

The Organ in Lutheran Worship

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TRADITIONS OF CHRISTIAN WORSHIP, almost without fail, include the use of an organ. The organ has been and remains the instrument of choice for use in corporate worship, and it is most likely that the organ will retain this position well into the future.

Within Lutheran worship traditions the same is also true. In fact, the organ is used more extensively in worship by Lutherans than by many other church bodies. The situation within the Wisconsin Evangelical Lutheran Synod is, of course, no different.

Wisconsin Lutheran Seminary also shares in the tradition. It seems especially fitting, therefore, to mark the 125th anniversary of the seminary's founding by means of a project which has as its goal the replacement of the old pipe organ of the chapel. Acquiring a new instrument meeting the needs of the worshiping student body and faculty is another indicator that traditions surrounding the organ remain strong. The instrument and its use imply a continuation of the tradition at the - seminary and also, by implication, in the parishes of the WELS.

That the organ - its use, its literature and the instrument itself - has gained this primacy within Lutheran worship is no mere coincidence. The organ has acquired a secure place in worship traditions because of its acceptance as an alternate musical medium to the "sung" Word and its capacity to assist in the ministry of the Word.

As the basis for the faith, life and practice of the church, the gospel has an immense impact on the inner life of the

church and all that it does. The fine arts, particularly music, blossom forth as the church, living in the light of God's love, expresses itself. Already during the sixteenth century Lutheran music thrived and later reached unprecedented heights in the work of Johann Sebastian Bach. The organ has gained and held, as no other musical instrument has, a place within Lutheran worship traditions.

It is the purpose of this article, then, to present a brief history of the organ's function within corporate worship. Furthermore, the article will explore the role of the organ in the WELS. Finally, the article will present information concerning the new pipe organ as it has been designed to carry out specific tasks in the Wisconsin Lutheran Seminary chapel.

A BRIEF HISTORY OF THE ORGAN IN CORPORATE WORSHIP

The background for the present discussion of the organ's use in corporate worship is provided by the article entitled "The Use of the Liturgical Arts in Corporate Worship" by Professor James P. Tiefel. The article appeared in the previous issue of the *Wisconsin Lutheran Quarterly*, Volume 85, Number 2 (Spring 1988).

Professor Tiefel pointed out that the church's artistic expressions originate from its theology and the practices based on that theology. All the arts, regardless of the medium - painting, stained glass, symbols, sculpture, architecture, music - flow from what the artist, or his patron, believes about God and the relationship that exists between God and man.

The arts are a reflection of the inner life of the church and of its membership. The cross, for example, holds a prominent position in the church's symbolism. Were it to be removed or relegated to a less-than-prominent position, questions would immediately surface. Wherever and whenever the visual or aural arts are employed, they make a public confession of what the church and its task are.

Thus it is with music. The music literature which the church selects is an indication of its inner life. The instruments it employs, the people who are appointed to use them in worship, and the literature and how it is executed all are manifestations of the church's view of God, his divine acts and the dialog between God and man.

As a survey of the organ's earliest use in worship is made, it becomes apparent that the organ served only as a substitute for or an extension of the human voice. Most histories of church music include lengthy sections on the hymns, the liturgy of the mass and offices, and choral music. Only after the writers have discussed vocal music do they present information concerning instrumental music.

Musical instruments serve in a complementary capacity and are, therefore, never indispensable. It is interesting to note that for ten centuries of the history of Christian worship, music was almost exclusively monodic and vocal, *una voce* and *a cappella*. The relatively late appearance of instrumental music in Christian worship occurred not because it was essential but because it was considered an aid, an accomplice and an attendant to the vocal forms. When instruments are used, the texts and functions of the musical portions of worship remain intact; the instrumental sounds merely amplify, complement and assist the "sung" text and remain subject to their vocal origin.

Although vocal music is paramount and instrumental music subservient to it, the Scriptures sufficiently attest the use of musical instruments in Old Testament worship. An array of instruments accompanied the singing when King David brought the Ark of the Covenant to Jerusalem (2 Sm 6:5). As part of the prescriptions for temple worship, David called for certain instruments and had certain players (Levites) designated to play them (1 Chr 25:1-6). At the temple dedication musicians played cymbals, harps and lyres, and 120 priests played trumpets (2 Chr 5:12-14). There are many biblical encouragements to invoke the sounds of instruments to praise God. These are found in the Book of Psalms (e.g., Ps 92,108,149,150); but references to instrumental music are far fewer than references to singing. Instrumental music was used extensively in Old Testament worship, but its role remained secondary when compared to the recorded use of vocal worship.

The New Testament writings note frequent occurrences of singing (Mt 26:30; Ac 16:25; Jas 5:12; Eph 5:19). Instruments, however, receive only occasional mention and then only in connection with certain customs (Mt 9:23;11:17) or in illustrations (Mt 6:2; 1 Cor 13:1; 14:7,8). While Old Testament worship made use of instruments, the Gospels record no occasion where Christ or his disciples used them. This may be because little instrumental music was part of synagogue worship.

Conflicting views of instrumental music in worship have been expressed by church leaders throughout the centuries. One view contends that when man takes earthly materials such as wood, metal and skins and shapes them into instruments and produces music on them, he offers the Creator a gift, something reserved for God alone. The opposing view holds that the sounds of instruments appeal to human nature in a sensuous manner, the baseness of which is an intrusion of the secular into the sacred realm of worship. In many instances the church fathers excluded instruments because of the roles accorded them in ancient civilizations and their inseparable link with idolatrous worship and pagan moral depravity. Thus in early times the flute and oboe were considered too erotic, the trumpet too bellicose and the organ too theatrical for use in worship. In the church fathers' attempts to exclude the profane, instruments were excluded from worship entirely. There were exceptions, however.

Nevertheless, once time had dimmed the memory of pagan rituals, vocal music was augmented by instruments without much reluctance. During the later Middle Ages almost all available instruments - the organ, harps, guitars, lutes, flutes, sackbuts, cornets and others - were used with vocal music. When first permitted to enter worship, instruments merely "doubled" the already existing vocal parts. Thus a consort of flute-like instruments (*Blockfloeten*) might sound the same notes as the choir. For that reason copies of early instrumental music are not much more than scores for vocal music.

The early history of the organ's use substantiates the thesis that its use was firmly anchored in the liturgical service and that it was a companion to the sung texts. A musical practice in the late Middle Ages and the Renaissance evolved in which liturgically related texts -the Ordinary of the mass, hymns, canticles, sequences, for example - were performed in alternation between choir and organ.

It is not surprising that the earliest extant organ music is a collection of versets to be used in connection with the Ordinary of the mass, Psalms, canticles and office hymns. As early as the 1400s mass organ movements are found in

the *Buxheimer Orgelbuch*. The sixteenth-century tablatures of Hans Buchner contain similar material. Verses of the *Magnificat* were among the most frequent settings for the organ and were intended for use in alternation with the sung verses.

The Lutherans readily accepted and enlarged on the instrumental practices already in existence in the pre-Reformation church. Luther, clearly stating his views on music, claimed that music is one of God's great gifts to man and that it was intended to be used for praising the one who created it. While Luther does not discuss the organ in his writings, his opinion that Christians had the freedom to use all music helped to make possible the elaborate traditions of organ music that developed in subsequent centuries.

In spite of the fact that Luther doesn't provide us with his views concerning the organ as a worship instrument, there are other indications that the organ was used regularly in sixteenth-century Wittenberg. His co-workers, Justus Jonas and Johannes Bugenhagen, wrote that organs, where such already existed, could be used on Sundays for the *Te Deum laudamus* and whenever German hymns were to be sung.

In giving an account of a service he attended on May 28, 1536, at the *Pfarrkirche* of Wittenberg, Wolfgang Musculus indicates several ways in which the organ was used. He mentions that the first part of the mass had all parts sung by the choir but that this also involved the organ. He reports that the Introit, the Kyrie and Gloria were rendered in alternation between the choir and organ, and that two hymns sung by the choir were preceded by an organ intonation. Thus we observe that the organ was used liturgically in Lutheran worship during Luther's lifetime.

In later orders of worship additional references to the organ's use are made. Some specific references to its use are these: alternation with choir in the Ordinary, intonations to the *Wir glauben all'* and joining in the rendition of the *Jesaja, dem Propheten*. By 1600 it appears that the organ was viewed as a companion in the Ordinary of the mass as well as for the Introit, for the Gradual and the increasingly popular Sequence and for German hymns used between the Epistle and Gospel readings.

The organ's role in connection with congregational hymn singing during the sixteenth century seems to be surprisingly limited, however. While it was used to intone the hymn and Ordinary of the mass and to play versets interspersed between choir and congregational stanzas, its use to accompany the congregational hymn seems to be a later development. During this period congregational hymns were led by choirs, including those drawn from the school classes. That children's choirs also were used

liturgically is attested by the many singing textbooks of the late 1500s, all of which have as their goal sight singing with applications to the liturgy of the worship service. The practice of restricting the organ to hymn introductions and alternating versets seems to have continued well into the seventeenth century, but the practice of using the organ as an accompanimental instrument had to await another development.

During the 1500s and early 1600s the publication of chorales in the *cantional* style contributed greatly to the use of the organ as a leader of congregational singing. The *cantional* style is a designation for homophonic four- or five-voice settings of congregational hymn tunes. These settings made it possible for the organ to replace the choir as a leader of congregational singing. In later *cantional* style settings the melody was moved from the tenor to the soprano voice, and with the 1586 publication of Lucas Osiander's collection this practice was firmly established and became the norm for subsequent publications. The *cantional* style settings, available through a proliferation of publications, were intended to be sung by the choir in parts while the congregation sang the melody. As the use of these settings became common, instruments played along with the choir and eventually replaced it. The organ also gradually assumed a role in this development, and by the late 1600s it seems the organ had become the leader of the congregational hymn singing.

The *cantional* style settings provided the church with many fine chorale harmonizations. Among the contributors to this body of literature were M. Franck (1602), S. Calvisius (1597), J. Eccard (1597), M. Vulpus (1604), H. L. Hassler (1608) and M. Praetorius (1609-10). Reference to the use of these hymn settings as organ accompaniments are found in the *Hamburger Melodey-Gesangbuch* (1604), the work of H. Decker, H. Scheidemann and J. and H. Praetorius. With the appearance of the 1627 collection of J. H. Schein, the use of vocal settings for accompanying congregational singing seems to end. Hereafter the organ with its own *Choralbuch* replaced the choir and its settings. Among the more significant chorale settings intended for the organ is the 1650 *Goerlitzer Tabulaturbuch* of Samuel Scheidt. Scheidt's collection provides some especially artistic arrangements intended for the organ alone. These and other similar arrangements were used as accompaniments for congregational singing and also as alternate organ settings for use in the *Alternatimpraxis*.

As was mentioned earlier, it is apparent that the organ's earliest use in worship was one in which it served as an accessory to the vocal portions of the service. That original purpose remained intact through the eighteenth century. Serving as a servant to the sung Word, the organ played

intonations, alternate settings and occasionally elaborations on the melodies. Later it also assumed the task of accompanying the congregational singing. Concurrently with the appearance of the large body of Lutheran hymnody, a vast quantity of chorale preludes was produced. Historically, such chorale preludes functioned as intonations, as versets in the *Alternatimpraxis* or as independently performed organ compositions. It should be stated that there is no consistency in the use of the terms organ chorale, chorale prelude or hymn prelude; all designate existing organ compositions which treat a chorale melody in some manner.

In the development of the chorale prelude the work of Jan Pieterszoon Sweelinck (1562-1621) is of great historical significance. Sweelinck's many German pupils carried his techniques for chorale-based composition into Lutheran areas. Many composers of organ music used Sweelinck's style. The quantity and quality of the chorale-based compositions composed by these many organists are amazing. These compositions remained the center of all Lutheran liturgical organ music, and their position has not been lost with passing centuries.

Eventually, seven types of chorale preludes evolved, each using the chorale melody differently. These types are: 1) the *cantus firmus* chorale, in which the melody appears in long notes, usually in the bass voice; 2) the chorale motet, where each melody phrase is treated imitatively, creating a succession of mini-fugues; 3) the chorale fugue, in which the first line of the melody is used as a fugal theme; 4) the melody chorale, the most commonly used form, in which the melody appears in the soprano voice accompanied by contrapuntal figures often derived from the melody; 5) the ornamented chorale, where the melody is treated in an elaborate and expressive manner; 6) the chorale fantasia, which uses melodic motives in a free manner; and 7) the chorale and variations, also termed the *partita*, in which a chorale and a number of rather brief variations are grouped together. Chorale-based organ compositions using one or more of these forms comprise the bulk of liturgical organ music used in our services today. Since these compositions are so closely tied to the tune and text, this is not at all surprising.

The chorale prelude reached its ultimate level of development with the great J. S. Bach (1685-1759), after which further interest, with only a few exceptions, waned. Pietism and Rationalism, both of which had a devastating effect on liturgical music, caused a cessation of further chorale-based composition. Where Luther and Bach recognized music as a gracious gift of God and an art to be employed to his glory, in Pietism's remodeled view the purpose of music stressed the upbuilding of the worshiper.

The effects of this anthropocentric view of church music remain with us today. Under the influence of Pietism the treating of fixed liturgical texts gave way to using texts which aimed to edify the hearer. Because music needed to edify, it had to be so devised that it communicated and appealed to man and his emotions. With an emphasis placed on piety and devotion, organ music once created for God's glory alone gave way to that which was directed toward man.

What Pietism did not destroy Rationalism and the Enlightenment did. Worship music, now intended to edify man rather than to glorify God, had to communicate. To do so, music had to be simple and popular. A wave of amateurism soon developed in which simplicity was the ideal. By establishing edification as music's chief purpose, doors were opened to extra-liturgical musical literature. "To beautify the service" now became a purpose of church music. It is not surprising, therefore, that much nonreligious music - operatic arias and orchestral transcriptions - came into the worship service. Luther's view that music was for God's glorification was overlooked, and the church, after the first half of the eighteenth century, made no significant contribution to its music.

The effects of Pietism, Rationalism and the Enlightenment became intertwined with the nineteenth-century Romantic notion of "the heavenly in music." Attempting to stem the nonliturgical excesses of church music, the Caecilian movement sought to discover, study, perform and foster Renaissance vocal music. The predilection for the old tended to create an "approved" style, the results of which have persisted to some extent to this very day.

What has the chaos of Pietism, Rationalism, the Enlightenment, Romanticism and Caecilianism done to the organ and its use in Lutheran worship? Much! First, organ music did not exist for the sole purpose of glorifying God, nor was it any longer linked inseparably to liturgically dictated vocal texts and melodies. The chorale preludes and the *Alternatimpraxis* gave way to organ literature contrived and performed for its effect on the worshiper. So-called "free" preludes, often totally bland in structure and effect, were used to beautify the service and to create a churchly effect. Eventually, the music of the concert hall, in the form of organ transcriptions, was heard, effecting entertainment rather than worship of God. This is the period from which "Here Comes the Bride" became an accepted wedding selection. This is the time when organ compositions were named "Consolation," "Prayer," "Devotion" and "Triumph." Somewhat more conservative but yet of questionable worth are the volumes of free organ music composed in the most-used major and minor keys by Rossini, Merkel, Ricky and others. Does this sound too close to home? Yes, it does! The

struggle to rid us of these things continues.

Secondly, the organ itself during the same period deteriorated greatly. From an instrument of vitality and integrity capable of playing the wealth of liturgical literature it claimed as its own, it reached a point at which it no longer could play its literature well. In fact, the church organ frequently omitted the ranks of pipes needed to lead congregational singing effectively. The organ reached its lowest point in the United States from the 1920s to the 1950s. During its years of decadence even the smallest organ was felt to need a Vox Humana rank (to mimic the vocal sound), or a Vox Celeste (so named because it was considered a "heavenly voice"). The pedal division was stripped of its full complement of ranks and left with only a bass stop or two, thereby rendering it incapable of playing a melody. The organ was installed into chambers making expressiveness by means of dynamic gradations achievable.

Again, does all this sound familiar? It is to the writer, who knows such organs only too well. To illustrate the organ described, consider the specifications for an organ built in 1927, installed into a WELS church building and recently scheduled for replacement.

<i>Great Organ:</i>	8' Open Diapason	61 pipes
	8' Melodia	73 pipes
	8' Dulciana	61 pipes
	8' Tuba	61 pipes
	Chimes	
<i>Swell Organ:</i>	16' Bourdon	12 pipes
	8' Stopped Diapason	85 pipes
	8' Salicional	73 pipes
	8' Vox Celeste tc*	49 pipes
	4' Flute d'amour	-
	2 2/3' Nasat	-
	2' Piccolo	-
	Vox Humana	61 pipes
	Tremulant	
	*treble clef, indicating a partial rank of pipes	
<i>Pedal Organ:</i>	16' Subbass	12 pipes
	16' Bourdon	
<i>Couplers:</i>	Complete set for all divisions, at all pitches	
	Swell Expression Pedal	
	Crescendo Pedal	

But the history of the pipe organ does not end in the dismal state described above. The Organ Reform Movement, the *Orgelbewegung*, has brought about organs with authentic

designs similar to those followed in the construction of seventeenth-century organs. Such instruments serve the Lutheran liturgical needs much better. During the last two decades some WELS churches have had excellent organs installed. Furthermore, many organs installed during the "low point" of organ construction are now due for replacement or reconstruction. It is expected that the number of congregations using organs meeting fully the liturgical demands of the Lutheran service will continue to increase.

THE CURRENT ROLE OF THE ORGAN IN THE WORSHIP LIFE OF THE WISCONSIN EVANGELICAL LUTHERAN SYNOD

The organ fulfills its purpose in worship by producing music at various points in the service. First, it is customary to use the organ prior to the worship service itself. Pre-service music is linked to the service proper when priority is given to compositions which use the tunes of the worship service. The *de tempore* hymn, the so-called "Hymn of the Week," is given prime consideration for selecting organ music. A study of the Sunday hymns also reveals a theme on which organ music is based. When no chorale-based literature is available or accessible to the organist, free compositions carrying the spirit of the service are used.

Of greater importance than pre-service music, and rightfully deserving more preparation, are the hymn intonations and hymn accompaniments. Historically, the Lutheran organist always "preludized" on each hymn. In so doing, the organist complements the hymn about to be sung with a prelude or intonation. This practice leaves little room for extra-liturgical performances since the organ music is closely associated with the hymns of the congregation. In today's culture, however, parishioners do not tolerate the performance of the more lengthy preludes of the seventeenth and early eighteenth centuries. Contemporary Lutheran composers, however, have produced and are producing short intonations, many of which are of fine quality and require only a modest organ technique.

To serve the hymn texts and the singing of them, it is assumed that well-chosen settings are used when the organist accompanies the congregation. Generally, the setting printed in the hymnal is used, sometimes so exclusively that some consider it nigh unto a "God-ordained" harmonization. While there are some valid arguments that worshipers find varied accompaniments disturbing, there also are reasons why all stanzas need not be sung to an identical harmonization or identical organ registration. When the organist employs skill, good musical sense and artistry in making modest changes in the

harmony, texture and organ registration, congregational singing is stimulated. Serving the Word alone, such adjustments are made with a focus on textual content and do not draw undue attention to the musical process or to the organist.

The *Alternatimpraxis*, particularly on festive occasions, provides another area where organ music complements the hymn singing. The organ can take a stanza with worshipers following the text silently and reflectively. At such times the congregational hymn also takes on an additional dimension when the organ's sound is complemented by the use of other instruments.

Organ music is usually performed when the offering is received. The music thus performed is sometimes called a voluntary - a free piece, or a prelude, used at some point in the service. Because of the proximity of the offering and the singing of a hymn, it is fitting to select an organ composition using the tune of that hymn. When that is not possible, a free prelude reflecting the mood of the service or season is also appropriate.

Following the tradition of singing a hymn during communion distribution, it is self-evident that interludes between stanzas are based on that hymn melody. Keeping the organ linked to the text and tune leaves little room for ill-chosen music.

The postlude is a summary of the service. The Word is served when the postlude uses one of the hymn tunes of the service and when it is reflective of the service theme. In addition to hymn-based compositions, the vast body of free organ literature serves well if the composition being played is in agreement with the spirit and mood of the service just completed.

In addition to the Sunday worship services, organists provide fitting music for special situations such as weddings, funerals, dedications and the like. What is well-chosen is that which is linked to the Word. When non-liturgically oriented music is performed, the possibility exists that the Word is not served. The music of the wedding service is not for entertainment or for the bride; it is for the glory of God, and it is to serve the gospel. Popular tunes coupled with pseudo-religious texts are strangely out of place in Lutheran worship. For funeral services no formal funeral march or music entitled "Consolation" or some other such name is necessary. A sturdy yet simple chorale setting at both the beginning and the end is always fitting.

In summary, the central guideline for the use of organ music in worship services is this: organ music serves 1) the Creator and worshiper, 2) the spoken Word and the hearer

and 3) the sung Word and the singer. For these reasons organ music achieves its highest purpose when chorale-based literature is used extensively with only an occasional complement of free works.

THE DESIGN OF THE NEW PIPE ORGAN FOR THE CHAPEL OF WISCONSIN LUTHERAN SEMINARY

In designing an organ for the Wisconsin Lutheran Seminary chapel, the designer considered all that was presented in Parts I and II of this article. Each detail - the organ timbre, the placement and layout, the decorative features and the mechanical details - had to be in agreement with the functions of the new pipe organ within the chapel. This procedure was essentially a "form-follows-function" process.

The new chapel organ will be used when the students and faculty meet together for daily worship. The most important musical component of this worship is the singing of hymns and liturgical responses. First and foremost, therefore, the organ will function in chapel worship as it has historically in Christian worship, as a facilitator of the sung Word. For that reason the organ includes the timbres and the intensity to lead the hearty singing of the seminary's male student enrollment and faculty.

Secondly, the organ should have the ability to accompany rehearsed vocal literature. While choirs and soloists generally do not sing in daily chapel worship, it is reasonable to assume that at least occasionally such music requiring an organ will be used. For this function the organ needs a few timbres somewhat different from those intended for leading the singing of congregational hymns. Thirdly, and hierarchically last, the organ will function as a solo instrument. For daily worship it will provide the pre- and post-chapel music, frequently drawing on the chorale-based as well as free organ literature. The organ will also be employed to provide the hymn intonation, again drawing on the vast body of literature existing for the purpose. To meet such demands, a few more colors had to be added to those already selected for the two purposes discussed above.

In creating a fitting set of specifications for the organ, its designer considered three chief functions: hymn singing, accompanying choirs and performing solo literature. To lead the vigorous hymn singing of the students and faculty the organ had to have principal choruses of varying intensities. To achieve this, ranks of pipes designated as principals were selected at proper pitch levels - 8', 4', 2' and higher.

To achieve the organ's accompanimental task, several non-principal ranks were added. These, the so-called flutes or *Gedackts*, provide the less intense timbres especially suited for use with choirs.

The solo literature of the organ, most of which is chorale-based, dictated the addition of several other sets of pipes. To the principal and non-principal pipes selected for the former two functions were added such as can provide foreground (solo) registrations on each of the three divisions - Great, Swell and Pedal - and background (accompaniment) registrations, again on each division.

A genuine "Lutheran" organ evolved which was designed to do that which an organ is expected to do within the context of Lutheran worship. The uniqueness of the seminary chapel and of the worship in the chapel, furthermore, contributed to the overall design. For these reasons the new pipe organ is an instrument peculiar to the Lutheran worship traditions as they exist within the seminary chapel.

That only the finest worship instrument practical would become a reality, it was mandatory that skilled, talented organ builders with vision and a keen understanding of and appreciation for the functions of the new organ be considered. Although the list of reputable American organ builders capable of meeting the wishes of both purchaser and designer was long, the list was eventually reduced to only a few companies. At this writing no contractual agreements have been completed with a builder. Formal action on the part of the seminary board will, however, finalize the legal details necessary for the construction of the instrument.

CONCLUSION

Will the new pipe organ for the seminary chapel, marked as the 125th anniversary project, meet the high aims envisioned for it by the seminary? Will it serve to glorify the Creator of all music? Will it serve well to lead the sung Word? Will it serve well into the twenty-first century? Will the new organ have an impact on the worship life of our congregations as pastoral candidates take up their work? With God's blessing, it will!

For 125 years of blessings and for a new worship instrument we exclaim, "To God alone be the glory!"

ADDENDUM

The following charts illustrate three basic registration groupings necessary to, meet the demands placed on the new organ. The three groupings are 1) the principal chorus, also called the principal plenum; 2) the non-principal chorus, also called the flute chorus; and 3) the solo registrations.

REGISTRATIONS PROVIDING PRINCIPAL CHORUSES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<i>GREAT</i>																	
8' Principal	+	+	+						+	+	+	+	+	+	+		
8' Rohrfloete				+	+	+	+	+									
4' Octave	+	+	+	+	+	+			+	+	+	+	+	+	+		
4' Nachthorn							+	+									
2' Waldfloete																	
2' Mixture IV (dd = 2')		*	+		-	+	-	+		-	+			+	+		
8' Trumpet									+	+	+				+		
<i>SWELL</i>																	
8' Gedackt												+	+	+	+	+	+
8' Salicional																	
4' Spitzfloete												+	+	+	+	+	+
2' Principal												+	+	+	+	+	+
2 ² / ₃ ' & 1 ³ / ₅ ' Sesquialtera II (dd = 2 ² / ₃ ')													-	-	-		-
<i>PEDAL</i>																	
16' Subbass		+	+	+	+	+	+	+	+	+	+	+	+	+	+		+
8' Floetenprincipal	+	+	+	+					+	+	+					+	
4' Choralbass	+	+	+						+	+	+					+	
16' Fagotto									+	+	+					+	
<i>COUPLERS</i>																	
Great/Pedal			+		+	+	+	+			+	+	+	+	+		
Swell/Pedal												+	+	+	+	+	+
Swell/Great												+	+	+	+		

*The first of the double draw; Mixture = 2' alone, Sesquialtera = 2 ²/₃' alone

REGISTRATIONS
PROVIDING
BACKGROUND

REGISTRATIONS
PROVIDING
FOREGROUNDS

	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7
<i>GREAT</i>																
8' Principal																
8' Rohrfloete	+	+	+							+						
4' Octave																
4' Nachthorn			+	+												
2' Waldfloete				+						+						
2' Mixture IV (dd = 2')																
8' Trumpet											+					
<i>SWELL</i>																
8' Gedackt				+	+		+		+				+	+	+	+
8' Salicional						+	+	+	+							
4' Spitzfloete					+			+	+						+	+
2' Principal								1								+
2 2/3' & 1 3/5' Sesqui- altera II (dd = 2 2/3')													*	+	+	+
<i>PEDAL</i>																
16' Subbass		+	+					+	+	+						
8' Floetenprincipal																
4' Choralbass													+			
16' Fagotto																
<i>COUPLERS</i>																
Great/Pedal	+	+	+													
Swell/Pedal				+	+	+	+	+	+							
Swell/Great																

*The first of the double draw of the Sesquialtera = 2 2/3' alone

A set of specifications was developed encompassing sixteen voices having twenty ranks of pipes and 1012 pipes. The incorporation of these voices resulted in a very modest pipe organ intended to serve the three musical and worship functions of the chapel - hymn singing, accompanying choirs and performing liturgically based solo literature.

STOPLIST FOR THE NEW PIPE ORGAN TO BE ERECTED IN THE CHAPEL OF WISCONSIN LUTHERAN SEMINARY

GREAT	1.	8' Principal	56 pipes
	2.	8' Rohrfloete	56 pipes
	3.	4' Octave	56 pipes
	4.	4' Nachthorn	56 pipes
	5.	2' Waldfloete	56 pipes
	6.	2' Mixture IV (dd)*	224 pipes
	7.	8' Trumpet	56 pipes

SWELL	8.	8' Gedackt	56 pipes
	9.	8' Salicional	56 pipes
	10.	4' Spitzfloete	56 pipes
	11.	2' Principal	56 pipes
	12.	2 2/3' & 1 3/4' Sesqui-	100 pipes
		altera II (dd)* Tremulant	

**Double draw; a mechanical arrangement whereby a single rank of pipes contained in a compound stop is drawn separately.*

PEDAL	13.	16' Subbass	32 pipes
	14.	8' Floetenprincipal	32 pipes
	15.	4' Choralbass	32 pipes
	16.	16' Fagotto	32 pipes

COUPLERS	Great/Pedal
	Swell/Pedal
	Swell/Great

There are features other than the stoplist which were taken into account. The matter of placement within the chapel was explored with two areas considered - the existing front two organ chambers and the rear chapel area. The old chambers, originally designed to house an organ of a radically different concept and design and to conceal unsightly organ components, were judged to provide a musically inferior space. The utilization of the rear floor area permitted, on the other hand, a freestanding instrument situated on the central axis of the chapel. This placement takes advantage of the sound-reflecting surface of the ceiling, walls and floor. All this, it was felt, would contribute to the acoustical requirements of a quality organ installation.

Another factor considered was the action. The action is the "harness" or the mechanism required to make the connection between the organist and the organ pipe. Two options were open for consideration - electric and mechanical, also called tracker, action. Mechanical action allows the organist to exercise subtle control over pipe speech. Furthermore, mechanical action makes possible an overall "purer" design. Another factor is that mechanical-action organs last longer and require less maintenance. It was also noted that many highly respected organ builders manufacture organs with such actions.

To enhance the tonal scheme of the organ, as well as the chapel itself, great care was given to the visual effect of the instrument. To achieve this goal, the organ was designed with solid oak cabinetry placed on the sides, the rear and the roof of the organ. Also included was a formal pipe facade using pipes fabricated of an alloy of 90 percent tin and polished to a high luster. "An organ should be pleasing to the ear and to the eye."