# GEORG JOSEPH VOGLER (1749-1814) AND HIS JESUIT-INFLUENCED "SYSTEM" OF HARMONY

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This dissertation reexamines the music-theoretical writing of Georg Jospeh Vogler (1749-1814) in light of his educational background. His system, which is often characterized as "awkward" or "self-contradictory," is actually indicative of the rationalist/humanist preferences of Vogler's main source of training: the Jesuit Order. I argue that Vogler's theories and compositional style have been marginalized, partially due to their incompatibility with the more prevalent systems of his era, which were predominantly based in empirical modes of thought.

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# CHAPTER 1

## INTRODUCTION

Through scattered mentions in numerous works of literature, Georg Joseph Vogler is characterized as an insightful yet eccentric music theorist, an influential yet opinionated music pedagogue, a skilled yet pretentious performer, a pious yet stubborn metaphysic, a brilliant yet mostly unknown composer, and "one of the most bizarre characters in the history of music."[1] His treatises, which introduced roman numerals into music-theoretical discourse, nevertheless seem relegated to the forgotten archival sections of the library. His compositions, though quite popular in certain parts of Europe during his lifetime, are now infrequently performed and almost never recorded. His name, to which "all doors [were] open" in the eighteenth century, is almost unknown to modern musicians who are not interested in historical music theory.[2] In short, all that might be called the best parts of Vogler's personality are also his worst attributes, depending on one's perspective; as Floyd K. and Margaret G. Grave write: "even during Vogler's lifetime, it was clear that the greater part of his work was doomed to near oblivion."[3] This dissertation argues that a major component of Vogler's controversiality finds its source in his unusual educational background. Specifically, I assert that, because Vogler was primarily trained by persons and organizations strongly influenced by humanism, his own worldview, and thus his understanding of music, was irrevocably tied to the tenets of rationalism. As a result, his theories were deemed irrelevant to (or even incompatible with) more prevalent

[1] The internal quote is taken from Donald J. Grout, *A History of Western Music, 3rd Edition*, (New York: W. W. Norton, 1941), 626.

[2] The internal quote is taken from Friedrich Wilhelm Marpurg, *Legende einiger Musikheiligen*, (Cölln am Rhein: Peter Hammern, 1786), 54.

[3] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 8.

theories/philosophies of the day, which were usually based in empirical systems of thought. This, combined with his relative lack of interaction with the First Viennese School, has resulted in his virtual dismissal as important to music history, music theory, and performance practice.

## Review of Literature

The body of scholarship surrounding Vogler, though not overly rare, is nevertheless insufficient to carefully place him in historical context; in English-language literature, mentions of Vogler are particularly sparse. Margaret G. Grave has supplied Vogler's most thorough biography, though, due to a relative lack of extant historical documents, was forced to leave out much desirable detail.[4] With coauthor Floyd K. Grave, she has also provided an important summary of Vogler's theoretical system, his compositions, and his journeys as an international performer.[5] Floyd K. Grave has also independently published analyses of some of Vogler's works, including one of Vogler's intriguing "Improvements" (*Verbesserungen*) of Pergolesi's *Stabat Mater*.[6] A few authors have cited Vogler as important to the history of organ tuning and voice training.[7] Finally, scholars such as Joel Lester, David W. Bernstein, and Robert W. Wason discuss Vogler, more or less in passing, as a figure who made contributions to *Stufentheorie*.[8]

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[4] Margaret G. Grave, "Vogler, Georg Joseph" in *Grove Music Online, Accessed* April 29, 2018. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.29608.

[5] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987).

[6] Floyd K. Grave, "Abbé Vogler's Revision of Pergolesi's 'Stabat Mater'," *Journal of the American Musicological Society* 30, no. 1 (Spring 1977), 43-71.

[7] See Bynum Petty, "Charlatan or Visionary? Abbé Vogler and His Theory of Organ Design," The Tracker 57, no. 2 (Spring 2013), 20-2; Britton, David. "Abbé Georg Joseph Vogler: his life and his theories on organ design." DMA diss., University of Rochester, 1973; and Paul Corneilson, "Vogler's Method of Singing," *The Journal of Musicology* 16, no. 1 (Winter 1998): 91-109.

[8] See Joel Lester, "Rameau and Eighteenth-Century Harmonic Theory," in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (New York: Cambridge University Press, 2002), 77; Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 208-9; David W. Bernstein, "Nineteenth-century harmonic theory," in *The Cambridge History of Western Music Theory*, ed. Thomas

Several of the writers mentioned here credit Vogler as an important influence on several later authors including Simon Sechter, Hugo Riemann, Heinrich Schenker, and Arnold Schönberg.[9]

German-language publications on Vogler are somewhat more plentiful. Karl Emil von Schafhäutl wrote an early, though problematic biography for Vogler.[10] Helmut Kreitz's 1957 dissertation covers much the same ground as the Graves' publication.[11] Joachim Veit has written a summary of Vogler's system, produced a few analyses of Vogler's works for theater, and examined the teacher-student relationship between Vogler and Carl Maria von Weber.[12] Similarly, Frank Heidlberger has examined Vogler's tutorship of Giacomo Meyerbeer.[13] Like the English scholars mentioned above, several German publications, such as the dissertation by Hertha Schweiger, have maintained an interest in Vogler's theories of organ design.[14] By far, the largest body of writings about Vogler stems from an international colloquium held in Vogler's honor at Heidelberg in 1999 (proceedings published in 2003); at this colloquium, among other items less relevant to this dissertation, Oliver Wiener explored Vogler's usage of

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Christensen (New York: Cambridge University Press, 2002), 779-80; and Wason, Robert W. *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg*. University of Rochester Press, 1995.

[9] Robert W. Wason, *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg*, University of Rochester Press, 1995; David W. Bernstein, "Nineteenth-Century Harmonic Theory: The Austro-German Legacy," in The Cambridge History of Western Music Theory, edited by Thomas Christensen, (New York: Cambridge University Press), 780.

[10] Schafhäutl, Karl Emil von. *Abt Georg Joseph Vogler: Sein Leben, Charakter und musikalisches System; seine Werke, seine Schule, Bildnisse, etc.* Augsburg: Verlag des Literarischen Instituts von Dr. M. Huttler, 1888. On the problematic nature of Schafhäutl's presentation, see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 9-10.

[11] Helmut Kreitz, "Abbé Georg Joseph Vogler als Musiktheoretiker," PhD. diss., Universität des Saarlandes, 1957.

[12] Joachim Veit, "Versuch einer vereinfachten Darstellung des Voglerschen 'Harmonie-Systems'," *Musiktheorie* 6 (1991), 129–49; and Joachim Veit, "Voglers Beitrag zur Gattung Melodram vor dem Hintergrund der frühen Mannheimer Melodramaufführungen," In *Untersuchungen zu Musikbeziehungen zwischen Mannheim, Böhmen und Mähren im späten 18. und frühen 19. Jahrhundert. Edited by Christine Heyter-Rauland,* 212-32. *Mannheim, 1987*.

[13] Frank Heidlberger, "Unus est Deus, unus est Voglerus: Vogler als Lehrer Giacomo Meyerbeer," In *Musikpflege* und 'Musikwissenschaft' in Würzburg um 1800, 95-120, (Tutzing: Hans Schneider, 1998).

[14] See Schweiger, Hertha. "Abbé G. J. Vogler's Orgellehre." PhD. diss., University of Freiburg, 1938.

non-musical notation to present his findings in a systematic way, and Michael Polth compared Vogler's symphonic forms to those of his predecessors as Mannheim's Kapellmeister.[15] Also within the German tradition, Vogler is credited as the honored founder of the "Mannheim Tonschule," a school notable for its assumed status as the oldest "conservatory" in Germany.[16] Finally, Vogler has also made sporadic appearances in publications in French, Czech, and Dutch.[17]

Another problem in any language's presentation of Vogler (and his music) is his omission from volumes in which he should have made an appearance. For example, Markus Waldura skips over Vogler entirely, even though he claims to cover the breadth of European harmonic systems before, during, and long after Vogler's lifetime, including those of Johann Philipp Kirnberger, Friedrich Wilhelm Marpurg, Hugo Riemann, Arnold Schönberg, Simon Sechter, Johann Georg Sultzer, Daniel Gottlob Türk, and Gottfried Weber, among others.[18]

However, the most significant oversight of all these sources is the imprecise (or even absent) attempts to identify the web of influence that resulted in Vogler's system. Writers such as Kreitz and Schweiger identify probable sources of inspiration for Vogler (such as René

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[15] Polth, Michael. "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition." In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, 93-130. Frankfurt am Main: Peter Lang, 2003; and Wiener, Oliver. "'Anschauende Erkenntnis' und 'natürliches Ohr'—zum Begriff 'System' in den Schriften Georg Joseph Voglers." In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, 165-182. Frankfurt am Main: Peter Lang, 2003.

[16] The present cannot prove that the Mannheim Tonschule is indeed the oldest conservatory in Germany. However, the modern-day "Staatliche Hochschule für Musik und Darstellende Kunst Mannheim" holds that it is "generally considered to be the predecessor of present-day conservatories and universities." See the university's self-written history at http://www.muho-mannheim.de/frame.php?path=/wirueberuns/ueberuns_eng.htm

[17] Thomas Betzwieser, "Langage et poétique dans les analyses d'opéras de l'Abbé Georg Joseph Vogler," in *Le parole della musica. II: Studi sul lessico letteratura critica del teatro musicale in onore di Gianfranco Folena*, (Florence: Leo S. Olschki, 1995), 69-83; Jitka Ludvová, "Abbé Vogler a Praha," *Hudební věda* 19 no. 2 (1982), 99-122; and Wim Kloppenburg, "Georg Joseph Vogler, de reislustige Abt," *Muziek & liturgie: Tijdschrift van de Koninklijke Vereniging van Organisten en Kerkmusici*, 83 no. 6 (December, 2014), 39-40.

[18] Waldura, Markus. *Von Rameau und Riepel zu Koch: Zum Zusammenhang zwischen theoretischen Ansatz, Kadenzlehre und Periodenbegriff in der Musiktheorie des 18. Jahrhunderts*. Hildesheim, Zürich, and New York: Georg Olms Verlag, 2002.

Descartes, Leonard Euler, Johannes Kepler, etc.) but do not take time to confirm the line of transmission for these sources, nor do they comment as to how these predecessors play into Vogler's own ideas. Floyd and Margaret G. Grave rightfully point out that Vogler had a rationalist mind, and even point to his upbringing as a likely source for this outlook. Yet, they do not explore how Vogler expresses himself rationally, and they make a few mistakes (see Chapters 2 and 3 of this dissertation) in identifying Vogler's specific influences. My own work builds on the foundation of the authors mentioned above by examining how Vogler's theories, rather than being treated in isolation as an "awkward system" that "suffered from numerous logical and empirical problems," is better understood when placed in dialogue with the writings of his near contemporaries and considered from the perspective of the Jesuit tradition that provided its rationalist pedigree.[19] Vogler should not be thought of as an anomaly in his own world, but rather as a logical outgrowth of his education, the musical practice of his day, and his communication with other musicians.

## The Importance of a Rational Mind

It would be a miscalculation to claim that Vogler, as a musician and theorist, did not need to participate in the grand debate between rationalists and empiricists; indeed, he could scarcely have avoided it. For example, Vogler's first theoretical treatise, the *Tonwissenschaft und Tonsezkunst* (1776), came just seventeen years after the final theoretical work of Jean-Philippe Rameau, the *Nouvelles réflexions sur le principe sonore* (1759).[20] In the *Nouvelles réflexions*, Rameau had attempted (for at least the third time) to craft a cohesive music-theoretical system

[19] David W. Bernstein, "Nineteenth-century harmonic theory," in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (New York: Cambridge University Press, 2002), 780.

[20] I was unable to locate a facsimile of the original *Nouvelles réflexions sur le principe sonore*. Instead, a facsimile of the following collected works, published during Rameau's lifetime, was used: Jean-Philippe Rameau, *Code de musique practique*, (Paris: Imprimerie Royale, 1761).

combining his rational deduction—namely "fundamental bass"—and the empirical data concerning acoustics made known to him through Jean le Rond d'Alembert, Daniel Bernoulli, Joseph Sauveur, Jean-Jacques Dortous Mairan, Marin Mersenne, and others.[21] Yet, Rameau was by no means alone in this venture; numerous other eighteenth-century theorists (such as Friedrich Wilhelm Marpurg, Johann Mattheson, Georg Andreas Sorge, etc.) also cite harmonic overtones as an unavoidable consideration in any legitimate musical inquiry. Even Vogler's primary teacher in the area of music theory, Francesco Antonio Vallotti, was fascinated by the overtone series, and doubtlessly taught Vogler about it.

Thus, by the time Vogler had embarked upon his music career, the overtone series, from which Rameau had reasoned his *corps sonore*, was considered an integral part of any critical approach to music theory. Ergo, Rameau's problem became Vogler's. David W. Bernstein explains:

> Influenced by the same Cartesian rationalism promulgated by Rameau, Vogler maintained that the science of music was drawn from a single principle. All necessary musical proportions, Vogler argued, could be derived from the resonance of the vibrating string. But unlike Rameau, Vogler exceeded Zarlino's senario of six partials and reached up to the sixteenth partial…By plotting out the various ratios engendered by these higher partials, Vogler was able to derive the "natural" major scale from the eighth through sixteenth partials, containing both a raised fourth and a natural seventh: f, g, a, b(♮), c, d, e(b), e♮, and f. The natural scale served as a model for the "artificial" major and minor scales, which Vogler derived from triads one and two fifths above "fundamental" triads on F and D (F–A–C, C–E–G, G–B–D and D–F–A, A–C–E and E–G–B).[22]

In this way, Vogler's system could be said to contradict itself. On the one hand, the "necessary musical proportions" mentioned by Bernstein refer to the practice of canonics, that is, deriving musical pitches from a rationally-divided, vibrating string. This practice dates back at least to

[21] Thomas Christensen, *Rameau and Musical Thought in the Enlightenment*, (New York: Cambridge University Press, 1993), 137-8.

[22] David W. Bernstein, "Nineteenth-Century Harmonic Theory: The Austro-German Legacy," in *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, (New York: Cambridge University Press), 779-80.

Pythagoras and depends upon the *a priori* belief that one must arrive at true pitches by means of mathematical ratios—ratios that Vogler faithfully and laboriously calculates for his reader. On the other hand, the partials from which Vogler takes his pitch identities are part of the overtone series, a naturally occurring phenomenon. These "natural" pitches are observable through the senses but are tuned rather differently from their counterparts in the canonics system. The issue is further complicated by the fact that, once Vogler locates all the pitches he wishes to use (the "natural scale"), he immediately abandons them in favor of the scales commonly used by the practical musicians of his day (the "artificial major and minor scales"). One must ask how the triads Vogler identifies can be considered "fundamental" when they are pieced together from three different tuning methods. Nevertheless, Vogler's derivation evidences both his preference for rational thought—via his insistence on a "science of music" based on a "single principle"—and his dependence upon the work of writers in the area of acoustics—via his expansion of the partials used by Rameau, Vallotti, etc, in the identification of fundamental triads.[23] Throughout his career, Vogler faces many other such rational/empirical challenges, some to be discussed elsewhere in this dissertation.

## Methodology

This dissertation places Vogler's writings and teachings in their historical context through consideration of the philosophical underpinnings of his system: namely, the Jesuit tradition and its accompanying rationalist convictions. I further discuss some of Vogler's music-theoretical predecessors—especially Johann Philipp Kirnberger (1721-83), Friedrich Wilhelm

[23] It is likely that Vogler never actually read Rameau's treatises. Rather, he probably had much easier access to *Systematische Einleitung in die musikalische Setzkunst nach den Lehrsätzen des Herrn Rameau*, Marpurg's translation of d'Alembert's *Elémens de musique, théorique et pratique suivant les principes de M. Rameau*. I will address this issue more properly in the dissertation itself.

Marpurg (1718-1795), Jean-Philippe Rameau (1683-1764), and Francesco Antonio Vallotti (1697-1780)—and show how they influenced Vogler's own writings; but I do so with an eye to how Vogler brought the thoughts of these writers into a semblance of agreement through the exercise of the humanist/rationalist principles taught to him by the Jesuits. Finally, this dissertation explores how Vogler's rationally derived system is applied in real music situations, whether in his commentary on other composers or in the production of his own oeuvre.

Chapter 1 consists of a historical reconstruction in which I place Vogler in the Jesuit tradition and carefully lay out the humanist/rationalist principles that he must have learned from them. This involves tracing a moderately in-depth history of the Order itself, showing its well-documented presence and prevalence in Europe (especially Germany) before and during Vogler's formative years, identifying what sort of curriculum would have constituted Vogler's training, and thereby describing the basic epistemological foundation built for Vogler by his teachers. I engage with the writings of various historians (William V. Bangert, Christopher Hollis, Harro Höpfl, John W. O'Malley, etc.), philosophers (René Descartes, John Cottingham, Heinrich Weiler, etc.), and theologians (Thomas Aquinas, Ignatius of Loyola, John W. Padberg, Michael J. Buckley, etc.) to accomplish this task. Most importantly, I argue that the Jesuits gave Vogler a sense of metaphysical immutability; Vogler thus believed that if his music and his theories were good, they would be logically closed and indisputably self-evident in both their analytical accuracy and musical taste: that is, he would achieve a sort of *a priori* musical truth and beauty.

Chapter 2 reexamines Vogler's actual music-theoretical system, employs intertextual comparison to sort among the writers who supposedly influenced or were influenced by Vogler's own treatises, and attempts to reconstruct many, though not all, lines of transmission surrounding

him. This chapter necessarily references a number of contemporaneous and semi-contemporaneous writings including those of C. P. E Bach, Francesco Antoni Calegari, Leonard Euler, Johann David Heinichen, Johann Philipp Kirnberger, Heinrich Cristoph Koch, Friedrich Wilhelm Marpurg, Christoph Nichelmann, Jean-Philippe Rameau, Francesco Antonio Vallotti, and many others. This chapter also shows that, whatever ideas Vogler does borrow from other authors, he always subjects them to the same rationalist logic that he learned from the Jesuits, seeking to craft what he believed to be a more coherent system based on "natural laws."

Chapter 3 introduces several of Vogler's own analyses (*Zergliederungen*) to show how Vogler's system, rather than merely a metaphysical ideal, is brought to bear on actual musical excerpts with a high degree of consistency and precision. This chapter also explores the significance of Vogler's *Verbesserungen* as exercises in analysis, re-composition, and music theory pedagogy.

Finally, Chapter 4 portrays Vogler as a rationalist *Tonsetzer*, that is, a composer who, beyond touting his system in an ivory tower, delves into the realm of composition, creating musical works that behave according to his previously established tenets. Interestingly, in following his own requirements, Vogler precludes the use of some musical conventions typically understood as cornerstones of the tonal era, particularly in the area of form.

In all of his musical dealings, Vogler harkens back to the modes of thinking instilled in him by his Jesuit upbringing. Without the Order's humanist/rationalist training, Vogler would have doubtlessly become a much different thinker, and therefore a much different organist, composer, teacher, and theorist. If, as some of the authors mentioned above claim, Vogler anticipated or informed the writings of so many subsequent musicians, this means that a Jesuit,

steeped in a supposedly “outdated” epistemological tradition, nevertheless changed the course of music-theoretical history.

# CHAPTER 2

## THE JESUIT CURRICULUM DURING VOGLER'S FORMATIVE YEARS

In their shared volume, *In Praise of Harmony*, Floyd K. and Margaret G. Grave point to a conundrum when determining Vogler's educational background:

> Few documents have come to light regarding his early education, his musical training, or the influences under which his opinions and predilections were formed. Quite possibly, his commitment to rationalism, and the attendant preference for mathematical demonstrations and chains of deductions, found early encouragement from his instructors at the Jesuit school in Würzburg, where he was likely to have gained exposure to the teachings of Leibniz, Christian Wolff, and the ideas of German *Aufklärung*. It is also possible that his early studies led to encounters with such rationally oriented writings as those of Leonhard Euler and Lorenz Mitzler as well as Daube, Sorge, and Marpurg, though Vogler's writings make no mention of such influences. In any case, it is clear that his rationalist outlook was well formed by the time of his journey to Italy in 1773.[24]

While it is certainly possible that Vogler simply felt no need to identify the courses, textbooks, and teachers that he encountered during his early education, it could also be argued that Vogler consciously chose to withhold any information on his schooling, because, by the time he began producing treatises of his own, the Jesuit Order had been forcibly disbanded by the 1773 papal edict *Dominus ac Redemptor*. Thus, it may have been socially and/or politically unwise to identify himself with the Order. Whatever the case, since documents concerning Vogler's personal education are indeed scarce, it is quite impossible to present an unimpeachable list of specific courses that Vogler would have taken during his time in Würzburg and Bamberg. Instead, this chapter explores the assertion that it is possible to construct a more general view of his coursework from an examination of those fields of study that are known to have been nearly universal aspects of Jesuit curriculum at the time, as well as the treatises of logic, philosophy, and theology that were popular in the area. In short, I will identify the most probable historical

[24] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 14.

scenario based on the pedagogical convictions of the Jesuits themselves. This process necessarily involves a recounting of the inception of the Jesuits, since, as I explain below, they were founded specifically for educational purposes. As such, I temporarily set Vogler aside and focus on the universities under the collective leadership of the Society of Jesus leading up to the mid-eighteenth century.

Another complication in this effort arises from a tension between, what Michael J. Buckley, SJ., calls the "descriptive" and "prescriptive" definitions of what a Jesuit university is or is intended to do. He explains:

> One can simply describe what is taking place: these institutions are determined to be Jesuits; so this is what a Jesuit university must be. Sociologists can do this with the present or historians with the past. Under this rubric, a Jesuit university can be called a university in which Jesuits teach—and this is presented as an effective rejoinder to any question about identity overly eager in its enthusiasms and naïve in its expectations. But these simply descriptive definitions provide little of the initial vision which was the originating dynamism of such institutions, of the educational goals that remain to be realized, and of the criteria by which growth or decline can be measured.
>
> The alternative is a prescriptive definition. The determination of a Jesuit university is taken from normative documents, and these documents are used to indicate what a Jesuit university should be. If descriptive discourse indicates what is (with little attention to purposes, objectives, or goals), prescriptive discourse fairly bristles with finality, goals and objectives—and it can delineate an institution that never was and never will be. In the descriptive, the emphasis is upon the factual and the actual; in the prescriptive, it falls upon the theoretical and potential.[25]

I shall attempt to present as much detail as possible about the Jesuit universities from both the descriptive and prescriptive perspectives. However, it will become evident that, while we have ample documents identifying what a Jesuit university "should be," we have comparatively little explaining the day-to-day practices of individual institutions. As I will show, the policies upheld by the numerous Jesuit faculties often varied widely from country to country, from city to city,

[25] Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 55-6.

and even between two schools managed by the same person.

Finally, the end of this chapter takes up an issue that Floyd and Margaret G. Grave neglect to mention: the effect that Vogler's training in Italy might have also had on his modes of thought. While it is true that his patron, Karl Theodore (1724-99, r. 1742-death), sent Vogler to Italy for music training, Vogler may have been exposed to some philosophical texts under the tutelage of Padre Martini and Francesco Antonio Valotti, or, more likely, during his theology degree in Padua. All told, Vogler would have had a variety of tutors who, though all humanists, would have had slightly different understandings of logic, philosophy, theology, and music itself.

## The Foundations of Jesuit Education

The father of the Jesuit Order, Ignatius of Loyola, was quick to identify Christian education as the primary purpose of his young society.[26] In 1554, he penned the *Constituciones de la Compañía de Jesús* (hereafter simply referred to as the *Constitutions*), in which he divided the whole of knowledge into three areas: humanistic letters (the trivium), arts and sciences (the quadrivium), and theology.[27] In Ignatius's understanding, the study of "letters" was necessary to make a student able to read and write—preferably as many languages as possible—so as to make other learning (whether related to the quadrivium or theology) available to aspiring scholars.[28] The quadrivium served the three-fold purpose of 1) developing the intellectual rigor (*ingenios*) necessary to understand theology, 2) providing a real-world framework to which theology could

[26] Ignatius of Loyola, *The Constitutions of the Society of Jesus*, IV.12.2.#446, trans. and ed. by John W. Padberg S.J., (Rome: The Institute of Jesuit Sources, 1996), 180.

[27] Ignatius of Loyola, *The Constitutions of the Society of Jesus*, IV.12, trans. and ed. by John W. Padberg S.J., (Rome: The Institute of Jesuit Sources, 1996), 180-1.

[28] Ignatius cites Latin, Greek, Hebrew (presumably Aramaic), Chaldaic, Arabic, and Indian, as being particularly valuable to this purpose. See Ignatius of Loyola, *The Constitutions of the Society of Jesus*, IV.12.2.#447, trans. and ed. by John W. Padberg S.J., (Rome: The Institute of Jesuit Sources, 1996), 180.

be related (for good theology and accurate science were believed to consistently agree), and 3) gaining a sense of the certainty and/or unquestionability of both religious and metaphysical concerns (since, historically speaking, theology and metaphysics have often gone hand-in-hand).[29] Equipped with a thorough understanding of human communication and sound reason, a student could finally approach the scriptures (and commentaries upon them) with confidence.

Arguably, the most foundational force in the early days of Ignatius's schools was his establishment of theology as the cornerstone and final arbiter of all pedagogical concerns. As Buckley explains, even though theology was the last subject to be presented, it was given the most prestigious place; that is to say, that the trivium and quadrivium were merely tools with which to accomplish the Society's main goal: the proliferation of sound doctrine through the well-educated instructors that they produced.[30] Moreover, not only did theology operate as the end goal of the Jesuit universities, it also helped define the relative merit of other subjects; indeed, this resulted in a tendency to avoid curricula that led into other fields. For example, the *Constitutions* state that "[t]he study of medicine and laws, being more remote from our Institute, will not be treated in the universities of the Society, or at least the Society will not undertake this teaching through its own members."[31] Concerning this issue, Buckley states that:

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[29] Ignatius of Loyola, *The Constitutions of the Society of Jesus*, IV.12.3.#450, trans. and ed. by John W. Padberg S.J., (Rome: The Institute of Jesuit Sources, 1996), 181. According to George E. Ganss, "'The arts' is Ignatius' term to designate the branches taught in his higher faculty of philosophy: logic, physics, metaphysics, moral philosophy, and some mathematics"; see Ignatius of Loyola, *The Constitutions of the Society of Jesus*, trans., intro., and comm. by George E. Ganss, S.J. (Rome: The Institute of Jesuit Sources, 1970), 191.

[30] Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 65-6. It should also be understood that the Jesuits concentrated on the practice, rather than the theory, of teaching. As such, they adopted many of their pedagogical strategies from those used at the University of Paris, which claimed to have inherited its methods from Quintilian; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), ix-x.

[31] Ignatius of Loyola, *The Constitutions of the Society of Jesus*, IV.12.4.#452, trans. and ed. by John W. Padberg S.J., (Rome: The Institute of Jesuit Sources, 1996), 181.

> This elimination or at least demotion of other professional, graduate schools is balanced by the preeminence given theology. Theology not only possessed its unique value, but explained in the *Constitutions* the presence of other studies in the curriculum. Theology constituted the governing criterion for the inclusion and the exclusion of particular subject matters and disciplines within the university.[32]

This is not to say that Jesuits refused to provide training in other fields, but such programs, and their faculties, were treated as secondary to the Order's more sacred elements.[33]

One should not assume that the Jesuits' focus on theology overshadowed humanistic concerns so far as to produce sketchy scholars. On the contrary, Ignatius insisted that the goal of theological dissemination mandated the creation of a high-quality forum of learning.[34] Though the trivium and quadrivium were secondary to theology, students were still encouraged to gain complete mastery of them, since a strong intellect was believed to dispose the mind to a more thorough understanding of holy things. Taken together, these three overarching areas of study denote a direct synthesis between conscientious scholasticism and pure, positivistic theology; but this was a synthesis mediated by the supreme purpose established by the evangelical call of the gospel.[35] The main point to glean here is that the Jesuit university system was not founded as a group of schools with deep religious convictions, rather, from its very inception, the system was

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[32] Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 66.

[33] For example, George E. Ganss points out that, by 1592, the Jesuit university of Pont-à-Mousson in Lorraine had full time faculties for both law and medicine. See Ignatius of Loyola, *The Constitutions of the Society of Jesus*, trans., intro., and comm. by George E. Ganss, S.J. (Rome: The Institute of Jesuit Sources, 1970), 215. Moreover, some Jesuit schools even maintained courses concerning various hobbies of the nobility such as dancing, fencing, horsemanship, and music; see Grendler, Paul F. *The Jesuit and Italian Universities, 1548-1773*. Washington D.C.: Catholic University of America Press, 2017.

[34] Buckley states that "theology is essentially a university discipline": see Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 69.

[35] Most Christian denominations take this call from Matthew 28:19-20 which, in the King James translation reads: "Go ye therefore, and teach all nations, baptizing them in the name of the Father, and of the Son, and of the Holy Ghost: *teaching them to observe all things whatsoever I have commanded you*: and, lo, I am with you always, even unto the end of the world." (emphasis added)

an inherently religious entity that chose to express its faith through its fervor in scholarly pursuits; indeed, this is doubtlessly why Robert R. Rusk characterizes the Society of Jesus as a scholastic "Crusade."[36]

Yet, the relationship between faith and learning goes much deeper in Ignatius's writings; indeed, it arises from a core philosophical argument that separated the Jesuits from most Protestants and even from other factions in the Catholic church itself, namely the conviction that the humanistic intention to glorify mankind was integral to the church's intention to glorify God. Here, Ignatius takes his cue from Thomas Aquinas's *Summa Theologiae* which states:

> It is proper to an instrument to be moved by the principal agent, yet diversely, according to the property of its nature. For an inanimate instrument, as an axe or a saw, is moved by the craftsman with only a corporeal movement; but an instrument animated by a sensitive soul is moved by the sensitive appetite, as a horse by its rider; and an instrument animated with a rational soul is moved by its will, as by the command of his lord the servant is moved to act, 'the servant being like an animate instrument,' as the Philosopher says in the first volume of the *Politics*. Hence, the human nature of Christ was an instrument of the Divine and was moved by His own will.[37]

Admittedly, this passage actually refers to Christ's deference to the will of the Father, but from it, Ignatius concluded that no existing entity moves under its own power; rather, every part of

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[36] Robert R. Rusk, *Doctrines of the Great Educators*, (London: MacMillan and Co., Ltd., 1918), 65.

[37] Thomas Aquinas, *Summa Theologiae* III q. 18a. 1 ad 2: "Proprium est instrumenti quod moveatur a principali agente: diversimode tamen, secundum proprietatem naturae ipsius. Nam instrumentum inanimatum, sicut securis, aut serra, moveatur ab artifice per motum solum coporalem. Instrumentum vero animatum anima sensibili moveatur per appetitum sensitivum sicut equus a sessore. Instrumentum vero animatum anima rationali moveatur per voluntatem eius, sicut per imperium domini movetur servus ad aliquid agendum; 'qui quidem servus est sicut instrumentum animatum,' ut Philosophus dicit in I. Politic. Sic ergo natura humana in Christo fuit instrumentum divinitatis ut moveretur per propriam voluntatem." The translation shown above has been adapted from that which was translated "literally" by an anonymous group of "Fathers of the English Dominican Province." For the original translation, see Anonymous, *The "Summa Theologica" of St. Thomas Aquinas*, (London: Burns, Oates, and Washbourne, Ltd., 1920), 2126. It should also be noted that Ignatius of Loyola considered Thomas Aquinas to be the most important theologian of history. Even after Ignatius's death, the leaders of the Jesuit order felt it necessary to emphasize Aquinas's significance. The *Ratio Studiorum* explains that "[t]he provincial is to be especially careful that no one be appointed to teach theology who is not well-disposed to the teaching of St. Thomas. Those who do not approve of his doctrine or take little interest in it, should not be allowed to teach theology"; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 3.

creation—animate or inanimate—having been created by God, also moves and acts under His direct auspices. Thus, in a sense, any action taken on Earth results from, or is at least permitted by, God's own will, even if they are affected "diversely" by that will. This is one of the ways by which the Almighty receives glory from His creation: when mankind is uplifted through its actions, the credit is imputed to God, because it was the result of His volition in the first place. For Ignatius, this stands in direct contrast to *Soli Deo gloria*, which, as Buckley concludes, can result in the belief that man must choose between the glory of God and the glory of man (*aut gloria Dei aut gloria hominis*).[38] For a Jesuit who accepts Ignatius's assessment, true faith and proper service to God are irrevocably tied to a desire for the exaltation of the human spirit; and this elevation is, in no small part, effected through the exercise of rational thought. Thus, a Christian university system is not only desirable, but, in fact, necessary to accomplish the Lord's purposes.

During Ignatius's lifetime, and for some years after, this ambitious education was to take place in approximately 13 years, split into 4 parts: the trivium (~4 years), the quadrivium (3 and a half years), basic theology (4 years), and advanced theology (2 years).[39] Students were not

[38] Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 88-9.

[39] There was a great fluctuation in the time necessary to complete the trivium during this period. See Ignatius of Loyola, *The Constitutions of the Society of Jesus and Their Complementary Norms*, trans. and ed. by John W. Padberg, S.J. (Rome: The Institute of Jesuit Sources, 1996), IV.15.1 #471. It states "In the study of humane letters and the languages no definite period of time for their completion can be established, because of the difference in abilities and knowledge of those who attend the lectures, and because of many other reasons which permit no other prescription of time save that which the prudent consideration of the rector or chancellor will dictate for each student." Similarly, the Ratio Studiorum directs: "The length of time to be given to the study of humanities and rhetoric cannot be strictly determined. It belongs to the superior to decide how much time each student should devote to these subjects. Still, none of our scholastics is to be sent to philosophy before he has devoted two years to the study of rhetoric, unless he be judged excused by reason of age or aptitude or other impediment"; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 4-5. Robert R. Rusk identifies this practice of early student promotion as unique among the universities of the era; see Robert R. Rusk, *Doctrines of the Great Educators*, (London: MacMillan and Co., Ltd., 1918), 86.

necessarily expected to complete the entire course of study but could exit the program after any of these four sections. For example, a student completing only the trivium and quadrivium earned the title "*magister artium*"—this is precisely what Vogler did while in Würzburg.[40] However, only a student who finished all of the above areas earned their coveted doctorate.[41] In any case, the conferring of any degree required a careful, public examination of the degree candidate "by persons deputed for this office."[42]

Interestingly, the suggested timeline for this process stood in stark contrast to that of Ignatius's own *alma mater*, the University of Paris, whose doctorate could take as much as 22 years to attain. While Ignatius admired the Parisian system, he insisted that the Jesuits did not require as extensive preparation as their pseudo-counterparts in France, simply because the two organizations consciously produced two different types of scholars. A student of the University of Paris was intended to eventually serve the church in a variety of capacities including teaching, preaching, apologetics, legal counsel, university administration, and a host of other activities. Furthermore, most of these highly-decorated, French professors, "limited their teaching to the one mandatory lecture a year on September 16, the feast of Saint Euphemia," though "some doctors did continue to lecture regularly."[43] Conversely, a doctorate from a Jesuit university

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[40] Ignatius of Loyola, *The Constitutions of the Society of Jesus and Their Complementary Norms*, trans. and ed. by John W. Padberg, S.J. (Rome: The Institute of Jesuit Sources, 1996), IV.15.2 #473.

[41] Ignatius of Loyola, *The Constitutions of the Society of Jesus and Their Complementary Norms*, trans. and ed. by John W. Padberg, S.J. (Rome: The Institute of Jesuit Sources, 1996), IV.15.3 #476.

[42] Ignatius of Loyola, *The Constitutions of the Society of Jesus and Their Complementary Norms*, trans. and ed. by John W. Padberg, S.J. (Rome: The Institute of Jesuit Sources, 1996), IV.15.4 #478. The *Ratio Studiorum* reemphasizes this requirement: "public defenses may be held, at the superior's discretion, and where it is the custom some may be advanced, on the authority of the general, to the doctor's or master's degree...The ceremonies accompanying the conferring of degrees may follow local practice so long as this does not conflict with the Constitutions"; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 3.

[43] James K. Farge, *Orthodoxy and Reform in Early Reformation France: The Faculty of Theology in Paris 1500-1543*, (Leiden: E. J. Brill, 1985), 34. For a more general overview of the activities of University of Paris faculty members, see Farge, 33-54.

only indicated that its bearer was a teacher qualified to instruct the masses in reading, writing, arts, sciences, and basic theology. Buckley reports that, in spite of this difference of preparation, there was no evident disparity between the levels of respect afforded to graduates of the Jesuit universities and those of the University of Paris, though he does not provide a source for this claim.[44] However, Gilbert Highet, who considered himself neither Jesuit nor Catholic, mused that:

> The success of Jesuit education is proved by its graduates. It produced, first, a long list of wise and learned Jesuit preachers, writers, philosophers, and scientists. Yet, if it had bred nothing but Jesuits, it would be less important. Its value is that it proved the worth of its principles by developing a large number of widely different men of vast talent: Corneille the tragedian, Descartes the philosopher and mathematician, Bossuet and Bourdaloue the orators, Molière the comedian, d'Urfè the romantic novelist, Montesquieu the political philosopher, Voltaire the philosopher and critic, who although he is regarded by the Jesuits as a bad pupil is still not an unworthy representative of their ability to train gifted minds.[45]

This, combined with the sheer breadth of pedagogical influence exercised by the Jesuits, points to an effective and highly respected system of education.[46]

Yet, the Jesuits were not allowed to operate with absolute independence. Just as today world governments exercise a certain controlling influence over the education of their respective populaces, so too did the Jesuits have to answer to the kings, councils, and religious leaders of the places in which they taught. It is beyond the scope of the present study to examine all of the different conditions under which Jesuits taught in their various schools across the globe, so I will confine discussion to the conditions of education in Germanic lands leading up to and during Vogler's time under Jesuit supervision. Interestingly, the political and religious power over

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[44] Michael J. Buckley, S.J., *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*, (Washington D.C.: Georgetown University Press, 1998), 65.

[45] Gilbert Highet, *The Art of Teaching*, (New York: Vintage Books, 1955), 198-9.

[46] As an example of the Jesuits' influence on methods of education in general, see Robert R. Rusk, *Doctrines of the Great Educators*, (London: MacMillan and Co., Ltd., 1918), 81-2 and 85-6.

these areas is relatively easy to understand, because both political and religious authority for a given city rested on the shoulders of a single man: the city's Prince-Bishop (*Fürstbischöfe)*. As long as the Jesuits had the favor of their ruling priest, they were able to run their schools as they wished. It is, therefore, critical for this study to take into account what the Prince-Bishops of Würzburg and Bamberg demanded of the Society.

## The Power of the Prince-Bishops

The tradition of the prince-bishops dates back to 1356 when Charles IV (1316-1378) issued the "Golden Bull," thereby promoting the three archbishops of Mainz, Cologne, and Trier to positions of immense legal agency in addition to their already considerable sacred influence.[47] These appointments were ostensibly intended to diminish power struggles between King and Church by granting the clergy a controlled amount of the dominion they believed they should wield. These three men were given the right to rule their assemblage of diocese with near absolute authority (subject only to direct orders from Charles himself). This system seemed to work, so many more such arrangements were made, both during Charles's reign and those of his successors. Some candidates for the position of prince-bishop were taken from the existing clergy, but others were chosen from among secular leaders and forced to take on clerical responsibilities as a qualification for their new mode of governance. In either case, a *Fürstbischof* could only be a member of the secular clergy (*Weltklerikern*) and, thus, could not be promoted from a monastic or other institutional order. Over the centuries, the number of prince-bishops fluctuated depending on perceived need, but during most of the 18th century, 26 such officials ruled various parts of the Germanic lands.

[47] All information in this paragraph concerning the history of the prince-bishops was taken from Josef Höffe and Karl Rahner, ed. *Lexikon für Theologie und Kirche*, 2nd ed. (Freiburg: Herder Verlag, 1968), 619-22. *Fürstbischofe* might also be translated "ruler-bishop."

Among their many responsibilities, prince-bishops oversaw (usually indirectly) the educations of their subjects. This gave prince-bishops complete authority over the Jesuit schools in their own realm. Apparently, most prince-bishops were content to allow the Jesuits to operate independently without any real supervision, so, for the most part, the Jesuits continued to employ virtually the same methods that they had used for centuries.[48] This general lack of oversight eventually led to trouble for the Jesuits. By the mid-18th century, Johannes Arnold von Bellmont, the rector of the University of Erfurt, felt the need to visit several Protestant universities across Europe for purposes of comparison. He concluded that the Catholic universities were far behind their Protestant counterparts in the realms of philosophy and natural science; he further lamented that he did not believe the Catholic schools were ready to make the vast improvements that were necessary.[49]

Perhaps because prince-bishops ruled independently, change to the old Jesuit system was neither swift nor uniform. For instance, it was not until 1763 that Franz Friedrich Wilhelm von Fürstenberg, an outspoken opponent of the Jesuits, began restructuring the Jesuit Gymnasium in Münster, and the university there would not be affected until the release of Fürstenberg's "Schulordnung des Hochstifts Münster vom Jahre 1776." Moreover, when the Jesuit Order was officially disbanded in 1773, the prince-bishops saw to it that most of the schools under Jesuit care remained opened—often retaining ex-Jesuits on the faculty.[50] Thus, in many cases, the

[48] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 82. This extreme conservativism within the pre-disbandment Order was not merely characteristic of its members; rather conservativism was demanded by the Order's own foundational documents. For instance, the *Ratio Studiorum* commands that "[t]eachers of philosophy who show themselves too inclined toward new doctrines or too liberal in their views should certainly be removed from teaching."

[49] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 15.

[50] This was certainly the case in Würzburg and Bamberg, which were ruled by Fürstbischof Adam Friedrich von Seinsheim, who opposed the Jesuit disbandment; for example, see Robert Haaß, *Die geistige Haltung der*

Jesuits (or ex-Jesuits) continued to control the Catholic universities, even throughout the suppression, though they were often required to alter their curriculum and/or pedagogical strategies. The situation in Würzburg and Bamberg (the schools that Vogler attended) was considerably more complicated, resulting in a slower than average transition out of the Jesuits' golden era.

The two issues making Würzburg and Bamberg problematic from an educational perspective were their intermittent co-rulership and the prince-bishops' long-standing lack of desire to alter the Jesuit system. In 1729, Friedrich Karl von Schönborn was separately selected as prince-bishop of the two cities (he assumed these positions within two months of each other).[51] Perhaps the only lasting change he made to the Jesuit system was the forced removal of the confessional aspect of the schools.[52] This led to two significant results: 1) the Jesuits were required to allow students of any religion to attend the traditionally Catholic universities—though strangely, Friedrich Karl's edict did not permit non-Catholics to officially graduate—and 2) the faculty was not allowed to speak out against other religions in the classroom.[53] Yet, Friedrich Karl did not actually change the Jesuit curriculum; the Jesuits continued to teach theology from the Catholic perspective, but their students were not required to agree with what they were taught.

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*katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 8, 76-7, 82, and 88-89. The effects elsewhere varied; overall, nearly 700 Jesuit institutions (both gymnasiums and universities) closed in the afermath of the Order's dissolution. Conversely, Frederick II of Prussia and Catherine II of Russia repealed Pope Pious VII's edict in their own lands. See Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), v.

[51] Dieter J. Weiss, ed., *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*, (Berlin and Boston: Walter de Gruyter, 2016), 108-9.

[52] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 75.

[53] Presumably, Schönborn did not allow non-Catholics to graduate because, to achieve any advanced degree, they would have to be trained in Catholic theology.

Upon Friedrich Karl's death in 1746, Würzburg came under the leadership of Fürstbischof Anselm Franz von Ingelheim. Little is known about his rule except that he apparently had little interest in the position beyond the opportunity it gave him to explore his primary interest: alchemy.[54] He was succeeded by Karl Philipp von Greiffenklau in 1749. Karl Philipp held Anselm Franz's reign in derision and restored most of the policies and patronages of his forerunner, Freidrich Karl von Schönborn. Robert Haaß argues that Karl Philipp may have been partially influenced by the anti-Jesuit convictions of Johann Kaspar Barthel; while this may indeed be the case, succeeding prince-bishops clearly did not support Barthel's methods.[55] Karl Philipp's most important contribution to the Jesuit universities was his 1749 commissioning of the mammoth, fourteen-volume, *Theologica Wirceburgensis*—not published until 1766-1771—which was intended to present all of the philosophical and theological beliefs of the Jesuit Order.[56] Following Karl Philipp's death in 1754, there was a bit of confusion in electing the new prince-bishop, but almost a year later, Adam Friedrich von Seinsheim was finally chosen.

On the Bamberg side, Freidrich Karl von Schönborn was replaced by Johann Philipp Anton von Franckenstein, whose reign primarily consisted of resolving a dispute between the King and the Bamberg cathedral chapter, fostering diplomatic relations with the French

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[54] See Else Brater, "Alchimie in Würzburg in den Jahren 1746-1749," *Sudhoffs Archiv* 24 (1931), 343; and Joachim Telle, "Eine Deutsche Alchimia Picta des 17. Jahrhunderts: Bemerkungen zu dem Vers/Build-traktat *Von der Hermetischen Kunst* von Johann Augustin Brunnhofer und zu Seinen Kommentierten Fassungen im *Buch der Weisheit* und im *Hermaphroditischen Sonn- und Monds-Kind*," Aries 4, no. 1 (2004), 22.

[55] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 75.

[56] Michael Schmaus, "Wirceburgenses." *New Catholic Encyclopedia*, 2nd ed., vol. 14, (Farmington Hills, Michigan: Gale, 2003), 776-777, Accessed September 12, 2019: https://link.gale.com/apps/doc/CX3407711932/GVRL?u=txshracd2679&sid=GVRL&xid=29be5735. Würzburg was originally spelled "Wirceburg." The *Theologia Wirceburgensis* was compiled by Professors H. Kilber (1710-1783), I. Neubauer (1726-1795), T. Holzklau (1716-1783) and U. Munier (1698-1759). Gustave Thils argues that one of the major reasons for this work's completion was a developing need to provide students with textbooks rather than expecting them to memorize everything by listening to the lectures of their teachers; see Gustave Thils, "Klaus Schilling, *Die Kirchenlehre der Theologia Wirceburgensis*., 1969," *Revue théologique de Louvain*, 3, no. 4 (1972), 477.

university system, increasing the Jewish population of the city, and consolidating power in the name of the church.[57] When Johann Philipp Anton died in 1753, he was replaced by Franz Konrad von Stadion und Tannhausen. Franz Konrad contributed to the ministerial work of the Jesuits in Bamberg but does not appear to have altered the schools in any way.[58] Franz Konrad's reign ended in 1757, at which time, Adam Friedrich von Seinsheim, already prince-bishop in Würzburg, was elected to take responsibility for a second city. Thus, in 1757, after eleven years of separation, Würzburg and Bamberg were once again united under a single prince-bishop. Adam Friedrich is of the greatest importance to the current study since it was he who oversaw the schools in Würzburg and Bamberg throughout Vogler's pre-Mannheim education. After Adam Friedrich, Würzburg and Bamberg continued to be ruled by the same *Fürstbischof* until the beginning of the nineteenth century, when the system of prince-bishops was dissolved.[59]

Adam Friedrich von Seinsheim is to be credited with the largest number of changes to the Jesuit gymnasiums and universities in Würzburg and Bamberg prior to the disbandment of the Order in 1773, though the present study will not permit their full recounting. More importantly, these changes were carried out similarly to those in some of the other cities ruled by prince-bishops; change occurred slowly, and began at the lowest levels of the gymnasiums, eventually

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[57] Dieter J. Weiss, ed., *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*, (Berlin and Boston: Walter de Gruyter, 2016), 175-210.

[58] For example, Stadion arranged room and board for Catholic missionaries in the dorms at the Jesuit schools; see Dieter J. Weiss, ed., *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*, (Berlin and Boston: Walter de Gruyter, 2016), 211-34 (especially 229-30).

[59] The year 1803 marks an important milestone in the secularization of German lands; on April 27, Francis II ratified the *Reichsdeputationshauptschluss*, which, among other things, officially removed all civil powers from the clergy; this resulted in the immediate dismissal of all prince-bishops. However, even before this act was passed into law, some prince-bishops were pressured in to stepping down. For example, the *Reichsdeputationshauptschluss* summarily removed Georg Karl Ignaz von Fechenbach zu Laudenbach from the throne of Würzburg. However, a year earlier, Fechenbach's uncle, Christoph Franz von Buseck was forced to abdicate from his rulership in Bamberg. The former prince-bishops did however retain their sacred positions; both Buseck and Fechenbach remained bishops of their diocese until their deaths in 1805 and 1808 respectively. See Dieter J. Weiss, ed., *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*, (Berlin and Boston: Walter de Gruyter, 2016), 395-6.

working their way up to the university level. As a result, the timing of these reforms becomes extremely important when determining what sort of education Vogler was likely to have experienced during his time in his three *almae matres*.

At first, Adam Friedrich had great trust in the Jesuits, and so, they enjoyed considerable freedom under his rule.[60] It is not clear what prompted Adam Friedrich's eventual intervention, but in 1769 (just one year before Vogler moved to Mannheim), he sent a representative to evaluate and completely reorganize the gymnasium (not the university) in Bamberg. Specifically, he ordered first, that the Bamberg school should establish a medical faculty over the next several years, and second, that they adopt the same theology textbooks as those used in Würzburg.[61] While I cannot account for the exact textbooks that this change might have involved, it is interesting to note that, just one year earlier, Würzburg had adopted Nikolaus Burkhäuser's philosophy textbook—eventually published as the *Institutiones logicae et metaphysicae* (four total volumes 1771–4). Burkhäuser had a preference for the writings of Christian Wolff, a preference which may have also influenced the choice of writings deemed appropriate in theology; however, this was the first time that Wolffian philosophy was accepted in the conservative areas of Würzburg and Bamberg.[62] Prior to this time, it is very likely that

[60] Christoph Mann has also noted that it is an oversimplification to credit the prince-bishops with unchallenged authority over other church powers; indeed, the influence of the various cathedral chapters led to the creation of the prince-bishop positions in the first place. This may have contributed to the sluggish change of Jesuit policies. See Christoph Mann, "Das Bamberger Domkapitel im späten 18. Jahrhundert: Lebensstile, Parteiungen, Reformfähigkeit," in *Bamberg in der Frühen Neuzeit: Neue Beiträge zur Geschichte von Stadt und Hochstift*, edited by Mark Häberlein, Kerstin Kech und Johannes Staudenmaier, (Bamberg: OPUS, 2008) 320.

[61] Dieter J. Weiss, ed., *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*, (Berlin and Boston: Walter de Gruyter, 2016), 288.

[62] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 82. Though the Jesuits considered Wolff to be too progressive from a philosophical perspective, they greatly respected him for his writings in mathematics; for example, they adopted his treatise, *Elementa matheseos universae* (1713-1715), as the official mathematics textbook for their schools in China.

Würzburg still employed Heinrich Weiler's *Logica novo philosophiae systemati accommodata* which was introduced there in 1763. Weiler's volume is arguably the most important philosophical source for the present discussion, because Würzburg adopted it as official philosophical dogma (though not as a classroom textbook) on the same year that a fourteen-year-old Vogler entered the university in Würzburg.[63] On the one hand, this series of developments calls doubt upon Floyd Grave and Margaret G. Grave's assertion (see quote at the beginning of this chapter), that Vogler was probably familiarized with the writings of Christian Wolff by his teachers in Würzburg. While such a scenario is not impossible, the historical data makes this unlikely. On the other hand, it is still possible that Vogler knew Wolff's writings for any one of dozens of other reasons. For example, he might have sought them on his own after hearing of their popularity in other areas (such as Halle), or he may have been introduced to them while in Mannheim.

I examine the Jesuits' use of textbooks more thoroughly in a latter section of this chapter; however, the important point to establish at this time is that virtually all of the changes that the prince-bishops made to the Jesuit universities of Würzburg and Bamberg occurred after (though not long after) Vogler completed his time under their tutelage. It is, therefore, reasonable to assume that Vogler was given an extremely traditional Jesuit education: one that aligned as closely as possible with the purposes and methods outlined in the writings of the Jesuits themselves. Thus, in regard to the actual curriculum and pedagogical methods employed by the Jesuits, the burden of historical accuracy falls on the documents that the schools themselves produced or accepted as compatible with the *Constitutions*.

[63] Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 82.

## The Jesuit Method

The first Jesuit university was founded in 1548 at Messina in Sicily. By Ignatius's death in 1556, already thirty-three schools, both gymnasiums and universities, were run by Jesuits in Austria, Bohemia, France, Germany, Italy, Portugal, Sicily, and Spain; and six more were under construction.[64] Obviously, part of organizing such a large enterprise required a well-defined curriculum, but the Society's only governing document, the *Constitutions*, merely expressed Ignatius's dreams for the Order, and therefore contained neither a specific plan of study nor a well-defined means of structuring individual institutions. Sadly, Ignatius would not live to see his plan fleshed out and officially adopted by the Society. More than forty years after his death, the Society issued the *Ratio atque Institutio Studiorum Societatis Iesu* (usually called the *Ratio Studiorum* or just the *Ratio*) which, among other policies, defines the curricula and pedagogical methods to be pursued by the Jesuit gymnasiums and universities.[65] With a unified plan of action, the Jesuits were able to continue expanding rapidly; when the *Ratio Studiorum* was ratified in 1599, nearly 250 schools dotted the European landscape, but by the time Vogler entered their tutelage (~late 1750s), the Jesuits ran over 650 such institutions, many of which were associated with the Jesuits' more remote missions in China, Cuba, India, Mexico, the Philippines, and even the American colonies. The larger European schools often had over 1,500 students, but even the smaller mission schools tended to boast over 500. Thanks to this ongoing success in application, the *Ratio* continued to be the single most important document for Jesuit

[64] All information in this paragraph concerning the number and population of Jesuit schools taken from Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), iii-iv.

[65] The *Ratio Studiorum* is actually divided into four sections, only one of which directly deals with curriculum. The other three explain the duties of the various faculty and administrators, approved pedagogical strategies, and student conduct/discipline procedures.

curricula even long after the temporary Jesuit suppression from 1773 to 1814.[66] Thus, from Buckley's "prescriptive" standpoint, the *Ratio* explains everything that a Jesuit institution "should have been" when Vogler was a student. In other words, unless the gymnasium in Würzburg as well as the universities in Würzburg and Bamberg (all of which were Jesuit institutions at the time) consciously ignored or altered the Order's official curriculum, Vogler would have learned what the *Ratio* demands.

Before examining the *Ratio* itself, it seems appropriate to briefly address the possible objection that a single document of this sort could not reasonably be expected to represent the actual beliefs and practices of any organization for over 170 years (1599-1773). Allan P. Farrell has already dealt with the somewhat more complex issue of applying the *Ratio* to the Jesuits of the twentieth century and beyond. He asserts that it is possible "to summarize or list a number of pedagogical principles derived from the *Ratio*, which, with necessary adaptation, apply to Jesuit teaching everywhere."[67] He concludes that "disputations, debates, repetitions that were held daily, weekly, monthly and annually, written exercises in imitation of the author being read, public correction of the exercises, [and] original essays in the upper grades" retain their pedagogical value "for places, persons and times very different from 1599."[68] In a similar vein, Robert Swickerath states that "objections have been raised against various features of the *Ratio*

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[66] Beginning in 1703, the Society interpreted the *Ratio Sudiorum* through the lens provided by its approved commentary, the *Ratio Discendi et Docendi*, by Joseph de Jouvancy; see Robert R. Rusk, *Doctrines of the Great Educators*, (London: MacMillan and Co., Ltd., 1918), 73. Over the course of the twentieth century, many schools run by the Jesuits have made a conscious effort to remove most Latin-language components from the day-to-day operations of the Society. As a result, Jouvancy's volume has been partially replaced by a series of similar volumes in various vernacular tongues across the globe. For example, the United States uses the interpretation of Allan P. Farrell, S.J.; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), i.

[67] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), viii.

[68] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), viii.

*Studiorum*, but most of them are either based on a misunderstanding of the *Ratio*, or directed against features which are entirely unessential."[69] While the Jesuits of today usually do not accept the requirements of the *Ratio* word for word, the general principles it presents still echo in their schools. It is therefore safe to assume that with small adjustments, the curriculum set down in 1599 was alive and well during Vogler's formative years.

Another important preliminary issue is that Vogler would not have experienced the full Jesuit curriculum. This is easy to discern from Vogler's educational timeline. We know that he entered humanistic studies at the gymnasium of Würzburg in 1763, but by 1770, he was already an almoner in Mannheim.[70] During the intervening years, he attained his degrees in common and cannon law; yet, to be allowed into law school, he would have been required to graduate with his *magister artium*, a degree that could require as much as seven and a half years to complete. Since Vogler completed both his *magister artium* and his law degree in only seven years, he must have been considered an exceptionally bright student. Whatever the particulars of this timeline, it is doubtful that Vogler experienced any portion of the Jesuits' degree in theology, though, as I will outline below, it is possible that he might have at least witnessed some debates between the theology students. What remains then is to break down what Vogler would have been required to learn and how the *Ratio Studiorum* required him to be taught/evaluated.

Students entering a Jesuit gymnasium were generally expected to already be capable of basic reading and writing in their native language, though remedial courses in these subjects

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[69] Robert Schwickerath, "Ratio Studiorum," In *The Catholic Encyclopedia*, vol. 12, edited by Harles G. Herbermann, Edward A. Pace, Conde B. Pallen, Thomas J. Shahan, and John J. Wynne (New York: Robert Appleton Company, 1911), 655.

[70] Margaret G. Grave, "Vogler, Georg Joseph [Abbé Vogler]" In *Grove Music Online*. *Accessed* April 29, 2018. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.29608.

were sometimes available.[71] Vogler himself was probably already proficient in these areas since 1) he did not enter the Jesuit system until age 12, and 2) as just mentioned, he moved through the programs so rapidly. Once a student's basic abilities were established, he was permitted to enter into the program of humanistic letters, which could consist of no more than five years of study: three in grammar (Latin), one in rhetoric, and one in humanities.[72] As indicated previously, both the *Constitutions* and the *Ratio Studiorum* allowed students to skip some of this part of the curriculum if they proved to be ahead of their peers in knowledge of these subjects.[73] It is likely that Vogler was allowed to test out of part of this five year span, though I am unaware of any documents that prove this.

However quickly Vogler progressed through grammar, rhetoric, and humanities, there are several things that should be said concerning his teachers and the standards to which they would have held him. First, there is sadly little available information about who might have presided over Vogler's classes. The Jesuits kept careful records concerning changes in the faculties of philosophy and theology, but records of the teachers in the humanities are often missing or incomplete.[74] A major contributor to this problem is that fact that these lower-level courses, especially those in grammar, were occasionally taught by well-respected doctoral students in a

[71] Ignatius of Loyola, *The Constitutions of the Society of Jesus and Their Complementary Norms*, trans. and ed. by John W. Padberg, S.J. (Rome: The Institute of Jesuit Sources, 1996), IV.12.3 #451.

[72] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 8. One could argue that the single year in humanities was not the extent of a students' exposure to classical writers; the rules of grammar and rhetoric, though learned from a textbook, were reinforced and practiced by reading, memorizing, and reciting passages from important Latin-language works such as those by Thomas Aquinas.

[73] See footnote 39.

[74] Concerning this problem in Würzburg and Bamberg, see Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 75-91.

position similar to what modern educators might call a teaching assistant.[75] In short, I was unable to locate any document that identifies any of Vogler's Jesuit teachers by name.

While it is hard to say who taught Vogler, it is far easier to determine what he was taught; for instance, the *Ratio Studiorum* prescribes that:

> ...our teachers use the grammar of Emmanuel Alvarez. If in some of our schools it is thought that his method is too detailed and refined for the boys to master, the teachers should use the Roman grammar or, with the general's approval, prepare a similar grammar, preserving, however, all the force and exactness of the precepts of Alvarez.[76]

Specifically, this admonition refers to Emmanuelis Alvari's *De Institutione Grammaticae Libri Tres* of 1572. Alvari was a Portuguese Jesuit, and his Latin grammar book was adopted by the Order after several seemingly inferior candidates were discarded.[77] Ever since its adoption, many Jesuits expressed reservations about the text's length and organization; this explains the *Ratio*'s provision for situations where "his method is too detailed and refined for the boys to master." Yet, the alternative that the *Ratio* suggests, the "Roman grammar" was actually a redaction of Alvari's text, prepared in Rome by Horace Torsellini in 1584.[78] In either format, Alvari's volume was unusual for its time—and desirable to the Jesuits—due to its inclusion of a volume on prosody.[79] Ergo, when the *Ratio* says that a substitute grammar book should preserve "all the force and exactness of the precepts of Alvarez," this means that the Jesuits' students,

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[75] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 10.

[76] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 9.

[77] Between the founding of the Order and the adoption of Alvari's volume in 1572, at least four other texts were rejected for various reasons. See Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 116-7.

[78] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 116-7.

[79] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 116-7.

including Vogler, should attain the same mastery in Latin etymology, syntax, and prosody that Alvari's volume permits.[80] Moreover, once a student completed their course in Latin grammar, it was expected that, in all continued professional pursuits, they should speak and write exclusively in Latin. This ban of vernacular tongues was nearly absolute and could only be temporarily lifted by approval of the Rector, and then only for special purposes such as the student's ability to communicate with his family or during vacation time.[81]

Another point of interest in the degree of humanistic letters is its requirements for approved readings in the humanities. Again, it is difficult to determine precisely what Vogler would have read during this time, but, following Ignatius's example, the Jesuits were careful to choose, from among the classics, only those volumes that were deemed both edifying and free of anti-Christian or immoral influences. Ignatius mused that:

> ...the youth [is] willing to receive and retain those first impressions that if he does, sometimes are good, sometimes bad, and yet those first concepts, good or bad examples, and documents proposed to him are of such importance for the rest of their lives; and on the other hand, considering that the books, maxims of the *littere humane*, which are commonly shared with young people, such as Terence, Virgil, and others, have, among many things useful to the doctrine, and not useless, even beneficial to life, likewise have some things which are very profane and dishonest, and only harmful to his hearing, since, as the Scripture says, "sensus et cogitatio homani cordis in malum prona ab adolescentia sua," and even more so if those things are put before him and inculcated in the books that they hear and where they study, usually keeping them in their hands.[82]

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[80] Alvari's grammar book and Tosellini's redaction are arguably two of the most popular Latin-grammar books ever printed. They have both enjoyed several editions (one as late as 1823) and are still reprinted today.

[81] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 15.

[82] Ignatius of Loyola, "Letter to Andreae Lippomano: Rome – 22 June 1549," in *Monumenta Ignatiana, ex Autographis vel ex Antiquioribus Exemplis Collecta. Series Prima: Sancti Ignatii de Loyola Societatis Jesu Fundatoris Epistolae et Instructiones, Tomus Secundus*, (Madrid: G. Lopez del Horno, 1904), 445-6.: "...la gioventù [é] disposta a ricevere et ritener' quelle impressioni prime che se gli fano, hora siano buone, hora cattive, et perhò essere di tanta importantia per tutto il resto della loro vita quelli primi concetti, et buoni o mali essempii et documenti che gli sono proposti; et d'un altra banda, considerando che gli libri, massime de littere humane, quali sogliono communmente legersi agli giovani, come Terentio, Virgilio, et altri, hanno, fra molte cose utili a la dottrina, et non inutili, anzi giovevoli, etiam alla vita, alcune molto profane et dishoneste, et solo al sentirle nocive, essendo, come la Scritura dice, *sensus et cogitatio homanui cordis in malum prona ab adolescentia sua*, et tanto piu se quelle cose gli sono messe inanzi et inculcate nelli libri quali senteno et dove studiano, tenendoli nelle mani ordinariamente." The italicized portion in Latin comes from Genesis 8:21 and can be translated "the thought and inclination of man is prone to evil from his youth." On the issue of controlling a student's available reading materials, see also Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 63, 66-7.

While Ignatius greatly admired the works of Aristotle, Cicero, Horace, Juvenal, Martial, Terence, Virgil, et al., he found that they occasionally contained objectionable material. He therefore tasked a number of the Society's members (especially his friend Andre des Freux) with preparing "expurgated" editions of many of these works.[83] Jesuit students were expected to read, memorize, and recite passages from these purified works, which were considered exemplars of grammar, rhetoric, and writing style, as well as representatives of historical-philosophical thought.[84] As young Latinists progressed, Jesuit teachers assigned their students exercises in which the learner was required to not only write exclusively in Latin, but also to mimic the style of the authors that their tutors held in the highest regard, particularly Cicero, who was crowned the most stylistic prose writer in the Greek and Latin canon.[85]

Vogler must also have been influenced by the Jesuits' system of "Rivals" (*aemuli*, sing. *aemulus*). Under the heading "Common Rules for the Teachers of the Lower Classes," the *Ratio Studiorum* explains that "[c]lass contests are to be highly valued and are to be held whenever time permits, so that honorable rivalry, which is a powerful incentive to studies, may be fostered."[86] These intellectual battles could constitute simple competitive activities in text

[83] For example, Andre des Freux completed an extremely popular edition of Martial—eighteen editions were published—but he soon admitted to Ignatius that Terence was proving too difficult to purify without compromising the substance of the work. As such, Ignatius banned the reading of Terence from Jesuits schools in 1553. It was not until a century later that Joseph de Jouvancy finally completed an approved edition of Terence; concerning approved editions of the Greek and Latin classics, see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 118 ff.

[84] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 55, 62-6, 74-93, 110-2, and 129-31.

[85] Concerning the requirements for written assignments in Jesuit institutions, see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 16, 50, 57-61, 69, 73, 75-7, 80, 82, 110, and 129. By the time that the *Ratio Studiorum* was adopted, the Society had given Cicero the highest place among the ancient writers: a place that he arguably holds even in the modern era; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), viii, 67, 73, 75, 80, 82, 84-94, 110, and 129.

[86] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 68.

recitation (from memory) or inter-student grammar correction, but could just as easily take the form of a full-blown philosophical debate, depending on the class(es) involved.[87] Contests usual took place during class time, between two intentionally paired students in the same class, but, occasionally, two classes in the same subject were pitted against one another in group exercises.[88] On rare occasions, exceptional students were even permitted to challenge members of higher courses, with a potential reward of promotion.[89]

It was also common for debates between upper classmen to occur in a public or semi-public forum. For example, one of the requirements for the position of "Beadle" was to post a weekly schedule of philosophy and theology students whose turn it was to participate in a public disputation.[90] While students could request additional opportunities to participate in these auditorium debates, they were required to do so at a known interval, determined by the number of members in their class. Disputations varied in gravity: weekly debates were held in the presence of fellow classmates on specific topics, pre-determined by the teacher; meanwhile larger, more challenging questions were reserved for the "comprehensive disputations" held at

[87] The most common format of a contest was a problem or question pre-selected by the teacher and simultaneously presented to the two rivals. The winner of a contest was the rival who gave the quickest, most correct, and best supported answer. For example, a teacher might present a Latin sentence or passage containing errors of grammar. The winner would be determined by the first student who could provide, in writing, not only corrections to the passage, but also a specific list of what rule(s) had been broken and how; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 68.

[88] If the *Ratio* was followed exactly, a teacher was supposed to split an entire class into pairs of "rivals" that would challenge each other for an entire semester. Thus, Vogler likely had a specific opponent, a member of his own class, with whom he collaborated/competed on a daily basis; on this, as well as inter-class debates, see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 66-8.

[89] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 68.

[90] The "Beadle" was essentially a teacher's assistant and/or secretary; he had various responsibilities including: seeing that the teacher's classroom was clean and tidy, printing and posting schedules, timing classroom exercises, and taking attendance; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 99-100.

the end of a semester.[91] A student arguing in any such debate could be given as much as an hour to explain his stance, and his opponent(s) might have as much as fifteen minutes to challenge the position.[92] Students and members of the faculty were required to attend any public disputation within their grade level but were also encouraged to attend those for other courses.[93] Moreover, anyone in the city was welcome to attend, particularly public officials who sometimes received invitations to special debates.[94] Anyone in attendance was allowed, within the rules of order, to present counterarguments against the current speaker.[95]

The system of Rivals came under sharp criticism during the twentieth century (especially in the United States); as a result, most Jesuits institutions no longer use it or carefully temper it with cooperative activities to avoid creating dissention or jealousy between students.[96] Nevertheless, Vogler would have witnessed and/or participated in dozens, perhaps hundreds, of competitive learning activities, many of which could have touched on subjects outside the actual

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[91] As the title suggests, the "comprehensive disputations" were the culmination of a semester. Usually six students were allowed to present their theses in a single day. A presenter's fellow students as well as most of the school faculty were to be available as respondents (either prepared or impromtu), especially if the presenter was a degree candidate. See Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 23-4, 44-5, and 97-100.

[92] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 45.

[93] Also, upper level students were always required to attend the disputations associated with courses on rhetoric. On this and other attendance requirements for disputations, see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 54.

[94] Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 37 and 108.

[95] The *Ratio* cautions Jesuit instructors that "young philosophers are to be trained from the very beginning of logic to consider it a matter of shame to deviate in a disputation from the use of the scholastic form. The teacher should be most vigorous in demanding of them the observance of the laws of argumentation and the proper order to be followed by the disputants. Accordingly, one who defends in a disputation must first repeat the full objection without replying to the separate premises. Next he is to repeat each premise of the argument and reply 'I deny' or 'I concede the major, minor, or conclusion.' Occasionally, too, he should distinguish, but rarely interject explanations or reasons, particularly if unasked"; see Anonymous, *The Jesuit Ratio Studiorum of 1599*, trans., intro., and comm. by Allan P. Farrell, S.J. (Washington D.C.: Conference of Major Superiors of Jesuits, 1970), 44-5.

[96] Robert Schwickerath, "Ratio Studiorum," In *The Catholic Encyclopedia*, vol. 12, edited by Harles G. Herbermann, Edward A. Pace, Conde B. Pallen, Thomas J. Shahan, and John J. Wynne (New York: Robert Appleton Company, 1911), 655.

subject matter of his courses. While Vogler might not have formally studied philosophy or theology under the Jesuits, he almost certainly was exposed to some of the major components of these fields via the public disputations of older students. Moreover, living in this sort of competitive environment for six years doubtlessly affected his modes of thinking, instilling the importance of a well-structured argument and an eloquent tongue.

## The Jesuit Writings in Würzburg and Bamberg

Assembling a complete list of texts that Vogler would have encountered during his time in Würzburg and Bamberg would prove difficult. Furthermore, since it is impossible to determine what debates Vogler witnessed while in school, it is difficult to say how much theology he absorbed from faculty and upperclassmen. Nevertheless, a few general tendencies are easy to observe through Weiler's 1763 *Logica novo philosophiae systemati accommodata*.[97] This work was presumably taken as a reasonable extrapolation of (or at least compatible with) the guidelines contained in the *Constitutions* and the *Ratio Studiorum*. While a full examination of this source could indeed prove valuable to a deep understanding of Vogler's philosophical convictions, such a study would constitute a complete project of its own. As such, I will confine my comments to only those broad elements that seem to have shaped Vogler's method for deriving the "rules" of music theory.

As mentioned above, the *Logica novo philosophiae systemati accommodata* became the official document of philosophy for Würzburg Jesuits on the same year (1763) that Vogler entered the school there. There are several ways in which Vogler's own writings parallel

[97] Weiler's philosophical text was not actually required as a "textbook" for individual courses in the universities of Bamberg or Würzburg. Rather, the faculty was expected to be familiar with the contents of the volume so as to direct their own classroom lectures; see Robert Haaß, *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*, (Freiburg im Breisgau: Verlag Herder, 1952), 82.

Weiler's text. The first of these is a general sense of metaphysical unquestionability. Numerous passages from Weiler's volume could be brought to bear on this point, but I believe these few will suffice:

> Obscure axioms and inane formulas are to be distinctly avoided. For science, with which knowledge is *clear and evident*, nothing of significance should be hidden by obscure words or ambiguities.[98]
>
> It [Logic] is a power of the mind, because it is a habit of the mind *infallibly* inclining towards truth.[99]
>
> Surely, actual Logic, or all the rules of Logic are *certain and evident conclusions*, deduced from principles, that is, from *certain and evident premises*. Therefore, Logic is a habit consisting of demonstrating truths and is a science.[100]

It is clear from Vogler's own writings that he was impacted by this same positivism. Chapter 2 will deal with this subject more in depth. For now, I will simply point to Vogler's "To the Reader" from the *Tonwissenschaft und Tonsezkunst*:

> The proportions and the symmetry on which the science of tones is founded are *certain and unchangeable*. A music teacher who knows this symmetry will also be able, in his lessons, to give *universal, secure rules, which are not subject to doubt or exceptions*. These rules must determine the number of all possible consonances and dissonances, of all inversions, connections, modes of preparation and resolution, of all cadences and evasion; they must define the structure of the hard, soft, and mixed scales, the division, the succession, the position, etc.[101]

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[98] "Axiomata obscura, & inanes formulae distinctivae cavendae sunt. Scientia enim, cum sit cognitio clara & evidens, verbis obscuris, ambiguis, nihil significantibus obscurari non debet." Henrico Weiler, *Logica novo philosophiae systemi accommodata*, (Würzburg: Strahel, 1763), 5-6. Emphasis added.

[99] "Est virtus mentis: eoquod sit habitus memte, infallibiliter inclinans in verum." Henrico Weiler, *Logica novo philosophiae systemi accommodata*, (Würzburg: Strahel, 1763), 9-10. Emphasis added.

[100] "Nimirum Logica actualis, sive omnes regulae Logicae sunt conclusiones certae & evidentes, deductae ex principiis, h, e, praemissis certis & evidentibus. Ergo Logica est habitus, constans veritatibus demonstratis, & est Scientia." Henrico Weiler, *Logica novo philosophiae systemi accommodata*, (Würzburg: Strahel, 1763), 11. Emphasis added.

[101] "Die Verhältnise und das Ebenmas, worauf sich die Tonwissenschaft gründet, sind an sich gewiß und unveränderlich. Ein Tonlehrer, der dieses Ebenmas kennet, wird also auch im Stande sein, in seinem Unterrichte allgemeine, sichere, und keinem Zweifel, keiner Ausnahme unterworfene Regeln zu geben. Diese Regeln müssen die Zahl aller möglichen Wohl- und Übelklängen, aller Umwendungen, Verbindunge, Vorbereitungs- und Auflösungsarten, aller Schlußfälle und Ausweichungen, sie müssen das Gebäud der harten, weichen und vermischten Leitern, die Eintheilung, die Folge, die Lage u. f. w. bestimmen." From "Dem Leser" in Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*. Mannheim: Kurfürstliche Hofbuchdruckerei, 1776. Emphasis added.

This insistence on unequivocal—almost self-evident—rules is all the more astonishing when one considers that the general philosophical climate of Europe during Vogler's time was dominated by British empiricism and its various derivatives.

On a related note, Weiler's title bears great interest: *Logica novo philosophiae systemati accommodata* translates to "Logic accommodated/adapted to a new system of philosophy." Notice that Logic is being adapted, not philosophy. In other words, Weiler's philosophical convictions were chosen ahead of time, and his line of reasoning had to be directed to achieve those ends. This is not an unusual approach for the Jesuit Order; indeed, critics of the Jesuits believed that the Society taught Aristotle incorrectly because "they made logic subservient to metaphysics."[102]

One might immediately interject that the Jesuits possess an active religious conviction that predetermines much of their philosophical framework and, thereby, restricts their use of logic. While this is almost certainly the case to one extent or another, one should recall the aforementioned habit of the Jesuits to preserve older traditions in spite of changes going on in the world around them. Consider, for example, this passage from Weiler's explanation of the material and formal objects of logic:

> According to some, Syllogism, but according to others, Method, is the object of attribution. For that is the object of the attribution of some sort of habit, which is intended from its primary to ultimate end, and to which the others are ordered as if, so to speak, to an internal end: yet, this is how a Syllogism is held with regard Logic, or Method and Demonstration are grasped or taken as a whole, just as others accept, therefore. Those that admit this syllogism, understand probability as well as demonstration; to which both seem to be so intended, as logic rests anywhere: not ordered as from one to another, as if to an internal end.[103]

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[102] Paul F. Grendler, *The Jesuit and Italian Universities, 1548-1773*, (Washington D.C.: Catholic University of America Press, 2017), 399.

[103] "Juxta alios Syllogismus, juxta alios Methodus est objectam *attributionis*. Nam illud est objectum attributionis alicujus habitus, quod ex fine primario illius ultimato intenditur, & ad quod alia tanquam ad finem intrensecum ordinantur: atqui ita se habet Syllogismus respectu Logicae, vel Methodus & Demonstratio complexa sive tractatus integer, ut aliis placet, ergo. Qui syllogismum hic admittunt, intelligent tam probabilem, quam demonstrativum;

Compare with it this passage from *Candidatus Philosophiae Peripateticae* by Julio Rost (another Jesuit) from more than thirty years earlier (1730):

> That is the object of attribution of any sort of habit, which, of the same habit, is the primary and ultimate end, to which all of the rest is ordered, but is itself not further ordered: yet, here the end of Logic is essentially syllogism: thus, syllogism is essentially the object of attribution of Logic.[104]

Not only has the former passage been obviously inspired by the latter—perhaps indirectly—but both authors hold syllogism to be an integral part of most logical processes. This is all the more significant when one considers that authors at least as early as Descartes (1596-1650) had called into question the validity of syllogism as a tool for logical inquiry.[105] Perhaps Rost himself was influenced by an even earlier Jesuit writer to grant syllogism such a prominent place, but I was unable to find a specific source with such a striking parallel. Whether from religious dogmatism or fanatical traditionalism, the Jesuits, by and large, used logic to prove their predetermined convictions rather than employing it to synthesize new knowledge.

Another similarity between the writings of Weiler and Vogler is their general format. Following the rationalist tradition, both authors divide each subject into a series of simpler questions/sub-proofs and order them in such a way that newer questions are individually answered in terms of the premises established as true in previous questions (see Figs. 2.1 and 2.2).

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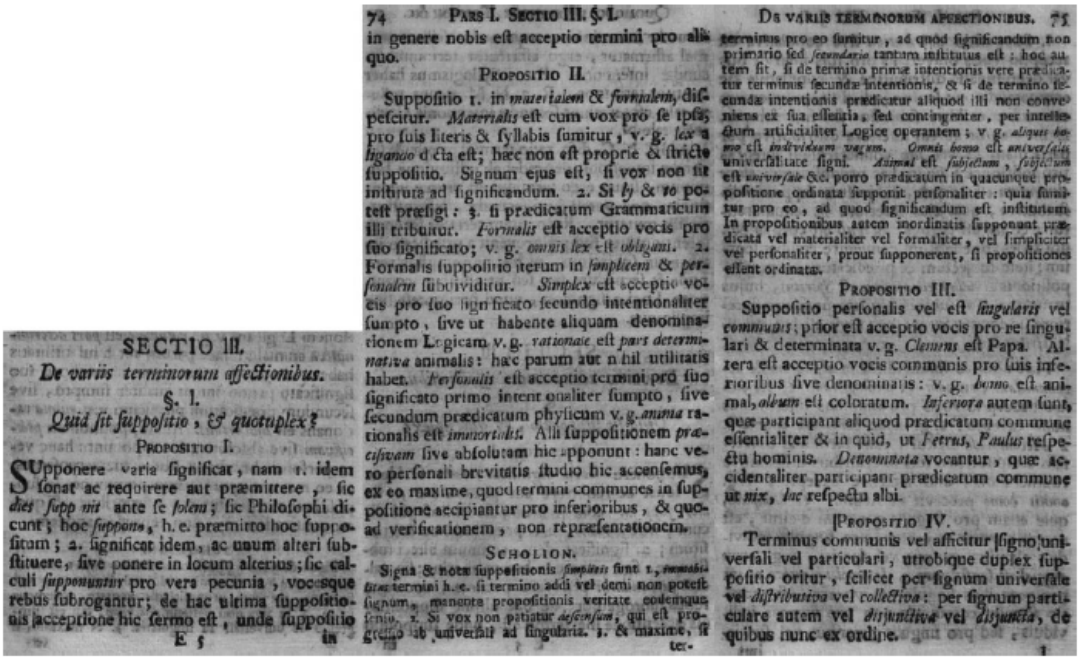
eoquod uterque ita videatur intendi, ut in quovis Logica quiescat: nec ab ea unus ordinetur ad alterum, tanquam ad finem intrinsecum." Henrico Weiler, *Logica novo philosophiae systemi accommodata*, (Würzburg: Strahel, 1763), 12-3.

[104] "Illud est objectum attributionis alicujus habitus, qui est ejusdem habitus finis primarius, & ultimatus, ad quem caetera omnia ordinatur, ipsum autem non ordinatur ulterius: Sed hic finis Logicae est tantum syllogismus: ergo syllogismus tantum est objectum attributionis Logicae." See Julio Rost, *Candidatus Philosophiae Peripateticae*, (Ambergen: Hanck, 1730), 243.

[105] Descartes's primary complaint was that a syllogism is essentially incapable of creating new knowledge; rather, it only serves as a form of proof for a conclusion which has already been intuited as true. See John Cottingham, Robert Stoothoff, and Dugald Murdoch, *The Philosophical Writings of Descartes*, vol. 1, (Cambridge: Cambridge University Press, 1985), 36-7.

**Figure 2.1: A list of short proofs in Weiler's *Logica novo philosophiae systemati accommodata***



74 PARS I. SECTIO III. §. I.

in genere nobis est acceptio termini pro alio quo.

PROPOSITIO II.

Suppositio 1. in *materialem* & *formalem*, dispescitur. *Materialis* est cum vox pro se ipsa; pro suis literis & syllabis sumitur; v. g. *lex* a *ligando* dicta est; haec non est proprie & stricte suppositio. Signum ejus est, si vox non sit inflexa ad significandum. 2. Si *by* & *to* potest praefigi: 3. si praedicatum Grammaticum illi tribuitur. *Formalis* est acceptio vocis pro suo significato; v. g. *omnis lex* est *obligans*. 2. Formalis suppositio iterum in *simplicem* & *personalem* subdividitur. *Simplex* est acceptio vocis pro suo significato secundo intentionaliter sumpto, sive ut habente aliquam denominationem Logicam v. g. *rationale* est *pars determinativa* animalis: haec parum aut nihil utilitatis habet. *Personalis* est acceptio termini pro suo significato primo intentionaliter sumpto, sive secundum praedicatum physicum v. g. *anima* rationalis est *immortalis*. Alii suppositionem *practicam* sive absolutam hic apponunt: hanc vero personali brevitatis studio hic accensemus, ex eo maxime, quod termini communes in suppositione accipiantur pro inferioribus, & quoad verificationem, non repraesentationem.

SCHOLION.

Signa & notae suppositionis *simplicis* sunt 1. *communis* termini h. e. si termino addi vel demi non potest signum, manente propositionis veritate eodemque sensu. 2. Si vox non patiatur *descensum*, qui est progressus ab universali ad singularia. 3. & maxime, si ter-

DE VARIIS TERMINORUM AFFECTIONIBUS. 75

terminus pro eo sumitur, ad quod significandum non primario sed *secundario* tantum institutus est: hoc autem fit, si de termino primae intentionis vere praedicatur terminus secundae intentionis, & si de termino secundae intentionis praedicatur aliquod illi non conveniens ex sua essentia, sed contingenter, per intellectum artificialiter Logice operantem; v. g. *aliquis homo* est *individuum vagum*. *Omnis homo* est *universalis* universalitate signi. *Animal* est *subjectum*, *subjectum* est *universale* &c. porro praedicatum in quacunque propositione ordinata supponit personaliter: quia sumitur pro eo, ad quod significandum est institutum. In propositionibus autem inordinatis supponunt praedicata vel materialiter vel formaliter, vel simpliciter vel personaliter, prout supponerent, si propositiones essent ordinatae.

PROPOSITIO III.

Suppositio personalis vel est *singularis* vel *communis*; prior est acceptio vocis pro re singulari & determinata v. g. *Clemens* est Papa. Altera est acceptio vocis communis pro suis inferioribus sive denominatis: v. g. *homo* est animal, *album* est coloratum. *Inferiora* autem sunt, quae participant aliquod praedicatum commune essentialiter & in quid, ut *Petrus*, *Paulus* respectu hominis. *Denominata* vocantur, quae accidentaliter participant praedicatum commune ut *nix*, *lac* respectu albi.

PROPOSITIO IV.

Terminus communis vel afficitur signo universali vel particulari, utrobique duplex suppositio oritur, scilicet per signum universale vel *distributiva* vel *collectiva*: per signum particulare autem vel *disjunctive* vel *disjuncta*, de quibus nunc ex ordine.

SECTIO III.

*De variis terminorum affectionibus.*

§. I.

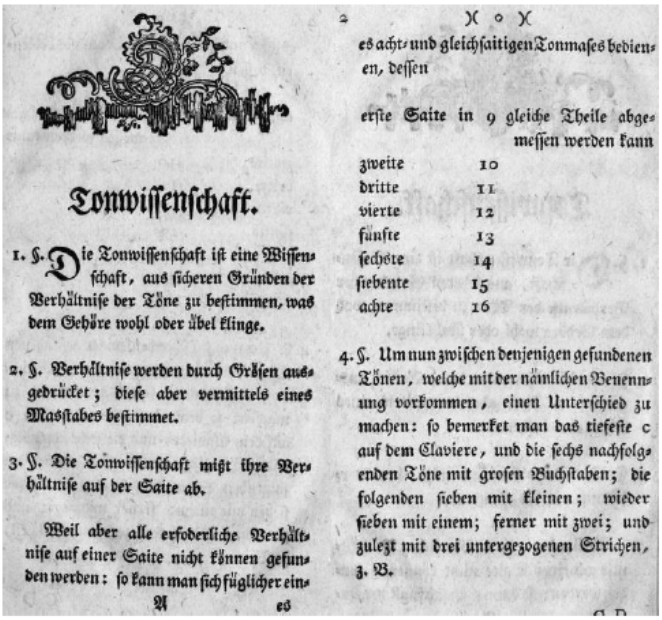
*Quid sit suppositio, & quotuplex?*

PROPOSITIO I.

Supponere varia significat, nam 1. idem sonat ac requirere aut praemittere, sic *dies supponit* ante se *solem*; sic Philosophi dicunt; hoc *suppono*, h. e. praemitto hoc suppositum; 2. significat idem, ac unum alteri substituere, sive ponere in locum alterius; sic calculi *supponuntur* pro veris pecuniis, vocesque rebus subrogantur; de hac ultima suppositionis acceptione hic sermo est, unde suppositio

E 5 in

**Figure 2.2: A list of short proofs in Vogler's *Tonwissenschaft und Tonsezkunst***



2 X o X

es acht- und gleichsaitigen Tonmaßes bedienen, dessen

erste Saite in 9 gleiche Theile abgemessen werden kann

| | |
|---|---|
| zweite | 10 |
| dritte | 11 |
| vierte | 12 |
| fünfte | 13 |
| sechste | 14 |
| siebente | 15 |
| achte | 16 |

4. §. Um nun zwischen denjenigen gefundenen Tönen, welche mit der nämlichen Benennung vorkommen, einen Unterschied zu machen: so bemerket man das tiefeste c auf dem Claviere, und die sechs nachfolgenden Töne mit grosen Buchstaben; die folgenden sieben mit kleinen; wieder sieben mit einem; ferner mit zwei; und zulezt mit drei untergezogenen Strichen, z. B.

## Tonwissenschaft.

1. §. Die Tonwissenschaft ist eine Wissenschaft, aus sicheren Gründen der Verhältnise der Töne zu bestimmen, was dem Gehöre wohl oder übel klinge.

2. §. Verhältnise werden durch Brüchen ausgedrücket; diese aber vermittels eines Masstabes bestimmet.

3. §. Die Tonwissenschaft mißt ihre Verhältnise auf der Saite ab.

Weil aber alle erfoderliche Verhältnise auf einer Saite nicht können gefunden werden: so kann man sich füglicher ein-

A es

In other words, both Weiler and Vogler have, what Floyd K. and Margaret G. Grave call, a "preference for…chains of deductions."[106] Yet, "[t]he rise of natural science and the subsequent

[106] See the quotation at the beginning of this chapter.

orientation of empiricist philosophers…led to a neglect and at times to a disdain of formal logic."[107] Thus, British empiricists, such as David Hume, often preferred to pose broader, more general questions and explore their answers at length without presenting discreet sub-proofs (see Fig. 2.3). Notice also that Hume's title does not inspire a sense of certainty; it is a "Enquiry."[108] Conversely, Weiler and Vogler's titles imply structured, scientific approaches. Thus, even the general format of Vogler's treatises speak to his preference for a rationalist's mode of argumentation.

**Figure 2.3: From David Hume's *Enquiry Concerning Human Understanding***

**Section 6: Probability**

Even if there were no such thing as chance in the world, our ignorance of the real cause of any event has the same effect on the understanding, and generates the same kinds of belief or opinion, ·as knowledge about chances does·.[4]

It can certainly happen that an outcome is probable because the chances of its occurring are greater than the chances of its not occurring; and the probability is greater—and the corresponding belief or assent stronger—in proportion as those chances exceed the chances of the outcome's not occurring. If a die were marked with two spots on four of its sides and with three spots on the two remaining sides, then it would be more probable that ·when the die was thrown· it would turn up *two* than that it would turn up *three*. If it had a thousand sides, with 999 of them marked with two spots and the remaining one side marked with three spots, the probability of its turning up *two* would be much higher, and our belief or expectation of that outcome would be more steady and secure. This process of thought or reasoning may seem trivial and obvious, but it offers plenty to think about for those who attend to it carefully.

It seems clear that when the mind looks to the future to learn which outcome will result from the throw of such a die, it considers the turning up of each particular side as equally probable; and this is the very nature of chance, to render all the particular outcomes that it covers entirely equal. But the mind, finding that a greater number of sides involve one outcome (·turning up *two*·) than in the other (·turning up *three*·), is carried more frequently to the former outcome, and meets it oftener in revolving the various possibilities or chances on which the ultimate result depends. This situation in which several views involve one particular outcome immediately generates—by an inexplicable contrivance of nature—the sentiment of *belief*, and gives that outcome the advantage over its antagonist, which is supported by a smaller number of views and crops up frequently in the mind. ·Although I have called it inexplicable·, this operation may perhaps be in some measure accounted for if we allow that belief is nothing but a firmer and stronger conception of an object than what accompanies the mere fictions of the imagination. The combination of these several views or glimpses imprints the idea more strongly on the imagination; gives it superior force and vigour; renders its influence on the passions and affections more obvious; and, in short, creates that reliance or security which constitutes the nature of belief and opinion.

With the probability of *causes* the situation is the same as it is with the probability of *chance*. Some causes are entirely uniform and constant in producing a particular ·kind of· effect, with no instance having ever been found of any failure or irregularity in their operation. Fire has always burned, and water has always suffocated, every human creature. The production of motion by impact and gravity is a universal law which up to now has had no exceptions. But other causes have been found to be more irregular and uncertain: rhubarb hasn't always worked as a purge, or opium as a soporific, on everyone who has taken these medicines. It is true that when any cause fails to produce its usual effect, scientists don't ascribe this to any irregularity in nature; but rather suppose that some secret causes in the particular structure of parts have prevented the operation. But our reasonings about the outcome are the same as if this principle ·concerning 'secret causes'· didn't apply. Custom has determined us to transfer the past to the future in all our inferences; so where the past has been entirely regular and uniform, we expect the ·usual· outcome with the greatest confidence, and leave no room for any contrary supposition. But where different effects have been found to follow from causes that *appear* exactly alike, all these various effects must occur to the mind when it moves from the past to the future, and must enter into our thoughts when we estimate the probability of an outcome. Though we give preference to the one that has been found to be the most usual, and believe that this effect will occur this time too, we have to take into account the other effects, assigning to each a particular weight and authority in proportion as we have found it to be more or less frequent. In almost every country of Europe it is more probable that there will be frost some time in January than that the weather will continue frost-free throughout that whole month; though this probability varies according to the different climates, and comes near to certainty in the more northern kingdoms. Here then it seems evident that when we transfer the past to the future in order to predict the effect that will result from any cause, we transfer all the different outcomes in the same proportion as they have appeared in the past, and conceive (for instance) one to have existed a hundred times, another ten times, and another once. As a great number of views here point to one outcome, they fortify and confirm it to the imagination, generate the sentiment that we call *belief*, and make us prefer that outcome to the contrary one that isn't supported by as many experiences and doesn't show up so frequently in our thought in transferring the past to the future. Try to account for this operation of the mind on the basis of any of the received systems of philosophy and you will become aware of the difficulty. For my part, I shall be satisfied if the hints that I have given arouse the curiosity of philosophers, and make them aware of how defective all common theories are in their treatments of these interesting and elevated subjects.

[4] Locke divides all arguments into demonstrative and probable. On this view, we must say that it is only probable that all men must die or that the sun will rise to-morrow, ·because neither of these can be demonstrated·. But to conform our language more to common use, we ought to divide arguments into demonstrations, *proofs*, and probabilities—by 'proofs' meaning arguments from experience that leave no room for doubt or opposition.

[107] Yehuda Rav, "On the Interplay between Logic and Philosophy: a Historical Perspective," Séminaire de Philosophie et Mathématiques, (1992), 15.

[108] This is likely due to Hume's intention to cast doubt upon, not only the proofs of many premises accepted by others, but also the provability of those premises. Figure 2.2 below is a case in point.

## Conclusion

This chapter has shown that the educational environment of Vogler's homeland during his early years was dominated by the Jesuit university system. At the time, these universities were allowed to operate mostly independent of outside supervision and were thereby able to continue to hold core beliefs (educational, philosophical, theological, etc.) that were well over a century old. A system so resolutely old fashioned was, perhaps, doomed to meet with the disbandment suffered by the Jesuits near the end of the eighteenth century, but the Order managed to uphold their traditions long enough for Vogler to make it through their schools with their *magister artium* degree: a degree characterized by nearly dogmatic commitment to rationalist logic and theological positivism. As subsequent chapters will show, the same metaphysical immutability that Vogler learned from the Jesuits, forms the cornerstone of Vogler's system of music theory.

# CHAPTER 3

## INTERNATIONAL INFLUENCE AND A RATIONAL SYSTEM

In the previous chapter, I established Vogler's reliance upon a Jesuit system of rational thought. Yet, there is no evidence to show that Vogler received any more than a cursory musical training from the Jesuits; it is therefore necessary to examine other sources of knowledge with which Vogler would have come into contact. This chapter divides said sources into two general categories. First, Vogler spent about 2-3 years under the tutorship of Italian musicians, primarily Francesco Antonio Vallotti (1697-1780). Second, Vogler's writings evidence that, over time, he was slowly exposed to the writings of other theorists, among them: Johann David Heinichen (1683-1729), Johann Philipp Kirnberger (1721-1783), Friedrich Wilhelm Marpurg (1718-1795), and Jean-Philippe Rameau (1683-1764). Vogler recombined the ideas of these various scholars to create his own brand of music theory, which, he promises, is all-encompassing and uniquely didactic.[109] Interestingly, this process resulted in a compromise between French, German, and Italian mainstream comprehension, a compromise that possesses a relatively high explanatory power for the music of his own day. In particular, this chapter uses the often-subtle differences between Vogler's subsequent theoretical treatises to construct an approximate timeline in which Vogler incorporated new ideas from other writers into his own evolving convictions.

Before pursuing this line of thought, a few disclaimers seem appropriate. First, by the time that Vogler went to Italy (age 24), he was already an accomplished pianist, organist and improvisor. Furthermore, he had already begun experimenting with organ building and tuning:

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[109] Vogler, in fact, says that no previous treatise has undertaken the task of providing students with clear, unchanging rules; see "Dem Leser" in Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776): "*Die Verhältnise und das Ebenmaß, worauf sich die Tonwissenschaft gründet, sind an sich gewiß und unveränderlich. Ein Tonlehrer, der dieses Ebenmas kennet, wird also auch im Stande sein, in seinem Unterrichte allgemeine, sichere, und keinem Zweifel, keiner Ausnahme unterworfene Regeln zu geben…Eine hinlängliche Erörterung dieser Stücke wird man noch in keinem Werke finden.*"

activities that served both as trade and hobby for the rest of his life.[110] Vogler's interest in organ design eventually led to such achievements as his famous "Orchestrion"—a 9ft x 9ft x 9ft portable organ containing four manuals and over 900 pipes—and the partial completion of his ambitious "Triorganon," a three-console, thirteen-manual organ designed to service St. Michael's in Munich.[111] While we could speculate that Vogler took organ lessons from the organists of the Würzburg Cathedral as a child, no specific records exist that show when Vogler acquired these skills or from whom he learned them. All that is known is that Vogler's father was a violin maker; this likely gained Vogler early access to tutoring in instrument construction as well as lessons with a number of musicians in the area around Würzburg.[112] Helmut Kreitz has also argued that Vogler must have had some training in music theory prior to his trip to Italy, because he left several students behind in Mannheim.[113] However, the source Kreitz cites does not contain this information. Moreover, even if Vogler did have pupils, this does not prove that he taught them any music theory beyond what they needed to know for performing on keyboard instruments, a field that Vogler would have been qualified to teach prior to his Italian journey.

Second, it must be understood that, with a few exceptions, I do not claim to provide previously unacknowledged connections between Vogler and his predecessors/contemporaries; instead, the web of influence I present is assembled from other authors. My goals are 1) to

[110] Floyd and Margaret G. Grave have partially examined how Vogler's background as performer and instrument builder informed his methods of presenting his theories; see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 237-66.

[111] For an abbreviated summary of these activities, see Bynum Petty, "Charlatan or Visionary? Abbé Vogler and His Theory of Organ Design," The Tracker 57, no. 2 (Spring 2013), 21.

[112] Grave, Margaret G. "Vogler, Georg Joseph." In *Grove Music Online, Accessed* April 29, 2018. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.29608.

[113] See footnote 4 of Chapter 2 in Helmut Kreitz, "Abbé Georg Joseph Vogler als Musiktheoretiker," PhD. diss., Universität des Saarlandes, 1957.

provide a more comprehensive view of these influences, 2) to be more consistent than previous authors in showing how the ideas of other writers actually affected Vogler's theory, and 3) show approximately when Vogler came upon these influences.[114] In addition to bringing these materials into dialogue with one another, I also re-examine some of their findings and argue against what I believe to be occasional misinterpretations.

Finally, I challenge the tendency in modern scholarship to believe that, by the time that Vogler wrote the *Tonwissenschaft und Tonsezkunst* (1776), his theoretical system was mostly solidified, and subsequent volumes are akin to mere editions of previous ones. This idea, though seemingly universal, is almost always implicit, as in David W. Bernstein's summary of *Stufentheorie* which eventually concludes that Vogler's "awkward system of harmonic theory suffered from numerous logical and empirical problems."[115] My opinion more closely aligns with that of Floyd K. and Margaret G. Grave who, concerning the relationship of the *Tonwissenschaft* and the *Handbuch zur Harmonielehre* (1802), write:

> The new way in no way repudiates the earlier one. The two volumes, engendered by different circumstances, represent alternative ways in which the ingredients of the system may be put together...the two manuals can shed light on each other...Their points of intersection and divergence help clarify underlying consistencies in Vogler's thinking as he pursues his concept of an enlightened, rationally ordered theory of harmony.[116]

While I agree that the *Handbuch* does not "repudiate" the *Tonwissenschaft* (indeed there are numerous similarities), I argue that the 26 years separating the two publications represent a time of theoretical evolution for Vogler, during which he read and ruminated upon sources

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[114] Hertha Schweiger, in particular, is quick to state that one author or another influenced Vogler, but rarely supports her assertions; see for instance: Schweiger, Hertha. "Abbé G. J. Vogler's Orgellehre." PhD. diss., (University of Freiburg, 1938), 9.

[115] David W. Bernstein, "Nineteenth-century harmonic theory: the Austro-German legacy," in *The Cambridge History of Western Music Theory*, ed. by Thomas Christensen, (New York: Cambridge University Press, 2002), 782.

[116] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 18.

unavailable to his younger self. Where Floyd K. and Margaret G. Grave focus on the similarities and interconnections of Vogler's treatises, I deal with the differences. I hold that the improper comparison of temporally removed parts of Vogler's theoretical output accounts for a number of the inconsistencies perceived by other authors. While the changes in Vogler's theory are admittedly not as dramatic as those encountered over the course of Rameau's career, they provide an informative view on the constant shift in 18th-century music theory.[117] Writers in the latter half of the century worked feverishly to rationalize the Galant and High Classical styles. Meanwhile, Europe remained a hot bed for musical innovation, and some authors, including Vogler, attempted to comprehend, anticipate, or even inform, new musical works by young composers (such as Ludwig van Beethoven, Johann Nepomuk Hummel, Friedrich Daniel Rudolf Kuhlau, etc.) who are traditionally understood as having helped usher in the Romantic style of the 19th century.[118] The only way that Vogler and others could accomplish this was by changing their formulations as new knowledge came to their hands.

## Vogler's Time in Italy

After completing his studies with the Jesuits, Vogler moved to Mannheim, whose court orchestra was the musical pride and joy of the Elector of Bavaria, Karl Theodor (1724-1799).[119] While serving as an almoner there, Vogler showed such an aptitude for music, that his new lord

[117] In particular, Rameau's theoretical system changed dramatically after other thinkers—such as Jean le Rond d'Alembert, Louis Bertrand *Castel,* Denis Diderot, and Bernard de Fontenelle—introduced him to modern acoustics; see Thomas Christensen, *Rameau and Musical Thought in the Enlightenment*, (New York: Cambridge University Press, 1993), 137-8.

[118] On eighteenth-century Europe's continuous musical evolution, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 258.

[119] In fact, the Mannheim orchestra was the founding force behind the so-called "Mannheim Tonschule," a mode of musical expression to which the modern Mannheim Conservatory traces its roots; see "Wir Über Uns," *Staatliche Hochschule für Musik und Darstellende Kunst Mannheim*, accessed December 26, 2019, https://www.muho-mannheim.de/wirueberuns/. This website even credits Vogler with the formal founding of the public institution.

paid to send him to Italy for further training.[120] Vogler first went to Bologna, where he studied quite briefly with Giovanni Battista Martini (1706-1784). Martini's compositional approach, which relied heavily on Johann Joseph Fux's *Gradus ad Parnassum* (1725), was essentially modal, and struck Vogler as outdated and contrived.[121] This led Vogler to move to Padua where, while achieving a theology degree at the university there, he became a pupil of the Franciscan rationalist, and 50-year Capellmeister, Francesco Antonio Vallotti.[122] Vallotti had never taken on a theory/composition student before, because previous applicants lacked Vogler's background in humanistic studies.[123] Vallotti probably had a decisive effect on Vogler's compositional style, but his influence on Vogler's music-theoretical views is also easy to see, particularly in Vogler's first treatise, *Tonwissenschaft und Tonsezkunst* (1776).[124] Indeed, in most ways, the

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[120] It is historically unclear how Vogler musically distinguished himself in Mannheim, but already by 1771, the Mannheim orchestra had performed his Singspiel, *Der Kaufmann von Smyrna*, at court.

[121] Georg Joseph Vogler, *Choral-System*, (Kopenhagen: Niels Christensen, 1800), 1-2. In addition to problems with Martini/Fux's general compositional style, Vogler's dislike of Fux was probably born out of his rationalist tendency to reject any system with internal logical inconsistencies; Fux's method came under fire for this very issue, even before Vogler's lifetime. However, any such perceived flaws were, in reality, characteristic of late Renaissance counterpoint, in which, the composer had to weigh anew the relative importance of contrapuntal rules and compositional creativity in each musical circumstance. For a summary of this issue, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 33-4. It has also been shown that, though Martini frequently touted Fux's importance, the former did not closely follow the latter's methods; see Ian Bent, "*Steps to Parnassus*: Contrapuntal Theory in 1725 precursors and successors," in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen, (New York: Cambridge University Press, 2002) 578-9.

[122] Vogler was apparently an avid, if impatient, student, and constantly pressed Vallotti, who was already in his seventies, for more information on everything they discussed. According to Vogler himself, this eventually led Vallotti to write "he wanted to learn in five months what I have learned in fifty years!" (*egli vuole imparare in cinque mesi, ciò che io ho imparato in cinquant' anni.*); see Georg Joseph Vogler, *Choral-System*, (Kopenhagen: Niels Christensen, 1800), 7. Karl Emil von Schafhäutl does not correctly transcribe the Italian for this quote. As a result, he translates it: "he wanted to learn in *fifty* months what I have learned in fifty years." (Er will in *fünfzig* Monaten lernen, was ich in fünfzig Jahren gelernt habe.); see Karl Emil von Schafhäutl, *Abt Georg Joseph Vogler: Sein Leben, Charakter und musikalisches System; seine Werke, seine Schule, Bildnisse, etc.,* (Augsburg: Verlag des Literarischen Instituts von Dr. M. Huttler, 1888), 9.

[123] Karl Emil von Schafhäutl, *Abt Georg Joseph Vogler: Sein Leben, Charakter und musikalisches System; seine Werke, seine Schule, Bildnisse, etc.,* (Augsburg: Verlag des Literarischen Instituts von Dr. M. Huttler, 1888), 9.

[124] Vogler expressed a distinct preference for the Italian style of composition. This did not extend to Italian-language works for stage other than those of Johann Adolph Hasse (1699-1783)—with whom Vogler briefly studied operatic composition in Venice—and Niccolò Jommelli (1714-1774). These two men's works, "might have approached the greatest heights of artistic accomplishment" if "a better understanding of taste and musical science had been available to their age"; see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings*

*Tonwissenschaft* more strongly resembles Vallotti's own *Della scienza teorica, e pratica della moderna musica* (1779) than any French or German treatise of the eighteenth century.[125]

Vallotti's volume was published after Vogler's, yet Vogler must surely have been aware of the theoretical concepts that eventually formed the core of Vallotti's writing. The ideas put forward in the *Della scienza* could hardly have been spontaneously developed between the end of Vogler's time in Italy (1773-1775) and its 1779 publication date, unless we assume that Vogler's treatise, being older, was the source of ideas for Vallotti. Yet, it is simple to show that Vallotti was Vogler's source, because one of the key elements of Vallotti and Vogler's theories, the Italian understanding of harmonic invertibility, is already present in *Ampla dimostrazione degli armoniali musicali tuoni* (published in 1750 under the title *Trattato della moderna musica*) by Vallotti's teacher, Francesco Antonio Calegari (1656-1749). Calegari was a well-known member of the *Scuola dei rivolti*, an Italian school that emphasized chord invertibility. Recent scholarship has shown that Calegari furthered the Italian understanding of inversion to the point that he independently introduced a system comparable to Rameau's fundamental bass, perhaps even before Rameau published his *Traité de l'harmonie* (1722).[126] As I argue hereafter, it is the

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*of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 103-9. It is unclear as to how Vogler came to this preference. However, it is possible that Elector Karl Theodor had a preexisting preference for Italian music, and thus influenced Vogler's decision. The only non-Italian composers that Vogler openly praised were Haydn and Mozart; Ibid., 111. So strong was Vogler's belief in a correct method of composition, that he frequently published "improved editions" (*Verbesserungen*) of works by composers such as J. S. Bach, Forkel, Pergolesi, and others. The *Verbesserungen* will be discussed in greater depth in Chapter 3 of this dissertation.

[125] Vallotti originally planned to publish a four-volume set, but Vallotti's drafts for volumes 2-4 were given to Padre Martini for safe keeping. It was not until 1950 that these drafts were made public; see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 15. It is unclear whether or not Vogler ever had access to these documents prior to their internment in the Martini estate. Nevertheless, as will subsequently become clear, Vallotti and Vogler must have discussed the sort of issues that formed the core of these additional volumes.

[126] After Calegari's death, Vallotti made some of Calegari's writings available against Calegari's wishes. However, in a March 8, 1763 letter to Martini, Vallotti wrote "With regard to Father Calegari, I can assure you that he had already established his principles before M. Rameau published *Traité*; nor was this author known to him, and he would perhaps have died without having known of him, if I had not made him known to him in Venice in about the year 1736." (*Quanto al padre Calegari, poi la posso assicurarvi ch'egli aveva d' già stabilito li suoi principi avanti che Mr. Rameau dare alla luce il suo Trattato; né a lui era noto questo autore, e sarebbe forse morto senza averlo*

Italian (Calegari/Vallotti) view of fundamental bass, not the French (Rameau/Marpurg) or German (Heinichen/Nichelmann/Kirnberger), that eventually found place in Vogler's *Tonwissenschaft* and probably continued to influence his thinking for many years after.[127]

A complete examination of the many differences between the theories of fundamental bass put forward by Calegari, Marpurg, Rameau, Vallotti, Vogler, etc. is beyond the scope of the present dissertation. Instead, I will only explore these schools' treatments of three ever-intertwined problems: dissonance treatment, chordal inversion, and harmonic reduction. Joel Lester has shown that, contrary to the beliefs of many 18th- and 19th-century writers, Rameau was not the first to describe harmonic inversion.[128] However, the existence of a system for harmonic inversion is not contingent upon its use in the same manner as is commonly taught in 20th- and 21st-century music pedagogy. Lester notes that such ahistorical interpretation ignores two important factors. First, even though 18th-century writers knew that C-E-G and E-G-C can be understood as inversions of one another, most treatises—especially in the first half of the century—treat these inverted sonorities in separate chapters and identify them under different titles; Lester explains:

> …any chord was now an entity that could appear in any arrangement over the bass, but different names for different voicings still implied that these different voicings were separate entities, not different forms of one entity.[129]

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*notizia, se io non glie lo avessi fatto credere in Venezia nell 1736 in circa.*) The original manuscript for this letter can be found in the archive of Martini's personal correspondence held in the Museo Internazionale e Biblioteca della Musica di Bologna. The above translation was taken from Bella Brover-Lubovsky, "Francescantonio Calegari and the Scuola dei rivolti: A Bridge between the Prima and Secunda pratica?" (conference presentation, 42nd Annual Meeting of the Society for Music Theory, Columbus, OH, November 8, 2019).

[127] Floyd and Margaret Grave draw a similar conclusion, though they provide no explanation for their assertion; see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 15-6. I have placed Marpurg under the French category only because Marpurg claimed to be a spokesman for Rameau. As I will discuss below, this claim is problematic.

[128] Joel Lester, *Between Modes and Keys: German Theory 1592-1802*, (Stuyvesant, New York: Pendragon, 1989), 28-41.

[129] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 53.

Second, in more recent pedagogical models, students are often taught to sort through all of the notes within a beat and "find the chord tones." This strategy essentially means "set aside all non-chord tones, whether accented or unaccented, so you can find the underlying harmony." Yet,

> …when thoroughbass methods treat dissonances, they are primarily concerned with dissonances played along with a bass note; it matters little whether they form what we call chord sevenths, dissonant fourths in second-inversion chords, or suspensions and appoggiaturas. All these dissonances were deemed part of the chord and were to be indicated in the figures.[130]

In this sense, 18th-century musicians typically divided dissonances into two categories: harmonic dissonances, which are usually included in the figured bass because they occur immediately over the bass note, and melodic dissonances, which, as unaccented (often improvisatory) melodic embellishments, are excluded from the figured bass.[131] As Lester has shown, this distinction does not disappear from mainstream theory until the nineteenth century.[132]

Vogler himself entered the theoretical discourse at a time when several authors, taking a more harmonic approach to music than their predecessors, sought to more carefully categorize what we now call "non-chord tones." Eventually, it is Vogler who introduces the first known system of harmonic reduction in which all verticalities must contain a consonant triad, which, through elaboration, may be concealed with inessential tones. As I will show, this idea confirms Vogler's eventual conversion from a somewhat narrow Italian way of thinking about harmony to a broader, more cosmopolitan view, variously influenced by many European theorists.

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[130] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 61.

[131] In German-speaking areas during the eighteenth century, notes arriving with the bass were often called *Hauptnoten* (main notes), while notes after the beat were entitled *durchgehende Noten* (passing notes). This distinction was irrespective of these notes' statuses as consonant or dissonant. For example, W. A. Mozart identifies unaccented octaves and unisons as *durchgehende Noten*; see, Wolfgang Amadeus Mozart, *Barbara Ployers Theorie- und Kompositionsstudien bei Mozart*. facs. in *W. A. Mozart als Theoretiker*, ed. Robert Lach, (Vienna: A. Holder, 1918), 11.

[132] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 212.

## The *Tonwissenschaft* as Anti-France and Anti-Germany

Lester has cautioned that it is not always simple or meaningful to divide the many writers of the eighteenth century into two irreconcilable camps such as "the thoroughbass theorists" and "the fundamental-bass theorists." Referring to a personal letter by Leopold Mozart, he writes:

> …the sharp separations some scholars draw between different theoretical traditions in the eighteenth century do not stand up to scrutiny. Perhaps the best indication of the unity perceived among various approaches during the latter part of the century—or at least of the consensus that each theoretical school had something important to contribute and that none had a monopoly on musical truth—is Leopold Mozart's reference to books by C. P. E. Bach, D'Alembert, Fux, Marpurg, Mattheson, Rameau, Riepel, Spiess, Scheibe, and Tosi-Agricola as sources of "sound stuff."[133]

Nevertheless, several authors of the day did bear more polemic views. One might cite, for instance, the many disputes that Marpurg had with Johann Friedrich Daube (1730-1797), Johann Philipp Kirnberger, Georg Andreas Sorge (1703-1778), and others.[134] Marpurg's controversies, as well as those of other writers, potentially arose more out of anti-foreign prejudices than out of legitimate theoretical concerns.[135] In any case, by mid-century, the challenge between thoroughbass and fundamental bass for supremacy in music-theoretical thought was in full force. While Vogler does occasionally tip his hat to the thoroughbass tradition, his loyalties are

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[133] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 256.

[134] Marpurg's dispute with Daube only consists of a 1756 letter from Daube to a *nomme de plume* of Marpurg: Gimmel. Kirnberger and Marpurg came to metaphorical blows several times during the 1750s and 1770s. Jonathan W. Bernard has pointed out that, though 1759 was the year that the Marpurg-Sorge controversy went public, their disagreement may have begun somewhat earlier. As a *terminus anti quem*, he offers 1755 as a date before which Marpurg and Sorge seem to have gotten along quite well; see Jonathan W. Bernard, "The Marpurg-Sorge Controversy," *Music Theory Spectrum* 11, no. 2 (Autumn 1989), 164-5.

[135] Marpurg himself was German, but since he claimed to be the spokesperson for the Frenchman Rameau, Marpurg might have been seen as a traitor to his musical countrymen, or at least to the philosophical values of his homeland. Cecil Grant has explored this issue with regard to the tension between Kirnberger and Rameau, but it is easy to see how his findings could be expanded to apply to Marpurg as well; see Cecil Powell Grant "Kirnberger Versus Rameau: Toward a New Approach to Comparative Theory." PhD. diss., (University of Cincinnati, 1976), 17-35.

strongly attached to the fundamental bass side of things.[136] This means that comparing his treatises to writers identifying themselves as thoroughbassists would be a difficult, if not a fruitless endeavor, except to show how little he depends on their points of view.

Vogler's complete dismissal of modal composition and nearly all thoroughbass concepts summarily sweeps asides a number of important authors of the day. For example, Johann Mattheson (1681-1764) was essentially a thoroughbass theorist and thus is not mentioned (even negatively) in Vogler's writings. Johann Friedrich Daube employs a variant of the Greek genera, but his treatise is basically a thoroughbass manual.[137] Lorenz Mizler (1711-1778), like Padre Martini, had great respect for Fux's *Gradus ad parnassum*, which he translated into German; his system essentially arises as an attempt to reconcile the differences between Fuxian counterpoint and the thoroughbass tradition.[138] Georg Andreas Sorge probably influenced Vogler's interest in tuning and temperament, but, as another thoroughbassist, was ignored for harmonic purposes.[139]

Helmut Kreitz and Hertha Schweiger have discussed several other authors that may have influenced Vogler's way of thinking, but many of these will not make any further appearance in this chapter because a commitment to either thoroughbass or fundamental bass is unclear or irrelevant to their system.[140] An example of this category is Leonard Euler who, though

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[136] In spite of Vogler's criticisms concerning the thoroughbass tradition, he concedes that all accompanists should be familiar with its precepts; see Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 129.

[137] Johann Friedrich Daube, *General-Baß in drey Accorden*, (Leipzig: Johann Benjamin Andrea, 1756).

[138] Lorenz Mizler, *Anfangsgründe des Generalbasses*, (Leipzig: by the author),1739.

[139] See Georg Andreas Sorge, *Anleitung zum Generalbass und zur Composition,* (Berlin: Gottlieb August Lange, 1760), "Inhalt"; and Georg Andreas Sorge, *Anweisung zur Stimmung und Temperatur sowohl der Orgelwerke, als auch anderer Instrumente, sonderlich aber des Claviers*, (Hamburg: by the author, 1744).

[140] Helmut Kreitz indentifies Hertha Schweiger as the first and only writer to identify the majority of Vogler's theoretical, philosophical, and literary influences; see Helmut Kreitz, "Abbé Georg Joseph Vogler als Musiktheoretiker," PhD. diss., (Universität des Saarlandes, 1957), 63-4. Schweiger's volume concentrates on Vogler's organ works and design, so it is not surprising that she neither cites any other author about these influences nor attempts to examine them herself; see Schweiger, Hertha. "Abbé G. J. Vogler's Orgellehre." PhD. diss., (University of Freiburg, 1938), 9. In addition to the authors mentioned above, Schweiger points to Descartes,

certainly of interest to Vogler, does not actually provide any practical application of his system beyond his idea of the relativity of consonance.[141] Similarly, Johannes Kepler (1571-1630), though perhaps interesting to Vogler from a mathematical perspective, was preoccupied by the so called "harmony of the spheres," and spent large sections of his treatise deriving harmonies from the movements of planets.[142]

Therefore, the five primary representatives of German-speaking music theory in the second half of the eighteenth century, by whom Vogler was probably influenced in his understanding of harmony, are Johann Philipp Kirnberger, Heinrich Cristoph Koch, Friedrich Wilhelm Marpurg, Christoph Nichelmann (1717-1762), and Joseph Riepel (1709-1782), all of whom had varying reliance on a fundamental bass perspective. However, Kirnberger, Koch, Nichelmann, and Riepel will not appear in this section: in the cases of Kirnberger and Nichelmann, I will show later in this chapter that it is likely that Vogler read one or both of their treatises after writing the *Tonwissenschaft;* Koch's first theoretical treatise, *Versuch einer Anleitung zur Composition* (1782), did not appear until 8 years after the *Tonwissenschaft*; finally,

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Černohorský and Tartini as having affected Vogler's writings. Vogler admits to inspiration from Descartes. Černohorský wrote no theory treatises of his own, but he was a teacher to Tartini; thus, his influence on Vogler would arguably be indirect. Vogler probably read from Tartini's *Trattato di musica secondo la vera scienza dell'armonia either on his own or at Vallotti's* request. At the very least, Vallotti, who worked with Tartini quite a bit and was familiar with his theoretical convictions, would have verbally passed on to Vogler those things from Tartini that he deemed important. Yet, this represents another branch of Italian influence, not French or German.

[141] See Leonhard Euler, *Tentamen novae theoriae musicae ex Certissimis Harmoniae Principiis*, (Petropolis: Academy of Science,1739), 26-41. Vogler makes one observation that partially reflects Euler's position: "The first ratio of the whole to the whole is the most pleasing, but the simplest; the last ratio of the fifth to the whole is the most varied, but, by report, the least pleasant. The whole to the whole, or 1:1, is the nearest; the whole to the fifth, or 1:1/5 is the more distant: from this follows that, *the nearer the ratio of a tone is to the other, the more pleasant, but simpler; the further the ratio is, the more varied, but the less pleasant it sounds to the ear*." (*Die erste Verhältnis des Ganzen zum Ganzen (5. §.) ist die angenehmste, aber die einfachste; die lezte Verhältnis des Fünftel zum Ganzen (8. §.) ist die mannigfaltigste, aber von bemeldten am wenigsten angenehm. Das Ganze zum Ganzen oder 1:1 ist die nächste; das Ganze zum Fünftel oder 1:1/5 ist die entferntere: daraus folgt, daß,* je näher die Verhältnis eines Tons mit dem andern ist, desto angenehmer, aber einfacher; je entfernter der Verhältnis ist, desto mannigfaltiger, aber weniger agenehm (*sic!*) er dem Gehöre klinge.) emphasis added; see Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 4.

[142] Johannes Kepler, *Harmonices Mundi, Liber III*, (Linz: Johannes Plancus, 1619).

Riepel's writings were steeped in the proper execution of melody, making it difficult to discern his exact harmonic convictions.[143] This leaves Marpurg as the sole German-language fundamental bassist after 1750 with whom Vogler might have been familiar prior to penning his first treatise.[144] In what follows, I first examine C.P.E Bach as a representative of the German thoroughbass tradition: a tradition that Vogler holds in low regard. Next, I briefly review Rameau, as the quintessential French authority, before turning to Rameau's supposed German herald: Marpurg. Then, I explain how Vallotti's fundamental bass system is distinctly different from its French and German peers. Finally, I compare Vogler's system to these other writers to confirm his Italian music-theoretical roots.

With regard to dissonance, the various approaches of members of the thoroughbass tradition, such as that of C. P. E. Bach, might be summarized in the following manner: 1) some intervals are inherently consonant or dissonant, 2) dissonant intervals usually require preparation and must always resolve, 3) some intervals are problematic because they do not seem to consistently behave as either consonance or dissonance. The third tenet here leads Bach and his peers to admit numerous special rules governing particular verticalities, and occasionally the first tenet is also threatened. These two problems come to the fore with an examination of, what present-day musicians would unhesitantly call, inversions of seventh chords. For example, following historical precedence, Bach defines a perfect fifth as one of the chief consonances; yet

[143] Lester notes that, despite Riepel's self-proclaimed dedication to melody as the founding force of music, his approach to melodic construction is dependent on a working knowledge of the harmonies that any melody might imply; see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 261.

[144] There do not appear to have been any overly influential French treatises on fundamental bass that are both post-Rameau and pre-Vogler. As late as 1780, when Vogler made a trip to Paris to have his system adopted by the *Académie Royale des Sciences* as the true system of harmony, Rameau was still considered the reigning authority on the subject. On the long-term preeminence of Rameau's ideas, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 150-7.

he puzzles over the fact that, over a bass with the figures $^{6}_{5}$ (*Sextquintenaccorde*), a perfect fifth—such as that appearing in a IV$M^{6}_{5}$ or a ii$^{6}_{5}$—behaves as a dissonance.[145] Similarly, in a chord labeled $^{4}_{3}$ (*terzquartenaccord*), Bach concedes that the normally-consonant third "is used like a dissonance" and the fourth "gains more freedom than usual."[146] While he recognizes that some intervals change from consonant to dissonant when inverted or placed between two upper voices—and even understands that some sonorities result from inverting simpler chords—he still defines the consonance or dissonance of a note as usually deriving from its distance to the bass rather than its position in a chordal entity.[147] Most importantly, Bach pursues this manner of thinking despite a ready knowledge of Rameau, whose system Bach vehemently rejects.[148]

Rameau, on the other hand, insists that the thorough-bass tradition resulted in more contradictions than rules.[149] He further argues that fundamental bass is easier to grasp than the

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[145] Carl Philipp Emanuel Bach, *Versuch über die wahre Art das Clavier zu spielen*. (Berlin: C. P. E. Bach, 1753), 87: "Die Quinte wird wie eine Dissonanz gebraucht..."

[146] Carl Philipp Emanuel Bach, *Versuch über die wahre Art das Clavier zu spielen*. (Berlin: C. P. E. Bach, 1753), 75: "Das Sonderbare hierben ist, daß die Terz wie eine Dissonanz gebraucht wird, und die Quarte daher mehr Freyheit bekommt, als ausserdem."

[147] C. P. E. Bach and Johann David Heinichen do discuss a system of "inversion" (Verwechselung), but it merely allows for the rotation of members of a harmony. Importantly, Verwechselung does not take any "root" or "fundamental" into account, and therefore cannot be considered representative of a system of fundamental bass; see Derek Remeš, "New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach's Compositional Pedagogy," ZGMTH 16 no. 2 (2019), 80.

[148] According to Kirnberger, C.P.E. Bach took Kirnberger's side in his great debate against Marpurg (and by extension, Rameau). Kirnberger also says that C.P.E. expressed that he and his father harbored distaste for Rameau's system; see Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik: Zweyter Theil – Dritte Abtheilung*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1779), 188. In it, Kirnberger claims to have received a letter from C.P.E. Bach, calling Marpurg "despicable" (*verabscheuungswürdig*) and stating, "You may say aloud that the principles of myself and my beloved father are anti-Rameau" (*Daß meine und meines seel. Vaters Grundläße antirameauisch sind, können Sie laut sage*). Related to this argument, several scholars have explored the likely scenario that the Bach family's knowledge of Rameau was indirect (instead stemming from Marpurg's presentation) and thus was unfavorable due to misunderstanding rather than a fundamental disagreement; for a summary and bibliography on this issue, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 231-2, 235-9, and 246-56.

[149] Even prior to Rameau, Johann Mattheson, specifically concerning the rule of the octave, observed, "There can be no rule which has more examples against it than for" (*Da nun aber das keine Regul seyn kan welches mehr Exempla wieder als vor sich hat.*); see Johann Mattheson, *Das neu-eröffnete Orchestre* (Hamburg: Benjamin Schillers Wittwe im Thum 1713), 72.

countless axioms and exceptions of the older system.[150] While Rameau does outline a system for the inversion of triads and seventh chords, where dissonance treatment is concerned, Rameau's system derives all of its power from the ability to resolve all dissonances as either major or minor thirds above a real or "implied" (*sous-entendu*) pitch, which need not be the sounding bass note.[151] The upper note of a dissonant major third, which he says finds its origin in the major third above the root of a dominant seventh, must resolve upward but does not require preparation; meanwhile, the upper note of a dissonant minor third, which is first found between the fifth and seventh of a dominant seventh chord, must resolve downward and be consistently prepared by consonance.[152] Strangely, in the second book of the *Traité*, Rameau slightly changes his formulation by stating that the minor seventh is the source of all minor dissonances, though it must still resolve down by step.[153] One of his examples from the *Traité* is reproduced in Figure 3.1.

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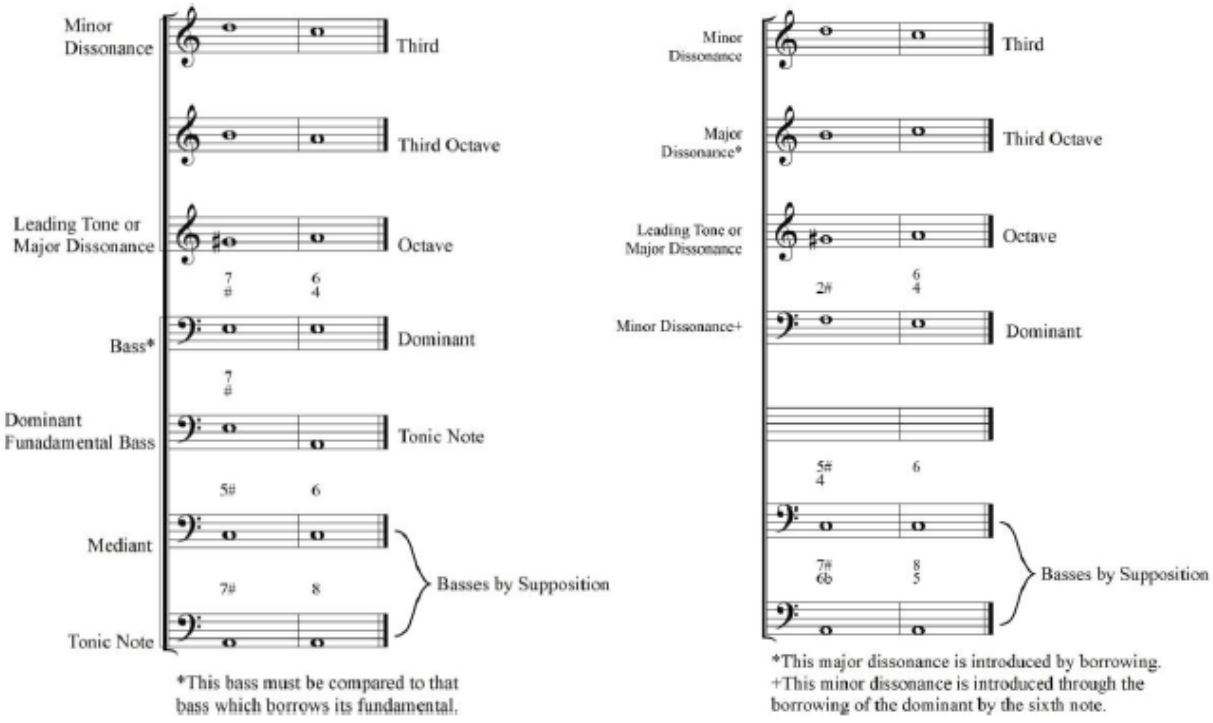
[150] For instance, Rameau points out that a complete mastery of thorough-bass harmonies would require the composer to memorize over 1600 seemingly different sonorities; see Jean-Philippe Rameau, "Observations sur la méthode d'accompagnement pour le clavecin qui est en usage, & qu'on appelle Echelle ou Règle de l'Octave", in *Mercure de France* (February, 1730), 253-4.

[151] For Rameau's explanation of inversion, see Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 34-8. For the present discussion, I shall take the *Traité de l'harmonie* as the definitive volume for Rameau's theoretical point of view. Admittedly, Rameau's position evolved over the course of his career—especially after his introduction of the *corps sonore*—but it is the *Traité* that Vallotti decries in the *Della Scienza*. Thus, when Vogler took his lessons in Italy, it would have been Vallotti's understanding of the *Traité*—or perhaps Marpurg's reimagination thereof—that they would have discussed. It may be that Vallotti's dislike of the *Traité* was so great that he never read any other materials by Rameau, however, I cannot at present substantiate this claim.

[152] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 45: "[The dominant seventh] is the source of all dissonances, for the major third of the perfect chord from which it is derived forms all major dissonances, & the minor third, which we add to the perfect chord in constructing the seventh chord, forms all minor dissonances…" (*il est la source de toutes les* dissonances*, la* Tierce majeure *qu'il tient de* l'Accord parfait *dont il dérive, forme toutes les* dissonances majeures*; & la* Tierce mineure*, qu'on ajoûte à cet* Accord parfait *pour en composer celui-cy, forme toutes les* dissonances mineures…)

[153] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 56: "The Seventh which comes from a Minor Third added to its perfect agreement, but still with the Major Third; so that this Third becomes dissonance compared to this Seventh; the first being the origin of all major dissonances; and the other one for all minors, without exception." (*La Septiéme qui provient d'une Tierce mineure ajoûtée à son accord parfait, mais encore avec la Tierce majeure; de sorte que cette Tierce devient dissonance par rapport à cette Septieme; la*

**Figure 3.1: Rameau's Example II.13, entitled "Perfect cadence in the minor mode" (LEFT) and "Perfect cadence in the minor mode avoided by borrowing" (RIGHT)[154]**




In the progression on the left, the D in the topmost voice is understood as the minor third added above B (or the minor seventh of E), and therefore must resolve downward to C. However, the leading tone, G#, resolves upward and, therefore must be accepted as the major third above E. The B in the alto voice does move downward, but since B is the consonant fifth above E, it does not require resolution; thus, the motion to A was not necessary. Rameau also notes in the bottom two staves that this same progression might appear supposed over a mediant or tonic pedal, resulting respectively in the so-called #5 and #7 chords.[155]

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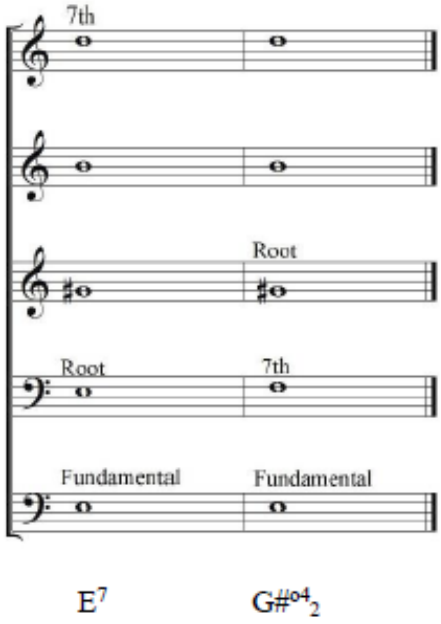
*premiere étant l'origine de toutes les dissonances majeures; et l'autre celle de toutes les mineures, sans aucune exception.*)

[154] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 80.

[155] There has been some discussion in the literature as to whether the French word *supposé* should be translated "sub-pose" or "suppose" in the context of Rameau's treatises. Those who argue for the former emphasize that *supposé* is derived from the Latin *sub-positio* and reflects the fact that the apparent bass is understood as having been added below the fundamental of the harmony; for instance, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 108-9. The later translation takes

The example on the right shows a variation of the left, which Rameau says allows the composer to mimic the previous example without supplying a proper cadence. This seemingly small alteration creates a considerably more complex method of resolution. The D, still a minor dissonance over B (or E), must resolve downward, as before, to C, but here the similarities end. Before the rest of this progression can be rendered comprehensible, one must first understand the means by which Rameau derives what present-day musicians would call "fully-diminished seventh chords."

**Figure 3.2: Rameau's derivation of the fully-diminished seventh chord and it fundamental**




For him, while these chords could be understood as a pair of tritones, he also argues that this method is not derivable from natural sources.[156] As such, he prefers to explain the fully-

its cues from traditional French pedagogy and argues that *supposé* actually refers to the fundamental bass, which appears—or, if physically absent, is understood—above (*posé au-dessus*) the apparent bass; see Steve Grazzini, "Rameau's Theory of Supposition and French Baroque Harmonic Practice," *Music Theory Spectrum* 38, no.2 (Fall 2016), 155-9. I find Grazzini's argument to be more persuasive and therefore consistently use "supposition."

[156] Specifically, Rameau says this harmony consists of a "false" (diminished) fifth and a "proportional" fourth. However, Rameau also believes that all fundamental chords must contain both a major third and a minor third. Since a diminished seventh chord only contains minor thirds, it cannot be one of his fundamental harmonies. See Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 41-2.

diminished seventh as a dominant seventh in which the root has been raised a diatonic half-step; for example, he gains $C\#^{o4}_{2}$ by raising the root of $A^7$ to Bb.[157] This means that the diminished seventh's native position is third inversion, though he does allow the harmony to be inverted after derivation. Interestingly, he argues that the fundamental of a diminished seventh chord is the same as that of the dominant seventh from which it was derived.[158] Put another way, in a diminished seventh chord, the seventh and fundamental are a half-step apart:

Thus while, in the righthand side of Figure 3.1, it might at first seem odd that the G# resolves upward to A—despite the fact that its previous fundamental, E, is missing (replaced by F)— Rameau would say that the absent E is understood as the real fundamental of the chord, forcing the G# to resolve as usual. Similarly, the apparent bass, F, is now the dissonant minor third of D (by inversion), and therefore must resolve downward. Finally, and most mysteriously, the alto voice is now labeled a major dissonance. For this to be the case, it must be the major third over G natural, a note which is simply not present.[159] It is possible that, at the time, Rameau was treating the B as the major seventh above the "bass by supposition", C. If this is correct, then he might have considered the G natural as the implied perfect fifth above said C, thus rationalizing the B's upward resolution. Nevertheless, this example does evidence a strong reliance on invertibility; within his commentary on this example, Rameau states that "if one

[157] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 42-3. Later in his career, Rameau conceives of a diminished seventh chord somewhat differently in that he allows the leading tone to be the fundamental. However, he still thinks of the harmony as an alteration of a dominant seventh; see Jean-Philippe Rameau, *Code de musique practique*, (Paris: Imprimerie Royale, 1761), 65.

[158] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 41-4.

[159] Interestingly, Rameau's own example suggests an alternate downward resolution to A; notice the annotation "Third, Octave" next to the C. Phillip Gossett adds a symbol where the A might have been, thus tacitly identifying the label "major dissonance" as a mistake on Rameau's part; see Jean-Philippe Rameau, *Traité de l'harmonie réduite à ses principes naturels*, trans., intro, and comm. by Phillip Gossett, (New York: Dover Publications, Inc., 1971), 94.

inverts the four upper parts, one will find the same conformity as is presently encountered here."[160]

Another important point in Rameau is his differentiation between seconds and ninths as well as fourths and elevenths. In Book One: Chapter Six of the *Traité*, Rameau comments:

> ...in practice doubled intervals are always treated as their simple counterparts, but we must exclude from this the ninth and the eleventh. Harmony classifies these intervals only under these names, because their progressions and the construction of their chords are quite different from those of the second and the fourth, whose doubles we might say they were.[161]

Rameau's subsequent argument could be interpreted to mean that, while melodic seconds and fourths frequently appear, harmonic seconds and fourths do not exist in and of themselves. For example, a harmonic second must either function as the inversion of a seventh or it is actually a ninth, reduced, in fact or perception, by transposing the upper note down by one or more octaves. In the former case, the lower note is the dissonance—for it would be a seventh above if inverted—and therefore must resolve as discussed in Figure 3.1. In the latter case, it is the upper note that is the dissonance, a ninth added beyond the dissonant seventh, and it must itself be resolved as appropriate to its major or minor quality. Similarly, a harmonic fourth can only be the inversion of a consonant fifth, a tritone (which bears its own rules of resolution), or a reduced eleventh, which must be resolved per the preceding rules.

For the purposes of this dissertation, three important factors result from Rameau's system. First, Rameau, much like the thoroughbass tradition, identifies almost every musical verticality as a distinct, irreducible event; while dissonances do require special treatment, they

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[160] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 80: *Si l'on renverse les quatre Parties superieures de part & d'autre, l'on y trouvera la même conformité qui s'y rencontre à present*.

[161] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 28-9. The translation above provided by Philip Gossett.

stand as an integral part of some simultaneity that need not be understood as an alteration of (or addition to) a consonant triad. Second, harmonic dissonances may appear in many guises, but these intervals are treated according to the core rule established by major and minor thirds or, by extension, sevenths. Finally, it must be understood that Rameau was not always the dedicated scholastic/scientist that he sometimes claimed to be. For example, while in Book 1 of the *Traité*, he performs the many calculations from which rationalists typically derived pitches, he does not seem to be convinced by their importance to composition:

> As for the first Book, it is, in some way, useless in practice, and one will make such use of it as one judges appropriate. I have placed it at the head of this treatise only for the proof of all that it contains concerning Harmony.[162]

Conversely, in the *Tonwissenschaft*, Vogler argues that the ratios encountered in music explain, among other things, the differences between various dissonances and their resolutions, thus affecting appropriate modes of composition.[163] The disparity between their positions is thus a matter of description (Rameau) versus prescription (Vogler). Related to this issue, Lester observes that "Rameau was too experienced a musician to eliminate musical practices from his theory that were irreconcilable with rigorous deductive or inductive methods."[164] Vogler is unimpressed by the cogence of Rameau's system, and perhaps jealous of Rameau's fame. Referring to Rameau's success in uprooting the thoroughbass tradition, Vogler proclaims that the Frenchman, "who tore down the disjointed old building, bumped into the ruins, fell upon it, and

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[162] Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), "Preface": *Pour ce qui est du premier Livre, il est, en quelque façon, inutile pour la pratique, & l'on en fera tel usage qu'on jugera à propos, ne l'ayant mis à la tête de ce Traité, que pour la preuve de tout ce qu'il contient touchant l'Harmonie*.

[163] For instance, he specifies various sevenths which appear above different scale degrees and explains that their slightly different sizes result in alternate rules of preparation and resolution; see Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 13-20.

[164] This quotation comes from Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 147; but pages 146-50 are more generally informative on this matter.

broke his neck."[165] This perceived insufficiency is probably one reason that Vogler sought, in 1780, to replace Rameau as premier music theorist in the annals of the Paris *Académie Royale des Sciences*; Vogler surely believed his own system to be more rationally derived and logically closed.[166] As discussed in the previous chapter, the tenet of reason most dear to Vogler is that a teacher must be able to provide students with immutable rules.[167]

Some previous scholarship has argued that Marpurg misinterpreted Rameau's ideas, but others insist that Marpurg intentionally appropriated the parts of Rameau with which he agreed and summarily discarded others.[168] Moreover, Joel Lester has argued that Marpurg's theories are actually closer to those of a thoroughbass theorist than a fundamental bassist.[169] As a result,

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[165] Georg Joseph Vogler, *Choral System*, (Kopenhagen: Haly'schen Musikhandlung, 1800), 8-9: "*der das unzusammenhängende alte Gebäude niedergerissen, an den Ruinen angestossen, gefallen, und den Hals gebrochen habe*…"

[166] Though, of course, he probably was not opposed to receiving the prestige as well.

[167] Vogler does allow for artistic license, provided that it does not conflict with the "laws of nature"; see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 1*, (Speyer: Bossler, 1781) 280-1; and Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3*, (Speyer: Bossler, 1781) 87.

[168] Many scholars accuse Marpurg of having never actually read Rameau's treatises. Instead, they argue that he only read the summary supplied by Jean Le Rond d'Alembert in his *Elémens de musique théorique et pratique suivant les principles de M. Rameau*, for which Marpurg created a translation and commentary entitled *Systematische Einleitung in der musicalischen Setzkunst, nach dem Lehrsätzen des Herrn Rameau*. D'Alembert had no interest in Rameau's empirical concerns, especially about the *corps sonore*, and therefore presents Rameau's theories as a rationale for musical science as pure logic. He makes little reference to its practical application. This presumably would explain many of Marpurg's misrepresentations of Rameau's conception of fundamental bass. Conversely, other writers emphasize that whether Marpurg's knowledge of Rameau came via D'Alembert or not, his obvious alteration of Rameau's principles was necessary to make fundamental bass compatible with the German music-pedagogy tradition. This area of scholarship is widely discussed; I will therefore only supply a representative of each camp. For those who blame Marpurg for misrepresentation, see Dagmar Comtesse and Moritz Epple, "Between Appropriation and Rejection: Translating D'Alembert into German, and D'Alembert on Translation," *Centaurus* 59, no. 4 (November 2017): 329–41. For those who emphasize Marpurg's selective borrowing, see David A. Sheldon, *Marpurg's Thoroughbass and Composition Handbook: A Narrative Translation and Critical Study*, (Stuyvesant, NY: Pendragon Press, 1989), x.

[169] For example, Marpurg is either unaware of or unconvinced by Rameau's understanding of chord invertibility. Instead, he employs a system of "pseudo-dissonances" (*Pseudodissonanzen*) to explain the resolution of a $^{6}_{5}$ chord, in a formulation similar to that of C. P. E. Bach (discussed above); concerning this and other thoroughbass-like convictions expressed in Marpurg, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 236-7. Another issue that complicates Marpurg's position is that, contrary to many of his predecessors and contemporaries (C. P. E. Bach, J. S. Bach, Rameau, etc.), Marpurg argues that two- (not four-) voice composition is the proper place to begin learning the craft; see Friedrich Wilhelm

one might initially dismiss him as irrelevant to a discussion on Vogler's understanding of fundamental bass. However, over the course of a long career writing treatises and periodicals (nearly twenty different items prior to Vogler's *Tonwissenschaft*), Marpurg asserts two points that Vogler might have found important to his understanding of harmony. First, unlike Rameau, Marpurg allows diminished triads to take the status of fundamental chords.[170] As a result, Marpurg also does not explain diminished seventh chords as an alteration of a dominant seventh, as encountered in Rameau's example above; a diminished seventh (either half or full) is a normal seventh chord and be freely inverted.[171] Second, Marpurg suggests a change in eighteenth-century terminology for dissonances by specifying that unaccented notes (*Nebennoten*) can either be part of the current harmony (*harmonischer Nebennoten*) or dissonant melodic embellishments (*melodische Nebennoten*).[172] In this way, he is able to account for almost all non-harmonic tones, with the exception that he follows Rameau in explaining suspensions by supposition.[173]

## Italian Roots

Vallotti's *Della scienza teorica, e pratica della moderna musica* is, in no small part,

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Marpurg, *Handbuch bey dem Generalbasse und der Composition*, (Berlin: Verlag Johann Jacob Schüzens Wittwe, 1755), 223 ff.

[170] Friedrich Wilhelm Marpurg, *Handbuch bey dem Generalbasse und der Composition*, (Berlin: Verlag Johann Jacob Schüzens Wittwe, 1755), 37-40.

[171] Marpurg's discussion of diminished sevenths is dispersed throughout: Friedrich Wilhelm Marpurg, *Handbuch bey dem Generalbasse und der Composition*, (Berlin: Verlag Johann Jacob Schüzens Wittwe, 1755), 89-145. For a condensed discussion of this issue, see David A. Sheldon, *Marpurg's Thoroughbass and Composition Handbook: A Narrative Translation and Critical Study*, (Stuyvesant, NY: Pendragon Press, 1989), 76-80.

[172] Wilhelm Friedrich Marpurg, *Anleitung zur Musik überhaupt*, (Berlin: Arnold Wever, 1763), 144-5. Marpurg calls general melodic embellishments *Manieren* and divides them into two categories: *Setzmanieren*, which are predetermined by the composer and appear in the score, and *Spielmanieren*, which are strictly improvisatory and are added by the performer; see Friedrich Wilhelm Marpurg, *Anleitung zum Clavierspielen*, (Berlin: Gaude und Spener, 1765), 36-45. The present study will not address the role of *Spielmanieren* since they do not effect on Marpurg's conception of fundamental bass itself.

[173] On the resolution of suspensions by supposition, see Friedrich Wilhelm Marpurg, *Anleitung zum Clavierspielen*, (Berlin: Gaude und Spener, 1765), 144-56.

dedicated to diminishing the importance of Rameau's brand of fundamental bass. Indeed, Rameau is one of only two authors that Vallotti paints in a negative light—the other being Johannes Kepler, with whom his disagreement is in "good peace" (*buona pace*).[174] Moreover, Rameau is the only author to whose refutation Vallotti dedicates an entire chapter of the treatise.[175] To begin the debate, Vallotti writes:

> ...it seems necessary to examine the system of dissonances of Mr. Rameau...noting the important defects, so that the inexperienced youth will not embrace it with his eyes closed, having been dazzled by his [Rameau's] fame and the praise of his fellow countrymen.176

Vallotti then proceeds to attack Rameau's concept of *supposition*, not by rejecting the possibility of added notes, but rather due to Rameau's reduction of all dissonances to chordal sevenths. He first observes that:

> Rameau argues that there is only one dissonance in music, that is, the minor 7th, and that to it the 9th and 11th are reduced, assuming the fundamental bass is a 3rd or a 5th above the basso continuo, from which it is later called bass due to supposition...177

This accusation is, as previously seen, not quite consistent with Rameau's principles. This is possibly due to the fact that Vallotti probably did not actually read Rameau's treatises themselves.[178] However, Vallotti continues:

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[174] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 23.

[175] Specifically, this is Chapter XXXII; see Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 96-100.

[176] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 97: *...sembrami necessario di esaminar il sistema delle dissonanze di M.r Rameau...rilevandone gl' importanti difetti, acciò l' inesperta Gioventù abbagliata dalla fama, e dagli elogi de' suoi nazionali, non lo abbracci ad occhi chiusi*.

[177] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 97: *Sostiene dunque M.r Rameau, che una sola dissonanza v' è nella Musica, cioè la 7.a minore, e che ad essa si riducono e la 9.a e l'11.a, supponendo il Basso fondamentale una 3.a, o una 5.a sopra il Basso continuo, da esso poi chiamato Basso per* supposizione...

[178] Specifically, it is possible that Vallotti may have fallen into the same trap as other musicians and read D'Alembert's simplification of Rameau. It is also possible that Vallotti had access to an Italian translation of the Traité which did not properly represent the original. While I cannot unequivocally show either of these possibilities

> The 7th has so many and again so many privileges, that only belong to it: and more so the minor than the major one. If therefore the 9th and 11th do not enjoy the same prerogatives (and this is in fact truth) how may they be the same as the 7th![179]

Rameau's mistake, Vallotti argues, is that:

> ...he has forgotten the difference that passes between harmony and melody. In fact, the 9th e.g., considered in the melody, is a replication of the 2nd, and as such preserves its original nature. And whereas the minor, the major, and the augmented 2nd is the same as the 9th in the melody, if you consider it in harmony, it is no longer the same, and changes its nature.180

This too is not a fair assessment of Rameau's stance, since he believes that melody is derived from harmony. In this sense, Rameau has not "forgotten" the difference; he has chosen to privilege one over the other. Nevertheless, Vallotti continues with an example:

> Mr. Rameau concedes that the 9th is obliged to be prepared, held, and resolved. But how can he make use of the augmented 9th, which does not take place in harmony, and by its very nature dislikes resolution?181

Vallotti completes the discussion of this topic by stating:

> ...where there are three different types of the 7th, not less in the melody than in the harmony; of the 9th, while there are three in the melody, only two in the harmony; and of

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to be the case, it is interesting to note that Vallotti cites Rameau several times, and said citations are occasionally incorrect; compare for instance Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 98; and Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 28-9. It is also interesting that when Vallotti cites Rameau, he always presents the treatise names in Italian (not French) and never provides the original quotation; meanwhile, he always cites other authors (Aristoxenus, Cicero, Kepler, Ptolemy, etc.) in Greek or Latin as appropriate, and frequently provides the entire quotation.

[179] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 98: *La 7.ª ha tanti e poi tanti privilegi, che ad essa solamente appartengono: e più assai la minore, che la maggiore. Se dunque la 9.ª, e l' 11.ª non godono le stesse prerogative (ed è verità di fatto) come mai posson essere la stessa 7.ª!*

[180] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 99: *...essersi egli dimenticato la differenza che passa fra l'armonia e la melodia. Infatti la 9.ª e. gr. considerata nella melodia è una replicazione della 2.ª, e come tale conserva l'originaria sua natura. E siccome v' è la 2.ª minore, la maggiore, e l'eccedente, così pure è della 9.ª nella melodia. Che se prendasi a considerare nell' armonia, non è più quella stessa, e cambia natura.*

[181] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 99: *Concede infatti M.r Rameau, che la 9.ª è obbligata a preparazione, legatura, e risoluzione. Ma come mai potrà egli far uso della 9.ª eccedente, che non ha luogo nel'' armonia, e per natura sua ripugna alla risoluzione?*

this, the clear consequence is, that the 9th is not the 7th, nor derived from it.[182]

To understand Vallotti's logic, one must realize that Vallotti's "three different types of the 7th" do not count a diminished or augmented interval among them.[183] Rather, in addition to a major seventh, Vallotti recognizes two different minor sevenths: one calculated above the dominant ($^{9}/_{16}$) and the other calculated above the mediant ($^{5}/_{9}$).[184] This, he says is an important distinction because the former, being "less harsh to the hearing," may be sounded freely and occasionally resolve up; meanwhile, the latter must be treated with greater care. Conversely, Vallotti only identifies two harmonic ninths, the major and minor, since the augmented ninth only appears melodically.[185] While Vallotti does not mention the possibility of a diminished ninth, his harmonic tenets would doubtlessly force him to dismiss it on the basis of aural consonance, just like the augmented ninth.

From all of this, Vallotti concludes, as Calegari previously did, that beyond the seventh there are three other independent dissonances: the ninth, eleventh, and thirteen.[186] In his system, all intervals contained within an octave (other than the seventh) are consonances, and

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[182] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 100: *laddove delle 7.e ne sono tre differenti, non meno nella melodia che nell' armonia; delle 9.e tre bensì ne sono nella melodia, ma due solamente nell' armonia; e di ciò la chiara conseguenza si è, che la 9.a non è la 7.a, nè da questa deriva.*

[183] Unsurprisingly, most authors of the time seem to agree that all augmented and diminished intervals are dissonant. However, many also discuss the relative dissonance of intervals. For instance, Marpurg identifies diminished fifths and augmented fourths as "pseudo-consonances" (*Pseudoconsonanzen*) because they are less-dissonant sounding, and they frequently arise without preparation; see Friedrich Wilhelm Marpurg, *Handbuch bey dem Generalbasse und der Composition*, (Berlin: Verlag Johann Jacob Schüzens Wittwe, 1755), 79.

[184] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 101.

[185] Interestingly, Vallotti actually does identify three harmonic ninths because, in addition to the minor ninth, he calculates two different major ninths. He says that the two are only a comma apart and are treated equivalently in musical context; therefore, they are effectively the same. See Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 104.

[186] Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 100.

dissonances must be taken from intervals larger than an octave. Significantly, this means that apparent seconds, fourths, and sixths, though not part of the *accordo consonante*, are also not inherently dissonances; they are either 1) inversions (*rivolti*) of intervals contained with the consonant triad, or 2) alternate voicings of the true dissonances: the seventh, ninth, eleventh, and thirteenth. This approach makes interval identity dependent upon the relationship between consonance and dissonance—rather than the other way around—and both of these items are contingent upon the recognition of the active consonant triad. For example, while a fourth is consonant, an eleventh is dissonant. In the collection: D-F-G-B, where D is the apparent bass, G Major is the active triad—though, obviously, it bears the chordal seventh, F. This results in a consonant fourth between D and G, because it stands in for the fifth G to D. Conversely, if the collection is G-B-C-D, the fourth, G to C, is actually an eleventh, and embellishes a perfectly consonant G Major triad.[187] Finally, in a move completely foreign to Rameau's methods, Vallotti allows for the dissonant thirteenth, provided that there are enough chord members that the thirteenth cannot be an inverted third.[188]

One result of this way of thinking is that, similar to Rameau's opinion, the interval of a second can only exist melodically; a harmonic second actually stands in for some other dissonant interval. In the collection: F-G-B-D, where F is the apparent bass, the interval of a second between F and G is dissonant, not because it is a second, but rather because it represents the seventh that would be present if the chord were in root position. In the collection G-A-B-D, the

[187] Rameau agrees with Vallotti in regard to the difference between a fourth and eleventh but disagree as to the method of resolution; see Jean-Philippe Rameau, *Traité de l'harmonie, (*Paris: Jean-Baptiste-Christophe Ballard, 1722), 79.

[188] Vallotti accuses, not only Rameau, but most modern musicians of being ignorant concerning the importance of the thirteenth. He does however credit Martini with having previously put forward a similar idea; Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 110-2.

second between G and A is, by Vallotti's system, not a second at all; in reality, it is a dissonant ninth moved down into close proximity with the bass. The true chord is, once again, G Major, and the A, as a ninth, would require downward resolution. This last example stands in slight contrast to Rameau, whose system would probably understand A as the inverted minor seventh over B.

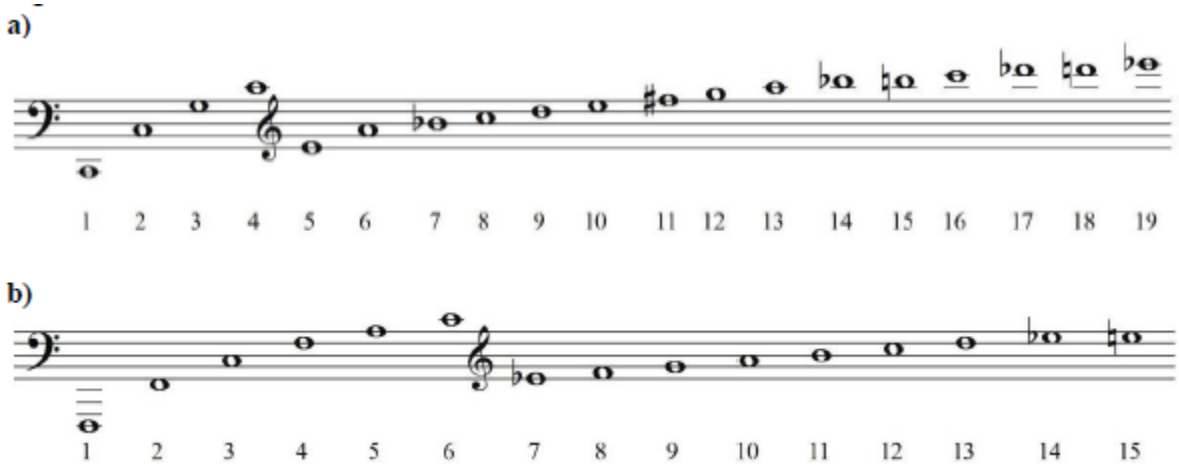
Another integral part of Vallotti's system is the way he rationalizes the existence of the minor key. In Vallotti's way of thinking, the challenge in this situation is not to provide the pitch collection used in the *mollis*; rather, it is to show that the minor triad on C is just as naturally occurring as the major triad on C and is, therefore, suitable as a tonic harmony. By the mid-eighteenth century, this challenge had been greatly problematized as writings on acoustics (particularly those of Joseph Sauveur) became well known. The difficulty is finding the requisite Eb, which does not occur in the C overtone series until the 19th partial (see Figure 3.3a): much too removed from the fundamental to be accepted by most theorists or practitioners of music.[189] Numerous authors had attempted to circumvent this problem in a variety of ways; for example, Rameau accepts the minor tonic on the basis of is parallel construction with the major tonic.[190] Vallotti remains unconvinced by all previous efforts and mounts his own proof in an unprecedented fashion. Simply put, Vallotti believes that other theorists fail in this endeavor because they insist on deriving the key of C from the overtone series of C. A better approach, he believes, is to find both C Major and C Minor in the overtone series of F as in Figure 3.3b. Vallotti seems untroubled by the fact that this choice makes C minor appear more fundamental

[189] Vallotti himself does not actually use the term "overtone series." Instead, he references Sauveur's discussion of the aliquot parts of a string and frames his discussion in terms his own variant of the monochord.

[190] Rameau's argument for this property, though ultimately insufficient, is more nuanced that can be appropriately covered here; for a more complete summary, see David Lewin, "Two Interesting Passages in Rameau's *Traite de l'harmonie*," *In Theory Only* 4, no. 3 (July 1978), 3-11.

than C Major (since E natural does not occur until the 15th partial). He asserts that "the natural harmony in every piece relies on the major mode…without artifice neither the harmony nor the mode of the minor third can be formed."[191] Thereafter, he treats the usage of a string tuned to F as a secure foundation for the system.

**Figure 3.3: The overtone series on C and F:**




Vogler's *Tonwissenschaft* is decidedly indebted to Vallotti's way of thinking rather than those of his French or German contemporaries. For example, Vogler directly adopts Vallotti's derivation of pitch content from the F overtone series, and he continues to hold that mathematical relationships explain, not only the pitches available in music, but also their proper deployment as consonance or dissonance.[192] Among other things, Vogler also expands upon Vallotti's aforementioned differentiation between the seventh above the dominant and the seventh above the mediant; Vogler allows for seven separate sevenths, including two different diminished

[191] *[L]'armonia naturale per ogni conto si manifesta appoggiata al Modo maggiore…senza artifizio no può formarsi nè armonia, nè modo di Terza minore*; Francesco Antonio Vallotti, *Della scienza teorica, e pratica della moderna musica*, (Padua: Stamperia del Seminario, 1779), 110-2.

[192] Vogler also points out that, using the F overtone series, one can acquire the pitches of C major in order (albeit rotated) from the 8th to 15th partial, whereas the same feat would require the 12th to 23rd partial in the C overtone series; see Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 3 ff.

sevenths.[193] Moreover, Vogler's inherited concept of dissonance flies in the face of Marpurg, Rameau, C. P. E. Bach, and the thoroughbass tradition in general:

> Just as the consonances always remain consonances, even if they are moved and the numbering changed: so, dissonances remain dissonances, even if they are moved. And here, by inversion, for the first time, the following digits have place:
>
> The Second. The Fourth. The Sixth.
>
> For, if one places the seventh in the bass, the root becomes the second; the third becomes the fourth; the fifth becomes the Sixth. e.g.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| G | b | d | f | \| | F | g | b | d |
| Root | 3 | 5 | 7 | | bass note | 2 | 4 | 6194 |

Following Vallotti's example, Vogler continues:

> …the second, fourth, and sixth are not dissonances since, if one searches for the root, they become consonances…But the ninth, the eleventh, and the thirteenth are dissonances; since, if one searches for the root with all its consonances, they always remain in the farthest ratios from the root.[195]

Thus, while it is difficult to determine whether Vogler was familiar with the writings of his French and German predecessors before writing the *Tonwissenschaft*, it is clear that his system, at least as it stood in 1776, was decidedly against their formulations of fundamental bass, though he may have garnered smaller ideas from them. These differences become all the more important when one considers that Vogler began transmitting these essentially Italian tenets to his students in the Mannheim Tonschule upon his return to Germany. It is even possible that,

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[193] Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 17-19.

[194] Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 24: *Gleichwie die Wohlklänge immer Wohlklänge bleiben, wenn sie auch versezet sind, und die Bezieferung verändert wird: so bleiben die Übelklänge auch Übelklänge, wenn sie schon versezet sind. Und hier, bei den Umwendungen haben erst folgende Ziefern Plaz:*

*Die Zweite. Die Vierte. Die Sechste.*

*Denn, leget man die Siebente zum Grunde: so wird der Hauptklang zur Zweiten; die Dritte zur Vierten; die Fünfte zur Sechsten werden. z.B.*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *G* | *h* | *d* | *f* | \| | *F* | *g* | *h* | *d* |
| *Hauptklang* | *3* | *5* | *7* | | *Grundstimme* | *2* | *4* | *6* |

[195] Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 25-6: *Also sind die Zweite, Vierte, Sechste, keine Übelklänge, weil, wenn man den Hauptklang erforschet, sie zu Wohlklängen werden…Die Neunte aber, die Elfte, und Dreizehnte sind Übelklänge; weil, wenn man den Hauptklang mit allen seinen Wohlklängen erforschet, sie immer in der weit entfernten Verhältnis von dem Hauptklange bleiben.*

through the publication of his *Tonwissenschaft*, as well as the *Betrachtungen der Mannheimer Tonschule*, he may have introduced some Italian ideas into the writings of Kirnberger and Koch, though tracing such a line of influence is a project for another time.

## Heinichen, Kirnberger, and Vogler's *Handbuch zur Harmonielehre*

The *Tonwissenschaft* was written as a general accompanying text for Vogler's lectures at the Mannheim Tonschule; the *Handbuch zur Harmonielehre*, was intended to serve a similar purpose during his time as a guest professor at the University of Prague (1801-1802).[196] A cursory examination of the topics discussed therein might lure the reader into believing that the *Handbuch* is simply a rewording of the *Tonwissenschaft*, perhaps in an attempt to make Vogler's theory more accessible. Yet, this begs the question: why would Vogler write a new volume when he could have simply reprinted the *Tonwissenschaft*? Floyd K. Grave and Margaret G. Grave point to "significant changes in order and in manner of presentation," by which the *Handbuch* "addresses a more sophisticated reader," though they elaborate very little on this point.[197] Nevertheless, they make one important statement that inspires further examination:

> In the *Handbuch zur Harmonielehre*…restrictions evident in the *Tonwissenschaft und Tonsezkunst* are substantially loosened. The domain of surface embellishment has been expanded…[198]

The remainder of this chapter serves partially to make this difference more explicit. My primary

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[196] Vogler's writings should not be understood as so-called "textbooks," since, as Carl Maria von Weber explains, none of these volumes contain a comprehensive overview of Vogler's entire system; see Max Maria von Weber, *Carl Maria von Weber: Ein Lebensbild*, Vol. 3, (Leipzig: Ernst Keil, 1866), 8-10; and Floyd K. Grave, "Abbé Vogler and the Bach Legacy," *Eighteenth-Century Studies* 13, no. 2 (Winter 1979-1980), 119-20.

[197] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 17-18. Additionally, these two authors show a difference between the two volumes with regard to Vogler's derivation for the diminished seventh over the supertonic of the minor key; Ibid. 26-7.

[198] Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 66.

purpose, however, is to show that this change in Vogler's explanation of harmony—in addition to evidencing a desire to explore "the potentials of his system afresh"—also signal his incorporation/adaptation of harmonic principles that are foreign to the *Tonwissenschaft* because they are derived from German musical practice rather than the Italian practice on which Vogler previously relied.[199] Specifically, over the course of the 18th century, a group of German writers, of whom Heinichen and Kirnberger shall stand as representatives, developed still another version of fundamental bass principles. While Vogler would certainly never acknowledge influence from these sources, the *Handbuch* makes it obvious that Heinichen and Kirnberger's line of reasoning changed Vogler's understanding of non-harmonic tones.[200]

Ludwig Holtmeier has explored how Johann David Heinichen—who, like Vogler, was Italian minded—influenced the 18th-19th-century tradition of German music pedagogy (particularly the *Harmonielehre* tradition).[201] Among other important points, he asserts that Heinichen's explanation of the Rule of the Octave (in his 1728 volume, *Der General-Bass in der Composition*) is indirectly responsible for the creation of a uniquely German understanding of

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[199] The internal quotation is taken from Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 18.

[200] Vogler does cite many sources, but almost exclusively if they are older (Greek/Latin-language) treatises. When he does cite more modern sources (particularly those in French or German), it is usually for the purpose of criticism; for instance, see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule, Dritten Jahrganges, zweite Hälfte, siebente Lieferung*, (Speyer: Bossler, 1781), 1-22. In it, Vogler offers an extensive, negative review of Kirnberger's *Die Kunst des reinen Satzes in der Musik*. Vogler's main goal is to attack Kirnberger's distinction between the "strict" (*strenge*) and "lighter" (*leichter*) styles of composition. Vogler argues that the rules of music are based in natural, scientific principles, and therefore are no different in either situation. For Kirnberger's discussion of the differences he perceives in these styles, see Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774), 80-90.

[201] Holtmeier is primarily concerned with how Heinichen, thoroughbass, and the Rule of the Octave affected the pedagogical style of J.S. Bach, but he rightfully stresses that his findings have much broader implications; see Ludwig Holtmeier, "Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave," *Journal of Music Theory* 51, no. 1 (Spring 2007). Heinichen received no direct training from Italian masters, but, possessing of a love for Italian opera, he spent several years in Italy (mostly Venice), absorbing the style; see George J. Buelow, "Heinichen, Johann David," In *Grove Music Online*, accessed November, 30, 2020. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.12688.

fundamental bass.[202] This is accomplished by systematizing the Rule of the Octave, that is, making the Rule of the Octave part of a system of music theory, rather than simply a device of performance practice.[203] A point that Holtmeier does not pursue, however, is how this new way of understanding harmony affects how its proponents think about non-harmonic tones. If the Rule of the Octave is taken as a standard to which all music should be compared, many of the more complex verticalities recognized by the thoroughbass tradition cease to be accepted as independent harmonies and are grouped with simpler harmonies, from which they seem to be derived. Put another way, if a given harmony does not look like one of those suggested by the Rule of the Octave, then that harmony is somehow deviant from its true form.

The chords in Figure 3.4, all of which are discussed separately by C. P. E. Bach can easily be gathered into three groups in Heinichen's system.[204] These groups arise out of the fact that Heinichen conceives of harmonies as having an internal hierarchy: some chord members are more or less essential depending on the contrapuntal context. Following Holtmeier's precedent, I call the two most essential voices of Heinichen's harmonies, "framing voices."[205] Framing voices are, in some ways similar to, and often coincide with, the traditional contrapuntal clausula

[202] Holtmeier argues that the Rule of the Octave presents its harmonies apart from their usual rhythmic context. This weakens the bonds of contrapuntal motions and thus strengthens the sense that each harmony stands independently from the others; see Ludwig Holtmeier, "Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave," *Journal of Music Theory* 51, no. 1 (Spring 2007): 18. Once harmony was "emancipated" from its dependence on counterpoint, Rameau and Heinichen simply took the extra step of grouping verticalities with similar pitch contents, thereby allowing universal harmonic inversion.

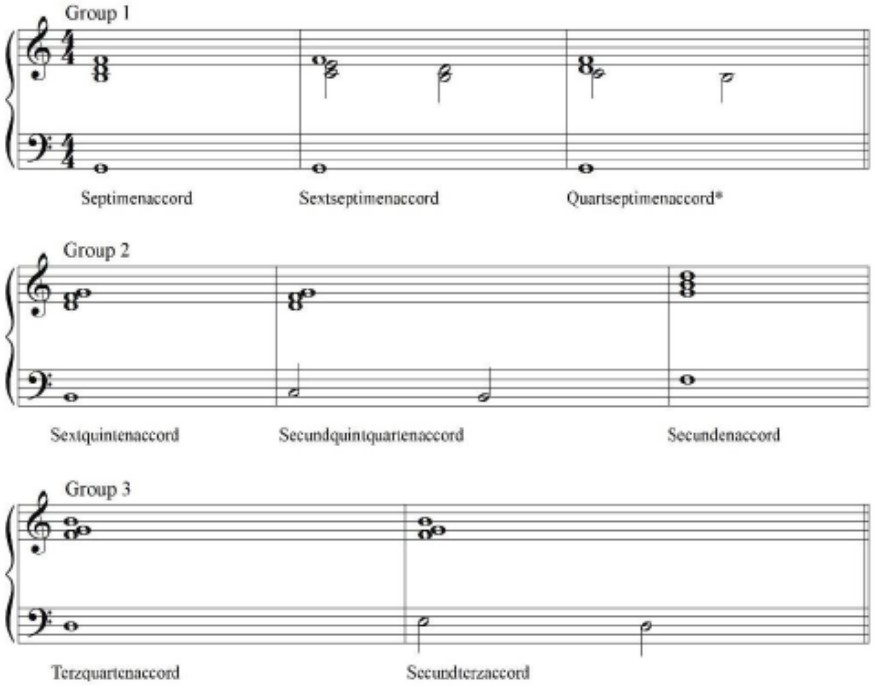
[203] Ludwig Holtmeier, "Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave," *Journal of Music Theory* 51, no. 1 (Spring 2007): 25-31 ff.

[204] It is important to note that, in spite of C. P. E. Bach's likely familiarity with Heinichen's treatise, he does not appear to accept this portion of Heinichen's system. This could, for example, indicate a direct rejection on C. P. E. Bach's part, a simple oversight, or a refusal to credit his source; I am unable to substantiate any specific one of these possibilities at this time.

[205] For a summary of the historical importance of these framing voices, see Ludwig Holtmeier, "Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave," *Journal of Music Theory* 51, no. 1 (Spring 2007): 15-6, 32-38, ff.

motions (*cantizans*, *altizans*, *tenorizans*, *bassizans*), but these two musical properties should not be confused. In Group 1, the framing voices are the bass note, G, and the seventh, F; in Group 2, the framing voices are those that outline the tritone (B and F); and chords in Group 3 are framed by the major sixth (D to B).[206]

**Figure 3.4: Groups of similar thoroughbass harmonies according to Heinichen's system[207]**




*The Quartseptimenaccord functions almost like a category in itself. According to Bach, the three upper voices are flexible in their application. The minor seventh (F) can be replaced with the diminished seventh (Fb); the perfect fifth (D) can be replaced with the diminished fifth (Db) or the augmented fifth (D#); finally, the perfect fourth (C) can be replaced by the diminished (Cb) or augmented (C#) fourth. In any combination of these options, the seventh must resolve down by step while the other two voices' resolutions are dependent on their quality.

Heinichen does not make this distinction in order to present these harmonies as entirely separate; rather, it gives him a means to explain how to choose appropriate chord members to double or

[206] Heinichen argues that the framing voices of Bach's Septimenaccord could instead be the leading tone, B, and the seventh, F. This is the case when the bass does not resolve as expected by leaping to the tonic, as occurs in a deceptive motion. In such a case, the Septimenaccord would belong more to Group 2.

[207] I created this figure to facilitate the comparison of C. P. E. Bach and Heinichen's systems; the figure does reflect any example or direct comparison by Heinichen himself.

eliminate as the number of voices in a work rises or falls. As long as the framing voices are in place and proper resolutions are observed, the composer can easily deploy as many or as few contrapuntal lines as he wishes and still maintain the sense that one harmony (not simply a set of consonant and dissonant intervals) is moving to another. Moreover, the Rule of the Octave makes most of the chords in a group interchangeable, both with each other and the simpler triad contained within the seventh chord.[208] In short, while this thought process is derived from contrapuntal practice, it privileges harmonic content and harmonic identity more strongly than most other thoroughbass systems in the early 18th century.

Heinichen's effect on music theory and composition in 18th-century Germany was far-reaching, in part due to its support by the so-called Bach Circle.[209] Though it is admittedly difficult to trace an exact line of transmission, Kirnberger should be understood as participating in the web of influence surrounding the Bach family; this, I argue, includes a certain regard for the writings of Heinichen.[210] David Beach has already identified some ways in which Kirnberger takes cues from Heinichen.[211] However, as further proof—and more relevant to

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[208] Even if a triad is chosen (as opposed to the seventh chord), the framing voices must be preserved. For example, in any of the chords of Group 2, the B and F must remain; this make G and extraneous note, and the triad must be diminished.

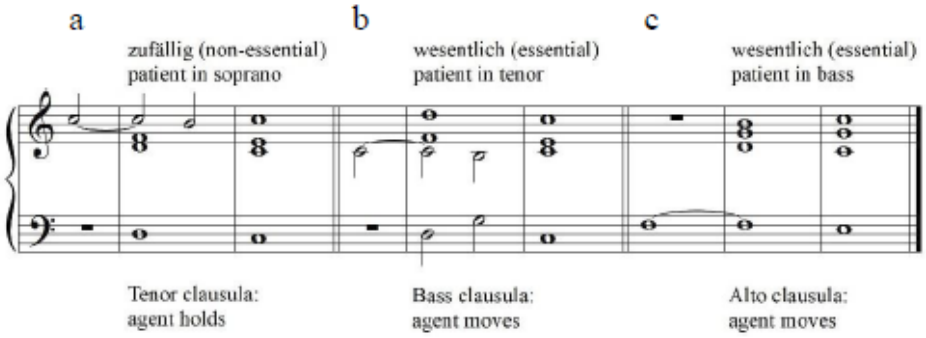
[209] Heinichen's system was directly supported by the Bach household; see Derek Remeš, "New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach's Compositional Pedagogy," ZGMTH 16 no. 2 (2019), 63-4.

[210] Recent scholarship has brought into question Kirnberger's apprenticeship/relationship to the Bach family; see Derek Remeš, "New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach's Compositional Pedagogy," ZGMTH 16 no. 2 (2019), 60-2. Nevertheless, Kirnberger credits J. S. Bach with a number of his own theoretical convictions, including his ordering of thoroughbass pedagogy; see Johann Philipp Kirnberger, *Gedanken über die verschiedenen Lehrarten in der Komposition, als Vorbereitung zur Fugenkenntniss*, (Vienna: Verlag der K. K. priv. chemischen Druckerey am Graben, 1782) 4-5.

[211] See, for instance footnotes b and c in Johann Philipp Kirnberger, *The Art of Strict Musical Composition,* trans. by David Beach and Jurgen Thym, comm. by David Beach. (New Haven and London: Yale University Press, 1982) 101-2. Other scholars have also observed that some knowledge of Heinichen may have come to other writers, such as Kirnberger, through David Kellner's popular 1732 thoroughbass manual, *Treulicher Unterricht im General-Bass*; see Derek Remeš, "New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach's Compositional Pedagogy," ZGMTH 16 no. 2 (2019), 64; and Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 125-6.

Vogler—I offer an example from Kirnberger's famous separation of essential and non-essential dissonances. For Kirnberger, dissonances consist of two main elements: the "patient" and "agent," as Derek Remeŝ calls them.[212] The "patient" must always be the dissonant voice, and the "agent" is the bass note.[213] If the bass is the dissonance, then it is both agent and patient:

**Figure 3.5: Kirnberger's distinction between essential and non-essential dissonances**




In Figure 3.5a, the dissonant C functions as a non-essential (*zufällige*) dissonance, because it resolves without a change in the bass note. The C's presence is, in a sense, harmonically superfluous, or, as Kirnberger says, "these suspensions are not necessary" (*diese Vorhälte nicht nothwendig sind*).[214] Conversely, in 3.5b and c, the resolution of dissonance coincides with a harmonic change; these dissonances "do not stand in the place of a consonance" (*nicht an der Stelle einer Consonanz gesetzt werden*), causing them to be essential (*wesentlich*) to the harmonic framework.[215] Interestingly, the F in the alto voice of 3.5a and b, which begins as the

[212] Derek Remeš, "New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach's Compositional Pedagogy," ZGMTH 16 no. 2 (2019), 77.

[213] Implicit in Kirnberger's understanding of suspensions is that the bass can only be a dissonance if it is accompanied by a harmonic second. In this case, the bass can only be an essential dissonance if it appears with the sixth, fourth, and second (or suspensions that delay these); otherwise, the bass is a non-essential dissonance. For Kirnberger's explanation of suspensions, see Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774), 26-33. Kirnberger also identifies a third-inversion, half- or fully-diminished seventh chord on the leading tone as a dominant seventh with a dissonant bass; Ibid., 90.

[214] Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774), 30.

[215] Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774), 30.

consonant third over D, becomes an essential dissonance over the dominant once the dissonant C resolves down to B.[216]

Kirnberger's identification of essential and non-essential dissonances is at least compatible with, if not derived from, Heinichen's concept of framing voices. In Figures 3.5a and b, Heinichen and Kirnberger, along with many others, would assert that the dissonant C stands in for the expected B. Thus, the two framing voices that Heinichen would recognize in both cases are the bass note, D, and the upper voice C. Similarly, Kirnberger would identify the D as "agent" and the C as "patient." The only difference between the two progressions is the non-essential (3.5a) or essential (3.5b) quality of the seventh itself. Indeed, if one re-examines the chords of Figure 3.4, it is notable that, in Groups 1 and 2, Kirnberger's agent and patient correspond completely with Heinichen's framing voices, except when the chordal seventh lies in the bass (as in Figure 3.5c); in this scenario, while Heinichen would identify both F and B as framing voices, Kirnberger is only concerned about the F in the bass. The only glaring difference between these two systems of dissonance is the fact that, in a second-inversion seventh chord, Kirnberger chooses F as the patient voice over the agent D, whereas Heinichen, as previously stated, accepts the upper B as his framing voice over the D. This is likely due to Kirnberger's belief that chord members maintain their identity, even in inversion; thus, the F is dissonant in any chordal position.[217]

Regardless of the differences between Heinichen and Kirnberger, their means of dealing

[216] It should also be noted that Kirnberger does not specifically discuss the various inversions of non-dominant sevenths, but his previously-mentioned understanding of suspensions makes these harmonic analyses compulsory.

[217] Heinichen does acknowledge the role of inversion in creating new positions for harmonies, but, as Lester argues, Heinichen probably inherited this idea, perhaps indirectly, from Rameau; see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 55. Importantly, Rameau and Heinichen only think of inversion as a rotation of the chord members and, therefore, do not identify chordal roots; see above where Rameau's derivation of the diminished seventh chord is discussed.

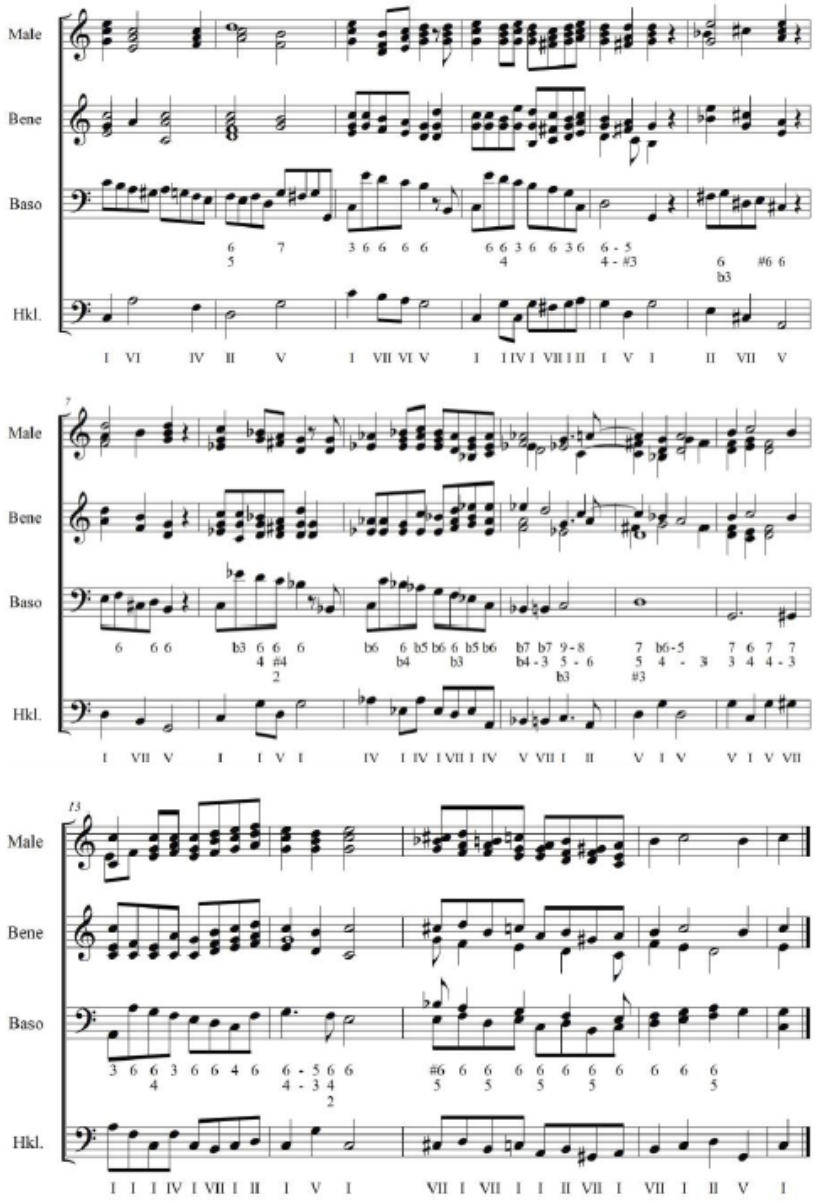
with dissonance leads them to develop another concept that greatly affected Vogler's system: harmonic reduction.[218] When Heinichen says that the Rule of the Octave gives the true chords into which dissonances resolve, or when Kirnberger says that certain dissonances are not essential, they mean that once non-harmonic tones have been reduced out, only more commonplace harmonies should remain. Over several years, Vogler slowly incorporated this idea into his own theories, creating a broad progression of thought from the *Tonwissenschaft* to the *Handbuch*. While the *Tonwissenschaft* (1776) does allow for the inversion of triads and seventh chords, it does not contain any system of reduction; this forces Vogler to explain the resolution of many extended dissonant harmonies without reference to an implied triadic scaffolding, a strategy that is not wholly unlike the thoroughbass tradition. As early as the first volume of the *Betrachtungen* (1778), Vogler starts providing pedagogical examples of reduction. By the time Vogler writes the *Choral-System* (1800), he employs the term "*Redukzion*."[219] Finally, in the *Handbuch*, Vogler is able to provide fully notated and annotated examples of his reductions, as can be seen in Figure 3.6, which Vogler uses as an exercise to teach the proper way to realize a figured bass. Notice that even this late in his career, Vogler labels the staves of his music with the Italian words *male*, *bene*, and *baso* but provides his analysis in the staff marked "Hkl.," an abbreviation for the German word *Hauptklänge*, or "roots." Vogler also provides a roman numeral analysis at the bottom. Unlike how modern theorists often employ roman numerals, Vogler does not provide two different numerals for pivot chords. In the event that a chord possesses *Mehrdeutigkeit* (multiple meaning), Vogler usually chooses the forward-

[218] For instance, see Heinichen, Johann David. *Der General-bass in der Composition*. (Dresden: bey dem Autore, 1728, "Andere Abtheilung"; and Johann Philipp Kirnberger, *Die Kunst des Reinen Satzes in der Musik*, (Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774), 223 ff.

[219] Georg Joseph Vogler, *Choral System*, (Kopenhagen: Haly'schen Musikhandlung, 1800), 7-9.

moving meaning of the chord in question; thus, while the second chord in m. 4 could be seen as both the dominant of C and the tonic of G, the music is moving into the key of G, so Vogler labels this harmony "I." However, this tendency can be overwritten if the chord in question is part of a perceived cadential motion such as the C major chord in m. 10. Moving forward, this chord should be thought of as IV in G, but Vogler chooses I because the raised tone B in the bass looks like a leading tone and thus implies a localized motion to C.

**Figure 3.6: Vogler – *Handbuch* Tab. XII, Fig. 4**



One additional oddity arises in m. 13, where Vogler labels the consecutive chords A minor, F major, and C major all with the numeral "I." It is difficult to say for certain what Vogler was thinking here. By Vogler's previous habits, A minor must be labeled I because the local leading tone G# is present in the bass of the preceding harmony. The C Major is also reasonably logical as a tonic, since, soon thereafter, a cadence in C arises. Yet, it seems to make little sense to accept F as a tonic here unless the music stays in F for at least one or two successive chords. It is possible that this is a misprint in the original text and the F Major chord should have been labeled IV; this option would seem to align with Vogler's other analytical choices. However, another option would be to argue that m. 13 contains a brief passage in F in the following manner:

| Harmony: | Am | F | C | F | C | B$^{o}$ | C | Dm | |
|---|---|---|---|---|---|---|---|---|---|
| Roman Numeral: | I | I | I | V | I | I | VII | I | II |
| Key: | Am | F | - | - | C | - | - | - | |

This would ostensibly indicate a mistake on Vogler's part.

Another hallmark in the *Handbuch* is that Vogler is now convinced enough of his own system of reduction that he is comfortable decrying Kirnberger's explanation of essential and non-essential dissonance, instead favoring a system that makes its distinction primarily on the basis of temporal displacement (in the sense that dissonances can appear before, during, or after the chord tones that they embellish).[220] Thus, while Vogler is indebted to Heinichen, Kirnberger, or some other German writer for the idea of harmonic reduction in general, Vogler's expansion of the concept, along with his inclusion of Roman numerals, constitute his response to that

[220] Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 95-100. Vogler's focus on the temporal aspects of dissonance is not entirely unlike Marpurg's, but they use different terminology, and Marpurg's version is a bit more precise; compare the previous with Friedrich Wilhelm Marpurg, *Anleitung zur Musik überhaupt*, (Berlin: Arnold Wever, 1763), 143 ff.

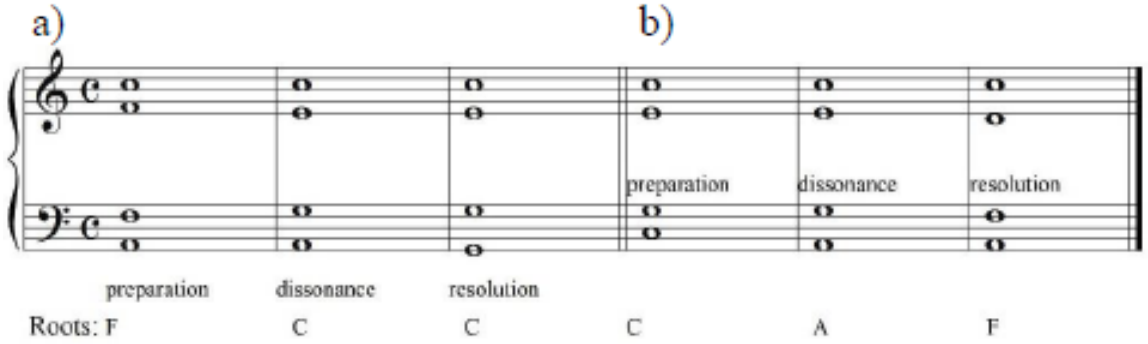
influence. What remains then, is to show how Vogler's System of Reduction (*Redukzion-System*) works, and how he uses it to differentiate between non-harmonic tones.

Vogler defines his *Redukzions-System* as the method by which:

> …one dissolves all shapes into the single, simple shape of the triad, and is assured that with every occurring harmony, no matter how complicated it may appear, a root with third and fifth can be found, and that the third and fifth form a root-position chord.[221]

But how does a musician correctly discern which members of a verticality are the root, third, and fifth? Or, as Floyd K. and Margaret G. Grave ask, "…can the root for a configuration such as A-C-E-G be determined unequivocally"? For Vogler, the answer must be taken from the individual musical context. Sometimes, he says, the fact that a note requires preparation is a helpful clue.[222] Thus, in Figure 3.7a, the bass note A, having been prepared consonantly by an F harmony, becomes a bass suspension resolving to G. Meanwhile, in Figure 3.7b, the bass A is unprepared marking it as a likely consonance:

**Figure 3.7: Identifying dissonances Vogler's way**




[221] Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 6: "*…man alle Gestalten auf die eine und einfache des Dreiklangs auflöset, und sich versichert hält, dass bei jeder vorkommenden Harmonie, sie mag auch noch so komplizirt aussehen, ein Hauptklang mit Dritten und Fünften aufgefunden werden kann, und dass die Dritten und Fünften einen Stammakkord bilden.*" There can be no doubt that Vogler uses the word *Stammakkorde* to refer to root position harmonies since he states that "*Stammakkorde*, as opposed to inversions, are those where the root is at the bottom"; Ibid., 7: "*Stammakkorde im Gegensatze mit den Umwendungen sind diejenigen, wo der Hauptklang zum Grunde liegt*."

[222] Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 86.

The tenor note G, in the second measure of 3.6a, is not likely to be confused as a dissonant 7th over an A harmony, because it is not prepared; therefore, the second measure must have C as its root, not A. Yet, the G in 3.6b has been suitably prepared making it a likely non-harmonic tone. There are only two dissonances, Vogler claims, that do not follow the guideline of preparation; they are the sevenths of a $V^7$ and a $vii^{o7}$, which are not as harsh to the ear as other dissonances, and therefore do not require preparation.[223]

Another important criterion for Vogler in establishing the harmonic or non-harmonic status of a note is resolution. In Figure 3.7a, once the A becomes dissonant, it immediately resolves down to G for the following harmony. Conversely, in 3.7b, it is the tenor note G that resolves downward. Thus, it is the behavior of a dissonant tone (its need for preparation and/or its motion of resolution) that makes it stand out from the harmonic tones surrounding it. One might object to the fact that the resolution in 3.7a rests on a second-inversion triad: traditionally not accepted as a consonant sonority. While Vogler does agree that second-inversion chords are not suitable for cadential locations, he seems convinced that they are essentially consonant. This is probably due to his previously-discussed dedication to invertibility; the fourth and sixth above the bass are consonant because they stand in for a third and fifth.[224]

Vogler, having settled in his own mind how to discern between harmonic and non-harmonic tones, now sets out to distinguish between different types of such embellishments.

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[223] The dominant seventh takes a special place in Vogler's system. He calls it the "seventh of amusement" (*Unterhaltungs-Siebente*) and argues that, due to its unusually strong cadential (*schlussfallmäßig*) quality, it can entertain the ear at length; see Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 2 and 10-1.

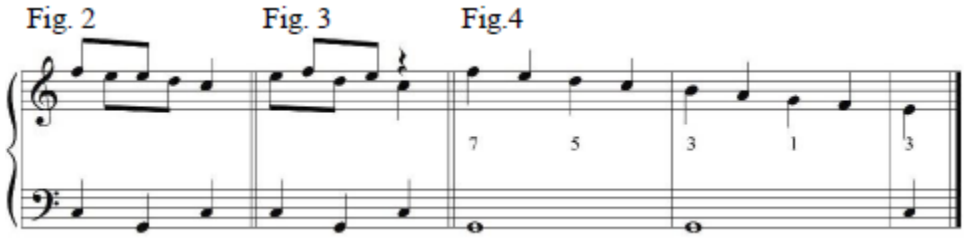
[224] Another uncommon opinion held by Vogler in regard to dissonance, is that, because leading tones do not always move upward in an implied resolutory motion, they are, therefore, not inherently dissonant as other authors claim. In particular, Vogler points to the rather common practice of allowing a leading tone to move by leap, especially when it is in an inner voice; see Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 59.

Like Marpurg, Vogler dislikes the prevailing terminology used by other musicians of the era. He states:

> The word "passing notes" is a much too fluctuating concept; one expresses oneself much more clearly when one says that melodic tones (i.e., those that cannot be counted as part of the harmony) are divided into three classes; those that precede the essential and valid notes are called pre-strikes (*Vorschläge*)—those that follow after it, after-strikes (*Nachschläge*)—those that stand between two valid notes, between-sounds (*Zwischenklänge*).[225]

He provides this example:

**Figure 3.8: Vogler's *Handbuch zur Harmonielehre*, Table IV, Fig. 2-4**




In all three of these figures, notes with upward-facing stems are non-harmonic tones, while downward-facing stems indicate chord-tones. While Vogler does not supply his usual Roman numerals here, it is obvious that in Vogler's Figures 2 and 3 (in my Figure 3.8), he is outlining a basic I-V-I progression. His Figure 2 contains two *Vorschläge* in the upper voice, F and the second E. His Figure 3 uses the same two non-chord tones but places them in position as *Nachschläge*. Meanwhile his Figure 4 consists of a two-measure dominant, embellished by four *Zwischenklänge* (E, C, A, and F), followed by a tonic arrival in the third measure. One small contradiction should be noted in Vogler's example; in the first measure of his Figure 4, F bears a

[225] Georg Joseph Vogler, *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*, (Prague: K. Barth, 1802), 11: "*Das Wort, durgehende Noten hat einen viel zu schwankenden Begriff; viel bestimmter drückt man sich aus, wenn man melodische Töne, d.i. solche, die nicht zur Harmonie gerechnet werden können, in drei Klassen theilet, und diejenigen, die der wesentlichen und geltenden Note vorhergehen, Vorschläge—die nach ihr folgen, Nachschläge—die zwischen zwei geltenden stehen, Zwischenklänge nennt*."

downward-facing stem, flagging it as a chord tone, whereas in the subsequent measure, the lower-octave F has an upward-facing stem designating it as non-harmonic. Vogler has even provided interval numbers to show which sounds are relevant to the harmony in question. The F's acceptance in the first measure indicates a dominant seventh harmony, which seems to have changed by the next measure into the simpler dominant triad. It is possible that Vogler was taking into account the consistent metric placement of the harmonic tones (which all fall on the beat), a technique that he seems to prefer on other examples in the *Handbuch*.

Vogler's taxonomy of non-chord tones is perhaps not as specific as modern terminology—for example, Vogler's *Nachschläge* encompass unaccented passing tones and most types of neighbors. Nor does Vogler's understanding in this area align with similar ideas by Heinichen, Kirnberger, or even Marpurg. Nevertheless, his level of precision is sufficient to draw attention to the different guises that non-harmonic tones might wear. Thus, the identification of these three types of embellishments is effective in helping Vogler's *Redukzions-System* draw out the underlying harmonies of a work.

## Conclusion

Concerning the transmission of the ideas in Rameau's *Traité*, Joel Lester states that many of Rameau's tenets spread rapidly across Europe and "became part of common musical parlance, even among musicians who claimed ignorance of Rameau's writings."[226] In this way, most theoretical systems in the late eighteenth century contain a hidden French element, making writers like Kirnberger (perhaps unwitting) international thinkers. Yet, over the course of his career, Vogler encountered various musicians from many different traditions. In his search for a

[226] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 150.

sort of universal music theory, Vogler was constantly challenged to respond to new knowledge by cautiously adjusting his ideas to account for new scientific discoveries, new repertoires, and new analytical systems. He may have begun his journey in Italy, and many of his principles may have remained Italian in origin, but he simply could not (nor did he wish to) avoid the broader musical world of Europe. From Vallotti, he learned to believe in the preeminence of the invertible consonant triad as the only true harmony. In Rameau and Marpurg, he found well-spoken musical opponents with whom he could debate the specifics of fundamental bass. Among his German countrymen, he found reason to pedagogically strip away the surface of an individual work of music to show its basic harmonic framework. Vogler found different kinds of truth in all of these scholars and, due to his rationalist mind, necessarily built a system that purported to explain them all. In this sense, Vogler's theories perhaps rate among the most obviously cosmopolitan writings of the time. The next two chapters address how this system, as more than a mere exercise in logic, functions as a tool for analyzing and composing actual music.

# CHAPTER 4

## VOGLER AS ANALYST AND RE-COMPOSER

If a system of music theory is to be accepted by musicians, it must be accompanied by a repertoire that, at least to some extent, appears to corroborate the system itself. Thus, most writings concerning music theory (both historical and modern) include musical excerpts with annotations and/or commentary, showing how the music in question supports the writer's claims. Vogler's *Tonwissenschaft und Tonsezkunst*, the purported foundation for his system, does not contain any such examples. To fill this gap, Vogler gathered notes from his various lectures at Mannheim and published them in the *Betrachtungen der Mannheimer Tonschule*. The *Betrachtungen* consist of four total volumes (three of elucidatory text and one of musical scores) and constitute the single largest collection of extant analyses (*Zergliederungen*) by the school's founder.[227] Moreover, where deemed appropriate, Vogler added "Improved Versions" (*Verbesserungen*) of works by other composers as well as explanations—based on the "immutable" rational principles of his own system—for the changes he made.[228] As such, the

[227] According to Ian Bent, the term *Zergliederung* is of historical importance far beyond its mention in this dissertation. According to his presentation of the idea, the word itself literally refers to the "dissection" of a subject into its component parts. As a result, *Zergliederung* sees use in a variety of contexts (particularly in medical texts on anatomy), but all such contexts bear distinctly scientific overtones. In music, a *Zergliederung* can refer simply to the deep analysis of a musical work and its constituent parts—indeed, this seems to be how Vogler usually uses the word—but can also denote thematic fragmentation—a usage frequently employed by Friedrich Wilhelm Marpurg in his analyses of fugues. Prior to the late eighteenth century, such analyses, though often used as supporting evidence within a treatise on music theory, generally did not appear as independent publications; thus, in the writing of the *Betrachtungen*, as well as several other items, Vogler was participating in a relatively new literary genre. For an insightful history of the word *Zergliederung*, and an expansive bibliography on the topic, see Ian Bent, ed., *Music Analysis in the Nineteenth Century, Volume 1: Fugue, Form and Style*, (New York: Columbia University Press, 1994); and Ian Bent, ed., *Music Analysis in the Nineteenth Century, Volume 2: Hermeneutic Approaches*, (New York: Columbia University Press, 1994).

[228] The German word *Verbesserung* can have many meanings depending on its usage. Strictly speaking, it simply translates "improvement," but when Vogler uses the word in the context of the *Betrachtungen*, it bears the distinctly negative connotation that he is correcting "mistakes" made by other composers. In some cases, Vogler believes that the composer in question simply did not know the "correct" way to accomplish a musical event, but in other situations, he seems to think that errors arise out of arrogant compositional malpractice. For example, he argues that J. S. Bach is guilty of the former, while Kirnberger, who uncritically claimed to follow Bach's example, was guilty

*Betrachtungen* are rife with the sort of examples that, as Vogler sees it, lay bare the uncompromising musical laws of nature and, by extension, prove the validity of his teachings. For the modern theorist, the *Betrachtungen* offer the most detailed possible view into the practical application of Vogler's system, particularly with regard to how and why Vogler uses his own theories to assess the works of other composers and demand that they follow proper musical "rules."

The tasks of this chapter are 1) to identify several preoccupations, based out of Vogler's own theoretical writings, that inform his methods of analysis, 2) show how said preoccupations result in a sort of dogma that colors his analyses of pre-existing music examples, and 3) explain how this dogma motivates his *Verbesserungen*. Vogler occasionally mixes praise with criticism, but as will be seen hereafter, he is usually quite vocal about the "problems" he sees and silent about a piece/composer's good points. To begin, I briefly review and reexamine the findings of Floyd K. Grave concerning Vogler's revisions of Giovanni Battista Pergolesi's *Stabat Mater*. Next, I offer a similar analysis on Vogler's "improved version" of two chorales by J. S. Bach. Finally, I depart from the *Betrachtungen* to discuss Vogler's *Verbesserung* for Johann Nikolaus Forkel's theme and variations on "God Save the King."

## Vogler and the Compositional Language of Pergolesi

Vogler was controversial for many reasons, not the least of which was his creation of the so-called *Verbesserungen*, in which he sought to exhibit and revise the various compositional "mistakes" he perceived in the works of other musicians. Even Vogler's favorite composers could be subjected to criticism if they strayed from Vogler's well-demarcated musical

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of the latter because he should have known better; see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3*, (Speyer: Bossler, 1781), Siebente, achte, und neunte Lieferung, 1-32.

sensibilities.[229] Certainly, the longest and most involved such review in the *Betrachtungen* deals with Pergolesi's *Stabat Mater*—a piece that was the subject of much European discussion at the time.[230] As Floyd K. Grave has previously discussed, Vogler's "improvements" of the piece range from small-scale rhythmic reassignments to the complete rewriting of the viola part.[231] Over the course of his analysis, Grave identifies several types of corrections that see repeated use in Vogler's reimagining of the work. These categories are admittedly not exhaustive, and they are often subject to overlap.[232]

Rhythmic Reassignment

Vogler makes numerous changes to the rhythmic profile of the *Stabat Mater*. Some of these changes are not necessarily motivated by a perceived compositional "error"; rather, they often simply signal Vogler's insertion of a personal touch to the work. For instance, he seems

[229] In the *Betrachtungen* alone, Vogler provides (sometimes extensive) reviews on works by J. S. Bach, Johann Friedrich Hugo von Dalberg, Baldassare Galuppi, Hugo Franz Karl Alexander von Kerpen, Johann Philipp Kirnberger, Johann Georg Mezger, Christian Gottlob Neefe, Giovanni Battista Pergolesi, Peter Winter, and many others. Vogler says that his criticisms of other composers primarily arise out of their inability to grasp the rules he held as fundamental to music. For example, see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 1*, (Speyer: Bossler, 1781) 135; in it, he asks "What phenomenon might one not promise in the realm of music, if talents such as Galuppi, spirited, as this great composer, sensitive, and original as he, were also equipped with the scientific observations necessary for the creation of masterpieces? How indeed would not a universal beauty, as yet only an ideal to us, be attained?" (*Welche Erscheinung dörfte man sich nicht im Tonreiche versprechen, wenn Talenten wie Galuppi, feurig, wie dieser grose Tonsezer, empfindsam, originell wie er, auch noch durch wissenschaftliche sichere Bemerkungen zu Meisterstücken vorbereitet würden? Wie sicher würde nicht immer ein* (sic!) *allgemeine uns bisher fast nur idealische Schönheit erzielet?*).

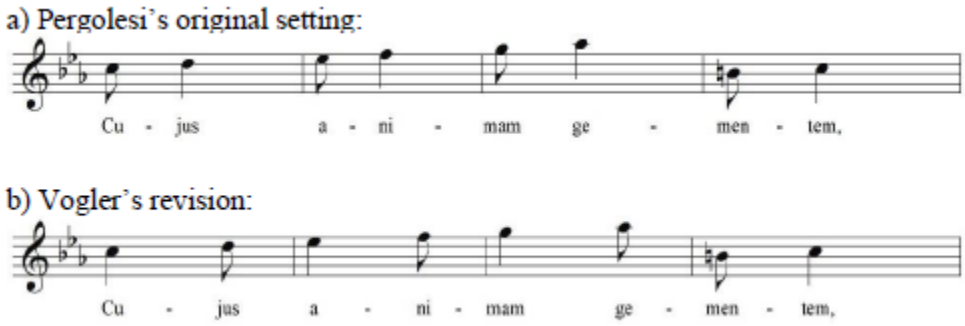
[230] Pergolesi's *La serva padrona* is credited with having incited the famous Querelle des Bouffons, and the *Stabat Mater*, which premiered during the extended debate, came under scrutiny as well; on the role these pieces played in the Querelle, see Giuseppe Radiciotti, *G. B. Pergolesi: Vita, opere ed influenza su l'arte*, (Rome, 1910), 216-36.

[231] The forthcoming analysis should not be taken as an indication that Vogler disliked Pergolesi's music in general or even the *Stabat Mater* in particular. Vogler's comments on Pergolesi seem laden with pity for the older composer, who, though genuinely sensitive to musical expression, nevertheless missed the mark because he lived in an era before the "true science of music" had been discovered; see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3*, (Speyer: Bossler, 1781), 218.

[232] Unless otherwise noted, all information regarding Figures 1-4 of this chapter are taken from Floyd K. Grave, "Abbé Vogler's Revision of Pergolesi's 'Stabat Mater'," *Journal of the American Musicological Society* 30, no. 1 (Spring 1977), 43-71. Grave does not use the specific titles for the corrections discussed hereafter; I simply add these titles for clarity.

fond of syncopated rhythms, so long as they do not stray outside the bounds of a measure too often. However, similar to other musicians throughout history, Vogler believes that text setting should follow regular patterns of speech. In general, Pergolesi would likely have agreed with this point, but on a few occasions, he makes some rhythmic choices that offended others; this is an error in Vogler's mind. On this point, Grave cites Vogler's change to the characteristic rhythm of the text "*Cujus animam gementem*"[233]:

**Figure 4.1: *Stabat Mater* II: "Cujus animam gementem," mm. 28-31**




Notice that Vogler does not alter Pergolesi's setting for the second and third syllables of "gementem," because it does not interfere with the natural declamation of the word.

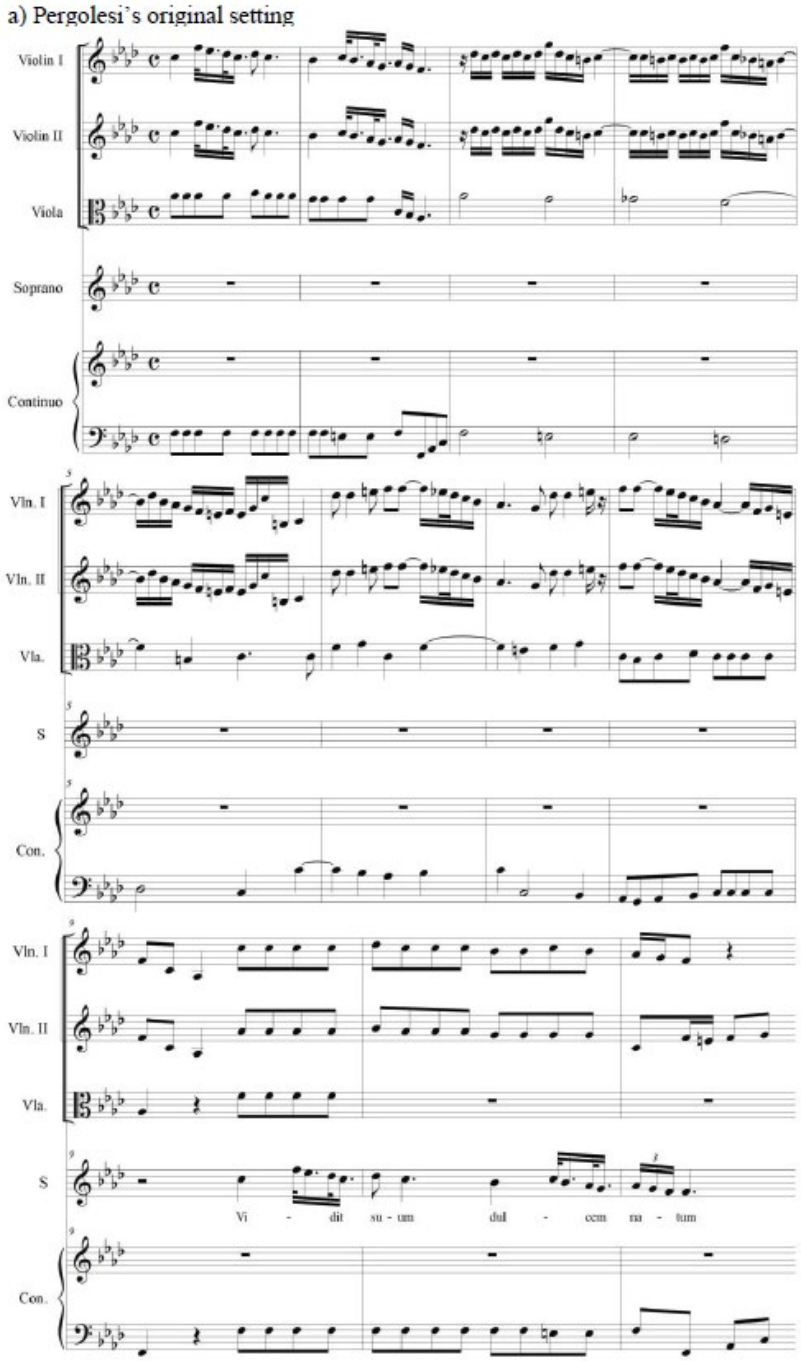
Phrasal Regularization

Vogler insists that the internal hierarchy of the beats in a measure must be preserved and that musical phrases should flow both regularly and predictably. As such, phrases that seem metrically rotated, that occupy too little/much space, or do not cadence when expected, require correction. Take, for instance, Vogler's revision to the opening of "*Vidit suum dulcem natum*" seen in Figure 4.2. In addition to altering rhythm (as discussed above) and creating a much different viola line (to be discussed below), Vogler has essentially deleted one and a half

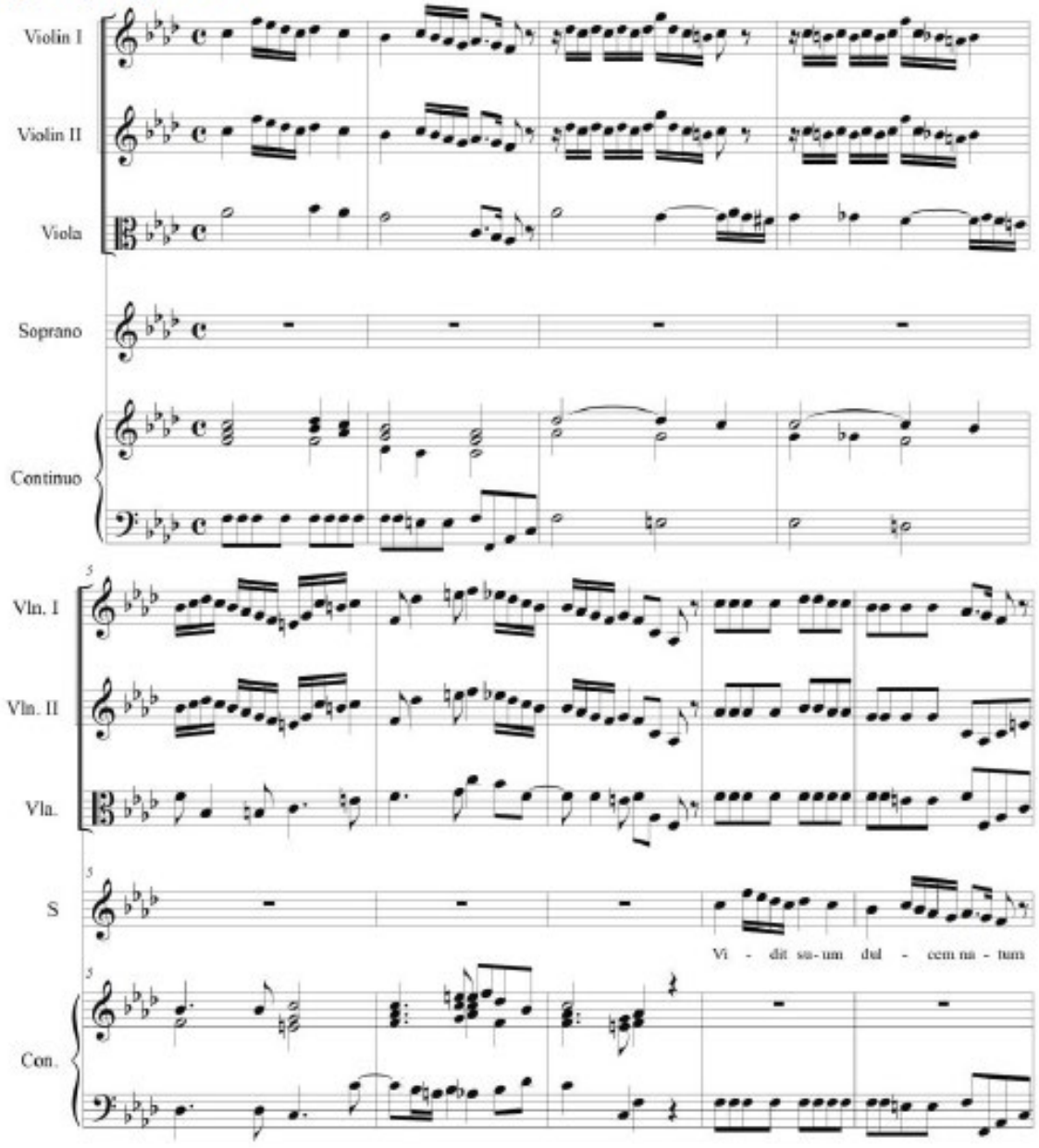
[233] Vogler was not the only musician to raise objections to Pergolesi's rhythmic choices in this movement. See for instance, Johann Georg Sulzer, *Allgemeine Theorie der schönen Künste*. (Leipzig, 1771-1774), 655.

measures by eliminating a repetition (in Pergolesi's original, mm. 6-7a are immediately repeated in mm. 7b-8). In addition to removing what he probably considered unnecessary material, Vogler's change realigns the entry of the soprano so that it lies more securely within its implied metrical placement and mirrors the previous entry of the violins.

**Figure 4.2: *Stabat Mater* VI: "Vidit suum dulcem natum," mm. 1-11a**



b) Vogler's revision




Textural Diversity

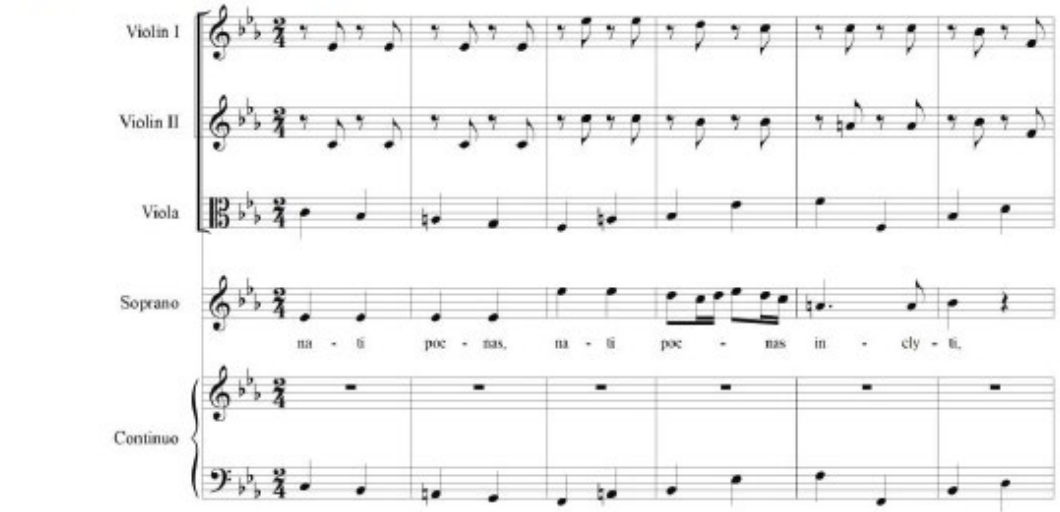
Throughout the original *Stabat Mater*, the viola part is nearly identical to the bass line (as in Figure 4.2). Vogler's version, in addition to giving the viola a certain amount of independence and increasing the perceived density of the work, also helps Vogler address his next concern: Harmonic Clarity.

Harmonic Clarity

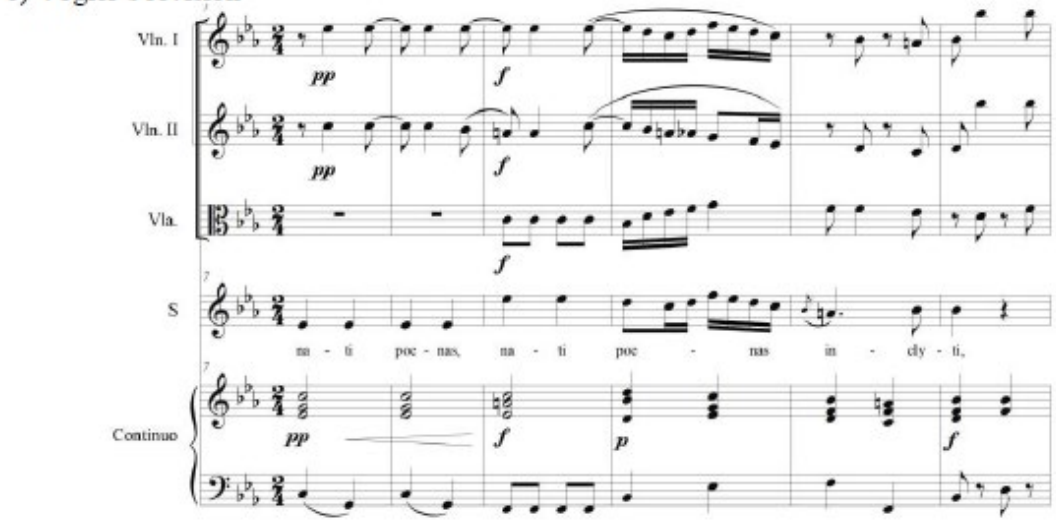
For Vogler, good music is harmonically driven, and incomplete chords make this drive difficult to discern.[234] The viola rewrite mentioned above helps add missing chord tones to harmonically thin sections of the *Stabat Mater*. In addition, Vogler is willing to make changes to the bass line to eliminate non-harmonic tones from this fundamental voice:

**Figure 4.3: *Stabat Mater* VI: "Quae moerebat et dolebat," mm. 43-48**

a) Pergolesi's original setting




b) Vogler's revision




[234] That is not to say that Vogler ignored contrapuntal concerns, rather that he seems to consider counterpoint secondary to harmony.

In this case, Vogler replaces the descending line from the bass in mm. 43–44. In m. 43, the Bb conflicts with the main harmony, C minor. On a very different point, in m. 44, he chooses to preserve the C minor harmony because he wants the harmonic change to $F^7$ to coincide with the dramatic repetition of the word *nati*; I return to this point shortly.

Musical Variety

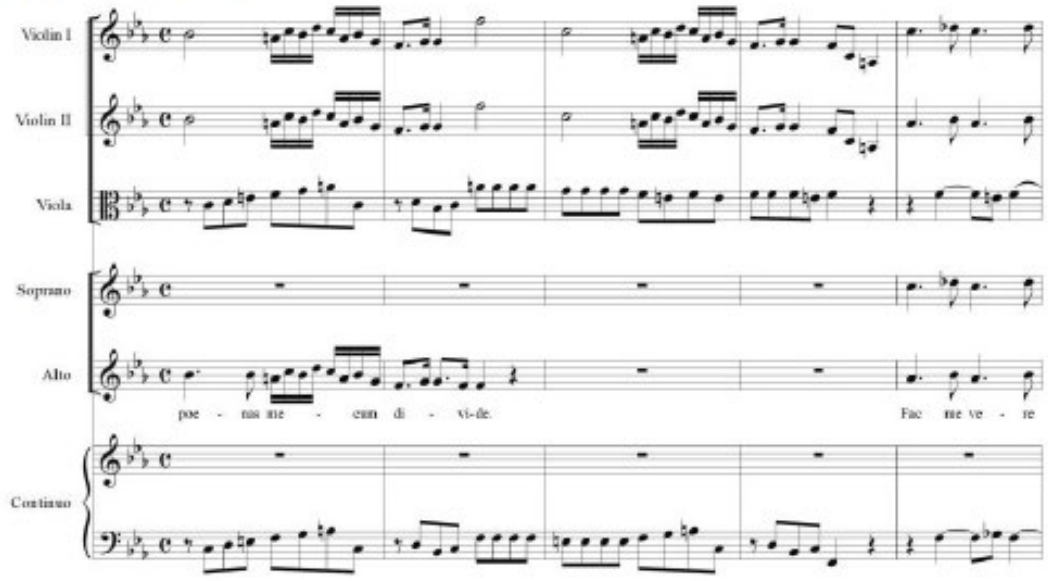
Vogler believes that direct repetition of musical material is abhorrent. Vogler is particularly displeased with recurring tutti gestures/sections, which he either eliminates altogether (as in Figure 4.2) or liberally rewrites according to the requirements of his next area of concern: Thematic Unity.

Thematic Unity

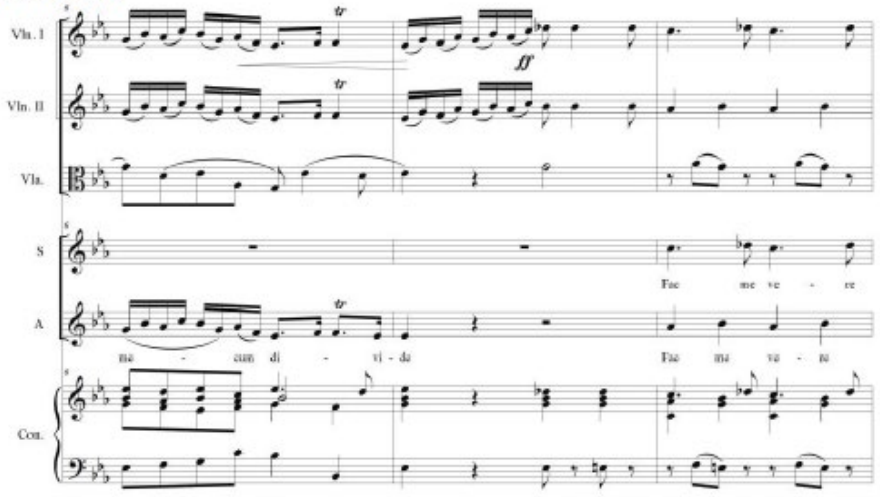
Musical variety cannot simply be random in Vogler's works. Like a well-formed, rational argument, musical events must be tied together by a common thread that creates a coherent trajectory.

**Figure 4.4: *Stabat Mater* VI: "Sancta mater, istud agas," mm. 38-42**

a) Pergolesi's original setting



b) Vogler's revision



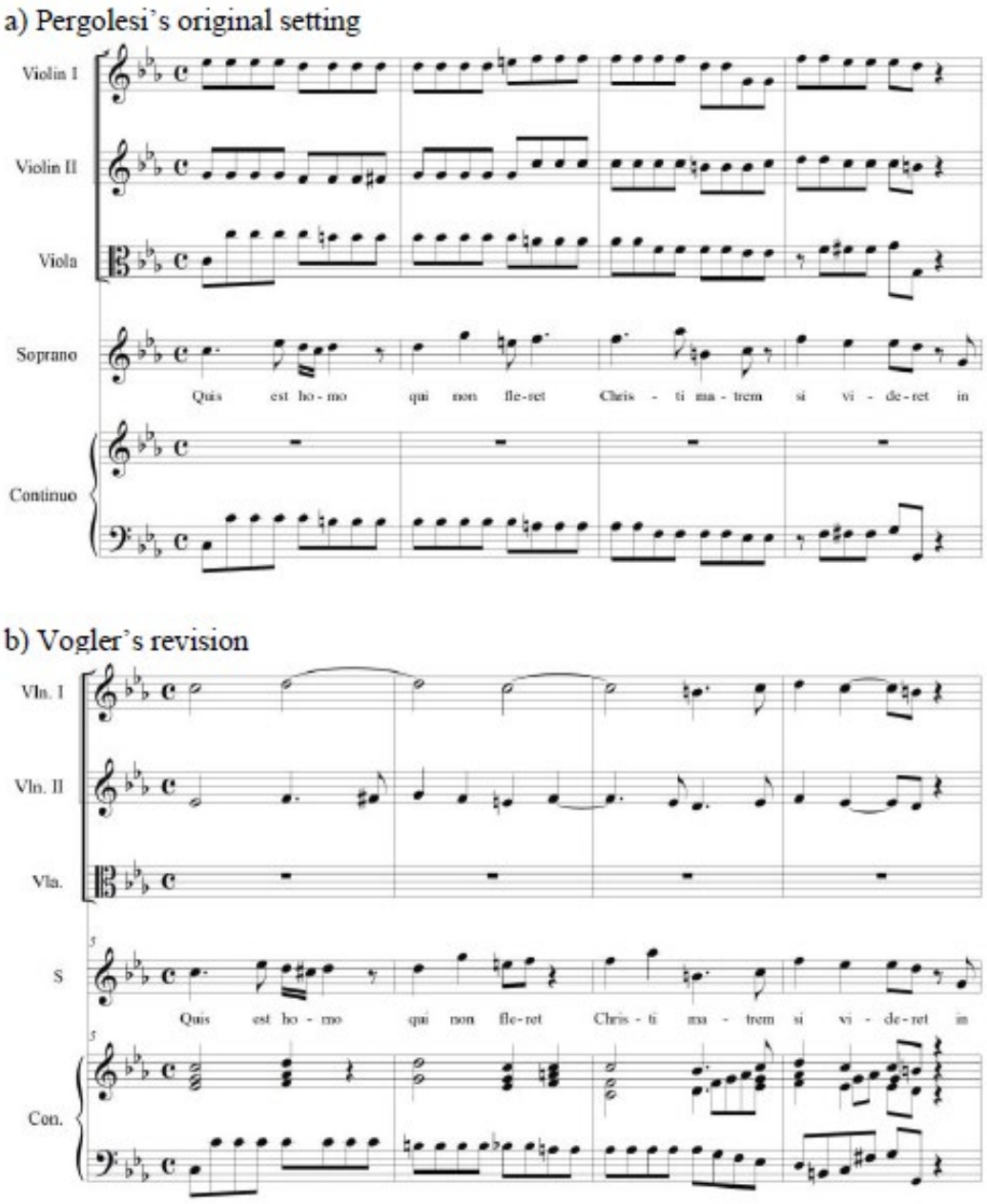

Vogler employs the term *Ausführung* to describe the process of "transposing an idea from one key to another, altering it without obscuring its original shape and reusing in a context where it may fulfill an entirely new function."[235] Vogler employs this technique to bridge a modulation (see Figure 4.4) that he believes Pergolesi accomplished too soon in the phrase. This revision also eliminates a rotated meter and the seemingly superfluous, non-thematic half notes in the violins.

There is, however, one other trend in Vogler's revisions that Grave does not touch on; namely, what might properly be called Reharmonization. This should not be confused with Harmonic Clarity (discussed above), which only involves adding or replacing notes to avoid unclear harmonic motions. Nor is Reharmonization at work when Vogler completely rewrites a section to fulfill the needs of Musical Variety. Instead, Reharmonization refers to when Vogler makes inessential changes in harmony either to expedite modulations (such as the $Eb^7 – E^{o7} – F$ minor motion in Figure 4.4), or simply to diversify the harmonic language of a passage. We

[235] Floyd K. Grave, "Abbé Vogler's Revision of Pergolesi's 'Stabat Mater'," *Journal of the American Musicological Society* 30, no. 1 (Spring 1977), 54.

have already seen an instance of this in m. 44 of Figure 4.3, however, a more complex example may be taken from the opening of "Quis est homo" (see Figure 4.5). Notice first how Vogler delays the initial chromatic decent. Still more dramatic is his harmonic alteration of m. 4 from a simple iv – vii$^{o7}$/V – V to the somewhat more involved ii$^{o}$ – vii$^{o7}$ – i –vii$^{o7}$/V – V, which creates faster harmonic rhythm leading into the cadence.

**Figure 4.5: *Stabat Mater* V: "Quis est homo," mm. 1-4**



Vogler's *Verbesserungen* of Two Bach Chorales

Another interesting example in the *Betrachtungen* is Vogler's *Verbesserungen* of two Bach chorales. The first of these is a recomposition of "Komm, Gott Schöpfer, heiliger Geist": for which Vogler provides the "improved" version seen in Figure 4.7.

**Figure 4.6: J. S. Bach – "Komm, Gott Schöpfer, heiliger Geist"**

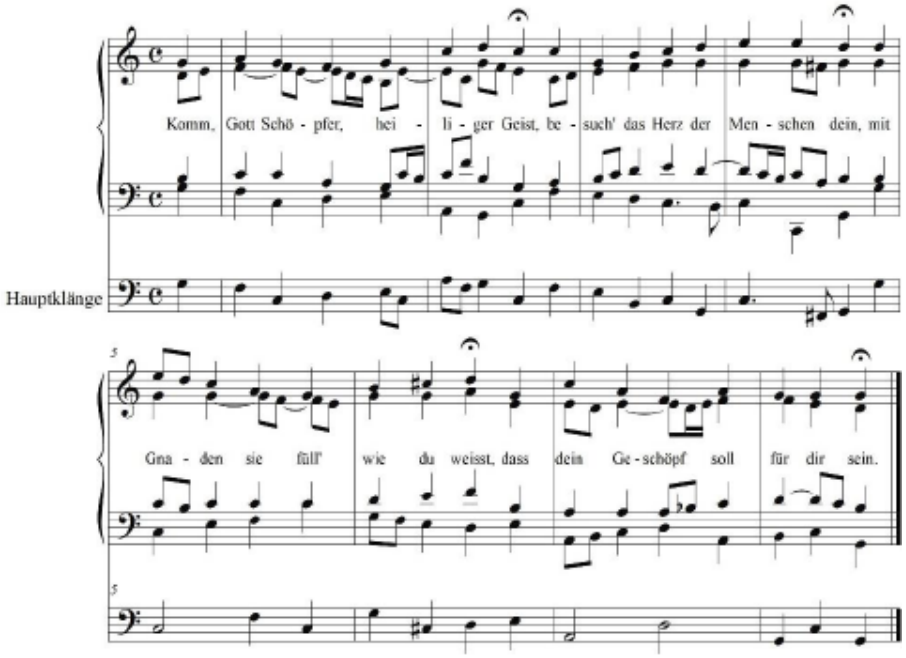
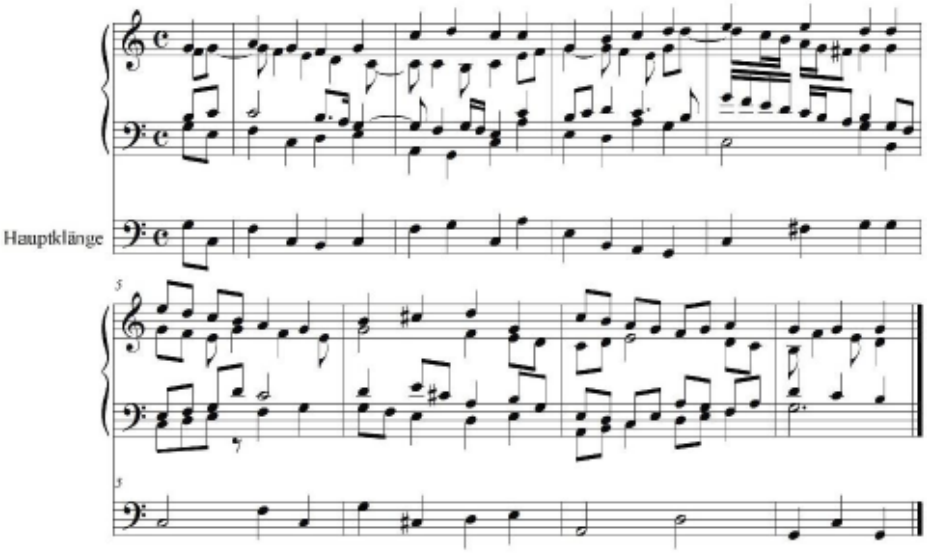



**Figure 4.7: Vogler's *Verbesserung* of "Komm, Gott Schöpfer, heiliger Geist"**



Vogler has helpfully provided his own fundamental bass analysis (the *Hauptklänge* staff below each measure of the chorale itself), both to show his personal reading of the work, and to provide evidence to support his changes. The techniques discussed above concerning Vogler's alteration of the *Stabat Mater* help guide this analysis as well.

Rhythmic Reassignment

One will note that Vogler's *Verbesserung* does not include the song's words. This appears to have been an intentional omission, since Vogler's commentary implies that he only intends his version to be played on a keyboard instrument.[236] This has a strong influence on the sorts of rhythms that Vogler is willing to deploy in his recomposition. For instance, even a casual look at the first two measures of the alto line would reveal that Vogler has replaced the original rhythmic profile with persistent syncopation, which, as discussed previously, is one of Vogler's favorite rhythmic devices. Yet, this is all the more significant in this case, because, if the vocal line was included, the relatively long-term misalignment of the words, particularly between the soprano and alto, might be taken as a musical flaw. Another indicator that Vogler's version is set exclusively for keyboard is his inclusion of long notes that gloss over multiple syllables of the original version's text. This type of change is used in the alto voice in m. 6 and 7, the tenor voice at mm. 1 and 5, and the bass in mm. 4 and 8.

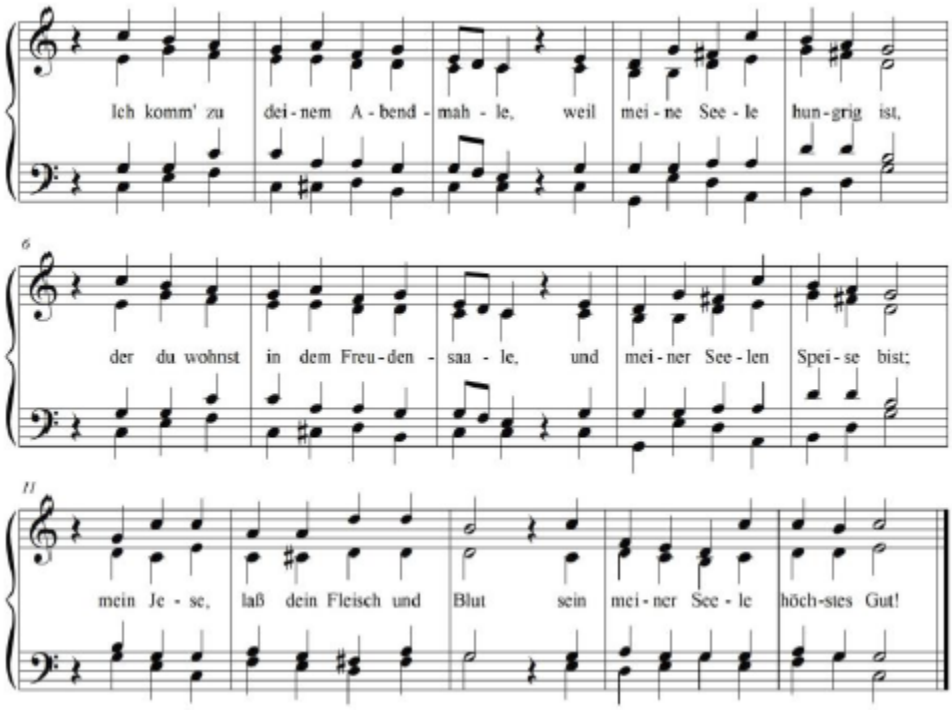
Phrasal Regularization

Unsurprisingly, this attribute does not see use in "Komm, Gott Schöpfer, heiliger Geist." Since Bach's originally setting was intended primarily for congregational singing, phrasal

[236] In addition to the purely musical reasons mentioned in this paragraph, Vogler also feels the need to address the potential difficulty for an organist in performing the alto note, G, in the pickup at the beginning; see Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781) 25. This same sort of issue occurs again in the alto voice in m. 3.

simplicity is built into the work; ergo, there is nothing here that Vogler would have felt the need to change. By this, I do not suggest that congregational hymns are always metrically simplistic, merely that they have a tendency to be so. An example of a metrically interesting hymn, indeed, one that Vogler would want to "improve," would be the setting of the hymn tune, "Ich sterbe täglich," with the text "Ich komm' zu deinem Abendmahle" as it appears in the *Emskirchner Choralbuch*. This setting presents the melody in what could be argued as an unstable meter:

**Figure 4.8: "Ich komm' zu deinem Abendmale"[237]**




Textural Diversity

This is a category in which Vogler simply declines to make any large changes. His choice to abandon the original text also removes the requirement of preserving a consistent four-voice texture, but he completely avoids the potential for greater diversity in this area. Perhaps he

[237] Anonymous, *Emskirchner Choralbuch*, (Emskirchner, 1756); this source does not have page numbers.

felt that such changes would threaten the reverent simplicity of the work, but Vogler makes almost no mention of this in his commentary.[238] The one exception arises from Vogler's analysis of his recomposed m. 5. In it, he suggests that the tenor notes D-C might be understood as having stemmed from the previous alto note E. This, he says, implies a cross-voicing as the tenor note G (immediately preceding the D-C motion) seems to leap up an octave into the alto line.[239]

Harmonic Clarity

Bach's original setting of this chorale has already been harmonized with clearly outlined chords. Thus, though Vogler has made numerous changes to the pitch content of the accompanying voices, none of them seem to have been motivated by a need to make harmonies more evident.

Musical Variety

This category is evidently at work throughout the alto and tenor voices of Vogler's *Verbesserung*, which, primarily through varying rhythmic profiles, frequently shift character to avoid being, what Vogler calls, "dry" (*trocken*) or "flat" (*platt*).

Thematic Unity

This chorale is much too short to provide broad thematic reusage. However, one might cite two interesting elements. First, is Vogler's previously mentioned continuous reintroduction of syncopation as a unifying element, particularly in the alto voice. Another interesting recurring

[238] Vogler does, however, comment about the need for simplicity in chorales in Georg Joseph Vogler, *Choral System*, (Kopenhagen: Haly'schen Musikhandlung, 1800) 36-7.

[239] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781) 28.

property is a contrapuntal interplay between the alto and tenor in which one of the two voices skips or leaps up (often dramatically), during or after which the other voice immediately mimics the motion, though on a different pair of pitches. This occurs in mm. 3–4, 5, and 7–8.

Reharmonization

As with the *Stabat Mater*, Vogler has made a few significant changes to the harmonic structure of this chorale. First, his introduction of a C harmony at the end of the anacrusis, as well his change of the last two harmonies of m. 1 (from chords with roots D and E to chords with roots B and C) are motivated by the same concern: namely that, in Vogler's system, two harmonies are not permitted to follow one another if they bear consecutive roots and are of the same quality.[240] Thus, a motion from D minor to E minor is undesirable, whereas D minor to E major, or D minor to G minor raise no objection. Second, Vogler has changed both the F harmony in the pickup to m. 3 and the C harmony in beat 3 of m. 3 to A minor triads, a pair of inessential changes which he says have the "best results" (*bestem Erfolge*), though he provides no explanation.[241]

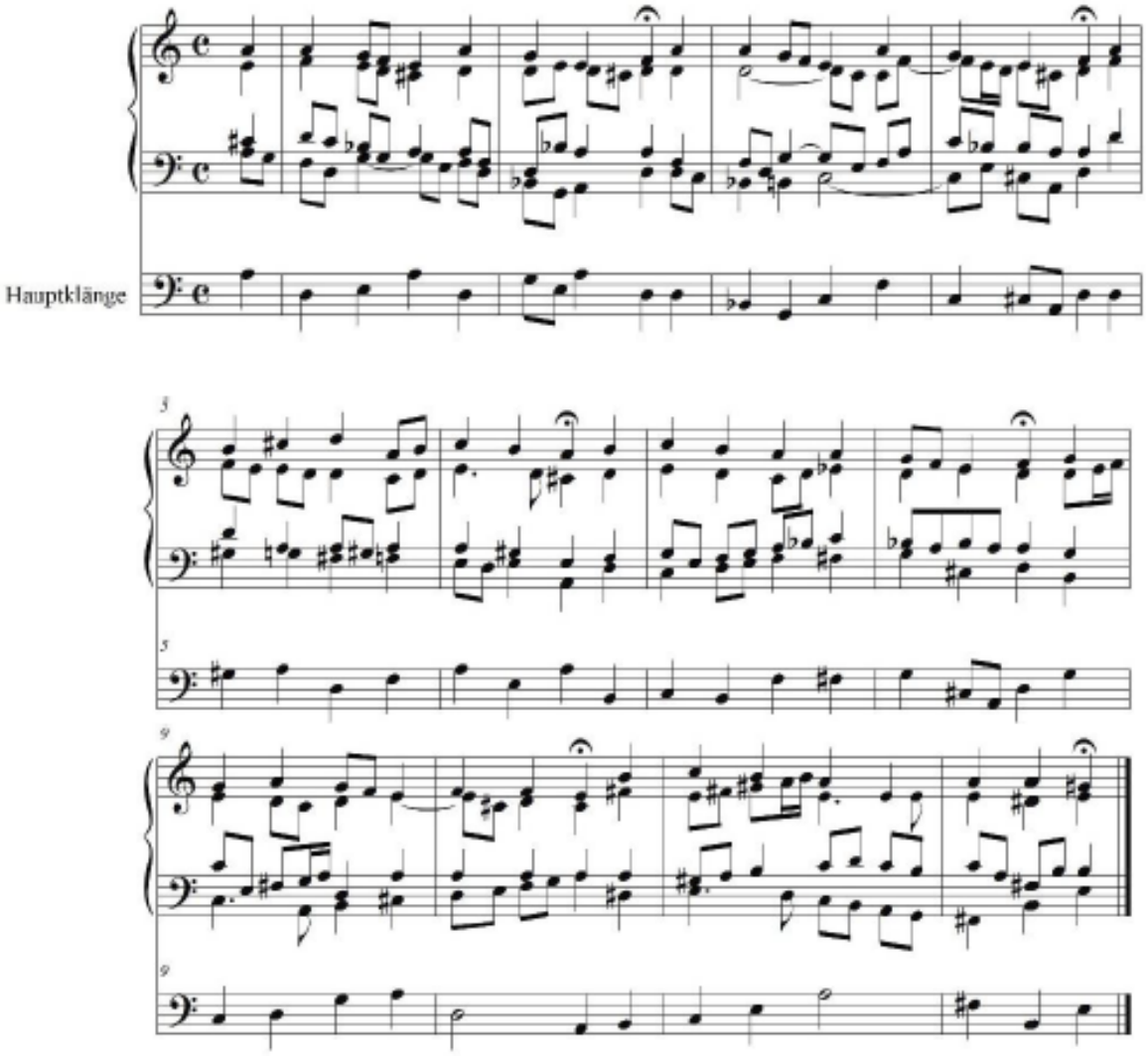
Vogler's alternate version of the chorale "Das alte Jahr vergangen ist" is of a somewhat different nature. Figure 4.9 shows Bach's original setting, as before, with Vogler's root analysis below, and Figure 4.10 contains Vogler's version with similar annotation. Many of the changes made to this chorale are similar to those of the previous one (such as the now-expected addition of syncopation), so, rather than repeating the previous analysis, I will only highlight a few

[240] It is possible that Vogler's preference in this regard is due to the high likelihood of parallel perfect intervals between the two harmonies. However, such as assertion seems unlikely because 1) he does not object to consecutive roots with different qualities (such as D minor to E major), which would run the same risk; and he makes the exception that the subdominant may lead directly to dominant under some circumstances; see Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 59.

[241] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781) 27.

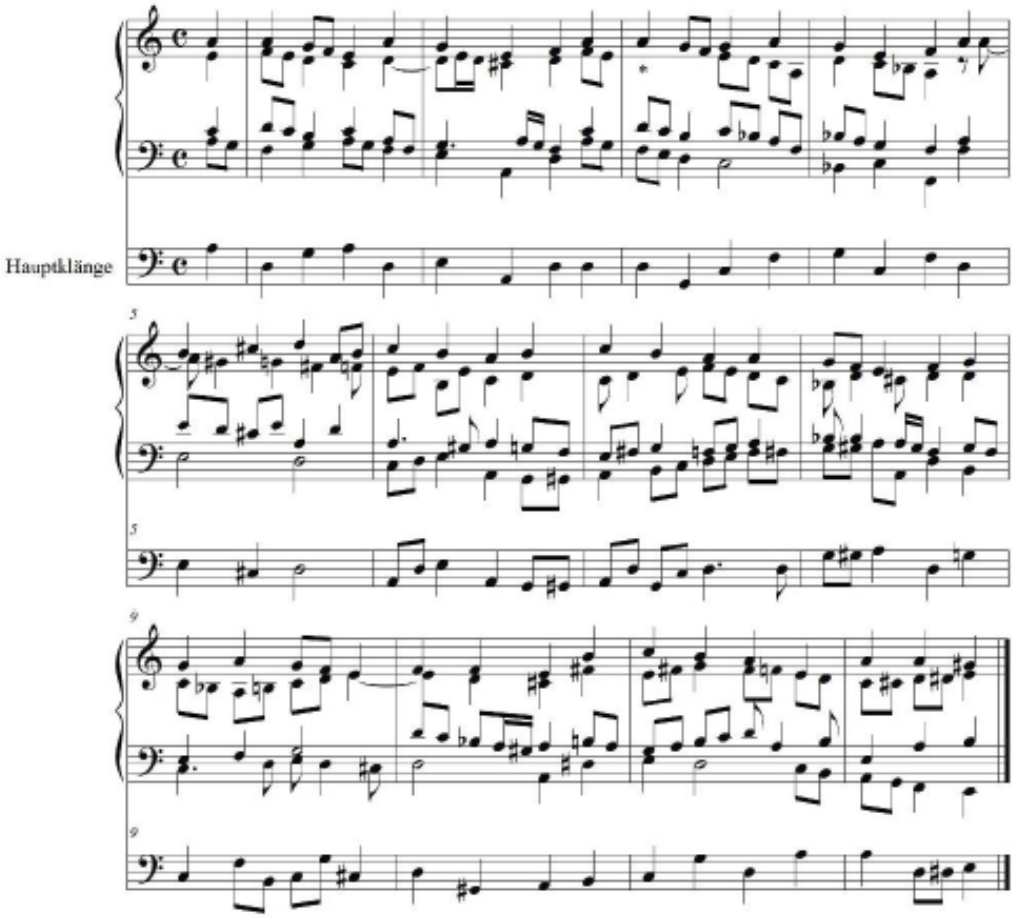
particular points of interest. First, while Vogler does not mention modal composition here, his changes indicate that he is thinking modally at the beginning of the chorale; concerning the first phrase, he states that "only for the cadence is C sharp necessary, and the $B^b$ does not belong in this key."[242] Modal purity becomes a much greater concern to Vogler in the *Choral-System*.

**Figure 4.9: Bach – "Das alte Jahr vergangen ist"**




[242] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781), 28: *Nur zum Schlussfalle ist cis nöthig, und das b gehört nicht in diese Tonart.*

**Figure 4.10: Vogler's *Verbesserung* of "Das alte Jahr vergangen ist"**




*The page of the *Betrachtungen* containing this *Verbesserung* is somewhat poorly printed; as a result, I am unable to provide Vogler's alto part for the first two beats of m. 3. Presumably, the downbeat of the measure would contain F or D, and the second beat would be on D.

Second, Vogler's previous condemnation of consecutive roots with the same chord quality seems to have been lifted here; in m. 2-3 he allows D minor to move directly to E minor, without explaining why this situation is different from the one in the previous chorale. Third, he has altered the second phrase to cadence on F simply for variety (*Abwechslung*).[243] Fourth, Vogler objects to the pseudo-parallel motion of the alto and bass in m. 5, because it introduces ill-advised dissonance. It is slightly unclear what he means by this, but his explanation implies that

[243] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781), 29.

he does not like unaccented dissonances that do not resolve within the same beat. Thus, he specifically cites the notes D in the alto of beat two and G sharp in the tenor of beat three, as "willfully obtrusive" (*willkührlich…aufgedrungene*).[244] For the same reason, he objects to the tenor and bass notes on the second half of beat two in m. 7.[245] Finally, Vogler sees Bach's final cadence as more of an IAC in E major than Vogler's preferred HC in A minor.[246]

## Beyond the *Betrachtungen*

The content of this chapter has perhaps painted Vogler as a prideful busybody, whose only joy was to criticize other composers for not bending to his way of thinking. While this may be partially true, Vogler believes—or at least claims to believe—that his constant calls for musical improvement stem from his pedagogical nature. Thus, he says:

> It is neither pride nor vindictiveness, rather the louder tendency to make my experiences charitable, which has led me to analyze Mr. Forkel's variations, to improve some passages, and to completely rework the most significant parts, especially the counterpoint pieces…I will always be happy to be able to contribute something to the reception of music and the dissemination of aesthetic and contrapuntal knowledge, through the assembly of reasons and the comparison of different arrangements of the same material.[247]

He then launches into the most detailed—indeed lengthy—review/recomposition created during his career: that of Johann Nikolaus Forkel's (1749-1818) theme and variations on the hymn "God

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[244] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781), 29-30.

[245] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781), 30.

[246] Georg Joseph Vogler, *Betrachtungen der Mannheimer Tonschule 3: Zweite Hälfte*, (Speyer: Bossler, 1781), 31.

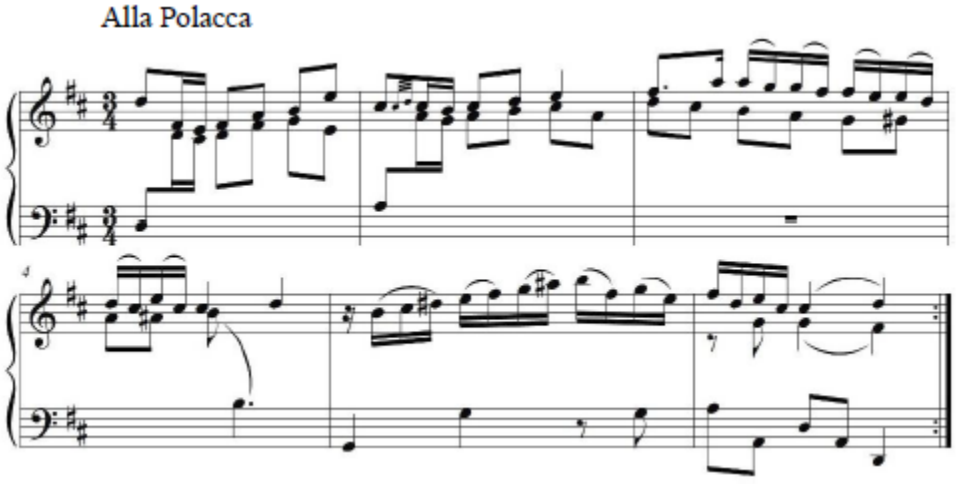
[247] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), Vorrede: *Es ist weder Stolz noch Rachsucht, sondern der lauterste Hang, meine Erfahrungen gemeinnützig zu machen, der mich bewogen hat, Herrn Musikdirektor Forkels Veränderungen zu zergliedern, einige Stellen zu verbessern, und die bedeutendsten, besonders die Kontrapunktischen Stücke ganz umzuarbeiten…ich mich immer freuen werde, durch Zusammenstellung von Gründen, durch Vergleichung von verschiedenen Bearbeitungen desselbigen Stoffs, zur Aufnahme der Musik und zur Verbreitung ästhetisch- und kontrapunktischer Kenntnisse etwas beitragen zu können*. Notice that Vogler says aesthetic and contrapuntal *knowledge*, instead of taste; once again, for him the rules of music are based in fact, not opinion.

Save the King" (1793). As will be seen hereafter, even Vogler does not believe that Forkel did absolutely everything wrong; nevertheless, he goes so far as to call the work "childish" (*kindischer*), and the sheer breadth of Vogler's complaints about the work required forty-eight pages of text alone (not including his attached examples) to address. Space considerations will not permit a complete recounting of Vogler's many comments.[248] Instead, I will once again offer selected examples, thereby re-highlighting the compositional techniques discussed throughout this chapter.

Rhythmic Reassignment

Since this work is in the form of a theme and variations, it necessarily involves a certain amount of Rhythmic Reassignment as the variations become more and more complex. This gives Vogler the opportunity, not only to provide his own suggestions concerning rhythms that can be updated, but also to critique the changes of others. In this case, Vogler does not detect very many "mistakes," but for instance, he condemns the fourth measure of variation 10:

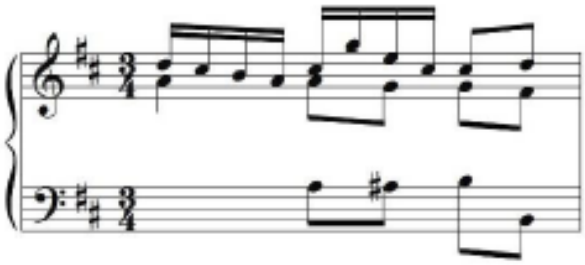
**Figure 4.11: Forkel – Variation 10 (A Section) on "God Save the King"**




[248] For a somewhat more complete analysis of Forkel's variations, see Ludwig Finscher. "Variation als Kommentar," In *Text und Kommentar*, (München: Wilhelm Fink, 1995), 483-96.

Vogler's concern is that the entry of the bass note, B, in measure four places emphasis on the upbeat. While Vogler values syncopation in general, in a variation that functions as a polish dance (alla Polacca), the stress, he says, should be on the beats, particularly beat two, just as Forkel had successfully accomplished up to that point in the phrase.[249] Vogler's revision realigns the rhythm to reinforce the meter, though it draws attention to beat three rather than beat two:

**Figure 4.12: Vogler's *Verbesserung* of Forkel's variation 10, m. 4**

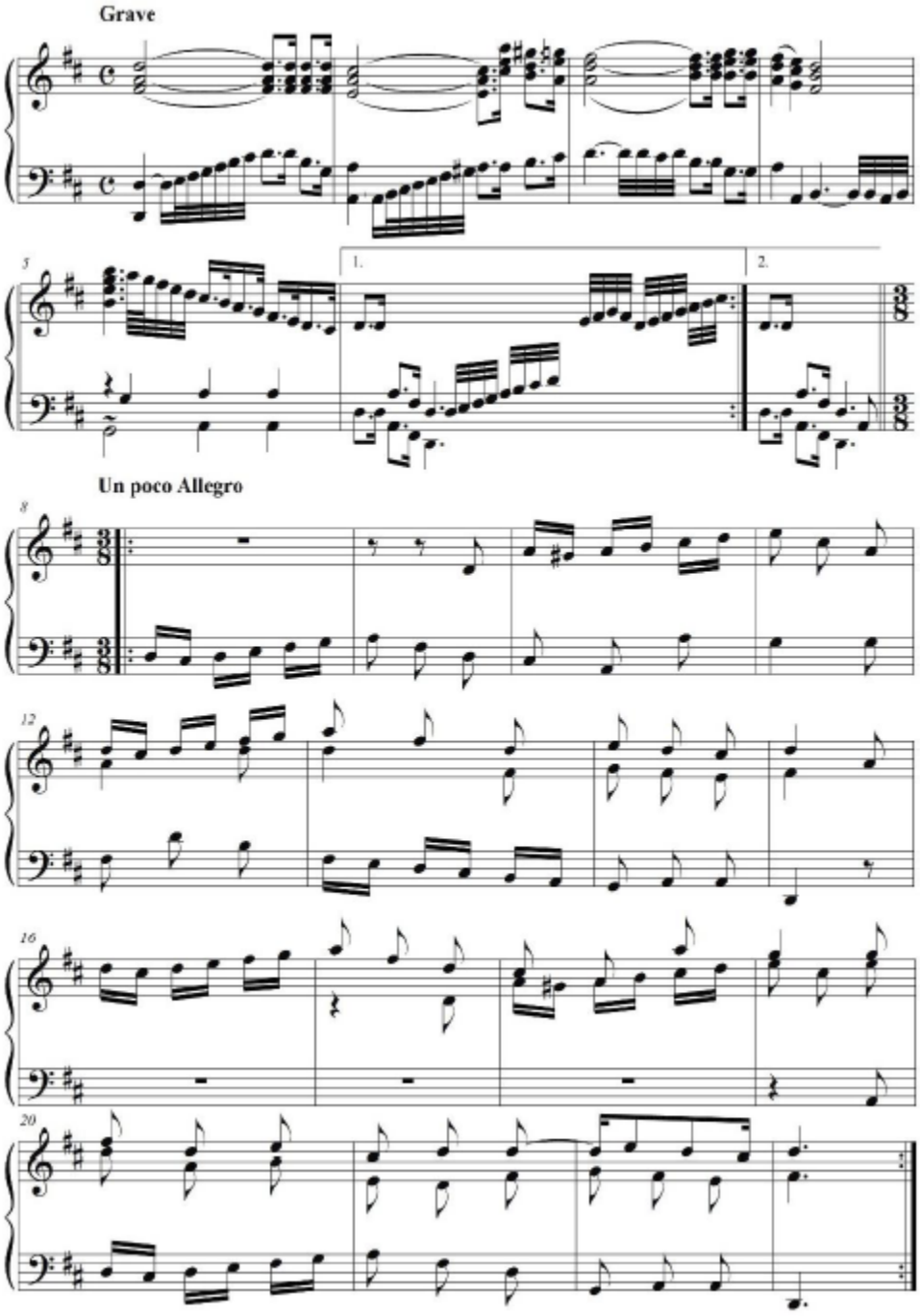


Phrasal Regularization

It is perhaps uncommon for a composer to alter the form of the theme when accomplishing variations upon it, but Forkel extends the B section of variation eighteen to give each implied voice the opportunity to carry the melody in invertible counterpoint (Fig. 4.13). However, since this change does not alter the regular arrival of cadences, Vogler raises no objection to this or any other phrase construction in the work. He does, however, dislike variation eighteen for other reasons, which is discussed below.

[249] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), 17. Strictly speaking, this variation functions as a polonaise; on the characteristics of polish dances in general and the polonaise specifically, see Downes, Stephen. "Polonaise." In *Grove Music Online*. Accessed January 30, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.22035.

**Figure 4.13: Forkel – Variation 18 on "God Save the King"**




Textural Diversity

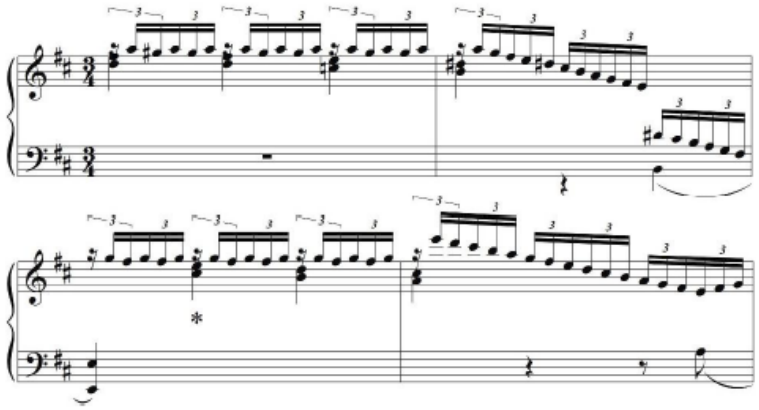
Vogler is unusually silent about the various contrapuntal densities used throughout Forkel's variations. This could be taken as a sign that Vogler mostly agrees with Forkel's

settings in this regard. However, given the prevalence of his complaints in other areas, Vogler may have simply felt that the work's texture could not be reasonably addressed until other issues were dealt with first.

Harmonic Clarity

Vogler addresses a large number of perceived errors against Harmonic Clarity in Forkel's variations, especially where Forkel's harmonic choices threaten the sovereignty of the piece's key. An instructive example of this is Vogler's review of the B section of variation 22:

**Figure 4.14: Forkel - Variation 22 on "God Save the King" B Section m. 1-4:**



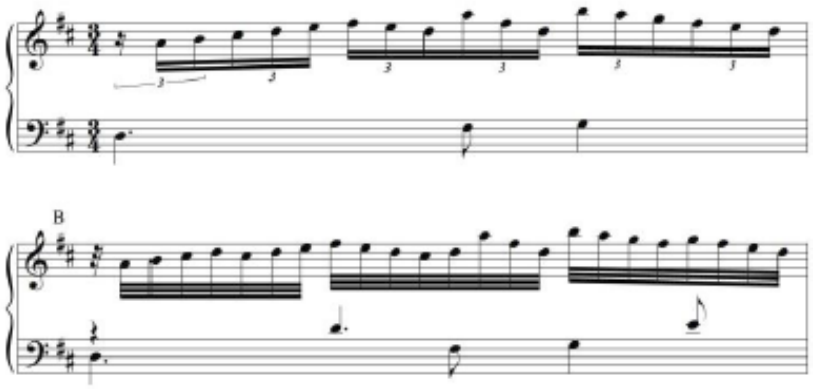
In the third measure, at the *, Vogler is concerned that a clearly C#-rooted harmony proceeds neither to a D harmony nor a B harmony. The G harmony that follows is both unexpected and unacceptable as a harmonic motion in D major.[250]

Musical Variety

According to Vogler, Forkel uses the same techniques, or at least nominally different techniques, much too often over the course of the variations. For instance, he draws attention to the distinct similarity between the first measures of variations 4 and 24:

[250] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), 15.

**Figure 4.15: Forkel – "God Save the King" A) Variation 4 m. 1; B) Variation 24 m. 1**




In these two excerpts, the bass lines are completely identical, and the melody of variation twenty-four outlines the same general figures with a few added embellishing tones. The only other difference is the addition of a middle voice to the twenty-fourth variation. Vogler continues to explain that the fourth variation is the source for two other suspicious bits of musical material, citing that m. 2 of the A section, and m. 6 of the B section are also copied, almost verbatim, in other variations.[251]

Thematic Unity

This is another category that occupies a large amount of space in Vogler's review. Yet, no other variation raises his ire as much as the "pedantic emptiness" (*pedantische Leere*) of number eighteen (see Figure 4.12). This variation:

> …begins like an overture in Handel's taste in the *Grave* tempo, but unexpectedly jumps into a $^{3}/_{8}$ time in allegro tempo, forgetting not only the previous gravity, but also the theme itself.[252]

One could argue that the contrasts between tempos and styles within this variation are positive

[251] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), 13-4.

[252] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), 11.

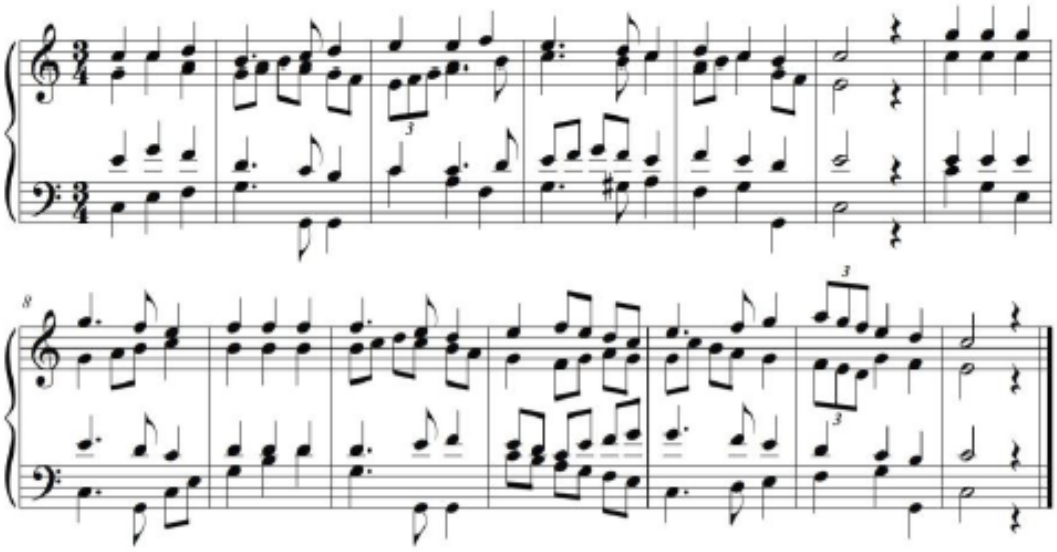
attributes thereof, contributing to a sustained level of musical interest. However, the theme is, at best, obfuscated in the A section, and essentially absent from the B section. In short, while this variation decidedly meets the criterion of musical variety, it fails both to maintain Vogler's standards of internal coherence and to participate meaningfully with the music that comes before or after it. So great is his dislike for the entire variation, that Vogler does not provide any suggestions as to how to fix the problem; this suggests that he would rather strike variation eighteen altogether.

Reharmonization

Forkel is relatively adventurous in his harmonization of these variations. For this reason, Vogler does not make any negative comments in this category except where Forkel's progressions interfere with harmonic clarity, as discussed above.

Near the end of his discussion of Forkel's work, Vogler includes an improved rendition of the main theme in a basic four-voice chorale setting:

**Figure 4.16: Vogler's Setting of "God Save the King"**



Vogler provides little commentary as to what makes his setting better than Forkel's theme,

except to observe that it avoids all of Forkel's mistakes without introducing new ones.[253] In any case, this chorale setting, much like the *Verbesserungen* of the Bach chorales mentioned above, is of great pedagogical significance to Vogler, because it offers clear, idiomatic harmonic content for a student to analyze. In addition to the excerpts above, the didactic quality Vogler assigns to chorales explains, not only their appearance in other areas of the *Betrachtungen*, but also the publications of the *Choral-System* and the *Zwölf Choräle* (1810).[254] Moreover, both Carl Maria von Weber and Giacomo Meyerbeer produced settings of "God Save the King"—in 1818 and 1835 respectively—that bear relatively strong resemblance to the style observed by Vogler in Figure 4.16.[255] The preeminence that Vogler grants the chorale, and its continued use by his students, further support Vogler's claim that the improvements he demands of other composers are motivated by his role as music teacher.

## Conclusion

The previous two chapters made evident that Vogler, due to his training in the Jesuit tradition, has good reason to build a system of music theory based on the deductive methods of rational thought. The present chapter has extended this idea to show that, regardless of the objections that might be raised against said system, Vogler does not treat it as a metaphysical

[253] Georg Joseph Vogler, "Verbesserung der Forkel'schen Veränderungen über das Englische Volkslied: God Save the King," (Frankfurt am Main: Verrentrapp und Wenner, 1793), 46-7.

[254] The *Choral-System*'s atempts to create a continuity in the history and theory of sacred music and argues for the purity and eternal relevance of the Greek modes; however, much of the book contains still more *Verbesserungen* of Bach chorales. The introduction (*Einleitung*) and analysis (*Zergliederung*) in the *Zwölf Choräle* were written by Carl Maria von Weber under Vogler's supervision; see Edler, Florian. "Carl Maria von Webers und Giacomo Meyerbeers Rezeption der Choralsatzlehre Georg Jospeh Voglers," in *Musiktheorie im 19. Jahrhundert*. ed. by Martin Skamletz, Michael Lehner and Stephan Zirwes (Schliengen: Edition Argus, 2017) 155. In addition to Vogler's likely desire to get his student's name in a publication, he may have also thought of this as a pedagogical exercise for Weber.

[255] Edler, Florian. "Carl Maria von Webers und Giacomo Meyerbeers Rezeption der Choralsatzlehre Georg Jospeh Voglers," in *Musiktheorie im 19. Jahrhundert*. ed. by Martin Skamletz, Michael Lehner and Stephan Zirwes (Schliengen: Edition Argus, 2017) 156-8.

ideal unrelated to any real-world counterpart. Rather, he insists that his harmonic principals are active rules that directly govern acceptable strategies of composition. By Vogler's assessment, composers that follow his well-defined rules, produce musical art; those that do not know the rules (or ignore them) may sometimes create passable works, but these works will always be deficient in one way or another. Moreover, as a pedagogically minded musician, Vogler believes that it is his responsibility to produce the *Verbesserungen*, pointing out the errors of others and hoping that they (or at least their successors) will achieve a greater understanding of what makes music effective. Chapter 5 takes up the question as to whether Vogler lives up to these standards within his own oeuvre.

# CHAPTER 5

## VOGLER AS *TONSETZER*

In his *Harmonielehre* (1922), Arnold Schönberg creates an intriguing comparison between a music theorist and a master carpenter. Both of these figures, he says, are professionals in their respective fields, yet there are a few important differences. Among these differences, he states: "the carpenter should never understand his craft purely theoretically, while the music theorist, above all, usually can do nothing practical; is not a master."[256] In other words, while a music theorist may know *about* music, that person does not necessarily possess the functional understanding that Schönberg expects from a composer. If Schönberg's statement is taken seriously, the present dissertation cannot accept Vogler as a worthy commentator in the area of music solely on the basis of the preceding chapters. We have seen Vogler as logician, performer, theorist, teacher, critic, and even as builder of instruments, but it remains to be shown that he legitimately lays claim to the title of *Tonsetzer* (composer).[257] The term *Tonsetzer* is of great importance in Vogler's case, not simply because it appears in the title of one of his own treatises (the *Tonwissenschaft und Tonsezkunst*), but also because, unlike the loosely related word *Komponist*, it bears deeply humanistic implications, tying Vogler to both the philosophical convictions of German *Aufklärung* and the more general idea of a well-rounded man educated in the classical tradition.[258] In other words, Vogler calls himself *Tonsetzer* perhaps because, unlike a mere *Komponist* who is only capable of writing music, he believes that his works participate in

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[256] Arnold Schönberg, *Harmonielehre*, (Vienna: Paul Gerin, 1922), 1-2: *der Tischler dürfte nie sein Handwerk bloß theoretisch verstehen, während der Musiktheoretiker vor allem gewöhnlich praktisch nichts kann; kein Meister ist.*

[257] This dissertation has admittedly not presented a great deal about Vogler as a performer; for a much broader view of this subject, see Floyd K. Grave and Margaret G. Grave, *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 227-66.

[258] This direct contrast between *Tonsetzer* and *Komponist* is not solidified in literature until later in the nineteenth- and early twentieth centuries, but Vogler's usage of the terms arguably foreshadows the distinction.

the dialogue of the enlightened world.[259] Showing that Vogler is indeed a *Tonsetzer* is doubly complex because, due to the great forcefulness with which Vogler insists that others follow his well-defined, "natural" rules for composition, he must necessarily show that he can create musical works that follow these same rules.

Other writers have already performed analyses on some of Vogler's works, though infrequently for the purposes intended here. For example, many authors have looked at Vogler's works for church and theater, though they tend to 1) examine only those works that Vogler analyses himself in the *Betrachtungen* and 2) concern themselves with text and text-setting rather than the harmonic rules that occupy so much of Vogler's writings; furthermore, they do not address musical form beyond the identification of da capo arias and the like.[260] A notable exception is Floyd K. and Margaret G. Grave's volume, which, though remaining strictly in church and theater music, does occasionally move outside the *Betrachtungen* and provide more general music-analytical commentary.[261] Another group of authors has partially analyzed some of Vogler's organ works, but primarily with an eye to the importance of these pieces in fostering an early-romantic system of tuning.[262] Michael Polth has discussed how Vogler's symphonic works compare with the standards of his predecessors in Mannheim (to be discussed below) but does not have the opportunity to carefully place this group of works in a larger European

[259] For further reading on the usage of the term *Tonsetzer*, see Paul Hindemith, *Unterweisung im Tonsatz*, (Mainz: B. Schott's Sohne, 1940), Einleitung; and Thomas Mann, *Doktor Faustus: Das Leben des deutschen Tonsetzers Adrian Leverkühn, erzählt von einem Freunde*, (Frankfurt am Main: S. Fischer Verlag, 1947), I.

[260] For instance, see Thomas Betzwieser, "Langage et poétique dans les analyses d'opéras de l'Abbé Georg Joseph Vogler." In *Le parole della musica. II: Studi sul lessico letteratura critica del teatro musicale in onore di Gianfranco Folena*. Florence: Leo S. Olschki, 1995.

[261] *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 128-56, and 178-226.

[262] For instance, see Hertha Schweiger, "Abbé G. J. Vogler's Orgellehre," PhD. diss., University of Freiburg, 1938.

context.[263] Moreover, in spite of this reasonably sizable group of sources, Vogler makes virtually no appearance in English-language scholarship; again, the main exception being the Graves' duograph.[264]

## A Brief Aside Concerning Vogler's Reflections on His Own Works

Some of Floyd and Margaret Grave's findings are quite relevant to this chapter in that they evidence a consistency between how Vogler says music should work and how it actually works under his authorship. In particular, the Grave pair draws attention to a *Zergliederung* (analysis) published by Vogler for pedagogical purposes alongside his own *Zwei und dreisig Präludien* (thirty-two preludes).[265] This *Zergliederung* is a "product of the author's ongoing quest for edifying connections between theory and practice" and "involves procedures comparable to those followed in (the?) *Betrachtungen*."[266] A pair of the Graves' examples bear

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[263] Polth does briefly draw attention to the fact that Vogler began composing at a time when a younger generation was experimenting with formal expectations, but simply does not have space to develop the idea beyond the bounds of Germany; see Michael Polth, "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition." In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, (Frankfurt am Main: Peter Lang, 2003), 93-130.

[264] Floyd K. Grave has also written a few articles on various compositions by Vogler; Margaret Grave provided Vogler's biography in *Grove Online*. I am aware of only two other English-language authors who make any mention of Vogler, both of them in Thomas Christensen, ed. *The Cambridge History of Western Music Theory* (New York: Cambridge University Press, 2002): Joel Lester identifies Vogler as a proponent of *Stufentheorie* (p. 774) and David W. Bernstein briefly presents Vogler's system as a precursor to nineteenth-century harmonic theory (p. 778-82).

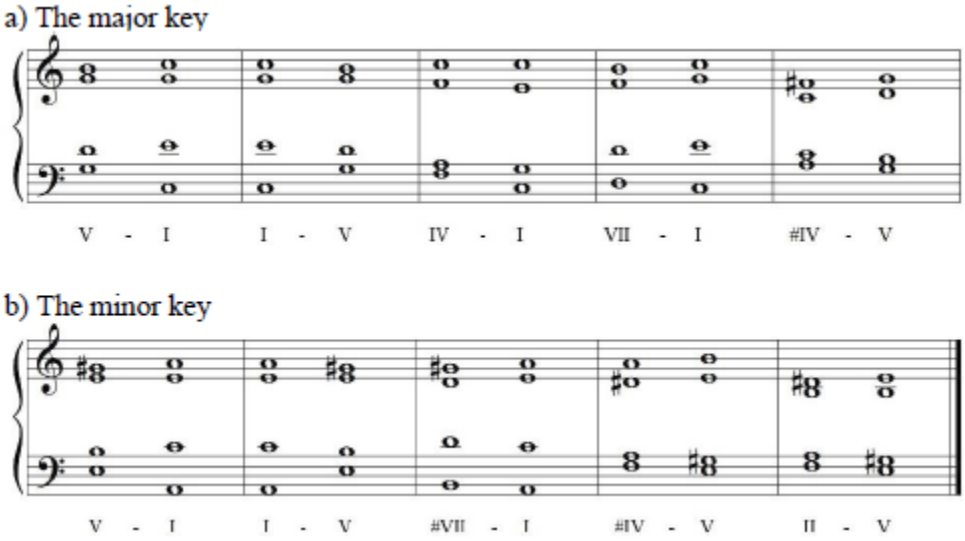
[265] As briefly mentioned in Chapter 3, Vogler claims that most of his theoretical writings are for the purpose of pedagogy. The small size of the preludes makes them particularly didactic for a *Zergliederung* in Vogler's assessment; he says that "since the rich material suitable for comments is limited to so few measures, the form can be more easily grasped and overseen; the music pupil can abstract rules of behavior all the more easily for his future manner of setting"; see Georg Joseph Vogler, "Zwei und dreisig Präludien für die Orgel und für das Fortepiano. Nebst einer Zergliederung in ästhetischer, rhetorischer, und harmonischer Rücksicht, mit praktischen Bezug auf das Handbuch der Tonlehre vom Abt Vogler," (München: Falter'schen Musikhandlung, 1806), 8: *Da der zu Bemerkungen geeignete reichhaltige Stoff sich auf so wenige Täkte beschränkt, so läßt sich die Form bequemer fassen und übersehen; der Tonschüler kann um so leichter für seine künftige Setzart Verhaltungs-Regeln abstrahiren*. Vogler used *Zergliederung* of his own works for pedagogical purposes with relative frequency; scattered throughout the *Betrachtungen*, Vogler provides similar analyses of some of his own keyboard sonatas and concertos, sacred choral works (such as "Ecce panis angelorum"), overtures (such as that for "Hamlet"), and arias (especially from *Kaufmann von Smyrna)*.

[266] Both of these quotations are taken from Floyd K. Grave and Margaret G. Grave. *In Praise of Harmony: The*

reproduction here, especially since they deal with a part of Vogler's system that this dissertation has yet to mention: the study of cadences (*Lehre der Schlussfälle*).[267]

Even in the *Tonwissenschaft*, Vogler argues that the major and minor keys can produce only five possible cadential (*schlussfallmäßig*) motions each.[268] These essentially schematic progressions are:

**Figure 5.1: The ten cadences according to Vogler**




The two cadences involving the raised fourth scale degree and the #VII -I cadence in minor are of special importance, because their characteristic chromatic pitch necessitates resolution, even when the music is not approaching the cadence that ends a phrase. For this reason, the Graves, following Vogler's example, point to the complexity of the two excerpts in Figure 5.2.

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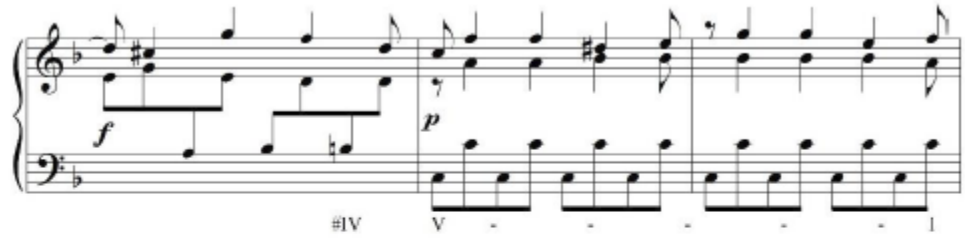
*Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 67.

[267] The German word *Lehre* is also of great interest in Vogler's usage since it can sometimes be translated "doctrine" or "tenet." Thus, *Lehre der Schlussfälle* could be taken as yet another way in which Vogler expresses his belief that musical rules are unchanging and unquestionable.

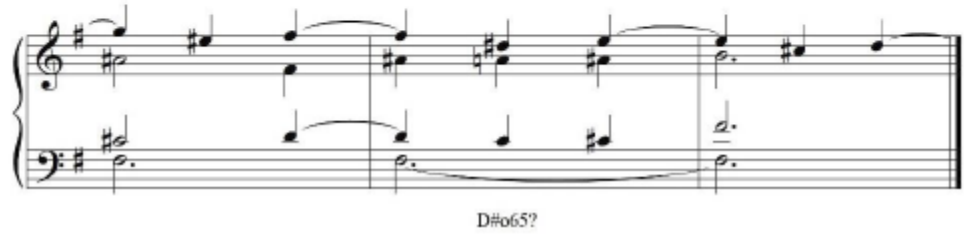
[268] The present dissertation will not have space to present the derivation of Vogler's cadential motions. His initial discussion of them is contained in Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 48-84. Later in his career, Vogler refined his explanation and provided actual musical examples to accompany his comments in the *Handbuch zur Harmonielehre*. An excellent summary of these materials appears in Floyd K. Grave and Margaret G. Grave. *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*, (Lincoln and London: University of Nebraska Press, 1987), 22-5.

**Figure 5.2: Excerpts from two of Vogler's Preludes**

a) Prelude No. 15 in F major, mm. 31-33




b) Prelude No. 14 in E minor, mm. 16-18




In the first of these examples, the apparent $^{6}_{4}$ chord on the downbeat of the second measure, which Vogler would normally accept as a functional tonic triad, cannot be so in this case. By Vogler's assessment, the sounding of the raised fourth scale degree in the bass clef of the first measure activates the cadential schema #IV-V, and therefore necessitates an immediate move to the dominant. Ergo, the F and A near the beginning of the second measure, as well as the more obviously dissonant D#, are surface-level embellishments that do not participate in the succession of harmonies. Similarly, the seeming D#$^{o6}_{5}$ in the second example cannot be a proper harmony because, due the presence of the pitch D#, the cadential motion #VII-I is expected but not immediately delivered; the entire measure effectively prolongs an F#$^{(7)}$ harmony.[269]

Considering the contents of the preceding analysis (including that in Chapter 4) as well as the many *Zergliederungen* within the *Betrachtungen*, one can easily see that Vogler's analyses

[269] While Vogler does not address this idea, his own analysis makes it very likely that he would read the A natural of m. 17 as an enharmonic spelling of G double-sharp, making the entire beat an example of chromatic counterpoint. If this is true—considering the established melodic pattern in the top voice—he might also interpret the tenor note C in m. 17 as B sharp.

(whether on his own works or works of others) maintain, not only a respectable level of sophistication, but also a near perfect uniformity with regard to the application of his own principals of composition and harmonic construction. Yet, one might object that this consistency might only work in certain pieces; or more pointedly, that Vogler only analyzed those pieces that he knew worked with the system he created. Moreover, Vogler's analyses, however lengthy or involved, do not address issues related to formal procedure—a greatly discussed topic in modern scholarship on the eighteenth and nineteenth centuries—beyond the level of individual phrase design. To fill these gaps, the remainder of this chapter will pursue two lines of inquiry. First, I examine Vogler's theme and variations on the famous French song "Ah! vous dirais-je maman" with an eye to how the compositional strategies of the preceding chapter find place in Vogler's own unanalyzed works. Finally, I expand my analytical scope from the consideration of moment-to-moment musical events and perform an extended examination on the first movement of Vogler's "Baierische National" Symphony, placing it in dialog with the expectations of modern theories of form, such as those by Charles Rosen, as well as James Hepokoski and Warren Darcy (hereafter simply H & D). While I readily acknowledge the much-discussed limitations of these scholars' methods, their relative familiarity in the field of music theory makes them an indispensable mirror upon which to reflect Vogler's compositions.[270] As I will show, Vogler provides a very different idea of form than what most modern scholars expect.

## Vogler Creates a "New" Work from an Old Tune

In 1785, W. A. Mozart published his famous Theme and Variations on "Ah! vous dirais-

[270] Hepokoski and Darcy provide a brief, yet insightful review of several other author's methods; see James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 3-9. They also recognize several potential pitfalls within their own system, especially concerning their usage of the term "deformation"; see Ibid., 614-21.

je maman," though it appears that he may have begun writing the variations about four years earlier.[271] Much later, Vogler published his own set of variations on the French song.[272] While it is possible that Vogler's version was created as a response to Mozart's, I cannot sufficiently substantiate such a claim.[273] Nevertheless, even if the two compositions share a common theme out of pure coincidence, their points of comparison are informative for understanding Vogler's analytical and compositional preferences. "Ah! vous dirais-je maman," provides a unique view of these preferences because it is neither one of Vogler's *Verbesserungen*—that is, it is not precisely an alteration of another composer's work—nor do the variations represent an entirely new composition, since the theme is predetermined. In what follows, I offer a selective analysis of Vogler's variations, which, through contrast to Mozart's much more well-known work, highlights some of the compositional strategies discussed in the previous chapter.

Due to this work's format as a theme and variations, a few of the preceding strategies used by Vogler for re-composition are something of a given. For this reason, I will not address

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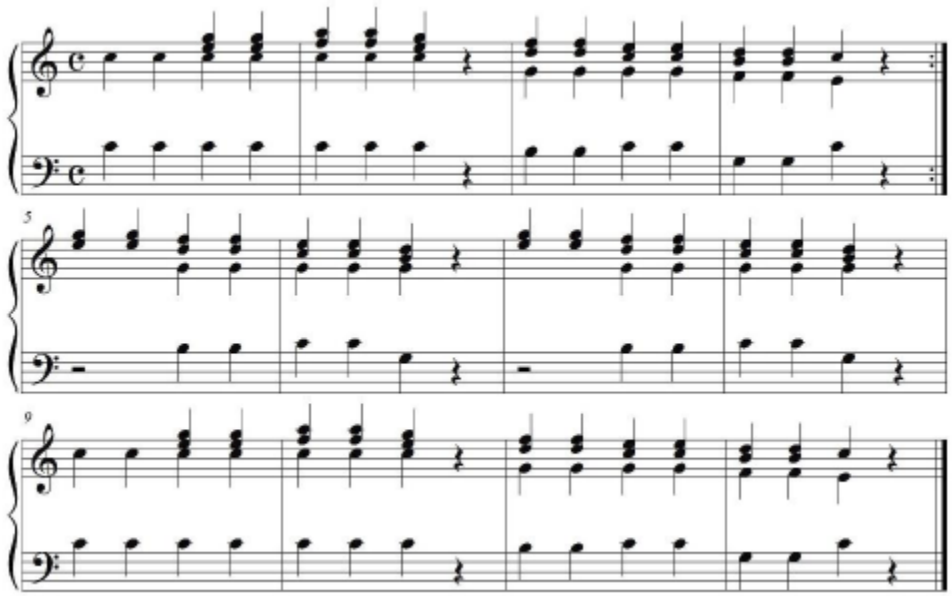
[271] Cliff Eisen and Stanley Sadie, "Mozart, (Johann Chrysostom) Wolfgang Amadeus," In *Grove Music Online*, Accessed January 13, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.6002278233.

[272] The composition and publication dates of Vogler's variations is unknown. Margaret G. Grave suggests an approximate date of 1807; see Margaret G. Grave, "Vogler, Georg Joseph." In *Grove Music Online, Accessed* April 29, 2018. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.29608. Conversely, a hand-written note on a French edition of the piece places the work in 1797; see Georg Joseph Vogler, "16 Variations pour le Clavecin ou Pianoforte," Mainz, 1797?–1807?.

[273] There is a good amount of circumstantial evidence to suggest that Vogler may have been trying to prove himself a better composer than Mozart. First, Vogler chose a French song and published the work with a French cover, indicating an intended French consumer; at the time, Mozart was much more popular in France than Vogler, whose primary area of influence was Scandinavia. On the other hand, French publications were not uncommon in Germany at the time, particularly due to the Napoleonic occupation of Bavaria and Austria at the beginning of the 19th century; indeed this very occupation provided the impetus for the 1806 edition of Vogler's *Baierische National Symphony* (to be discussed below). Second, Vogler chose the Theme and Variations format even though he could have used the tune as the basis of any other sort of work; a few instances include: the second movement of Haydn's Symphony No. 94, the first movement of Harl McDonald's *Children's Symphony*, and the twelfth movement of Saint-Saëns's *The Carnival of the Animals*. Third, Vogler includes four more variations than Mozart, perhaps in an effort to show his greater level of creativity. Finally, as mentioned earlier in this dissertation, there may have been a bit of professional hostility between Mozart and Vogler, both of whom auditioned for the Kapellmeister position at Mannheim in 1777.

Rhythmic Reassignment or Musical Variety at length; instead, these criteria will be touched on as they relate to other musical concerns. It should also be noted that this piece does not lend itself to an analysis of Phrasal Regularization, because the theme itself provides a steady structure that Vogler sees no need to alter elsewhere in the work.[274] Here is the theme as Vogler presents it:

**Figure 5.3: Vogler's Theme**



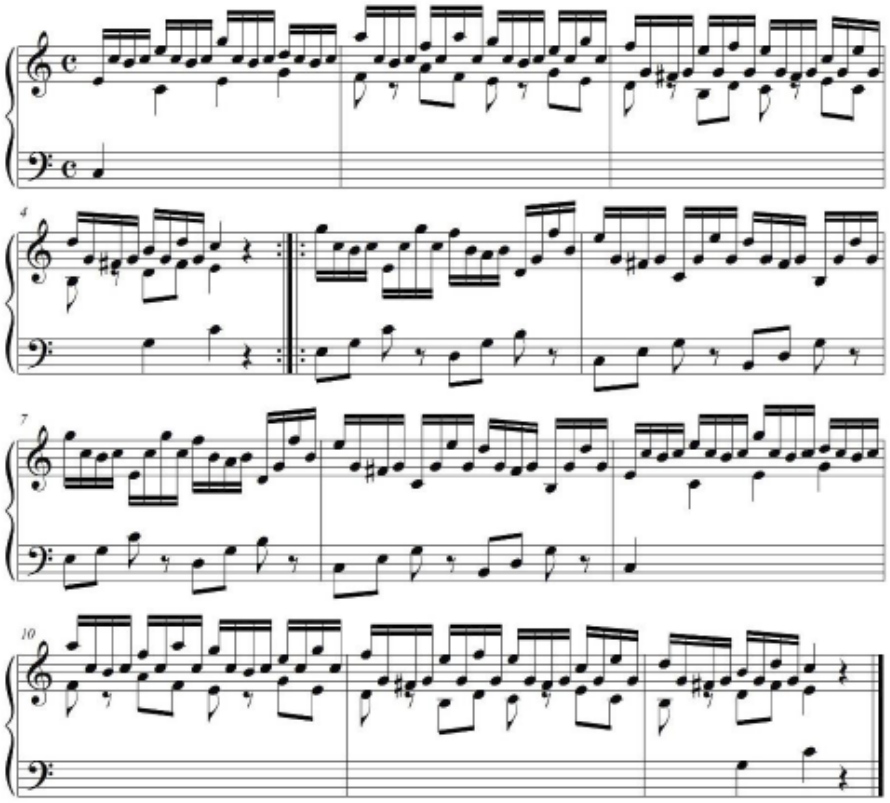
Textural Diversity

In general, one of the purposes of a theme-and-variations movement is to set up a unique musical character in each variation. This frequently involves creating a thicker or thinner contrapuntal density, thereby altering the number of perceived voices, as noted previously in the viola part of Pergolesi's *Stabat Mater*. Thus, a textural difference between two variations,

[274] A potential exception might be taken from variation X, in which, after arrival at its usual formal closure, the score indicates *dal capo*. This presumably extends the variation by four measures, which seem both tonally and formally superfluous. It is possible that the *dal capo* in variation X is a printing error; virtually all of the other variations require the *dal capo* to close the form, so the editor may have simply printed it next to every variation by habit. I am unaware of any evidence, other than the music itself, that would help decide this issue in either direction.

though musically interesting, is not remarkable for the present discussion. However, on a few occasions, Vogler even alters this property internally within a variation, as seen in Figure 5.4. In the A section, there are three apparent voices: the bass, which begins in the first measure with simple quarter notes but changes to groups of three eighths in the second measure; the melody, which essentially forms sixths or tenths with the bass; and an alto voice that functions as a pedal on C (mm. 1-2) or G (mm. 3-4), both with lower neighbor tones. The quickening of the bass in the digression along with the addition of a tenor voice (E4-D4-C4-B4 in mm. 5-6 and again in mm. 6-7), create a thicker texture than previously heard. The music returns to its original texture in the A' section (mm. 9-12). A similar instance can be found in Mozart's variation XII.

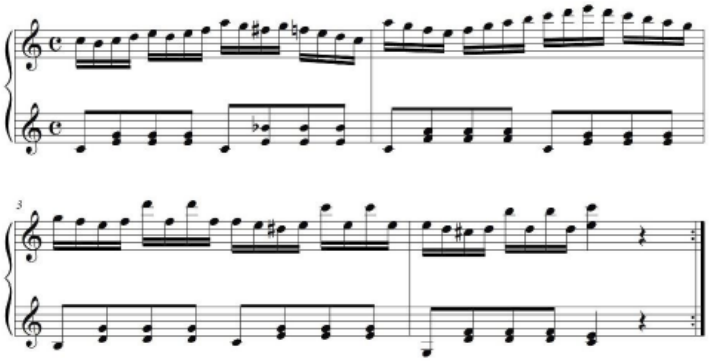
**Figure 5.4: Vogler's Variation V**



Another interesting example of Textural Diversity (see Figure 5.5) occurs not between formal sections, but internally within a phrase. The first two measures set up the expectation of

smoothly rising and falling sixteenths. In mm. 3 and 4, the sixteenths continue, but a new added voice suddenly appears, pulling the melody into the topmost register, while the previous focal voice moves mostly in parallel sixths. This increases the variation's perceived contrapuntal density from three to four voices. Comparable examples appear in Mozart's variations V and VIII.

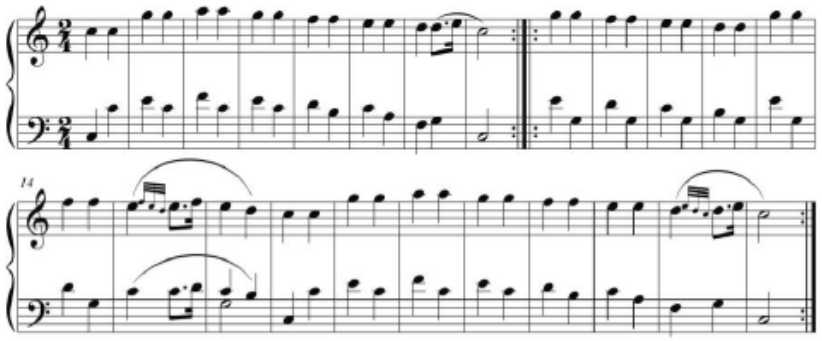
**Figure 5.5: Vogler's Variation I – A Section (mm. 1-4)**



Harmonic Clarity

As Vogler moves into subsequent variations, Harmonic Clarity becomes less important, since the progression gains more and more familiarity. However, at the outset of the work, Vogler wants to be sure that his harmonies are absolutely clear. Thus, whereas Mozart accomplishes his theme mostly in delicate two-voice counterpoint (as seen below in Figure 5.6), Vogler almost exclusively presents unmistakable block chords (see above Figure 5.3).

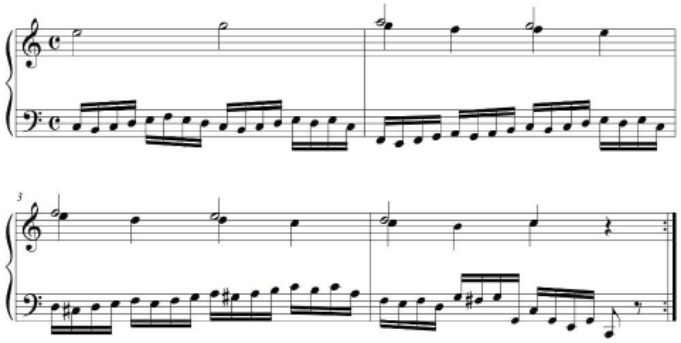
**Figure 5.6: Mozart – Theme and Variations on "Ah vous dirais-je Maman," Theme**



Thematic Unity

In both Mozart and Vogler's pieces, once a given variation has declared its chosen thematic character, with few exceptions (some mentioned above), that character remains consistent throughout the variation. Yet, Vogler, activating the potentials of *Ausführung*, creates interconnection between certain variations to tie the work together more completely. There are several ways that he accomplishes this; I will mention just two of them. First, Vogler is keen to make liberal use of chain suspensions:

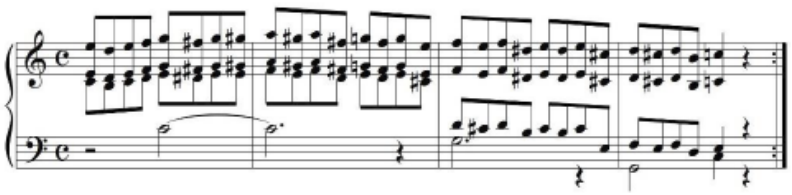
**Figure 5.7: Vogler's Variation VII – A Section**



The middle voice of this variation, even in the B Section (not shown), introduces a variety of chain suspensions, though only 9-8 and 4-3 suspensions are seen here. Similar figuration appears throughout variations X and XV as well.

Secondly, while Mozart employs lower chromatic neighbor tones in a few variations, Vogler's version see their use in variations I, II, III, V, VI, VII, and IX. Variation II is of special interest in this regard, because after the simpler chromatic lower neighbor pattern of Variation I (see Figure 5.5), Vogler incorporates both complete and incomplete chromatic neighbors:

**Figure 5.8: Vogler's Variation II – A Section**

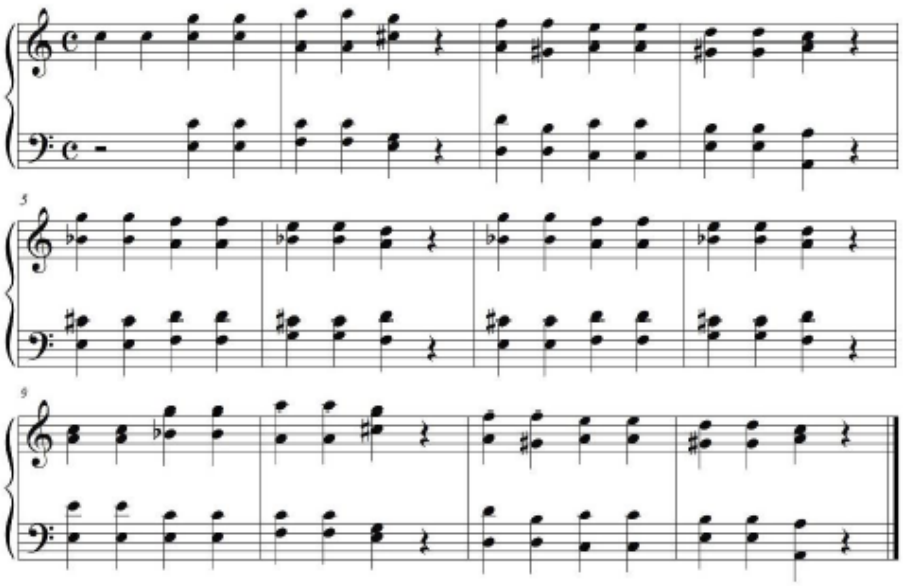


In all three of the upper voices, the second eighth note of beats one and three (except beat one of the "soprano" in m. 1) consistently stand a half-step below their parent note, and the second eighth of beats two and four (except m.1) function as lower appoggiaturas. Many of these require chromaticism.

Reharmonization

This category is perhaps where Vogler makes, if not the most common changes, certainly the most inventive ones.[275] Vogler's theme contains exclusively tonic triads, dominant triads, and various positions of dominant sevenths. As early as the first variation, he begins incorporating secondary dominants of the subdominant; variation II exhibits a dominant lock in the digression; by variation IV, the subdominant appears in root position, and the parallel minor key has been explored; in variation VII, the submediant becomes an accepted tonic expansion; and by variation XIII, numerous secondary dominants have dotted the musical landscape.

**Figure 5.9: Vogler's Variation XIII**



[275] Strictly speaking, Vogler would argue that he also incorporates the triad on the subdominant into the theme, but a modern theorist would probably identify these second-inversion chords as examples of the so-called, neighbor/pedal harmonies.

However, among these, variation XIII is by far the most interesting, for it contains one of the most imaginative uses of *Mehrdeutigkeit* that Vogler ever composed (Fig. 5.9). Notice first that, because this variation functions as a complete reharmonization of the theme, the progression Vogler wishes to use is not familiar to his listener; as such, he returns to block chording, once again enforcing his desire for harmonic clarity.

Especially at the beginning, variation XIII sounds as if it will, as all preceding variations, remain in a key centered on C. Beat three of the second measure does stand out as a chromatic harmony, but at first, there is no reason to assume that this is not simply the secondary leading tone triad to the supertonic (or a brief tonicization in contemporaneous parlance). The form's A section (mm. 1-4) cadences somewhat weakly on A minor, perhaps signaling a modulation to the relative. Yet, this cannot be considered a decisive cadence; in A minor, it is only an IAC and in C major, it is, at best, a tonic substitute approached by a secondary dominant. The digression (mm. 5-8) cycles ambiguously around d minor (either as the supertonic of C or the subdominant of A), and the A' section (mm. 9-12) is problematized by entering on a second-inversion triad. In the end, the final cadence presents the same weak motion as the one that ended the A section. The key of A minor is confirmed, but one never feels secure in this temporary tonal sojourn; variation XIV pulls directly back in C major, forcibly dispelling the tonal fog of XIII. Nevertheless, Vogler has successfully shown that the melody of "Ah! vous dirais-je maman" inherently possesses one of the forms of "multiple-meaning" that he described even as early as the *Tonwissenschaft*.[276]

[276] It is possible that Vogler was introduced to the idea of harmonizing this melody in the relative minor thanks to his own review of Johann Nikolaus Forkel's variations on "God Save the King," which was discussed in the third Chapter of this dissertation. Forkel's uses this technique in the 21st variation.

## The "Baierische National" Symphony and the Vicissitudes of *Formenverlauf*

Vogler's writings are remarkably silent about formal considerations beyond the succession of simple phrases (*Sätze*). When he analyses pre-existing works, he does comment about form to orient his reader within the piece under scrutiny, but he rarely praises or criticizes any choice of formal organization unless that choice interferes with the regularity of the *Sätze* (see Chapter 4, Figure 4.2) or threatens the harmonic clarity of a piece through the improper deployment of keys (see Chapter 4, Figure 4.9). There are several potential reasons why Vogler writes so rarely about this subject. These reasons include, but are not limited to: 1) he was unconvinced of the role of form as an essential element of a so-called "masterpiece,"[277] 2) he felt that form was so intuitive that no decent musician required instruction in it, 3) he believed that the subject of form was sufficiently addressed by other authors, 4) he did not possess a strong enough understanding of formal conventions to authoritatively comment on the matter, or 5) he purposefully privileged small, localized musical concerns over larger ones (i.e. favored the musical trees over the forest). With regard to the first of these reasons, Vogler would not be unusual for his time in having limited interest in strictly defined forms; nevertheless, this reason seems unlikely since Vogler believed in rules that governed virtually all other aspects of music.[278] Reasons two and three might seem easy to discard on the basis that he wrote exhaustively on everything else that pertained to theory, even if he was only repeating the words of others (as we have seen in Chapter 2 with his near-copying of Vallotti). Finally, if either

[277] By this comment, I do not seek to involve Vogler in the arguments surrounding "masterworks" and musical "genius." While it is true that Vogler himself uses the term "masterpiece" (*Meisterstück*) from time to time—without precisely defining what he means by it—the question as to whether Vogler would have willingly debated the subject of "genius" with other authors of his day or the present, is a subject for another time.

[278] Many composers at the time recognized older forms such as Theme and Variation, da capo aria, etc., but as Joel Lester explains, in spite of Koch and Riepel's important contributions to the area of form, the terms *Exposition*, *Development*, and *Recapitulation* are foreign to the eighteenth century; see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 294.

reason four or five is the case, we should expect to find uncommon (or even unheard-of) formal usages in his works. The remainder of this chapter is dedicated to the challenge of sorting among these possibilities. To prevent the discussion from spanning too broad an analytical scope, I concentrate solely on what James Hepokoski and Warren Darcy (hereafter "H & D") call the "most important large structure of individual movements from the 'common-practice' tonal era": sonata form; however, as we will see, sonata form was not as important to Vogler as such pronouncements would suggest.[279]

My choice of sonata form—a widely debated topic in modern scholarship—does not arise by coincidence, nor is it motivated by analytical convenience; rather, as I argue below, Vogler's compositions that might receive the title "sonata" or "first-movement form"—relatively few in number—like many other works recently placed in dialogue with sonata research, problematize some typical definitions of the genre.[280] For theorists who have already begun the process of expanding this sub-field beyond the bounds of the more famous Viennese classicists, it will come as no surprise that Vogler, having been trained elsewhere—in southwest Germany and Italy—exhibits a style and set of formal procedures more akin to the traditions of the places where he lived and operated. It would, however, be equally dangerous to assume that Vogler's works represent a small, unusual cluster in a highly localized zone of Europe; Vogler's ability to

[279] The internal quote is from James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 14.

[280] Part of the confusion arises due to the semantic overload of the terms "sonata" and "symphony." In addition to the well-known problem between "sonata" as a genre versus a form, the word can also historically refer to any purely instrumental work, as opposed to any "cantata," which designated sung works; see Sandra Mangsen, John Irving, John Rink, and Paul Griffiths, "Sonata" In *Grove Music Online*, Accessed March 31, 2021: https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.26191. Similarly, "symphony," rather than only referring to the typically understood four-movement symphonic form, can historically denote anything from a concerted motet to an opera overture; see Jan Larue, Eugene K. Wolf, Mark Evans Bonds, Stephen Walsh, and Charles Wilson, "Symphony" In *Grove Music Online*, Accessed March 31, 2021: https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.27254. Vogler himself composed a "Sinfonia in G Major" which consists of only three movements—or only two if you consider that he indicates an immediate connection between the first Allegro and the Andante section; the score indicates "Volti Súbito Andte."

travel, and thereby spread his ideas, creates the potential for a more complicated web of continental influence.

Any musical analysis (especially one of form) must be predicated on one of three decisions: 1) to avoid any preconceptions by being mostly descriptive of the music in question, 2) to establish a set of initial expectations with which the present work is deemed to conform or conflict, or 3) to allow for a blend of the previous two strategies, showing how creativity and convention are negotiated as a piece unfolds. Any of these decisions bears its own analytical perils and necessarily colors any conclusions derived from the data examined. Essentially all modern analytical strategies sit somewhere within the broad third category; this is because purely descriptive styles rarely teach us anything that we can use as reference in the comprehension of unfamiliar repertoire, and prescriptive strategies are doomed either to an endless stream of caveats or the constant condemnation of works that do not meet the accepted criteria. It is perhaps more helpful to conceive of the various strategies in question as lying on a continuum, such that individual analyses occupy a space more or less descriptive/prescriptive. In this sense, neither Charles Rosen nor H & D would fall into either pure descriptivism or unbending prescriptivism. Further, Rosen's *Sonata Forms* (revised 1988) might be understood as leaning more toward the descriptive side than H & D's *Elements of Sonata Theory* (2006), but both are more descriptive in formulation than the so-called "textbook" sonata.[281]

Another large consideration in sonata-form scholarship is the usage of historical and/or

[281] Two potential challenges should be noted here. First, I recognize that H & D could be seen as heavily prescriptive on the basis of analytical specificity. However, their system of "defaults" presents formal choices as being more or less common than others; this is an essentially statistical model, making it mostly descriptive of the given data. Second, several authors have also raised the objection that, due to a concentration on Haydn, Mozart, and Beethoven, H & D's data is biased and therefore prescriptive on works by other composers, see for instance William Drabkin, "Mostly Mozart," *The Musical Times*, 148 (Winter 2007), 98. Yet, this assertion is fundamentally a question of how strictly their data is applied to repertoires outside their chosen scope; throughout their volume, H & D are remarkably clear about what they have and have not personally examined.

modern methods in discussing a piece. Moreover, when a theorist engages in historical analysis, one must ask which historical lens has been chosen; it is a very different thing to analyze an 18th-century sonata in terms used by Kirnberger than to perform the same analysis in the style of Adorno. With an eye to modern scholarship on sonata form, one might once again draw a distinction between Charles Rosen, who strongly favors the writings of Donald Francis Tovey, and H & D, who side more with writers such as Heinrich Christoph Koch. This is not to say that one interpretation is necessarily more valid than the other. As Thomas Christensen notes:

> …real historical interpretation involves neither the domination of the historian over the past nor his submission to it. Rather it occurs by means of a dialogue carried out through the pathway of tradition…A text has a double hermeneutic identity. It is, as the historicist insists, a historical document written by an individual living within a unique culture and addressing definite problems in a personal discourse. Yet, this does not constitute its final meaning to us today, for meanings are never finished. A text is not like some archeological object that is to be excavated and preserved. A text is always open and subject to new readings and meanings by virtue of being read and interpreted in new contexts.[282]

Here, for Christensen's word "text," we might simply substitute "musical work." Thus, if one looks at works occupying the analytical space that sonata form claims to circumscribe, an ahistorical approach is not inherently more or less accurate than a historical one, nor is any particular historical approach better or worse on the basis of its relative temporal distance from the musical artifact. As long as an author's biases are explicit, their understanding of the subject participates meaningfully with the cultural, historical, and even scholarly discourse.

To avoid becoming mired in a debate over either of the preceding topics (descriptivism vs. prescriptivism and historicism vs. presentism), the current investigation will operate under three guiding conditions. First, wherever the music lends itself to such, I use terminology

[282] Thomas Christensen, "Music Theory and Its Histories," In *Music Theory and the Exploration of the Past*, edited by Christopher Hatch and David W. Bernstein, (Chicago and London: The University of Chicago Press, 1993), 29-30.

consistent with H & D's *Elements of Sonata Theory*. I do not, as H & D often do, intend this terminology to reinforce expectations as to how a form should or should not proceed.[283] Instead, I recognize the analytical utility of several of their concepts and value the nuance that they show in most of their musical inquiries. Table 5.1 contains a helpful list of the abbreviations that I have adopted from their system. As this analysis progresses, it will become evident that these abbreviations, and the concepts that they represent, do not always fit well with the formal processes favored by the Mannheim school in general, or Vogler specifically. Second, I accept the findings of Michael Polth concerning the typicalities of Mannheim-based symphonic works (to be discussed below) as essentially representative of that repertoire. Finally, I take the "Baierische National" Symphony as Vogler's symphonic output that is most significant to this dissertation, because it was written in closer temporal proximity to the *Handbuch* than his other works for orchestra. This means that it has the highest likelihood of aligning with the music-theoretical principles outlined in Vogler's final (and presumably most definitive) treatise.

**Table 5.1: Characteristics of H & D's sonata theory with their abbreviations**

| Abbreviation | Meaning |
|---|---|
| P | Primary Theme (approximately equivalent to the *Hauptsatz*) |
| S | Secondary Theme (approximately equivalent to the *Seitensatz*)[284] |
| TR | Transition (specifically that which bridges P and S) |
| X-space | The measures of music occupied by X (where X is replaced with one of the other abbreviations. Thus, P-space indicates the measures occupied by the primary theme) |
| MC | Medial Caesura (a formally significant cadence which, in most cases, ends TR and announces the beginning of S-space) |

*(table continues)*

[283] For example, I am suspicious of statements by H & D such as "If there is no medial caesura, there is no secondary theme"; see James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 52.

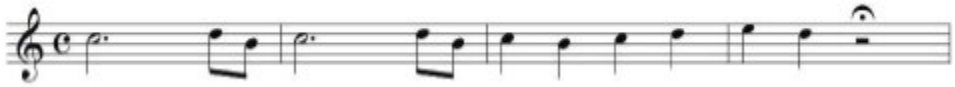
[284] By using the German terms *Haupt-* and *Seitensatz*, I do not intend to activate any of the problematic historical presumptions that are often associated with them (for example by Adolph Bernhard Marx). Specifically, I do not imply any genderization of the themes, nor do I align myself with the idea that secondary themes must always be softer or more *cantabile* than primary themes.

| Abbreviation | Meaning |
|---|---|
| EEC | Essential Expositional Closure (the cadence that structurally ends the exposition) |
| ESC | Essential Structural Closure (the cadence the structurally ends the movement as a whole; sometime called the Essential Sonata Closure. This cadence is often followed by C in both the exposition and recapitulation as well as a coda in the recapitulation.) |
| Dev. | The Development |
| C | Closing Material (indicates any musical ideas, thematic or otherwise that occur between the EEC and development or after the ESC. If part of C is considered especially recognizable or melodic, it can be called a C-theme) |
| Crux | The point in the recapitulation beyond which all remaining events unfold in the same order that they appeared in the exposition (allowing for the transpositions common to the recapitulation) |

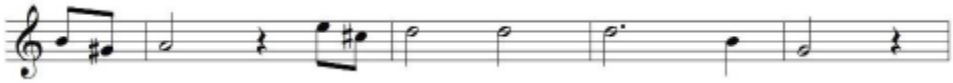
The overwhelming majority of the "Baierische National" Symphony's first movement is constructed from the themes and gestures in Figure 5.10. What I have somewhat ambivalently called the "Primary Theme" (Figure 5.10a) sets the tone for a movement that simply does not behave according to the formal plan that is commonly associated with the works of Haydn,

**Figure 5.10: Themes of Vogler's "Baierische National" Symphony**

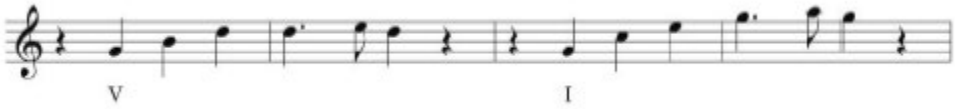
a) Primary Theme – Incipit only



b) Secondary Theme – Incipit only

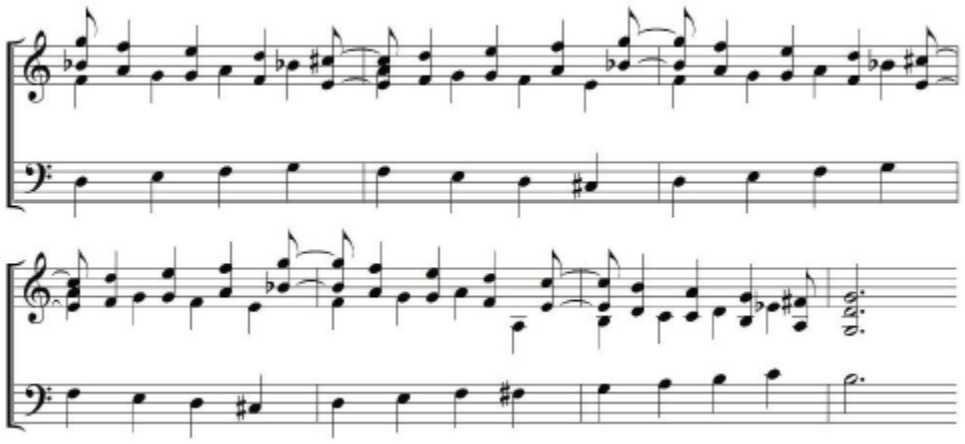


c) "Ich bin ein Baier" – two sub-modules that often appear one after the other[285]

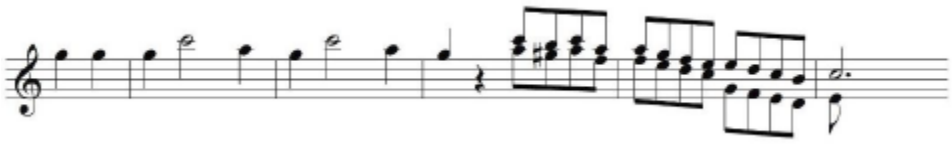



[285] The "Baierische National" Symphony was originally composed in 1799 and simply called "Symphony in C Major." Vogler arranged the work in 1806 for a special celebration commemorating the establishment of the kingdom of Bavaria. The "Ich bin ein Baier" theme appears in the instrumental voices of the 1799 version with no implied text, but in 1806, he added a choral part to actually sing the words that I have adopted as the theme's name. As near I as I am able to discern, "Ich bin ein Baier" has no other significance as a preexisting hymn, nor does it seem to possess any association with Bavaria.

d) Syncopated Transition



e) Syncopated Cadential Approach – does not always appear with the initial two measures from which its name is derived



Mozart, Beethoven, et al. In truth, this P, which, as a primary theme should, bursts forth as a bustling allegro in the main key, nevertheless also functions quite similarly to an introduction, even by H & D's standards. H & D recognize two types of introductions that they say are typical in the eighteenth century. First, is the "*brief, in-tempo introduction*" which is constructed with "a brief cadential formula or even only one, two, or three chords."[286] The other category is the statelier slow introduction, which, as their volume notes, frequently consists of four zones[287]:

1. *Heraldic or annunciatory call to attention* – in short, a *forte* entry in a "grand or 'important' style, claiming and clearing space for what is to follow."

2. *Quieter material, often a brief, lyrical melody* – the "*piano* aftermath of zone 1…In a major-mode work, it sometimes happens that the major collapses here to minor or displays significant borrowings from the parallel minor."

[286] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 292.

[287] All information here concerning slow introductions and their "zones" is taken from James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 297-9.

3. *Sequences* – "These often give the impression of a 'searching'—groping toward the attainment of the structural dominant."

4. *Dominant preparation* – most often a dominant prolongation or dominant "lock," often ending with a *fermata* "that separates the introduction from the sonata form that it has prepared."

One or more of these zones may be absent in a particular piece, and some aspects of a zone may be altered to suit a particular movement; but the zones that are present usually appear in the order indicated above.[288]

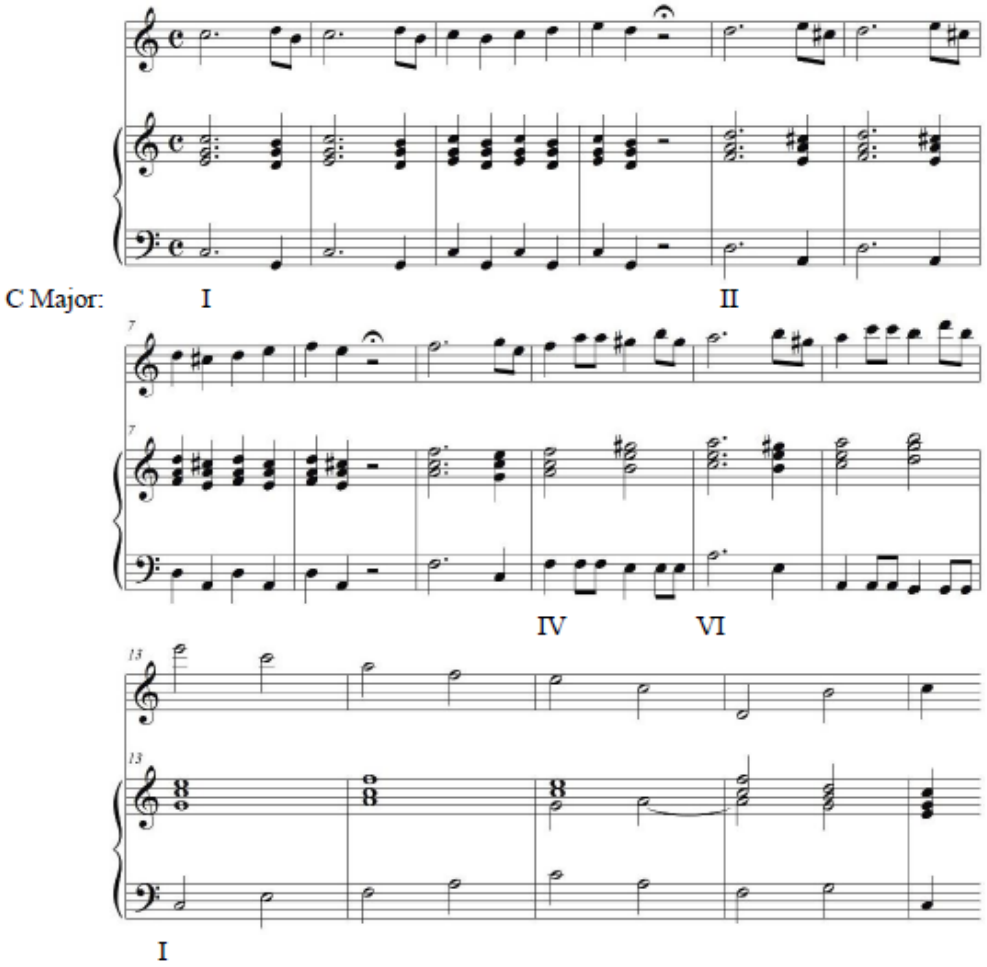
The initial impulse of the "Baierische National" Symphony (mm. 1-4) is not wholly representative of either category of introduction just mentioned. The theme enters at full tempo and is relatively terse as a brief introduction should be, but mm. 5-12 and beyond clearly participate with mm. 1-4 in a larger phrasal structure. Thus, the beginning of the movement is much too long to be encompassed by H & D's definition of an *in-tempo introduction*. Conversely, one could call attention to the fact that the theme enters as a *forte*, full-orchestra call to attention as H & D suggest concerning slow introductions. The gesture also leads to a dominant, immediately halted by a grand pause (indicated by the *fermata* over the half-rest). Moreover, as H & D predict, the next musical event (mm. 5-8) enters in a minor key at a lyrical *pianissimo*. Yet, the Allegro tempo of all eight measures is not typical for this type of introductory material, and the second phrase is not an independent, slow melody in the parallel minor; it is obviously just mm. 1-4 transposed up a step to D minor and still in the hurried allegro

[288] See James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 297-8: "…a generically typical introduction has available to it four expressive or functional zones, which usually become accessible in order. By no means do all introductions make use of all four zones. An introduction may omit, elide, or intermix one or more zones for localized expressive purposes…Although these four zones and their sub-types provide many of the basic patterns and expressive effects for eighteenth-century introductions, they do not underpin them all. Some introductions might rework individual aspects of individual zones to the exclusion of others."

previously heard. Another grand pause ensues. Taken together, mm. 1-8 operate like a *Monte* schema.[289]

A hypothetical listener may now reasonably expect two different ways in which the music could proceed. First, as a *Monte* often does, the music might continue sequentially and sound the theme in E minor; this would add credence to the idea of a slow introduction, which, as H & D claim, often contains sequencing. Second, mm. 1-8 could be taken as two basic ideas that form the presentation of a musical sentence. In this scenario, the listener would anticipate a continuation containing some fragmentation of the thematic gesture that has now appeared twice.

**Figure 5.11: Vogler – Baierische National Symphony, I., Reduction of mm. 1-17**




[289] Robert O. Gjerdingen, *Music in the Galant Style*, (New York: Oxford University Press, 2007), 89-106, and 458.

Vogler chooses the second course of action. Returning to *forte*, a fragment of the initial gesture sounds on F Major in m. 9 before moving to A minor and still higher back to C major (m. 10-12). A leisurely, falling arpeggio follows, which brings the music to a PAC in C major at the downbeat of m. 17. The entire melody of mm. 1-17 with a harmonic reduction of the orchestral parts can be seen in Figure 5.11. This proposed introduction sends the listener mixed signals. The music has outgrown the bounds of a *brief, in-tempo introduction* and also insecurely explored conditions 1, 2, and 3 of H & D's taxonomy for slow introductions (condition 1 more clearly than 2 or 3). Simultaneously, the theme has activated some of the typical markers for a primary theme: fast tempo, mostly *forte*, well-defined phrasal form, etc. Only subsequent music can decide this ambiguous beginning, but upcoming measures do little to aid formal clarity.

Now Vogler arrives at a crossroads with two probable options. He could mark off the first sixteen measures as an introduction and launch into some new theme at the cadential arrival of m. 17. Otherwise, he might force these measures to stand as a somewhat unusual P—drawing attention to their well-defined sentential form—and follow them up with either more P-space or TR. Instead, Vogler proceeds along an unforeseeable third course. He does introduce the "Ich bin ein Baier" theme (mm. 17-8), in its tonic guise, but immediately discards it in favor of a slightly lengthened "Syncopated Cadential Approach" which brings the music to another PAC in C major at m. 26.

In m. 26, P returns and, as before, works its way through C major, D minor, and F major, but this time, the keys cycle in different proportions; the C major of mm. 1-4 seems compressed into only mm. 26-27, mm. 5-8 (D minor) are shortened to occupy only mm. 28-29, and F major, which previously lasted only one measure (m.9), now holds mm. 30-31. Suddenly, the "Syncopated Transition" appears, vacillating back and forth between the diminished sevenths of

D minor and G major (mm. 31-36). In m. 37, the P theme returns once again, now seemingly introducing the key of G major with a bit of modal mixture ($E^b$). A well-enunciated, yet weakly orchestrated, cadence in G major follows at m. 44. At this point, a listener has good reason to retrospectively define mm. 26-44 as TR-space and accept the G major cadence as a strong candidate for the MC. If this is correct, the secondary theme should be heard next. Yet, Vogler decides that P is somehow still not sufficiently established; it rises once again, this time complimented by "Ich bin ein Baier" (mm. 44-46).[290] P quickly fades, giving way to its accompanying theme (mm. 47-49). Finally, even "Ich bin ein Baier" disappears, allowing a variant of the end of the "Syncopated Cadential Approach" to secure a more definitive, full-orchestra MC at m. 52.

After a caesura fill (mm. 52-53), a new theme finally presents itself. The key is G major and the theme is marked *dolce*; thus, even by many stricter definitions, m. 54 marks the beginning of S-space proper. This somewhat lengthy "Secondary Theme" is first presented as another simple sentential structure, consisting of two identical basic ideas (mm. 54-57 and 58-61) and a fragmentary continuation (mm. 62-77), but immediately plays through a second time with constant accompaniment by "Ich bin ein Baier" (mm. 78-100). There are two factors that make this S atypical in H & D's system. First, while S is not a literal reusage of P, one is probably derived from the other; the conspicuous double-neighbor figure evidences such.[291] Second, this S, like P before it, does not end as expected. After two full presentations of the S melody, P intrudes yet again at mm. 100, eliding with the expected location for the EEC. P (an

[290] H & D would call this a situation where the "*proposed* MC" is "declined" and the music "defers the real MC…until later"; see James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 45-7.

[291] It is likely that H & D would classify this S a "'Contrasting Derivation' from P"; see James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 136.

inherently "opening" idea") is now placed in counterpoint with fragments of the "Syncopated Cadential Approach" signaling both a beginning and an end (perhaps the beginning *of* the end?). This mix of roles eventually negotiates a PAC in G Major at m. 114, but neither party seems satisfied, so both go around again before finally coming to rest forcefully on G major at m. 126 and reemphasizing the cadential arrival from m. 126 through m. 129. The exposition's work is finally complete.

The formal ramifications of this S-space might be considered quite large. In H & D's terms, having been ousted by P-material, the S-theme does not end on a proper cadence. The appearance of P in C-space is not unusual, but since there is no clean break at the end of S, H & D cannot accept mm. 100-129 as proper closing material either. In the end, their system only allows them three possible explanations. First, this movement could be said to exhibit "P- or TR-Material in the Interior of S-Zones."[292] This option places the EEC at either m. 114 or m. 129, depending on whether or not mm. 115-129 seem of sufficient force to "reopen" the exposition-space: an unlikely option, since S does not reappear after m. 100. A second reading would declare a "failed exposition" since no PAC separates S and C, but this is also doubtful in H & D's mind because S-space has indeed secured a cadence in the secondary key (m. 77).[293] Third, and the most likely scenario by H & D's standards, is to place the EEC at m. 77 and argue for a "Persistence of S-Material" that bleeds into C-space.[294] This characterization is somewhat problematic because it labels mm. 78-129 as closing material, making C-space nearly as large as

[292] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 140-1.

[293] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 177-8.

[294] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 151-2.

the rest of the exposition combined.

I offer one final possibility that is unavailable to H & D's system, namely that, as Michael Polth has observed, Mannheim-based composers had a penchant for creating movements with common formal "interchangeability" (*Vertauschung*).[295] We will see a much more dramatic use of this property later, but for now, it is only important to note that the very fact that P and S are so closely related makes it easier for Vogler to mingle and/or exchange them as formal sections or sub-sections. In this reading, I disagree with H & D that the formal end of the exposition is the "first satisfactory PAC within the secondary key."[296] I argue that the term "satisfactory" can be taken in relativity, and the cadences at mm. 114 or 126 are both much more "satisfying" than that of m. 77.

The development of the "Baierische National" Symphony's first movement is neatly divided into three sub-sections. The first of these (mm. 129-181) is characterized by fragments of P, metric rotations of P (as seen in Figure 5.11), and fragments of the "Syncopated Cadential Approach." Eventually (mm. 176-180), the "Syncopated Cadential Approach" is presented in its complete form and clearly announces that it is heading for the key of C major, potentially bringing about the recapitulation. However, at the last possible second (m. 181), the expected cadence is replaced with a fermata over a full measure of rest. The recap must wait.

The second zone of the development (mm. 182-211) initially continues to use P, both in its original and rotated variants, but now in counterpoint against "Ich bin ein Baier." Beginning in m. 190, a new musical gesture—perhaps derived from S or the "Syncopated Cadential

[295] Michael Polth, "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition," In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, (Frankfurt am Main: Peter Lang, 2003), 95-100.

[296] James Hepokoski and Warren Darcy, *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*, (Oxford and New York: Oxford University Press, 2006), 151-2.

Approach"—appears, and languidly moves through several keys (Fig. 5.13). As if concerned that the movement is losing energy, "Ich bin ein Baier" returns (m. 204) and spurs the music, first to a $G\#^{o4}{}_{3}$ (m. 207-210) and then finally to $B^{6}{}_{5}$ (m. 211), ushering in the third and final zone of the development.

**Figure 5.12: Vogler – "Baierische National" Symphony, P in metric rotation**

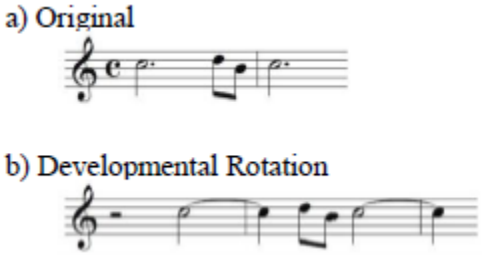
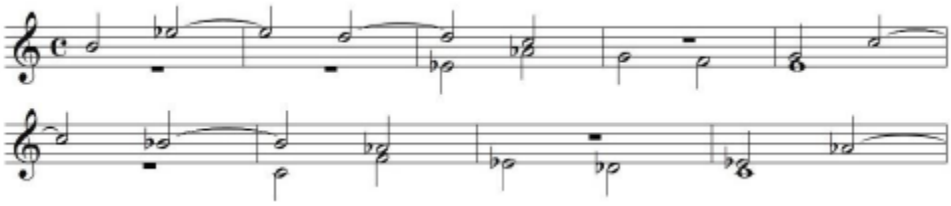



**Figure 5.13: Vogler- "Baierische National" Symphony, I. Development Reduction**



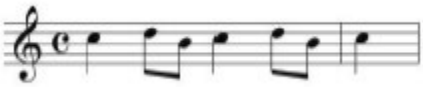
In m. 212, "Ich bin ein Baier" continues and swiftly coaxes P back into counterpoint with it. By m. 218, "Ich bin ein Baier" seems convinced that P has enough energy to go on alone. P quickly hands the music over to the "Syncopated Cadential Approach" (m. 221) trying to hasten the onset of the recapitulation. Yet, the movement seems stuck: approaching the tonic return, but never quite reaching it. The "Syncopated Transition" intervenes (m. 228) and forcibly clears the musical stage so that the "Syncopated Cadential Approach" (mm. 240- 245) can finally draw the movement out of the development.

After the events of the exposition and development, it should be no surprise that the recapitulation does not follow H & D's expected patterns. The music remains on track for only four measures (mm. 245-248); P's *forte* annunciatory gesture recurs in tonic, followed by the

previous grand pause. Thus, a sentential basic idea has been sounded, and the listener anticipates another basic idea on D minor at *pianissimo*, according to the standard set forth by the exposition. However, an unprecedented timpani solo (mm. 249-250) signals that something is awry.[297] The strings join the timpani in an effort to fill suddenly empty space, after which, S ensues unannounced. The majority of P, the entirety of TR, and H & D's all-important MC are completely culled. Satirically, P now seems more like a *brief, in-tempo introduction* than it did in the beginning of the movement.

It now becomes fortuitous that Vogler presented so much P material after S in the exposition. Otherwise, P would have virtually no role in the tonic return. Once S begins, everything plays out almost exactly as it did previously; S plays through twice (the second time with "Ich bin ein Baier), and P once again elides with the end of S (m. 299). At m. 315, a PAC in C Major (which H & D would likely label the ESC) elides with a short transition built from a new variant of the P theme:

**Figure 5.14: Vogler – "Baierische National" Symphony, I. P's recap variant**



This new idea carries the music to m. 327, where the previously missing falling arpeggio of P suddenly resurfaces, in the "wrong place"—if one references the order of the exposition. A full-orchestra PAC, much more satisfying than that heard at m. 315, arrives at m. 331 providing necessary closure to the form. A short P-based coda (331-336) completes the movement. Yet, due to several relatively small thematic detours, the movement has no crux.

[297] This is not the only time that Vogler uses a timpani solo to demarcate an important formal event; another notable example occurs at the beginning of his Samori Overture (1804) where the timpani is the first to present a version of the main melody, and it does so unaccompanied (mm. 4-11).

To complete the examination of this sonata form, I return to the words of Michael Polth:

> One of the most striking moments of the formal structure observed in the Allegro first movements of many Mannheim symphonies is the interchanging of formal sections—especially in the recapitulation (if the term "recapitulation" is still appropriate under these circumstances)—or the repetition of the beginning at the end of a movement. This peculiarity, which indeed seems to have existed with a certain continuity, is found in almost all movements of Vogler's symphonies (even in slow movements).[298]

While Polth does not mention Timothy Jackson's concept of the "tragic reversal" of the themes in the recapitulation,[299] Polth would doubtlessly contend that such a reversal is in fact the standard in Mannheim symphonic works—particularly those of Johann Stamitz—and is therefore not "tragic" in any way.[300] Ergo, the formal expectations of Mannheim listeners were probably different from most others in Europe. It is even possible that, due to Vogler's fame in the extreme northern regions of the continent, Scandinavian audiences grew to treat Mannheim's formal procedures as the norm.

Yet, the central query of this section has not yet been answered: why did Vogler not write about those formal elements that were integral to his style? Yet, Polth has hinted at the answer to this question in the quote just seen: for Vogler, "recapitulation" may not be an appropriate term. Perhaps, Vogler's main concern is not the return of themes or sections, but the reassertion of the tonic key to end the movement; indeed, this is a core musical "rule" on which he has

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[298] Michael Polth, "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition," In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, (Frankfurt am Main: Peter Lang, 2003), 95: *Zu den auffallendsten Momenten des Formaufbaus, die an den Allegro-Hauptsätzen vieler Mannheimer Sinfonien beobachtet wurden, gehört die Vertauschung von Formabschnitten—vor allem in der Reprise (falls man den Ausdruck „Reprise" unter diesen Umständen noch für angebracht hält)—bzw. die Wiederholung des Anfangs am Schluß eines Satzes. Diese Eigenart, die in der Tat mit einer gewissen Kontinuität existiert zu haben scheint, findet sich in fast allen Sätzen der Sinfonien Voglers (auch in langsamen Sätzen)*.

[299] Timothy Jackson, "The Tragic Reversed Recapitulation in the German Classical Tradition," *Journal of Music Theory* 40, No. 1 (Spring 1996), 61-111.

[300] Michael Polth, "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition," In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, (Frankfurt am Main: Peter Lang, 2003), 96. Polth does not mention Jackson's article; the connection presented here is only by me.

insisted since the beginning of his career.[301] In other words, *tonal* closure (in an exclusively harmonic sense) takes precedence over *formal* closure: a belief that Polth might say was typical of the Mannheim style. This procedure is also observed in other works in Vogler's oeuvre; for instance, of the previously mentioned thirty-two preludes, all of them have a tonic return at the end, but only twelve of them (II, III, IV, VII, X, XI, XV, XXIII, XXVI, XXVII, XXX, and XXXI) bring the main theme back with the tonic. Furthermore, several of these tonic restatements are not as clear as one might expect in the eighteenth century; for example, when prelude XV's A-theme reappears in tonic (seen above in Figure 5.2), it does so over a dominant pedal, weakening the sense of a return to the beginning.

Thus, the answer to this section's question is something of a mix between two of the options previously presented: form is indeed not as important to Vogler as modern theorists might assume, and the Mannheim tradition of form (as far as it *can* be defined) was probably so well established by Vogler's time, that it did not bear mention. It might be more meaningful to compare Vogler's "first movement" forms to the so-called "Grand Binary."[302] As such, Vogler's sonatas do not consist of H & D's suggested three-rotation construction; rather, Vogler may have considered the development, which functions more like a highly involved digression, as being joined to the "recapitulation" in a large B section. Overall, the movement must contain a tonic return but does not necessarily need not exhibit the proportions or thematic characteristics of

[301] Vogler, in fact sets forth the standard that a piece must not only begin and end in the same key, but it must also not stray too far from that key; see Georg Joseph Vogler, *Tonwissenschaft und Tonsezkunst*, (Mannheim: Kurfürstliche Hofbuchdruckerei, 1776), 71.

[302] The Grand Binary Form or "Grand Coupe Binaire" entered the theoretical discourse through the writings of Anton Reicha, though, unlike Vogler's form in the "Baierische National Symphony," Reicha does specify that the tonic return should also present the primary theme (*première idée*). Nevertheless, Reicha does consider the form to essentially consist of two main parts, and the development represents the first section of the second part (*Première section de la seconde partie*); see Anton Reicha, *Traité de Haute Composition Musicale*, vol. 2. (Paris: Zetter, 1825), 300 ff.

balanced or rounded binary form. In any case, Vogler, and probably other composers like him, may have thought of form as a process to be carried out, not a mold to be filled.

## Conclusion

To close the form of this chapter, I return to its metaphorical tonic: the question as to Vogler's identity as a *Tonsetzer*. Vogler did indeed produce musical works, and those works can be placed in dialogue with other composers of his day, particularly within the Mannheim tradition. Moreover, Vogler, rather than only taking other composers to task, is quite consistent in applying his theoretical principles to his own works, both in regard to harmonic rules and issues of taste. If his works do not sit well in the mold of other composers, this is doubtlessly due to the persons and places involved in his musical training. If he was unpopular in places like Paris and Vienna, it was probably due to the same compositional techniques that made him a cultural icon in Mannheim and Scandinavia. Vogler was not a *Tonsetzer* in the same vein as Haydn, Mozart, Beethoven, et al., but by Schönberg's standards, he still earns the title.

# CHAPTER 6

## CLOSING REMARKS

The contention of this dissertation has been that Georg Joseph Vogler, though often only appearing on the edge of modern scholarship in the area of eighteenth-century music theory, is actually a central figure in the creation and transmission of many ideas deemed critical to most analytical inquiries into music of that time. His contributions to the field are not anomalous or unrelated to the writings of his contemporaries; rather they are indicative of the constant theoretical reformulations brought about by the clash between thoroughbass and fundamental bass for the position as the more musically meaningful system of thought. Vogler's brand of fundamental bass is mostly unknown because its progenitor, Francesco Antonio Calegari (and more broadly, the Italian pedagogy tradition), chose not to publish his works and therefore was overshadowed by the more politically and academically savvy Rameau.[303] Vogler's compositions, perhaps masterworks in their own right, have been passed over because they do not sufficiently resemble those of the First Viennese school, who works and forms have been popularized through the writings of A. B. Marx, Heinrich Schenker, Carl Dahlhaus, Arnold Schönberg, Donald J. Grout, et al. Vogler's influence on coeval European musical style is mostly forgotten because it was not disseminated in the typical cultural centers of the continent, such as Vienna and Paris; though, his influence is perhaps felt indirectly through the better-known efforts of Gottfried Weber as well as Vogler's own students, especially Giacomo Meyerbeer and Carl Maria von Weber.[304] Finally, Vogler's early training, in some ways,

[303] On the steps that Rameau took to ensure the acceptance of his ideas among academics, see Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 143-50.

[304] One treatment concerning these influences can be seen in Joachim Veit, *Der junge Carl Maria von Weber. Untersuchungen zum Einfluss Franz Danzis und Abbé Georg Joseph Vogler*, (Mainz: B. Schott's Söhne, 1990).

sabotaged his own popularity as a writer, because the Jesuits, the rationalists, and the very concept of an unchanging musical metaphysic went against the grain of the day's musical culture and philosophical sensibilities. Vogler's rationalist dogmatism further complicates the transmission of his ideas, because, instead of composition leading to theory and finally to pedagogy, Vogler's music-theoretical system precedes both composition and pedagogy. Whatever objections might be raised against such a stance, the theory and compositions that result from it remain relevant to the broader theoretical discourse. Thus, the inclusion of Vogler, and other less well-known authors, in our history of music provides an important foil for the essentially teleological approach often presented in modern views of the eighteenth century.

This dissertation has also opened a few avenues for further research. First, I have brought into question the centrality of Rameau as a pioneer in bringing about the end of the thoroughbass era. Lester has argued that Rameau's ideas spread more or less by word of mouth, slowly, almost surreptitiously gaining cultural currency over the course of the century.[305] Yet, it appears that Italians (Calegari, Vallotti, etc.) and Germans (Heinichen, Koch, etc.) were also considering the implications of harmonic invertibility and devising systems comparable to Rameau's; this may have enabled Rameau's concepts to be more readily accepted. In some cases, Rameau's reception may have even been based on a type of confirmation bias rather than the force of his arguments or his method of presentation. A closer examination of the lines of transmission for these systems seems advisable.

Second, one source of influence I did not fully explore is how Vogler's understanding of music was influenced by the Mannheim court orchestra. Michael Polth has shown that Vogler's

[305] Joel Lester, *Compositional Theory in the Eighteenth Century*, (Cambridge, Massachusetts: Harvard University Press, 1992), 150-5.

forms and usage of dynamics are typical of the Mannheim style. Yet, one must ask if Vogler learned more from Mannheim musicians. There are portions of Vogler's theories, hinted at in chapters 3 and 4, that he accepts as self-evident, and transmits to his students without further explanation. This raises the possibility of a greater continuity in Mannheim-based compositions despite the departure of the court orchestra just before Vogler's institutionalization of the Mannheim Tonschule.[306] Rather than a pre-Vogler era, during which the court orchestra observed certain traditions, and a second era strictly observing Vogler's Italian concepts, Mannheim may have developed a music pedagogy of its own. However informal this training may have been, it may have, in part, survived to the present day, not only through the school itself, but also through the writings and compositions of Vogler's more dedicated students, such as Giacomo Meyerbeer, Carl Maria von Weber, and Peter Winter.

Finally, following the example of several other recent publications, I have suggested that the musical forms of the eighteenth century were not as clear cut as is often assumed[307]; this should encourage a renewed interest in diversifying our understanding of the European musical environment of the day to include compositions and composers beyond the scope that has dominated most twentieth- and twenty-first century discussion. While it is also important to investigate works outside "western music," Vogler's oeuvre makes it clear that we have not yet exhausted Europe's great musical variety.

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[306] In 1777, the Mannheim elector, Karl Theodor, became the elector for all of Bavaria, a position which required him to relocate his court, including the orchestra, to Munich; see Würtz, Roland. "Mannheim." Revised by Eugene K. Wolf. In *Grove Music Online*. Accessed March 25, 2021. https://www-oxfordmusiconline-com.libproxy.library.unt.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000017660?rskey=SIzh4M.

[307] For another example of the diversity of European sonata forms, see Bryan Stevens, "Theorizing Sonata from the Margins: Manuel Blasco de Nebra's Seis Sonatas (1780) in Context." Conference Presentation, 42nd Annual Meeting of the Society for Music Theory, Columbus, OH, November 8, 2019.

# BIBLIOGRAPHY

## Primary Sources


Albrechtsberger, Johann Georg. *Gründliche Anweisung zur Komposition*. Leipzig: Breitkopf, 1790.

Anderson, Emily. *The Letters of Mozart and His Family*, 3rd ed. London: The MacMillian Press Ltd., 1985.

Anonymous. *Emskirchner Choralbuch*. Emskirchen, 1756.

Bach, Carl Philipp Emanuel. *Versuch über die wahre Art das Clavier zu spielen*. Berlin: C. P. E. Bach, 1753.

Campion, François *Traité d'accompagnement et de composition selon la règle des octaves de musique*. Paris: G. Adam, 1716.

Daube, Johann Friedrich. *General-Baß in drey Accorden*. Leipzig: Johann Benjamin Andrea, 1756.

Descartes, René. *Regulae ad directionem ingenii*. Amsterdam, 1701.

Euler, Leonhard. *Tentamen novae theoriae musicae ex Certissimis Harmoniae Principiis*. Petropolis: Academy of Science,1739.

Fenaroli, Fedele. *Partimenti ossia Basso numerato. Opera completa di Fedele Fenaroli*. Paris: Carli, 1780.

Forkel, Johann Nikolaus. "Vier und zwanzig Veränderungen fürs Clavichord oder Fortepiano auf das Englische Volkslied: God Save the King." Göttingen: by the Author.

Förster, Emanuel Aloys. *Anleitung zum Generalbass*. Vienna: Artaria und Companie, 1805.

Furno, Giovanni. *Metodo facile, breve e chiaro delle prime ed essenziali regole per accompagnre i partimenti senza numeri*. Naples: Orlando, ca. 1810.

Heinichen, Johann David. *Der General-bass in der Composition*. Dresden: by the Author, 1728.

Hindemith, Paul. *Unterweisung im Tonsatz*. Mainz: B. Schott's Söhne, 1940.

Ignatius of Loyola. *The Constitutions of the Society of Jesus*. Translation, Introduction, and Commentary by George E. Ganss, S.J. Rome: The Institute of Jesuit Sources, 1970.

———. *The Constitutions of the Society of Jesus and Their Complementary Norms*. Translated and Edited by John W. Padberg, S.J. Rome: The Institute of Jesuit Sources, 1996.

———. "Letter to Andreae Lippomano: Rome – 22 June 1549." In *Monumenta Ignatiana, ex Autographis vel ex Antiquioribus Exemplis Collecta. Series Prima: Sancti Ignatii de*

*Loyola Societatis Jesu Fundatoris Epistolae et Instructiones, Tomus Secundus*, 445-6. Madrid: G. Lopez del Horno, 1904.

Kant, Immanuel. *The Cambridge Edition of the Works of Immanuel Kant: Theoretical Philosophy: 1755–1770*. Translated and edited by David Walford and Ralf Meerbote. New York: Cambridge University Press, 1992.

Kepler, Johannes. *Harmonices Mundi, Liber III*. Linz: Johannes Plancus, 1619.

Kirnberger, Johann Philipp. *Die Kunst des Reinen Satzes in der Musik*. Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1774.

———. *Die Kunst des Reinen Satzes in der Musik: Zweyter Theil*. Berlin and Königsberg: G. J. Decker and G. L. Hartung, 1779.

———. *Gedanken über die verschiedenen Lehrarten in der Komposition, als Vorbereitung zur Fugenkenntniss*. Vienna: Verlag der K. K. priv. chemischen Druckerey am Graben, 1782.

———. *The Art of Strict Musical Composition*. Translation by David Beach and Jurgen Thym. Commentary by David Beach. New Haven and London: Yale University Press, 1982.

Kloppenburg, Wim. "Georg Joseph Vogler, de reislustige Abt." *Muziek & liturgie: Tijdschrift van de Koninklijke Vereniging van Organisten en Kerkmusici*, 83 no. 6 (December 2014), 39-40.

Ludvová, Jitka. "Abbé Vogler a Praha." *Hudební věda* 19 no. 2 (1982), 99-122.

Mann, Thomas. *Doktor Faustus: Das Leben des deutschen Tonsetzers Adrian Leverkühn, erzählt von einem Freunde*. Frankfurt am Main: S. Fischer Verlag, 1947.

Marpurg, Friedrich Wilhelm. *Anfangsgruende der Theoretischen Musik*. Leipzig: Johann Gottlob Immanuel Breitkopf, 1757.

———. *Anleitung zum Clavierspielen*. Berlin: Gaude und Spener, 1765.

———. *Anleitung zur Musik überhaupt*. Berlin: Arnold Wever, 1763.

———. *Georg Andreas Sorgens Anleitung zum Generalbass und zur Composition*. Berlin: G. A. Lange, 1760.

———. *Handbuch bey dem Generalbasse und der Composition*. Berlin: Verlag Johann Jacob Schüzens Wittwe, 1755.

———. *Legende einiger Musikheiligen*. Cologne: Peter Hammern, 1786.

Mattheson, Johann. *Das neu-eröffnete Orchestre*. Hamburg: Benjamin Schillers Wittwe im Thum, 1713.

Mizler, Lorenz. *Anfangsgründe des Generalbasses.* Leipzig: by the author),1739.

Mozart, Wolfgang Amadeus. *Barbara Ployers Theorie- und Kompositionsstudien bei Mozart*. facsimile in *W. A. Mozart als Theoretiker*, edited by Robert Lach, Vienna: A. Holder, 1918.

———. *Briefe und Aufzeichnungen*, vol. 2. collected and annotated by Wilhelm A. Bauer and Otto Erich Deutsch. Kassel: Bärenreiter, 1962.

Nichelmann, Christoph. *Die Melodie nach ihrem Wesen sowohl, als nach ihren Eigenschaften*. Danzig: Johann Christian Schuster, 1755.

Rameau, Jean-Philippe. *Code de musique practique*. Paris: Imprimerie Royale, 1761.

———. *Génération harmonique, ou Traité de musique théorique et pratique*. Paris: Quay de Conte, 1737.

———. *Nouveau système de musique théorique*. Paris: Jean-Baptiste-Christophe Ballard, 1726.

———. *Nouvelles réflexions sur le principe sonore*. Paris: Imprimerie Royale, 1760.

———. "Observations sur la méthode d'accompagnement pour le clavecin qui est en usage, & qu'on appelle Echelle ou Règle de l'Octave", in *Mercure de France* (February, 1730), 253-4.

———. *Traité de l'harmonie réduite à ses principes naturels*. Paris: Jean-Baptiste-Christophe Ballard, 1722.

———. *Traité de l'harmonie réduite à ses principes naturels*. Translation, Introduction and Commentary by Phillip Gossett. New York: Dover Publications, Inc., 1971.

———. *Treatise on Harmony*. Translated with an Introduction and Notes by Philip Gossett. New York: Dover, 1971.

Reicha, Anton. *Traité de Haute Composition Musicale*. Paris: Zetter, 1824-1825.

Rost, Julio. *Candidatus Philosophiae Peripateticae*. Ambergen: Hanck, 1730.

Sechter, Simon. *Die Grundsätze der musikalischen Komposition*. Leipzig: Breitkopf und Härtel, 1854.

Schönberg, Arnold. *Harmonielehre*. Vienna: Paul Gerin, 1922.

Sorge, Georg Andreas. *Anleitung zum Generalbass und zur Composition*. Berlin: Gottlieb August Lange, 1760.

———. *Anweisung zur Stimmung und Temperatur sowohl der Orgelwerke, als auch anderer Instrumente, sonderlich aber des Claviers*. Hamburg: by the author, 1744.

Sulzer, Johann Georg. *Allgemeine Theorie der schönen Künste*. Leipzig, 1771-1774.

Vogler, Georg Joseph. “16 Variations pour le Clavecin ou Pianoforte.” Mainz, 1797?-1807?.

———. *Betrachtungen der Mannheimer Tonschule 1-4*. Speyer: Bossler, 1781.

———. *Choral System*. Kopenhagen: Haly’schen Musikhandlung, 1800.

———. *Handbuch zur Harmonielehre und für Generalbass nach den Grundsätzen der Mannheimer Tonschule*. Prague: K. Barth, 1802.

———. *Kuhrpfälzische Tonschule*. Mannheim: C. F. Scwhan, 1778.

———. *Tonwissenschaft und Tonsezkunst*. Mannheim: Kurfürstliche Hofbuchdruckerei, 1776.

———. “Verbesserung der Forkel’schen Veränderungen über das Englische Volkslied: God Save the King.” Frankfurt am Main: Verrentrapp und Wenner, 1793.

———. “Zwei und dreisig Präludien für die Orgel und für das Fortepiano. Nebst einer Zergliederung in ästhetischer, rhetorischer, und harmonischer Rücksicht, mit praktischen Bezug auf das Handbuch der Tonlehre vom Abt Vogler.” Munich: Falter’schen Musikhandlung, 1806.

Vallotti, Francesco Antonio. *Della scienza teorica e pratica della moderna musica*. Padua: Stamperia del Seminario, 1779.

Weiler, Henrico. *Logica novo philosophiae systemi accommodata*. Würzburg: Strahel, 1763.

Secondary Sources

Anonymous. *The Jesuit Ratio Studiorum of 1599*. Translation, Introduction, and Commentary by Allan P. Farrell, S.J. Washington D.C.: Conference of Major Superiors of Jesuits, 1970.

Anonymous. *The “Summa Theologica” of St. Thomas Aquinas*. London: Burns, Oates, and Washbourne, Ltd., 1920), 2126.

Bangert, William V. *A History of the Society of Jesus*. St. Louis: The Institute of Jesuit Sources, 1972.

Barnett, Gregory. “Tonal Organization in Seventeenth-Century Music Theory.” In *The Cambridge History of Western Music Theory*. Edited by Thomas Christensen, 407-55. New York: Cambridge University Press, 2002.

Bent, Ian. “*Steps to Parnassus*: Contrapuntal Theory in 1725 precursors and successors: In *The Cambridge History of Western Music Theory*. Edited by Thomas Christensen, 554-602. New York: Cambridge University Press, 2002.

Bent, Ian, ed. *Music Analysis in the Nineteenth Century, Volume 1: Fugue, Form and Style*. New York: Columbia University Press, 1994.

———. *Music Analysis in the Nineteenth Century, Volume 2: Hermeneutic Approaches*. New York: Columbia University Press, 1994.

Bernard, Jonathan W. "The Marpurg-Sorge Controversy." *Music Theory Spectrum* 11, no. 2 (Autumn 1989), 164-186.

Bernstein, David W. "Nineteenth-century harmonic theory: the Austro-German legacy." In *The Cambridge History of Western Music Theory*, edited by Thomas Christensen, 778-811. New York: Cambridge University Press, 2002.

Betzwieser, Thomas. "Langage et poétique dans les analyses d'opéras de l'Abbé Georg Joseph Vogler." In *Le parole della musica. II: Studi sul lessico letteratura critica del teatro musicale in onore di Gianfranco Folena*, 69-83. Florence: Leo S. Olschki, 1995.

Brater, Else. "Alchimie in Würzburg in den Jahren 1746-1749." *Sudhoffs Archiv* 24 (1931), 329-70.

Britton, David. "Abbé Georg Joseph Vogler: his life and his theories on organ design." DMA diss., University of Rochester, 1973.

Brover-Lubovsky, Bella. "Francescantonio Calegari and the Scuola dei rivolti: A Bridge between the Prima and Secunda pratica?" Conference Presentation, 42nd Annual Meeting of the Society for Music Theory, Columbus, OH, November 8, 2019.

Buckley, Michael J., S.J. *The Catholic University as Promise and Project: Reflections in a Jesuit Idiom*. Washington D.C.: Georgetown University Press, 1998.

Buelow, George J. "Heinichen, Johann David." In *Grove Music Online*, accessed November 30, 2020. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.12688

Christensen, Thomas. "Music Theory and Its Histories." In *Music Theory and the Exploration of the Past*, 9-39. Edited by Christopher Hatch and David W. Bernstein. Chicago and London: The University of Chicago Press, 1993.

———. *Rameau and Musical Thought in the Enlightenment*. New York: Cambridge University Press, 1993.

———. "The Règle de l'Octave in Thorough-Bass Theory and Practice." *Acta Musicologica* 64, no. 2 (Jul. – Dec., 1992): 91-117.

Comtesse, Dagmar, and Moritz Epple. "Between Appropriation and Rejection: Translating D'Alembert into German, and D'Alembert on Translation." *Centaurus* 59, no. 4 (November 2017): 329–41. doi:10.1111/1600-0498.12164.

Corneilson, Paul. "Vogler's Method of Singing." *The Journal of Musicology* 16, no. 1 (Winter 1998): 91-109.

Cottingham, John. *Rationalism*. London: Granada Publishing Ltd., 1984.

———. *The Rationalists*. Oxford: Oxford University Press, 1988.

Cottingham, John, Robert Stoothoff, and Dugald Murdoch. *The Philosophical Writings of Descartes*, vol. 1. Cambridge: Cambridge University Press, 1985.

Diergarten, Felix. "Romantic Thoroughbass. Music Theory Between Improvisation, Composition, and Performance." *Theoria* 18 (2011), 5-36.

Dineen, Murray. "Figured Bass and Modulation: The *Wiener-Tonschule* of Joseph Preindl." *Music Theory Online* 8, no. 3 (October 2002): 1-13. Accessed April 26, 2017, http://www.mtosmt.org/issues/mto.02.8.3/mto.02.8.3.dineen.html.

Downes, Stephen. "Polonaise." In *Grove Music Online*. Accessed January 30, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.22035.

Drabkin, William. "Mostly Mozart." *The Musical Times*, 148 (Winter 2007), 89-100.

Dragone, Luann R. "François Campion's Treatise on Accompaniment: A Translation and Commentary." *Theoria* 6 (1992): 135-62.

Edler, Florian. "Carl Maria von Webers und Giacomo Meyerbeers Rezeption der Choralsatzlehre Georg Jospeh Voglers." In *Musiktheorie im 19. Jahrhundert*. Edited by Martin Skamletz, Michael Lehner and Stephan Zirwes, 149-161. Schliengen: Edition Argus, 2017.

Eisen, Cliff, and Stanley Sadie. "Mozart, (Johann Chrysostom) Wolfgang Amadeus." In *Grove Music Online*. Accessed January 13, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.6002278233

Farge, James K. *Orthodoxy and Reform in Early Reformation France: The Faculty of Theology in Paris 1500-1543*. Leiden: E. J. Brill, 1985.

Finscher, Ludwig. "Variation als Kommentar." In *Text und Kommentar*, 483-96. München: Wilhelm Fink, 1995.

Gjerdingen, Robert O. *Music in the Galant Style*. New York: Oxford University Press, 2007.

Grant, Cecil Powell. "Kirnberger Versus Rameau: Toward a New Approach to Comparative Theory." PhD. diss., University of Cincinnati, 1976.

———. "The Real Relationship between Kirnberger's and Rameau's 'Concept of the Fundamental Bass.'" *Journal of Music Theory* 21 no. 2 (Fall 1977): 324-38.

Grave, Floyd K. "Abbé Vogler and the Bach Legacy." *Eighteenth-Century Studies* 13, no. 2 (Winter 1979-1980), 119-141.

———. "Abbé Vogler's Revision of Pergolesi's 'Stabat Mater'." *Journal of the American Musicological Society* 30, no. 1 (Spring 1977), 43-71.

———. "Abbé Vogler's Theory of Reduction." *Current Musicology* 29 (1980), 41-69.

———. “Metrical Displacement and the Compound Measure in Eighteenth Century Theory and Practice.” *Theoria* 1 (1985), 25-60.

Grave, Floyd K. and Margaret G. Grave. *In Praise of Harmony: The Teachings of Abbé Georg Joseph Vogler*. Lincoln and London: University of Nebraska Press, 1987.

Grave, Margaret G. “Vogler, Georg Joseph.” In *Grove Music Online*, Accessed April 29, 2018. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.29608.

Grazzini, Steve. “Rameau’s Theory of Supposition and French Baroque Harmonic Practice.” *Music Theory Spectrum* 38, no. 2 (Fall 2016), 155-77.

Grendler, Paul F. *The Jesuit and Italian Universities, 1548-1773*. Washington D.C.: Catholic University of America Press, 2017.

Grout, Donald J. *A History of Western Music, 3rd Edition*. New York: W. W. Norton, 1941.

Haaß, Robert. *Die geistige Haltung der katholischen Universitäten Deutschlands im 18. Jahrhundert: Ein Beitrag zur Geschichte der Aufklärung*. Freiburg: Verlag Herder, 1952.

Hansel, Sven. “Vallotti, Francesco Antonio.” In *Grove Music Online*, Accessed December 27, 2019. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.28949.

Heidlberger, Frank. “Unus est Deus, unus est Voglerus: Vogler als Lehrer Giacomo Meyerbeer.” In *Musikpflege* und ‘Musikwissenschaft’ in Würzburg um 1800, 95-120. Tutzing: Hans Schneider, 1998.

Heggelbacher, Othmar. “Gestaltwandel der Alma Mater Bambergensis.” In *Pietati Bonisque Litteris Universitas Bambergensis*. Edited by Siegfried Oppolzer. Bamberg: University of Bamberg, 1987.

Hepokoski, James and Warren Darcy. *Elements of Sonata Theory: Norms, Types, and Deformations in the Late Eighteenth-Century Sonata*. Oxford and New York: Oxford University Press, 2006.

Hettche, Matt. “Christian Wollf.” In *The Stanford Encyclopedia of Philosophy*. Edited by Edward N. Zalta. The Metaphysics Research Lab, 2016. https://plato.stanford.edu/entries/wolff-christian.

Highet, Gilbert. *The Art of Teaching*. New York: Vintage Books, 1955.

Höffe, Josef and Karl Rahner, ed. *Lexikon für Theologie und Kirche*, 2nd ed. Freiburg: Verlag Herder, 1968.

Hollis, Christopher. *A History of the Jesuits*. Liverpool, London, and Prescot: by the author, 1968.

Höpfl, Harro. *Jesuit Political Thought*. Cambridge: Cambridge University Press, 2004.

Holtmeier, Ludwig. “Heinichen, Rameau, and the Italian Thoroughbass Tradition: Concepts of Tonality and Chord in the Rule of the Octave.” *Journal of Music Theory* 51, no. 1 (Spring 2007): 5-49.

Jackson, Timothy. “The Tragic Reversed Recapitulation in the German Classical Tradition.” *Journal of Music Theory* 40, No. 1 (Spring 1996), 61-111.

Jans, Markus. “Towards a History of the Origin and Development of the Rule of the Octave.” In *Towards Tonality: Aspects of Baroque Music Theory*, 119-43. Leuven, Belgium: Leuven University Press, 2007.

Jarrett, Charles E., John King-Farlow, and F. J. Pelletier, ed. *New Essays on Rationalism and Empiricism*. Guelph, Ontario: Canadian Association for Publishing in Philosophy, 1978.

Kech, Kirsten. “Hochstift und Stadt Bamberg zwischen 1648 und dem Ende des Alten Reichs: Ein Forschungsüberblick.” In *Bamberg in der Frühen Neuzeit: Neue Beiträge zur Geschichte von Stadt und Hochstift*, 33-48. Edited by Mark Häberlein, Kerstin Kech und Johannes Staudenmaier. Bamberg: OPUS, 2008.

Kenny, Anthony, ed. *Rationalism, Empiricism, and Ideailism: British Academy Lectures on the History of Philosophy*. Oxford: Clarendon Press, 1986.

Klumpenhouwer, Henry. “Dualistic Tonal Space and Transformation in Nineteenth-Century Musical Thought.” In *The Cambridge History of Western Music Theory*. Edited by Thomas Christensen, 456-76. New York: Cambridge University Press, 2002.

Kreitz, Helmut. “Abbé Georg Joseph Vogler als Musiktheoretiker.” PhD. diss., Universität des Saarlandes, 1957.

Larue, Jan, Eugene K. Wolf, Mark Evans Bonds, Stephen Walsh, and Charles Wilson. “Symphony” In *Grove Music Online*, Accessed March 31, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.27254.

Lester, Joel. *Between Modes and Keys: German Theory 1592-1802*. Stuyvesant, New York: Pendragon, 1989.

———. *Compositional Theory in the Eighteenth Century*. Cambridge, Massachusetts: Harvard University Press, 1992.

———. “Rameau and Eighteenth-Century Harmonic Theory.” In *The Cambridge History of Western Music Theory*. Edited by Thomas Christensen, 753-77. New York: Cambridge University Press, 2002.

Lewin, David. “Two Interesting Passages in Rameau’s *Traite de l’harmonie*.” *In Theory Only* 4, no. 3 (July 1978), 3-11.

Loyola, Ignatius. *Personal Writings: Reminiscences, Spiritual Diary, Select Letters* including the text of the *Spiritual Exercises*. Trans., Intro, and Notes by Joseph A. Munitiz and Philip Endean. London: Penguin Books, 1996.

Mangsen, Sandra, John Irving, John Rink, and Paul Griffiths. "Sonata" In *Grove Music Online*, Accessed March 31, 2021. https://doi-org.libproxy.library.unt.edu/10.1093/gmo/9781561592630.article.26191.

Mann, Christoph. "Das Bamberger Domkapitel im späten 18. Jahrhundert: Lebensstile, Parteiungen, Reformfähigkeit." In *Bamberg in der Frühen Neuzeit: Neue Beiträge zur Geschichte von Stadt und Hochstift*, 319-45. Edited by Mark Häberlein, Kerstin Kech und Johannes Staudenmaier. Bamberg: OPUS, 2008.

Markie, Peter. "Rationalism vs. Empiricism," in *The Stanford Encyclopedia of Philosophy*. Stanford: The Metaphysics Research Lab, 2016. https://plato.stanford.edu/entries/rationalism-empiricism. Accessed April 20, 2021.

Mickelsen, William C. *Hugo Riemann's Theory of Harmony and History of Music Theory, Book III by Hugo Riemann*. Lincoln and London: University of Nebraska Press, 1977.

Morgan, Robert P. "Schenker and the Theoretical Tradition." *College Music Symposium* 18, no. 1 (Spring 1978), 72-96.

O'Malley, John W. *The First Jesuits*. Cambridge and London: Harvard University Press, 1993.

Pelker, Bärbel and Rüdiger Thomsen-Fürst. *Georg Joseph Vogler (1749-1814): Materialen zu Leben und Werk unter besonderer Berücksichtigung der pfalz-bayerischen Dienstjahre*. Frankfurt am Main: Peter Lang, 2016.

Petty, Bynum. "Charlatan or Visionary? Abbé Vogler and His Theory of Organ Design." The Tracker 57, no. 2 (Spring 2013), 20-2.

Polth, Michael. "Die Sinfonien Abbé Voglers und die Mannheimer Sinfonie-Tradition." In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, 93-130. Frankfurt am Main: Peter Lang, 2003.

Randel, Don Michael, ed. *The Harvard Dictionary of Music*. 4th ed. Cambridge, MA: Belknap Press of Harvard University Press, 2003.

Rav, Yehuda. "On the Interplay between Logic and Philosophy: a Historical Perspective." Séminaire de Philosophie et Mathématiques, (1992), 1-21.

Reijen, Paul van. *Vergleichende Studien zur Klaviervariationstechnik von Mozart und seinen Zeitgenossen*. Büren: Frits Knuf, 1988.

Reiss, Timothy J. *Knowledge, Discovery and Imagination in Early Modern Europe: The Rise of Aesthetic Rationalism*. Cambridge: Cambridge University Press, 1997.

Remeš, Derek. “New Sources and Old Methods: Reconstructing and Applying the Music-Theoretical Paratext of Johann Sebastian Bach’s Compositional Pedagogy.” GMTH 16 no. 2 (2019), 51–94.

Rusk, Robert R. *The Doctrines of the Great Educators*. London: MacMillan and Co., Ltd., 1918.

Sanguinetti, Giorgio. *The Art of Partimento: History Theory, and Practice*. New York: Oxford University Press, 2012.

Saslaw, Janna. “Gottfried Weber and Multiple Meaning.” *Theoria* 5 (1990), 74-103.

Schafhäutl, Karl Emil von. *Abt Georg Joseph Vogler: Sein Leben, Charakter und musikalisches System; seine Werke, seine Schule, Bildnisse, etc.* Augsburg: Verlag des Literarischen Instituts von Dr. M. Huttler, 1888.

Schmaus, Michael. “Wirceburgenses.” *New Catholic Encyclopedia*, 2nd ed., vol. 14. Farmington Hills, Michigan: Gale, 2003, 776-777, Accessed September 12, 2019: https://link.gale.com/apps/doc/CX3407711932/GVRL?u=txshracd2679&sid=GVRL&xid=29be5735.

Schönberg, Arnold. *Theory of Harmonie*. Translation by Roy E. Carter. Berkley and Los Angeles: University of California Press, 1983.

Schurr, Walter W. “Calegari [Callegari, Caligari], Francesco Antonio.” Revised by Patrizio Barbieri. In Grove Music Online, Accessed December 27, 2019. https://libproxy.library.unt.edu:2147/10.1093/gmo/9781561592630.article.04584.

Schweiger, Hertha. “Abbé G. J. Vogler’s Orgellehre.” PhD. diss., University of Freiburg, 1938.

———. “Abt Vogler.” *The Music Quarterly* 25 no. 2 (April 1939), 156-66.

Schwickerath, Robert. “Ratio Studiorum.” In *The Catholic Encyclopedia, Vol. 12*. Edited by Harles G. Herbermann, Edward A. Pace, Conde B. Pallen, Thomas J. Shahan, and John J. Wynne, 654-7. New York: Robert Appleton Company, 1911.

Scruton, Roger. *A Short History of Western Philosophy: From Descartes to Wittgenstein, 2nd ed*. London and New York: Routledge, 1995.

Sheldon, David A. *Marpurg’s Thoroughbass and Composition Handbook: A Narrative Translation and Critical Study*. Stuyvesant, NY: Pendragon Press, 1989.

Solomon, Robert, C. *Continental Philosophy since 1750: The Rise and Fall of the Self*. Oxford: Oxford University Press, 1988.

Stevens, Bryan. “Theorizing Sonata from the Margins: Manuel Blasco de Nebra’s Seis Sonatas (1780) in Context.” Conference Presentation, 42nd Annual Meeting of the Society for Music Theory, Columbus, OH, November 8, 2019.

Stevens, Jane R. “Georg Joseph Vogler and the ‘Second Theme’ in Sonata Form: Some Eighteenth-Century Perceptions of Musical Contrast.” Journal of Musicology 2 no. 3 (Summer 1983), 278-304.

Telesco, Paula J. “Enharmonicism and the Omnibus Progression in Classical-Era Music.” *Music Theory Spectrum* 20, no. 2 (Autumn 1998), 242-79.

Telle, Joachim. “Eine Deutsche Alchimia Picta des 17. Jahrhunderts: Bemerkungen zu dem Vers/Build-traktat *Von der Hermetischen Kunst* von Johann Augustin Brunnhofer und zu Seinen Kommentieren Fassungen im *Buch der Weisheit* und im *Hermaphroditischen Sonn- und Monds-Kind*.” Aries 4, no. 1 (2004), 3-26.

Thils, Gustave. “Klaus Schilling, *Die Kirchenlehre der Theologia Wirceburgensis*., 1969.” *Revue théologique de Louvain*, 3, no. 4 (1972), 477.

Veit, Joachim. *Der junge Carl Maria von Weber. Untersuchungen zum Einfluss Franz Danzis und Abbé Georg Joseph Vogler.* Mainz: B. Schott’s Söhne, 1990.

———. “Versuch einer vereinfachten Darstellung des Voglerschen ‘Harmonie-Systems’.” *Musiktheorie* 6 (1991), 129–49.

———. “Voglers Beitrag zur Gattung Melodram vor dem Hintergrund der frühen Mannheimer Melodramaufführungen.” In *Untersuchungen zu Musikbeziehungen zwischen Mannheim, Böhmen und Mähren im späten 18. und frühen 19. Jahrhundert*. Edited by Christine Heyter-Rauland, 212-32. Mannheim, 1987.

von Weber, Max Maria. *Carl Maria von Weber: Ein Lebensbild*, Vol. 3. Leipzig: Ernst Keil, 1866.

Waldura, Markus. *Von Rameau und Riepel zu Koch: Zum Zusammenhang zwischen theoretischen Ansatz, Kadenzlehre und Periodenbegriff in der Musiktheorie des 18. Jahrhunderts*. Hildesheim, Zürich, and New York: Georg Olms Verlag, 2002.

———. “Musical Rhetoric and the Modern Concept of Musical Period–A New Perspective on 18th Century German Theories of Musical Periodicity. Part 1.” *Theoria* 13 (2006), 5-42.

Walker, Katherine H. “Leopold Mozart, the Rationalist? Humanism and Good Taste in Eighteenth-Century Musical Thought.” *Yale Journal of Music and Religion* 3, no. 2 (2017), 64-84.

Wason, Robert W. *Viennese Harmonic Theory from Albrechtsberger to Schenker and Schoenberg*. University of Rochester Press, 1995.

———. “Progressive Harmonic Theory in the Mid-nineteenth Century,” *Journal of Musicological Research* 8 (1988), 55-90.

Weiss, Dieter J. ed. *Das exemte Bistum Bamberg 4: Die Bamberger Bischöfe von 1693 bis 1802*. Berlin and Boston: Walter de Gruyter, 2016.

Wiener, Oliver. "'Anschauende Erkenntnis' und 'natürliches Ohr'—zum Begriff 'System' in den Schriften Georg Joseph Voglers." In *Abbé Vogler: Ein Mannheimer im europäischen Kontext—Internationales Colloquium Heidelberg 1999*, 165-182. Frankfurt am Main: Peter Lang, 2003.

———. "Eine Spielart der 'ars combinatoria': zu Georg Joseph Voglers Musiktheorie." In *Musikpflege und Musikwissenschaft in Würzburg um 1800*. Edited by Ulrich Konrad, 71-94. Tutzing: Hans Schneider, 1998.

Worcester, Thomas, ed. *The Cambridge Companion to the Jesuits*. Cambridge: Cambridge University Press, 2008.

Würtz, Roland. "Mannheim." Revised by Eugene K. Wolf. In *Grove Music Online*. Accessed March 25, 2021. https://www-oxfordmusiconline-com.libproxy.library.unt.edu/grovemusic/view/10.1093/gmo/9781561592630.001.0001/omo-9781561592630-e-0000017660?rskey=SIzh4M.

Yellin, Victor Fell. *The Omnibus Idea*. Warren, Michigan: Harmonie Park Press, 1998.