publication of Die Orgelregister (by

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Christhard Mahrenholz), and publication of *Musik und Kirche* (by Karl Vötterle) all lead to greater impetus in reform.

5. Construction of an organ at St. Mary's Gottingen, 1925, under Mahrenholz's direction realizes the goal of three classic divisions and independent pedal.

6. By 1930 three various impeti are obvious in the Organ Reform: (a) an absolute standard instrument (either Silbermann or Schnitger, or their contemporaries), (b) a compromise organ (an organ "furnished...with a series of registers suited to the performance of old music in addition to the usual complement of stops, which enabled one to give a stylistic interpretation of organ music of all periods. ...Such an instrument necessarily must lose all artistic unity and coherence and be degraded to the status of an arsenal."26), (c) a supra-stylistic organ. "The leading organ reformers had held from the beginning that they tended toward the creation of a new organ, not the imitation of any historical type."27

7. These three impeti led to two solutions: (a) the organ which follows closely the old North German model, and (b) "an organ which tries to blend the various experiences of past periods of organ building. ... There have not to this day appeared many valid manifestations of either type."28

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Lawrence Phelps, an organ builder currently working with Casavant in Canada, has summarized the specifications of the Organ Reform Movement.²⁹

1. The organ is mainly a polyphonic instrument. Therefore the scalings of the old masters (like Schnitger) were preferred in order to realize the transparency necessary for polyphonic textures. Use of slider chests, open toe voicing, wind pressures of 3", and best materials available were advocated. Pipes were to be left unnicked at the mouth.

2. Direct mechanical action is superior to all other types.

3. The organ should be placed in a free-standing, somewhat elevated position, in cases, with the Principal ranks standing in the front of the case.

4. The scope of music for which the design is intended should be limited to church music and polyphonic literature.

5. Stop names should be a simple indication of the function, tone, or type of pipe construction.

6. The Principal choruses of each division should be based on a different pitch.

7. Divisions should be stacked one above another, with the pedal stops installed in towers.

8. The rooms housing the organ should have natural and untreated surfaces.

Since the acceptance of the platform of the movement by the world's leading builders, more and more of the organ builders in Denmark, Holland, Germany, Austria, and Scandinavia follow tenaciously the scruples of reform. Many old organs in France have been lovingly restored and one classic French organ has been built. In America the movement led at first in two directions.

Walter Holtkamp in his early days of building used slider chests, nickless pipes, reduced wind pressures, classic stop specifications for the Great and Positif divisions, and artistic display of pipes. He consistently refused to use mechanical action or functional case work, however.

G. Donald Harrison, working for Aeolian-Skinner, evolved the American-Classic scheme. This was hopefully a combination of Silbermann-type flue work on the Great and Cavaillé-Coll reeds on the Swell. The Positif was a compromise between French and German elements. The Great never contained reeds, and the mixtures were boosted in volume to make up for this lack. The American-Classic Organ was designed to play all types of music. Actually it was only a well-developed Romantic Organ, since it contained many of the same stops as the nineteenth-century Steinmeyer, Willis, and Cavaillé-Coll organs. These German, English, and French traits were combined into single instruments.
Besides the products of various reformers, various compromisers, and various degenerates of the past, we have in America today many possibilities for types of organ building. The philosophy of organ building today ranges from avid adherence to the ideals of the Reform, to compromise, to capitulation to the wishes of the general public. American builders such as Fisk, Noack, Sipe, and Hofmann build classic instruments of honest integrity, striving to recreate or surpass the organ of the "Golden Age." Others, such as Aeolian-Skinner, Moller, Austin, and Casavant are now striving to find the true compromise which will allow all types of music to be played on the instrument. The Wicks Organ Company has sought to modernize the organ, both by perfecting direct electric action and by adding transistors and other mechanical devices for bringing the mechanism of the organ up-to-date.

We must pass judgement on the entire production of the nineteenth century. It is banned by the reform because it is not "organlike." The greater part is oriented with respect to the symphonic orchestra style, a smaller part with respect to the piano style.\(^{30}\)

Some present day organ musicologists (John Fespermann and Erich Goldschmidt) have stated that proper performance of nineteenth-century music is impossible on Classic Organs. From this, the conclusion is drawn that Franck organ works are to be played only on Cavaillé-Coll organs.

Since all students of organ need to learn to play the music of Franck and a number of other nineteenth and twentieth century works in Romantic style, and since a true Romantic Organ is not always available for presentation of these works; it is necessary to devise some guidelines for presenting Romantic or orchestral-style organ works on a Classic Organ.

The Classic Organ, often smaller than most Romantic organs, has less forceful volume, more scintillating brilliance, no orchestral-imitation stops, but high color in all types of stops, and few or no string stops or beating stops.

Use of single stops of greater color is more characteristic of the Classic Organ. Use of several of dull color is often characteristic of the Romantic Organ.

Individual stops are the basic elements of organ registration, and their use alone is too often overlooked. Probably all organists use reed stops alone, or only one at each pitch, but the use of single 8' flue stops alone is all too rare. ... In a truly fine instrument these voices provide the most beautiful sounds of all, and they are a fair test of an organ builder's art. 31

Crescendos and decrescendos will be made generally by adding and subtracting stops rather than by opening and closing swell boxes. Opportunities for changing stops are available, since Classic Organ builders generally have no objection to electric adjustable combination action.

31 Arthur Howes, "Registration," Organ Institute Quarterly, X (Spring, 1963), 15.
General suggestions which have been followed in the conception of the classic registration schemes for this recital are listed below.

1. Try to see the music in long lines.

2. Use as simple registration as possible; that is, make as few changes as possible.

3. Involve as few stops as possible in changes; one if possible.

4. Be aware of the particular beauty of each stop and know the particular qualities of each pitch area of each stop. Be willing to play a voice an octave lower or higher on a stop other than 8' pitch.

5. Be extremely aware of the melodic and rhythmic tensions in the music and make the most of subtle touch and rhythmic nuances.

6. Make crescendos with the help of an assistant or a number of general and manual pistons. When this is not feasible, stops should be added in large blocs.

7. Do not play music which does not sound at all convincing on the Classic Organ. The character of the music may be somewhat changed; but if the fundamental validity of the music is not changed, performance is encouraged.

While the instrument being used for this recital is not American-Classic in style, neither is it truly Classic. Because the first two keyboards contain pipes on slider windchests at low pressures, they might be considered classic.
These keyboards are not, however, controlled by mechanical action and the pipes are not in cases. The third keyboard of the organ is classic in the stops it contains, but is controlled by electro-pneumatic action. The fourth keyboard is a large French Swell division containing Romantic voices designed for the presentation of nineteenth century music.

This instrument is a unique kind of compromise. The first three keyboards used by themselves come very near being a true classic instrument. Romantic music can be played very adequately on this instrument by using the fourth keyboard primarily and combining its resources with certain elements of the other keyboards.

In the registration of this recital, only the three classic keyboards were used in the presentation of the works in classic style. The specification of these three divisions is presented below.

<table>
<thead>
<tr>
<th>MANUAL I</th>
<th>MANUAL II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holzgedeckt</td>
<td>Quintadena</td>
</tr>
<tr>
<td>8'</td>
<td>16'</td>
</tr>
<tr>
<td>Principal</td>
<td>Principal</td>
</tr>
<tr>
<td>4'</td>
<td>8'</td>
</tr>
<tr>
<td>Spillflöte</td>
<td>Rohrflöte</td>
</tr>
<tr>
<td>4'</td>
<td>8'</td>
</tr>
<tr>
<td>Nasat tc.</td>
<td>Gemshorn</td>
</tr>
<tr>
<td>2 2/3'</td>
<td>8'</td>
</tr>
<tr>
<td>Gemshorn</td>
<td>Octave</td>
</tr>
<tr>
<td>2'</td>
<td>4'</td>
</tr>
<tr>
<td>Sifflöte</td>
<td>Spitzflöte</td>
</tr>
<tr>
<td>1'</td>
<td>4'</td>
</tr>
<tr>
<td>Sesquialterta</td>
<td>Octave Quint</td>
</tr>
<tr>
<td>II</td>
<td>2 2/3'</td>
</tr>
<tr>
<td>Scharf</td>
<td>Super Octave</td>
</tr>
<tr>
<td>IV</td>
<td>2'</td>
</tr>
<tr>
<td>Krummhorn</td>
<td>Flachflöte</td>
</tr>
<tr>
<td>8'</td>
<td>2'</td>
</tr>
<tr>
<td></td>
<td>Mixture</td>
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<tr>
<td></td>
<td>V-VI</td>
</tr>
<tr>
<td></td>
<td>Cymbel</td>
</tr>
<tr>
<td></td>
<td>III</td>
</tr>
<tr>
<td></td>
<td>Dulzian</td>
</tr>
<tr>
<td></td>
<td>16'</td>
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<tr>
<td></td>
<td>Trompete</td>
</tr>
<tr>
<td></td>
<td>8'</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>MANUAL III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gedeckt</td>
</tr>
<tr>
<td>8'</td>
</tr>
<tr>
<td>Rohrflöte</td>
</tr>
<tr>
<td>4'</td>
</tr>
<tr>
<td>Principal</td>
</tr>
<tr>
<td>2'</td>
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<tr>
<td>Quint</td>
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<tr>
<td>1 1/3'</td>
</tr>
<tr>
<td>Cymbel</td>
</tr>
<tr>
<td>III</td>
</tr>
<tr>
<td>Regal</td>
</tr>
</tbody>
</table>
To achieve a classic registration for a Romantic work, the simplest means will be utilized. The composers indications are used only in regard to basic pitch, and the work takes on an entirely different color. If the initial idea of the composer is valid, the beauty of simple classic stops will fulfill the needs for expression.

For the "Mirrored Moon," no more than three stops at a time on any keyboard were used; one to give the basic pitch and one or two more to lend further color or volume.

The piece opened on the Manual I Spillflöte 4', played an octave lower. This full-length, tapered flute has a rich, colorful beauty which captures the serenity in this opening. The pedal enters in bar 3 with Quintadena 16', and Gedecktpommer 8', both stops unabashedly classic in voicing and initial speech.

Instead of the Gedeckt 8' and Vox Angelica 4' as called for at bar 5, the single Manual I Holzgedeckt 8' was used. Its dark, covered sound provided the necessary haunting sound.

The right hand solo at bar 7 was played on the Manual II Spitzflöte 4' an octave lower. For contrast, the Octave 4' was substituted in bar 8.

Bar 9 continued use of the same two stops, the right hand on the Holzgedeckt and the left hand on the Octave. The hands switched at bar 10.

Instead of an attempt at an orchestral crescendo at bars 11 through 14, the Manual I Holzgedeckt 8' and Spillflöte 4'
were used for the whole passage. This phrase gained considerably in motivation of line from this simple registration.

The right hand "harp" effect at bar 15 was played on the single Manual I Spillflöte 4' an octave lower, while the reed solo was played on the Manual III Regal 8'. This classic reed had a bright buzziness which is very natural for the passage. The hands switched as indicated.

Measure 19 calls for a contrast of registration, from fluework to reeds. A simple, delicate contrast was provided for this by using at first the Manual I Spillflöte 4' an octave lower and then the Manual II Rohrflöte 8'. Since these stops are across the room from each other, the spatial aspect furnished some element of contrast.

The right hand part at measure 21 calling for Swell 8' with Ferncormett or Dulciana Mixture was played on the simple Manual I Holzgedeckt 8'. The chiff and nasality of this stop had an interest which adequately replaced the complex registration desired by the composer.

Measure 24, calling for 16', 8', and 2 2/3' pitches, was registered with the Manual II Quintadena 16' and Rohrflöte 8'. This registration is dark and yet rich in overtones. The last two 16ths of bar 25 were played on the Rohrflöte alone.

At measure 26, the right hand played on the Manual I combination of Holzgedeckt 8', Spillflöte 4', and Nasat 2 2/3'. This provided a volume level higher than the
pianissimo marked by the composer, but it seemed best to arrive gradually at the louder volume.

At measure 27, the right hand played on the Manual II combination of Rohrflöte 8' and Spitzflöte 4'. The pedal was coupled to Manual II in this place. The left hand played with registration set on Manual I.

At bar 28, the Manual II Octave 4' was added to the flutes. No attempt at further crescendo was made, since the rising melody and increasing number of voices provided a natural crescendo.

The situation with measures 29 and 30 is similar to measures 26 and 27.

At bar 31, the Manual I combination of Spillflöte 4' and Gemshorn 2', played an octave lower, was used. These two open stops, rich in upper partials, gave the warmth needed for this passage. No addition was made at bar 33.

Measures 35 through 38 were registered the same as measures 15 through 18, being the same musical material.

Measure 39 was played on the Manual I combination of Holzgedeckt 8' and Spillflöte 4'. The left hand continued on this manual at bar 41 while the right hand went to Manual II, set with Rohrflöte 8' and Octave 4'.

Measure 43 has the same musical material as measure 5 and was registered the same: Manual I Holzgedeckt 8'.

Measures 45 and 46, indicated to be registered with contrasting celestes, were played simply on the Manual I
Spillflöte an octave lower. The momentum of the line is improved here by not changing stops and the natural crescendo caused by the rise in pitch is obvious.

The right hand part at bar 47 was played on the Manual II Rohrflöte 8'. The hands switched at bar 48.

The conclusion of the piece, beginning with the left hand at bar 49, was played on the Manual III Gedeckt 8'. This is the softest stop of the three classic divisions of the organ, and its quinty flavor is interesting for the extremes of pitch found in the passage.

This registration solution is not what the composer intended. Nevertheless, the simple color provided the necessary moods of the piece, though more pastel in shade than the brilliant color of the Romantic registration. It is possible that more of the music's substance is audible with the classic registration.

Also it should be remembered that in an organ that has been designed, voiced and placed so that each individual stop will achieve its maximum effectiveness, not only are fewer stops required for a full sound, but the addition or subtraction of one or two (by hand) can make a greater change in both color and volume that we are accustomed to.32

32Ibid., p. 17.
CLASSIC VERSION OF "THE MIRRORED MOON", BY KARG-ELERT, AS PRESENTED ON THE SIPE-YARBROUGH ORGAN AT TEXAS WOMAN'S UNIVERSITY

Set the following combination pistons:

<table>
<thead>
<tr>
<th>III</th>
<th>1</th>
<th>Gedeckt</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>1</td>
<td>Rohrflöte Spitzflöte</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>Gedeckt Spillflöte</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Gedeckt Spillflöte</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Spillflöte</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Spillflöte Gemshorn</td>
</tr>
</tbody>
</table>

Opening registration:  
I  Spillflöte  
II Spitzflöte  
III Regal  
Ped Quint. 16, Gedeckt Pommer

Measure  
1 - Play both hands on I, an octave lower.  
5 - Push I 1 before beginning measure, continue on I.  
7 - Move r.h. to II, play an octave lower.  
8 - Change Spitzflöte to Octave 4, continue r.h. on II an octave lower.  
9 - Play r.h. on I, l.h. on II an octave lower.  
10 - Play r.h. on II an octave lower, l.h. on I.  
11 - Push I 2, play both hands on I.  
15 - Push I 3 before beginning measure, play r.h. on I an octave lower, play l.h. on III.  
16 - Play r.h. on III, l.h. on I an octave lower.  
17 - Play r.h. on I an octave lower, l.h. on III.  
18 - Play r.h. on III, l.h. on I an octave lower.  
19 - Play both hands on I an octave lower. Before third 16th, push II 1 and play both hands on II.  
20 - Play first two 16ths on I an octave lower, on third 16th, move to II.  
21 - Push I 1 before beginning measure, play r.h. on I, l.h. on II.  
22 - On third 16th, play both hands on I.
24 - Before beginning bar add Quint. 16 to II, play both hands on II. During bar push I 2 and add Naz. 2 2/3 to I.
25 - Both hands on II. On fifth 16th push II 1.
26 - Play l.h. on II, r.h. on I, add II-Ped. during bar.
27 - Push II 2 before beginning bar, play r.h. on II, l.h. on I.
28 - Add octave 4 before beginning bar, play both hands on II.
29 - Take off Octave before beginning bar, play r.h. on II, l.h. on I.
30 - same as bar 28.
31 - Push I 4 before beginning bar, play both hands on I an octave lower, add II-Ped. during bar.
35 - Push I 3 before beginning bar, play r.h. on I an octave lower and l.h. on III.
36 - Play r.h. on III, l.h. on I an octave lower.
37 - Play r.h. on I an octave lower and l.h. on III.
38 - Play r.h. on III and l.h. on I an octave lower.
39 - Push I 2 before beginning bar, play both hands on I.
41 - Take off Spitzflote before beginning bar, play r.h. on II.
43 - Push I 1 before beginning bar, play both hands on I.
45 - Push I 3 before beginning bar, play both hands on I an octave lower.
47 - Push II 1 before beginning bar, move r.h. to II.
48 - Move r.h. to I, play an octave lower.
49 - Push III 1 before beginning bar, play both hands on III from here to end.
The Roger-Ducasse *Pastorale* was written for the Romantic Organ, specifically a Cavaille-Coll. Because of the buildup of tonal forces in the middle of this work, it presents more of a challenge to the organist who wishes to register it in classic style. Many of the sections gain clarity and lightness from the simpler classic registration.

An example of this clarity is the beginning. In this recital, the right hand was played on the Manual II Rohrflöte 8' and Spitzflöte 4'. To accompany this clear, light sound, the Manual I Krummhorn was used for the left hand. This gave a large amount of contrast and a quaint "country-side" sort of sound, like a scratchy violin. The pedal was set with Quintadena 16' and Gedecktpommer 8'.

This registration continued to measure 14, when both hands played on the Manual II flutes. The pedal Subbass 16' was added here for melodic prominence.

At measure 17 the Subbass was withdrawn and the hands continued as at the beginning. Again at bar 31 both hands played on Manual II. Since there is no possibility for crescendo or decrescendo on Manual II, the player is challenged to make these bars expressive; this is done by careful nuance and rhythmic control.

At bar 53, the left hand continued on Manual II and the Krummhorn was replaced on Manual I by the Holzgedeckt 8', Spillflöte 4', and Gemshorn 2'. To realize the contrast indicated by the composer, the Gemshorn was removed at bar 37.
The composer indicates a change of manual at bar 39. For this presentation, the Manual I Nasat 2 2/3' was added to the Holzgedeckt 8' and Spillflöte 4'. The Gedecktpommer 8' was used alone in the pedal. At bar 41 the Nasat was withdrawn.

Both hands played on Manual II at bar 43, and the Nasat was again added to Manual I at bar 44 for the right-hand part. At bar 46 the Subbass 16' was added to the pedal.

The first half of bar 50 was played with both hands on Manual II, the second half on Manual I. At bar 51 the left hand played on Manual II and the right on Manual I.

A complete tonal change was made at bar 53, when the Manual II Spitzflöte 4' was used alone for both hands and played an octave lower. This stop has a quiet, rich sound which is very appropriate for this passage. At bar 55, after the quarter rest, the Flachflöte 2' was added.

At bar 60 the right hand moved to the registration set on Manual I (8', 4', and 2 2/3').

Bars 61, 62, and 63 were played on the Manual II Spitzflöte 4' alone (an octave lower). The clarity of this stop brings out the three voices in the right hand just as adequately as the elaborate registration used for the second version on this recital.

At bar 64, a general piston brings on the Manual II Rohrflöte 8' and Spitzflöte 4' for the right hand and the Manual I Holzgedeckt 8' and the Spillflöte 4' for the left
hand. The physical separation of these two sounds created an element of contrast in the two manuals, even though the registration of the two manuals should have produced an effect only slightly different in sound.

At bar 66 the **Subbass 16',** the **Gedecktpommer 8',** and the **Trompete 8'** were added to the pedal for this moderate buildup. At bar 68 the **Trompete 8'** was added to Manual II and the **Principal 4'** and **Nasat 2 2/3'** were added to Manual I.

Use of another general piston at bar 71 brought on the **Manual II Spitzflöte 4'** for the left hand and the **Manual I Spillflöte 4'** for the right hand. The left hand is marked **un peu en dehors,** and the **Spitzflöte** is slightly larger in scale and richer in color than the **Spillflöte.** The pedal **Gedecktpommer 8'** was used alone at bar 72.

The grand buildup of the organ starts at bar 81. It began with the left hand playing on Manual I set with **Holzgedeckt 8'** and **Spillflöte 4'** and the right hand playing on Manual II set with **Rohrflöte 8'** and **Spitzflöte 4'.** The pedal at bar 83 was still set with **Gedecktpommer 8'** only.

At bar 83 the **Octave 4'** was added to Manual II.

At bar 84 at the indication of manual change, both hands played on Manual I, to which was added the **Principal 4'** and **Nasat 2 2/3'.**

At bar 87, the **Gemshorn 2'** was added to Manual I for the right hand and the left hand moved to Manual II where
the Principal 8', Octave 4', and Superoctave 2' were set. Manual I was coupled to Manual II.

The Krummhorn was added to Manual I at bar 89 and both hands were played there. Though a crescendo on a Classic Organ is usually made by the addition of higher pitched stops, the Krummhorn adds an extra buzziness to the ensemble, even though it duplicates the pitch of the Holzgedeckt.

At bar 91, the right hand played on Manual II (Principal 8', Octave 4', and Superoctave 2') and the pedal was set with Principal 16', Octave 8', and Choralbass 4'.

Both hands played on Manual II at bar 93. With Manual I coupled to Manual II, the Scharf IV was added to Manual I at bar 94. At the same time, the pedal Posaune 16', Trompete 8', and Schalmei 4' were added.

At bar 99, the Dulzian 16', Trompete 8', and the Mixture V-VI were added to Manual II.

The final element of the crescendo came at bar 107, when the Cymbel III was added to Manual II.

These stop-adding procedures followed the suggestions mentioned previously. As few stops as possible were added each time there was a textural change or an indication for some kind of increase. Each addition was carefully weighed for its tonal impact, and the least forceful additions were made first. The loudest stops (and the highest) were added last.
The full organ combination that employs the smallest number of stops always sounds best. Not only do unneeded stops fail to increase the volume appreciable; they also render the tone less clear because of interference between their sound waves and those of essential stops.\textsuperscript{33}

At bar 112 the left hand played on Manual I and the right hand on Manual II. At bar 126 the hands came back together on Manual II.

At bar 132 the \textit{Contre Basson} 32' was added to the pedal for one final broadening of the pitch level.

The conclusion was registered simply, as was the entire piece. It begins at bar 133, and the Manual I \textit{Principal} 4' was used alone, played an octave lower. The pedal was set with \textit{Quintadena} 16' and \textit{Gedecktpommer} 8'.

At bar 138 the \textit{Spillflöte} 4' on Manual I was substituted for the \textit{Principal} 4'.

The epilogue section beginning at bar 142 was registered with the Manual II \textit{Rohrflöte} alone. No attempt was made to solo out the pedal, since the simplicity of the registration made all voices clear. No change of manual was made at bar 146 or 149 as indicated by the composer in order to keep the placidity of the single stop.

The 4' flute solo at bar 152 was played on the \textit{Spillflöte} 4', and the last two bars were played on the Manual II \textit{Spitzflöte} 4', an octave lower.

\textsuperscript{33}\textit{Ibid.}, p. 16.
CLASSIC VERSION OF ROGER-DUCASSE PASTORALE AS
PRESENTED ON THE SIPE-YARBROUGH ORGAN
AT TEXAS WOMAN'S UNIVERSITY

<table>
<thead>
<tr>
<th>Gen.</th>
<th>I</th>
<th>II</th>
<th>III IV (Encl)</th>
<th>Pedal</th>
<th>Couplers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>S.Fl. 4</td>
<td>S.Fl. 4</td>
<td></td>
<td>Gedeckt 8</td>
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<tr>
<td>5</td>
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<td>R.Fl. 8</td>
<td>R.Fl. 8</td>
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<td>II-Ped.</td>
</tr>
<tr>
<td></td>
<td>Prin. 4</td>
<td>Prin. 8</td>
<td>Octave 4</td>
<td>Octave 8</td>
<td>I-II</td>
</tr>
<tr>
<td></td>
<td>S.Fl. 4</td>
<td>Octave</td>
<td></td>
<td>C. Bass 4</td>
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</tr>
<tr>
<td></td>
<td>Nas. 2 2/3</td>
<td>S. Octave 2</td>
<td></td>
<td>Subbass 16</td>
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<tr>
<td></td>
<td>Gems. 2</td>
<td></td>
<td></td>
<td>Quint. 16</td>
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</tr>
<tr>
<td>6</td>
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<td>R.Fl. 8</td>
<td>R.Fl. 8</td>
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</tr>
<tr>
<td></td>
<td>S.Fl. 4</td>
<td>S.Fl. 4</td>
<td></td>
<td>Subbass 16</td>
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<td></td>
<td></td>
<td>Tromp. 8</td>
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</tbody>
</table>

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| I 1  | Ged. 8 | S.Fl. 4 | Prin. 4 | Nas. 2 2/3 |          |
| I 1  |        |        |          |            |          |
| II 1 |        |        |          |            |          |
| II 1 |        |        |          |            |          |

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<table>
<thead>
<tr>
<th>Ped. 1</th>
<th>Prin. 16</th>
<th>Octave 8</th>
<th>C.Bass 4</th>
<th>R.Quint II</th>
<th>Posaune</th>
<th>Trompete</th>
<th>Schalmei</th>
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| 3      | Subbass 16 | Quint. 16 | Gedeckt 8 |          |         |          |          |
| 4      | Gedeckt    |          |          |          |         |          |          |
Opening registration:

I  Krummhorn
II  Rohrflöte, Spitzflöte
Ped  Quintadena, Gedecktpommer

At beginning, play r.h. on II, l.h. on I.
3-1-3  - (page 3, line 1, bar 3) Play both hands on II, push Ped. 3 after first quarter.
3-2-3  - Take off Subbass.
4-3-1  - Play both hands on II, push Ped. 3 after first quarter.
4-4-1  - Change I to Gedeckt, Spillflöte, and Gemshorn.
4-4-3  - Take off Gemshorn.
5-1-3  - Add Nasat 2 2/3 to I, play r.h. on I, push Ped. 4 after first eighth.
5-2-2  - Take Nasat off I.
5-3-2  - Play both hands on II.
5-4-1  - Add Nasat to I and play r.h. on I.
5-4-2  - Push Ped. 3 during last half of measure.
6-3-1  - Play both hands on II; at mid-measure play both hands on I.
6-3-2  - Play r.h. on I, l.h. on II.
6-4-2  - Push II 2 before beginning measure, play both hands on II an octave lower.
7-1-1  - On quarter rest, add Flachflöte to II, continue as before.
7-2-2  - Move r.h. to I.
7-3-1  - Push II 2 before beginning measure, play both hands on II an octave lower.
7-4-2  - Push Gen. 6 before beginning measure, play r.h. on II, l.h. on I.
8-2-1  - Push II 3 and I 1 before beginning measure (without rhythmic hesitation), continue as before.
8-3-2  - Push Gen. 1 before beginning measure, play r.h. on I an octave lower, l.h. on II an octave lower.
9-4-2  - Before playing last quarter push Gen. 6 and Ped. 4, play l.h. on I.
10-1-1  - Play r.h. on II.
10-1-2  - Add Octave 4 to II.
10-2-1  - Before beginning third quarter, push I 1, play both hands on I.
10-3-2  - Push Gen. 5 before beginning measure, play r.h. on I, l.h. on II.
10-4-1  - Push I 2 before beginning measure, play both hands on I.
10-4-3  - Play r.h. on II, l.h. on I.
11-1-2  - Play both hands on II, push Ped. I during rest.
11-1-3  - Push I 3 with knee on first sixteenth.
11-3-2  - Push II 1 before beginning bar.
12-2-2  - Push II 4 just as bar begins.
12-4-2 - Play l.h. on I, r.h. on I.
14-1-1 - Play both hands on II.
14-3-3 - Push cancel before beginning bar, put on I Principal, play both hands on I an octave lower. During measure add Quintadena and Gedeckt pommer to pedal.
14-4-3 - Before beginning bar take off I Principal 4 and add Spillflöte. Continue with both hands on I an octave lower.
15-1-2 - Put on II Rohrflöte before bar begins and play both hands on II. Continue next three lines on II ignoring indications to solo voices.
15-4-2 - Play r.h. on I as written.
15-4-4 - Take off Rohrflöte and put on Spitzflöte before bar begins. Play last two bars on II with both hands an octave lower.
Conclusions Relative to a Suprastylistic Organ
and an Approach to the Registration of
Orchestral Textures in Organ Music

Before concluding the recital with a presentation of the Pastorale in traditional Romantic style, an attempt will be made to answer two questions posed by the introduction.

First, what type of organ is best suited to play not only the bulk of organ literature which was intended for the classic instrument but also the orchestrally conceived organ works of the Romantic Era? Assuming that the American-Classic Organ and refinements of this idea are actually Romantic Organs, are these instruments suitable for the bulk of polyphonic organ music? The answer is "no."

American-Classic organs of small and medium size cannot include enough mixture and mutation ranks and still provide Romantic voices. The large American-Classic instruments often do not feature the Werk princip idea of classic principal choruses of various pitches, in cases, stacked one above the other. The large number of 8' stops consumes too much room, causing the classic portions of the organ to suffer because of their necessary remoteness.

Can the Classic Organ (that is, the organ of the Schnitger type) play music of the Romantic Era? Essentially,
yes; the keyboards and pedals are the same. With the combination action provided by most builders of classic instruments, it is possible to play anything written for the organ. Stylistically, however, it is not possible.

The Classic Organ contains a small number of 8' stops (sometimes only one on a keyboard), no orchestral imitative stops, and no crescendo pedal. The small pipe scales and low wind pressures which produce a warm, intimate, sometimes nasal sound are far removed from the heavy, full-blown Romantic scaling of pipes on high wind pressures. Many times the Classic Organ will have no pipes enclosed in a swell box, or if it does, the Swell probably will not have the sound of a characteristic French or English Swell.

It is obvious that neither Romantic nor American-Classic instruments are the ideal types of organ for performance of all types of music. But there are many organists today who refuse to accept the Classic Organ as the proper medium for presentation of Romantic music. What we need then, is a suprastylistic instrument: an organ with a unique but integral design. This organ would be virtually a classic instrument, with mechanical action, slider chests, low wind pressures, open-toe voicing, but also with whatever basic essentials for Romantic music could be provided without losing the integrity, or classicity, of the instrument.
What are the stylistic essentials of an organ which is to play Romantic music?

1. At least one keyboard completely enclosed in an effective swell box. This division should include chorus reeds of 8' and 4' pitch, a harmonic flute, one narrow-scale non-imitative string stop of warm tone.

2. At least one other open flute on another keyboard beside the Swell. This may be a 4' stop.

3. At least two contrasting 8' flue stops on each keyboard.

4. A beating stop.

5. The mixture on the main keyboard should be divided so that low and high mixtures are available separately.

6. Tremulants, adjustable combination action, and electrically controlled stop action are necessary and are usually provided on classic instruments.

7. A crescendo pedal to control only those stops useful in building a crescendo.

A Classic Organ built with these Romantic ingredients would still be unacceptable to the Romantic ideal because there would not be a heavy, forceful preponderance of 8' tone; there would be few or no orchestral-imitative stops; and specific registrations called for by various Romantic composers would be unavailable. Romantic organ-building and playing experience has shown, however, that excesses in
scaling and wind pressures do not accomplish a musical goal; and orchestral imitations only lead the organ to the role of second class imitator. It is time now to return to building real organ stops which are not imitative of something else, both for solo stops and ensemble building. Stops of the Regal family, the Trompete and Krummhorn styles are just as useful and charming as orchestral imitations. Scalings of flue pipes must be moderate. Naturally, the use of an organ of this type for Franck, Roger-Ducasse, or Karg-Elert would often make specified registrations by the composer impossible. But this writer does not feel that the lack of Romantic organ voices is adequate reason for not playing the music. Whatever music is well constructed and valid will be successful on any well designed instrument.

Another question raised in the introduction: Is the performance practice of elaborate orchestral-style registration necessary or desirable?

Careful study of the scores of literally hundreds of composers from the sixteenth century to the present day, and familiarity with outstanding examples of organbuilders' art throughout the world during this entire period force upon the writer the conclusion that, although we already possess knowledge of the art of registration, and there is much still to be learned of its traditions, we nevertheless in contemporary practice tend to follow registration plans that are too elaborate and unnecessarily complicated.34

Though it may be true that the trend of elaborate registration on Romantic Organs has gone too far, it is necessary to suit the approach to registration to the instrument being used. The Romantic and American-Classic instruments almost demand an elaborate style of registration because of the many pallid colors often available. More artificial contrast, made by changing stops frequently, is required to substitute for the dullness of the sounds of the pipes.

A Classic Organ can use a classic style of registration. Ideally, each stop will be scaled, voiced, and placed for its optimum color and effectiveness, making each note interesting and colorful. The charm of a classic stop should make it interesting for longer periods of time than an orchestrally voiced stop.

Some music stands valid only when played on the registration specified by the composer. This reflects a weakness in the music. The registration of any piece of music must and should vary with the instrument. The player should choose those sounds which make the piece most successful on the instrument being used.

Though the classic instrument is very much in evidence in America today, remnants of the past are still in abundance. In order to perform successfully on all types of instruments, organists still need to cultivate the Romantic style of registration, and to use it when it seems most appropriate.
It would be a shame if the organ were to become a stereotyped design, or organ playing were to become completely monolithic in style, or organ literature were to become limited only to those works in classic style.

Our lives today are enriched because of the works of artist-builders of the past who chose to build individual instruments instead of stereotypes, and we have inherited from the past many different types of tonal approaches and action systems. In a free society we are still fortunate that we don't have to build organs of one system only as laid down by a guild, or church council or government commission.

The organ of the future must be capable of playing all the worthy music of the past as well as presenting a challenge to composers. It must be a unified instrument which seeks only to be an organ, not an orchestra or a piano. The organist of the future must nevertheless be prepared to play upon instruments of a degenerate era as well as on the daring new re-creations of Baroque excellence.

The twentieth century has proved to be an era of rapid change. 1969 presents hopes higher than ever before for a bright future for organists and organ builders. Hopefully our best players, builders, and composers will realize the importance of their mission.

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To conclude the recital, the Roger-Ducasse *Pastorale* was presented again, this time using a traditional, elaborate Romantic registration. The indications of the composer were used as a starting point and variants were made when the desired effect of the composer could be better realized.

To begin, the right hand played on the Enclosed Flûte Harmonique, the stop developed originally by Cavaillé-Coll and discussed previously in this paper. Since there was no other stop of string quality to substitute for the Viole de Gambe desired for the left hand, the narrow scale Manual I *Principal 4'* was used (an octave lower.).

At measure 14 the two stops were coupled as desired and the Subbass 16' was added to the pedal. The right hand part was soloed out at bar 16 on the Manual III *Gedeckt 8'* and the *Rohrflöte 4'*.

The registration of the beginning was reassumed at bar 18 except for the addition of the *Flûte octavienne 4'*. For an orchestral contrast, the Nazard 2 2/3' was added at bar 20. At bar 26, the *Flûte 8'* and 4' combination was used again. During all these passages, the swell box was operated as indicated.

At bar 31, the manuals were again coupled.

The effect designated by the composer at bars 34 through 38 is for a contrast of pitch. The first melodic fragment at bar 35 was registered with the Manual III *Gedeckt 8'* and *Rohrflöte 4'*. The second fragment at bar 37 was played on
the Manual I Principal 4' an octave lower. This gave not only a contrast of pitch but also a contrast of timbre. For reasons of balance, the Manual III Gedeckt would have been satisfactory alone.

At bar 36, the left hand moved to Manual II, set with Rohrflöte 8' and Gemshorn 8' (duplication of pitch for blurred timbre) in order to free Manual I for right hand passages on the next page.

Measure 39 is to be played on the Positif Gromorne. The TWU organ possesses only a thin, German Krummhorn, which is not fat or warm enough for this passage. Therefore, a registration of Holzgedeckt 8', Spillflöte 4', and Nasat 2 2/3' was used, with Tremulant. The pedal was set with Gedecktpommer 8' alone.

For the echo of this passage at bar 41 (for Flûte Harmonique) the Spillflöte 4' and Gemshorn 2' was used an octave lower.

Both hands played on Manual II (Rohrflöte 8' and Gemshorn 8') at bar 43. Bar 44 was played again on the Manual I Holzgedeckt 8', Spillflöte 4', and Nasat 2 2/3' combination. If there had been a very large-scale flute stop (such as Flauto Mirabilis) on this organ, it could have been used for this passage and not be covered by the accompaniment. Since none of the stops on this organ are of excessive scale, for prominence, more stops need to be used.
At bar 46 the left hand played on the Enclosed with a combination of both celestes and the two 8' flute stops.

At bar 47 this was changed to both celestes with the super-octave coupler. This heightened pitch brings out the melody at the top of the left hand. At bar 48 the imitation was brought out by coupling Manual III to the pedal. It was set with Gedeckt 8', Rohrflöte 4', and Regal 8'.

The first half of bar 50 was played on the celeste combination of the enclosed, while the second half was played on Manual II, set with the coupled Enclosed and the two foundation stops.

At bar 51, the right hand played on Manual II and the left on the Enclosed. The little phrase extensions in bar 52 were played as echos, the first on Manual III (Gedeckt 8' and Rohrflöte 4') and the second on the Enclosed.

A complete change in timbre was made at 53. The Flute Celeste with super-octave coupler was used for this.

At bar 55 the string celeste was added.

At bar 57 the pedal imitation was played on the Principal 16', coupled to the Enclosed. This gave a fair imitation of a String bass solo.

At bar 60, the right hand played on Manual III set with Rohrflöte 4' alone and coupled to the Enclosed.

At bar 61, a very elaborate effect was attempted. It is best shown by the following example:
Fig. 2--Pastorale, Roger-Ducasse, measure 61

Each of the three melodies in the right hand was soloed out on a different stop: the melody beginning with the quarter note C on the Flûte harmonique, the two sixteenths on E flat on the Manual II Gemshorn, and the eighth note melody on the Pedal Nachthorn 2'. At bar 62, the entire structure was played on the Flûte harmonique.

At bar 64 Roger-Ducasse has marked "les 2 claviers dans la même sonorité." To realize this, the Enclosed registration of Viole de Gambe 8' and Nazard 2 2/3' was coupled
to both Manual I and III. On each of these keyboards the 4' flute stop was drawn. With the separation of the key-
boards across the room, this dialogue was quite effective.

At bar 66, the Manual II Trompete 8' was used alone for the pedal passage.

At bar 68 the Manual III Gedeckt 8', Rohrflöte 4', and Principal 2' were added for the right hand and the Holzgedeckt 8', Principal 4', Gemshorn 2', and Krummhorn 8' added for the left hand. It was not at all effective on this organ to use the specified registration indicated by the composer. The first necessity of this passage is balance of the two hands.

Another complete change in timbre was made at bar 71. The right hand played on the Manual I Spillflöte 4' (realizing the direction of the composer) and the left hand played on the Enclosed Flute Celeste with super-octave coupler. With the pedal set with only the Enclosed to pedal at bar 72, the effect was very serene.

A general piston activated at the end of bar 81 prepared for the big climax. The left hand played on the Enclosed, set with flutes 8' and 4', the Viole 8' and the Nazard 2 2/3'.

At bar 82, the right hand played on Manual III, set with the Gedeckt 8'. The Enclosed was coupled to Manual III.
Since there was no large-scale flute, the Rohrflöte 4' was added to Manual III for the right hand at bar 83.

Both hands played on Manual III in the middle of bar 84.

Changing manuals for both hands at bar 87, the right hand moved to Manual I (with III and Enclosed coupled to it), set with Holzgedeckt 8' and Spillflöte 4'; and the left hand moved to Manual II (with III, I, and Enclosed coupled to it), set with Principals and flutes 8', 4', and 2'.

Both hands played on Manual I at bar 89. At bar 91, the right hand moved to Manual II and the pedal foundation stops at 16', 8', and 4' were added.

Both hands moved to Manual II at bar 93. The crescendo pedal was used from this point to add more stops. With sufficient practice, the "feel" of the pedal can be gained so that the organist can guess how far to push for Mixtures, Reeds, etc. At the beginning of bar 94, the pedal was opened to the Manual III Cymbal III. At bar 95 it was opened to the Manual II Mixture V-VI, and at bar 97 to the Enclosed Trompette 8' and Clarion 4'.

At bar 99 it was opened completely, bringing on the Enclosed to II super-octave coupler. During all these additions, the swell box was activated as indicated.

At bar 107, the Manual II Cymbal III was added, and at bar 110, the sforzando was activated, adding 16' reeds and flues to the manuals and the 32' reed in the p'edal.
No change in registration was made for bar 112, but the left hand moved to Manual I. The left hand rejoined the right hand at Manual 126.

In contrast to the "classic" version, the closing section was registered very elaborately. As directed by the composer, the string celeste was used at bar 134. The lowest left hand voice was, however, soloed out on the Manual II Dulzian 16' an octave higher. The pedal Basses douces were the Contre Gambe 16' and the Enclosed to Pedal coupler.

At bar 136 the pedal melody was soloed out on the Manual III Regal 8', Gedeckt 8', and Tremulant coupled to the pedal.

At bar 138 the Flöte Harmonique was used for the right hand and the lowest voice was soloed out on the Manual II Principal 8'. At bar 140, the pedal melodic line was reinforced by the Manual II Principal 8'. This pedal registration was retained through most of the last page to bring out the augmentation of the melody.

At bar 142, the celestes of the Enclosed, with super-octave coupler, were used. At bar 146, the right hand soloed out on the Gedeckt 8', Rohrflöte 4', and Tremulant of Manual III. (The Enclosed was coupled to III.)

At bar 148 the right hand moved to Manual III and the left hand to Manual I, where the Krummhorn 8' and Holzgedeckt 8' were set. Both hands were played on III at bar 149. On
the last beat of the measure, the stops on Manual III were cancelled, leaving the celestes from the Enclosed. The alto voice was thumbed on Manual II on the Principal 8'.

At bar 151, the left hand moved to the Enclosed, set with celestes and super-octave coupler. The right hand played on the Manual I Spillflöte 4' in bar 152.

On the last eighth of bar 153, the Manual II Gemshorn 8' was substituted for the Principal 8', and the last two bars were played on the Enclosed Flute Celeste with super-octave coupler.
Set the following combination pistons:

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<th>III</th>
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Pedal 1: all 16, 8, 4 flues
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Pedal 3: Quint. 16
Pedal 4: Gedecktpommer 8
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Opening registration:  
General 6, minus III R.Fl. 4  
IV-I coupler  
Subbass 16

2-1-2  - Play r.h. on IV, l.h. on I an octave lower.
3-1-3  - Push Gen. 6 before beginning measure, play  
both hands on I an octave lower.
3-2-2  - More r.h. to III, take off Subbass 16 on rest  
in pedal.
3-2-3  - Take off III R.fl. 4 and IV-I coupler on rests,  
play L.H. on III.
3-2-4  - Push IV 1 on rest and play r.h. on IV.
3-3-2  - Add Nazard 2 2/3 to IV during rest, continue as  
before.
4-1-2  - Push IV 1 on rest, continue as before.
4-2-3  - On last dotted quarter, take all but top note  
of chord with l.h., drop off tie to change  
manuals on.
4-3-1  - Push Gen. 6 before measure and play both hands  
on I an octave lower.
4-4-2  - Play r.h. on III.
4-4-3  - Move 1.h. to II, take off IV-I 4 coupler.
5-1-1  - Play r.h. on I.
5-1-2  - Push I 1 during rest.
5-1-3  - Play r.h. on I, push Ped. 4 on rest.
5-2-2  - Push I 2 on rest, play r.h. an octave lower.
5-3-2  - Play both hands on II.
5-4-1  - Push I 1 on rest, play r.h. on I.
5-4-2  - Push Gen. 5 during rest.
6-1-1  - Play 1.h. on IV.
6-1-2  - Before last two eighth notes in 1.h. of bar  
push IV 2.
6-2-1  - Push III-Ped. coupler on rest.
6-3-1  - Play both hands on IV until third beat, then  
both hands on II.
6-3-2  - R.h. continues on II, l.h. moves to IV.
6-4-1  - Before second "a" of bar push III 3 and play  
r.h. on III, on "a flat" play r.h. on IV.
6-4-2  - Push Gen. 4 before beginning bar, play both  
hands on IV.
7-1-1  - On rest, add Viole 8 and Celeste 8 and Pedal 3.
7-2-2  - Play r.h. on III.
7-3-1  - Push Gen. 3 before beginning measure, play both  
hands on III, except for octave "e flats" which  
are soloed out on II with r.h. and inner voice  
at bottom of r.h. which is soloed out on pedal.
7-3-2  - R.h. continues playing everything, but first two  
16ths which are doubled by the pedal.
7-4-2  - Push Gen. 2 before beginning bar, play r.h. on  
III and 1.h. on I.
8-2-1 - Push III 1 and I 3 before beginning bar.
8-3-2 - Push Gen. 4 before beginning bar. Play r.h. on I an octave lower, l.h. on IV, take off Pedal Gambe 16 during l.h. rest.
9-4-2 - Push Gen. 1 before last beat, play l.h. on IV.
10-1-1 - Play r.h. on III.
10-1-2 - Push III 2 on rest, continue r.h. on III.
10-2-1 - Play both hands on III beginning on third beat.
10-3-2 - Move r.h. to I and l.h. to II.
10-4-1 - Play both hands on I, push Pedal 2 during rest.
10-4-3 - Play r.h. on II, l.h. on I.
11-1-2 - Play both hands on II, push Pedal 1 during rest.
11-1-3 - Crescendo Pedal to Mixture on III.
11-2-1 - Crescendo Pedal to Mixture on II.
11-2-3 - Crescendo Pedal to Swell reeds.
11-3-2 - Crescendo Pedal full (With each addition in this crescendo the box should be closed and opened).
12-2-2 - Push II 4 before beginning bar.
12-3-2 - Close Swell box after big chords, add sforzando on next to last 16th of bar.
12-4-2 - Play r.h. on II, l.h. on I.
14-1-1 - Play both hands on II.
14-3-3 - Push Cancel before beginning, also remove crescendo pedal and sforzando pedal. Play r.h. on III an octave lower.
14-3-4 - Solo out lowest manual voice by playing on II an octave higher.
14-4-1 - Push III-Ped. coupler before pedal solo.
14-4-2 - Take off IV stops and put on Fl. Harm. and trem., take off IV-III 4 coup. and put on IV-III 8 coup.
14-4-3 - Take off Dulzian from II, put on Principal 8.
14-4-4 - Take off III-Pedal coupler, play lowest manual voice on II with l.h.
14-4-5 - Add II-Ped. coupler after "d flat" in pedal.
15-1-1 - During measure, take off Flûte Harmonique, put on Viole, Celeste, Fl. Celeste, and Coupler 4 on IV.
15-1-2 - Play both hands on IV.
15-2-2 - Push III 3 on rest. Play top voice on III with r.h.
15-3-1 - Play r.h. on III, l.h. on I.
15-3-2 - On second eighth, move l.h. to III, on fourth quarter push III 4 and play alto voice on II by thumbing down.
15-4-1 - Play l.h. on IV.
15-4-2 - Play r.h. on I with Spillflöte only.
15-4-3 - Just before last eighth note of bar, push II 2 and IV 4.
15-4-4 - Play last two bars on IV.
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