Normal	Shift	Option	Shift+Option
1-0			
Virga	Rhombus	Porrectus (2nd)	Porrectus (3rd)
Q-P			
Left Virga	Tops	Left Side Bar*	Right Side Bar
A-;			
Punctum	Bottom	Quilisma	Custos
Z-B			
Staff Lines	Clef Signs	Ictus (lower)	Ictus (higher)
Dots (lower)	Dots (higher)	Episema (lower)	Episema (higher)
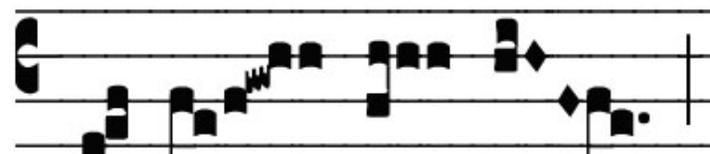
Grave   Hyphen   Equal   Right [Left]   Backslash   Apostrophe

Ø = Option Key. To access these signs, hold down the option key and type the first letter. After releasing the option key, type the second letter: upper or lower case.

| Øea ØeE | Øia | Ø`a Ø`A |
Øei Øeo	Øie	Ø`e Ø`i
Øeu	Øio	Ø`o Ø`u
	Øiu	Øna ØnA
	ØnN	Øno ØnO

Porrectus – 4th
Øua ØuA Øue
Øui Øuo ØuO
ØuU Øuy

StMeinrad A

*For Øe, Øi, Øu, and Øn, the letter must be typed a second time, i.e. Øee, Øii, Øuu, and Ønn
Ap[ostrophe lower and upper case will not work with automatic quotations.
Flats and Naturals are also found on Ø`E, ØiE, ØuE, ØiU, ØuY.
Ø` and SØ` connect the lines above and below the staff. Ø[and Ø] are low and high episemas.

StMeinrad Fonts 2002

TrueType Fonts
for Creating
Gregorian Chant
on the Macintosh

Harry Hagan, OSB
Saint Meinrad Archabbey

	Normal	Shift	Option	Shift+Option
1-0				
	Aug. Punctum	Dim. Top	Porrectus 2nd	Porrectus 3rd
Q-P				
	Liqu. L. Virga	Top with Stem	Left Side Bar*	Right Side Bar
A-;				
	Dim. Clivis	Liqu. Bottom	Oriscus	Apostropha
Z-B				
	Staff Lines	Celeriter	Dimished Punctum	
	Tenete (lower)	Tenete (higher)	Augmented Apostropha	

Grave	Hyphen	Equal	Right [	Left]	Backslash	Apostrophe

Ø = Option Key. To access these signs, hold down the option key and type the first letter. Release the option key and type the second letter.

Øea ØeE		Øia		Ø`a Ø`A	
Øei Øeo		Øie		Ø`e Ø`i	
Øeu		Øio		Ø`o Ø`u	
		Øiu		Øna ØnA	
		ØnN		Øno ØnO	

Øua ØuA	
Øue Øui	
Øuo ØuO	

StMeinrad B

*For Øe, Øi, Øu, and Øn, the letter must be typed a second time, i.e. Øee, Øii, Øuu, and Ønn
Apostrophe lower and upper case will not work with automatic quotations.
Flats and Naturals are also found on Ø`E, ØiE, ØuE, ØiU, ØuY.
Ø` and SØ` connect the lines above and below the staff. Ø[and Ø] are low and high episemas.

Øy SØ6 y

Øy SØ6 6

Øy Ø6 v 6 f

Notes with dots:
f , v

g < v

G H < . v
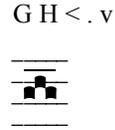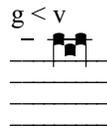
F T M < v
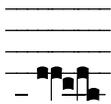
StM B
grave accent
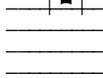
StM B
~

connected episema
SØ. over each note

ictus (low)
(high)
Øc h

ictus (high)

SØc j

episema (low)

Ø, g

episema

SØ, h

apostropha
SØh SØh SØn

clivis dim.
u h

podatus dim.
G ^

rhombus dim.
6 z % Ø`i

St Meinrad Fonts 2002

TrueType Fonts
for Creating Gregorian Chant
on the Macintosh

Harry Hagan, OSB
Saint Meinrad Archabbey

The fonts St. Meinrad A and St. Meinrad B are versions of the StMeinrad-A and StMeinrad-B which were adapted from StMeinrad and StMeinradAux.

Another set of fonts have been produced for Microsoft® Windows™.

These fonts and the accompanying charts may not be reporduced, stored, or transmitted in any way without written permission from
Office of Liturgical Music
Saint Meinrad Archabbey
100 Hill Dr.
St. Meinrad, IN 47577

The Copyright Claims of the Abbey de Solesmes

In addition to their copyright of their interpretation of the Latin chant in their various editions, the Abbaye de Solesmes also claims a French copyright of certain newly designed neums as well as certain new combinations. Although American copyright law provides no such protection, this font provides other designs to avoid any conflict with the cliam of Abbaye de Solesmes.

Finally, just as the creator of a new Roman font cannot take responsibility for the plagarizing of material, so also St. Meinrad Archabbey assumes no responsibility for the infringement of any copyright by means of this font. In all cases, permission must be sought from the holder of any copyright.

Examples

StMeinrad A is normal, and StMeinrad B is underlined.
Capital Letter = Shift Key
Ø = Option Key SØ = Shift + Option Key

punctum	podatus 2nd	podatus 3rd	podatus 4th
B v v f	F T	F Y	F SØu U
quilisma	quilisma	custos	bivirga
f Øg Y	f Øg v 6 f	SØf	6 z 6
clivis	clivis	climacus	climacus
y g	y Søy f	6 z % $	6 z % b b #
torculus	torculus	torculus	toruclus
f g f	f Y g	g 6 f	f Y Øy f
torc. aug.	initio debilis	torc. debilis	
g h 5	/ h 5	g h /	
porrectus			
Øy Ø6 Y	Øy Ø6 u	g c Ø6 Y	Øt SØ5 c f Ør s

The torculus can use the virga and left virga to link the intervals. If it contains two intervals of a third, then a side par must be used.
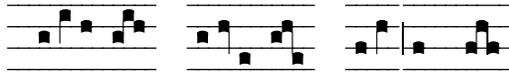
The Porrectus: Two Forms

The porrectus has a curved and a straight form. The curved form is used if the final interval is a second. The straight form is used if the last interval is a third or more.
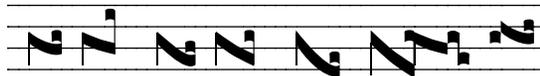
The "c" from "StMeinrad B" has been used in the last two groups of notes to separate the punctum from the slanting line of the porrectus.

The Rhombus: The Diamond Shaped Note

In the climacus, the rhombus is separted from the virga by a 3/8 width (z). If the rhombus drops a third, then half of a unit (bb) must be added so that the notes will contine to form the proper angle. The "z" can also be used to separate the bivirga and the trivirga.
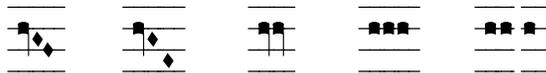
6 z % $ 6 z % b b #   6 z 6   h z h z h h bb h bb h

Liquescents

The symbols for the liquescents are contained in StMeinrad B. Several keys are dead so that they can perform the needed gymnastics. A new half neum was designed for the diminished punctum. Two of these could be used together to form a new shape. Cf. the chart of neums in the back of this booklet.

I have created these fonts to provide modern composers of plain song for the vernacular with the ability to print their music in a clear and readable notation. The free rhythm and modal tonalities of chant offer possbilities akin to some paths of modern music. I hope that these fonts will help the exploration of those possibilities. The fonts can also serve scholars who study the Latin chant. A full range of notes with liquescents offer the scholar the possibility of transcribing the medieval manuscripts with greater definition.

The Abbeye de Solesmes claims a French copyright of certain newly designed notes and has asked that we not reproduce them: i.e. the oriscus, the augmented punctum (up and down), the aqpostropha and the augemented apostropha. In addition, Solesmes claims under French law the exclusive use of the following new combinations of older signs: the *initio debolis* for the *podatus* and *torculus*, the use of the small note of the *diminished podatus* and *torculus*, the use of the small note of the diminished *podatus* for the *diminished porrectus*, and the use of the rhombus to form the *trigon*. Although one cannot copyright a font under American law, we have withdrawn these designs in recognition of the great contribution made by the Abbaye of Solesmes, and we offer substitutes which were newly designed to avoid the conflict with the Abbaye de Solesmes.

While the pitches of the Latin chant belong to the tradition, the interpretation with various rhythmic marks by the monks of Solesmes or by others is their copyright. Newly composed music for the vernacular chants also may be copyrighted, and each publisher must negotiate with the holders of these copyrights.

These fonts have been produced with Fontographer 4.0 to provide fonts of great sophistication. Still we take no responsibility for any incompatibility with any hardware. If there are any problems, I would appreciate hearing about them. I am also open to suggestions.

Fr. Harry Hagan, OSB
24 June 1995
Feast of John the Baptist

Basic Types	Basic Notes	Liquescents	
		Augmented	Diminished
1. Punctum			
2. Virga			
3. Apostropha			
4. Oriscus			
5. Clivis			
6. Podatus			
7. Pes Quassus			

Doted notes are created with the keys from N to slash (n m , . /). The normal position places the dot lower in the space, and the shifted position raises the dot.
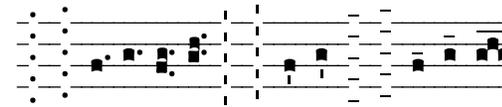
The Option and Shift+Option puts accents in the space. The option key puts the accent lower, and the shift+option key puts them higher. The right side (z x c v b) adds the ictus, the vertical accent. The left side (n m , . /) adds the episema, the horizontal accent. Several episemas can be linked together to form a single line.

Dead Keys

Since chant sometimes piles notes and accents on top of one antoher, some of the keys are "dead" or "zero-width" so that a second and even a third note or mark can be added to the same position. The "dead" keys are indicated on the charts by broken lines.

"Tops"

When a punctum must be added over another note, it has a special form, called here a "top." A regular punctum will fall too close to the note below. The "top" is used for the podatus, the porrectus, and over a quilisma.

Side Bars: Left and Right

Side bars are vertical lines added to connect notes. Each side bar is three notes high; several can be used together to link large intervals. The side bars are located on the option and shift+option keys in the row "Q-P". Note that the keys "e" "i" and "u" are combination keeys, and the letter must be typed a second time after releasing the option key: Øee, Øii, and Øuu.

The podatus has a line hidden so that the bottom and the top can be used to create a rise of a 2nd or a 3rd. For the rise of a fourth, a side bar must be added.

The left side bar is used for the porrectus and for a clivis that drops a third or more.

Option (Ø) and Shift+Option Keys (SØ)

In addition to the normal position (lower case) and shifted position (upper case), the Macintosh also access symbols by typing a key while holding down the Option Key alone or with the Shift + the Option keys. The use of the Option Key is indicated by the symbol Ø. The Shift + the Option keys is indicated by SØ.

Combination Keys: e.g. ØiA

The remainder of the symbols are accessed by combination keys in which the Option key is held down while a first letter is struck. After releasing the option key, a second key is struck. Thus the combination ØiA means the the "i" key is typed while holding down the option key; then after releasing the option key, the capital "A" is typed.

Øe, Øi, Øu, and Øn = Øee, Øii, Øuu, and Ønn

For these keys to work properly, one must type the letter while holding down the option key, and then type the letter again after releasing the option key.

The Bottom Row: Two Groups of Five

The bottom row is divied into two groups of five.

The keys "z x c v b" create the staff lines used between the notes. The most import of these is "v" which adds staff lines that are one unit wide, the width of the basic punctum. The "b" is one quarter wide and is used to move a note slightly to align it with the text.

key:	z	x	c	v	b	6 z 6
width:	3/8	1/8	3	1	1/4	

The "z" can be used to separte two notes that come close together such as a double bivirga. The apostrophe key also produces staff lines; however this key will not work properly unless the automatic quotation marks have been turned off. On "StMeinrad B" the "c" is a 1/16 unt wide. This can be used when a porrectus is preceded or followed immediately by a punctum to make up the difference of overlap allowed for the sidebar in expert layout and printing.

The shifted keys "Z X C V B" create the clef signs.

| BASIC TYPES	BASIC NOTES	LIQUESCENTS	
		AUGMENTED	DIMINISHED
9. POD. INITIO DEBILIS			
10. TORCULUS			
11. TOR. INITIO DEBILIS			
12. PORRECTUS			
13. CLIMACUS			
14. SCANDICUS			
15. SALICUS			

Introduction
2002

The Saint Meinrad fonts have proved very servicable to many people over the last several years. Part of the success lies in their simplicity. As fonts they can be used with various programs.

The changes to the font are minimal. Basically I have not changed any of the location of notes or signs. I have moved the "side bars" so that they overlap. I have also included some sidebars that are one unit high. The shape of notes has been altered every so slightly. Some of these changes will only be noticed on printers at very high resolution.

I hope that the fonts will continue to help people preserve the tradition of chant and explore new horizons of chant created for the vernacular.

<div align="center">

Harry Hagan, OSB
January 16, 2002

</div>

Each number and letter of the top three rows is related to a designated space or line on the staff.

StMeinrad Fonts 2002

"StMeinrad A.suit" and "StMeinrad B.suit" contain all the symbols necessary to set electronic type for Gregorian chant. They have been generated as TrueType fonts by Typographer 4.0.

These fonts are installed on the computer in exactly the same way as other fonts. Drag them to the Systems Folder if that makes sense. Otherwise consult your documentation of instructions.

Fractional Width Display

These fonts can be used with any program that uses fonts. In order to align the music font with the text, the program must show exactly on the screen what will print on the screen. Some earlier programs required the user to turn on the "fractional width display" so that the alignment can be seen exactly on the screen.

Point Size

These fonts have been designed for normal use at 48 points with text at 11 or 12 points. Larger and small point sizes will also work.

Some very small marks may not be visible on the screen at normal resolution. At the high resolutions of 200% or 400%, these marks should appear.

Layout of Notes on the Keyboard

Cards are included with show the layout of these fonts on the keyboard. While you may need to consult the cards often in the beginning, still there is a certain logic to the layout.

The Top Three Rows of the Keyboard

The top three rows of the keyboard are dedicated to one particular note or mark. The far left keys (1,q,a) place the note or sign in the space below the staff. The next key (2,w,s) puts the note or mark on the bottom line of the staff, and so on.

In order to put a note or mark on the staff, one must find the row assigned to this particular sign. Then one must choose the key in the row corresponding to the proper place on the staff.