HEAVENLY HANDWRITING, TEUTONIC TYPE: FAITH AND SCRIPT IN GERMAN PENNSYLVANIA, CA. 1683 – 1855

by

Alexander Lawrence Ames

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of the requirements for the degree of Master of Arts in American Material Culture

Spring 2014

© 2014 Alexander Lawrence Ames
All Rights Reserved
HEAVENLY HANDWRITING, TEUTONIC TYPE: FAITH AND
SCRIPT IN GERMAN PENNSYLVANIA, CA. 1683 – 1855

by

Alexander Lawrence Ames

Approved:

Consuela Metzger, M.L.I.S.
Professor in charge of thesis on behalf of the Advisory Committee

Approved:

J. Ritchie Garrison, Ph.D.
Director of the Winterthur Program in American Material Culture

Approved:

George H. Watson, Ph.D.
Dean of the College of Arts and Sciences

Approved:

James G. Richards, Ph.D.
Vice Provost for Graduate and Professional Education
ACKNOWLEDGMENTS

Whom does one thank first for assistance toward completion of an academic project only brought to fruition by the support of dozens of scholars, professionals, colleagues, family members, and friends? I must first express gratitude to my relations, especially my mother Dr. Candice M. Ames and my brother Andrew J. Ames and his family, without whose support I surely never could have undertaken the journey from Minnesota to the Winterthur Program in American Material Culture nearly two years ago. At Winterthur, I found mentors who extended every effort to encourage my academic growth. Rosemary Krill, Brock Jobe, J. Ritchie Garrison, and Greg Landrey did much to help me explore new fields. I owe a particular debt to Winterthur’s art conservators. In one, Consuela Metzger, I found a thesis advisor willing to devote countless hours to guiding my intellectual exploration. In another, Joan Irving, I found a paper conservator gracious enough to share her vast store of knowledge with a novice student of manuscripts. To Emily Guthrie, Winterthur’s rare books librarian, I owe my reaffirmed commitment to librarianship. I offer my most heartfelt thanks to Emily, Consuela, and Joan for their cultivation of my interest in book history. Debra Hess Norris was a source of incessant inspiration. Able assistance from the Winterthur Library’s Lauri Perkins proved essential to this project.

Many thanks are due to the faculty of the University of Delaware. The generous and knowledgeable Dr. Ronet Bachman, Professor of Sociology, guided the development of my quantitative method. Her enthusiasm for statistical inquiry has indelibly shaped my own social science-based approach to historical analysis. I am
grateful for conversations had with Doctors Anne Boylan, James Brophy, Katherine Grier, and Arwen Mohun of the Department of History. My research would have been impossible to undertake were it not for the support of the Delaware Public Humanities Institute and Albert T. and Elizabeth R. Gamon Scholarship of the Peter Wentz Farmstead Society. I am honored to thank the UD Office of Graduate & Professional Education for their support of travel to a conference presentation in Chicago, and to Morrison and Fenella Heckscher for support to present at a conference in Harrisburg. I offer my humblest gratitude to the curators and librarians who extended every grace and courtesy to this novice scholar. Dr. Matthew Heinzelman of the Hill Museum & Manuscript Library at St. John’s University, Joel Alderfer of the Mennonite Heritage Center, Carolyn Wenger of the Lancaster Mennonite Historical Society, Bruce Bomberger of the Landis Valley Museum, Cory Amsler and Sara Good of the Mercer Museum, Ashley Hamilton of the Reading Public Museum, and Kim Schenck of the National Gallery of Art lent me both their time and expertise. Without the friendliness and wisdom of Candace Perry of the Schwenkfelder Library & Heritage Center, the quantitative portion of this thesis would have been utterly impossible. Fortunate indeed was I to consult with the eminent Don Yoder while pursuing this research.

I owe a special debt of gratitude to Lisa Minardi, the immensity of whose knowledge of Fraktur is matched only by her kindness and generosity in sharing it. To her parents, Silvio and Katherine Minardi, who opened their home to me as I conducted my research, I proffer my humblest thanks. To all those above mentioned, to countless others whose kindnesses I failed to recount here, and to the memories of Henry Francis du Pont and Lois F. McNeil, I humbly dedicate this thesis. Its shortcomings are my own.
# TABLE OF CONTENTS

LIST OF TABLES ...................................................................................................................... vii
LIST OF FIGURES ................................................................................................................... viii
ABSTRACT ............................................................................................................................... xiii

Chapter

1 INTRODUCTION: VISUAL PRAYER? SPIRITUAL-MATERIALIST DIRECTIONS IN FRAKTURSCHRIFT MANUSCRIPT STUDY ............. 1
Background: The Manuscript World of Pennsylvania Germans ................. 5
Goal of Present Study: Modeling Change in Manuscript Culture ............ 12
Methods ......................................................... 17

2 FRAKTURSCHRIFT AND ANTIQUA IN EUROPE AND AMERICA ...... 19
Origins of the Graeco-Roman and Gothic Scripts ........................................ 22
Imperial Script: Fraktur as Gothic Baroque ..................................................... 25
Fraktur or Antiqua? Type, Script, and National Identity ............................ 31
European Scripts in America ........................................................................ 38

3 THE PIOUS AND MYSTIC AMONG PENNSYLVANIA'S GERMANS .... 43
Composition of Pennsylvania's German-Speaking Population ................. 44
Scripture Alone? Mysticism, Pietism, Anabaptism, and the Word of God ..... 49
Mysticism and the Schwenkfelders ................................................................. 53
Pietism ......................................................................................................................... 58
Anabaptism and the Mennonites ................................................................. 60

4 LEARNING TO READ AND WRITE IN EARLY AMERICA AND GERMAN PENNSYLVANIA .......................................................... 65
Teaching Literacy in Early America ................................................................. 66
Literacy Education: The Schwenkfelder and Mennonite Experience ....... 71
Vorschriften: The Material Evidence ............................................................... 81
The Politics of Education in Early Pennsylvania ........................................ 97
New Trends in Handwriting Education ......................................................... 99
5  MODELING CHANGE IN DESIGN OF PENNSYLVANIA GERMAN VORSCHRIFTEN ................................................................. 107

Goals of Statistical Analysis .................................................. 108
Methods .................................................................................. 110

Hypothesis Formation ......................................................... 110
Conceptualizing the Vorschrift ............................................. 119
Sample Characteristics ......................................................... 124
Dependent Variables ............................................................ 128
Independent Variable ........................................................... 136
Analysis Strategy ................................................................. 139

Results .................................................................................... 140

General Additive Index ......................................................... 141
Multivariate Ordinary Least Squares (OLS) Regression ........ 142
Binary Logistic Regressions ................................................. 148

Discussion ............................................................................... 150
Future Applications of Generalized Linear Model .............. 154

6  CONCLUSION: THE LETTER AND THE SPIRIT .................. 156

Implications for Future Research ......................................... 164

BIBLIOGRAPHY ...................................................................... 169

Manuscript Collections ......................................................... 169
Published Primary Sources ................................................. 172
Secondary Sources ............................................................... 177

Appendix

IMAGE PERMISSION LETTERS ............................................. 183
LIST OF TABLES

Table 1. Distribution values for date of Vorschrift production for elements of random sample ................................................................. 128

Table 2. Index of dichotomous variables measuring Vorschrift adherence to baroque design ................................................................. 130

Table 3. Frequencies and percentages of baroque design index values .... 134

Table 4. Number of Vorschriften per date made category collected in November, 2013 random sample ....................................................... 137

Table 5. Mean Vorschrift index score per date category .......................... 142

Table 6. Percent distribution of adheres/code 1 scores per variable, 1750-1789 ................................................................................. 145

Table 7. Percent distribution of adheres/code 1 scores per variable, 1790-1849 ................................................................................. 146

Table 8. Levels of significance of baroque design index variables with binary logistic regression ............................................................ 149
LIST OF FIGURES

Figure 1. Reverend George Geistweit, Religious Text. Courtesy of the Philadelphia Museum of Art, Philadelphia, PA: Titus C. Geesey Collection, 1954 .................................................................5

Figure 2. Vorschift of Barbara Reist(in), 1780. Landis Valley Museum, FM2012.11.4 .................................................................10

Figure 3. T.J.V. Braght, The Bloody Spectacle, or Martyer's Mirror, 1814. Landis Valley Museum, FM 2014.11.1 .................................11

Figure 4. Johannes Bard, writing sample, ca. 1819-1821. Winterthur Museum, 2011.28.17 .................................................................12

Figure 5. Hillmar Curas, engraved writing sample of Psalm 146, Calligraphia regia: Konigliche Schreib-Feder, Berlin: Im Verlag des Autoris, 1714, Plate 4 .........................................................15

Figure 6. Writing sample featuring Frakturschrift majuscules (“Groß Frakturbuchstaben”) by Johannes Bard, Adams County, PA, 1819-1821. Winterthur Museum 2011.28.14 .................................40

Figure 7. Detail, writing sample featuring Frakturschrift majuscules (“Groß Frakturbuchstaben”) by Johannes Bard, Adams County, PA, 1819-1821. Winterthur Museum, 2011.28.14 .................................40

Figure 8. Johannes Bard, writing sample, Adams County, PA, 1819-1821, 2011.28.16. Winterthur Museum, 2011.28.16 .........................41

Figure 9. Detail, Johannes Bard, writing sample, Adams County, PA, 1819-1821. Winterthur Museum, 2011.28.16 .................................41

Figure 10. Johannes Bard, writing sample, Adams County, PA, 1819-1821. Winterthur Museum 2011.28.9 .................................................42
Figure 11. Bible, published in Zürich by Chrisoph Frohschauer (Christoffel Froschower) in 1580. Lancaster Mennonite Historical Society collection number 2006.0006 .........................64

Figure 12. Detail, Bible, published by Christopher Frohschauer, 1580, Lancaster Mennonite Historical Society 2006.0006 .........................64

Figure 13. Carl Friederich Egelmann, Vorschriften für die Jugend, 1831, Schwenkfelder Library VSFS 34-269 ........................................69

Figure 14. Detail, Carl Friederich Egelmann, Vorschriften für die Jugend, 1831, Schwenkfelder Library VSFS 34-269 .....................................70

Figure 15. Detail, Carl Friederich Egelmann, Vorschriften für die Jugend, 1831, Schwenkfelder Library VSFS 34-269 .....................................70

Figure 16. Mennonite classroom reward, ca. 1790-1810, recto, Downs Collection 320 65x547, Winterthur Library ........................................76

Figure 17. Detail, verso of Mennonite classroom reward, ca. 1790-1810, recto, Downs Collection 320 65x547, Winterthur Library .............76

Figure 18. Mennonite classroom reward, ca. 1790-1810, Downs Collection 65x548, Winterthur Library ................................................77

Figure 19. Classroom verse and scene, ca. 1800, Winterthur Museum, 2013.0031.092 A ..............................................................80

Figure 20. Schoolmaster with Frakturschrift alphabet, ca. 1780-1800, Winterthur Museum, 2012.0036.001 ........................................80

Figure 21. Charles family Bible donation, 1973, Charles (Carli) Family Collection, Lancaster Mennonite Historical Society ................85

Figure 22. "In Gottes namen" religious verse, Charles (Carli) Family Collection, Lancaster Mennonite Historical Society ................85

Figure 23. Family record, Charles (Carli) Family Collection, Lancaster Mennonite Historical Society ........................................86

Figure 24. Vorschrift for Johannes Carli, Charles (Carli) Family Collection, Lancaster Mennonite Historical Society .......................87
Figure 25. Religious text for Johannes Carli, Charles (Carli) Family Collection, Lancaster Mennonite Historical Society .......................88
Figure 26. Hershey family Bible, Lancaster Mennonite Historical Society ..........89
Figure 27. Marriage certificate, Lancaster Mennonite Historical Society ..........89
Figure 28. Religious broadside "Ein schön Lied zur Aufmunterung eines christliches Leben," Lancaster Mennonite Historical Society ..........90
Figure 29. Briefleinn made for Abraham Hershey, 1804, Hershey, Christian (1755-1800) Papers, Box 002, Lancaster Mennonite Historical Society ..................................................................................................91
Figure 30. Vorschrift for Catharina Huber(in), Hershey, Christian (1755-1800) Papers, Box 002, Lancaster Mennonite Historical Society .......91
Figure 31. Vorschrift made by or for Elisabetha Grimm (Liessabetha Grimm), 1772, Joseph Downs Collection, 320 87x165, Winterthur Library ..................................................................................................................94
Figure 32. Vorschrift, ca. 1790, Mercer Museum, SL96-2014.001 A-14 .............95
Figure 33. Manuscript fragments associated with Vorschrift, ca. 1790, Mercer Museum, SL96-2014.001 A-14 ........................................95
Figure 34. Vorschrift, ca. 1780, Mercer Museum, 96.2033-1 SC-58. No. A-33 ..................................................................................96
Figure 35. *Nordamerikanische Schnell-Schreibmethode*, 1839, title page, Winterthur Library .................................................................102
Figure 36. *Nordamerikanische Schnell-Schreibmethode*, 1839, Winterthur Library section 2, page 1 .........................................................102
Figure 37. William Schultz, pseudo-Vorschrift, ca. 1844, recto, Amos H. Schultz Collection, Schwenkfelder Library ........................................104
Figure 38. William Schultz, pseudo-Vorschrift, ca. 1844, verso, Amos H. Schultz Collection, Schwenkfelder Library ........................................104
Figure 39. Johannes Bard, manuscript copy of title page, Johann Gottfried Weber, *Allgemeine Anweisung*, ca. 1819-1821, Winterthur Library .................................................................112

Figure 40. Detail, writing sample in George Shelley, *The second part of Natural writing*, 1740-1754, Winterthur Library .........................113

Figure 41. Artist's box sold by Roberson & Co., including a porte de crayon, ca. mid-nineteenth century, courtesy of Kim Schenck ......................114

Figure 42. Georg Friedrich Schmidt, "Self-Portrait Sketching," 1752, object number 2007.111.159, National Gallery of Art, Washington, D.C. .................................................................115

Figure 43. Johann Michael Schirmer, *Geöfnete Schreib-Schule*, ca. 1765, plate 49, Winterthur Library ...............................................116

Figure 44. Vorschrift, 1773, Winterthur Museum, 1957.1183 ..................117

Figure 45. Vorschrift for Heinrich Cassel, 1790, Winterthur Museum, 1985.91 ...............................................................117

Figure 46. Vorschrift, 1827, Schwenkfelder Library & Heritage Center ......118

Figure 47. Detail, Vorschrift, Winterthur Museum, 2013.0031.078 ..........122

Figure 48. Vorschrift for Michael Lang, Joseph Downs Collection 320 86x188, Winterthur Library .........................................................122

Figure 49. Vorschriften-Büchlein for Jacob Arnold, 1816, Winterthur Museum 2012.0027.014 A ...............................................................123

Figure 50. Boxplot showing distribution of Vorschrift random sample dates made .................................................................127

Figure 51. Percent of cases coded 1/adheres or 0/deviates in dichotomous variables 1-10 of the baroque design index .................................135

Figure 52. Percent of cases coded 1/adheres or 0/deviates in dichotomous variables 11-20 of the baroque design index .................................135

Figure 53. Number of Vorschriften in each year-made category ............138
Figure 54. Scatterplot of baroque design index, by year of Vorschrift production ................................................................. 141
Figure 55. Linear model of adherence to baroque design index by year ........ 147
Figure 56. Vorschrift, 1774, 5-49, Schwenkfelder Library ..................... 152
Figure 57. Vorschrift, 1788, 00.265.22, Schwenkfelder Library .............. 153
Figure 58. Vorschrift, 1805, 5-63_00.271.64, Schwenkfelder Library ........ 153
Figure 59. Pennypacker collection auction catalogue, Schwenkfelder Library, pages 100-101 ......................................................... 161
Figure 60. Pennypacker collection auction catalogue, Schwenkfelder Library, pages 102-103 ........................................................ 162
Figure 61. Pennypacker family Bible, 1568, P99.70.1, Pennypacker Mills ................................................................. 163
Figure 62. Title page, Pennypacker family Bible, 1568, P99.70.1, Pennypacker Mills ................................................................. 163
Figure 63. Vorschrift for Simon Pannebecker, 1758, P81.212, Pennypacker Mills ................................................................. 164
ABSTRACT

“All nations have something peculiar to their writing,” wrote Johann Merken in a ca. 1782 German-language writing manual.¹ The German-speaking peoples of Central Europe, for whom ideas of nation, peoplehood, and faith practice were closely intertwined, cultivated unique lettering traditions known as “Fraktur,” or neo-gothic, “broken-letter” type and script. The German-speaking settlers of early Pennsylvania carried vibrant manuscript illumination traditions involving Fraktur letter forms with them to the New World. Those manuscripts comprise a rich record of Pennsylvania German religious life. This thesis explores the European antecedents of types and scripts in America, the spiritualistic heritage of Pennsylvania German settlers, and the teaching of reading and writing among two groups of Pennsylvania Germans to assess the spiritual foundations of their manuscript practices and consider the documents’ utility as indicators of cultural change. The study suggests the politically and religiously charged heritage of print and manuscript Fraktur letter forms, and the extent to which Protestant spiritual practice relied on reading and writing religious texts. A quantitative methodology documents that the Vorschrift, or teacher-made manuscript writing sample, diverged from baroque European writing samples between ca. 1750 and 1850, suggesting the form’s association with changes in literacy education at the national, state, and community levels.

¹ Johann Merken, Liber artificiosus alphabets maioris (1782), 2.
Chapter 1

INTRODUCTION: VISUAL PRAYER? SPIRITUAL-MATERIALIST DIRECTIONS IN FRAKTURSCHRIFT MANUSCRIPT STUDY

Die Kunst zu schreiben ist eine hochschätzbare Gabe Gottes...
(The art of writing is a highly valuable gift from God…)

—Jean Braun, *Gründliche Anweisung zur Schreib-Kunst* (Thorough *Instruction in the Art of Handwriting*), 1781

What does a prayer look like? The question, while simple, is unfamiliar. Modern Protestant Christians more likely encounter prayers and other vehicles of religious devotion via sound than sight. In the context of congregational worship, prayers are recited, set to music, chanted, or sung—all aural enterprises. The faithful bring scripted prayers to life when written words are elevated to the oral. As personal, meditative exercises, Christians often “speak” prayers in their minds, engaging in a direct dialogue with God devoid of external visuality. “Prayer is a complex, fluctuating relationship with God that occurs either in the silence of inarticulate longing, or in speech,” writes literary scholar J.R. Watson. In Watson’s formulation, silence is inarticulate, speech succinct. Christians formalize and express prayers’

---

meanings by organizing them into spoken words, because speech is a communicative and social act. 3

But might not the same be said for the acts of reading and writing? Written words are not just static symbols for spoken language. Like speech, reading and writing are active, communicative, processual. As visual enterprises, they allow for expression through graphic ornament on the page, that is, printed and calligraphic decoration distinct from words’ sounds and meanings. Just as rhyme, cadence, and timbre elevate speech, the aesthetics of devotional letter forms—their color, shape, line, and layout—suit texts to the divine.

In various world religious traditions, the act of calligraphy from time to time has assumed a mantle of spiritual devotion invested in the physical realities of putting quill, ink, brush, and pigment to paper. Calligraphy can become a prayer-like enterprise akin to the saying of a Psalm, or the singing of a hymn. Subsequent reading of such documents is mediated by the unique cultural resonance of calligraphy as a medium of religious engagement, and the system of visual aesthetics employed by the scrivener to present holy texts. The museums and libraries of southeastern Pennsylvania abound in ornate manuscript copies of devotional texts, including Bible verses and hymns. 4 Handwritten and ornamented with decorative figures and illustrations by the region’s pre-1775 German-speaking settlers (a process known as


4 For purposes of this study, “southeastern Pennsylvania” refers to the eight counties surrounding Philadelphia: Delaware, Montgomery, Bucks, Northampton, Lehigh, Berks, Lancaster, and Chester.
“illumination”), some of the documents are byproducts of an intense devotional religiosity bound up in their makers’ and readers’ German linguistic heritage and distinctive approaches to religious education and practice. The documents bear witness to an active engagement with letter forms quite extinct in modern mainstream American society (see Figure 1).

Distinctive for their neo-Gothic script (known as “Frakturschrift”), religious content, and colorful forms and shapes, Pennsylvania German illuminated manuscripts have attracted attention from scholars since 1897. They command high prices among collectors and are often interpreted as exemplars of American folk art, decorating the walls of museums and homes. But this interpretation oversimplifies the manuscripts’ intellectual and spiritual sophistication. The full significance of Pennsylvania German calligraphy and manuscript illumination—as well as the tradition’s utility as a tool for historical analysis—depends on placing the artifacts in a transatlantic religious framework that considers their meanings for those who wrote and read them. This framework suggests that some Frakturschrift manuscripts are better interpreted as totemic artifacts, treasured vessels of meditative interaction with God through the holy word, rather than as rustic folk art created for household decoration. While it may overreach to call the documents a visual form of prayer, one may argue that totemic manuscripts functioned as conduits for spiritual revelation and dialogue with the divine, much as prayer did. Among the zealous Protestants of southeastern Pennsylvania, Frakturschrift manuscript culture thrived as a vital component of

devotional and educational practices that emphasized mystical experience of scripture. As those practices faded, so too did the manuscript culture.

Passed down and cultivated by several generations of German-speakers (in particular clerics and schoolteachers), the skills to make manuscripts using Frakturschrift calligraphy were demanding and only attained with careful study. The craft required precision and focus on the part of the scrivener, who drew on centuries of European manuscript practice. The scrivener carefully planned manuscript layout and content, scored a sheet of high-quality imported writing paper, cut a feather quill, mixed commercially available color pigments, drafted designs with graphite, and finally applied iron-gall ink and colorants to the page. The final products are striking, even today. Their impact on readers, however, was grounded in cultural expectations of how such holy texts should look—and often did look—in written form.6

Surrounding the documents themselves was a cloud of meaning associated with their commission, creation, and dispersal. Pennsylvania Germans lived in a world in which Frakturschrift manuscript making and consumption thrived as a social institution charged with more than the functional reproduction of texts. Some manuscripts were closely held family and community treasures, as indicated by their long-term survival. A spiritual element to Frakturschrift calligraphy undergirded some Pennsylvania Germans’ cultural and religious worlds. Manuscripts and the process of their making served as arbiters of an early modern Protestant European religious sensibility that thrived, albeit for a short time, on the fringes of Western civilization.

________________________

Background: The Manuscript World of Pennsylvania Germans

German-speaking Pennsylvanians who settled the seven counties surrounding Philadelphia before 1775 interacted with a variety of strong early modern European associations between letter forms, German language, and Protestant spirituality that
tinged how they wrote and read printed and handwritten words. Radical Pietists—left-wing Protestants whose text traditions form the focus of this thesis—carried German-language Frakturschrift calligraphy’s traditional spiritual associations further than most other German-speaking immigrant groups, namely Lutherans and members of the Reformed Church. But they did not invent its unique character.

The seventeenth and eighteenth-century Europeans who settled North America lived in a literary world populated by a great diversity of types and scripts. While few German-speaking Pennsylvanians commented explicitly on perceived meanings of various scripts, they did use scripts differently in different circumstances. Type and script bore symbolic associations with early modern politics and religiosity and thus offer a means to assess how German-speakers responded to the dissonant cultural forces shaping daily life in multilingual eighteenth and nineteenth-century America. That is, their use of Frakturschrift ought not to be taken as a given, but rather explored as a cultural phenomenon. Text traditions of Pennsylvania’s Radical Pietists present a particularly rich case study of the religious and social implications

7 Michael Baurenfeind, “Form einer gelegten und zierlichen Cantzleÿ-Schrifft,” Vollkommene Wieder-Herstellung/der bisher Fehr in Verfall gekommenen gründlich-u: Ziefsichen Schreib-Kunst/worinnen…. (Nuremburg, Germany: Christoph Weigel, 1716), plate. 14. The array of distinct handwriting styles available to Pennsylvania scribes, many of which were named for the purpose to which they were put (“Kanzleischrift/ Cantzleÿ-Schrifft,” or chancellery/secretary hand, for example) underscores this point.
of type and script, as their employment of handwritten text was spiritualistic to the extreme.

One uniquely Radical Pietistic form of Frakturschrift illuminated manuscript offers an opportunity to measure the extent of change in Pietistic spiritual and literacy practices between 1683 and the 1850s, and will form the focus of the analysis to come. Vorschriften, or manuscript writing samples, were documents created by Pietistic schoolteachers for presentation to students. Pennsylvania’s Vorschrift form was cultivated by Mennonites (Anabaptist followers of Dutch reformer Menno Simons) and Schwenkfelders (followers of Silesian mystical theologian Caspar Otto von Schwenkfeld). Both of those Pietistic sects settled in rural southeastern Pennsylvania and cultivated Frakturschrift calligraphy noted for its intricacy and abundance. Mennonite schoolteachers, who often taught both Mennonite and Schwenkfelder pupils, presented students with handwritten and illuminated Vorschriften as rewards for progress in handwriting proficiency. The documents seem to have possessed both pragmatic and ceremonial value. They served as models for calligraphic precision, taught religious and moral lessons through scriptural quotations, and, as seen in their highly ornamental presentation of script and illuminations, were often objects of some aesthetic beauty. Vorschrift recipients and their families folded and stored the documents between the leaves of family Bibles and other devotional texts. The Reist family, for example, stored a 1780 Vorschrift for Maria Reist(in) in the pages of Martyr’s Mirror, a classic Pietistic religious book
(see Figures 2 and 3). The extent to which students actually used the handwriting exemplars as models, or to which the documents emerged from Bibles and other books for student use, is difficult to establish. The survival of so many vibrantly colored, intact examples, however, suggests that, once the potent manuscripts were tucked away, they were well protected and carefully cared for.

The Vorschrift writing sample form was not unique to Pietists. Printed writing manuals abounded in Europe, and they functioned as exemplars of fine calligraphy intended for copying. Their general style of text presentation transcended religious and geographic boundaries. Some German-speaking Pennsylvanians made Vorschriften based on European writing samples quite outside of the Pietistic tradition explored in this study. Take, for example, the writing samples of schoolteacher Johannes Bard, which, while close copies of an earlier printed European source, were bound as part of a manuscript volume and fall outside the Pietistic gift-Vorschrift tradition that forms the focus of this study (see Figure 4). The unique quality of Pennsylvania German Pietistic Vorschriften—and how the word “Vorschrift” will henceforth be employed throughout this study—derives from the making of presentation pieces given by Pietistic teachers to pupils, a tradition

---

8 T.J.V. Braght, Der Blutige Schon-Platz, oder Martyrer Spiegel... 2nd Amer. ed. (Lancaster, PA: Joseph Ehrenfried, 1814); Vorschrift of Maria Reist(in), 1780, Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission, Lancaster, PA, Reist Family Collection, FM2012.11. The presence of the “-in” suffix after Maria Reist’s surname corresponds with the German-language tradition of feminizing surnames for female family members.
rooted in Swiss Anabaptist practice.\textsuperscript{9} Presentation Vorschriften of the Pennsylvania Pietistic tradition document the content of moralistic school curriculum (in the form of devotional verses written on the documents) as well as design standards to which Pietistic schoolteachers held their calligraphy. Early examples maintain close connections to printed baroque European writing samples, but later pieces changed dramatically in design before disappearing entirely by ca. 1850. Why?

Figure 2. Vorschift of Barbara Reist(in), 1780. 8" x 6 7/16". Landis Valley Museum object number FM2012.11.4. Courtesy of the Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission, Lancaster, PA. Gift of Marian Reist. Griffith Photograph by the author.
Figure 3. An 1814 Lancaster, Pennsylvania edition of T.J.V. Braght *The Bloody Spectacle, or Martyr’s Mirror*, in which the Barbara Reist(in) Vorschrift and other documents were discovered. 14 1/14" x 9 11/16". Object number FM2012.11.1. Courtesy of the Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission, Lancaster, PA. Gift of Marian Reist Griffith. Photograph by the author.

**Goal of Present Study: Modeling Change in Manuscript Cultures**

Among the great challenges of studying Pennsylvania German illuminated manuscripts, including Vorschriften, is their large number, which makes generalization difficult. The convoluted history of radical Protestantism and its complex, esoteric theological heritage mean that those fields often go under-
consulted in discussions of the manuscripts. European calligraphy has its own many-layered history all too often overlooked in Pennsylvania German manuscript studies. This thesis develops a strategy that begins to address all three of those challenges to understand if Frakturschrift manuscript illumination constituted a devotional activity akin to prayer, and if changes in Pietistic spirituality partly explain why the Vorschrift form declined and disappeared among Pennsylvania Pietists. It offers a methodological model of manuscript change that might serve as a blueprint for study of other Frakturschrift manuscript forms. The study presents three related hypotheses—one theological, one material, and one anthropological—that explain the Vorschrift’s role as a devotional document, changes in its design, and the spiritual and cultural significance of Blackletter type and Frakturschrift handwriting in early Pennsylvania.

First, the theological. The Vorschrift form, so ubiquitous in some of Pennsylvania’s Pietistic communities, possessed religious underpinnings. It emerged out of and functioned within an educational environment focused on fostering direct students encounters with divine will through Holy Scripture. Radical Pietistic forms of scriptural exegesis informed methods of literacy education among German-speaking communities in eighteenth and early-nineteenth-century Pennsylvania, as practiced in community-run Pietistic schools. Shaped by mysticism and pedagogies developed and implemented by theologists in German-speaking Central Europe, Pennsylvania’s Pietistic educational infrastructure rested on a foundation in which
Frakturschrift text creation and visual consumption comprised prime acts of religious devotion. The Vorschrift both commemorated Frakturschrift calligraphy’s elevated social importance and helped ingratiate young Pietists into a distinctive devotional method.

Second, the material. The custom of making and presenting students with Vorschriften left us with one of the only documentary records of Pietistic educational practice in early Pennsylvania. Study of Vorschrift composition and use, changes in their form and content, and their gradual reemergence at the end of the nineteenth century as quasi-foreign artifacts of a defunct theological and educational system reflect gradual changes in some aspects of Radical Pietistic religious practice associated with literacy education between ca. 1683 and the 1850s. Quantitative analysis of the documents reveals that, while the earliest examples of Pennsylvania Vorschriften adhered closely to design standards demonstrated by engraved printed European writing manuals of the baroque era of roughly 1600 to 1750 (such as that in Figure 5), Pietistic Vorschrift presentation pieces took on styles all their own over several generations of American production and use. This was likely a natural shift; the earliest Pennsylvania Pietistic schoolteachers, educated in Central Europe where printed writing models were common, carried baroque principles with them to southeastern Pennsylvania.10 The precision of the Frakturschrift calligraphy on early

---

10 See Chapter Three for a discussion of the meaning of the term “baroque” as it is utilized in this thesis.
pieces speaks to the close connection of their makers to high-style European training. As years progressed and later, American-born makers lost touch with baroque design standards, Vorschrift design colloquialized until the form embodied a rustic, “Pennsylvania Dutch” aesthetic common to other manuscript and craft forms. The less-confident Frakturschrift calligraphy of some later pieces echoes statistically demonstrated shifts in document design and layout.

Figure 5. Hillmar Curas, engraved writing sample of Psalm 146, Calligraphia regra: Königliche Schreib-Feder, Berlin: Im Verlag des Autoris, 1714, plate 4. 4 7/16” x 6 1/2”. Courtesy, The Winterthur Library: Printed Book and Periodical Collection, Winterthur, DE. Photograph by the author.
Third, the anthropological. The 170 years between ca. 1680 and ca. 1850 witnessed tremendous changes in the size, religious composition, and cohesion of Pennsylvania’s German-speaking communities, as well as their relationship to broader government and society. The Pietistic pedagogical practices associated with Vorschriften attracted the ire of early Pennsylvania’s English-speaking majority, who looked with dismay upon a German-language educational autonomy that encouraged linguistic and civic separatism. Pennsylvania’s dominant Anglophone population twice challenged German civic, linguistic, and pedagogical autonomy by imposing English-language schools on Pennsylvania’s German-speaking communities. The first effort, undertaken by charitable Englishmen and elite colonial Americans in the 1750s, failed.\footnote{Patrick M. Erben, “Educating Germans in Colonial Pennsylvania,” in “The Good Education of Youth”: Worlds of Learning in the Age of Franklin, ed. John H. Pollack (New Castle, DE: Oak Knoll Press, 2009), 122-149.} The second effort, codified in state law as the Common Schools Act of 1834, succeeded.\footnote{James Pyle Wickersham, A History of Education in Pennsylvania, Private and Public, Elementary and Higher. From the Time the Swedes Settled on the Delaware to the Present Day. (Lancaster, PA: Inquirer Publishing Company, 1886), 71.} The demise of autonomous Pietistic education and the pedagogical practices associated with it (including the production and distribution of Vorschriften) point to the changing relationship of German-speakers—and especially the descendants of Radical Pietists—to surrounding Anglophone society. It also corresponds to the last gasp of distinctively Radical Pietistic practices of interpreting scripture in southeastern Pennsylvania, as Pietistic communities lost the means by
which to train their youth in methods of reading and engaging with the Bible and other devotional texts.

**Methods**

Mystical, Radical Pietistic engagement with sacred texts may have comprised an important variable in shaping the religious background of certain scribal traditions including the Vorschrift, but Pietistic manuscript culture did not emerge fully formed out of the theology and devotional practices of the Radical Protestant Reformation. Rather, it was the product of centuries of European calligraphic, theological, linguistic, and political developments that scholars must take into account to make meaning out of Pietistic scribal practices and the cultural resonance of neo-Gothic letter forms. This thesis begins with a brief discussion of the origins, development, and religious and political associations of various type fonts and scripts in Europe and early America, paying particular attention to the history and significance of Frakturschrift in German religious and intellectual life. Next, it explores the history and theology of Radical Pietism in Europe and America, analyzing why and how Pietists emphasized the reading and writing of holy texts as a form of mystical religious devotion. The study then tightens its focus to early American literacy education and the Vorschrift tradition in southeastern Pennsylvania, exploring the evolution of the Vorschrift form in a context of changing national (and international) approaches to handwriting education. It lays out a quantitative methodology to study,
first, the stylistic relationship between baroque printed writing samples and early Pennsylvania manuscript Vorschriften, and second, patterns in deviance of manuscript Vorschriften from baroque models. Finally, the study lays out a research plan to examine the relationship of Vorschriften to scriptural-interpretive practices.

Despite their age and dispersal among collectors and antiquaries, Vorschriften and other paper artifacts of Pennsylvania radical Protestantism survive in large numbers and good condition. The texts’ physical durability, however, belies Pietistic religiosity’s own ephemeral nature. Mystical books and manuscript documents have lingered long after their useful lives as vessels of mystical religious devotion ended, relics of an era in early American history when the spirits of Menno Simons and Caspar von Schwenkfeld dwelt in Penn’s Woods.
Chapter 2

FRAKTURSCHRIFT AND ANTIQUA IN EUROPE AND AMERICA

The most distinctive characteristic of Vorschriften and other Pennsylvania German manuscripts is their neo-Gothic letter forms. An account of the rise and cultural gravitas of the letterforms questions common assumptions about their origins. In 1897, Bucks County antiquarian Henry Mercer delivered a paper before the American Philosophical Society in which he drew a link between medieval calligraphy and the calligraphy of early German-speaking Pennsylvanians. Mercer’s work, the first scholarly treatment of the topic, accurately traced Pennsylvania German ornamental handwriting and manuscript illumination to medieval roots but outlined too direct a genealogy by calling Pennsylvania’s calligraphic and illuminative tradition a “survival of the art of medieval illuminative writing.”\(^1\)\(^3\) Two-hundred-fifty years separated early German-speaking Pennsylvanians from the Middle Ages, and their calligraphy reflected that distance. Many emblematic features of Frakturschrift calligraphy dated to the baroque era of the seventeenth and early eighteenth centuries.

For many German-speakers, Frakturschrift was not archaic and backward-looking, but
very modern indeed.¹⁴

An innovative calligraphic style around the time of its development in the mid-
sixteenth century, Frakturschrift constituted a politically conservative response to
forces at work reshaping print and manuscript cultures at that time. German court
scribes created Frakturschrift as a Gothic counterpart to classically-inspired, Western
European typographical and scribal innovations of the Renaissance based on Graeco-
Roman precedents. A brief history of European scripts and types, presented below,
suggests reasons behind the ideological division between the Blackletter and Graeco-
Roman script families, and why German-speakers clung to the former.

A brief definition of terms must precede this discussion. The word
“majuscule” will refer to letter forms commonly called “upper case,” whereas
“minuscule” will refer to lower-case forms. As used in preceding pages, “type” refers
to printed letter forms, whereas “script” denotes handwritten counterparts. Among
scripts, the term “book hand” is used for hands in which each letter form is discrete of
its immediate neighbors, commonly called “printed” handwriting today. “Current
hand” refers to styles in which letter forms are connected, commonly called cursive.¹⁵
Scripts that combine elements of both book hands and current hands are known as
“Bastarda.” The terms “Graeco-Roman” and “Antiqua” refer to scripts inspired by

¹⁴ Don Yoder, “The European Background of Pennsylvania’s Fraktur Art,” in Bucks
County Fraktur, ed. Cory M. Amsler (Doylestown, PA: Bucks County Historical

¹⁵ N. Denholm-Young, Handwriting in England and Wales (Cardiff: University of
those used in Classical Greece and Rome, which found new currency with the Italian humanists’ rediscovery of the ancient world in the fifteenth century. England, France, and other Western European nations gradually adopted Graeco-Roman scripts and types in the seventeenth and eighteenth centuries. “Graeco-Roman” is employed here in general reference to types and scripts modeled on classical antecedents; “Antiqua” finds more focused application, in reference to the specific script crafted by fifteenth-century humanists who admired a heroic Roman past. Notably, for those familiar with Pennsylvania German studies, this thesis entirely eschews use of the word “fraktur” as short-hand for Pennsylvania German illuminated manuscripts that feature Frakturschrift calligraphy. Collectors have embraced the term since the days of Henry Mercer in the 1890’s as a single-word descriptor for the objects they collect, often referring to “a fraktur” in reference both to neo-gothic letter forms themselves and artworks on which those letter forms appear. The term has been used to describe all variety of ornamental Pennsylvania German manuscripts that feature Frakturschrift calligraphy—and some that do not. Use of the term in this way is undesirable for two reasons. First, it lacks clarity. By referencing both neo-Gothic letter forms as well as the entire documents on which the letter forms appear, fraktur in its American definition is far too general a word to be used here. Second, the term lacks transatlantic relevance. In German, the word “Fraktur” refers only to a certain neo-gothic type and script, not to illuminated manuscripts or printed documents in their entireties. In this study, the longhand “Frakturschrift illuminated manuscript” or simply “illuminated manuscript” will denote those Pennsylvania German documents that make use of Frakturschrift and feature other illuminative decoration. The term “Druckfraktur,” German for “printed Fraktur,” denotes Fraktur type as opposed to
Frakturschrift. The shorter “Fraktur” is employed to reference the Fraktur family of letter forms in general. The capital F, which adheres to German use of the word, will remind readers that the term is used here in its European context.

**Origins of the Graeco-Roman and Gothic Scripts**

The Graeco-Roman letter system commonly employed for Western European languages today traces its roots to Greek alphabets of the sixth century B.C.E., which were characterized by letter forms’ rectilinear character, sparseness, austerity, and uniformity of stroke. Early Latin writing embraced “contrasting strokes,” or varied thinness and thickness of line. It gradually lost the rectilinear character of Greek antecedents, resulting in a “Latin Uncial” by the third century C.E. This Uncial looks not dissimilar to miniscule letter forms known today. Favored for stone carving, Roman Square Capitals maintained their state-sponsored prestige alongside expanding use of the Uncial. After the disintegration of the Roman Empire beginning in A.D. 455, Western European scripts developed free of the imperial authority that for centuries had backed the Square Capital and Latin Uncial. Unsurprisingly, however, just as spoken languages vulgarized from classical Latin, so

---


17 Ibid., 71. “It has been usual since the eighteenth century to say that Latin Uncial is a rounded form Square Capital.”

18 Ibid., 73, 83.

19 Ibid., 41-43.
too did scripts vary from their imperial forms. The early Middle Ages (ca. 455 to 1000) witnessed the maturation of a triumvirate of new scripts: Uncial, Half-Uncial, and Cursive, which formalized during the Carolingian Renaissance of ca. 800—900.20

The Carolingian Uncialesque’s domination of European script was short-lived. The eleventh century witnessed rapid changes to calligraphic standards, as elements of Uncial absorbed into the emergent Gothic, or Blackletter, script.21 The term “Blackletter” refers to the color balance of Gothic letter forms versus their Uncial and, later, sixteenth-century humanist Antiqua counterparts: “the darkness of the characters overpowers the whiteness of the page.” scholars explain.22 French Textura, the most formal of Blackletter book hands, emerged in France between the eleventh and thirteenth centuries.23 The growth of government bureaucracies, market economies, and universities during the High and Late Middle Ages (ca. 1001 – 1500) catalyzed the development of other scripts.24 Related to Textura were three other Blackletter scripts: Rotunda (a rounded, southern-European Gothic script developed in fourteenth-century Italy that coexisted there alongside Graeco-Roman scripts for many years),

20 Ibid., 109, 79. Morison defines a Half-Uncial as a “combination of full and reduced capitals, with ascending and descending sorts.”


Bastarda (known in German as “Schwabacher,” an intermingling of book and current hands adapted as a type in Augsburg in 1472) and, of somewhat later vintage, Frakturschrift, which, not unlike Schwabacher, combined elements of book and secretarial hands.25 From very early days, Rotunda was often used to present Latin text, whereas Schwabacher and later Fraktur were used for German-language text.26 From ca. 1250, Blackletter script abandoned spare Carolingian models in favor of a hitherto unparalleled decorative opulence.27 Intricate Blackletter scripts became standard formal book hands across Europe, and they directly influenced typography. Guttenberg’s 42-line Bible of ca. 1455 used a Textura type based on standard book hands. Rotunda and Schwabacher also inspired print types.28

Blackletter hands dominated European manuscripts from the thirteenth through the early fifteenth centuries, while the types they inspired characterized the first wave of German printing. Similarly, a current hand called “secretary” served as the main script employed by scribes for civic and commercial purposes.29 A significant


26 Killius, 6.

27 Morison, 242.

28 Shaw and Bain, “Introduction: Blackletter vs. Roman: Type as Ideological Surrogate,” 10, 12.

challenge to Blackletter and Gothic secretary emerged in Italy when fifteenth-century humanists reawakened interest in classical learning and (supposedly) classical scripts. In their search for ancient Greek and Latin texts, humanists discovered the Uncial script of the Carolingian Renaissance invented some seven hundred years prior and, mistakenly assuming it to date to classical antiquity, dubbed it “Antiqua,” as compared to the “Moderna” Blackletter Gothic scripts. The humanists combined Roman Square Capitals with Antiqua miniscules to create our modern alphabetical system. Venetian printer Nicolas Jenson introduced the first “Roman” type in 1470. History rendered revived Carolingian Miniscules and Roman Capitals “the universal medium of Western civilization.”

Imperial Script: Fraktur as Gothic Baroque

The triumphant fate of revived Graeco-Roman script was far from guaranteed upon its inception in early Renaissance Italy, however. Quite on the contrary, Antiqua faced an uphill battle to displace the “moderna” Gothic from its elevated position in both formal-hand manuscript production and early printing. Gothic letter forms had embedded themselves deeply in northern European scribal and print culture, particularly in the Germanic lands. Frakturschrift emerged as German-speaking

30 Morison, 265.
31 Shaw and Bain, “Introduction: Blackletter vs. Roman: Type as Ideological Surrogate,” 12.
32 Morison, 145.
33 Ibid., 273.
Central Europe’s organic, Gothic-baroque answer to the intellectual advancements of Renaissance humanism. It was a trademark script and type that persisted well into the twentieth century alongside Graeco-Roman counterparts of Italian humanist derivation. Yet Fraktur was in its own way a Renaissance humanist endeavor.

Despite its centrality to the history of European type and script, scholars struggle to pin down exactly who invented Frakturschrift, and when. Want of consensus on what differentiates Frakturschrift from medieval and other early modern scripts exacerbates the challenge. Moreover, the term “Fraktur” lacked consistent meaning in the early 1500s (a phenomenon that persists to this day). It seems often to have referred to all “broken-letter” types and scripts, including those that seem little different from the Textura and other medieval Blackletter scripts that preceded the Renaissance invention of Frakturschrift.® Suffice to say that innovations in Gothic script and type emanated from the court of Holy Roman Emperor Maximilian I in the first years of the sixteenth century, resulting in a fresh yet familiar Gothic book hand script and type eventually dubbed Fraktur.

Of the many figures associated with the rise of Frakturschrift, Emperor Maximilian I himself predominates. Known variously as the “last knight” of the Middle Ages and the “first modern man north of the Alps,” Maximilian sat on a precipice between two intellectual worlds, one dominated by scholasticism and written in Gothic Blackletter, the other by Italian humanism and written in Antiqua.® Intellectually precocious, with literary inclinations and access to the latest intellectual


35 Fichtenau, 5.
trends coursing through Europe, Maximilian felt acutely the gulf between the Germanic medieval and the Italian Renaissance classical. His youthful education encompassed aspects of both of these worlds. Maximilian lurched under the confines of medieval learning but found solace in humanistic sensibilities emigrating northward over the Alps from Italy. Those experiences were as distinct to the scholar-prince as were the Textura and Antiqua through which he encountered them.\textsuperscript{36}

Perhaps unsurprisingly, Maximilian’s imperial court became an intellectual, calligraphic, and typographical meeting ground, due both to the emperor’s own intellectual proclivities as well as the pressing bureaucratic needs of his imperial apparatus. The emperor patronized the development of Druckfraktur (Fraktur type) for use in his Gebetbuch (prayer book) of 1513, and the Theuerdank (a chronicle of Maximilian’s life) of 1517, both of which are widely considered the first landmarks of Fraktur typography. In this era of close interaction between print and manuscript traditions, however, the roots of Druckfraktur are found in the earlier work of German scribes of the fifteenth and sixteenth centuries. The letter designs of court calligrapher Vincenz Rockner served as model for the type used by Johann Schönsperger the Elder (1455-1521) to print the Gebetbuch and Theuerdank. Rockner and Schönsperger’s designs represented the culmination of some years’ worth of reform in broken-letter scribal practice indirectly connected to the court. Some scholars trace the roots of Fraktur in the Kanzleischrift of calligrapher Wolfgang Spitzweg, a court scribe who died in 1472. Leonhard Wagner (1453-1522), Europe’s most famous Renaissance calligrapher, presented “fractura” and “semi-fractura” scripts as early as 1507, in his

\textsuperscript{36} Ibid., 5-9.
seminal *Proba centum scripturarum diversarum*, which also includes Graeco-Roman styles. These three landmark texts—Wagner’s *Proba* of 1507, Maximilian’s Gebetbuch of 1513, and his Teuerdank of 1517—are early milestones of the age of Fraktur in German-speaking Central Europe.

This discussion naturally begs the question of what constituted Fraktur. The very types of documents on which early Fraktur type and script appeared—prayer books, devotional texts, and state documents—offer hints. Scribes and printers had traditionally presented prayer books in Bastarda scripts such as Schwabacher, as the weaker duct (that is, thickness of pen stroke or printed line) lent itself to the personal character of such works. Textura was deemed too formal for this variety of texts. This predisposition to Bastarda, as well as the relationship of Druckfraktur to Frakturschrift, as seen in the relationship between Rockner and Schönsperger, reflects Fraktur’s mixed origins in Gothic book and current hands of the same period. Indeed, some scholars have classified Fraktur as a form of Bastarda, its most direct antecedents including Bohemian and Burgundian Bastardas. Tellingly, Kanzleischrift (secretary hand), an informal court hand, developed alongside

37 Leonhard Wagner, *Proba centum scripturarum diversarum una manu exaratarum fratris Leonardi Wagner, alio nomine Wichtlein* (Furth, Austria: Stift Göttweig, Austria, 1507), microfilm, Hill Museum & Manuscript Library. St. John’s University, Collegeville, MN.

38 Ibid., 29-30, 38.

39 Ibid., 31. For more on duct, see Denholm-Young, 7-8.

40 Fichtenau, 26; Killius, 40, 68.
Frakturschrift in Maximilian’s imperial court. It shares notable similarities to its rather more formal book-hand cousin.  

Fraktur represented the modernization of the Gothic, both in style and function. While clearly rooted in medieval Blackletter, an “open form” characterizes Renaissance and Baroque Fraktur that puts it at odds with Textura and reflects the script’s heritage in current hands. In terms of aesthetic, the style was no less ornate than Textura, but its written and printed forms present a more fluid composition. Fraktur is characterized by its use of ornate flourishes in both majuscule and miniscule letter forms, particularly over-lines on miniscule letters b, h, k, and l. Known in German as “Elefantenrüssel,” or “elephant trunk,” such long, exaggerated strokes complement the tall, thin f and s miniscules, among other flowing letter forms. Despite this commonality, Fraktur majuscules and miniscules contrast sharply. Majuscules more likely consist of true “broken” script (in which letter forms’ component parts are disconnected), whereas miniscules are frequently rounded. Fraktur majuscules are large and ornate; they often defy the rectilinear layout of the rest of the text. (Fraktur shares this trait in common with late Roman imperial and Byzantine state scripts, as well as Papal scripts of the early Middle Ages.) Frakturschrift miniscules look rather different; lower-case Frakturschrift characters are narrow and tall compared to their Textura cousins. All these traits contribute to Fraktur’s “open,” less constricted aesthetic, distinct from other Gothic types and scripts.  

With its increased contrast between majuscules and miniscules, weaker duct, 

41 Killius, 84.  
42 Fichtenau, 26-27.
and open form, Frakturschrift was considered more legible than its Textura antecedent.\(^{43}\)

Frakturschrift quickly assumed a mantel of Holy Roman imperial power and prestige, replacing Textura as the preferred letter form for liturgical texts.\(^{44}\) The appearance of Luther’s Bible in Druckfraktur, coupled with the predominance of Frakturschrift at imperial court, established broken letter forms as symbols of Protestant German language and identity.\(^{45}\) Frakturschrift was truly the pinnacle of the “gothic baroque,” a distinctively German modification to medieval Blackletter that remained relevant for centuries.\(^{46}\) Druckfraktur quickly spread beyond Germany to become the preferred printing type in Scandinavia, Finland, and the Baltic countries.\(^{47}\)

Whatever its political and ideological implications, certain physical characteristics of Blackletter type and script disposed the style to employment in German-language texts because it encouraged efficient and economical use of page space. First, German words are often very long, and Blackletter characters are written

\(^{43}\) Ibid., 28.

\(^{44}\) Killius, 71-72.

\(^{45}\) Ibid., 82.

\(^{46}\) Ibid., 39.

\(^{47}\) Bertheau, 26; Philipp Luidl, “A Comparison of Fraktur and Roman Type: A German Study,” in Blackletter: Type and National Identity, eds. Peter Bain and Paul Shaw, 20-21. The typeface was created by Johann Neudörffer and Hieronymous Andreä and introduced in Nuremberg in 1522. Schwabacher and Fraktur shared a close relationship throughout the period. Just as works published in Roman type included words in Italic for emphasis, texts published primarily in Fraktur utilized Schwabacher for emphasis.
and printed closer together than Graeco-Roman counterparts. Moreover, all German nouns are capitalized regardless of their location in a sentence, meaning that the German language requires use of considerably more majuscules than do the Romance-languages. Blackletter majuscules use the same line width as miniscules, allowing more conservative use of page space than possible if writing or printing German in Graeco-Roman types or scripts. Other advantages have to do with legibility. Scholars assert that, particularly considering the length of many German words, German presented in Blackletter is more legible than German in Graeco-Roman type or script, in large part because of the style’s greater variety of letter forms. A larger number of Frakturschrift miniscules and majuscules possess ascenders and descenders than do Graeco-Roman alternatives. Moreover, Frakturschrift uses the long s. This added variety enhanced differentiation among letter forms, which in turn increased recognition of lengthy German words.48 Blackletter and Frakturschrift were indeed well-disposed to the written German language.

**Fraktur or Antiqua? Type, Script, and Cultural Identity**

By happenstance, design, or something in between, Blackletter shared close associations with the most important political and cultural upheavals shaping fifteenth and sixteenth-century society in German-speaking Central Europe. Gutenberg’s printing press and its Blackletter moveable type were useful tools in fanning the flames of religious dissent, culminating in the printing of Martin Luther’s German-

---

language, Druckfraktur Bible and other sacred texts, many translated from Latin. Luther’s incendiary commentary on the tyranny of the Catholic Church advocated throwing off the yoke of foreign, learned languages in favor of the German mother tongue. The word of God, claimed the Protestants, was no holier in Latin or Hebrew than the common vernacular presented in Fraktur. The contrast of Luther’s works (published in vernacular German in Blackletter type) with the Gothic Rotunda and other classical types and scripts of Latin-language Catholic liturgical works, added a visual distinction to aural and inferred religious and national divisions between languages. The Reformation inspired new waves of church bureaucratization, theological scholarship, and publication that catalyzed a rich German-language Blackletter Protestant print culture. Indeed, the Protestant Reformation figured prominently in the standardization of the German language, the cultural association of Blackletter with German-language text, and the centrality of Protestantism to nascent north-German ethnic identity and proto-nationalism. The spiritual and associated linguistic dichotomy Luther and his followers delineated between Catholic and Protestant print culture both reflected and helped coalesce dialogue about the German language’s history and future, shaping cultural consciousness around the language for several generations.


51 Ibid., 45.

52 Ibid., 39, 52-53.
Language, type, and script traditions played a central role in shaping concepts of cultural and intellectual identity in seventeenth and eighteenth-century Europe, particularly among Central European German-speakers, who occupied more than three-hundred small, quasi-independent principalities and lacked much else to unite them except common linguistic (and, for many, Protestant) heritage. Culturally loaded theories of linguistic origins often claimed primeval origins for the German language. German commentators had applied terms like “lingua materna/mütterliche Sprache (mother tongue)” and “lantsprachen (language of the country)” to the German language since the fourteenth and, especially, the fifteenth centuries. Some scholars postulated a German-speaking Adam, while others traced “König Deutsch (King German)” to “Abrahams Zeiten (Abraham’s time).” Though fanciful theories of a German-speaking Adam fell from favor in the seventeenth and eighteenth centuries, linguists continually underscored the ancient origins of German (often at Babel) and the discrete developments of Romance and Germanic languages. Distinct types and scripts reinforced discrete linguistic genealogies. Many theories sought to elevate German to the lofty status of “Hauptsprache (chief language),” a title shared by Hebrew, Latin, and ancient Greek. Such efforts situated the German tongue above vulgarizations of Latin (including French and Spanish) in the hierarchy of ancient,

53 Ahlzweig, 29, 33.

holy languages. Johann Merken’s 1782 German-language writing manual Liber artificiosus alphabeti maioris builds an argument for linguistically-based scripts on contemporary theories of linguistic development following the destruction of the Tower of Babel. Noting scriptural knowledge that several tongues emerged at Babel out of one, common root language, Merken suggests that scripts associated with written forms of those tongues originated from one root script. As proof, Merken offers in tabular format a visual comparison of letters of the Hebrew, Greek, Latin, and German alphabets, noting similarities among various letter forms across alphabets. Merken’s scribal typology reinforces German’s aggrandized status as one of four diasystemic languages to emanate from Babel (as compared to French), while underscroing the level of difference he and others ascribed to the Latin and German scripts—or, in his terminology, their distinct “alphabets.” To Merken and other writing masters, Blackletter and Graeco-Roman scripts and types were as different as German and Latin languages and religions themselves.

Various period accounts attest to the centrality of text aesthetic to conceptions of linguistic and quasi-national identity. Terms like “Muttersprache,” which Luther and other reform-minded incendiaries employed so liberally, had late-medieval roots in written, not spoken, language. German’s proclaimed status as Hauptsprache

55 Ibid., 1105-9; Killius, 100. “There was obvious advantage if German, increasingly invested with knowledge of its own linguistic monuments, could stand as a major representative of a diasystem, the roots of which stretched much further back than the modern rivals French, Spanish, and Italian,” Jones asserts. Killius notes that the concept of three holy languages (Greek, Hebrew, and Latin) was a medieval notion modified by linguists of the sixteenth and seventeenth centuries.

56 Johann Merken, Liber Artificiosus Alphabeti Maioris (1782), 2-3.

57 Ahlzweig, 51.
(diasystemic language) lent itself to discussion of linguistic purity, the extent to which German itself and its linguistic offshoots (including English and the Scandinavian languages) adhered to or strayed from their Teutonic roots. Johann Gottsched explained the correlation of type and script to linguistic genealogy. “The Dutch and the English had, like the original German, initially shared a script with us; afterwards this the Anglo-Saxons had carried to Britain,” Gottsched lamented. “They were alone there until William the Conqueror’s time, when a good quantity of Latin and French words entered the language, which they wrote and published entirely in round Latin characters. So was their script so muddied, that they nearly feel ashamed of it.”

Blackletter type and Frakturschrift enjoyed a golden age in the seventeenth century, as the German book trade flourished and the Holy Roman Empire’s bureaucratic apparatus expanded. As German language asserted its status in the worlds of literature and scholarly inquiry, so too did its signature type and script. Sixteenth-century publishers codified what remained for many years the tradition of the use of Blackletter for German texts and the use Graeco-Roman type for foreign languages (especially Romance languages), scientific publications, and classical texts. The same held true in Scandinavia, Luxembourg, the Netherlands, and other northern European Protestant nations.

A more substantial challenge to Fraktur emerged in the eighteenth century, as classicism overtook Western Europe. Graeco-Roman type and script had evolved since the days of the early humanists. Between the fifteenth and eighteenth centuries,

---

58 Johann Christoph Gottsched, Grundlegung einer Deutschen Sprachkunst... (Leipzig: Verlegts Bernhard Christoph Breitkopf, 1752), 28.

59 Killius, 11.
Graeco-Roman types lost evidence of their descent from scripts. As a result, Graeco-Roman types became increasingly standardized and adapted to the printed rather than written word.\textsuperscript{60} Classicization in education spread Graeco-roman types and scripts across the European continent, leaving the German-speaking world isolated in its adherence to the gothic and thus reinforcing the German identity of Blackletter.

France, Germany’s leading literary rival, almost totally abandoned Blackletter in favor of Graeco-Roman type and script in the seventeenth and early eighteenth centuries. The English reduced Gothic book hands and types to ornamental use in English-language texts. Similarly, by the end of the seventeenth century, both the English and French had largely eschewed native gothic secretary hand for imported Italian humanist current hands. Men of trade and commerce hastened this shift, opting to maintain business records in merchant current hands derived from Italian humanistic models.\textsuperscript{61} The commercial emphasis of English-language handwriting education in George Bickham and Joseph Champion’s 1741 \textit{Universal Penman} is clear. A verse titled “The Penman’s Advice to Young Gentlemen” reads: “Ye British Youths, our Age’s Hope & Care, / You whom the next may polish or impair, / Learn by the Pen those Talents to insure, / That fix ev’n Fortune & from Want secure. / …For Ease and Wealth, for Honour and Delight, / Your Hand’s yo. [your] Warrant, if you well can Write.”\textsuperscript{62} In the eighteenth and early nineteenth centuries, English-

\textsuperscript{60} Ibid., 61.

\textsuperscript{61} Thornton, 18-19, 22.

\textsuperscript{62} George Bickham, \textit{The Universal Penman, or, The Art of Writing} (London: Printed for the author, 1741), plate 29.
language writing instruction took on more and more commercial an emphasis, which often overshadowed writing manuals’ imperatives toward moral education.\textsuperscript{63}

Given Graeco-Roman’s new status as typographical and scribal standard, challenges to Blackletter arose among the eighteenth-century German literati, who were incensed by the ascendency of French literature and angered by the perceived backwardness of Blackletter text and the literature that appeared in it. Publication of German literature in Graeco-Roman type, some thought, would improve the reception of German literature in Western Europe.\textsuperscript{64} Some authors inspired by Classicism clamored for the adoption of Graeco-Roman type; Johann Wilhelm Ludwig Gleim’s “Lieder” and Ewald Christian von Kleist’s “Frühling” appeared in Graeco-Roman type as early as 1733.\textsuperscript{65} Graeco-Roman type made little headway, however; Fraktur had become a popular trademark of German publications within and beyond the German-speaking lands. British writing master Joseph Champion titled his 1794 publication featuring neo-Gothic book hand scripts “A New and Elegant Set of Copies in German Text.”\textsuperscript{66} Roughly 90-95\% of all works published in the German-speaking lands between 1785 and 1810 appeared in Fraktur, a proud symbol of German linguistic and cultural identity.\textsuperscript{67}

\textsuperscript{63} Thornton, 11-12.

\textsuperscript{64} Killius, 61.

\textsuperscript{65} Ibid., 148.

\textsuperscript{66} Joseph Champion, \textit{A New and Elegant Set of Copies in German Text} (London: Laurie & Whittle, 1794).

\textsuperscript{67} Killius, 12, 189-215.
**European Scripts in America**

The imperial court of Maximilian I, the printing press of Johannes Gutenberg, the desk of Martin Luther, and the libraries of Renaissance Italy where humanist scholars rediscovered the classical age seem worlds away from the agrarian landscape of eighteenth and early nineteenth-century provincial Pennsylvania. But the literate German-speaking settlers who arrived at Philadelphia between 1683 and 1775 interacted on a daily basis with typographical and scribal traditions established in Europe over the previous centuries—as well as the religious, ideological, and geopolitical tensions played out in print and manuscript culture. In his handmade copies of plates from a German-language European writing manual published in 1780, Pennsylvania schoolteacher Johannes Bard reenacted a schism between Blackletter and Graeco-Roman scripts with roots extending deep into European linguistic, literary, and cultural history as late as 1820. The scripts in which Bard had attained proficiency bore names reminiscent of the political and ideological discourses from which they had emerged: Latin, French, and Roman scripts on the one hand, Fraktur scripts on the other (see Figures 6-10). The extent to which the division between Blackletter and Graeco-Roman scripts meant anything culturally significant to German-speaking Pennsylvanians who learned, employed, or just read texts in one or another style is difficult to assess. While learned men like linguist Johann Gottsched

68 Johannes Bard, Writing Sample, Adams County, PA, 1819-1821, object 2011.28.14; Johannes Bard, Writing Sample, Adams County, PA, object 2011.28.16; Johannes Bard, Writing Sample, Adams County, PA, 1819-1821, object number 2011.28.9.
or authors of published writing manuals like Johann Merken’s *Liber artificiosus alphabetti maioris* commented on the origins and uses of types and scripts, few Pennsylvania Germans (even those like Bard, who mastered numerous calligraphic styles) articulated their own insights on what script meant to them, and why. We do know, however, that Bard and others operated in a print and manuscript world infused with politics, ideology, culture, and religion, and that they employed different types and scripts in predictable ways. Blackletter and Frakturschrift comprised this community’s vital medium of cultural expression and cohesion. The medium changed over time in its American context.

While known among the earliest Anglophone settlers of North America, Gothic book hands and types fell out of favor in England during the first seventy years of colonization. Graeco-Roman types and scripts became standard for presentation of English text on both sides of the Atlantic. Similarly, English abandonment of native Gothic secretary hands for imported Italian humanist current hands influenced handwriting in North America, where, before long, Gothic scripts were obsolete.69 Among German-speaking Pennsylvanians, however, Blackletter undergirded vibrant, fluid, and interactive print and manuscript cultures distinct beyond the neo-Gothic letter forms they employed.

69 Thornton, 18-19.
Figure 6. Writing sample featuring Frakturschrift majuscules (“Groß Frakturbuchstaben”) by Johannes Bard, Adams County, PA, 1819-1821, 7 1/8” x 7 7/8”. Courtesy, Winterthur Museum, Writing sample, gift of Nick and Jo Wilson, 2011.28.14. Photograph by James Schneck.

Figure 8. Johannes Bard, writing sample, Adams County, PA, 1819-1821, 7 7/8” x 8 3/8”. Courtesy, Winterthur Museum, gift of Nick and Jo Wilson, 2011.28.16. Photograph by James Schneck.

Figure 9. Detail, Johannes Bard, writing sample, Adams County, PA, 1819-1821. Courtesy, Winterthur Museum, gift of Nick and Jo Wilson, 2011.28.16. Photograph by James Schneck.
Figure 10. Johannes Bard, writing sample, Adams County, PA, 1819-1821. 6 ¾” x 7 3/8”. Courtesy, Winterthur Museum, Writing sample, gift of Nick and Jo Wilson, 2011.28.9. Photograph by James Schneck.
Almost all of Pennsylvania’s early German-speaking settlers were Protestant. Those who were literate operated in print and manuscript worlds dominated by Blackletter and Frakturschrift. Most were, to a greater or lesser extent, influenced by seventeenth and eighteenth-century German Pietism and revivals of mysticism, though the beliefs of very few amounted to “pure” Pietism or mysticism, if such things existed. Beyond these general similarities, substantial differences divided German-speakers’ religious backgrounds, devotional practices, and political philosophies. Many small Protestant groups were labeled “sects,” or exclusionary religious communities characterized by separatist civic, social and religious practices.\footnote{Aaron Spencer Fogleman, \textit{Hopeful Journeys: German Immigration, Settlement, and Political Culture in Colonial America, 1717-1775} (Philadelphia: University of Pennsylvania Press, 1996), 109.} Sectarians, as well as their Lutheran and Reformed counterparts, arrived in waves between 1683 and 1775, and they lived what they preached.\footnote{Ibid., 4. After the 1750s, most newly arrived German-speaking settlers were members of mainstream Lutheran or Reformed congregations. Those congregations did, however, owe some debt to Pietistic thought.} Theology and social philosophy among Pennsylvania’s German-speaking Protestants reinforced each other. Lutherans, who comprised the vast majority of eighteenth-century German immigrants, represented the theological and sociopolitical mainstream. They
interacted most easily—and willingly—with Anglophone society. Radicals settled in Pennsylvania intent to isolate themselves from conformist Protestant religious practices and the corrupting influence of the temporal world. A brief discussion of Reformation-era theologies and politics enlightens how Blackletter type, Frakturschrift calligraphy, scriptural interpretation, and colonial settlement interacted in Pennsylvania, where early modern religious beliefs and devotional practices gradually adjusted to the realities of American life.

**Composition of Pennsylvania’s German-Speaking Population**

Between 1683 and 1775, some eighty-thousand (mostly literate) German-speaking Central Europeans flowed into British North America. Settlement proceeded in three waves: first, from 1683 to 1709; second, from 1709 to 1714; and third, from 1717 to 1775. Each wave featured immigrants of different religious backgrounds who settled in various colonies. The first wave, from 1683 to 1709, was characterized by the arrival of radical sectarians, including Mennonites, into the port of Philadelphia. The sectarians, many of whom farmed, sought to pursue utopian social experiments in the geographic and political isolation of Penn’s Woods. Germans migrated during the years of the second wave, from 1709 to 1714, in large part because of a Central-European agricultural disaster in 1709 and a settlement experiment funded by the British crown. Many during this period settled in New York and North Carolina. The third wave, from 1717 to 1775, during which the vast

---

72 Ibid., 6.
73 Ibid., 4.
majority of German-speaking immigrants arrived, varied drastically from the earlier two. Relatively few of this group were Radical Pietists, or left Europe primarily for reasons of religious freedom. (A major exception was the mystical Schwenkfelders, who arrived as late as 1732.) A greater number opted for the harrowing journey across the Atlantic in light of socioeconomic stresses and political oppression making life in Central Europe—and particularly southwestern Germany—unbearable for the agricultural peasantry.⁷⁴

Emigrants left a region rife with economic, political, and religious pressure. The southwestern corner of the German-speaking lands of Central Europe, encompassing territories such as the Palatinate, Baden, Württemberg, and Alsace, occupied a unique geographical and political position in Central Europe that made it a hotbed for religious and social tension. The region lacked strong, centralized leadership, as it fell outside the direct influence of Prussia, Austria-Hungary, or the Swiss Confederation. The Palatine Electorate and Baden-Durlach, the area’s most prominent political authorities, were weak compared to the Habsburg empire and Prussia. Given this political power vacuum, none of the early modern period’s three major faith traditions—Catholicism, Lutheranism, or Calvinism—established a dominant foothold in the region. Even within regional Lutheran and Reformed churches, a conservative Pietism made its presence felt and bred internal controversy. Its central location rendered southwestern Germany an epicenter of the Thirty Years’ War, ravaging the agricultural landscape, killing many of the region’s inhabitants, and driving countless others to new lands. Radical Pietism and apocalyptic movements

⁷⁴ Ibid., 4-18.
found fertile soil in the war-torn European landscape. Those small but potent sects, which cultivated such incendiary beliefs as pacifism and adult baptism, contributed to the religious character and ethnic diversity of the region. In the late seventeenth century, regional leaders sought to repopulate the landscape with sectarian migrants from the Cantons of Bern and Zürich, among other places. This, coupled with natural population growth, led to overpopulation. By the mid-1700s, after several decades of repopulation, early modern agrarian village life proved unsustainable, as lack of land forced younger generations of peasantry to new territory and rural life shifted toward a more capitalistic model. In the midst of this turmoil, local governments and religious bureaucracies tightened their grip on the lives of the citizenry. The region was a logical recruiting ground for Continental European nobility as well as British imperial authorities seeking settlers for underpopulated territories in eastern Europe and the New World.\(^{75}\)

Southwestern German settlement of Pennsylvania was part of a much larger pattern of eighteenth-century out-migration from the region. Most of the Central European German-speakers who left their homelands in the seventeenth and eighteenth centuries settled in eastern Europe, not Pennsylvania.\(^ {76}\) The British, who eagerly sought agrarian settlers for its American colonies, faced a disadvantage in luring Germans on a lengthy, dangerous, and expensive sea voyage to the unfamiliar New World. Only about 15 percent (85,000 of 900,000) of emigrants opted to travel to British North America. Those who did were likely dazzled by the vast amounts of

\(^{75}\) Ibid., 17, 41, 21, 102, 18-23, 38, 28-30.

\(^{76}\) Ibid., 28.
land available in the American colonies, as well as the colonies’ freedom from oppressive governmental and religious hierarchies. Many transatlantic settlers likely viewed continental European empires’ promises of freedom on European soil suspiciously and interpreted the American colonies’ distance from centralized governments as an advantage.

Pennsylvania’s proprietors did little to demarcate settlement patterns by ethnicity, meaning that, at least during the first waves of settlement, different nationalities and religions occupied close quarters near Philadelphia. Most Germans who arrived at the port of Philadelphia either stayed in the city or settled in the immediate outlying area, chiefly in Philadelphia, Montgomery, Chester, Bucks, Northampton, Berks, and Lancaster Counties. Most were Lutheran or Reformed. While their religious beliefs occupied central places in community identity for these German-speakers, they lacked the separatist tendencies of their Radical Pietistic counterparts. Despite their civic isolationism, Mennonite and Schwenkfelder German-speakers embraced the agricultural market economy and settled in regions where they could actively participate in it. Settlement in the counties surrounding Philadelphia, while offering some level of engagement with the urban center, was

77 Ibid., 30-33, 87.


79 Fogleman, 6, 30, 81.

80 Ibid., 86-87.

81 Lemon, 6.
sparse and agricultural, reinforcing the separatist tendencies of these small sectarian
groups. Of the eighty-thousand German-speakers to immigrate before 1775,
between 3,077 and 5,550 (around 10 percent) were Radical Pietists, including between
1,536 and 4,200 Mennonites and just 206 Schwenkfelders. Germans of all
denominations dominated southeastern Pennsylvania and indeed the entire colony-
turned-state.

While lumped together by contemporary English-speakers under the monikers
“Palatines,” “Pennsylvania Germans,” or “Dutch,” the German-speakers who
populated southeastern Pennsylvania likely would have felt more affinity with their
religious groups than an ambiguous concept of “Germanness.” The religious beliefs
of southeastern Pennsylvania’s early German settlers defy simple classification. The
material component of this study focuses on Mennonites and Schwenkfelders, two
groups variously categorized as Anabaptists, Radical Pietists, and mystics. A
discussion of these terms must precede a presentation of Mennonite and
Schwenkfelder contributions to southeastern Pennsylvania manuscript culture. While
often employed to describe the same people in early modern Europe and early

82 Ibid., 98-99.
83 Fogleman, 103.
84 Lemon, 14; Fogleman, 81.
85 Steven M. Nolt, Foreigners in Their Own Land: Pennsylvania Germans in the
Early Republic (University Park, Pennsylvania: The Pennsylvania State University
Press, 2002), 4, 28-29; Fogleman, 80-81. Anglo-Americans employed the term
“Palatine” when referencing German immigration whether or not the German-speakers
in question hailed from the Palatinate. They used “Dutch” or “German” in other
contexts.
America, the three terms are not interchangeable. Mysticism is a philosophy of scriptural devotion grounded in medieval theology. Pietism was a broadly based seventeenth and eighteenth-century Protestant religious movement based on revived components of mystical thought. Anabaptism (eventually called Mennonitism) was the highest-profile sect to sprout from Radical Pietistic thought and one of the largest sectarian groups to settle provincial southeastern Pennsylvania.  

Pietistic and mystical theologies constituted a theological and spiritual pipeline from the learned Protestant aristocrats, academics, and clergy of early modern Central Europe to the farmsteads of southeastern Pennsylvania. Whereas it fell to members of early modern Europe’s educated elite to articulate new and often controversial theologies that pitched them against both the Catholic Church and Martin Luther, their zealous followers were often of humbler, agrarian stock. Those provincials made their own contributions to the corpus of Pietistic theology, in the form of the devotional manuscripts they made and used as central components of their religious and educational practice.

**Scripture Alone?  Mysticism, Pietism, Anabaptism, and the Word of God**

“In a manner of speaking, the whole excitement and enterprise of the sixteenth century was aimed at resurrecting the ‘living spirit’ mouldering inside the tomb of a

---

86 Fogleman, 105-107.

dead or false ‘letter,’” wrote one scholar of early modern Europe. Italian humanists unearthed and studied forgotten ancient texts—and developed new scripts and types based on Classical models. North of the Alps, in German-speaking Central Europe, the Protestant Reformation questioned interpretive authority over scripture and methods to exegete the holy Word. Who possesses power to establish scriptural meaning? How is divine grace distributed? For Protestants, personal experience with scripture opened the door to pure faith experiences. They enjoyed a spectrum of options in just how radically to depart Catholic orthodoxy in their free interpretation of scripture.

Mainstream Lutheranism, which presented the most conservative Protestant alternative to Catholicism, departed from Roman Catholic theology on four central points. First, Lutherans adhered to sola scriptura, or “scripture alone,” a concept whereby all knowledge of God comes directly from the Bible, rather than through intermediaries including sacraments and clergy. Second, Lutherans espoused the priesthood of all believers, implying individual engagement with the means to salvation. Third, Lutherans believed in salvation by grace rather than good works; and, fourth, they believed in justification (that is, spiritual redemption) while simultaneously a sinner. Lutheran doctrine was radical compared to Roman Catholicism, which placed the Church at the center of salvation. Yet Lutheranism left little room for religious pluralism, supported the authority of an educated clerical elite,

and did not question the validity of hegemonic state-sponsored churches—so long, of course, as those churches were Lutheran.\(^{89}\)

The radical religious groups who comprised the far fringes of the Reformation sought, in their view, to complete the work of the Reformation by popularizing access to divine knowledge and internalizing religious devotion.\(^{90}\) Such reformers often still adhered to the doctrine of *sola scriptura*.\(^{91}\) While liberal enough to desire religious experience unmediated by clergy, non-Biblical texts, or formalistic interpretations of scripture, Pietists, Anabaptists, and mystics for the most part recognized the Bible as the only universal authority on matters of Christian belief and practice. Written and spoken words were operative variables in Anabaptist, Pietistic, and mystical religious experiences, but in a way quite different from contemporary Lutheranism.\(^{92}\) For the Reformation’s fringe elements, scripture was a medium for divine revelation brought about by the Holy Spirit. It was not revelation itself. Thus, they sought methods of encountering the Bible that would push their faith *beyond* the holy Word *through* the holy Word.

This distinction between Lutheran and radical Protestant theology may seem esoteric today, but in early modern Europe, it resulted in vicious persecution against Radical Pietists. Sixteenth and seventeenth-century Europe organized its religious, social, and political structures around the medieval concept of *corpus christianum*, or

\(^{89}\) Snyder, 19-20.

\(^{90}\) Weeks, 3, 6, 13.

\(^{91}\) Snyder, 43.

\(^{92}\) Weeks, 3, 6, 13.
“Christian body,” according to which temporal society and spiritual life comingled as a coherent whole. Martin Luther and the mainstream Reformation followed a conservative trajectory, inciting separation from Rome and establishment of a Protestant state apparatus while reasserting the authority of elite political, academic, and theological leaders in delineating the boundaries of acceptable orthodoxy. Luther passionately discouraged disturbance of the European social order. Some of those at the bottom of Europe’s class hierarchy, however, embraced the liberty of personal scriptural interpretation to incite social and economic revolution in addition to theological reform, removing authority over acceptable religious meaning from the hands of learned clerics and giving it to those beyond the pale of elite, educated early modern society. The Peasants’ War of 1525 epitomized the comingling—and boiling over—of Reformation-era political and religious tensions. This bloody attempt at political reformation was led by commoners who felt liberated by Lutheran doctrine, but the revolt was quickly and ruthlessly put down by aristocrats keen to establish boundaries on Protestant religious fervor. The uprising largely failed in achieving its ends, though separatist, reformist Anabaptist ideologies sprouted concomitant with (and were influenced by) the Peasants’ War. Persecution against radical dissenters inspired by the revolt pushed thousands of nonconformists to American shores—and tinged their sense of self-identity.93

This thesis has thus far spoken of Anabaptists, Radical Pietists, and mystical spiritualists as a bloc. While adherents of those traditions had similar quarrels with Lutheranism and drew on similar theological and philosophical approaches to address

93 Snyder, 14-15, 43, 103. The first adult baptisms in Zürich took place at the outset of the Peasants’ War.
them, the terms are distinct conceptual models by which to differentiate between related early modern Christian movements. Mysticism itself never blossomed into a tenable theology. Aside from the Schwenkfelders of Silesia and Pennsylvania, it inspired no lasting independent Protestant denomination or sect. Its influence was extensive, however, as an approach to scripture employed by nonconformists. Schwenkfelders are called mystics not because they alone among Protestants employed mystical methods, but because their devotional practices adhered to mysticism most closely. Pietists, for their part, drew heavily on mysticism in formulating alternatives to Lutheran orthodoxy. Pietism was grounded in an inner spirituality derived at least partly from medieval mystical antecedents. Anabaptists, later called Mennonites, were Radical Pietists who established a church structure that distinguished them from their theological cousins. As elements of mystical thought undergirded Radical Pietism and Anabaptism, this summary will begin with mysticism before exploring mysticism’s applications to other radical movements.

Mysticism and the Schwenkfelders

Radical Protestant nonconformist theology of the seventeenth century drew heavily on mysticism, a religious philosophy and set of devotional practices that had occupied positions on the margins of German intellectual life since the fourteenth century. The fundamental tenet of mysticism was spiritual enlightenment through

94 Ibid., 95.

95 Schneider, 4; Weeks, 1. The term “deutsche Mystik” was first used by Karl Rosenkranz, a student of Hegel, who asserted the centrality of medieval religiosity to all German philosophy.
personal, meditative interaction with scripture. Mystical religious experiences involved transcendent union with God. During this union, God offered divine knowledge directly to the believer, bypassing the interpretive influence of clergy, church doctrine, or religious rites and ceremonies. As a primarily emotive exercise, mystical religious experience subordinated human logic to divine revelation.

Systematic theology cannot be mystical, nor could mysticism be organized into a systematic theology. It was characterized by its lack of logic and reliance, as one historian noted, on “mystical intuition.” Mystics rejected universalist doctrines of scriptural interpretation in favor of pluralistic, highly personal faith experiences.96 While meaning emanated from within the believer, the written word of God was just as (if not more) vital to mystical religious experience as it was to mainstream Lutheranism. Mystics read the Bible as intently as non-mystics, and their scriptural revelations rarely, if ever, diverged from Biblical mandate.97 Mystics did not espouse a conception of truth opposed to the absolute truth of Lutherans, but rather an alternative pathway to access divine truth.98 Exegetical process, rather than product, set mystics apart from mainstream Lutherans.99

This thesis first posed the question, “What does prayer look like?” One might now ask, “What does mysticism look like,” or, how did Christians enact abstract mystical concepts in their devotion, especially as they related to visual culture and

96 Weeks, 7, 156.
97 Ibid., 1-3, 6, 8.
98 Ibid., 145.
99 Ibid., 145.
letter forms? Just as mysticism itself is challenging to define, it is difficult to parse out what (if any) aspects of Protestant visual culture may rightly be called fundamentally “mystical” in nature. Review of scholarship on mysticism and calligraphy suggests that ornate letter forms, which ornament text, the very medium of divine communication, lent themselves to the mystical sensibility. Given that they sought direct transcendental union with God, theologian Bernard McGinn suggests that mystics looked suspiciously at pictorial forms of religious devotion. “Precisely because it involves a hidden and secret perception of God…the mystical element of religion ought, by definition, to defy pictorial representation,” McGinn observes. “Mystics have always wrestled with language as the necessary, if insufficient, tool of their imperative to invite others to experience an otherwise ineffable God,” McGinn continues.100 By ornamenting letter forms, mystics avoided the worst offenses of pictorial religious imagery while enhancing their only real pipeline to God’s will: text. Ornamental calligraphy was thus perhaps a more acceptable aesthetic enterprise.

No group of German settlers adhered to mystical practices more closely than the residents of Ephrata Cloister in Lancaster County, followers of the pious mystic Georg Conrad Beissel who dwelt in spiritual solitude devoted to the attainment of transcendental union with God. Calligraphy and manuscript illumination became two

100 Bernard McGinn, “On Mysticism & Art,” Daedalus 132, no. 2 (Spring, 2003), 131-132; Mary Carruthers, The Book of Memory: A Study of Memory in Medieval Culture, 2nd ed. (Cambridge, UK: Cambridge University Press, 2008), 20-21. In her landmark study of the visual culture of medieval memory, Carruthers notes that scholars must count letter forms among visual representations. “One should distinguish very carefully between ‘pictorial’ and ‘visual,’” she writes. “Pictures are not the only sorts of objects we can see. We also see written words and numbers, punctuation marks, and blotches of color…”
of the central devotional practices undertaken at Ephrata on the spiritual journey to Christian enlightenment. According to scholar Jeff Bach, “The process of creating *Fraktur* was a religious discipline to make the scribes’ bodies living temples…while members anticipated the New Jerusalem.”

While even at Ephrata not all manuscript illumination seemed to have adopted distinctively spiritual overtones and might not rightly be called “visual prayer,” *Frakturschrift* calligraphy was a medium of prayerful communication with the divine.

Philosophers and theologians returned to mysticism throughout German history when frustrated with orthodoxy. A young Martin Luther embraced mysticism on his quest for justification, so much so that he edited a mystical work known as *Theologia Deutsch*, which became required reading in Pietistic circles. Luther eventually abandoned his early mystical leanings, opting instead for a rigid “scriptural principle” that denied individual agency in Biblical interpretation. Nonetheless, the legacy of Luther’s early writings remained a rallying-point for Protestant nonconformists. Heinrich Horch’s 1712 *Mystical and Prophetical Bible*, better known as the Marburg Bible, was essentially Luther’s German translation, featuring mystical commentary. According to Horch, the volume “retrieved the hidden seed from the shell of the [dead] letter” and was “directed to the inward person”—two of mysticism’s defining features.

---


102 Weeks, 2-3, 143-144.

103 Ibid., 7-8.

104 Schneider, 80.
constrictions of rational philosophy.\textsuperscript{105} Many Pietists, whose dissenting beliefs were grounded in mysticism, eventually abandoned mystical inclinations. But the tradition permanently tinged their devotional practices.\textsuperscript{106}

The theology of Silesian nobleman Caspar Otto von Schwenkfeld and his followers formed the early modern era’s one sect to arise primarily out of mysticism. Educated at the University of Cologne, a center of humanist scholarship, around 1519 Schwenkfeld experienced a religious epiphany inspired by Martin Luther’s early, mystical writings. In addition to Luther, Schwenkfeld’s theology drew from two other sources: mysticism, and humanism.\textsuperscript{107} He became well-known in reform-minded Protestant circles for his spiritualism, characterized by his belief in the work of the “inner Word,” (i.e., the Holy Spirit) within believers’ hearts, facilitating direct communication between God and the Christian flock.\textsuperscript{108} For years, Schwenkfeld viewed his spiritualism as a branch of Martin Luther’s Reformation theology.\textsuperscript{109} By 1522, he became frustrated by mainstream Protestantism’s doctrinal focus and lack of concern for rejuvenation of Christian spiritual and moral life.\textsuperscript{110} By 1523,

\textsuperscript{105} Lewis White Beck, \textit{Early German Philosophy: Kant and His Predecessors} (Cambridge, MA: Harvard University Press, 1969), 8, 42.

\textsuperscript{106} Weeks, 6.


\textsuperscript{108} Ibid., 1-3; C. Arnold Snyder, \textit{Anabaptist History and Theology: An Introduction} (Kitchener, Ontario, Canada: Pandora Press, 1995), 35.

\textsuperscript{109} Weigelt, 14-16. Schwenkfeld had not met Luther prior to the former’s visit to Wittenberg in December, 1525.

\textsuperscript{110} Ibid., 16.
Schwenkfeld and his followers viewed their movement as distinct from the mainstream Lutheran Reformation.\textsuperscript{111}

Aspects of Schwenkfeldian religious thought and practice—primarily their refusal to attend Lutheran worship services, baptize their children, or receive Holy Communion—eventually proved too destabilizing to Reformation-era Central Europe’s political equilibrium of power to escape persecution.\textsuperscript{112} After a brief interlude on the estate of the Count von Zinzendorf (scion of the Moravian sect), where they had sought refuge in 1727, forty Schwenkfelder families consisting of 180 men, women, and children, left for Philadelphia, where they arrived on September 22, 1734.\textsuperscript{113} Within three generations, the distinctive characteristics of Schwenkfeldianism had gone extinct on both sides of the Atlantic.\textsuperscript{114}

### Pietism

The term “Pietism” encompasses many sixteenth and seventeenth-century liberal reactions to Lutheran theology and is considered the most important Protestant spiritual movement to follow the Reformation. While influenced by mysticism, the movement drew on a broader array of theoretical inspirations. Whereas Martin Luther and like-minded reformers had focused their energies on doctrinal reinterpretation and issues in church governance (in other words, Christian orthodoxy and ecclesiology),

\textsuperscript{111} Ibid., 1, 53.

\textsuperscript{112} Ibid., 102..

\textsuperscript{113} Ibid., 130-131; Ruth, 112.

\textsuperscript{114} Weigelt, 137.
Pietists wished to reform Christianity’s lived experience (that is, orthopraxy, or the practice of faith). True religious experience emanated from the hearts, minds, and spirits of believers, not from external, rational precepts. Emotional experience of the divine was the only sure path to salvation. Some adherents (so-called “Church Pietists”) sought to achieve this new, emotive religiosity within existing Protestant church structures. Church Pietism exercised a considerable influence over the Lutheran and Reformed Churches of Europe and Pennsylvania. Radical Pietists, unlike their church counterparts, lacked confidence in the ability and willingness of the Protestant establishment to enact their desired theological changes. These fringe groups desired not only abandonment of the established state churches but also the states themselves. Such shirking of both the spiritual and political status quo seemed to threaten every aspect of established social order, made Radical Pietists the target of persecution for hundreds of years, and rendered martyrdom a leitmotif of Pietistic spirituality. One of the earliest German-language books published in North America, the Anabaptist Bloody Spectacle, or Martyr’s Mirror, described the gruesome executions of Pietistic nonconformists.

115 Donald F. Durnbaugh, preface to German Radical Pietism, by Hans Schneider, vii; Schneider, 33.
116 Ibid., vii.
117 Schneider, 1-4.
118 Ruth, 122-126.
Anabaptism and the Mennonites

Of all the radical Protestant nonconformists, Anabaptists were most successful in founding a lasting denomination. It was a hard-won achievement, since they were also arguably the most persecuted Christian sect in early modern Europe. The word “Anabaptist” comes from the Latin, meaning to re-baptize. (All Anabaptist groups eventually adopted the name “Mennonite” after Dutch Anabaptist leader Menno Simons. The first known use of the term dates to 1544.\textsuperscript{119}) Their practice of adult baptism was undergirded by a complex theology that centered on belief in the exegetical power of the Holy Spirit (that is, the Holy Spirit’s agency in bringing the meaning of scripture to light) and the authority of lay people to interpret scripture independent of trained clergy.\textsuperscript{120} It revolved around two central tenets. First, Anabaptists forged a direct link between spirit and letter, in which the Holy Spirit provided access to scriptural meaning by working within the heart and mind of the believer. Scriptural revelation was active, emotive, and unmitigated by academic learning. Second, Anabaptists carried a vibrant inner life of the spirit to the outside world through demonstrations of faith, namely good works.\textsuperscript{121}

Three distinct Anabaptist groups emerged around the same time in Europe, each with different roots but common theological and political stances that eventually drew them together: the Swiss Anabaptists, the South German and Austrian

\textsuperscript{119} Smith, 58-62.

\textsuperscript{120} Snyder, 86-90.

\textsuperscript{121} Ibid., 87-88, 339.
Anabaptists, and the North German and Dutch Anabaptists.\textsuperscript{122} They all expressed concerns about the correct path to salvation and advocated for both moral and theological reform. Many unique sects emerged within these umbrella classifications. One commentator writing in 1560 identified thirteen distinct strains of Anabaptism in Europe. Another, writing in 1589, put the number as high as forty.\textsuperscript{123}

Swiss Anabaptism, whose adherents settled southeastern Pennsylvania, was born of political crises incited by the Peasants’ Revolt and the Zürich Reformation of the 1520’s. It had roots in the theology of Ulrich Zwingli. Zwingli, like other famous Protestant reformers Martin Luther and John Calvin, initiated a rejection of Roman Catholic theology and deference to the Papacy in favor of a state-mandated Protestant religion—in his case, a Reformed church tied to the Council of Zürich. He did not give any greater spiritual authority to individual believers than had the Catholic Church.\textsuperscript{124} Originally followers of Zwingli, Anabaptists sought to carry the Zürich Reformation further than did their spiritual leader or Council officials. Inspired by radical theologies found in the works of pious theologians such as Andreas Karlstadt, Thomas Müntzer, Hans Denck, and Hans Hut, radical Switzers opted for no state religious mandate, rather than Zwingli’s substitution of the Council of Zürich for the Papacy.\textsuperscript{125} Zwingli and his radical followers parted ways in 1523.\textsuperscript{126} As he and the

\textsuperscript{122} Ibid., 6.


\textsuperscript{124} C. Henry Smith, 4.

\textsuperscript{125} Snyder, 25-29, 62, 67.

\textsuperscript{126} Smith, 4-5.
Council of Zürich established a state-sponsored Reformed Church, the radicals developed a theology all their own and incurred much persecution in light of it.\textsuperscript{127} A diaspora took place in 1671, when seven hundred Swiss Mennonites settled in Alsace and the Palatinate.\textsuperscript{128} Later, in July, 1711, five hundred Mennonites sailed down the Rhine, many joining their compatriots in the Palatinate.\textsuperscript{129} But Anabaptism’s political situation in the Palatinate soon proved uncertain.\textsuperscript{130} Englishman William Penn marketed his North American colony and its principle of religious toleration to the radicals.\textsuperscript{131} Between 1683 and 1774, Swiss Anabaptists immigrated to Pennsylvania.\textsuperscript{132}

The short theological distance between the Schwenkfelders and Anabaptists bred both amity and conflict and reflects their shared heritage in mysticism.\textsuperscript{133} In 1528, Zürich printer Christoff Frohschauer, famous for his Anabaptist imprints published in an elegant Druckfraktur, abandoned his Anabaptist loyalties to follow Schwenkfeld. Some Frohschauer Bibles, such as that of the Schenck family, traveled across the Atlantic Ocean to Pennsylvania, where they remained in the hands of

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{127} Ibid., 81.
  \item \textsuperscript{128} Ibid., 78-79.
  \item \textsuperscript{129} Ibid., 100.
  \item \textsuperscript{130} Ruth, 26, 93.
  \item \textsuperscript{131} Ruth, 45-51.
  \item \textsuperscript{132} Ibid., 45, 96, 121. Most immigration occurred in spurts between 1709 and 1751. The largest wave arrived in 1717.
  \item \textsuperscript{133} Weigelt, 15, 42-44, 58.
\end{itemize}
\end{footnotesize}
descendants of Anabaptists for several generations (see Figures 11 and 12). In Pennsylvania, the groups interacted closely, resulting in shared educational institutions and common calligraphic traditions.\textsuperscript{134}

\textsuperscript{134} Ibid., 58.
Figure 11. Bible, published in Zürich by Chrisoph Frohschauer (Christoffel Froschower) in 1580, 14 11/16" x 10 3/8" x 5" (when shut). Lancaster Mennonite Historical Society collection number 2006.0006. Courtesy of the Lancaster Mennonite Historical Society, Lancaster, PA. Photograph by the author.

Figure 12. Detail, Frohschauer Bible, Lancaster Mennonite Historical Society collection number 2006.0006. Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Chapter 4

LEARNING TO READ AND WRITE IN EARLY AMERICA AND GERMAN PENNSYLVANIA

These sectarian settlers made their homes in a New World that changed dramatically during the next two centuries, altering most every aspect of their culture including their script. The years of this study’s period of focus—roughly 1683 to 1856—witnessed an evolution in European and American handwriting education that brought calligraphy to the brink of modernity. In the seventeenth and early-to-mid eighteenth centuries, a select few New World colonists used printed writing manuals studied while in (or transported to America from) Europe to mimic ornate, baroque calligraphy of both Graeco-Roman and neo-Gothic styles. These educated elites controlled access to a refined art form, a symbol of gentility, learning, aesthetic sensibility and, in some cases, a distinct form of spiritual enlightenment. By the end of the study’s period of focus in the 1850s, inexpensive, American-published commercial writing manuals, well-attended metropolitan writing schools, and state-supported classrooms offered instruction in the most basic—and, by this time, most in-demand and prevalent—writing skills: bookkeeping and “rapid writing” merchant hands.¹³⁵ Frequently viewed by Europeans as “a natural bridge between the artistic and the useful,” handwriting instruction fluctuated between focus on the ornamental

and the utilitarian.\footnote{Ibid., 252.} Between 1683 and 1856, English and German-American handwriting education moved toward simplification of script for the sake of efficiency and economy.

**Teaching Literacy in Early America**

When the first German-speaking Pietistic schoolteachers began their practice in Pennsylvania, Renaissance and Baroque ideals of handwriting as a highly specialized art or craft form predominated. This understanding of handwriting shaped what and how educators taught Pietistic youth. Given their relatively humble, provincial agrarian socioeconomic backgrounds, the level of Pietistic pupils’ exposure to ornate baroque European calligraphy is quite remarkable, even if they never mastered the letter forms themselves. A dearth of English and German-language calligraphy curriculum published in America between seventeenth-century settlement and the renaissance of a prosperous native publishing industry in the first decades of the nineteenth century meant that instructional materials were either imported from abroad or, as was the case with Pietistic Pennsylvanians, created by hand, perhaps through inspiration of European models or older manuscripts.\footnote{Ibid., 253.} John Jenkins published the first American writing manual, *Art of Writing*, in Boston in 1791. A flurry of English-language writing manuals followed in the early nineteenth century: Henry Dean published *Deans Recently Improved Analytical Guide to the Art of Penmanship* in Salem in 1804, followed by Joseph Perkins and Benjamin Howard

Pennsylvania German Carl Friederich Egelmann made history with the publication of at least four editions of his *Deutsche & Englische Vorschriften für die Jugend* (*German and English Writing Samples for Children*) between 1820 and 1831 (see Figure 13).\(^{139}\) Prior to this publication, no known engraved and printed German-language *Vorschriften* akin to those published in Europe had appeared in southeastern Pennsylvania. Surviving documentation suggests that manuscript exemplars of the Vorschrift form predominated prior to the Egelmann work. Notably, the piece is dual-language. A poetical verse on the cover page of Egelmann’s 1831 edition hails the virtues of handwriting in both Frakturschrift German and Graeco-Roman English. As one might expect, the verses are not direct translations: the German verse refers to handwriting as “Die Himmelstochter Schreibukunst,” or “Heaven’s daughter, handwriting,” a reference to the divine absent in the English-language version.\(^{140}\)

---

\(^{138}\) Ibid., 255-256.


\(^{140}\) Egelmann, title page (leaf one).
The word “Himmelstochter” never seems to have acquired a precise meaning; even the Brothers Grimm offered only a few examples of its use in their dictionary, in lieu of a formal definition. Authors often applied the word in reference to Protestant faith, German language, German nationalism, and the confluence of the three. In an 1830 collection of verse by Johann Friedrich Richard, in a poem called “Heiligthümer” (“Holy Things”), “die Himmelstochter, Tugend” (“Heaven’s daughter, Virtue”) joins a list of other Heiligthümer:

Heilig ist das Vaterland, die Sprache,
So im eignen Schmuck die Ahnen singt….

(Holy is the Fatherland, the language,
In which ornament the Ancestors sing….)  

In such a literary context, the little poem on the cover of Egelmann’s Vorschriften connects Pennsylvania handwriting to virtues central to nineteenth-century German consciousness. For a significant period of early American history, however, both English and German-speakers operated in a world devoid of easy access to printed handwriting instructional materials.

141 Jacob Grimm and Wilhelm Grimm, Deutsches Wörterbuch, Bd. 4, Abt. 2, H.I.J. (Leipzig: S. Hirzel, 1877), s.v. “Himmelstochter.”

142 Johann Friedrich Richard, Klänge durch die Nacht (Hamburg: Johann August Meissner, 1830), 41-43.
Figure 13. Object VSFS 34-269, leaf one. 6 5/8" x 8". Courtesy of the Schwenkfelder Library, Pennsburg, PA. Photograph by the author.
Figure 14. Detail, *Vorschriften für die Jugend* title page, Schwenkfelder Library object number VSFS 34-269, leaf one. Courtesy of the Schwenkfelder Library. Photograph by the author.

Figure 15. Detail, *Vorschriften für die Jugend* title page, Schwenkfelder Library object number VSFS 34-269, leaf one. Courtesy of the Schwenkfelder Library. Photograph by the author.
In such an environment of scarce access to curriculum resources, handwriting education in the colonial and early national eras was by no means a universal privilege. The extent of literacy education among the Pennsylvania Pietists and the high level of importance the community placed on reading and both ornamental and practical handwriting is notable, given Pietists’ and mystics’ relatively low socioeconomic standing, provincial settlement patterns, and reliance on manuscript teaching tools. The level of technical mastery exhibited by the ceremonial manuscripts of German-speaking schoolteachers including Johannes Bard probably represented a community ideal which, while consumed by the literate population in the form of texts written and disseminated by scribes, was rarely reproduced by other, less-trained hands. Surviving documentation suggests that most students never achieved their teachers’ calligraphic expertise. The practice of hiring out scribal work continued unabated in southeastern Pennsylvania as elsewhere in America well into the nineteenth century; indeed, schoolteachers often supplemented their incomes through this means.

**Literacy Education: The Schwenkfelder and Mennonite Experience**

For purposes of this study, the period between the emergence of the early modern manuscript Vorschrift as a Pennsylvania document type in the 1750s and the

---

143 Eaton, 253.

144 Ibid., 253; David McKitterick, *Print, Manuscript and the Search for Order, 1450-1830* (Cambridge: Cambridge University Press, 2005). McKitterick demonstrates that manuscript culture thrived along print well into the nineteenth century in English-speaking cultures.
publication of Egelmann’s *Deutsche & Englische Vorschriften für die Jugend* in the 1820s and 30s is of particular interest, as one during which the Mennonites and Schwenkfelders coalesced educational infrastructures that centered on Protestant religious education. Unfortunately, very few written sources survive to shed light on the theoretical—and theological—underpinnings of early Pietistic education in Pennsylvania. Examination of the two that do reveal the extent to which literacy education focused on catalyzing students’ personal engagement with scripture.

The first source is a foundational document in the establishment of Schwenkfelder schools in the 1760s. In 1764, Christopher Schultz of Hereford documented the case for schooling in a series of questions designed to inspire the Schwenkfelder community to action. Many of the questions center on the religious utility of an educated populace. “Since religious instruction cannot be presented and indicated except in words, utterances and speech, how can youth then come to an understanding of the said grammatical sense of the words, not only to understand thoroughly what is being presented to them, but also that in the course of time by the grace of God they may serve others against the confusion and maiming of the truth,” he posed.\textsuperscript{145} The impassioned educational advocate went on to call upon his contemporaries’ regard for their ancestral German language.

\textsuperscript{145} Elmer Schultz Gerhard, “The History of Schwenckfelder Schools and Education,” in “Schwenckfelder Schools and Education,” special issue, *Schwenckfeldiana* 1, no. 3 (September, 1943): 7.
own advantage an filled up with all kinds of indecencies and coarseness, and be ruined?\textsuperscript{146}

The full power of language, in other words, relied on possessing the intellectual wherewithal to understand and interpret scripture. The point was driven home with direct reference to what, in Schultz’s estimation, made the reformation possible: close study of language, or the emergence of a Protestant hermeneutics.

Is it not true, or in what manner is it going too far, if one says that just as learning and the science of language cleared and blazed the way for the Reformation, so on the other hand ignorance, lack of judgment, and simple crudeness on the part of our people have cleared and blazed the way that our people have so shamefully fallen away from the truth and have so blindly turned to error? What a pity!\textsuperscript{147}

A similar focus on student engagement with words of Christian devotion marks the most famous source on early Pietistic education in Pennsylvania, Mennonite Christopher Dock’s \textit{Schul-Ordnung (A Simple and Thoroughly Prepared School Management)}, published in Germantown by Christopher Saur in 1770.\textsuperscript{148} Dock grounds his entire educational philosophy in a Pietistic sensibility to the working of the Holy Spirit within his students’ spiritual and temporal lives. “I see that it is beyond human power to exterminate the root” of human iniquity, Dock admits. “God alone through the power of His Holy Spirit must do this.”\textsuperscript{149} Teachers, clergy, and

\textsuperscript{146} Ibid., 8.

\textsuperscript{147} Ibid., 8.


\textsuperscript{149} Dock, 117.
parents can only encourage moral and religious rectitude “as by the grace of God is in their power.”

Within so pious a context, scribal training was bound up in a classroom environment centered on the reading, recitation, memorization, recall, and interpretation of scripture and other holy texts. Dock’s explanation of a typical day in his classroom underscores the place of scripture in his method. After students gather in the morning, “they sing a psalm or a morning hymn”—the very kinds of verses Dock also wrote on Vorschriften—“and I sing and pray with them.” After rehearsing the Lord’s Prayer to improve their recitation, students studied the letters of the alphabet, during which Dock quizzed them on their recognition of the letter forms, as well as spelling. Pupils who advanced beyond the “ABC class” and more elementary readings undertook lessons in the New Testament, reading the text of which all their prior training had prepared them. At this stage students were asked to ruminate on the meaning of the New Testament and were “allowed to write” Dock notes, suggesting that beginning engagement with Holy Scripture marked an important milestone when students actively engaged the meaning of texts. After reading a selection from the New Testament and “consider[ing] the teaching therein,” students moved on to other relevant scripture passages. “As it is the case that this thought is also expressed in other passages of Holy Writ, these are found and read, and then a hymn is given containing the same teaching,” Dock explains. “If time remains all are given a short passage of Scripture to learn.” Writing and spelling conclude the lesson.

^150 Ibid.
This done, they must show their writing exercises. These are examined and numbered, and then the first in turn is given a hard word to spell. If he fails the next must spell it and so on. The one to spell it correctly receives his exercise. Then the first is given another hard word, and so each receives his exercise by spelling a word correctly.  

Students who performed well in the day’s studies might receive a drawing of a flower or bird made by Dock, documents which, along with the Vorschrift, are commonly associated with early Pietistic education today (see Figures 16-18).  

Far from mere rote memorization of scriptural texts, Dock’s students (and, we might infer, pupils in other Mennonite-runs schools of approximately the same era) engaged in a sophisticated learning process grounded in ancient pedagogical approaches brought to bear on the Protestant imperative for personal engagement with scripture. “Pre-modern scholars thought of remembering as a process of mentally visualizing signs both for sense objects and objects of thought,” notes medievalist Mary Carruthers. The process of aural recall and recitation, followed by scribal exercises, were mutually supportive. “The shapes of letter forms are memorial cues” to access the very divine knowledge Dock and other Pietistic schoolteachers sought to impart. If the form and content of writing exercises undertaken within Mennonite classrooms resembled the exemplars of Mennonite schoolteacher handwriting that survived in numerous family Bibles, then students almost certainly engaged with letter forms distinctive in their character and texts devotional in their content.

151 Ibid., 109.
152 Ibid., 107.
153 Carruthers, 33-34.
Figure 16. Mennonite classroom reward from the Goyman family of Upper Bucks County, Pennsylvania, ca. 1790-1810. Recto. 2 11/16" x 3 15/16". Downs Collection number 320 65x547. Courtesy, The Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera. Photograph by the author.

Figure 17. Detail, verso of Mennonite classroom reward from the Goyman family of Upper Bucks County, Pennsylvania, ca. 1790-1810. Note the virtuous maxim and list of Goyman family names, both in Graeco-Roman script. Downs Collection number 320 65x547. Courtesy, The Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera. Photograph by the author.
Except math, Dock included descriptions of few other subjects beyond literacy in the *Schul-Ordnung*. Mennonites were not notable for the liberality or breadth of their educational curriculum. Many provincial agrarians were suspicious of the worldly influence of over-indulgence in learning, preferring instead that their children focus on farm work and religion.\(^{154}\) Yet in meetinghouses and schoolrooms where classes were held, teaching and teachers occupied an exalted status in early Pennsylvania’s Mennonite communities.\(^{155}\) They owed this position at least in part to

---

\(^{154}\) Ruth, 210-212.

\(^{155}\) Ibid., 189.
their role as purveyors of spiritual knowledge. Provincial farmers may have viewed reading as a necessity only insofar as it allowed personal access to scripture. A well-known verse that appeared variously in manuscript and print form, titled “Des Schulmeisters Leibstück” (The Schoolmaster’s Anthem”) hailed the teacher (called in the verse by the Old World term “Preceptor”) as a servant of divine will:

Preceptor, they title me,
Because I teach the children;
And if I truly please my God,
this is my highest honor,
And this is my desire,
And this is my delight.
Although I may not please all men,
If I may only please my God—
This is my true desire,
And this is my delight.\textsuperscript{156}

One of the only visual depictions of a Pennsylvania German classroom features a handwritten verse asking God to support the educative process (see Figure 19).\textsuperscript{157} Calligraphic proficiency seems to have been a necessary prerequisite for Mennonite schoolteachers. A hand-drawn illustration of a schoolteacher—the only known example from this era—highlights his scribal mastery (see Figure 20).\textsuperscript{158} The

\textsuperscript{156} Ruth, 167-168. John Ruth provided the English translation.

\textsuperscript{157} Classroom verse and scene, Lancaster County, ca. 1800. Winterthur object number 2013.0031.092 A. Frederick S. Weiser Collection, Winterthur Museum, Garden, & Library, Winterthur, DE

\textsuperscript{158} Johann Conrad Gilbert, schoolmaster with Frakturschrift alphabet, ca. 1780-1800. Winterthur object number 2012.0036.001 A. Frederick S. Weiser Collection, Winterthur Museum, Garden, & Library.
Vorschrift was the ultimate symbol of teacher scribal achievement, as well as a ceremonial marker of the passage of spiritual knowledge and literacy skill from master to pupil.
Figure 19. Classroom verse and scene (Fraktur), Lancaster County, PA, ca. 1800. 6 3/8” x 3 7/8”. Courtesy, Winterthur Museum, museum purchase with funds provided by the Henry Francis du Pont Collectors Circle, 2013.31.92 A. Photograph by James Schneck.

Figure 20. Schoolmaster with Frakturschrift alphabet (Fraktur), by Johann Conrad Gilbert, Berks County, PA, ca. 1780-1800. 4 1/4” x 2 7/8”. Courtesy, Winterthur Museum, gift of Patrick Bell and Edwin Hild in memory of Pastor Weiser, 2012.36.1. Photograph by James Schneck.
Vorschriften: The Textual and Material Evidence

The lifespan of the Vorschrift, from its making by a schoolteacher to its status as religious relic and family heirloom, reflects the spirituality of the document and the nature of Pietistic education before institution of the Common Schools Act of 1834. Scant evidence survives that explicitly narrates how and why Mennonite and Schwenkfelder communities cultivated Vorschrift production; their presence almost seems to have been taken for granted by the makers and families who received them. The best clues for understanding the documents are the documents themselves, both their content and material condition.

That the Vorschrift possessed spiritual significance is without question. One early example dating from 1758 features a verse that reads “This writing shows me, correctly, / Which way that I should choose to travel, / Which is good for me….That I may know thee [God], genuinely, / At all times in the way to go, / That this writing to me doth show.”\(^{159}\) Featuring a full alphabet at the bottom of the document (typical of most if not all Vorschriften), the piece explicitly combines training in letter recognition, letter formation, and Christian indoctrination.

Individual student spiritual experience aside, surviving examples and related manuscripts suggest that Vorschrift production was a systematic process, and one that teachers repeated often. Teachers abided by relatively strict standards and varied the

\(^{159}\) Hershey, 60-61. H.M. Ache, Vorschrift (Fürschrift) for Simon Pannebecker, Skippack, 1758, object P81.212. Pennypacker Mills, County of Montgomery, Schwenksville, PA.
documents little among students. Content, too, seems to have remained more or less constant among pieces made around the same time by individual schoolteachers. The manuscripts’ precise use by students is difficult to establish. Few records survive to suggest how students engaged with the pieces. Material evidence (discussed at length below) suggests that students may well have utilized the pieces as models for their own handwriting, but it is clear that teacher-made documents, rather than student imitations, were sufficiently valued among families to be preserved for posterity. As such, the documents were not simply functional educational tools, but like the physical form of the Bible itself held great symbolic value.

Students and families seemed to attach special spiritual significance to the pieces and what they represented about spiritual devotion in the Pietistic community. A Vorschrift made in Skippack in 1787 came replete with a cover to protect the colorful text and illuminations found on the Vorschrift itself. Some evidence suggests that most Vorschriften were stored between the leaves of family Bibles and other devotional texts after their presentation to students. Most exhibit creases in their centers, suggesting folding. Nineteenth and early twentieth-century collectors separated Vorschriften from the books in which they were stored when the manuscripts became highly valuable on the antiques market, but later some family Bibles with their loose manuscript contents in situ found their way into various Pennsylvania museum collections. Such assemblages offer insights into the literary and spiritual contexts in which Vorschriften were stored and used.

160 Henry Brachtheiser, Vorschrift for Philip Markley, Skippack, PA, 1787. Cover and Vorschrift 8 1/16" x 12 15/16". Mennonite Historians of Eastern Pennsylvania object number 98.8.1, Mennonite Heritage Center, Harleysville, PA.
The Charles family (previously known by the Germanic surname “Carli”) donated their sixteenth-century Bible and manuscripts housed within it to the Lancaster Mennonite Historical Society in 1973, more than a hundred years after the family immigrated to Pennsylvania. Curators found a family record in the Bible that closely resembles the traditional Vorschrift form, a Christian verse beginning “In Gottes namen” (“In God’s name”), birth certificates, as well as numerous other family records and religious manuscripts. Also included was a Vorschrift made for Johannes Carli on February 25, 1791. Another document found in the Bible stylistically similar to the Vorschrift depicts devotional text and is also inscribed to Johannes Carli (see Figures 21-25). Loose print and manuscript documents found inside a Bible previously belonging to the Hershey family include a marriage certificate, a religious broadside, a “Brieflein” (little letter) that closely resembles the ceremonial Vorschrift form in composition and layout, as well as a Vorschrift, for one Catharina Huber (see Figures 26-28). (Numerous Vorschriften survive that were made for female Pietists.) That Vorschriften and related documents were stored with devotional texts, birth certificates, and other highly prized family history records suggests the cultural importance of the documents themselves as well as the venerated status of handwriting.

education among people for whom literacy provided access to spiritual salvation through both published religious texts and devotional manuscripts.

Figure 22. Religious verse found in the Charles family Bible, beginning “In Gottes namen” (“In God’s name”). 4 15/16" x 7 3/4". Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 23. Family record, found in the Charles family Bible. 12 7/8" x 7 13/16".Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 24. Vorschrift for Johannes Carli, made February 25, 1791, found in the Charles family Bible. 7 13/16" x 6 1/2". Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 25. Religious text for Johannes Carli, made February 25, 1791, found in the Charles family Bible. Approximately 7 7/8" H x 6 1/2". Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 26. Hershey family Bible. 10" x 14 1/4" (when closed). Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.

Figure 27. Marriage certificate, found in the Hershey family Bible. 13 1/8" x 7 1/8". Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 28. Religious broadside “Ein schön Lied zur Aufmunterung eines christlichen Leben” (“A Beautiful Song of Encouragement to a Christian Life”), discovered in the Hershey family Bible. Approximately 11 7/8” x 7 1/8”. Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Figure 29.  Briefleinn (“little letter”), made by or for Abraham Hershey, March 11, 1804. 5” x 5½”. Hershey, Christian (1755-1800) Papers, Box 002. Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.

Figure 30.  Vorschrift for Catharina Huber(in), Lancaster County, April 22, 1775. 8 3/8” H x 6 5/8” W. Hershey, Christian (1755-1800) Papers, Box 002. Courtesy of the Lancaster Mennonite Historical Society. Photograph by the author.
Compared to the large number of Vorschriften extant in Pennsylvania German manuscript collections, very few student-written documents explicitly imitate ornamental Vorschrift book hand design and layout, especially vibrancy of color and ornateness of letter form. This may imply that teachers did not intend students to use the documents’ more ornate scripts and illuminations as models for imitation, at least in terms of text layout. It must be acknowledged, however, that student calligraphic exercises simply did not survive in large numbers relative to the teacher-made examples held in such high regard by pious families—and by later collectors, who may have dispensed with other, more mundane paper materials. A few pieces in Pennsylvania collections suggest that students did imitate Vorschriften in instances of ornamental handwriting. A “letter” written by a pupil of Christopher Dock for presentation to his teacher—a feature of Dock’s instructional method—survives from 1767. The student carefully modeled the letter on the Vorschrift form. (Not all students may have undertaken this particular enterprise during the century-long lifespan of the Pietistic Vorschrift, however.) Another, less colorful piece, dating from 1772, shows the Vorschrift style employed in an even less decorative context; the distinctive layout is embedded within the context of a half-sheet presumably removed from a bound volume, text covering both recto and verso (see Figure 31). The piece’s provenance is uncertain; it may have been made in either Europe or America. In either case, the first-person voice of the piece’s opening line,

\footnote{Christian Stauffer, religious text, 1767, Henry S. Borneman collection of fraktur, shelfmark FLP 373, item number frk00373, Free Library of Philadelphia, Philadelphia, PA.}

\footnote{Ruth, 129. The piece is discussed in detail in Ruth’s Maintaining the Right Fellowship.}
“Liessabetha Grimin bin ich (I am Elizabeth Grimin)” sets it apart from ceremonial presentation pieces commonly found in Pennsylvania collections.\textsuperscript{164}

If few direct student imitations of ornate teacher Vorschrift design survive, then much evidence suggests that students engaged with Vorschriften as models for basic handwriting skills. Many Vorschriften survive with associated scraps of manuscript that seem to be student handwriting, suggesting that during their active lives Vorschriften may have been spent contiguous to student handwritten materials. As was the case with the Liessebetha Grimin piece, even more ceremonial Vorschriften seem to have been components of larger handwritten documents (see Figures 32-34).

\textsuperscript{164} Elisabetha Grimm [Liessabetha Grimin], Vorschrift, Calligraphy Collection Number 320 87x165, The Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera, Winterthur, DE.
Figure 31. Vorschrift made by or for Elisabetha Grimm [Liessabetha Grimin], Wessenburg Township, Lehigh County, 1772. 13 1/16" x 8 3/8". Downs Collection Number 320 87x165 Box 1 Location 3 J 11. Courtesy of the Joseph Downs Collection of Manuscripts and Printed Ephemera, Winterthur Library, Winterthur, DE.
Figure 32. Vorschrift, ca. 1790. 8 1/16" x 13 3/16". Object sl-58-no-a-14 (SL96-2014.001 A-14). Courtesy of the Mercer Museum of the Bucks County Historical Society, Doylestown, PA.

The Politics of Education in Early Pennsylvania

In the first decades of the nineteenth century, Mennonite educators variously sought to balance progressive, Anglophone conceptions of civic involvement, community identity, and education with adherence to their traditional pedagogical goals and methods grounded in the theologies and social philosophies of an earlier era. Such issues inspired contention among the faithful. John Oberholtzer, a well-known southeastern Pennsylvania Mennonite teacher and ordained minister of the early 1800s, had little interest in Mennonite heritage and sought to instill a deeper fondness for liberal education among his community members. He was also more fluent in English than most contemporary Mennonite leaders.\textsuperscript{165} A noted contemporary and fellow teacher-minister, Henry Neiss, remained committed to traditional, German-language education; his bachelor-teacher brothers-in-law cultivated Frakturschrift calligraphy and manuscript illumination at this late date.\textsuperscript{166} Neiss and Oberholtzer discussed the condition of the Mennonite faith, the former favoring modernization and reform, the latter tradition above all.\textsuperscript{167}

Such internal debates and shifts in curriculum occurred within a paradigm of local, community-run schools that remained essentially unchallenged. All that changed in 1834, however, when the Pennsylvania Free School Law more or less mandated Pennsylvania’s German-speakers to reorganize community education along

\textsuperscript{165} Ruth, 212-213.

\textsuperscript{166} Ibid., 214.

\textsuperscript{167} Ibid., 214.
the approved lines of Anglophone dominant society. The state government divided Pennsylvania into a system of school districts and offered substantial subsidies to support school operations to communities that elected a board of directors and instituted a local school tax.\textsuperscript{168}

Needless to say, conservative Mennonites who were suspicious even of excessive German-language education were greatly discomfited by this Anglophone incursion into their educational world, which lifted instructional authority out of the hands of the church and into a municipal bureaucracy. Heated debate ensued, and German communities enacted the new legislation only slowly. Only one township in Montgomery County approved the law upon its passage; Upper Providence Township approved it eight years after passage, and Salford and Franconia Townships seventeen years after passage.\textsuperscript{169} Older Mennonite schools held on while townships established concurrent common school counterparts. Sensing the changing political climes, the Salford Mennonite school, since the mid-eighteenth century a center of much Vorschrift production, hired its first English teacher in 1841.\textsuperscript{170} Such incursions gradually eroded the long-established hegemony of locally-run, German-language curriculum based on hymns, prayer, and scripture, which undercut the relevance of the Vorschrift as a pedagogical tool.\textsuperscript{171}

\textsuperscript{168} Ibid., 214-215.

\textsuperscript{169} Ibid., 215.

\textsuperscript{170} Ibid., 233.

\textsuperscript{171} Ibid., 210-211.
New Trends in Handwriting Education

Pennsylvania was not the only state to enact laws that helped incite changes to traditional handwriting education in the early nineteenth century. Nationwide, the 1830’s witnessed the decline of the “writing master” and the rise of the common schoolteacher, the result of public schools legislation enacted in various states. Relatively inexpensive and widely disseminated printed copybooks, far cries from baroque-era writing manuals, became standard curriculum in classrooms across the nation. The holistic beauty of letters forms and words elegantly arranged gave way to a quasi-scientific exactitude in handwriting instruction, which now emphasized practicality for the sake of commerce and self-discipline; beauty for the sake of ornament.\(^\text{172}\) The mystical motivations and pious pedagogy of early modern Radical Pietistic literacy instruction in southeastern Pennsylvania seemed quite out of place in this modern educational milieu.

Throughout the latter decades of this study’s period of focus, handwriting education across the United States underwent a process of standardization, systematization, and commercialization. Urban business schools and widely distributed published writing manuals usurped the educative role once held by the itinerant writing master or, in the case of German-speaking Pietistic sects, community-employed schoolteachers proficient in an array of ornate and graceful hands often used to write religious texts.\(^\text{173}\) Platt Rogers Spencer, first of the famous nineteenth-century

\(^{172}\) Thornton, 46-47.

\(^{173}\) Ibid., 45-46.
writing masters, published his penmanship instruction manual in 1848. It was republished by his son in 1869 as *Spencerian Key to Practical Penmanship*. Spencer—and contemporary and future writing masters—focused incessantly on rapid writing, and the development of plain, unornamented scripts that would support it. Reformers frustrated by the capitalistic model driving handwriting education advocated the importance of incorporating handwriting education into standard curriculum. Canny businessmen like Spencer marketed their methods to schoolroom teachers, individual learners, and commercial training institutes.

The *Spencerian Key* did not quote the Psalms or ancient Pietistic hymns. Platt Rogers Spencer penned his own poetical homage to what, in the nineteenth century, seemed the main advantage of penmanship: “Busy Pen, proud commerce flings / Her wealth abroad on countless wings, / And Science opes her thousand springs, / Guided by work of thine.” Spencer’s focus on handwriting education to further burgeoning American commercial enterprise resonated in an era during which market capitalism fed concepts of national identity. Surely the days of heavenly handwriting had passed, at least for the majority of penmanship instructors and their customers. Even among German-speakers, the potent linkage between cultural identity, German

174 Eaton, 257.


177 Eaton, 259.
language, and Protestant religious devotion faced significant tests as new standards for commercial handwriting gripped the Western world. An 1839 German publication entitled *Nordamerikanische Schnell-Schreibmethode in 84 Vorlegeblättern (North American Fast Writing Method in 84 Samples)* hailed New-World innovations in speedy handwriting quite different from the value placed on Frakturschrift (see Figures 35 and 36). While it presented contemporary German current hand rather than the Graeco-Roman script taught in counterpart English-language works, the *Schreibmethode* looks not all that different from how Spencer and others presented their handwriting lessons. Transatlantic calligraphic exchange had come full-circle. Just as Radical Pietists had brought baroque calligraphy to eighteenth-century American shores, home-grown fast handwriting methods offered alternatives to nineteenth-century European scribes.
Figure 35. *Nordamerikanische Schnell-Schreibmethode in 84 Vorlegeblättern*, published in Chemnitz, Germany, 1839. 4 1/2" x 8 1/2". Courtesy of the Winterthur Library. Photograph by the author.

Figure 36. *Nordamerikanische Schnell-Schreibmethode in 84 Vorlegeblättern*, published in Chemnitz, Germany, 1839, section two, page 1. 4 7/16" x 8 1/4". Courtesy of the Winterthur Library. Photograph by the author.
The Vorschrift tradition evolved within this broader milieu of change in the priorities of handwriting education. As the nineteenth century progressed into its third and fourth decades, Pennsylvania German teacher and student writing samples suggest that, first, that the Vorschrift form lost its prevalence, and second, that mastery of gothic scripts among young German-speakers declined. One intriguing piece, inscribed at least in part by a young boy named William Schultz in the mid-1840s, suggests the crumbling of the Vorschrift form by this late period. While its first line on the recto of the document was modeled closely on pieces of some decades prior, the Vorschrift was never finished, though young William doodled where a text block might have otherwise gone. The piece’s verso displays practice in Graeco-Roman current hand, a large Frakturschrift majuscule, as well as finely executed birds (see Figures 37 and 38).
Figure 37. Pseudo-Vorschrift by William Schultz, ca. 1844. Recto. 8" x 13 1/8". Amos H. Schultz Collection, 732:193. Courtesy of the Schwenkfelder Library. Photograph by the author.

The decline of the Vorschrift and the rise of new handwriting educational methods comprised one component of a gradual shift in Pietistic Pennsylvania German culture as erstwhile radicals moved closer to mainstream Anglo-American society. It is no coincidence that social historian Steven Nolt pegs the 1850s—around the time the Vorschrift disappeared—as the period by which Pennsylvania Germans had come to consider themselves full-fledged Americans.178 “By 1850, Pennsylvania Germans were ethnic Americans at home in their own land, sure that their religious ideals and related cultural commitments best represented core civic and political values of the United States.”179 This development represents the culmination of a complex process of reconciliation of early modern Radical Pietistic mentalities and lifeways to the realities of nineteenth-century American society that divided adherents of various strains of Pietism. Many separatists, especially the Amish and some Mennonites, chose not to modernize. But many more did, diminishing the regional influence of early modern religiosity. Literacy education was one of many cultural traditions to shift as part of the Americanization process.

Aspects of antiquated Mennonite pedagogy lingered after the 1850s, though in fundamentally altered form. The old handwritten poem that so often appeared in Mennonite manuscript educational materials, “Des Schulmeister’s Leibstück” (“The Schoolmaster’s Anthem”), appeared in Blackletter print on a broadside in the 1850s. The traditional verse, handed down by generations of Swiss schoolteachers since the

178 Nolt, 2.

179 Ibid., 8.
early modern era, was now copyrighted by a publisher under American legal statute. Traditional Anabaptist education had entered the modern age.\textsuperscript{180}

\textsuperscript{180} “Des Saengers Harmonie,” ca. 1850, Mennonite Historians of Eastern Pennsylvania box 60, folder 7, object number 2006.4.
Chapter 5

MODELING CHANGE IN DESIGN OF PENNSYLVANIA VORSCHRIFTEN

Previous chapters have demonstrated that the principles of mysticism and Pietism held implications for the relationship some Pennsylvania Germans cultivated with scripture.\textsuperscript{181} Consideration of the material and aesthetic characteristics of Pietistic illuminated manuscripts guides the next chapter’s statistical analysis. Did Vorschriften change over time? If so, how and why? Can these changes be modeled mathematically in an empirically valid way?

Such questions about Vorschrift design change are easier asked than answered. Despite their familiarity among collectors and regional historians, little is known about Vorschriften as a class of documents: their origins, their content, their design, and their significance as indicators of cultural change. Academic scholars of handwriting education have all but ignored the form. Regional scholars have uncovered little about the European stylistic antecedents of Vorschriften, or the documents’ change over time during Vorschrift-making’s lifespan in southeastern Pennsylvania. Extant Vorschrift research is rich in specificity, focusing by and large on close study of individual pieces and their makers.\textsuperscript{182} Little empirically valid data currently exist that


\textsuperscript{182} Mary Jane Lederach Hershey, \textit{This Teaching I Present: Fraktur from the Skippack and Salford Mennonite Meetinghouse Schools, 1747-1836} (Intercourse, PA: Good Books, 2003).
explain the trajectory of the aggregate Vorschrift tradition. This chapter offers such an elementary overview in hopes of laying the groundwork for Vorschrift content analysis in a future study. Aggregation of Vorschrift characteristics as quantitative data will allow scholars to situate surviving examples of the form within broad trends in manuscript illumination while considering their collective function as documents of cultural and spiritual transmission. This quantitative inquiry tests qualitative observations about Vorschrift change over time, using baroque-era printed European writing manuals as a benchmark in studying design shifts in American Vorschriften from European norms.

**Goals of Statistical Analysis**

The study that follows offers first steps toward an aggregate understanding of change in Vorschrift design, materiality, and content between ca. 1750 and 1850. The work presented here focuses on the aesthetics of Vorschrift design. Later stages of the project will explore Vorschrift content in a statistical framework. The end product of the analysis is a generalized linear model of Vorschrift design change that will help scholars place particular pieces in a stylistic progression that characterizes the Pietistic Vorschrift tradition.

Of all possible strategies to assess the Vorschrift tradition, a statistical methodology is especially appropriate. Quantification allows for easy manipulation and presentation of a large amount of information about many Vorschriften. The numbers presented below draw a “composite sketch” of Vorschriften during the period of interest. While the approach possesses little explanatory power (in that it cannot tell us *why* Vorschriften look the way they do), it uncovers design trends otherwise
obscured by the large number of extant Vorschriften and offers great utility as a starting-point for systematic analysis of the documents. This work demonstrates an approach to the systematic quantitative study of document design and change potentially applicable to other forms of Pennsylvania German illuminated manuscripts.\textsuperscript{183}

The study tests the hypothesis that, as the date of making of a German-speaking Pennsylvania Mennonite or Schwenkfelder manuscript writing sample (Vorschrift) increases, adherence to orthodox European engraved and printed writing sample design aesthetics of the seventeenth and early to mid-eighteenth centuries decreases. Thus, the independent variable (time) and dependent variable (adherence to European high-baroque design aesthetics) are negatively correlated. The formation and significance of this hypothesis is described below.

The basic objectives of statistical inquiry are to model observed relationships between a defined set of phenomena, explain those relationships, and predict future outcomes based on known and measurable variables. Study of Vorschrift design aesthetics via statistical methods requires consideration of what design features require study, how to quantify observed differences between examples, and how to model trends in aesthetic variation. The next section explains the methodological scheme developed to explore Vorschrift design change.

Methods

Statistical research depends on numerical, rather than text-based, data. Addressing aggregate changes in Vorschrift stylistic attributes requires transforming visual observations into numerical values that allow us to test relationships between variables. This study’s methodology relies on what statisticians call categorical, or nominal, data, meaning that the numerical values assigned to variables have no mathematical meaning. They do, however, allow us to generate and model mathematically meaningful relationships among variables. These relationships might otherwise go unnoticed due to the high volume of Vorschriften available to the historical researcher if not explored quantitatively. The process of establishing a quantitative method for the study of Vorschrift design was complex. The following narrative describes the central steps of that process: forming a hypothesis, defining what kinds of documents count as “Vorschriften” for purposes of this study, collecting data about Vorschriften through random sampling, and building a research design to analyze that data. It then presents and discusses key findings.

Hypothesis Formation

Ceremonial presentation Vorschriften were a distinctive manuscript form characteristic of Mennonites and Schwenkfelders in southeastern Pennsylvania. Teacher-scriveners who made Vorschriften modeled such documents on engraved, printed European writing manuals, or manuscript examples that were highly similar to them. The writing samples of Johannes Bard, executed in the 1820s but based on a

---

German writing manual published in the 1780s, underscores this reliance on printed models as well as the conservative nature of handwriting practice, given that Bard found a forty-year-old writing manual suitable to his needs (see Figure 39). Such writing manuals were ubiquitous fixtures of calligraphy education across Europe in the seventeenth, eighteenth, and early nineteenth centuries. The close relationship between engraving and calligraphy by way of education through writing manuals was known and celebrated by calligrapher J.J. Brunner the Elder and engraver C.G. Guttenberg, in a ca. eighteenth-century writing sample printed in Basel, Switzerland. The sample highlights a scriptural verse, First Corinthians Chapter 4, Verse 7. An intricately engraved image at the bottom of the sample shows a feather quill, a burin (or graver, used to incise lines in a metal printing plate), and a porte de crayon (or chalk/pastel holder) all bound by a leafy vine (see Figure 40). Engraved writing samples such as these presented the standard to which well-trained calligraphers could model and assess their work; the porte de crayon was closely associated with drawing in the eighteenth and nineteenth centuries, suggesting the elevated reputation handwriting held that the quill would be bound with a drawing implement (see Figures 41 and 42). Precision of line and intricacy of decoration—both of which were easier to obtain on a copper engraving than with a soft, ink-laden quill on paper—became standards of the well-executed calligraphic hand. Writing masters commented on the relationship between graven and handwritten works in their manuals, demonstrating transposition of the graven ideal to the manuscript world of the quill (see Figure 43).

185 George Shelley, *The second part of Natural writing: containing the breaks of letters and their dependence on each other...* (London: Thos. Bowles and John Bowles, ca. 1740-1754), plate 10.
Qualitative observation suggests that Vorschriften made during the first few decades of large-scale Pietistic settlement of Pennsylvania closely resembled printed European writing samples (which educated continental European calligraphers likely would have studied), while later pieces diverged from these designs in light of later calligraphers’ lack of both European education and the printed writing manuals their forbears had used. Figures 44 through 46 present Vorschriften from early, middle, and late in the form’s history in Pennsylvania. Observation of such gradual change might seem to carry little import. But these shifts occurred on documents closely associated with literacy education practices in Pietistic schools, among people for whom the reading of devotional texts such as those on Vorschriften held tremendous cultural and spiritual import. Moreover, the changes to the documents occurred in a period of noted breakdown of Pietistic religiosity and the decline of community-run
German-language education. Unfortunately, little documentation other than Vorschriften and related curriculum materials shed light on Pietistic education during this era. An understanding of changes in the manuscripts offers context for study of religious and educational shifts in Pietistic communities.

This statistical study tests the qualitative observation that the stylistic association of Pennsylvania manuscript Vorschriften with baroque-era printed European writing manuals waned over time. As the teacher-scriveners became generationally removed from continental European calligraphy training, and geographically removed from access to commercial print sources on which to model their handwriting.

Figure 40. Detail, George Shelley, *The second part of Natural writing: containing the breaks of letters and their dependence on each other*, ca. 1740-1754. Courtesy, The Winterthur Library: Printed Book and Periodical Collection. Photograph by the author.
Figure 41. Artist’s box sold by Roberson & Co., including a porte de crayon, ca. mid-nineteenth century. Courtesy of Kim Schenck.
Figure 42. Georg Friedrich Schmidt (German, 1712-1775), "Self-Portrait Sketching," 1752, black and red chalk with watercolor and pastel and pen and black ink, 8 1/4” x 6 11/16” . Wolfgang Ratjen Collection, Patron’s Permanent Fund, object number 2007.111.159, from the collection of the National Gallery of Art, Washington, D.C.
Figure 43. Johann Michael Schirmer, *Geöfnete Schreib-Schule*, ca. 1765. 8 1/16" x 11 7/16". The image presents the graven ideal on the left, as well as how those life-like images can be imitated by quill to the right. Courtesy, The Winterthur Library: Printed Book and Periodical Collection. Photograph by the author.
Figure 44. Vorschrift, Montgomery County, Pennsylvania, 1773. 7 1/2" by 8 1/8". Courtesy, Winterthur Museum, Writing sample bequest of Henry Francis du Pont, 1957.1183. Photograph by the author.

Figure 45. Vorschrift for Heinrich Cassel, Marietta, Lancaster County, Pennsylvania, 1790. 13 1/8" x 16 1/8". Courtesy, Winterthur Museum, Gift of Anne H. Torbert in memory of Mary E. Cassel Holloway, 1985.91. Photograph by the author.
Figure 46. Vorschrift, 1827. 12 1/2” x 7 11/16”. Courtesy of the Schwenkfelder Library & Heritage Center. Photograph by the author.
Conceptualizing the Vorschrift

Despite their ubiquity among Mennonites and Schwenkfelders for several generations, Vorschriften remain mysterious objects that defy easy recognition and classification. A core cluster of Vorschriften made in the 1780s and 90s exemplifies scholars’ and collectors’ conception of the document type, but lack of knowledge of the manuscripts’ use, as well as their aesthetic and textual similarity to related manuscript forms, confuses the issue of where to draw the line between Vorschriften and closely related documents. “Vorschrift” as it is defined for purposes of this study does not necessarily encompass all documents considered Vorschriften by scholars and collectors today, nor does it reflect the full range of eighteenth and nineteenth-century Pennsylvania German use of the term. So particular a definition was required to delineate what materials identified through random sampling methods (described below) could and could not be incorporated into this study.186

Pennsylvania German scriveners often used the word “Vorschrift” on their handwritten writing samples (see Figures 47 and 48), but not all documents labeled a “Vorschrift” by their makers fit the idea of the ceremonial presentation certificate commonly associated with the word today.187

186 Henry S. Borneman, *Pennsylvania German Illuminated Manuscripts: A Classification of Fraktur-Schriften and an Inquiry into their History and Art.* (1937; repr., Mineola, NY: Dover Publications, 1973). The classification system put forward here is one in a long line of efforts to categorize aspects of the Pennsylvania German manuscript tradition. A much earlier, much-criticized, but still valuable and insightful method for classifying manuscripts and interpreting their spiritual significance was put forward by Henry S. Borneman in 1937.

187 For more on defining the Vorschrift, see Hershey, *This Teaching I Present: Fraktur from the Skippack and Salford Mennonite Meetinghouse Schools, 1747-1836* (Intercourse, PA: Good Books, 2003).
Jacob Arnold in 1816, for example, presents calligraphic instruction in a booklet format, which places that document quite outside the analytical boundaries of this quantitative study (see Figure 49).\textsuperscript{188} It can and is, however, considered qualitatively alongside the Vorschriften included in the quantitative study.

Wide-ranging use of the word “Vorschrift” is not the only challenge in studying the document type. A more substantial problem is the similar aesthetic appearance and textual content of Vorschriften and other manuscript documents, which may or may not have been written to serve as calligraphic teaching tools. This latter point raised special problems in deciding which pieces to include and exclude from this quantitative investigation. A systematic interpretation of the “Vorschrift” document type was vital to this research, as it dictated which documents were included in a random sample that provided data for analysis. A series of eight conditions was employed to serve as a working definition of “Vorschrift” to support this study. Given this study’s interest in the transmission of literacy skill and religious knowledge in the Pietistic classroom, the conditions are meant to identify Vorschriften that fit the standard of manuscript documents handwritten for students by teachers, documents created by students themselves through the inspiration of calligraphic models, or documents that very closely resemble or were modeled on ceremonial instructional pieces. Three of the eight conditions are necessary prerequisites for inclusion. Of the other five secondary conditions, at least two must be met for a document’s inclusion in the study.

\textsuperscript{188} “Dieses Vorschriften-Büchlein gehöret Jacob Arnold…” Frederick S. Weiser Collection, Winterthur Museum, Garden, & Library, Winterthur, DE. Object number 2012.0027.014 A.
Necessary Conditions (All Must be Met for Inclusion):

1) The document is handwritten and illuminated.
2) A central practical function of the document is to display proper handwriting styles.
3) The document’s aesthetic scheme centers on one page.

Secondary Conditions (Two Must be Met for Inclusion):

1) The handwriting is presented in a ceremonious context, and portions of it, especially book hands, are often (though not always) highly decorative.
2) The document was seemingly intended for use by a specific student or group of students.
3) The document communicates moral, ethical, or religious lessons in the form of scriptural quotations or excerpts from other devotional texts.
4) Decorative presentation of text suggests that the document held symbolic value beyond their pragmatic functions.
5) The maker labeled the piece a Vorschrift.

It merits reiteration that the definition of “Vorschrift” demanded by these conditions is intended only as a tool to determine what documents to include in the random sample described below, not to challenge how other scholars define Vorschriften or over-simplify how Pennsylvania Germans employed the word. Henceforward, use of the term is confined to documents that fit the conditional definition delineated above.
Figure 47. Detail, Vorschrift attributed to Johann Adam Eyer, 1782. Detail approximately 1 1/2” x 3”. Winterthur object number 2013.0031.078. Courtesy of the Frederick S. Weiser Collection, Winterthur Museum. Photograph by James Schneck.

Figure 48. Detail, Vorschrift for Michael Lang, Lebanon Township, Lebanon County, PA. Detail approximately 7” x 8”. Downs Coll. 320 86x188. Courtesy, The Winterthur Library: Joseph Downs Collection of Manuscripts and Printed Ephemera. Photograph by author.
Figure 49. Vorschriften-Büchlein (Writing sample booklet) for Jacob Arnold, 1816. 7 15/16” x 6 1/2”. Winterthur object number 2012.0027.014 A. Courtesy of the Frederick S. Weiser Collection, Winterthur Museum. Photograph by Jim Schneck.
Sample Characteristics

A careful and objective selection method was necessary to ensure that Vorschriften incorporated into this study were representative of the general population of Vorschriften surviving in libraries, archives, museums, and private collections today. A standard for data collection in statistics is random sampling, a method in which every element included in a sample is selected by chance. In a random sample, all elements eligible for selection enjoy the same opportunity for inclusion in a study. Results of a study are generalizable to a broader population only if the study sample is free of systematic bias. Random sampling helps minimize the impact of bias in sample selection.\textsuperscript{189} The principle of randomness is theoretically undermined when working with historical sources, as documents survive in historical collections only because an individual or group deems them worthy of preservation, and there is no way to guarantee surviving sources’ accurate representation of documents that were \textit{not} preserved for posterity. Moreover, historical materials accessible to the researcher are often carefully organized by librarians and curators, making randomization even of surviving documents difficult. The advantage of randomization in allowing some level of generalization of statistical findings is too valuable, however, to disregard an attempt at such a standard. In this case, it is hoped that a random sample of Vorschriften will allow generalization to a surviving population of

\textsuperscript{189} Bachman and Schutt, 42-43, 108-112, 466. Bachman and Schutt define random selection as “the fundamental element of probability samples; the essential characteristic of random selection is that every element of the population has a known and independent chance of being selected into the sample.”
Vorschriften available to researchers at libraries, museums, archives, and private collections today.

A collection of Vorschriften housed at the Schwenkfelder Library & Heritage Center in Pennsburg, Pennsylvania, lent itself to random sampling and forms the focus of this study. The collection supported random sampling for a variety of reasons. First, it is very large, perhaps the largest assemblage of Vorschriften held by a public institution. Second, it was assembled around the turn of the twentieth century, meaning that it reflects the diverse spectrum of Vorschrift form and content more accurately than other collections assembled later. Third, the institution’s Frakturschrift illuminated manuscripts have not been organized by type, meaning that several large boxes and smaller folders house most of the institution’s manuscripts. Four large boxes in particular lack subject order, i.e. a level of randomness prevails in their current storage. A random sample of the Schwenkfelder Library Vorschrift collection was conducted on October 11 and 12, 2013. Forty-nine Vorschriften were selected for inclusion in the study using a random number list generated in Microsoft Excel 2013. A fixed progression for exploration of the institution’s collections was established with the guidance of Curator of Collections Candace Perry. Four large boxes of illuminated manuscripts, as well as smaller manuscript collections containing Frakturschrift illuminated documents, contain most if not all of the institution’s Vorschrift collections (intermingled with other manuscripts). Each element was

190 The progression through the Schwenkfelder Library progression proceeded as follows: Box 1 of the Heeber family manuscript collection, a number of framed Vorschriften pulled by Ms. Perry from storage; Box 2 of the Heeber family manuscript collection, Samuel Pennypacker fraktur collection box 2, Samuel Pennypacker fraktur collection box 1, “Vorschriften” box in enclosed cabinet storage, Pennypacker Vorschriften framed for upcoming exhibition, “Schwenkfelder” manuscript collection
measured, photographed, and documented for future reference. When available, accession numbers of the various pieces were recorded. The forty-nine Vorschriften range 90 years in their dates of making, from 1754 to 1844, with a median year made of 1783. The mean year of making in 1787.8, with a standard deviation of 21.8 years (see Figure 50 and Table 1).

box in enclosed cabinet storage, loose manuscript assemblages in enclosed cabinet storage, “Religious Texts” box in enclosed cabinet storage, and three unlabeled boxes in enclosed cabinet storage.
Figure 50. Boxplot showing distribution of Vorschrift random sample dates made.\textsuperscript{191}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{boxplot}
\caption{Boxplot for Vorschrift Random Sample by Date of Making}
\end{figure}

\textsuperscript{191} Bachman and Paternoster, 182-185. According to Bachman and Paternoster, “a boxplot offers a visual display of the data and, in addition, provides the analyst with numerical information about the distribution’s center, spread, and outliers.” The lowest horizontal line on the graph represents the Low Adjacent Value, or the earliest year in which a Vorschrift included in the sample was made that is not more than 1.5 times the interquartile range removed from the median. The lower boundary of the box represents the twenty-fifth percentile of year of Vorschrift making. The line through the box represents the median. The upper boundary of the box represents the seventy-fifth percentile. The upper horizontal line represents the High Adjacent Value (the highest year of Vorschrift making not more than 1.5 times the interquartile range removed from the median), whereas the two points removed from the line represent mild outliers.
Table 1. Distribution values for date of Vorschrift production for elements of random sample.

<table>
<thead>
<tr>
<th>Box Plot Values</th>
<th>Year Made</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td></td>
</tr>
<tr>
<td>Low Adjacent Value</td>
<td>1754</td>
</tr>
<tr>
<td>Q1 (25%)</td>
<td>1772</td>
</tr>
<tr>
<td>Q2 (50%, Median)</td>
<td>1783</td>
</tr>
<tr>
<td>Q3 (75%)</td>
<td>1803</td>
</tr>
<tr>
<td>High Adjacent Value</td>
<td>1829</td>
</tr>
<tr>
<td>Mild Outliers</td>
<td>1843, 1844</td>
</tr>
</tbody>
</table>

Dependent Variables

The dependent variable of interest in this study, adherence of manuscript Vorschriften to baroque European design aesthetics as demonstrated in European engraved and printed writing manuals of the seventeenth and early to mid-eighteenth centuries, is very abstract. To operationalize the variable required close consultation of period printed writing manuals and development of a list of twenty characteristics indicative of their general style, classified here as their “baroque-ness.”

The concept of “baroque-ness” was adopted for this study in accordance with canonical

---

192 Bachman and Schutt, 464. Bachman and Schutt define “operation” as “the procedure for actually measuring the concepts we intend to measure, identifying the value of a variable for each case.” They define “operationalization” as “the process of specifying the operations that will indicate the value of a variable for each case.” In the context of this study, operationalization of the concept of “baroque-ness” was achieved through the identification of twenty observable baroque design variables.
art-historical periodization. Most of the writing manuals under consideration here were published between approximately 1600 and 1750 and exhibit certain design characteristics that align them with the aesthetics of other artistic media of the age. During October and November, 2013, eighteen European writing manuals published between 1615 and 1784 were consulted at the Winterthur Library (Winterthur, Delaware) and Newberry Library (Chicago). Comparison of plates from these writing manuals to Pennsylvania manuscript Vorschriften resulted in a list of twenty stylistic characteristics the presence of which qualitatively suggested high baroque design. Table 2 presents those twenty design characteristics, which hereafter are interpreted as statistical variables.
Table 2. Index of dichotomous variables measuring Vorschrift adherence to baroque design.

<table>
<thead>
<tr>
<th>Variable Abbreviation</th>
<th>Variable Description (&quot;Yes&quot; Response = Baroque)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeftInitial</td>
<td>First letter is positioned to the left of any text that comes below it on the Vorschrift, except presentation/signature lines?</td>
</tr>
<tr>
<td>BigMaj</td>
<td>Oversized initial decorative majuscule is present (initial majuscule is bigger than any to follow in the same or subsequent lines)?</td>
</tr>
<tr>
<td>DescendMaj</td>
<td>First letter in the first prominent line of book hand is a descending majuscule?</td>
</tr>
<tr>
<td>BrokeSquare</td>
<td>Flourishes and other decorative motifs connected to a decorative majuscule break the regular square occupied by that decorative majuscule?</td>
</tr>
<tr>
<td>OneBlock</td>
<td>Textual content is concentrated in one discrete central text block, with no lines of text appearing beyond the exterior perimeter of that text block, or going in another direction than those in the text block?</td>
</tr>
<tr>
<td>CircBlock</td>
<td>Text block is presented within a circular-designed border, in which the text block is centered near the middle of the page?</td>
</tr>
<tr>
<td>StrtVertEdge</td>
<td>The largest concentration of text in terms of number of words uninterrupted by linear or figurative borders has approximately vertical edges on its left margin?</td>
</tr>
<tr>
<td>OffSetBlock</td>
<td>Left edges of largest concentration of text on the Vorschrift in terms of number of words uninterrupted by linear or figurative borders are to the right of the left edge of the opening majuscule, such that no lines of text in the central text block extend to the left of or align perfectly with the opening majuscule, including its associated connected flourishes?</td>
</tr>
<tr>
<td>NoBelow</td>
<td>No text, other than cursory signature lines and/or portions of the central text block, appears under the first decorative majuscule?</td>
</tr>
<tr>
<td>DisFlourish</td>
<td>Non-figurative calligraphic flourishes are present that are not connected to or originate in a letter form?</td>
</tr>
<tr>
<td>NoFigFloral</td>
<td>Floral imagery is not present?</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>NoFigFaunal</td>
<td>Faunal/human imagery not made by pen flourish is <em>not</em> present?</td>
</tr>
<tr>
<td>SmallFirst</td>
<td>Space allotted to first line of book hand (excluding initial decorative majuscule but including all flourishes attached to the next-largest letter) is <em>not</em> greater than approximately one-third of the height of the entire text block?</td>
</tr>
<tr>
<td>NoLine</td>
<td>The scrivener did <em>not</em> incorporate drawn, straight horizontal and vertical lines or bars as a design motif on the Vorschrift, in order to define spatial boundaries on the Vorschrift?</td>
</tr>
<tr>
<td>NoFigDecBorder</td>
<td>The Vorschrift does <em>not</em> feature decorative exterior and interior borders that include figured decoration or any decoration other than straight lines, calligraphic flourishes, cross-hatching, or one solid filled color?</td>
</tr>
<tr>
<td>BiLetter</td>
<td>Discrete and/or connective stylized figurative letter bifurcation is present as a book hand decorative motif?</td>
</tr>
<tr>
<td>BkHandFl</td>
<td>Book hand letter forms, excluding the first decorative majuscule, are decorated with connective, horizontal non-figurative calligraphic flourishes?</td>
</tr>
<tr>
<td>FigIntDec</td>
<td>Figurative/patterned decoration occurs <em>within</em> book hand letter forms (excluding outlining)?</td>
</tr>
<tr>
<td>MultClrIntDec</td>
<td>Book hand letter forms feature more than one color per letter?</td>
</tr>
<tr>
<td>SmallFig</td>
<td>Speckles, dots, small curved lines, and other very small, figured shapes appear in the decoration of ornamental book hand letter forms, often though not exclusively majuscule forms, excluding such figures that may appear within letter forms as interior decoration, or as integral forms of figurative decoration?</td>
</tr>
</tbody>
</table>

Each of these twenty variables represents a building block of the concept of “baroque-ness” as operationalized in this study. In order to assess the “baroque-ness” of manuscript Pennsylvania Vorschriften through the lens of all these variables simultaneously, they were transformed into a single value through the process of index creation. An index is “a composite measure based on summing, averaging, or otherwise combining the responses to multiple questions that are intended to measure
the same variable.” Each of the twenty variables was dichotomized; that is, each could be answered only with a yes-or-no, 1-or-0 value. Given the nature of the concept this index measures, “adherence to baroque design standards,” a yes/1 code means “adheres,” whereas a no/0 code means “deviates.” For example, one variable identified in the printed European manuals was “DisFlourish,” or “Presence of calligraphic flourishes not attached to letter forms.” If flourishes were present, the variable was coded “yes” with a 1 value, suggesting adherence to baroque design. If flourishes were absent, the variable was coded “no” with a 0 value, associated with deviance from baroque design. Treating of all the variables in this way quantifies the twenty design characteristics and allows manipulation of “baroque-ness” data for each individual Vorschrift holistically, as an “index score,” which refers simply to the sum of all the 1-or-0 variable scores. Thus, according to the hypothesis undergoing testing, the higher the total index value, the more adherent the Vorschrift to baroque European design standards. Conversely, the lower the total index value, the more divergent the Vorschrift from baroque European design standards.

To continue with this example, clearly a Vorschrift should not be considered divergent from baroque design standards simply because it lacks flourishes. The strength of the additive index method is that the total index value offers a composite assessment of Vorschrift “baroque-ness.” Perhaps the Vorschrift without flourishes is very baroque in many other features; several “1” scores for other variables will more than balance out a 0 score for the flourish variable. This study allows for dual analysis

193 Bachman and Schutt, 203-204.

194 Ibid., 96.
both of total index values as well as values of individual variables across Vorschriften. Table 3 presents frequency data for responses to each dichotomous variable that contributes to the adherence to baroque design index. The data are displayed visually in Figures 51 and 52.
Table 3. Frequencies and percentages of baroque design index variables.

<table>
<thead>
<tr>
<th>Variable Abbreviation</th>
<th>Brief Description</th>
<th>1/Adheres</th>
<th>0/Deviates</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeftInitial</td>
<td>First letter to left of other text</td>
<td>33 (67%)</td>
<td>16 (33%)</td>
</tr>
<tr>
<td>BigMaj</td>
<td>Oversized opening letter present</td>
<td>45 (92%)</td>
<td>4 (8%)</td>
</tr>
<tr>
<td>DescendMaj</td>
<td>First letter descends</td>
<td>31 (63%)</td>
<td>18 (37%)</td>
</tr>
<tr>
<td>BrokeSquare</td>
<td>Irregular majuscule decoration</td>
<td>36 (73%)</td>
<td>13 (27%)</td>
</tr>
<tr>
<td>OneBlock</td>
<td>Text in central block</td>
<td>33 (67%)</td>
<td>16 (33%)</td>
</tr>
<tr>
<td>CircBlock</td>
<td>Text in circular design</td>
<td>49 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>StrtVertEdge</td>
<td>Text has vertical edges on left</td>
<td>22 (45%)</td>
<td>27 (55%)</td>
</tr>
<tr>
<td>OffSetBlock</td>
<td>Left edge of text block to right of first letter</td>
<td>29 (59%)</td>
<td>20 (41%)</td>
</tr>
<tr>
<td>NoBelow</td>
<td>No text below first majuscule</td>
<td>38 (78%)</td>
<td>11 (22%)</td>
</tr>
<tr>
<td>DisFlourish</td>
<td>Flourishes not connected to letters</td>
<td>22 (45%)</td>
<td>27 (55%)</td>
</tr>
<tr>
<td>NoFigFloral</td>
<td>No figurative floral imagery present</td>
<td>22 (45%)</td>
<td>27 (55%)</td>
</tr>
<tr>
<td>NoFigFaunal</td>
<td>No figurative human/animal imagery</td>
<td>42 (86%)</td>
<td>14 (7%)</td>
</tr>
<tr>
<td>SmallFirst</td>
<td>First line book hand less than 1/3 height</td>
<td>40 (82%)</td>
<td>9 (18%)</td>
</tr>
<tr>
<td>NoLine</td>
<td>No drawn straight lines</td>
<td>28 (57%)</td>
<td>21 (43%)</td>
</tr>
<tr>
<td>NoFigDecBorder</td>
<td>No decorative border</td>
<td>30 (61%)</td>
<td>19 (39%)</td>
</tr>
<tr>
<td>BiLetter</td>
<td>Letters bifurcated</td>
<td>5 (10%)</td>
<td>44 (90%)</td>
</tr>
<tr>
<td>BkHandFl</td>
<td>Flourishes decorate book hand</td>
<td>30 (61%)</td>
<td>19 (39%)</td>
</tr>
<tr>
<td>FigIntDec</td>
<td>Decoration in letter forms</td>
<td>30 (61%)</td>
<td>19 (39%)</td>
</tr>
<tr>
<td>MultCirIntDec</td>
<td>Multiple colors per letter form</td>
<td>33 (67%)</td>
<td>16 (33%)</td>
</tr>
<tr>
<td>SmallFig</td>
<td>Small figures decorate</td>
<td>26 (53%)</td>
<td>23 (47%)</td>
</tr>
</tbody>
</table>
Figure 51. Percent of cases coded 1/adheres or 0/deviates in dichotomous variables 1-10 of the baroque design index.

Figure 52. Percent of cases coded 1/adheres or 0/deviates in dichotomous variables 11-20 of the baroque design index.
Independent Variable

Only one independent variable—year of Vorschrift production—currently figures in this study. The variable is operationalized in two ways. Specific dates of the making of each Vorschrift are included as an independent variable, abbreviated “Date,” at the ordinal level of measurement. Nominal-level date range categories are also included and are abbreviated “DateCat.” The variable includes ten ten-year categories beginning in 1750 and ending in 1850 (1750-1759, 1760-1769, etc.).

Most Vorschriften included in the study were dated by their makers. Sixteen of the forty-nine Vorschriften randomly selected for inclusion in the study, or 33% of the entire sample, were not. To compensate for this absence, Candace Perry, Frakturschrift manuscript expert and Curator of Collections at the Schwenkfelder Library & Heritage Center, used qualitative evidence to offer approximate date ranges for the undated pieces selected for inclusion through random sampling. Examples of evidence used to date the manuscripts include comparison to similar, dated pieces, and attributions to known Vorschrift makers based on prior scholarship. Most were dated with a range of five years; the maximum range provided for any undated piece was twenty years. After Ms. Perry assigned appropriate date ranges, the median of her suggested range (rounded down to the nearest whole year) was adopted as the approximate date of making.

A preponderance of Vorschriften selected for the random sample—22 cases, or 44 percent—were made between 1770 and 1789. The number drops off precipitously on the turn of the nineteenth century. Table 4 and Figure 53 present frequency information for year of Vorschrift production.
Table 4. Number Vorschriften per date made category, collected in November, 2013 random sample.

<table>
<thead>
<tr>
<th>Date Category</th>
<th>Frequency</th>
<th>Percent (%)</th>
<th>Cumulative Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750-1759</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1760-1769</td>
<td>8</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>1770-1779</td>
<td>10</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>1780-1789</td>
<td>12</td>
<td>24</td>
<td>64</td>
</tr>
<tr>
<td>1790-1799</td>
<td>4</td>
<td>8</td>
<td>72</td>
</tr>
<tr>
<td>1800-1809</td>
<td>5</td>
<td>10</td>
<td>82</td>
</tr>
<tr>
<td>1810-1819</td>
<td>3</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>1820-1829</td>
<td>3</td>
<td>6</td>
<td>96</td>
</tr>
<tr>
<td>1830-1839</td>
<td>0</td>
<td>0</td>
<td>96</td>
</tr>
<tr>
<td>1840-1849</td>
<td>2</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>98</td>
<td></td>
</tr>
</tbody>
</table>
Figure 53. Number Vorschriften per date made category, collected in November, 2013 random sample.
Analysis Strategy

This study performs three statistical tests on the random sample: a general additive index, a multivariate ordinary least squares regression, and a series of binary logistic regressions. Each test builds on the last. The general additive index, described above, is the foundational and simplest measurement of Vorschrift change over time. It offers a holistic, large-scale understanding of Vorschrift stylistic change and assesses if the baroque design index is a statistically significant measurement of change over time. Graphical depiction of test results uses ordinal categories of year made (that is, the “Date” variable) and only one dependent variable, the sum index value. Tabular representation of the test results uses nominal categories for year made (the “DateCat” variable) and index sums.

A multivariate ordinary least squares (or OLS) regression follows the general additive index. OLS regression examines the variables that contribute to the general additive index to create a statistical model of the relationship between those variables and time. This approach treats date of Vorschrift making as a continuous dependent variable, which can be predicted by contributing variables to the baroque design index.195 The resulting model (a mathematical formula) quantifies the degree of Vorschrift style change over time. It allows prediction of index values or years of making for pieces not yet incorporated into the study, depending on implementation of the model. It also results in linear-graphical representation of Vorschrift change. The test uses nominal categories of year made (“DateCat” variable) and all twenty index variables summed into one index value.

---

The OLS regression models the entire index using “DateCat” as an independent variable, without paying attention to the makeup of the index’s component variables. A series of binary logistic regressions follow the OLS regression. These regressions measure the statistical significance (or lack thereof) of each individual dichotomous variable against the ordinal-level year made variable (“Date”). These figures will guide future refinement of the model.

It should be noted that all variables identified in qualitative research—even those deemed insignificant in this study—remain in the adherence to baroque design index. As this research is exploratory in nature and the index will be tested on other samples of Vorschriften, the decision to remove variables from the study will be reserved for future investigations.

Results

All three statistical tests demonstrate that the adherence to baroque design index is a statistically significant model of Pennsylvania German Vorschrift aesthetic change between 1754 and 1845. The OLS regression test creates a model that predicts year of Vorschrift making by index score for undated pieces not incorporated into the study. The binary logistic regressions highlight which variables contribute most to the predictive strength of the index.

__________________________

196 Ibid., 45-48.
General Additive Index

Graphical representation of Vorschrift general additive index scores by year made reveals a clear negative correlation. Excepting several post-1800 outliers with comparatively high index scores, the index scores of most cases decrease as year made increases (see Figure 34). This trend is further revealed by comparison of mean index scores for different year made categories. Index scores were highest in the 1760s, slowly decreasing until a revival of antique design aesthetics seen in two cases in the 1840s (see Table 5).

Figure 54. Scatterplot of baroque design index, by year of Vorschrift production.
Table 5. Mean Vorschrift index score per date category.

<table>
<thead>
<tr>
<th>Date Category</th>
<th>Number Cases</th>
<th>Mean Baroque Design Index Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1750-1759</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>1760-1769</td>
<td>8</td>
<td>14.25</td>
</tr>
<tr>
<td>1770-1779</td>
<td>10</td>
<td>13.1</td>
</tr>
<tr>
<td>1789-1789</td>
<td>12</td>
<td>11.41</td>
</tr>
<tr>
<td>1790-1799</td>
<td>4</td>
<td>11.75</td>
</tr>
<tr>
<td>1800-1809</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>1810-1819</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>1820-1829</td>
<td>3</td>
<td>8.67</td>
</tr>
<tr>
<td>1830-1839</td>
<td>0</td>
<td>N/A</td>
</tr>
<tr>
<td>1840-1849</td>
<td>2</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Multivariate Ordinary Least Squares (OLS) Regression

The general additive index illustrated the existence of a negative correlation between year made and adherence to Baroque design index score within the random sample of forty-nine Vorschriften undertaken at the Schwenkfelder Library. It does not suggest the statistical significance of this trend—that is, the existence of such a correlation among the surviving population of manuscript Vorschriften writ large. Multivariate ordinary least squares (OLS) regression results in a judgment of whether or not the correlation found in the random sample may be generalizable to extant Vorschriften. A Pearson Chi Square test performed on the data found the adherence to baroque design index significant at the .01 level, meaning that, in 99.9 percent of cases, the index serves as an accurate predictor of Vorschrift year made. Tables 6 and 7 present percent breakdowns of code 1/”adheres” responses by date category, as well
as which dichotomous variables emerged as especially significant in crosstab analysis of the variable and year made (operationalized at the nominal level as “DateCat”).

Furthermore, OLS regression offers a model for prediction of Vorschrift index values by year, displayed in Figure 55. The line running through the index value scatterplot represents the average downward path for Vorschrift index scores over time. The line’s formula is seen in Equation 1.

Equation 1. Linear regression model for baroque design index.

\[ y = 131.42 + -0.067(year\ made) \]

The first figure, 131.42, is relational and has no meaning in the real world. The second half of the formula, however, reveals how index scores ("y") change over time. The mean Vorschrift index score decreases 0.067 every year. Thus, inserting a value for “year made” and calculating the formula returns an estimated index score based on the Vorschrift’s year of production. The value of the formula comes in using a known index value (“y”) to estimate date of production of an undated Vorschrift, seen in Equation 2.

Equation 2. Equation for calculation of Vorschrift year made.

\[ year\ made = (131.42 - y) / 0.067 \]

This model may assist in the approximate dating of undated Vorschriften. Moreover, it will help assess the accuracy of the index if and when it is applied to Vorschrift data sets other than the random sample on which it is based. It bears
mentioning that, despite this study’s tightly defined focus, the Vorschrift did not exist in a vacuum. As demonstrated by the overview of handwriting instruction offered in the previous chapter, the documents occupied a world of handwriting styles and instructional methods. The .067 annual index score decline occurred within this milieu.
Table 6. Percent distribution of adheres/code 1 scores per variable, 1750-1789.

<table>
<thead>
<tr>
<th>Percent Distribution of Index Variables by Time Category, 1750-1789</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>1750-59</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>LeftInitial</strong></td>
</tr>
<tr>
<td>****BigMaj</td>
</tr>
<tr>
<td>DescendMaj</td>
</tr>
<tr>
<td>BrokeSquare</td>
</tr>
<tr>
<td>****OneBlock</td>
</tr>
<tr>
<td>CircBlock</td>
</tr>
<tr>
<td>StrtVertEdge</td>
</tr>
<tr>
<td>OffSetBlock</td>
</tr>
<tr>
<td>*NoBelow</td>
</tr>
<tr>
<td>DisFlourish</td>
</tr>
<tr>
<td>*NoFigFloral</td>
</tr>
<tr>
<td>NoFigFaunal</td>
</tr>
<tr>
<td>****SmallFirst</td>
</tr>
<tr>
<td>****NoLine</td>
</tr>
<tr>
<td>**NoFigDecBorder</td>
</tr>
<tr>
<td>BiLetter</td>
</tr>
<tr>
<td>****BkHandFl</td>
</tr>
<tr>
<td>FigIntDec</td>
</tr>
<tr>
<td>MultClrIntDec</td>
</tr>
<tr>
<td>SmallFig</td>
</tr>
</tbody>
</table>

---

Bachman and Paternoster, 360-375. Significance as indicated by asterisks on the mega-table were determined using chi-square tests. According to Bachman and Paternoster, “the chi-square test of independence tests the null hypothesis that two categorical variables are independent of each other.” For variables indicated with asterisks, the null hypothesis of no relationship between the variable and date made was determined to be false. The formulas listed below the table offer a key to the level of significance of each significant variable.

197 Bachman and Paternoster, 360-375. Significance as indicated by asterisks on the mega-table were determined using chi-square tests. According to Bachman and Paternoster, “the chi-square test of independence tests the null hypothesis that two categorical variables are independent of each other.” For variables indicated with asterisks, the null hypothesis of no relationship between the variable and date made was determined to be false. The formulas listed below the table offer a key to the level of significance of each significant variable.

---

197 Bachman and Paternoster, 360-375. Significance as indicated by asterisks on the mega-table were determined using chi-square tests. According to Bachman and Paternoster, “the chi-square test of independence tests the null hypothesis that two categorical variables are independent of each other.” For variables indicated with asterisks, the null hypothesis of no relationship between the variable and date made was determined to be false. The formulas listed below the table offer a key to the level of significance of each significant variable.

---

197 Bachman and Paternoster, 360-375. Significance as indicated by asterisks on the mega-table were determined using chi-square tests. According to Bachman and Paternoster, “the chi-square test of independence tests the null hypothesis that two categorical variables are independent of each other.” For variables indicated with asterisks, the null hypothesis of no relationship between the variable and date made was determined to be false. The formulas listed below the table offer a key to the level of significance of each significant variable.
| Percent Distribution of Index Variables by Time Category, 1790-1849 |
|---|---|---|---|---|---|
| **LeftInitial** | 6.1 | 3 | 3 | 3 | 3 |
| ****BigMaj | 8.9 | 11.1 | 6.7 | 2.2 | 2.2 |
| DescendMaj | 6.5 | 6.5 | 6.5 | 3.2 | 3.2 |
| BrokeSquare | 11.1 | 5.6 | 8.3 | 2.8 | 2.8 |
| ****OneBlock | 9.1 | 12.1 | 0 | 3 | 3 |
| CircBlock | 0 | 0 | 0 | 0 | 0 |
| StrtVertEdge | 4.5 | 13.6 | 4.5 | 9.1 | 0 |
| OffSetBlock | 3.4 | 3.4 | 6.9 | 3.4 | 3.4 |
| *NoBelow | 7.9 | 13.2 | 5.3 | 2.6 | 2.6 |
| DisFlourish | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 |
| *NoFigFloral | 4.5 | 4.5 | 0 | 9.1 | 4.5 |
| NoFigFaunal | 7.1 | 7.1 | 4.8 | 7.1 | 2.4 |
| ***SmallFirst | 10 | 10 | 0 | 5 | 5 |
| ****NoLine | 7.1 | 7.1 | 0 | 3.6 | 7.1 |
| **NoFigDecBorder | 10 | 10 | 0 | 6.7 | 6.7 |
| BiLetter | 20 | 20 | 0 | 0 | 0 |
| ****BkHandFl | 6.7 | 6.7 | 6.7 | 0 | 0 |
| FigIntDec | 13.3 | 13.3 | 10 | 6.7 | 3.3 |
| MultiClrIntDec | 12.1 | 12.1 | 9.1 | 6.1 | 6.1 |
| SmallFig | 7.7 | 7.7 | 7.7 | 7.7 | 7.7 |

****$\chi^2$ p < .01
****$\chi^2$ p < .05
**$\chi^2$ p < .10
*$\chi^2$ p < .15
Figure 55. Linear regression model of adherence to baroque design, by year.
Binary Logistic Regressions

Binary logistic regression is a more appropriate measure than OLS regression to assess the significance of each dichotomous variable as an indicator of Vorschrift date made.\(^\text{198}\) Table 8 suggests which individual variables play the most important roles in contributing to the strength of the index. According to logistic regression, “LeftInitial” and “BkHandFl” are significant at the .01 level; “BigMaj,” “OneBlock,” “NoBelow,” “NoFigFaunal,” and “SmallFirst” are significant at the .05 level; “DescendMaj” and “MultClrIntDec” are significant at the .10 level, and “OffSetBlock,” “NoFigFloral,” and “NoLine” are significant at the .15 level.

The significant variables may be classified into analytical categories. All variables associated with the first letter of the Vorschrift (“LeftInitial,” “BigMaj,” and “DescendMaj”) as well as variables associated with document layout and text alignment (“OneBlock,” “NoBelow,” “SmallFirst,” and “OffSetBlock”) are particularly significant indicators of Vorschrift change over time. Only two variables directly concerned with letter forms themselves (“MultClrIntDec” and “BkHandFl”) achieved levels of significance. At this stage of the study, the best statistical indicators of Vorschrift deviance from baroque design as conceptualized in this study are layout and configuration of text.

\(^{198}\) Hoffmann, 45-48.
Table 8. Levels of significance of baroque design index variables with binary logistic regression.

<table>
<thead>
<tr>
<th>Variable Abbreviation</th>
<th>Variable Description</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>LeftInitial</td>
<td>First letter to left of other text</td>
<td>****.007</td>
</tr>
<tr>
<td>BigMaj</td>
<td>Oversized opening letter present</td>
<td>***.02</td>
</tr>
<tr>
<td>DescendMaj</td>
<td>First letter descends</td>
<td>**.082</td>
</tr>
<tr>
<td>BrokeSquare</td>
<td>Irregular majuscule decoration</td>
<td>.176</td>
</tr>
<tr>
<td>OneBlock</td>
<td>Text in one central block</td>
<td>**.022</td>
</tr>
<tr>
<td>CircBlock</td>
<td>Text in circular design</td>
<td>N/A</td>
</tr>
<tr>
<td>StrtVertEdge</td>
<td>Text has vertical edges on left</td>
<td>.425</td>
</tr>
<tr>
<td>OffSetBlock</td>
<td>Left edge of text block to right of first letter</td>
<td>*.124</td>
</tr>
<tr>
<td>NoBelow</td>
<td>No text below first majuscule</td>
<td>**.03</td>
</tr>
<tr>
<td>DisFlourish</td>
<td>Flourishes not connected to letters</td>
<td>.212</td>
</tr>
<tr>
<td>NoFigFloral</td>
<td>No floral imagery of present</td>
<td>*.12</td>
</tr>
<tr>
<td>NoFigFaunal</td>
<td>No figurative human/animal imagery</td>
<td>***.039</td>
</tr>
<tr>
<td>SmallFirst</td>
<td>First line book hand less than 1/3 height</td>
<td>***.029</td>
</tr>
<tr>
<td>NoLine</td>
<td>No drawn straight lines</td>
<td>*.146</td>
</tr>
<tr>
<td>NoFigDecBorder</td>
<td>No decorative border</td>
<td>.441</td>
</tr>
<tr>
<td>BiLetter</td>
<td>Letters bifurcated</td>
<td>.484</td>
</tr>
<tr>
<td>BkHandFl</td>
<td>Flourishes decorate book hand</td>
<td>****.003</td>
</tr>
<tr>
<td>FigIntDec</td>
<td>Decoration in letter forms</td>
<td>.244</td>
</tr>
<tr>
<td>MultiClrIntDec</td>
<td>Multiple colors per letter form</td>
<td>**.062</td>
</tr>
<tr>
<td>SmallFig</td>
<td>Small figures decorate book hand</td>
<td>.469</td>
</tr>
</tbody>
</table>

\[ \chi^2 p < .01 \]
\[ \chi^2 p < .05 \]
\[ \chi^2 p < .10 \]
\[ \chi^2 p < .15 \]
Discussion

The data presented above quantify the existence of change over time in Vorschrift design, indicating an average .067 index value decline among Vorschriften every year. This model, which possesses utility in explaining how change occurred, does not explain why change occurred, or how such change should be interpreted through the lens of Pennsylvania German religious and cultural history. Future iterations of this quantitative approach, as well as more traditional historical inquiry based on primary sources, will fill in interpretive gaps left by questions raised through these initial statistical tests.

The results suggest the existence of several fluid stylistic periods in the Vorschrift form’s history in Pennsylvania. While always a conservative practice that respected community traditions for design and content, Pennsylvania German Vorschrift aesthetics can be classified into four stylistic time periods: ca. 1750-1779, ca. 1780-1799, ca. 1800-1829, and ca. 1830-1849. (These periods reflect the categorical nature of the statistical time data. Qualitative exploration of the documents may suggest more specific breaking-points between the periods.) We may call the first period, from ca. 1750 to 1779, the First Generation Baroque, when Vorschrift form adhered most closely to baroque European design practices. Common features of Vorschriften from this period are few or no non-letter figurative illuminations, offset text blocks to the right of the opening initial, and no extraneous text outside of central text blocks (see Figure 56). Following this period was the Modified Baroque Revival of ca. 1780-1799, the golden age of the Pennsylvania German Vorschrift in which form departed from writing sample presentation in engraved European writing manuals yet retained the foundational essence of baroque style and layout. Common
features of Vorschriften from this period are various text blocks throughout the piece, increased figurative decoration, and text presentation directly under the historiated initial (see Figure 57). The ascendency of the Modified Baroque Revival in the 1780s correlates with the rise of a second generation of Mennonite Pennsylvanians whose parents had emigrated from Europe, and whose children attended German-language community schools as they had done. 199

Between ca. 1800 and 1829, the aesthetic of the Modified Baroque Revival broke down and new design norms emerged, best called the Transitional “Dutch.” The period is characterized by gradual, subtle, yet noticeable modifications to baroque design standards, and increasing similarity of illuminated Vorschriften to other Frakturschrift manuscript forms generally considered to exude a folksy, “Pennsylvania Dutch” aesthetic. Common features of Vorschriften from this period are increased use of figurative floral and faunal illumination and greater liberality in text arrangement, including presentation of texts underneath the historiated initial (see Figure 58). The final period is the most difficult to quantify but also the most insightful in terms of changes in Vorschrift cultural resonance. By the 1840s and 50s, as common schools legislation made its impact felt, a small but noticeable resurgence in Vorschrift activity resulted in the making of some Vorschriften in styles that seem out of progression with their immediate antecedents. These documents might have been antiquarian enterprises that were not true Vorschriften at all, at least in the traditional pedagogical sense. By this late year, community-run German-language education had lost its sway. Rather, the documents likely were concerted efforts at revival of older styles

199 Ruth, 159.
now several generations vanished from active cultivation. They suggest the existence of an Era of Antiquarian Enterprise between ca. 1830 and 1859, in which the making of Vorschriften and related documents was removed from its historical purpose and undertaken as revival of a defunct religious and educational manuscript form.

Figure 56. Vorschrift, 1774, 7 13/16" x 8 5/16". Typical of the First Generation Baroque period, ca. 1750-1779. Object number 5-49. Courtesy of the Schwenkfelder Library. Photograph by the author.
Figure 57. Vorschrift, 1788. 8 1/4" x 13 1/8". Typical of the Modified Baroque Revival period, ca. 1780-1799. Object number 00.265.22. Courtesy of the Schwenkfelder Library. Photograph by the author.

Figure 58. Vorschrift, 1805. 8 3/8" x 10 1/4". Typical of the Transitional Dutch period, ca. 1800-1829. Object number 5-63_00.271.64. Courtesy of the Schwenkfelder Library. Photograph by the author.
Future Applications of Generalized Linear Model

These findings pointing to the existence of four time periods in Vorschrift design are meaningful in the qualitative context of cultural and educational change between the 1750s and 1850s described in Chapter Three. They prove that, between two episodes of Anglophone intervention in Pennsylvania German community-run education, a central pedagogical tool of Pietistic literacy and religious education underwent significant visual and format changes from their baroque-period European antecedents. The implications of those changes remain to be uncovered in a discussion of Vorschrift content, an analysis that an understanding of the stylistic periods laid out above will undergird. The data—especially the measurements of statistical significance—suggest a tantalizing new line of inquiry that will inform these future efforts, described below.

The variables “NoFigFloral” and “NoFigFaunal,” which assess the lack of presence of non-calligraphic floral and faunal imagery on Vorschriften as a sign of baroque-ness, met the threshold for statistical significance established by this study. One of the primary distinguishing features of late Vorschriften is the presence of decoration other than or ancillary to letter forms themselves. Early pieces, which seem to pay greater attention to precisely-executed letter forms than other decorative figures, feature comparatively few illuminations, whereas later pieces abound in such decoration. This suggests that, the further removed Vorschrift makers and consumers became from early modern European design aesthetics (and religious understandings of the importance of the Word?), the less they viewed letter forms themselves as vessels of ceremonial spiritual meaning. Figurative illuminations and other decoration
may have filled a decorative void once occupied by letter forms themselves. This insight requires further testing as described in the conclusion.

The randomness of the sample that produced the linear model above supports generalizable conclusions of Vorschrift design change, as well as statistically significant inferences about variable relationships. With these conclusions in hand, more advanced research questions that incorporate analysis of Vorschrift text may make it necessary to expand the model to include Vorschriften from collections where randomness is not assured. What the model loses in generalizability it will gain in analytical power; including more elements in the study will support the running more sophisticated statistical tests on the data.\textsuperscript{200}

\textsuperscript{200} Most importantly, addition of more elements will allow the running of a factor analysis on the data.
Chapter 6

CONCLUSION: THE LETTER AND THE SPIRIT

Rural southeastern Pennsylvania was an antiquarian book and manuscript collector’s paradise in the late nineteenth century, especially for buyers interested in German religious texts. At country sales across the agrarian landscape, descendants of Pennsylvania Mennonites, Schwenkfelders, and adherents of other immigrant Protestant traditions sold or disposed of books and handwritten documents they had inherited from their ancestors. One voracious collector of these materials, the wealthy lawyer, judge, and Pennsylvania Governor Samuel Pennypacker, recollected such scenes. Pennypacker dressed in disguise on visits to auctions and sales, where he and an associate scoured lots for “out-of-the-way treasures” they hoped to secure at discount prices. 201 “Often I went ‘incog’ [incognito] in an old suit and broken hat…to the sales of German farmers in the country and I have bought as many as a three-bushel-bag full of books at a sale,” he noted. “The auctioneer would hold them up at a window, half a dozen at a time, and knock them down for a few pennies.” 202 Pennypacker collected more than books on these trips. He also acquired many Frakturschrift manuscript documents, including Vorschriften, as enumerated in the

201 Ibid., 114-115, 194-260, 261-438, 162.

inventory of his collection made for its sale in 1920 following Pennypacker’s death four years earlier (see Figures 59 and 60).  

Pennypacker’s collecting occasionally proved personal. One day in 1872, he traveled to the country farmstead of a relation who had invited him to dine. The austere old farmer “entertained me at dinner sitting on a long bench before a table without cloth or napkins,” Pennypacker reminisced.

He gave to me an old Bible which he said was of no use to him and which had been thrown with some other stuff into a worn-out clothes basket in the garret. It proved to be the Bible which belonged to my great-great-great-grandfather, printed at Heidelberg in 1568, containing a family record and many interesting manuscript notes, which has now been in the family for ten generations and much antedating every other family possession [see Figures 61 and 62].

Pennypacker’s interest in rural Pennsylvania’s German-language books and manuscripts was not just scholarly. This scion of elite Pennsylvania civic and cultural life traced his own ancestry to the state’s early Radical Pietistic settlers, who had carried this Bible across the seas to Penn’s Woods in 1685—and for whom schoolteachers made Vorschriften (see Figure 63). One hundred eighty-seven years later, Samuel Pennypacker pulled the Bible from the “rubbish” of an old man’s attic.

__________________________


205 Samuel Pennypacker, manuscript notes in Bible (Heidelberg, 1568), Object Number P99.70.1, Pennypacker Mills, Pennsburg, PA, manuscript leaves 1-2.
Samuel Pennypacker’s collecting of German books and manuscripts took place at a watershed moment in Pennsylvania German religious history. As fringe theologies of early modern Protestantism lost their hold over many of Pennsylvania’s German-speakers in the early to mid-nineteenth century, some chose to shed the texts that had sustained their ancestors’ religious beliefs in Europe and Pennsylvania. Governor Pennypacker felt filial connection to and scholarly interest in the Bibles, devotional texts, and religious manuscripts made and used by his ancestors but chose, as had several generations of his ancestors, not to abide by separatist religious practices rooted in theologies and social philosophies more relevant in early modern Europe than nineteenth-century America. An earlier generation of the governor’s family eschewed the German language and changed their surname from “Pannebacher” to the Anglicized “Pennypacker.” The governor had to teach himself German. Pennypacker was living manifestation of the cultural transformation examined in this thesis. What manuscript documents taught us about the evolution of pious spirituality, Samuel Pennypacker lived.

Decline in early modern religiosity and affinity with Frakturschrift calligraphy and manuscript illumination among German-speaking Pennsylvanians did not occur abruptly. The statistical analysis of one genre of Frakturschrift calligraphy presented in this thesis, based partly on examples randomly selected from the Schwenkfelder


Library’s Samuel Pennypacker collection, suggests that the European baroque aesthetics of Pennsylvania Frakturschrift calligraphy and manuscript illumination declined gradually over time and at a predictable and measurable pace, at least in one prominent manuscript format. Standards of text alignment and page layout common to baroque European printed writing manuals, as well as certain characteristics of letter formation that figured prominently in early modern and baroque European calligraphy, gradually lost hold over the Vorschrift form. While not in itself a diagnostic of religious and cultural shift, this quantified design change raises deeper questions about how Pennsylvania Pietists and mystics conceptualized their faith and its place in early American society as they grew more removed from their European environment.

The way German-speaking Pennsylvania Pietists perceived and organized their social and spiritual worlds underwent a dramatic shift during the eighteenth and nineteenth centuries, as many traded in their ancestors’ Reformation-era political and religious philosophies for a modern American lifestyle. This generational shift disrupted emotive connection to (or even cerebral understanding of) the printed religious works and devotional manuscripts Pennsylvania’s Radical Pietists once held dear. Minus the mystical scriptural devotion that had spurned their creation by preceding generations, these print and manuscript texts lost their meditative value. Minus proficiency in seventeenth-century High German, they lost even simple intelligibility. Documents that had previously facilitated the functioning of a particular religious sensibility had become curiosities, decorative objects. That Pennypacker, one of the great early Vorschrift collectors, had to rediscover and study Pietistic culture as a scholar suggests how far removed he and other Pennsylvanians of
Pietistic descent had become from their early modern Central European religious heritage.\textsuperscript{208} Pennypacker acquired his family Bible and many other printed books and loose manuscripts as artifacts of religious cultures which, by 1872, had for all intents and purposes expired. For Pennypacker, collecting trips to auctions, country sales, and even family members’ houses, were truly rescue missions.\textsuperscript{209} Across southeastern Pennsylvania, descendants of Radical Pietists peddled heirloom books and manuscripts that had once been central to their ancestors’ spiritual and earthly lives.\textsuperscript{210}

\begin{flushleft}
\footnotesize
\hspace{1cm} \footnotesize
\textsuperscript{208} On Mennonites’ gradual drift from separatist orthodoxy and cultural tradition, see Ruth, 199-231.

\textsuperscript{209} Samuel Pennypacker, manuscript notes in Bible (Heidelberg, 1568), manuscript leaves 1-2. Pennypacker described his acquisition of the Bible as a “rescue.”

\end{flushleft}
Figure 59. Page depicting Vorschriften and other Frakturschrift manuscripts for sale as part of the Samuel Pennypacker collection at the Samuel T. Freeman auction house of Philadelphia, October 26 and 27, 1920. Courtesy of the Schwenkfelder Library and Heritage Center.
Figure 60. Page depicting Vorschriften and other Frakturschrift manuscripts for sale in the collection of Samuel Pennypacker, October 26 and 27, 1920. Courtesy of the Schwenkfelder Library and Heritage Center.
Figure 61. Pennypacker family Bible, published in Heidelberg, Germany, in 1568. 9 7/8" x 6 3/4" x 3 1/8". Object number P99.70.1. Courtesy of Pennypacker Mills, County of Montgomery, Schwenksville, PA, Photograph by the author.

Figure 62. Title page, Holy Bible, published in Heidelberg, Germany, in 1568. 10 9/16" H x 6 3/6". Object number P99.70.1. Courtesy of Pennypacker Mills, County of Montgomery, Schwenksville, PA, Photograph by the author.
Implications for Further Research

Scholars have failed to situate Pennsylvania German Frakturschrift calligraphy and manuscript illumination practices in a multicultural context of handwriting in early America. This oversight is a disservice to both German-American and Anglo-American handwriting scholarship. Scholars of Anglo-American handwriting traditions in particular tend toward totalistic claims that evidence from German-American primary sources would unravel. “The practice of copying penmanship models shaded into a generalized habit of copying by hand,” wrote Tamara Plakins
Thornton in her 1996 *Handwriting in America: A Cultural History*, a work based almost entirely on English-language sources.

Colonial Americans copied sermons and lectures, passages from medical books and legal writings, poetry and essays. Print copies of these texts were nonexistent, scarce, or expensive, so that copying made practical sense. But the practice of transcription also reinforced the notion of reading as the passive inscription of authoritative texts into one’s inner being and of writing as the subsequent copying of those texts.211

Copying certainly made practical sense for early Americans, as Thornton notes. But the visual power of many treasured Frakturschrift calligraphy pieces shows that, for mystical and Pietistic Pennsylvania Germans, copying was anything but “passive inscription of authoritative texts.” The reading and writing practices of Mennonites, Schwenkfelders, and other German-speaking Pennsylvanians represented forms of meditative, devotional creativity grounded in the inner spirit. Some Pennsylvania Germans valued written words not only for their functional, cognitive meaning, but also as aesthetic, memorial “objects” with visual identities of their own, bound up in the material and stylistic enterprises of the scribes as much as the writers who first strung a text together as a coherent thought. While the words they wrote and read in Frakturschrift calligraphy may often have been scripted, Pietists’ and mystics’ emotive interaction with those words could thus be authoritative and highly personal. How they actually wrote the words sometimes required great skill and allowed for a regulated brand of self-expression. When undertaken at the highest level, the physical, material process of writing and manuscript illumination implied calligraphers’ active

religious, cognitive, and social engagement with holy texts. The readers of such
documents, those for whom calligraphers crafted ornate manuscript artworks,
belonged to a culture in which letter forms catalyzed and mediated meditative
religious experiences. Pietistic scriptural interpretation and associated scribal
practices were imbued with a power of personal agency over divine revelation and
salvation directly opposed to the doctrinal authoritarianism of mainstream
Christianity. The copying of scripture, especially in ornamental hands, implied an
ownership of faith that scholars consider one of mysticism and Pietism’s distinctive—
and radical—features. For adherents to Pietism in its various forms, manuscript
making and reading was a devotional activity akin to prayer in its intellectually active,
processual, dialogic, and profoundly social nature (as demonstrated in Mennonite and
Schwenkfelder educational practices). An interactive world of religious manuscript
making and reading thrived among Pennsylvania Germans for whom ornamental letter
forms comprised a suitable testament to God’s glory and will. Changes to the
manuscripts’ form, in particular divergence from baroque continental European
models, may point to deep transitions in Pennsylvania German culture.

These sweeping assertions about mystical and Pietistic scriptural exegesis and
its associated manuscript cultures requires more exhaustive research and analysis,
relating to both transatlantic Vorschrift traditions and Reformation-era theology. The
next stage of research must encompass five distinct avenues of inquiry. First, the
Swiss Vorschrift tradition must be considered in greater depth. The index of baroque
design aesthetics developed as part of this study must be assessed against Swiss
examples made prior and contemporary to Pennsylvania pieces. The index variables
and their associated generalized linear model must be readapted to achieve
transatlantic utility, so that changes in the European tradition may be compared to changes in Pennsylvania. Particular attention must be paid to the relationship between the decoration of letter forms themselves and the presence or absence of figurative illuminations, to assess if the perceived importance of letter forms as vessels of spiritual experience copying earlier baroque exemplars changed over time. Second, a full-scale, quantitative content analysis of Vorschrift texts must be undertaken to complement this study’s findings of changes in Vorschrift design and layout. The same random sample used as the basis of this study, in addition to European pieces identified in Swiss archives, will support this work.

Third, the primary sources of medieval and early modern theologies of mysticism, Lutheranism, Calvinism, and Pietism must be explored to understand the relationship between spirit, letter, and handwriting. Fourth, scriptural-interpretive and manuscript traditions of various Anglo-American religious denominations, most importantly Puritanism and Quakerism, must be explored to allow for comparison to their Pennsylvania German counterparts. Fifth, the general history of European and American handwriting instruction must be explored more thoroughly. This will involve further consultation of published handwriting manuals as well as manuscript examples of student handwriting practice. These avenues of inquiry will widen the scope and enhance the meaning of the trends in Pennsylvania Vorschrift design aesthetics laid out in this thesis.

While significant work remains to be done in the field of Pennsylvania German print and manuscript culture, the qualitative and quantitative findings presented in this thesis enrich the traditional decorative arts interpretations of Pennsylvania German Frakturschrift calligraphy and manuscript illumination. These findings open new
directions in manuscript scholarship grounded in transatlantic understandings of letter forms’ importance to spiritual devotion and cultural identity. A transnational, multicultural, religious-historical approach to Pennsylvania Frakturschrift manuscript cultures underscores the truth in the maxim of eighteenth-century English writing master Joseph Champion, that “Dead Letters, thus with Living Notions fraught, Prove to the Soul the Telescopes of Thought.”

BIBLIOGRAPHY

Manuscript Collections
Lancaster Mennonite Historical Society

Bachman/Hartman Collection—Fraktur. Lancaster Mennonite Historical Society, Lancaster, PA.

Charles (Carli) Family Collection. Lancaster Mennonite Historical Society, Lancaster, PA.

Eby [Ebi], Johannes Fraktur Collection. Lancaster Mennonite Historical Society, Lancaster, PA.

“Fraktur in acid free folders” folder. Lancaster Mennonite Historical Society, Lancaster, PA.

Hershey [Hirschi], Christian (1755-1800) Papers. Lancaster Mennonite Historical Society, Lancaster, PA.

Nissley Family Collection. Lancaster Mennonite Historical Society, Lancaster, PA.


Mercer Museum of the Bucks County Historical Society

Free Library of Philadelphia

Henry S. Borneman Fraktur Collection. Rare Book Department, Free Library of Philadelphia, Philadelphia, PA.

Mennonite Heritage Center

Fraktur Collection—Vorschrift Box. Mennonite Heritage Center, Harleysville, PA.
Isaac Clarence Kulp Collection. Mennonite Heritage Center, Harleysville, PA.

Pennypacker Mills

Pennypacker, Samuel W., Book and Manuscript Collection. Pennypacker Mills, Schwenksville, PA.

Philadelphia Museum of Art


Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission

Reist Family Collection (Gift of Marian Reist Griffith). Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission, Lancaster, PA.


Schwenkfelder Library & Research Center

Heeber Family Manuscript Collection. Schwenkfelder Library & Research Center, Pennsburg, PA.
Pennypacker, Samuel W. Collection of Fraktur. Schwenkfelder Library & Research Center, Pennsburg, PA.

“Religious Texts” Collection. Schwenkfelder Library & Research Center, Pennsburg, PA.

Schultz, Amos H. Collection. Schwenkfelder Library & Research Center, Pennsburg, PA.

“Schwenkfelder” Manuscript Collection. Schwenkfelder Library & Research Center, Pennsburg, PA.

“Vorschriften” Fraktur Collection. Schwenkfelder Library & Research Center, Pennsburg, PA.

Winterthur Museum

Weiser, Pastor Frederick S. Collection. Winterthur Museum, Garden, & Library, Winterthur, DE.

Museum Collection of Pennsylvania German Fraktur. Winterthur Museum, Garden, & Library, Winterthur, DE.

Manuscript Collections, Downs Collection, Winterthur Library


Published Primary Sources

Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission

Braght, T.J.V. Der Blutige Schon-Platz, oder Martyrer Spiegel... 2nd Amer. ed. Lancaster, PA: Joseph Ehrenfried, 1814.

Rare Books, Winterthur Library

Baurenfeind, Michael. Vollkommene Wieder-Herstellüng/der bisher Fehr in Verfall gekommenen gründlich-u: Ziefstichen Schreib-Kunst/orinnen... Nuremburg, Germany: Christoph Weigel, 1716.
Bickham, John. *Fables and Other Short Poems: Collected from the Most Celebrated English Authors: for the Practice and Amusement of Young Gentlemen and Ladies: In the Art of Writing*. London: Printed and Sold by Thomas Cobb, [1733?].


Clauss, G.B. *Nordamerikanische Schnell-Schreibmethode in 84 Vorlegeblättern*. Chemnitz, Germany: Expedition des Gewerbeblattes für Sachsen, 1839.


Noyes, Enoch. *An Analytical Guide to the Art of Penmanship; in Which the Correct Principles of the Round and Running Hands are Systematized and Simplified. Designed to Teach this Important and Elegant Art with the Utmost Faculty*. Boston: 1821.


173


Rare Books and Microfilms, Hill Museum & Manuscript Library, St. John’s University


Newberry Library

Braun, Jean. *Gründliche Anweisung zur Schreib Kunst deutsch u französisch ... Examplaire pour apprendre facilement l'écriture française et l’allemande.* Mülhausen, Germany: 1784.

_________. *Vorweisung verschiedener teutsch- u. französischer Schriften.* Mülhausen, Germany: 1790.

Der Blühenden Jugend: *Neüe Anleitung zur Teutschen Fractur Cantzeley und Current Schrifft.* Nuremberg, Germany: In Verlegung Johann Christoph Weigels, [ca. 1703?].

Göischler, Elias. *Anleitung zur edlen Schreibe-Kunst, Bestehend in geographisch-historischen Vorschriften, Eingängen zu Geburths-und Lehr-Briefen, Kundschaften... Dresden, Germany: [1744?-5].

_________. *Geographisch-und historischer Vorschriften II. Theil... Dresden, 1745.*


Kupfer, Martin. *Schreib-Formular Büchlein von allerhand wohlgebrauchlichen teutschen-undt lateinischen Zier-Schrifften ... Dresden[?], Germany: N. Weishun, 1667-68. Five parts in one volume.*

Möller, Arnold. *Schreib Kunst Spiegel ... in drey Theil ordentlich abgefasset ... und jetzt erstmahls ... ans Licht gebracht ... Lübeck, Germany: [ca. 1648?]. Three parts in one volume.*

_________. *Schreib-Stübelein darin mancherleý nützliche teütsche, auch fremder Sprachen Schrifffen mit deren Fundamenten, güldenen Lehrn, Handels-Briefen und Ehren Tituln ... in drey Theil ordentlich abgefasset ... und jetzt erstmahls ans Liecht gestelt ... Lübeck, Germany: 1643.*

_________. *Vorschrift, teutsch und lateinischer Schrifften...* Nuremberg, Germany: C. Riegel, 1696.


Schreib-Stüblein darin mancherley, Schreib-Stüblein darin mancherley nützliche teütsche, auch fremder Sprachen Schrifften mit deren Fundamenten, güldenen Lehrn, Handels-Briefen und Ehren Tituln ... in dreý Theil ordentlich abgefasset ... und jetzt erstmals ans Liecht gestalt ... Lübeck, Germany: 1643. Three parts.


Other Collections


Richard, Johann Friedrich. *Klänge durch die Nacht.* Hamburg: Johann August Meissner, 1830.
Secondary Sources


Crous, Ernst, and Joachim Kirchner. *Die Gotischen Schriftarten*. 2nd ed.


Appendix

PERMISSION LETTERS

Permission Letter from the Philadelphia Museum of Art:

Dear Alexander,

Thank you for your inquiry regarding image(s) from the Philadelphia Museum of Art for your project. Attached please find the JPEG image with photo credit and caption:

The museum will provide this image to you, as a courtesy for your educational publication. This image is public domain:

The photo credit notice must appear on all copies made, the minimum being artist, title, Philadelphia Museum of Art.

Below please find the photo credit and caption for accession #1954.85.7:

**Religious Text**

The Reverend Georg Geistweit

American, Pennsylvania German, August 19, 1901

Pen and ink and watercolor on laid paper

Sheet: 12 1/2 x 15 1/4 inches (31.8 x 38.7 cm)

Philadelphia Museum of Art: Titus C. Geesey Collection, 1954

This should be suitable for your publication purpose(s).

All the best with your project!

Kind regards,

Rights & Reproduction, Photography
Philadelphia Museum of Art
Email: rightsandrepro@philamuseum.org
Office: 215-684-7602
FAX: 215-235-0034
Permission Letter from the Landis Valley Village & Farm, Museum, Pennsylvania Historical and Museum Commission:

Hi again. So sorry to bother you with a third e-mail, but I thought of one ot...

Alex,

I am first day back from a month off for shoulder surgery and moving quickly to get through a mountain of e-mail. I'm familiar with ProQuest, which Lehigh also uses. The Barbara Reist document is being cleaned and conserved, and I might be able to get you a better image of it in improved condition directly by email from the conservator, if you want - let me know.

We are pleased to grant you permission to use images of FM2011.1.4, a vorschrift for Barbara Reist, and FM2011.1.1, an 1814 Lancaster edition of the Martyr's Mirror, for use in your University of Delaware thesis, "Heavenly Handwriting, Teutonic Type: Faith and Script in German Pennsylvania, ca. 1683-1855." The citation for the full name of the museum and its parent agency is "Landis Valley Village & Farm Museum, Pennsylvania Historical and Museum Commission." You might also want to note these items are the gift of Marian Reist Griffith (in whose family the pieces descended).

Bruce

Bruce D. Bomberger, Ph.D., Curator
Landis Valley Village & Farm Museum
2451 Kissel Hill Road
Lancaster, PA 17601

From: Alexander Ames [mailto:ames@udel.edu]
Sent: Saturday, April 12, 2014 6:24 PM
To: Bomberger, Bruce
Permission Letter from the Winterthur Museum:

<table>
<thead>
<tr>
<th>Registration #</th>
<th>Subject</th>
<th>Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1957.1183</td>
<td>Vorschrift</td>
<td>digital image</td>
</tr>
<tr>
<td>1985.0091</td>
<td>Vorschrift</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.009</td>
<td>Writing Sample</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.014</td>
<td>Writing Sample</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.014</td>
<td>DETAIL</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.016</td>
<td>DETAIL</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.016</td>
<td>Writing Sample</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.017</td>
<td>Writing Sample</td>
<td>digital image</td>
</tr>
<tr>
<td>2011.0028.020</td>
<td>Manuscript</td>
<td>digital image</td>
</tr>
<tr>
<td>2012.0027.014</td>
<td>Writing Smpl Bklt</td>
<td>digital image</td>
</tr>
<tr>
<td>2012.0036.001</td>
<td>DETAIL</td>
<td>digital image</td>
</tr>
<tr>
<td>2013.0031.078</td>
<td>DETAIL</td>
<td>digital image</td>
</tr>
<tr>
<td>2013.0031.092A</td>
<td>Classroom Scene</td>
<td>digital image</td>
</tr>
</tbody>
</table>

The credit line to be used with each picture is: "Courtesy, Winterthur Museum."
Permission Letter from the Winterthur Library, Printed Books and Periodicals Collection:

April 15, 2014

Alexander L. Ames
Lois F. McNeil Fellow
Winterthur Program in American Material Culture
Academic Programs Department
Winterthur Museum, Library, & Garden
Winterthur, DE 19735

Permission is granted to reproduce the images listed below in Heavenly Handwriting, Teutonic Type: Faith and Script in German Pennsylvania, ca. 1683 – 1835 by Alexander Lawrence Ames, to be submitted to the University of Delaware as a 2014 thesis.

<table>
<thead>
<tr>
<th>Accession or Call Number</th>
<th>Book or Object</th>
<th>Reproduction to be made from</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBR Z43 C97*</td>
<td>[Calligraphia regis konigliche Schreib Fader.] [Berlin : Im Verlag des Autris, 1714]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plate 4. “Der Herr erlöst die Gesange.”</td>
<td>Image taken by author</td>
</tr>
<tr>
<td>RBR Z43 S54b F</td>
<td>Shelley, George. <em>The second part of Natural writing.</em> London: Sold by the author, [between ca. 1740 and 1754.]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Plate 10. “Die Mühe so die Alten.”</td>
<td>Image taken by author</td>
</tr>
<tr>
<td>RBR Z43 S33</td>
<td>Schirmer, Johann Michael. <em>Geöffnete Schreib-Schule oder. Deutsche, lateinische, und französische Verschriften.</em> [Frankfurt am Main : s.n., 1760]</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• p.49. “Anleitung zu verzogenen Figuren.”</td>
<td>Image taken by author</td>
</tr>
<tr>
<td></td>
<td>• Cover.</td>
<td>Images taken by author</td>
</tr>
<tr>
<td></td>
<td>• p.1. “Abtheilung.”</td>
<td></td>
</tr>
</tbody>
</table>

The credit line to be used with each picture is:


Please provide a complimentary copy of the publication. It is understood that this thesis will be submitted to UMI, and that UMI may sell, on demand, for scholarly purposes, single copies of your dissertation, which includes the images described above. Permission is hereby granted for that purpose. Please note use restrictions below.

Lauri Perkins
Rights and Reproductions
Library and Academic Programs
Permission Letter from the Winterthur Library, Joseph Downs Collection of Manuscripts and Printed Ephemera:

April 15, 2014

Alexander L. Ames
Lois F. McNeil Fellow
Winterthur Program in American Material Culture
Academic Programs Department
Winterthur Museums, Library, & Garden
Winterthur, DE 19735

Permission is granted to reproduce the images listed below in Heavenly Handwriting, Text and Type: Faith and Script in German Pennsylvania, ca. 1683 – 1855 by Alexander Lawrence Ames, to be submitted to the University of Delaware as a 2014 thesis.

<table>
<thead>
<tr>
<th>Accession or Call Number</th>
<th>Book or Object</th>
<th>Reproduction to be made from</th>
</tr>
</thead>
<tbody>
<tr>
<td>Col. 320, 65s547</td>
<td>Mennonite bookmarks, circa 1800.</td>
<td>Images taken by author</td>
</tr>
<tr>
<td></td>
<td>• Mennonite classroom reward from the Goymann family of Upper Bucks County, Pennsylvania, ca. 1790-1810.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Detail, verso of Mennonite classroom reward from the Goymann family of Upper Bucks County, Pennsylvania, ca. 1790-1810.</td>
<td></td>
</tr>
<tr>
<td>Col. 320, 65s548</td>
<td>Mennonite bookmarks, circa 1800.</td>
<td>Image taken by author</td>
</tr>
<tr>
<td></td>
<td>• Mennonite classroom reward, ca. 1790-1810</td>
<td></td>
</tr>
<tr>
<td>Col. 320, 87s165</td>
<td>Grimm, Elisabetha. First lines of hymns, 1772.</td>
<td>Image taken by author</td>
</tr>
<tr>
<td></td>
<td>• Vorschrift vor Michael Lang, 1790.</td>
<td></td>
</tr>
<tr>
<td>Col. 320, 86s188.1</td>
<td>Gebhard, F. G. Forschrift vor Michael Lang, 1790.</td>
<td>Image taken by author</td>
</tr>
<tr>
<td></td>
<td>• Detail.</td>
<td></td>
</tr>
</tbody>
</table>

The credit line to be used with each picture is:


Please provide a complimentary copy of the publication. It is understood that this thesis will be submitted to UMI, and that UMI may sell, on demand, for scholarly purposes, single copies of your dissertation, which includes the images described above. Permission is hereby granted for that purpose. Please note use restrictions below.

Lauri Perkins
Rights and Reproductions
Library and Academic Programs
Permission Letter from Lancaster Mennonite Historical Society:

Memo
To Whom It May Concern
August 9, 2013

I, Alex L. Ames—student in the Winterthur program in American Material Culture at the University of Delaware and Winterthur Museum, Garden, & Library—acknowledge that I have been granted access to study a portion of the fraktur collection of the Lancaster Mennonite Historical Society for my master’s thesis, focusing on Pennsylvania German Vorschriften. I agree by my signature below that all photographs I took were for my private, personal use in relation to the above-mentioned thesis and that such photographs may not be reproduced digitally or by photocopy or any other means for any other purpose without written permission of the Lancaster Mennonite Historical Society. I have permission to use the images educationally in class and/or conference presentations directly related to my thesis.

Alex L. Ames

Carolyn C. Wenger, Curator and Archivist
Lancaster Mennonite Historical Society

Engaging history to inspire memory, faith and hope.
Clarification on Image Permission

Alexander Ames

Dear Carolyn, I hope you have been well since we last communicated. I am plea...

Caroline Wenger

Dear Alex,

Congratulations on your progress. I am glad to hear that your continued efforts have gone well for you.

Regarding reproduction of your thesis by UMI for students, I can grant permission for this, but any further reproduction of the fulfil and broadside images from your thesis on behalf of or by students requires permission from the Lancaster Mennonite Historical Society. Thank you, and best wishes for your continuing work. I hope we’ll see more of you.

Lancaster Mennonite Historical Society
Carolyn C. Wenger, Archivist and Curator
E-mail: cwenger@mhs.org
Permission Letter from Schwenkfelder Library & Heritage Center:

To whom it may concern:

This email will serve to grant Alexander Ames, Lois F. McNeil Fellow, Winterthur Program in American Material Culture, permission to use the following images in his thesis "Heavenly Handwriting, Teutonic Type: Faith and Script in German Pennsylvania, ca. 1683-1855".

1) Carl Egelmann, Deutsche & Englische Vorschriften für die Jugend. Object VSFS 34-269, leaf one. 6 5/8" x 8".
4) Vorschrift, 1827. 12 1/2" x 7 1/16".
5) Vorschrift, 1774. 7 13/16" x 8 5/16". Object number 5-49.
6) Vorschrift, 1788. 8 1/4" x 13 1/8". Object number 00.265.12.
7) Vorschrift, 1805. 8 3/8" x 10 1/4". Object number 5-63_00.271.64.

Thank you. If you have any questions, please feel free to contact me.

Candace Kintzer Perry
Curator of Collections
Schwenkfelder Library & Heritage Center
105 Seminary Street
Pottsville, PA 18073
www.schwenkfelder.com
215-679-3103
Permission Letter from the Mercer Museum of the Bucks County Historical Society:

Mercer Museum & Library and Fonthill Castle
Operated by The Bucks County Historical Society
84 South Pine Street Doylestown PA 18901

Publication Rights Agreement Form (Print Publication)

Name: Alexander Lawrence Ames

Address: 1202 W. 4th St. Apt. # 2C Wilmington, DE 19808

Institutional Affiliation: Winterthur Museum / University of Delaware

Telephone Number(s): 302-282-9345

Email Address: alames@udel.edu

Purpose of Photography Requested (check all that apply)
- [ ] Illustrate a scholarly/academic paper or publication
- [ ] Illustrate a school or University project
- [ ] Exhibition and/or Museum Exhibit Catalog
- [ ] Illustrate a commercial publication (i.e. magazine, newspaper, newsletter, calendar, poster, etc)
- [ ] Book
- [ ] School Textbook
- [ ] Other

Please list title of publication and date:

I hereby request permission to publish images, in the work described above, and in the media type and run as described below. Please contact the Collections Manager for fee schedule.

Artifact/Lib. Material: Accession/Catalog No.: Media Type/Run: Fee:

Please see attached list.

Total Cost of Order $25.00

I have read the terms and conditions on this form and agree to them. Further, I agree to use the images(s) identified above only in the manner described on this form, and I agree to pay any fees for which I am now liable or for which I may become liable should the use I intend for these photographic materials change.

Signature: Alexander Lawrence Ames 
Date: August 12, 2013

BCHS Use Only: One-time publication rights are hereby conferred to the individual/institution named above, subject to the terms, manner and conditions described in this agreement.

Signature/Title: 

Date: 9-10-2013

Revised 9/4/2011
Terms and Conditions for Print Publication Use of Images  
Mercer Museum & Library and Fonthill Castle (hereafter referred to as BCHS)

The collections of the BCHS are an important visual resource for the study of local and family history, the history of everyday life in preindustrial America, and the life and works of Henry Mercer. The usefulness of the collection visually also extends to numerous commercial and public relations applications. With this in mind, it shall be the policy of the BCHS to make available and accessible photographic images of its buildings and collections, and to permit their publication, subject to the following conditions and procedures:

1. Expressed written permission is required from the BCHS prior to the publication of any image of objects or materials in the BCHS collections. The Publication Rights Agreement Form and only this form, signed by an authorized staff member of the BCHS, shall constitute such permission. The ordering or taking of photographs and the payment of service fees DO NOT of themselves convey permission to publish.

2. In addition to obtaining written permission, individuals requesting permission to publish an image in a commercial or non-commercial publication are responsible for paying a publication fee. No fees are charged for the publication of an image in a publication deemed to have public value for the BCHS.

3. Non-commercial, Commercial and Public Relations uses of photographic images are defined as follows:
   a. Non-commercial use is defined as any photography used by a nonprofit organization; or as part of any non-profit scholarly enterprise, especially for educational purposes and/or cultural enhancement, or for personal study or reference.
   b. Commercial use is defined as any photography used by a for-profit enterprise, or in any profit-making venture, for the purposes of creating, illustrating, advertising, marketing or commemorating a product.
   c. Public Relations use is defined as any photography used by an individual, organization or business which is deemed to have public, advertising or marketing value for the BCHS.

4. Individuals requesting the right to publish photographs of objects or materials in the BCHS collections must reveal the Publications Rights Agreement Form the type, title, and date of the publication in which they want the image(s) to appear, and the intended format of the image(s).

5. The right to publish is extended only for the image(s) listed on the Publication Rights Agreement Form, and only for use in the manner described. In addition, the right to publish is extended for one-time use only. Additional use requires further permission of the BCHS.

6. Payment is required in advance of the publication of any image(s).

7. The BCHS must be acknowledged as the source of any published image. The credit line must read either "From the Collection of the Mercer Museum, Doylestown, PA" or "From the Collection of the Mercer Museum Library, Doylestown, PA" as appropriate. If such placement proves to be impractical, alternate placement such as in an index or a list of credit may be approved on an individual basis.

8. Two copies of any publication using images from the BCHS collections are to be donated to the Mercer Museum & Library.

9. Before printing, a proof may be requested. Any errors involving BCHS images must be corrected before printing may proceed.

10. Images may not be altered, cropped, or otherwise edited without the written permission of the BCHS.

11. Failure to meet these conditions will result in forfeiture of the right to use BCHS photos for publication purposes unless the conditions are formally waived or altered, in writing, by the BCHS.

I have read and understand the above Terms and Conditions.  
Signature: [Signature]  
Date: Aug 13, 2013
Image Permission Requests from Mercer Museum/Bucks County Historical Society

I request to use these images as primary source material for my master's thesis research, in class and academic presentations (in which the images are not distributed in print or digital format), and perhaps as illustrations in the thesis document itself.

MSC 609, Fol. 7/97-16-7
Cyphering Copybook of Henry Oberholtzer, Milford Township, 1856
Page 1 (Cover Page)
Page 27

SL 97-2008-1 SL 58. No. C-16
Debit and Credit Book of Michael Dech
Cover of the book-Show highly decorative style
Book plate
Page 98-Example of the account book
Page 130-Containing household remedies for illnesses
Page 137 (final leaf in volume)

97.27 COFO48 B-1 SC-58 No. B01
Entire document

SL 96-2014.001 A-14
Entire document
Rectos and versos of all fragments kept in folder with object

SL 96-2015-001 A-15
Entire document

Entire document

SL 96-2034.1 SC-58. No. A-34
Entire document

Entire document
SL 96-2033-1 SC-58. No. A-33
Entire document
Back of object

Entire document
Permission Letter from Kim Schenck:

Dear University of Delaware,

This email serves as permission to use my image of the chalk drawing box produced by Charles Roberson & Co. in the thesis of Alexander Lawrence Ames entitled "Heavenly Handwriting, Teutonic Type: Faith and Script in German Pennsylvania, ca. 1683 — 1855".

Sincerely,

Kimberly Schenck
Head of Paper Conservation
National Gallery of Art
Sixth Street and Constitution Avenue, NW
Washington, DC
202-842-6443

Mailing address:
20008 South Club Drive
Landover, MD 20783

Click here to Reply or Forward
Permission Letter and Open Access Information from the National Gallery of Art:

Thesis Photo Permission Letter

Alexander Ames
Dear Kim: I hope you have made it home safely from your recent travels. I am ...

Schenck, Kimberly
Dear Alex,

Because the NGA image can be acquired through our website you do not need permission. Just learned that last week. I will send you a separate email with my permission. I also sent you a picture of the label inside the box.

Best,
Kim

From: Alexander Ames <alames@udel.edu>
Date: Tuesday, April 15, 2014 7:23 AM
To: NGA <Schenck@NGA.GOV>
Subject: Thesis Photo Permission Letter

Alexander Ames <alames@udel.edu>

Thanks so much, Kim. I appreciate the lenient policy of the NGA, as well as your willingness to feature your object in my thesis.

ALA
NATIONAL GALLERY OF ART

OPEN ACCESS POLICY FOR IMAGES OF WORKS OF ART PRESUMED TO BE IN THE PUBLIC DOMAIN

With the launch of NGA Images, the National Gallery of Art implements an open access policy for digital images of works of art that the Gallery believes to be in the public domain. Images of these works are now available free of charge for any use, commercial or non-commercial. Users do not need to contact the Gallery for authorization to use these images. They are available for download at the NGA Images website (images.nga.gov). See Policy Details below for specific instructions and notes for users.

BACKGROUND

The mission of the National Gallery of Art is to serve the United States of America in a national role by preserving, collecting, exhibiting, and fostering the understanding of works of art at the highest possible museum and scholarly standards. In pursuing this mission, the Gallery makes its collection images and information available to scholars, educators, and the general public to support research, teaching, and personal enrichment; to promote interdisciplinary research; and to nurture an appreciation of all that inspires great works of art.

The Gallery’s open access policy is an natural extension of this mission. In applying this policy in a global digital environment, the Gallery also expands and enhances its educational and scholarly outreach. The Gallery believes that increased access to high quality images of its works of art fuels knowledge, scholarship, and innovation, inspiring users that continually transform the way we see and understand the world of art.

Works in the public domain are those not subject to copyright protection. The Gallery has launched this open access policy with works it believes to be in the public domain, but is hoping gradually to include additional works whose public domain status is currently uncertain. The research necessary to determine public domain status of a work is often complicated, time-consuming, and inconclusive. Nevertheless, the Gallery is committed to clarifying, whenever possible, the status of all of its works and to making them available under the open access policy if and when the Gallery has reason to believe they are in the public domain.

The National Gallery of Art respects all intellectual property rights and complies with applicable copyright law, including the exemption from copyright restrictions under the doctrine of fair use. Nothing in this open access policy is intended to limit the application of this doctrine to the use of images of the Gallery’s collections. The Gallery also respects the privacy and publicity rights of individuals and abides by provisions in donor and purchase agreements that may restrict access to certain works.

https://images.nga.gov/en/page/openaccess.html (active as of April 20, 2014)
Permission Letter from Pennypacker Mills, County of Montgomery, Pennsylvania:

APPLICATION FOR PERMISSION TO PUBLISH/EXHIBIT IMAGES

Requested by:
Name: Alexander Lawrence Ames
Address: 4 Doe Run Court
Apartment #2C
Wilmington, DE 19808
Phone: 320-282-9345
Email: alames@udel.edu

Requested for project:
Date requested: April 15, 2014
Project Description:
Use of three images for Master’s Thesis entitled: “Heavenly Handwriting, Teutonic Type: Faith and Script in German Pennsylvania, ca. 1683-1855” for the University of Delaware.

Publisher (if known): University of Delaware/University Microfilms International (UMI)
Expected date of publication: May 29, 2014

<table>
<thead>
<tr>
<th>IMAGE#</th>
<th>Description</th>
<th>Format and/or Fees</th>
</tr>
</thead>
<tbody>
<tr>
<td>P81.212</td>
<td>Vorschrift of Simon Pannebecker</td>
<td>Photograph taken by author</td>
</tr>
<tr>
<td>P99.70.1</td>
<td>Umsatz Bible</td>
<td>Photograph taken by author</td>
</tr>
<tr>
<td>P99.70.1</td>
<td>Umsatz Bible title page</td>
<td>Photograph taken by author</td>
</tr>
</tbody>
</table>

All images remain the property of the Division of Parks, Trails & Historic Sites, County of Montgomery. Any additional reproduction and/or usage must be approved by the Division of Parks, Trails & Historic Sites/County of Montgomery in advance.

A courtesy line must be used with all images. This courtesy line shall read: Courtesy of Pennypacker Mills, County of Montgomery, Schwenksville, PA.

If an image is used in publication, the applicant will submit copies of the publication gratis to the Division of Parks, Trails and Historic Sites.

I agree to the above conditions governing usage of images from Pennypacker Mills, County of Montgomery, PA.

Applicant: [Signature]
Date: April 15, 2014

For Pennypacker Mills/County of Montgomery

Date: April 15, 2014