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Keys from the past: Unlocking the power of eighteenth-century contrapuntal pedagogies

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Chapter 2. Keys from the past: Unlocking the power of eighteenth-century contrapuntal pedagogies. Jonathan Paget and Stewart Smith.

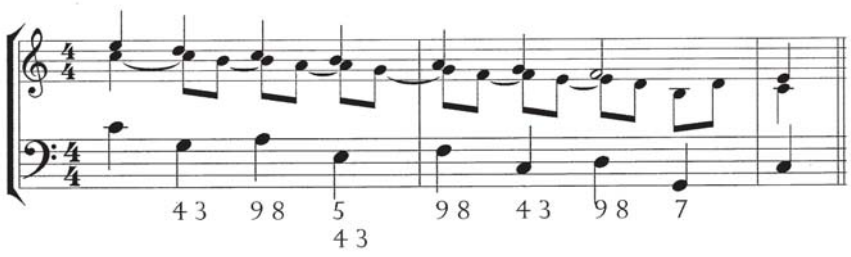
Introduction

How did eighteenth-century musicians learn to compose, and how were they able to produce musical works with such comparative ease and fluency? What were the strategies at play that enabled even the most workman-like of composers to produce vast amounts of competent music, and how was it possible for almost any professional keyboard player to improvise a passable fugue? It is only recently that scholars have sought the answers to such questions. Groundbreaking work by Gjerdigen (1988; 2007a), Porter (2000; 2002), Renwick (1995), and others, provides a fascinating glimpse of the working methods of eighteenth-century musicians, and also offers implications for contemporary music theory teaching. Historically, training musicians in the art of composition has been one of theory's primary goals, and it could be argued that the ability to replicate a musical style is a true litmus test of deep understanding. Theory instruction in Australia, however, often falls short in this regard, confining itself instead to drilling rudiments, basic voice-leading tasks, and superficial analysis such as labeling chords. This paper aims to show how theory teaching can be re-envisioned to include style composition as a pedagogically powerful and rewarding activity. It also highlights the key usefulness of eighteenth-century pedagogies in unlocking windows into the common-practice idiom.

Three aspects of eighteenth-century pedagogy will be highlighted: (1) the significance of learning a vocabulary of musical schemata, (2) the importance of middle-ground scaffolding, and (3) the relationship between improvisation and composition. Point No.1: A central claim of this paper is that learning a vocabulary of musical schemata is a key missing ingredient in learning to compose in historical styles. Schemata are prototype musical clichés that have both a contrapuntal and harmonic component. In a similar way that contemporary Jazz musicians study chord-shell voicings for common progressions, eighteenth-century musicians learnt many schemata, committed them to memory, and used them for improvisation and

composition. Such schemata include cadence formulas, sequence patterns, contrapuntal expansion formulas, subject-answer paradigms, and stretto formulas.[1] Point No. 2: Contemporary theory training too often focuses on either minutiae or macrostructure, neglecting to fill in the middle-ground. Point No.3: Composition and keyboard improvisation were often one and the same in the eighteenth-century (Porter 2000). Ideally, schemata should be learnt at the keyboard, felt under the fingers, and thereafter absorbed internally. Recently, music theory has achieved a new historical consciousness, and publications such as *The Cambridge History of Western Music Theory* (Christensen 2002) offer new ways by which to analyze, and create music of the past. One particularly fruitful avenue of enquiry lies in the Italian *partimento* tradition. In *Music in the Galant Style*, Robert Gjerdingen (2007a) clearly explains the workings of the Neapolitan *partimento* tradition and, by extension, we are invited to walk in the footsteps of a typical eighteenth-century composer. Gjerdingen (2007b) relates Charles Burney's vivid description of the cacophonous din made by a group of young men simultaneously playing on seven or eight harpsichords at one of Naples' most prestigious eighteenth-century conservatories in 1770. But where Burney only heard "jargon and continued dissonance", (Burney 1773, 337) Gjerdingen—surely correctly—postulates that real learning was going on, and that the boys were simply "pounding out *partimenti*". (Gjerdingen 2007b, 188) This phrase—"pounding out *partimenti*"—well describes the manner by which eighteenth century musicians learned the entwined arts of keyboard performance, thoroughbass, counterpoint, free composition and improvisation. Students underwent a rigorous apprenticeship of eight years and daily played from a series of instructional bass lines in which were encoded various musical schemata and clichés. For example, **Figure 1** shows part of a *partimento* bass by Mattei in which a sequence pattern (a variant of the *Romanesca*) is evident.

Figure 1. A partimento bass by Mattei ca. 1880s, with the right-hand part realized by Gjerdingen, demonstrating an implied Romanesca sequence



[1] See Gjerdingen (2007) for an overview of some of the most common schemata. See Dodds (2006) and Santa Maria (1565) for instructions on how to improvise fugal stretti.

In completing the solution to this exercise, students would have had to realize the upper parts in a manner similar to that given here, and by so doing would internalize the mechanics of the *Romanesca* pattern.

Some schemata acted as opening gambits, some were used in development sections, some were used in ascending sequences, and some in descending ones. Repetition ensured that these schemata were internalized, and were able to be reproduced either *ex tempore* at the keyboard, or with absolute ease on paper. Typically, these bass lines also had implied counterpoints that had to be taken into account in any realization. Thus, the very material that these students were internalizing was a type of middle-ground scaffolding that could easily be decorated to form, say, an instrumental sonata, or the first movement of a concerted mass or perhaps an operatic aria. Significantly, many fugues were also created in this manner.

Case Study No 1. Fugue

Composing a fugue, let alone improvising one, has often been the *ne plus ultra* of the musician's training. Famously, the Paris conservatoire fostered an enduring tradition of writing fugues—the so-called *fugues d'ecole*, which were so complicated they defied being improvised.[2] The fact that at the same time whole generations of French organists were skilled fugal improvisers points to the existence of a rival system, one that enabled fugue to be worked out and carried in the head. Significantly, the system practised by these French improvisers has its roots in the eighteenth-century *partimento* tradition.

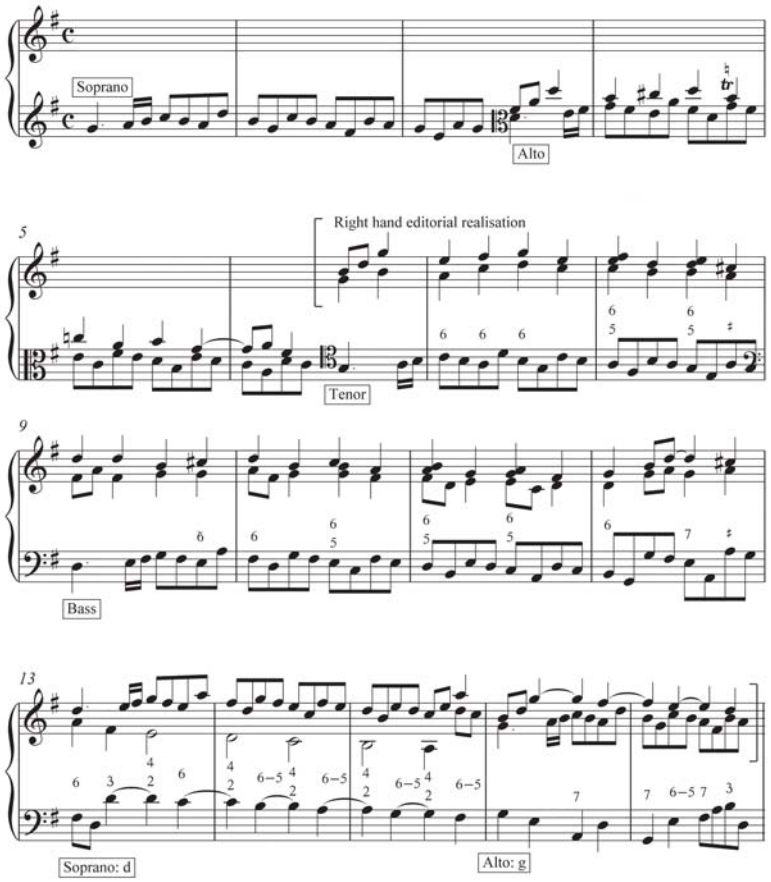
It was to the Italians and Germans of the late seventeenth and early eighteenth centuries that we find fugue being conceptualized as the logical outcome of thoroughbass theory. (Renwick 1995, 2001) In the same way that the Neapolitan *partimento* tradition allowed minuets, sonatas and concertos to be imagined in the head (*alla mente*) and realized at the keyboard, so too were these *partimento* basses used to teach the composition and improvisation of fugue. There is strong evidence that at least some genres of fugue were conceived in this way in both the circles of Bach and Handel. (Gingrass 2008) Indeed, Handel has left us with a graded series of thoroughbass exercises—written for Princess Anne, the eldest daughter of George II (modern edition in Ledbetter 1990). Here, a series of six *partimento* fugues logically follows on from a series of exercises in thoroughbass.

Part of the fourth fugue from the set will serve as an example of the genre (see **Figure 2**). As can be seen, Handel gives us several clues to its realization: (1) a figured bass; (2) the

[2] For the classic exposition of the form see Gédalge (1904).

countersubject at bar three; (3) a system whereby c clefs are used to indicate the entries of different voices; and (4) pitch indications giving the starting notes of entries. From these slight materials, Handel encodes a complete fugue. Ever the master teacher, through these *partimento* fugues Handel offers a carefully graded sequence of techniques for the student to practice and to internalize.[3]

Figure 2. Fugue exercise No.4 by Handel, with editorial realization



While space prevents more detailed description, we are able to summarize how Handel's teaching can inform the budding fuguist, based on practical experience teaching this material to undergraduates at the Western Australian Academy of Performing Arts: (1) sequences are meticulously drilled; not only do students learn how episodes can be created from sequences but they also learn how fugue subjects themselves can be imbedded within sequences; (2) a

[3] There are few clues to the realization of *partimento* fugues (Moelants 2010; Gingras 2008) but what seems to have been prevalent was a certain sparseness of texture and often a somewhat cavalier attitude to assigning subjects and countersubjects to their "correct" position. My realisation (printed in small type) reflects this practice. In b. 6 for example, the alto should correctly carry the countersubject and the soprano should correctly sit above it in free counterpoint. The fact that my realisation maintains a polarity between the countersubject/subject pair in the *outermost* voices is a particular feature of improvised *partimento* fugues.

variety of subject/answer paradigms are taught, and the student is instructed in the importance of holding both the subject and the answer in the head at all times; (3) the invertible counterpoint given for some of the double fugues, when internalized, can be used as generators of sequences in new improvised fugues; (4) the student is taught to realize the relationship between the order of voices in a fugal exposition and its effect upon the ensuing counterpoint; (5) through studying Handel's fugues as a whole, much can be learned about the architectural ground plan of small-scale fugues; and finally (6) those students who take time to work through these fugues at the keyboard actually experience the physical and tactile sensation of counterpoint growing out of harmony.

It is testament to the power of *partimento* fugue that even the weakest students manage a passable solution. The step from realizing a *partimento* fugue to improvising, or fluently writing one from scratch, is not as great as it would first appear. Keyboard playing was improvisation; improvisation was composition; and both improvisation and composition were crafts to be learned.

Case Study No 2. Minuet

Composing a minuet in a late eighteenth-century style is a useful pedagogical task as it employs a rounded binary form that is essentially a sonata form in miniature. As Riepel states, "a minuet, as far as its working-out is concerned, is nothing other than a concerto, an aria, or a symphony." (Strunk and Treitler 1998, 750) Minuet composition is adopted as a key-learning tool by multiple modern authors. (see Budday 1983; Gauldin 1988; Eckert 2005; Parker 2006)

Eighteenth-century and early nineteenth-century sources give us many clues as to how to approach composing a minuet. Such information includes (1) the harmonic architecture, (2) periods and phrase structures, and (3) the use of relevant schemata. These contemporaneous sources (such as Riepel 1752; Koch 1782-93; Galeazzi 1791-96; de Momigny 1803-05, 1821; Reicha 1814) are particularly striking in their attention to aspects of middle-ground structure. The classical minuet had such a normative harmonic structure that numerous late eighteenth-century sources describe methods whereby the uneducated person can compose one by such numerical chance procedures as a dice game.[4] I have attempted to summarize the normative structure of a classical minuet in **Figure 3**, which should be taught carefully and systematically. Notable features include the following: (1) the consequent phrase of section A

[4] See Tatlow 2001; and also Kirnberger 1757; Hoegi 1770; and attributions to Haydn 1793 and Mozart 1793;Tatlow (2001) notes, "At least 20 different methods of composing music by numbers were published between 1757 and 1812."

modulates to the dominant; (2) the B section commences with a sequence; (3) the reprise is preceded by a retransition, consisting of a dominant pedal and pause; (4) the reprise begins with a "double-return", the simultaneous return of the original key and thematic material; and (5) the consequent phrase of the reprise must be re-composed so that it stays in the tonic.

Figure 3. Rounded binary form and nested phrase structures

	A section		**B section**			
Section	A Progressive Period		Sequence, Digression, or Quasi-dev.	Retrans.	Reprise (a period)	
Phrases & Themes	Antecedent (a)	Consequent (a' or b)	(derived from themes of A section)		Antecedent (a)	Consequent (modified), (a" or b')
Harmonic Scheme	Tonic	Dominant	Unstable	cad. on chord V, often big V pedal	Tonic	Tonic

A variety of schemata are useful in minuets, including opening gambits, cadential formulas, and sequences. By practicing and memorizing these schemata students are equipped to use them as the basis of elaboration and composition. A large number of schemata is outlined by Gjerdingen (2007), some extracted from eighteenth-century sources, others theorized through empirical observation of the *partimento* tradition. Many of these are simple opening gambits consisting of contrapuntal expansions of a tonic triad, as illustrated in **Figure 4 (**overleaf), which classifies them according to the motion of the outer voices.

Riepel (1752) outlines three typical formulas appearing at the opening of the B section of a minuet: the *fonte*, the *monte*, and the *ponte* (Strunk and Treitler 1998, 749-62; Gauldin 1988, 92). Three of Reipel's examples are replicated in **Figure 5.** (overleaf: from Gjerdingen 2007, 456, 458, and 461) The *fonte* and *monte* are key sequence prototypes, while the *ponte* is a dominant prolongation intended as an abbreviated retransition. It could be noted that in some

twentieth-century theory texts sequences are either omitted or misunderstood as exclusively melodic phenomenon.[5]

Figure 4. The contrapuntal uses of chords

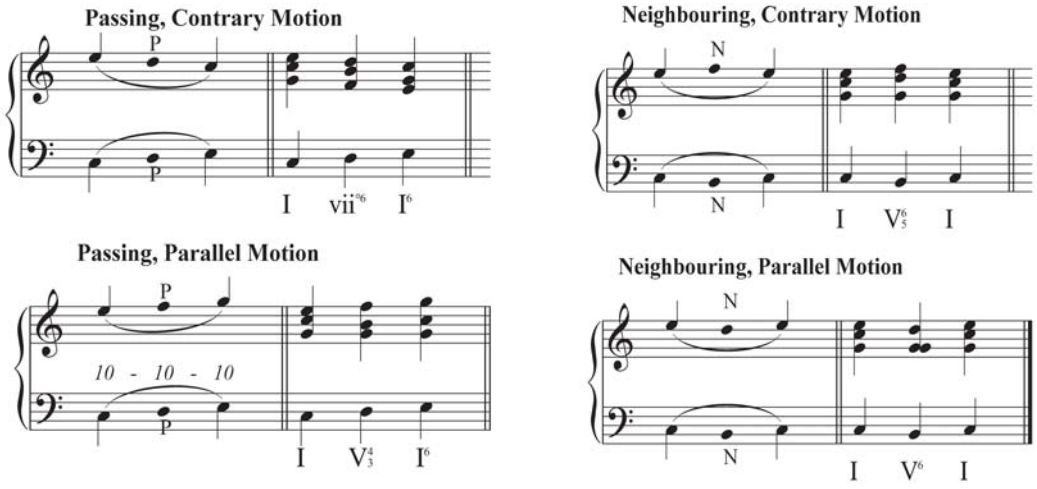


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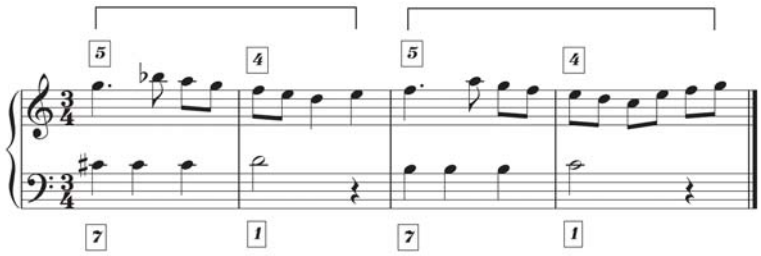
Figure 5. Three contrapuntal formulas as given by Riepel: fonte, monte, and ponte

1) Fonte



[5] See, for example, Warburton 1959, 56 and 1967, 65. An exceptional text is Tunley (1978), which describes sequences as exclusively harmonic phenomenon.

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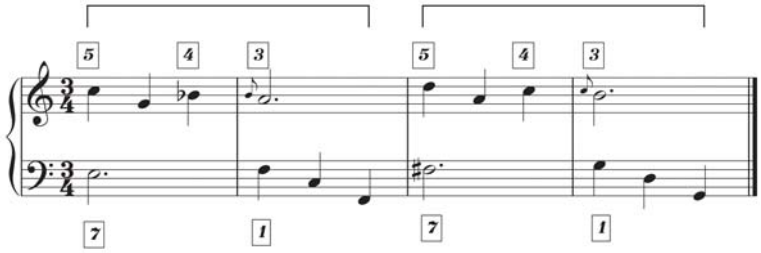
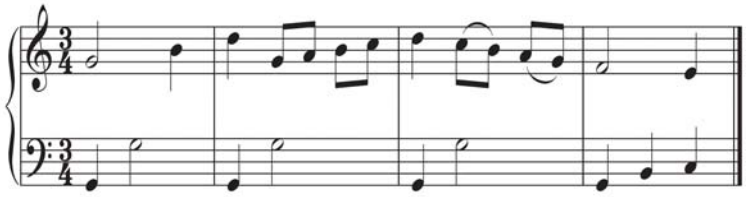
2) Monte



3) Ponte



However (as shown in **Figure 6**), a corrective to this is seen in recent US textbooks that trace all sequences to four principal prototypes, which can then be subjected to alteration, mutation, and elaboration. (Aldwell and Schachter 1978; Gauldin 1988; Laitz 2003) Sequences are a perfect illustration of the pedagogical reach of learning schemata. They are one of the golden keys to eighteenth-century style composition and underpin the modulations of every episode in fugues and concertos, not to mention the developments in every classical sonata form, whether symphony or sonata.

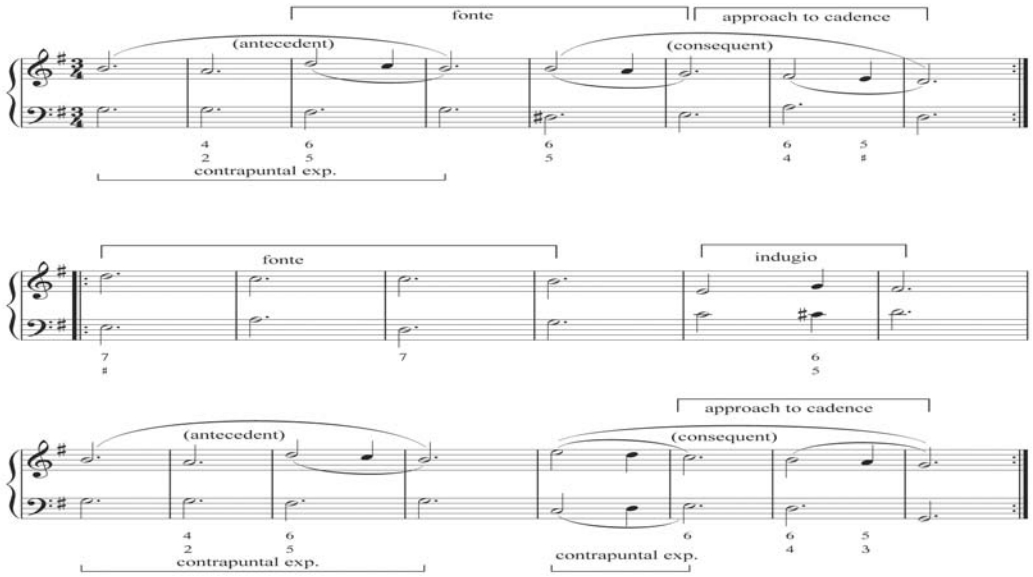
Figure 6. Classifying and labeling sequences

Riepel **(1752)**	***Schoenberg*** **(1954)**	***Laitz*** **(2003)**	***Gjerdingen*** **(2007)**
Fonte	Second down	D2 (A4/D5 or D5/A4)	Fonte
	Second up	A2 (A4/D5 or D5/A4)	
Monte	Second up	A2 (D3/A4)	Monte
	Third down	D3 (D4/A2)	Romanesca

We employ additional teaching strategies in the form of compositional tasks designed to provide helpful middle-ground scaffolding. For instance, a two-voice contrapuntal framework of a model minuet (such as **Figure 7** overleaf) can be used as the basis for improvisation and composition, as well as to illustrate the various schemata employed. Similarly, a ‘”ill-in-the-gaps” exercise can be useful in focusing attention on particular structural components, aspects of the structure. For instance, students can be asked to complete a missing *fonte*

sequence based on previously occurring musical material, and/or to recompose the consequent phrase of the reprise (such that it doesn't modulate).

Figure 7. A two-voice contrapuntal framework for a minuet



What Happened to the Partimento Tradition?

Arguably, the growing complexity of musical composition in the nineteenth century made the pedagogy of schemata increasingly redundant. And by the twentieth century, it is almost forgotten. For instance, there is very little evidence in early twentieth-century English harmony texts that sophisticated knowledge of tonal composition was widely disseminated. Many texts (such as Kitson 1914; Morris 1925; 1946; Andrews 1950; Hollinrake 1954 and Lovelock 1956) give sparse guidelines on compositional tasks; their coverage is largely restricted to rudiments, chord functions, dissonances, and basic chorale harmonization. Modern US texts, by contrast, typically provide more systematic coverage of the musical middle-ground—including phrase structures, sequences, and harmonic architecture. (see, for instance, Piston 1941; Schoenberg 1954; Aldwell and Schachter 1978) Aldwell and Schachter, in particular, demonstrate the influence of Schenkerian thinking (Schenker 1935) in their practice of systematically detailing the contrapuntal functions of chords. Reforming the pedagogy of composition was one of Schenker's principal goals, although (ironically) the power of his theories in this regard has only recently been rediscovered.[7] Several recent texts (such as Gauldin 1988 and Laitz 2003) not only employ Schenkerian concepts, they have also

[7] Graphing techniques can be used to provide scaffolding at the middleground level, a harmonic framework around which a tonal composition can be constructed.

rediscovered the value of style composition and revitalized the pedagogical value of learning schemata at the keyboard.

Conclusion

In conclusion, this paper has described a number of eighteenth-century pedagogies, pointing out the ways that they differ from traditional theory instruction. Three key strategies have been highlighted, extracted from eighteenth-century practice; (1) the use of a repertoire of schemata for memorization; (2) the inclusion of information on middle-ground structure; and (3) the importance of composing at the keyboard. More than passing historical curiosities, we believe that these pedagogical approaches can fruitfully be applied in the classroom. In providing students the "keys" to successful composition in an eighteenth-century style, the relevance of harmony becomes suddenly clear; leading to greater understanding and enjoyment.

References

Aldwell, Carl and Edward Schachter. 1978. *Harmony and voice-leading*. Harcourt: Brace Jovanovich.

Andrews, H. K. 1950. *The Oxford harmony,* Vol.2. London: Oxford University Press.

Budday, Wolfgang. 1983. *Grundlagen musikalischer Formen der Wiener Klassik: an Hand der zeitgenössischen Theorie von Joseph Riepel u. Heinrich Christoph Koch dargest. an Menuetten u. Sonatensatzen (1750-1790).* Kassel: Bärenreiter Verlag.

Burney, Charles. 1773. *The present state of music in France and Italy*. 2nd ed, London: T. Becket and Co.

Christensen, Thomas Street. 2002. *The Cambridge history of western music theory, The Cambridge History of Music*. Cambridge, U.K., New York: Cambridge University Press.

Dodds, Michael R. 2006. "Columbus's Egg: Andreas Werckmeister's teachings on contrapuntal improvisation in Harmonologia musica" (1702). *Journal of Seventeenth-Century Music* 12 (1).

Eckert, Stefan. 2005. ""So, you want to write a Minuet?": Historical perspectives in teaching theory" in Music Theory Online 11/2 <http://mto.societymusictheory.org/issues/mto.05.11.2/mto.05.11.2.eckert.html>

Galeazzi, F. 1791-6. *Elementi teorico-pratici di musical*. Rome.

Gauldin, Robert. 1988. *A practical approach to eighteenth-century counterpoint*. Illinois: Waveland Press, Inc.

———. 1995. *A practical approach to sixteenth-century counterpoint*. Illinois: Waveland Press, Inc.

———.1997. *Harmonic practice in tonal music*. New York: W. W. Norton & Co.

Gédalge, André. 1904. *Traité de la fugue Paris*: Enoch.

Gingras, Bruno. 2008. "Partimento fugue in eighteenth-century Germany: A bridge between thoroughbass lessons and fugal composition." *Eighteenth-Century Music* 5:51-74.

Gjerdingen, Robert O. 1988. *A classic turn of phrase: Music and the psychology of convention*. Philadelphia: University of Pennsylvania Press.

———. 2007a. *Music in the Galant Style*. Oxford; New York: Oxford University Press.

———. 2007b. Editorial. *Eighteenth-Century Music* 4 (2):187-189.

Hoegi, Piere. 1770. *A tabular system whereby the art of composing minuets is made so easy that any person, without the least knowledge of musick, may compose ten thousand, all different, and in the most pleasing and correct manner*. London.

Hollinrake, H. 1954. *Novello's Music Primer, No.131: Foundations of harmony for class teaching*. Borough Green: Novello.

Incorporates compositional training, keyboard harmony, detailed descriptions of middle-ground structure, chromatic harmony, and so on.

Kirnberger, J. P. 1757. *Der allezeit fertige Polonoisen- und Menuettencomponist.* Berlin.

Kitson, C. H. 1914. *The evolution of harmony: A treatise on the material of musical composition, its gradual growth and elementary use*. London: Oxford University Press.

Koch, Heinrich Christoph. 1782/1787-93. *Versuch einer Anleitung zur Composition*. 1st ed. Rudolstadt, 2nd and 3rd ed. Leipzig.

Laitz, Steven. 2003. *The complete musician: An integrated approach to tonal theory, analysis, and listening*. New York: Oxford University Press.

Ledbetter, David and George Frideric Handel. 1990. *Continuo playing according to Handel: His figured bass exercises, early music series*. Oxford; New York: Oxford University Press.

Lovelock, William. 1956. *Third year harmony*. UK: Hammond & Col.

Moelants, ed. 2010. *Partimento and continuo playing in theory and in practice*. Leuven: Leuven University Press.

Momigny, J. J. de. 1806. *Cours complet d'harmonie et de composition*. Rev ed. Paris.

———. 1821. *La seule vraie théorie de la musique*. Rev ed. Paris.

Morris, R. O. 1925. *Foundations of practical harmony and counterpoint*. London: Macmillan.

———. 1946. *The Oxford harmony*, Vol.1. London: Oxford University Press.

Parker, Sylvia. 2006. “Understanding sonata form through model composition,” *The Journal of Music Theory Pedagogy* 20.
Piston, Walter. 1941. *Harmony*. USA: Norton.
Porter, William. 2000. “Reconstructing 17th-century North German improvisational practice: Notes on the Praeambulum with a report on pedagogy used in December 1995.” *GoArt Research Reports*, edited by S. Jullander. Güteborg: Güteborg Organ Art Center.
———. Hamburg organists in Lutheran worship. In *The organ as a mirror of its time: North European Reflections, 1610-2000*, ed. K. J. Snyder. Oxford; New York: Oxford University Press.
Reicha, A. 1814/1832. *Traité de mélodie*. Paris.
———. 1816-18. *Cours de composition musicale, ou Traité complet et raisonné d’harmonie pratique*. Paris.
———. *Art du compositeur dramatique, ou Cours complet de composition vocale*. Paris.
Renwick, William. 1995. *Analyzing fugue: A Schenkerian approach*. Stuyvesant, NY: Pendragon Press.
———. *The Langloz manuscript: Fugal improvisation through figured bas*s. Oxford: Oxford University Press.
Riepel, J. 1752/54. *Anfangsgründe zur musikalischen Setzkunst, i: De Rhythmopoeia*. Regensburg
———. 1755. *Anfangsgründe zur musikalischen Setzkunst, ii: Grundregeln zur Tonkunst insgemein*. Frankfurt.
———. 1757. *Anfangsgründe zur musikalischen Setzkunst, iii: Gründliche Erklaerung der Tonordnung*. Frankfurt.
———. 1765. *Anfangsgründe zur musikalischen Setzkunst, iv: Erlaeuterung der betrueglichen Tonordnung*. Augsburg.
———. 1768. *Anfangsgründe zur musikalischen Setzkunst, v: Unentbehrliche Anmerkungen zum Contrapunct*. Regensburg.
Sancta Maria, Thomas de 1565. *Libro llamado el arte de tañer fantasia*. Valladolid.
Schenker, Heinrich. 1935. Der freie Satz. Vienna: Universal Edition, 1935.
The 3rd volume in his *Neue musikalische Theorien und Phantasie*, normally translated as Free Composition, meaning composing in the common-practice tonal style, not the sixteenth-century style otherwise known as strict counterpoint.
Schoenberg, Arnold. 1954. *Structural functions of harmony*. Norton.

Snyder, Kerala J. 2002. *The organ as a mirror of its time: North European Reflections*, 1610-2000. Oxford; New York: Oxford University Press.

Strunk, Oliver (ed.) and Leo Treitler (ed. Rev. ed.). 1998. *Source readings in music history*. London: W. W. Norton & Co.

Tatlow, Ruth. 2001. "Numbers and music: 1750-1900," *Grove Music Online*, www.oxfordmusiconline.com. Accessed January 25, 2011.

Tunley, David. 1984. *Harmony in action: A practical course in tonal harmony*. London: Faber Music Ltd. 1st ed. University of Western Australia, 1978.

Warburton, Annie O. 1959. *Score reading, form, and history*. Essex: Longman Group Ltd.

———. 1967. *Basic music knowledge*. Essex: Longman Group Ltd.