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# The *Gesangleiter* in Joseph Riepel's *Baßschlüssel* (1786)

Stefan Eckert

ABSTRACT: Joseph Riepel's *Anfangsgründe zur musikalischen Setzkunst* (Fundamentals of Musical Composition) is an important source for our understanding of eighteenth-century compositional theory and pedagogy. One of the most noticeable aspects of the *Anfangsgründe* is the fact that the treatise is written in dialogue form. Only the chapter published posthumously in 1786, the *Baßschlüssel* (Bass clef), which focuses on how to write a bass against an existing melody, does not, except for the last four pages, follow the dialogue format. Because of this, the *Baßschlüssel* seems to present a different theoretical approach to composition. Most noteworthy is the absence of other theoretical positions that result from the typical back and forth between teacher and student. While the original manuscript upon which the edited version is based does not seem to have survived, a manuscript copy held in the *British Library* (GB-Lbl Add. 31034) contains at least twelve pages in dialogue form that are related to the *Baßschlüssel*, but that are not part of the published chapter. These twelve pages relate to Riepel's *Gesangleiter*, his instruction on how to harmonize ascending and descending scale steps in the upper voice, which follows his discussion of the *Baßleiter*, the harmonization of scale steps in the lowest voice, or bass. The following essay, provides an overview of the *Gesangleiter* in Riepel's *Baßschlüssel*, followed by a discussion of the manuscript pages as compared to the published version and a transcription of the manuscript pages.

Joseph Riepel's *Anfangsgründe zur musikalischen Setzkunst* ist eine der zentralen Quellen für unser Verständnis der Kompositionstheorie und pädagogik im achtzehnten Jahrhundert. Ein auffallendes Merkmal der *Anfangsgründe* ist das das Traktat in der Form eines Dialoges verfasst ist. Nur der nach Riepels Tod veröffentlichte *Baßschlüssel*, das Kapitel das darauf fokussiert wie man einen Baß zu einer bestehenden Melodie setzt, ist, abgesehen von den letzten vier Seiten, nicht in Dialogformat. Deshalb scheint der *Baßschlüssel* einen ganz anderen theoretischen Ansatz zur Komposition darzulegen. Am auffallendsten ist die Abwesenheit von unterschiedlichen theoretischen Positionen die ein Resultat des typischen hin und her zwischen Lehrer und Schüler sind. Obwohl das originale Manuskript auf dem die herausgegebene Version basiert nicht überliefert ist, eine Kopie der *British Library* (GB-Lbl Add. 31034) enthält wenigstens zwölf Seiten in Dialogform die mit dem Baßschlüssel zusammenhängen aber nicht Teil des publizierten Kapitels sind. Diese zwölf Seiten beziehen sich auf Riepels *Gesangleiter*, seine Anleitung wie man auf- und absteigende Tonstufen in der Oberstimme harmonisiert, die auf die Baßleiter, der Anleitung wie man Tonstufen in der Unterstimme, dem Baß, harmonisiert, folgt. Der folgende Beitrag liefert eine Überblick über die *Gesangleiter* in Riepels *Baßschlüssel* gefolgt von einer Besprechung der Manuskriptseiten im Vergleich mit dem publizierten Kapitel und einer Abschrift der Manuskriptseiten.

Joseph Riepel's *Anfangsgründe zur musikalischen Setzkunst* (Fundamentals of Musical Composition) was among the first treatises to discuss composition on the basis of combining measures and to address musical form on the phrase level.<sup>1</sup> Recognized by contemporaries for offering hands-on instructions and practical suggestions for budding composers, Riepel's treatise continues to be an important source for our understanding of eighteenth-century compositional theory and pedagogy.<sup>2</sup> The *Anfangsgründe* consists of ten chapters, five of which were published by Riepel during his lifetime between 1752 and 1768. Two chapters were edited and published posthumously in 1786 in one volume by Johann Caspar Schubarth (who was one of Riepel's former students); another three chapters have survived in manuscript form.<sup>3</sup> One of the most noticeable aspects of the *Anfangsgründe* is the fact that the treatise is written in dialogue form. According to Riepel, the different chapters resemble actual lessons in composition, unfolding as lively discussions between a teacher, the *Præceptor*, and his student, the *Discantista*. Only the chapter published posthumously in 1786, the *Baßschlüssel* (Bass clef) does not, except for the last four pages, follow the dialogue format. Because of this, the *Baßschlüssel* seems to present a different theoretical approach to composition. This change in structure is most profound when noting the absence of other theoretical positions that result from the typical back and forth between teacher and student. Because Riepel usually does not present compositional issues as codified theory, but instead uses the dialogue to convey the multifarious aspects of mid-eighteenth-century musical practice, this difference is highly significant.<sup>4</sup>

While the original manuscript upon which the edited version is based does not seem to have survived, a manuscript copy held in the *British Library* (GB-Lbl Add. 31034) contains at least twelve pages in dialogue form that are related to the *Baßschlüssel*, but that are not part of the published chapter.<sup>5</sup> Since no copy of the original manuscript seems to exist, it is impossible to know which aspects of the treatise were changed by the editor, Johann Kaspar Schubarth, and which can be traced back to Riepel. In his listing of Riepel's works, Thomas Emmerig stated that "[a]fter the [manuscript] copy of the *Baßschlüssel* in GB-Lbl. [the British Library] follow 22 pages (fol. 71a–92b), 'which do not appear in the published edition' (Hughes-Hughes III, 326). These pages are without any doubt fragments of earlier manuscript versions, among others of the *Baßschlüssel*—in its original dialogue form!—and of the *Harmonisches Sylbenmaß III*; some parts could not be identified. Whether these constitute autograph pages or copies cannot be ascertained, because proven autographs from Riepel's earlier years for comparison are missing. Literature: Mettenleiter, 52 – Twittenhoff, 38 f. and 107 ff."<sup>6</sup> Emmerig refined his assessment of

1 See Wolf 1981, 132.

2 See for example the review in Marpurg 1775, 342–343.

3 See Emmerig 1984 for a full listing of Riepel's oeuvre and Emmerig 1996 for an edition of Riepel's complete theoretical writings including a transcription of the chapters that only survived in manuscript form.

4 See Eckert 2000 pp. 14–54 and Eckert 2007 pp. 95–96 for a detailed discussion of the dialogue structure and its significance to Riepel's theories.

5 See British Library (Anton Bachschmidt) [Add. 31034] fol. 71a–92b.

the forty-four single pages in the appendix to the complete edition, stating that 12 pages related to the *Baßschlüssel* still remain unidentified in their content.<sup>7</sup>

I have transcribed these twelve pages and identified that their content relates to Riepel's *Gesangleiter*, his instruction on how to harmonize ascending and descending scale steps in the upper voice, which follows his discussion of the *Baßleiter*, the harmonization of scale steps in the lowest voice, or bass. While the manuscript pages approach the *Gesangleiter* from different perspectives, several passages seem fragmented and slightly cryptic, almost as if they were taken from another context or constituted only a preliminary stage of the material. However, the employment of different perspectives compares well with the overall approach in the rest of the *Anfangsgründe* and complements the opening sections of the *Baßschlüssel* which seems to offer a somewhat categorical approach to the material. It is also noteworthy that the first five pages of the *Baßschlüssel*, which contain the *Baßleiter*, restate material already presented in the previous chapter on Counterpoint, a situation that is unique within the *Anfangsgründe*.<sup>8</sup> In the following essay, I provide an overview of the *Gesangleiter* in Riepel's *Baßschlüssel*, followed by a discussion of the manuscript pages as compared to the published version. My transcription of the manuscript pages follows in a separate article. While the content of the manuscript pages, due to their limited size and the topics addressed, do not reveal any extraordinary new insight into Riepel's ideas, it is interesting how there is a distinct reorganization of the material. In addition, despite its scholarly neglect, Riepel's *Gesangleiter* does offer interesting insights into his conception of the interaction between melody, harmony, and counterpoint and thus deserves our attention.

\* \* \*

The *Baßschlüssel*, *das ist, Anleitung für Anfänger und Liebhaber der Setzkunst, die schöne Gedanken haben und zu Papier bringen, aber nur klagen, daß sie keinen Baß recht dazu zu setzen wissen* (Bass clef, that is, instruction for beginners and music lovers, who have beautiful ideas and can notate them, but who complain that they do not know how to set a proper bass against them), is intended to teach students how to write a bass against an existing melody and consists largely of two parts. Figure 1 provides an overview of the topics and demonstrates that the *Baßleiter* and the *Gesangleiter* make up the largest sections of the treatise. The *Baßleiter*, which is also known as the *Rule of the Octave*,

6 "An den *Baßschlüssel* schließen sich in dem Exemplar in GB-Lbl. 22 Blätter (fol. 71a–92b), 'which do not appear in the published edition' (Hughes-Hughes III, 326). Bei diesen Blättern handelt es sich zweifelsfrei um Bruchstücke früherer Manuskriptfassungen u. a. des *Baßschlüssel* – in der ursprünglichen Dialogform! – und des *Harmonisches Sylbenmaß III*; einige Teile konnten noch nicht identifiziert werden. Aussagen darüber, ob es sich um autographe Blätter oder Kopien handelt, sind nicht möglich, da gesicherte Autographen aus früheren Jahren Riepels zum Vergleich fehlen. Literatur: Mettenleiter, 52 – Twittenhoff, 38f. and 107 ff." (Emmerig 1984, 167–168).

7 Emmerig 1996, 852–853.

8 See Emmerig 1996, 578–585 (*Sechstes Capitel vom Contrapunct. Joseph Riepel, Sämtliche Schriften zur Musiktheorie*. Vol. I. Wien: Böhlau Verlag, 527–634).

builds the foundation for the *Gesangleiter*, which constitutes Riepel's idiosyncratic appropriation of the octave rule to the highest voice.<sup>9</sup>

- *Baßleiter* (pp. 1–5)
  - *Ascending Scale with Major Third [Aufsteigende Leiter mit der großen Terz]* (pp. 1–2)
  - *Descending Scale with Major Third [Absteigende Leiter mit der großen Terz]* (pp. 2–3)
  - *Exceptions at the Ascending [Ausnahme bey den Aufsteigenden]* (p. 3)
  - Ascending and Descending minor scales (p. 4)
  - Example Bass in major; first without, then with Figures (pp. 4–5)
  - Example Bass in minor; first without, then with Figures (p. 5)
- *Gesangleiter* (p. 6–80)
  - Ascending *Gesangleiter* in major, §. 1–13 (pp. 6–11)
    - Examples demonstrating an Application of the Ascending *Gesangleiter* (pp. 11–17)
  - Descending *Gesangleiter* in major, §. 14–25 and §. 26 (pp. 17–21 and 26)
    - Examples demonstrating an Application of the Ascending *Gesangleiter* (pp. 21–27)
  - Ascending *Gesangleiter* in minor, §. 27–31 (pp. 28–30)
  - Descending *Gesangleiter* in minor, §. 32–36 (pp. 30–33)
    - No Examples demonstrating an Application of the *Gesangleiter* in minor
- [Fragments of Tutti, Soli, Allegro, Minuets addressing various issues of Melody, Harmony, and Counterpoint, not explicitly connected with the *Gesangleiter* (pp. 33–63)]
  - Distinction between dissonant pitches and chordal dissonances §. 37–43 (pp. 53–56)
  - Chromatic Aspects of the *Gesangleiter* in major, §. 44 (pp. 63–64)
  - Chromatic Aspects of the *Gesangleiter* in minor (pp. 64–65)
  - Fragments addressing various issues of Melody, Harmony, and Counterpoint (pp. 65–71)
  - More Chromatic Bases, §. 45 (pp. 71–80)
- Canon presented in Dialogue form (pp. 80–83)
- *Corrections [Verbesserungen and Notenverbesserungen]* (pp. 83–84)

Figure 1: Contents of Riepel's *Baßschlüssel* (84 pages)

9 See Christensen 1992 and Jans 2007 for an extensive discussion and historical context of the octave rule.

While the *Baßleiter* and the *Gesangleiter* create an overarching structure for the *Baßschlüssel*, there exist significant portions, especially pages 33–63, that do not explicitly relate to either of the two topics. Also, while the *Gesangleiter* in major is treated in great detail, the minor and chromatic versions are only mentioned briefly, without additional examples for their applications. I begin with a summary of Riepel's *Baßleiter* and provide a more detailed discussion of Riepel's ascending and descending *Gesangleiter* in major, which consists of twenty-six rules, and end with an overview of the extension of the *Gesangleiter* in minor and a brief account of the final, rather loosely connected rules around *Gesangleiter* and *Baßleiter*, including some chromatic issues, with which Riepel ends the *Baßschlüssel*.

### Riepel's Baßleiter

Riepel begins the *Baßschlüssel* with a discussion of the common (*allgemeine*) *Baßleiter*, that is, the rules on how to harmonize the different pitches within a scale, assuming mostly stepwise motion. For the ascending scale, Riepel sets root position chords above scale degrees ①, ④, and ⑤, and first inversion triads on scale degrees ②, ③, ⑥, and ⑦.<sup>10</sup> However, he points out that composers often harmonize scale degrees ④ and ⑦ with a 6/5 and scale degree ② with a 6/4/3; the latter he shows in both ascending and descending motion: ①–②–③ and ③–②–① (Figure 2):

Figures		6		6				6		6	
Variants		6/4/3			6/5					6/5	
Bass	①	②	③	④	⑤	⑥	⑦	①			

Figure 2: Ascending scale with major third [Aufsteigende Leiter mit der großen Terz] (including variants)

For the descending scale, he keeps root position chords on scale degrees ① and ⑤, but harmonizes ④ with a 4/2. In addition, he harmonizes scale degree ⑥ with #6, a major sixth (Figure 3):

Figures		6	#6		4/2	6	6	
Bass	①	⑦	⑥	⑤	④	③	②	①

Figure 3: Descending scale with major third [Absteigende Leiter mit der großen Terz]

In addition, he highlights further context-specific harmonization of scale degrees ⑥, ④, and ② (Figure 4). While ⑥–⑤ be harmonized with a major sixth (#6), if scale degree ⑤

10 Following Gjerdingen 2007, I will identify the scale degree of notes in the bass using ①, ②, ③, etc. based on the major scale. That is, regardless of mode, ⑦ will always identify the leading tone, the major seventh above the tonic. I use accidentals to identify any alterations or to clarify ambiguous moments; for example, ♭⑦–♯⑦–① identifies a motion from the minor to the major seventh to the tonic. Similarly, I use ①, ②, ③, etc. to identify scale degrees of notes in the soprano.

does not follow scale degree ⑥, then it should be harmonized with just a minor sixth (6). In addition, if scale degree ⑥ is approached by step from either direction without a stepwise continuation, it should be harmonized with a 5/3. Scale degree ④ should be harmonized with a 4/2 when moving ⑤–④–③; however, if scale degree ④ moves to ③ without the context of a Dominant chord, it should be harmonized with a 5/3. Similarly, while scale degree ② is usually harmonized with a 6 or 6/4/3, if it does not move stepwise within a Tonic chord, that is scale degrees ① and ③, it should be harmonized with a 5/3. I have summarized these context-specific harmonizations of ⑥, ④, and ② in Figure 4 below:

⑥–⑤	harmonize ⑥ with #6
⑥ no ⑤	harmonize ⑥ with 6
①–⑦–⑥ not to ⑤	harmonize ⑥ with 5/3
⑤–⑥ not to ⑦	harmonize ⑥ with 5/3
⑤–④–③	harmonize ④ with 4/2
④–③ no Dominant	harmonize ④ with 5/3
② no Tonic	harmonize ② with 5/3

Figure 4: Context-Specific Harmonization of ⑥, ④ and ②

As Example 1 demonstrates, Riepel suggests fixed harmonizations for scale degrees ①, ③, ⑤, and ⑦ and flexible, that is, context-specific harmonizations of scale degrees ②, ④, and ⑥:

Example 1: Baßleiter, p. 3 (measure numbers added)

The fixed harmonizations result in root position chords for scale degrees ① and ⑤ and first inversion triads on scale degrees ③ and ⑦; with the possibility of the latter taking a 6/5, that is, a chordal seventh. Scale degree ② may be harmonized with a root position chord if ② does not move to tonic harmony (that is, to either scale degrees ① or ③) as seen in mm. 12 and 19; scale degrees ④ and ⑥ may be harmonized with root position chords, if ④ and ⑥ do not move to a dominant chord (that is, ⑤ or ⑦) as it happens for ④ in mm. 11 and 22 and for ⑥ in m. 17. In addition, ⑥ takes a major sixth (#6) moving to ⑤ as in mm. 6–7, but a minor sixth (6) when it does not moves to ⑤ as in m. 10.

For the ascending minor scale (Figure 5), all changes are due to the mode change, otherwise the same rules as in the ascending major scale apply. In contrast, the descending minor scale (Figure 6) with its flattened scale degrees ♭⑥ and ♭⑦ usually does not

include the major sixth (#6) in its stepwise descend to ⑤. With the exception of the major sixth (#6) and the necessary alteration due to the lowered third and sixth scale degrees (♭③ and ♭⑥), the other context-specific harmonization of scale degrees ②, ④, and ⑥ as outlined in Figure 4 above apply also in minor.

Figures		#6	6		#	6	6	
Bass	①	②	♭③	④	⑤	⑥	⑦	①

Figure 5: Ascending scale with minor third

Figures		6	6	#	4/2	6	#6	
Bass	①	♭⑦	♭⑥	⑤	④	♭③	②	①

Figure 6: Descending scale with minor third

Riepel follows this overview of the octave rules in major and minor with a reminder that a minor second below a scale step indicates scale degree ⑦, the leading tone, which he calls *Septimensprung* (leap of a seventh) of a new key. Listing all the closely related keys, which he calls *Mitteltonarten* in Example 2, it is noteworthy that F is identified not by scale degree ⑦, E, but by Bb–A–F (④–③–①).



Example 2: *Mitteltonarten* (Closely Related Keys), p. 4

Finally, Riepel ends his presentation of the octave rule with two unfigured basses in both major and minor as examples for applying the octave rule to a bass that moves to all closely related keys. The bass lines appear first without figures but with annotations identifying the different keys followed by a figured version that provides the answer key on how the bass lines should be harmonized.

What is unique about the presentation of the octave rule in the opening five pages of the *Baßschlüssel*, is that this constitutes the second complete presentation of the octave rule within the *Anfangsgründe*. Indeed, halfway through Chapter Six “On Counterpoint,” at a moment when Riepel rewrites counterpoint examples by J.J. Fux from a harmonic perspective, the teacher already introduces the octave rule to the student.<sup>11</sup> While the content of the two presentations is essentially the same, that is, the information concerning how specific scale degrees should be harmonized, the differences between the two presentations are significant. Most importantly, the presentation of the octave rule at the

11 See Emmerig 1996, pp. 578–586. Wiener 2003 has pointed out Riepel’s harmonic revisions of counterpoint example by Fux.

beginning of the *Baßschlüssel* is not in dialogue form and proposes root position chords above scale degrees ①, ④, and ⑥, as a matter of nature.

Since the fourth F and the fifth G demand by nature a complete chord [The *Baßschlüssel* defines a complete chord as consisting of a third and fifth, either of which may be omitted in practice<sup>12</sup>], yet their immediate progression easily leads to forbidden fifths or octaves, even the oldest masters have used the six-five chord as a good emergency assistance. Although it sounds somewhat drudging, it is often used for [above] the seventh as well as the fourth [scale degree].<sup>13</sup>

Joel Lester has suggested that such emphasis on scale degrees ①, ④, and ⑥ demonstrates that Riepel embraces “aspects of Rameauian harmony.”<sup>14</sup> Yet, the introduction to the octave rule in the counterpoint chapter does not contain this reference to nature, and the student-teacher discussion does not sound as categorical as the opening in the *Baßschlüssel*. Moreover, throughout the *Anfangsgründe*, Riepel either ignores or comments negatively on Rameau’s mathematically grounded principles of music, which he considers to stand in contrast with his hands-on approach. For example, he compares the ideas contained in one of Rameau’s treatises, *Démonstration du Principe de l’Harmonie*, to a satire by Ludvig Holberg, stating, “I was just as eager to read [Rameau’s] treatise as I was to know how Nicolaus Klim finally found a fifth monarchy in the center of the earth.”<sup>15</sup>

## Riepel’s Gesangleiter

I would first like to note that the ancient bass, which accompanies a melody [Gesang] has been explained by some to be systematical (perhaps only in this century). According to this explanation, the whole octave scale has only three Grundbaßnoten [fundamental-bass notes], the remainder are neighboring or passing tones, which I in appreciation of their good service call at least *Mittelbaßnoten* [middle-bass notes] (6).<sup>16</sup>

This opening statement, with which the author of the *Baßschlüssel* begins the presentation of the *Gesangleiter* seem foreign to Riepel’s ideas. Most importantly the claim that

12 “Ein vollkommener Accord besteht, wie bekannt, in der Terz und Quinte, es mag die Terz gleich über oder unter der Quinte zu stehen kommen.” And a footnote explains further, “In der Praktik gilt ein Accord oft für vollkommen, wenn anstatt der Terz auch nur die Quinte und Oktave, oder anstatt der Quinte nur die Terz und Oktave zu hören stehen etc” (Riepel, *Baßschlüssel*, 1).

13 “Da denn der Quartsprung f und der Quintsprung g von Natur vollkommene Accorde verlangen, und aber bey deren unmittelbaren Fortschreitung leicht verbotene Quinten oder Octaven sich ereignen, so haben schon die ältesten Meister zur Vermittelung eine gute Nothhülfe, nemlich den Sextquintenaccord erfunden; und ob er gleich ein wenig stumpfsinnig lautet, so wird er doch nicht minder zum Septimen- als [auch] Quartsprung gern gebraucht. Z. Ex. <Example>” (Riepel, *Baßschlüssel*, 1).

14 Lester 1992, 270.

15 “Ich war eben so begierig, diesen Tractat zu lesen, als ich begierig war zu wissen, auf was Art Nicolaus Klim mitten in der Erde endlich noch eine fünfte Monarchie angetroffen habe” (Riepel 1755, 53 fn).

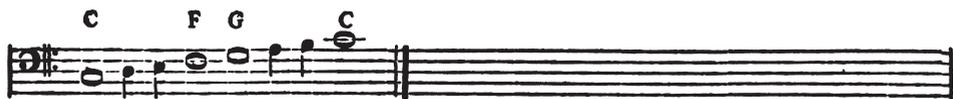
16 “Zu voraus muß ich anmerken, daß der uralte Baß zum Gesange von Einigen (vielleicht erst in diesem Jahrhundert) für systematisch erklärt worden ist. Dieser Erklärung zufolge hat die ganze Otavleiter nur drey Grundbaßnoten, die übrigen sind Neben- oder Ausfülltöne, die ich aber aus Achtung für ihre guten Dienste wenigstens Mittelbaßnoten nenne” (Riepel, *Baßschlüssel*, 6).

the bass derives from a system, which reduces it to three fundamental bass notes, seems reminiscent of Rameau's ideas. However, as mentioned in the context of Riepel's discussion of the octave rule, there does not really exist enough evidence to substantiate a specific relationship. The *Gesangleiter with its various and usual bass notes* [mit ihren verschiedenen und üblichen Baßnoten] directly and indirectly takes up the majority of the *Baßschlüssel*. Since the *Baßschlüssel* is not in dialogue form, there exists no back and forth between the teacher and student, no questions are raised, and no contradictions appear. On the other hand, the single authorial voice allows for an uninterrupted presentation of the topics at hand. Even though we are unable to prove or disprove Riepel's authorship of the printed version of the *Baßschlüssel*, I continue to identify him as the author in the following discussion.

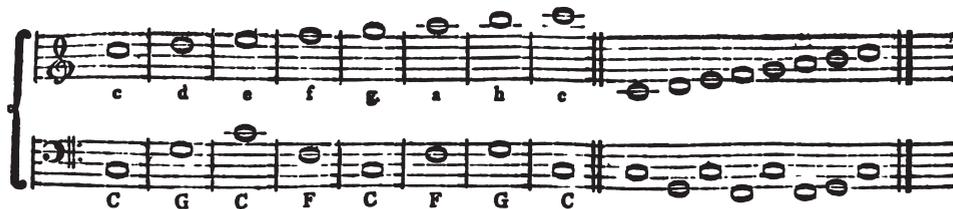
The *Gesangleiter* begins quite simply. Declaring C, F, and G *Grundbaßnoten* and the remaining pitches *Nebenlänge* or *Mittelbaßnoten* that arise from the triads above C, F, and G (Example 3), Riepel first demonstrates that this approach results in a complete scale (Example 4) and then goes on to harmonize this ascending scale in treble clef using only the *Grundbaßnoten* C, F, and G (Example 5).



Example 3: *Gesangleiter* §. 1, p. 6



Example 4: *Gesangleiter* §. 2, p. 6

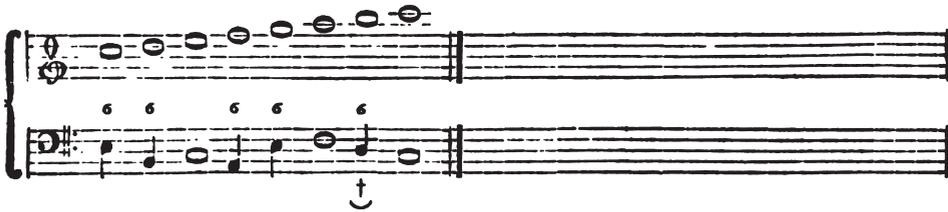


Example 5: Ascending *Gesangleiter* §. 3, p. 7

While it seems implied that the pitches in the top voice are harmonized by the triad to which each pitch belongs, two pitches, G and C, which both are part of the triads on C and G and C and F respectively, are harmonized in the ascending scale with C without explanation.<sup>17</sup> Commenting on the resulting leaping root motion in the bass, Riepel sug-

17 Since C appears only at the beginning and the end of the scale, it makes sense to harmonize it with C, and a possible reason for not harmonizing G with G would be that since G is preceded by F, which is harmonized by F, harmonizing G with a G would create parallel octaves.

gests that if composers would use only *Grundbaß-* and no *Mittelbaßnoten*, compositions would seem desolate and barren. Thus he suggests that the root of the chords could be replaced with by its third, which “the old have called *Nota median* (mediating note).”<sup>18</sup>



Example 6: Ascending *Gesangleiter* §. 4, p. 7

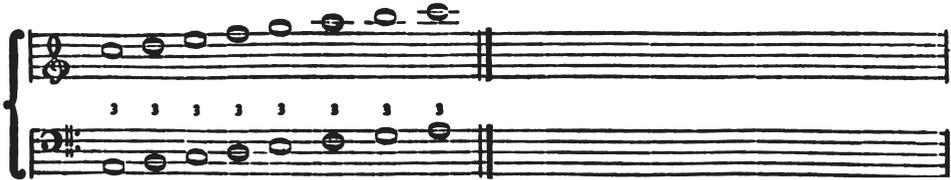
Example 6 reproduces the harmonization of the ascending *Gesangleiter*, which, except for the final C, replaces the chordal roots with the thirds where possible. That is scale degree ②, E, and ⑥, A, which are the chordal thirds of the triads on C and F respectively, continue to be harmonized with their roots. However, scale degree ⑦, B, is not harmonized by its root G, but D, which in this context is ‘mediating.’ Indeed, Riepel’s chordal harmonization of the ascending *Gesangleiter* §. 4 (Example 7), demonstrates that the scale degree ⑦, B, is harmonized by its third, D. Riepel thus expands the repertoire of chords adding a B diminished chord. It is noteworthy that he does so without making an attempt to explain the origin of the diminished chord. Riepel, however, points out that even though scale degree ①, C, is harmonized by scale degree ③, its third E, in the bass, that this is meant as a continuation in the middle of a melody, “otherwise, there should not be the note E at the beginning but the *Grundbaßnote* C.”<sup>19</sup>

Example 7: Harmonization of the Ascending *Gesangleiter* §. 4, p. 8

18 “... von den alten *Nota medians* (vermittelnde Note” genannt” (Riepel, *Baßschlüssel*, 7).

19 “[...] sonst müßte es (wie bekannt) zum Anfange nicht di Note e, sondern die *Grundbaßnote* C seyn” (Riepel, *Baßschlüssel*, 7).

The next two harmonizations of the ascending Gesangleiter (Examples 8 and 9) use only consonant thirds and sixths. "I also imagine," Riepel writes, "that, except at the beginning and the end, there can always be thirds between the melody and the bass, may they be mediating or not mediating, Mittelbaß- or Grundbaß-like, for example:"<sup>20</sup>

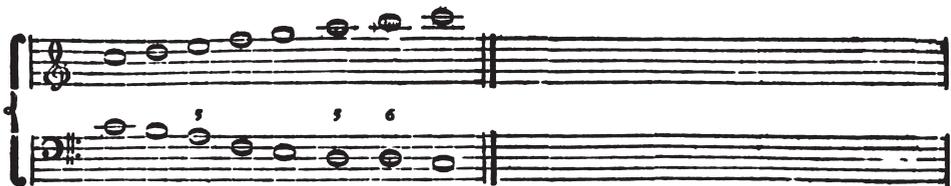


Example 8: Ascending *Gesangleiter* §. 5, p. 8



Example 9: Ascending *Gesangleiter* §. 6, p. 8

In addition to using thirds and sixths, Riepel suggests that scale degrees  $\textcircled{3}$ , E, and  $\textcircled{6}$ , A, could also be harmonized with fifths (Example 10) and octaves (Example 12) between the outer voices:



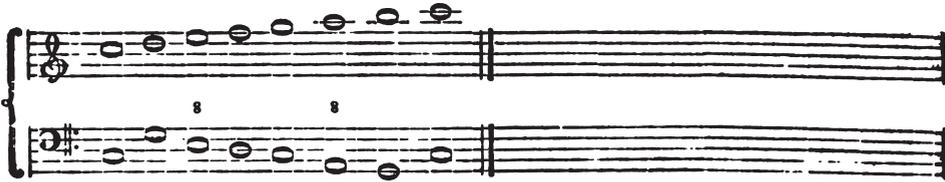
Example 10: Ascending *Gesangleiter* §. 7, p. 9



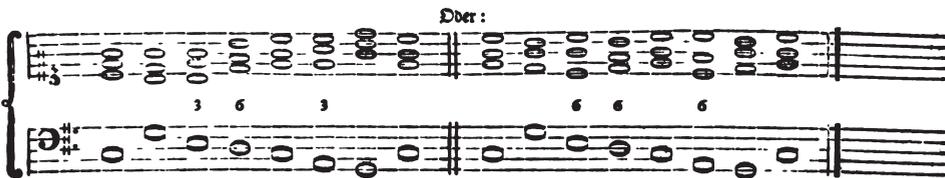
Example 11: Right Hand Chords for the Ascending *Gesangleiter* §. 7, p. 9

20 "Auch stelle ich mir vor, daß Terzen außer Anfang und Ende zwischen Gesang und Baß durchaus statt finden, sie seyen zum Gebrauche meinethalben vermittelnd oder unvermittelnd, mittelbaß- oder grundbaßmäßig, z. Ex." (Riepel, Baßschlüssel, 8).

The fifth below E results in an A minor, the fifth below A in a D minor triad as shown in Example 11. In addition, since the D remains stationary in bass through the ascent from scale degree 6–7, the outer voices create a 5–6 motion. While the fifths below scale degrees 3 and 6 resulted in root position chords, Riepel harmonizes the octaves below 3 and 6 (Example 12) in two different as shown in Example 13:



Example 12: Ascending *Gesangleiter* §. 8, p. 9



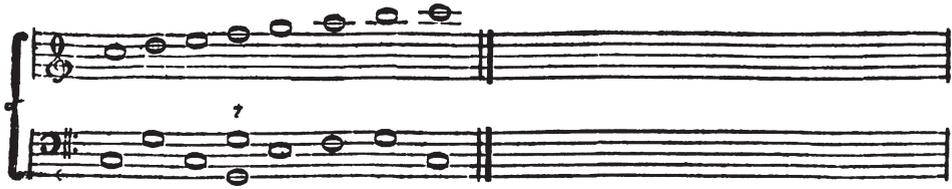
Example 13: Two Harmonizations of the Ascending *Gesangleiter* §. 8, p. 9

The two harmonizations in Example 13 share the bass of Example 12; however, Riepel interprets E and A first as chordal roots resulting in E minor and A minor chords and then as the chordal thirds of the C major and F major chords respectively. Figure 7 schematizes the two different harmonizations of the octaves in comparison:

Soprano	①	②	③	④	⑤	⑥	⑦	①
Intervals			8			8		
Chords 1	C	G	Em	B°6	C	Am	G	C
Chords 2			C6			F6		
Bass	①	⑤	③	②	①	⑥	⑤	①

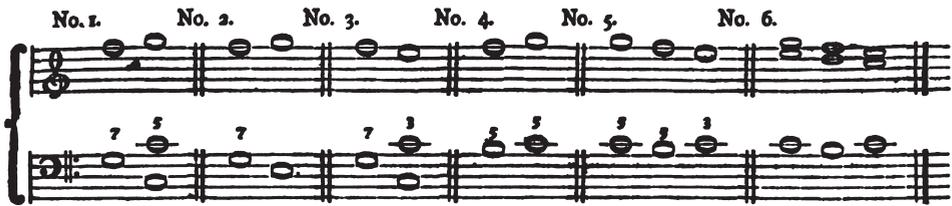
Figure 7: Two Harmonizations of Ascending *Gesangleiter*, §. 8

Ascending *Gesangleiter* §. 9–11 (Examples 14–17) introduces the use of the chordal seventh. Example 14 harmonizes scale degree 4 in the soprano with ⑤ in the bass, resulting in a minor seventh. In his brief discussion before the example, Riepel acknowledges that the minor seventh, while a dissonance, now constitutes a common sonority, especially in a chord containing also a third and fifth.



Example 14: Ascending *Gesangleiter* §. 9, p. 10

However, the unusual resolution of the chordal seventh, ④ moving stepwise up to ⑤, is far from ideal and Riepel presents six resolutions reproduced in Example 15.



Example 15: Ascending *Gesangleiter* §. 9, p. 10 – Resolution of Chordal Seventh

Discarding No. 1 and No. 4 because of the outer voices moving into a fifth, Riepel accepts No. 2 where ④–⑤ in the soprano is countered by ⑤–③ in bass; however, he prefers Nos. 3, 5, and 6 where the seventh resolves stepwise down. Examples 16 and 17 demonstrate how ② and ④ and ③ and ⑦ can be harmonized with a 4/2:



Example 16: Ascending *Gesangleiter* §. 10, p. 10



Example 17: Ascending *Gesangleiter* §. 11, p. 10





Example 21: Application of the Ascending *Gesangleiter* according to §. 4, p. 12

Example 21 uses first inversion chords where possible, but includes also a cadential 6/4 chord at the half cadence in m. 8. That is, when chordal thirds appear in the melody, the bass always takes the root of the chord, as seen on the last beat in mm. 1 and 3 where E and A are harmonized with C and F respectively.



Example 22: Application of the Ascending *Gesangleiter* according to §. 5, p. 12

Example 22 contains two extended passages harmonized in parallel thirds (from the last beat of m. 1 to the downbeat of m. 3 and last beat of m. 5 to the last beat of m. 7).



Example 23: Application of the Ascending *Gesangleiter* according to §. 6, p. 12

Example 23 contains two extensive passages in parallel sixths (last beat of m. 1 – last beat of m. 3 and last beat of m. 5 – last beat of m. 7). However, Riepel notes that the bass starting at † seems more like an inner voice and he rewrites mm. 5–6 by placing the bass as the melody harmonized in parallel 3rds.



Example 24: Application of the Ascending *Gesangleiter* according to §. 7, p. 13

Example 24 presents the 5ths below ③ and ⑥, resulting in the Am (m. 2 beat 1) and Dm (m. 5 beat 1). Interestingly, Riepel comments how the passage at (O), in mm. 4–5, while acceptable, sounds better when fully voiced. However, Riepel's harmonizations concern only the motion from ④–③ in the bass, harmonizing them with first inversion chords d6–C6 respectively, which contradicts the B in the melody.



Example 25: Application of the Ascending *Gesangleiter* according to §. 8, p. 13

Example 25 contains the 8ves below ③ and ⑥, resulting in Em and Am chords on the downbeats of mm. 2 and 3 respectively.

Example 26: Application of the Ascending *Gesangleiter* according to §. 9, pp. 13–14

Example 26 includes chordal sevenths. Unlike §. 9 which only focused on the resolution of the minor seventh in the context of the dominant, (Q) presents a half-diminished seventh chord above ⑦, while (P) and (R) treat the V7 in root position and inversions.

Example 27: Application of the Ascending *Gesangleiter* according to §. 10, p. 14

Example 27 includes 4/2 below ② and ④ (ii4/2), both using the repeated note paradigm (①–①–⑦–①), harmonized with 5/3–4/2–6/3–5/3. However, at †, the bass moves not to ①, but using ③–① in order to avoid moving into the fifth C–G (downbeat of m. 3) in the outer voices.



Example 28: Application of the Ascending *Gesangleiter* according to §. 11, p. 14

Example 28 features 4/2 below ③ and ⑦. However instead a V4/2of IV, ③ is harmonized with a V4/2of ii with ⑤ in the bass, resolving to a d6 on the downbeat of m. 4.



Example 29: Application of the Ascending *Gesangleiter* according to §. 12, p. 15

Example 29 contains the two chromatically descending bass segments (①–⑦–♭⑦–⑥ and ⑤–♯④–④–③) ending on an F6 and C6 respectively.



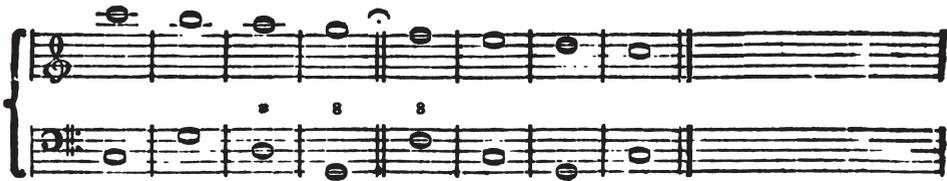
Example 30: Application of the Ascending *Gesangleiter* according to §. 13, pp. 16–17

Example 30 contains a chromatically ascending bass segment. Unlike §. 13, where its harmonic interpretation was ambiguous because the segment ended the example, Example 30 clearly remains in the key of C because of the phrase ending on the dominant.

The descending *Gesangleiter*, taking up §. 14–26 (pp. 17–26), includes a tonicization of the dominant, an extensive discussion of cross-relation, and several schemata (*Romanesca* (§. 18), *Prinner* (§. 22), and *Quiescenza* (§. 24)). Examples 31–33 (§. 14–15a and 15b) harmonize the descending scale degrees ⑦–⑥–⑤ with ⑤–②–⑤ or ⑤–♯④–⑤, that is with G–D–G and G–D6–G respectively (Figure 8) with the comment “We have seen this hasty departure from the main key into the fifth in the *Generalbaßleiter* above.” Aligning both, *Gesangleiter* and *Baßleiter*, Riepel further conflates *Baßleiter* and *Generalbaß* into *Generalbaßleiter*, which up to this moment in the *Baßschlüssel* appeared separately. The term *Generalbaßleiter* highlights the close relationship between thoroughbass and the octave rule and may indicate how futile it is to keep these two concepts separated

because they overlap in so many ways. While Riepel highlights the Grundbaßnoten C, F, and G in his harmonization of the ascending scale, the harmonization of the descending scale adds D, which he describes as a “swift deviation from the main key to the fifth.”<sup>21</sup>

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Example 31: Descending *Gesangleiter* §. 14, p. 17



Example 32: Descending *Gesangleiter* §. 15, p. 18



Example 33: Descending *Gesangleiter* §. 15b, p. 18

- 21 “Diese eilfertige Abweichung von der Haupttonart in die Quinte haben wir auch oben bey der Generalbaßleiter gesehen” (Riepel *Baßschlüssel*, 17).
- 22 Giorgio Sanguinetti begins his 2007 article by discussing the close relationship between thoroughbass and partimento, of which the octave rule is an important aspect. Sanguinetti’s most pronounced difference between thoroughbass and partimento, speaks to the independence of the partimenti, because thoroughbass is usually meant to accompany something, thus is in service to some other musical force.
- 23 “[...] eilfertige Abweichung von der Haupttonart in die Quinte.” I am taking the liberty to translate “eilfertig” as “swift” despite that it literally translates into “rash,” because I detect no negative connotations in the German text.

Soprano	①	⑦	⑥	⑤	④	③	②	①
Chords	C	G	D(6) #④	G	F(6) ⑥	C	G	C
Bass	①	⑤	②	⑤	④	①	⑤	①

Figure 8: Simple Harmonizations of the Descending *Gesangleiter*, §. 14 and 15a&b

The main difference between §. 14 and 15 (Examples 31 and 32) is that Riepel divides the octave in §. 14 into two sections, section one lasting from ①–⑤ and section two from ④–①. The section break undermines the parallel octaves resulting from harmonizing ⑤ with ⑤ and ④ with ④ if the example would move in one section through scale degrees [⑥–]⑤–④[–③]. §. 15 (Example 32) remedies this situation by harmonizing ④ with ⑥, which avoids the parallels and allows an uninterrupted scale harmonization. While Riepel takes recourse to the *Baßleiter* in harmonizing scale degree ⑥ with a D major chord in the context of the scale-wise descent ⑦–⑥–⑤, it is curious that he does not draw on the *Baßleiter* and harmonize scale degree ④ with a V7 chord in the descent ⑤–④–③. However, harmonizing ⑤–④–③ with ⑤–⑥–① works well, because the ⑤–⑥ (V–IV6) deceptive motion helps to prepare the final I–V–I of the ③–②–①. Finally, Example 33 (§. 15b) simply replaces the root D with its third F#, which provides for a smoother bass line.

“However,” Riepel continues, “one could remain in the main key, if one could tolerate peaceful cross-relation.”<sup>24</sup>

Harmonizing ⑦–⑥ in the soprano with ⑤–④ in the bass, which results in a G major to F major progression in mm. 2–3 of Example 34 (§. 16), Riepel identifies the *Mi contra Fa* (⑦–④), or cross-relation (*Querstand*), in the outer voices, that is, the presence of scale degree ⑦ in the soprano followed one note later by scale degree ④ in the bass, with an extended front slash.



Example 34: Descending *Gesangleiter* §. 16

Stating that the “old [masters] condemned such two major thirds in a descending *Gesangleiter*,” Riepel explains in a footnote that this concerns “especially [two major thirds] between the highest voice and the bass; yet, only in certain positions and turn of phrases.”<sup>25</sup>

24 “Man könnte dagegen durchaus in der Haupttonart bleiben, wenn ein fridlicher Querstand zu dulden wäre” (Riepel *Baßschlüssel*, 17).

25 “... von den alten zwei große Terzen nur in absteigender *Gesangleiter* für verwerflich gehalten worden sind.\* [\*] Und zwar fordertsamst zwischen der obersten Stimme und dem Basse; aber nur in gewissen Lagen und Wendungen” (Riepel *Baßschlüssel*, 18).

Marking the example containing the cross-relation with “§.16” (Example 34), Riepel seems to indicate that he considers the example part of the *Gesangleiter*, despite the fact that he explicitly points out in most of the following examples (§. 17–22) how they avoid the Mi contra Fa (♭–♮). Example 35 introduces the *Romanesca* bass with its characteristic bass motion of a descending fourth followed by an ascending second (①–⑤–⑥–③–④–①), provides an effective harmonization of the stepwise descending soprano with root position chords.<sup>26</sup> Though unusual, Examples 36 (§. 18), harmonize the descending scale with a *Romanesca* starting on A, or scale degree ⑥. Riepel argues that the cross-relation (♭–♮) between mm. 2–3 in Example 36 matter less because of the two-measure units created by the sequential bass motion.



Example 35: Descending *Gesangleiter* §. 17, p. 18



Example 36: Descending *Gesangleiter* §. 18, p. 19

Similar to §. 5 and 6, which focused on harmonizing the ascending scale using thirds and sixth respectively, Examples 37–39 (§. 19–21), focus on intervallic relationships. Example 37 (§. 19) moves in parallel 3rds, 38 (§. 20) in parallel 6ths, and 39 (§. 21) combines sixths and thirds. Throughout his discussion of intervallic relationships, Riepel highlights how the respective examples address the cross-relation. While the sixth below scale degree ⑥ prevents the cross-relation in Examples 38 and 39, Riepel argues that the cross-relation in Example 37 are mitigated by the opening minor third and the two-measure unit. In support of this, he rewrites several of the examples to demonstrate that they can be conceptualized in two-measure groups.

26 I want to thank Robert Gjerdingen for pointing out the *Romanesca* in the first place. See Gjerdingen 2007 Chapter 2, pp. 25–43 for a discussion of the *Romanesca* schema.



Example 37: Descending *Gesangleiter* §. 19, p. 19



Example 38: Descending *Gesangleiter* §. 20, p. 20



Example 39: Descending *Gesangleiter* §. 21, p. 20

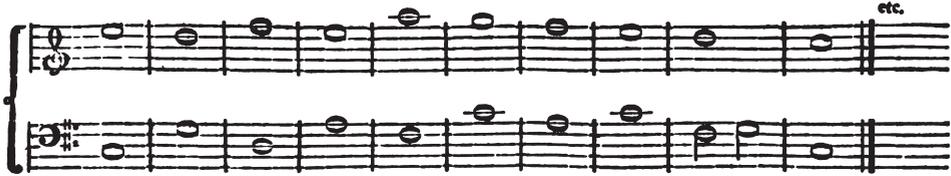
Example 40 (§. 22) avoids the cross-relation by inserting an additional note (measure) between scale degrees 7 and 6, resulting in two different soprano lines: 1–7–1–6 and 1–7–3–6. It is noteworthy that the harmonization of the second soprano line's last four notes 6–5–4–3 in parallel thirds creates a *Prinner*.<sup>27</sup> Riepel considers this and the following example (Examples 40 and 41) “good diatonic turn of phrases” (*gute diatonische Sätze*) which have been used by ancient masters.<sup>28</sup> It is noteworthy that only the last six notes consist of a descending scale from 6 to 1, the beginning of a sequence of ascending fifth harmonizing a 3–2–4–3 soprano.



Example 40: Descending *Gesangleiter* §. 22, p. 20

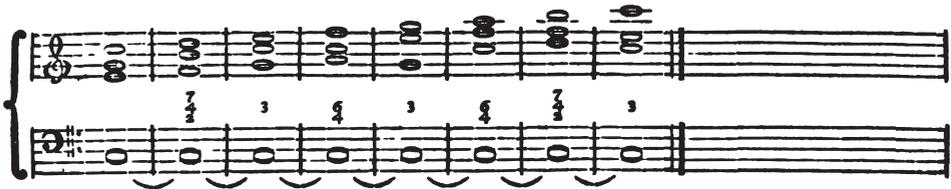
<sup>27</sup> See Gjerdingen 2007 Chapter 3, pp. 45–60 for a discussion of the *Prinner*, which provides a common harmonization of a stepwise descend 6–5–4–3.

<sup>28</sup> See Riepel, *Baßschlüssel*, 20–21.



Example 41: Descending *Gesangleiter* §. 23, p. 21

Examples 42–43, §. 24–25, show both a stepwise ascending and descending soprano above a tonic-pedal bass. In the case of the stepwise ascending soprano, the last four notes, 5–6–7–1, create a *Quiescenza* with  $5/3$ ,  $6/4$ ,  $7/4/2$ , and  $5/3$  above the pedal which can appear both with and without chromatic alterations.<sup>29</sup>



Example 42: Ascending *Gesangleiter* §. 24, p. 21



Example 43: Descending *Gesangleiter* §. 25, p. 21

Finally, Example 44 (§. 26) appears in the context of examples that demonstrate an application of the descending *Gesangleiter*. Unlike the other illustrations of the rules for the descending *Gesangleiter*, Riepel presents Example 44 in an open three-part score (violin, viola, and bass). While Examples 42 and 43 demonstrate ascending and descending scale harmonizations above a tonic pedal, this final example harmonizes a sustained tonic in the soprano.

<sup>29</sup> See Gjerdingen 2007 Chapter 13, pp. 181–195 for a discussion of the *Quiescenza*. For a diatonic *Quiescenza* see Ex. 13.1, for a chromatic variant Ex. 13.2 (pp. 181–182).

**No. 1. Allegro, etc.**

**No. 2. etc.**

Example 44: Descending *Gesangleiter* §. 26, p. 26

Except for the five-page distance between §. 25 (Example 43) and §. 26 (Example 44), which makes §. 26 appear almost like an afterthought, the thirteen rules for harmonizing an ascending *Gesangleiter* (§. 1–13) are followed by thirteen rules for harmonizing a descending *Gesangleiter* (§. 14–26). Similar to the treatment of the ascending *Gesangleiter*, which was first introduced and then exemplified, pp. 21–25 also present examples for how to apply the rules of the descending *Gesangleiter*. Most of the examples demonstrating the application of the *Gesangleiter* are in three or more parts, which is helpful for clarifying some of the harmonically ambiguous rules. Except for Example 46, which consists only of four measures, all examples create a complete harmonic and melodic context. That is, all begin on and end with a cadence in the tonic C major.

Example 45 combines both rules §. 14 & 15. That is, D is harmonizing scale degree 6 as a secondary dominant to G as a detour to the fifth of the key, (*Abweichung in die Quinte*), and 6–4 are harmonized by 5–6 (V–IV6), which avoid the parallel octave that would result from successive root position chords of 5–4 (V–IV).

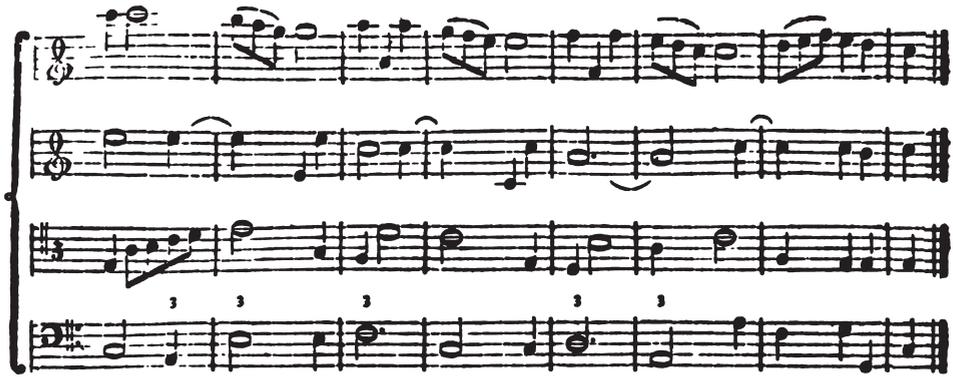
Example 45: Application of the Descending *Gesangleiter* according §. 14 & 15, p. 21

Examples 46 highlight again the Mi contra Fa (♭7–♭4), or cross-relation (*Querstand*), in the outer voices. Riepel argues that the second example with its rest on the last beat of m. 2 moderates the cross-relation at (†). Following this example, Riepel demonstrates other harmonic means to avoid the cross-relation. Most important is the use of a minor seventh, that is scale degree ♭7 below scale degree ♭6, resulting in half-diminished seventh chord, which resolves to the tonic (♭6–♭5 harmonized by ♭7–♭1).

Example 46: Application of the Descending *Gesangleiter* according §. 16, pp. 21–22

Examples 47 and 48 both make use of the *Romanesca* schema, which consists of a descending fourth and ascending second sequence harmonized by root position chords. While the *Romanesca* usually starts on scale degree ♭1, moving ♭1–♭5–♭6–♭3–♭4–♭1, Example 48 begins the pattern on scale degree ♭6, moving ♭6–♭3–♭4–♭1–♭2–♭6. In contrast to Example 36 which seemed harmonically ambiguous because it started on A and ended on C, Example 48, both begins and ends with a cadence in the tonic harmony C (with the bass motion ♭1–[♭6–...–♭6]–♭4–♭5–♭1), thus ensuring that the *Romanesca* does not move out of the key of C.

Example 47: Application of the Descending *Gesangleiter* according §. 17, p. 22



Example 48: Application of the Descending *Gesangleiter* according §. 18, p. 23

Examples 49 and 50 largely move in parallel thirds and sixths respectively. Both examples also emphasize the grouping in two-measure unit, which according to Riepel diminishes the impact of the Mi contra Fa (Example 49, mm. 2–3). In addition, the harmonization of ⑥–⑤–④–③ (Example 49, mm. 3–6) contains a *Prinner*.



Example 49: Application of the Descending *Gesangleiter* according §. 19, p. 23



Example 50: Application of the Descending *Gesangleiter* according §. 20, p. 23

Example 51, most importantly, inserts scale degree ① in between ⑦–⑥, resulting in ①–⑦–①–⑥. In addition, the ⑥–⑤–④–③ in mm. 4–7 contains a *Prinner*.



Following the ascending and descending *Gesangleiter* in major, Riepel also provides brief examples for the *Gesangleiter* in minor §. 27–36, which reiterates many of the rules for the *Gesangleiter* in major. Figures 9 and 10 summarize rules §. 27–28 and 29 respectively, which provide guidelines for harmonizing ascending melodic minor scales. Similar to Example 5 (§. 3), the bass for §. 27 uses exclusively the *Grundbaßnoten* C, F, and G; similar to Examples 8 and 9 (§. 5 and 6) the bass for §. 28 and 29 move in parallel thirds and sixth respectively. In Figure 10 (§. 29), Riepel separates the last four notes from the first five in order to diminish the effect of the Fa contra Mi, that is scale degree 4 in the soprano followed by scale degree 7 in the bass.

Soprano	<b>1</b>	<b>2</b>	<b>b3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>1</b>
Bass §. 27	1	5	1	4	1	4	5	1
Bass §. 28	1	7	1	2	b3	4	5	1

Figure 9: Harmonizations of the Ascending Melodic Minor Scale, §. 27

Soprano	<b>5</b>	<b>1</b>	<b>2</b>	<b>b3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>1</b>
Bass	1	b3	4	5	b6	7	1	2	1

Figure 10: Harmonizations of the Ascending Melodic Minor Scale, §. 29

Writing out an ascending harmonic minor scale as §. 30, Riepel comments on the augmented second **b6–7**, stating, “this scale is quite natural until the A<sup>b</sup> (that is, including Fa). If only the B as an improper Mi were not to follow. Placing a note in between, it is however quite possible to make the scale natural.”<sup>30</sup> Figure 11 (§. 31) demonstrates the mitigation of the augmented second with either **5** or **1** in between **b6** and **7**. While the first version (Bass 1) harmonizes the ascending scale using only C, F, and G, the second (Bass 2) uses first inversion chords as indicated.

Soprano	<b>1</b>	<b>2</b>	<b>b3</b>	<b>4</b>	<b>5</b>	<b>b6</b>	<b>5</b>	<b>7</b>	<b>1</b>
Bass 1	1	5	1	4	1	4	1	5	1
				(6)	(6)	(6)	(6)		
Soprano	<b>1</b>	<b>2</b>	<b>b3</b>	<b>4</b>	<b>5</b>	<b>b6</b>	<b>1</b>	<b>7</b>	<b>1</b>
Bass 2	1	5	1	b6	b3	4	b3	5	1

Figure 11: Harmonizations of Ascending Harmonic Minor Scale, §. 31

30 “Bis zum ab (also fa) inclusive ist diese Leiter ganz natürlich; wenn mir das h als ein hierzu ungehöriges mi nicht darauf folgte. Es läßt sich aber die Leiter mit einer dazwischen gesetzten Note durchaus natürlich machen, z. Ex.” (Riepel *Baßschlüssel*, 30).

Concerning the descending minor scale, Riepel provides rules for the descending natural minor (§. 32 and 33, Figure 12) followed by four additional example basses (Figure 13) and rules for the harmonic minor scale (§. 34–36, Figure 14). In §. 32, Riepel expands the *Grundbaßnoten* C, F, G to include E-flat, that is, the major triad above  $\flat\textcircled{3}$ ; in §. 33, he also includes a first inversion chord above  $\textcircled{4}$  and harmonizes  $\textcircled{4}$  in the soprano with either  $\textcircled{4}$  or  $\textcircled{5}$  (V7). The four basses in Figure 14 demonstrate a range of chromaticism, including tonicizations of the subdominant below  $\flat\textcircled{7}$  and  $\flat\textcircled{6}$  chords below scale degree  $\textcircled{4}$  in basses 3 and 4. Noteworthy is the harmonic ambiguity of scale degree  $\textcircled{5}$ : the “3” in basses 1 and 2 potentially allows both a root position E-flat major or a first inversion c minor chord (Riepel usually uses “5” to indicate root position chords, yet in rare cases also “3”).

Soprano	$\textcircled{1}$	$\flat\textcircled{7}$	$\flat\textcircled{6}$	$\textcircled{5}$	$\textcircled{4}$	$\flat\textcircled{3}$	$\textcircled{2}$	$\textcircled{1}$
Bass §. 32	$\textcircled{1}$	$\flat\textcircled{3}$	$\textcircled{4}$	$\textcircled{1}$	$\textcircled{4}$	$\textcircled{1}$	$\textcircled{5}$	$\textcircled{1}$
		5/3	6/3	5/3	(7)			
Bass §. 33	$\textcircled{1}$	$\flat\textcircled{3}$	$\textcircled{4}$	$\textcircled{1}$	$\textcircled{4}$ ( $\textcircled{5}$ )	$\textcircled{1}$	$\textcircled{5}$	$\textcircled{1}$

Figure 12: Harmonizations of the Descending Natural Minor Scale, §. 32 and 33

Soprano	$\textcircled{1}$	$\flat\textcircled{7}$	$\flat\textcircled{6}$	$\textcircled{5}$	$\textcircled{4}$	$\flat\textcircled{3}$	$\textcircled{2}$	$\textcircled{1}$
		(5/3)	5	3	5	3	$\natural$	
Bass 1	$\textcircled{1}$	$\textcircled{5}$	$\textcircled{2}$	$\flat\textcircled{3}$	$\textcircled{7}$	$\textcircled{1}$	$\textcircled{5}$	$\textcircled{1}$
		6	6	3	6	6	6	
Bass 2	$\textcircled{1}$	$\textcircled{2}$	$\textcircled{1}$	$\flat\textcircled{3}$	$\flat\textcircled{6}$	$\textcircled{5}$	$\textcircled{4-5}$	$\textcircled{1}$
		7/ $\natural$		$\flat$	$\sharp\textcircled{6}$	6	6/5- $\natural$	
Bass 3	$\textcircled{1}$	$\textcircled{1}$	$\textcircled{4}$	$\textcircled{1}$	$\textcircled{2}$	$\flat\textcircled{3}$	$\textcircled{4-5}$	$\textcircled{1}$
	$\flat\textcircled{3}$	6/5		6	$\sharp\textcircled{6}$		$\natural$	
Bass 4	$\textcircled{1}$	$\natural\textcircled{3}$	$\textcircled{4}$	$\flat\textcircled{3}$	$\textcircled{2}$	$\textcircled{1}$	$\textcircled{5}$	$\textcircled{1}$

Figure 13: Additional Harmonizations of the Descending Natural Minor Scale

The descending harmonic minor scale does contain, of course, the augmented second, which Riepel addressed as Fa–Mi ( $\flat\textcircled{6-7}$ ) in § 30 and 31. In order to avoid problems resulting from harmonizing the descending  $\textcircled{7-}\flat\textcircled{6}$ , Riepel suggests two solutions: §. 34 does not harmonize  $\textcircled{1-7}$ , but harmonizes the rest of the scale in parallel sixth starting on  $\flat\textcircled{6}$ , §. 35 adds a  $\textcircled{1}$  resulting in a  $\textcircled{7-1-}\flat\textcircled{6}$  line.<sup>31</sup> In addition, Riepel provides a final me-

31 I assume that the example §. 35 contains a printing mistake, because the bass in m. 3 reads E-flat with a raised 6 above and a C in the soprano. The progression, however, seems to make most sense with an E in the bass as a leading tone to F.

lodice example (§. 36, p. 33) in which he demonstrates how the ascending 5–♭6–7–1 and descending 1–7–♭6–5 harmonic minor scale with its augmented second can be made easier to sing if scale degree 1 is placed on metrically accented beats.

Soprano	1	7	(1)	♭6	5	4	♭3	2	1
Bass §. 34				①	⑦	♭⑥	⑤	④—⑤	①
		#6	6			6	6/4	5/♯	
Bass §. 35	①	②	③ <sup>1</sup>	④	♭③	♭⑥	⑤	⑤	①

Figure 14: Harmonizations of the Descending Harmonic Minor Scale, §. 34 and 35

Finally §. 37–45 (pp. 53–71) provide a somewhat loose collection of examples addressing issues related to both the *Baßleiter* and *Gesangleiter*; I have summarized the topics in Figure 14 below. The content and organization of these examples is similar to the material covered in the twenty pages that precede them (pp. 33–53), where it is difficult to find any overarching organization and specific focus that would help unify these pages. As a result, the content and structure of these pages stand in stark contrast to the focused presentation with which the *Baßschlüssel* opened. On the other hand, the content and structure of the pages following the discussion of the *Gesangleiter* in minor (pp. 33–83) is not unlike the roaming dialogues in large sections of Riepel's *Anfangsgründe*. The pages outlined in Figure 15 address basic issues of dissonant treatment (§. 37), the importance of parallel first inversion chords for harmonizing stepwise ascending and descending lines (§. 38–39), the treatment of chordal sevenths in root position and inversions (§. 40–41), the nature of 6/4 chords (§. 42), acoustic principles related to the *Grundbaßnoten* (§. 43), the chromatic scale (§. 44), and the harmonization of scale degrees 1–3–♯2–♯2–1 and 1–♯4–5 with chromatic, especially diminished seventh chords (§. 45). All of these issues are more or less relevant to the overall goal of the *Baßschlüssel* and often demonstrated with more than one example (Figure 15).

Similar to the *Baßleiter*, the *Gesangleiter* (Figure 16) is based on some shared principles without actually creating a strict method. While the *Gesangleiter* starts out with a claim for a unified theory, §. 1–2 argue that everything derives from the *Grundbaßnoten* C, F, and G and §. 3–4, §. 14–15, 31–32, and 27 use mostly the I, IV, and V chords first in root position then in first inversion—the remainder of the *Gesangleiter* cannot be described as a logical outcome of this opening. §. 5–8, §. 19–21, 28–29, and 34 incorporate intervals (first 3rds and 6ths, then 5ths and 8ves), §. 9–11 and 33 introduce chordal sevenths and §. 12–13 chromaticism and §. 17–18, 22–26, and 35–36 focus on various local solutions and schemata (*Romanesca*, *Prinner* and *Quiesenza*) to address problematic harmonic issues such as the cross-relation and augmented seconds. Riepel's approach to the *Gesangleiter* is thus not unlike his approach to harmony in general, that is rather than theorizing harmony as a system, Riepel appropriates aspects of harmony and counterpoint and applies them to specific moments without a concern for an overarching method or system (Figure 16).

- §. 37 (p. 53) – inharmonious (nicht harmonisch) examples; unresolved dissonances against the bass
- §. 38 (p. 54) – ascending *Baßleiter* harmonized mostly with 1<sup>st</sup> Inversion chords (5–6 above ④, 5/3 above ① and ⑤)
- §. 39 (p. 54) – descending *Baßleiter* harmonized mostly with 1<sup>st</sup> Inversion chords (5/3 above ① and ⑤ and 4/2 above ④)
- §. 40 (p. 54) – inversions of major-minor seventh chord above G
- §. 41 (p. 54) – resolution of major-minor seventh chord above G in root position and inversions in two parts
- §. 42 (p. 56) – examples of 6/4 chords and chords
- §. 43 (p. 61) – *Grundbaßnoten* as sympathetic undertones (parts of this section appears in the manuscript pages!)
- §. 44 (p. 62) – ascending chromatic scale, not harmonized
- §. 45 (p. 71) – Chromatic chords harmonizing ①–③–#②–b②–① and ①–#④–⑤

Figure 15: Chromatic and Other Alterations for *Gesang-* und *Baßleiter*, §. 37–41, 42, 43, 44, and 45 (pp. 53–54, 56, 61, 62, and 71)

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Opposite page:

Figure 16: Summary of the *Gesangleiter*

In summary, I believe that Riepel's *Gesangleiter* succeeds in outlining a method for writing a bass against a melody that goes extensively beyond the simplistic method suggested in the opening where all harmonic content is reduced to C, F, and G, that is, the tonic, subdominant, and dominant harmonies. While this opening suggests an approach linked to or based on Daube's *General=Bass in drey Accorden* (Figured Bass in Three Chords) published in 1756, Riepel neither generates all bass notes strictly harmonically, nor does he agree with Daube's 6/5 chord above scale degree ④.<sup>32</sup> Instead, Riepel's thirty-six rules for the *Gesangleiter* also borrows principles from the *Baßleiter* and in many instances combines harmonic and contrapuntal procedures for the purpose of writing a bass that both supports the melody and results in an independently recognizable musical line. The fact that there exist no traces of the *Gesangleiter* in the wake of the *Baßschlüssel* may be due to a combination of issues, most significantly, because counterpoint—in its close affiliation with partimento and solfeggio practice—already provides the tools for writing such bass lines, and it would seem that only amateurs without much formal training might be interested in Riepel's approach. However, the *Baßschlüssel* documents Riepel's wrestling with issues of melody, harmony, and counterpoint and provides us with an eighteenth-century insight into issues that are still relevant for the training of musicians today.

32 Diergarten 2008 provides an insightful summary of Daube's compositional approach.

THE GESANGLEITER IN JOSEPH RIEPEL'S BASSSCHLÜSSEL (1786)

- Ascending *Gesangleiter* in major, §. 1–13 (pp. 6–11)
  - §. 1 (p. 6) – C, F, and G and C(-E-G), F(-A-C), and G(-B-D)
  - §. 2 (p. 6) – ascending scale consisting of the *Grundbaßnoten* C, F, and G and the *Nebenbaßnoten* d, e, a, and b.
  - §. 3 (p. 7) – ascending scale harmonized by C, F, and G only (root motion)
  - §. 4 (p. 7) – ascending scale harmonized also by 1st Inversion (also B<sup>°</sup>6)
  - §. 5 (p. 8) – ascending scale harmonized in parallel thirds
  - §. 6 (p. 8) – ascending scale harmonized in parallel sixths
  - §. 7(p. 9) – ascending scale harmonized with fifths below ③ and ⑥
  - §. 8 (p. 9) – ascending scale harmonized with octaves below ③ and ⑥
  - §. 9 (p. 10) – ascending scale harmonized with a m7 below ④
  - §. 10 (p. 10) – ascending scale harmonized with 4/2 below ② and ④ (ii4/2)
  - §. 11 (p. 10) – ascending scale harmonized with 4/2 below ② and ④  
⑦ (⑥ V4/2 of IV and ⑦ V4/2)
  - §. 12 (p. 10) – ascending scale harmonized with a partially chromatic descending bass (①–⑦–♭⑦–⑥–⑤–♯④–④–③)
  - §. 13 (p. 11) – ascending scale harmonized with a partially chromatic ascending bass ((④–♯④–⑤–♯⑤–⑥) or ♭⑥–♯⑥–♭⑦–♯⑦–⑧)
- Descending *Gesangleiter* in major, §. 14–25 [26] (pp. 17–21 [26])
  - §. 14 (p. 17) – descending scale harmonized in two sections by C, F, G, and D V/V (root motion)
  - §. 15 (p. 17) – descending scale harmonized by C, G, D and F6 only, variation D6
  - §. 16 (p. 18) – descending scale, ⑦–⑥ harmonized with G–F resulting in False or cross relation (Ger. *Querstand*; Lat. *relatio non harmonica*, Mi contra Fa).
  - §. 17 (p. 19) – descending scale, ⑦–⑥ harmonized with G–Am avoiding false relation, *Romanesca* Bass starting on C (desc. 4th, asc. 2nd, etc.)
  - §. 18 (p. 19) – descending scale, ⑦–⑥ harmonized with E–F avoiding false relation, *Romanesca* Bass starting on A (desc. 4th, asc. 2nd, etc.)
  - §. 19 (p. 19) – descending scale harmonized mostly in parallel 3rds
  - §. 20 (p. 20) – descending scale harmonized mostly in parallel 6ths
  - §. 21 (p. 20) – descending scale harmonized mostly in 3rds and 6ths
  - §. 22 (p. 20) – descending scale with note inserted between ⑦ and ⑥, second variant includes a *Prinner*
  - §. 23 (p. 21) – partial descending scale harmonized with a “good diatonic turn of phrase” (ascending fifth sequence)
  - §. 24 (p. 21) – ascending scale harmonized above tonic pedal (last four notes by a *Quiescenza*)
  - §. 25 (p. 21) – descending scales harmonized above tonic pedal
  - [§. 26 (p. 26) – sustained tonic in soprano harmonized]

## Discussion of the Manuscript Pages from Joseph Riepel's *Baßschlüssel*

Unlike the printed version of the *Baßschlüssel*, the manuscript pages are in dialogue form and contain references to the typical cast of characters that teacher and student invoke in order to discuss scientific, rational, and Pythagorean approaches to music; however, the former *Schulmeister* from *Monsberg* seems to have become a *Capellmeister*, while the Vetter Hansmichel is now addressed as Herr Hansmichel.<sup>33</sup> The following brief discussion identifies some of the most important features of the manuscript pages in relation to the printed version of the *Baßschlüssel*.

The introduction, pp. 41–42, relates to page 61 in the *Baßschlüssel*, where Riepel addresses his apparent acoustic findings on the violin. The corresponding section in the printed version of the *Baßschlüssel* presents different examples (Example 1), yet the overall discussion is very similar. The following presents a short excerpt:

The image shows two musical exercises, No. 1 and No. 2, written on a grand staff (treble and bass clefs). Exercise No. 1 is a rhythmic exercise consisting of eighth-note patterns. Exercise No. 2 is a rhythmic exercise consisting of quarter notes on the treble staff and eighth notes on the bass staff. The title for No. 2 is "No. 2. ist noch merkwürdiger."

Example 1: §. 43, p. 61

If one plays No. 1, the thirds and sixth, emphatically and in tune on the violin, and, while playing, holds the left ear close to the strings, it is possible to perceive the lower pitches notated in the viola rasping. [...] If at No. 2, a violinist has a somewhat heavy tobacco tin placed just behind the bridge, everyone can hear the buzzing of the notated very low bass (in consideration of the small instrument).<sup>34</sup>

In the printed version of the *Baßschlüssel*, this claim about perceived chordal roots below thirds and sixths appears as a curious side note concerning the nature of *Grundbaßnoten* (fundamental-bass notes). It is followed, on the same page, by a discussion of a Beginning-Ritornello (*Anfangs-Ritornell*), without further clarification or discussion and despite the fact that page 61 is prominently mentioned in the introductory "Letter of the Author to his Friend."<sup>35</sup> While the prominent position of this section in the manuscript opening pages seems to slant the text more strongly towards these apparent acoustic principles,

33 See Eckert 2000, pp. 30–35 for a general discussion of the dialogue in Riepel's *Anfangsgründe* and especially pp. 34–35 for a specific discussion of the cast of characters.

34 "Streicht man auf der Violine No. 1 die Terzen und Sexten außerordentlich stark und sehr rein zusammen, und hält währendem Streichen das linke Ohr nahe an den Saiten, so vernimmt man die unten in der Bratsche geschriebenen Noten deutlich mit raspeln. [...] Bey No. 2 läßt sich ein Violinist währendem Streichen linker Hand hinten knap an dem Steg (oder Sattel) eine mher schwer als leichte Tabacksdose hinlegen, so hört jederman umher den unten geschriebenen (in Ansehung des so kleinen Instruments) sehr tiefen Baß mitbrummen" (Riepel, *Baßschlüssel*, 61).

35 Riepel, *Baßschlüssel*, Schreiben des Verfassers an seinen Freund.

the section ends with a dismissal of the monochord. However, the assertion that there exists only a major mode can be found throughout the manuscript pages and within the printed *Baßschlüssel*.<sup>36</sup> In addition, both the manuscript pages and the printed version acknowledge that this position fails to derive the minor mode. While this slant towards the major mode helps to explain why both the *Baß-* and the *Gesangleiter* pays significantly less attention to the minor mode, it is interesting that both texts repeatedly invoke, dismiss and acknowledge the limits of the monochord. The resulting uncertainty about the status of acoustic principles for compositional practice is not unusual for Riepel's *Anfangsgründe*. Indeed, I believe that such moments serve to inform readers about the existence of multiple perspectives and eventually challenge readers to make up their own minds.

The first introduction to the *Gesangleiter* (pp. 43–49) begins with a reference to the *Capellmeister* from *Monsberg*, who either plays or knows of the *Maultrommel* (*Jew's Harp*), which supposedly is able to produce all intervals. In this version, the *Discantista* reports that Hansmichel and the two musicians from Vallenthal and Urbstadt utilize only three pitches, C, F, and G in order to explain the *Baßleiter*. The *Præceptor* continues this thread and derives the bass scale similar to §. 1 and 2 of the *Gesangleiter*. Instead of *Mittelnoten*, both designate D, E, A, and B as “abstammende” (derived) pitches that complete the scale together with the *Grundnoten* C, F, and G. In contrast to the discussion of the *Gesangleiter* in the *Baßschlüssel*, the student, the *Discantista*, proposes a different system for deriving all pitches. He suggests that the C, the third below E-G in the C-E-G chord, is replaced by B, the third above, thus relating C-E-G and E-G-B, similarly F-A-C and A-C-E and G-B-D and B-D-F♯. “This invention”, says the *Præceptor*, “is as casual as useless,” yet he acknowledges that one needs to try to explain all the many sounds in music.<sup>37</sup> Again such a statement is reminiscent of the teacher in the *Anfangsgründe*, who both draws on and critiques systems. The remainder of the discussion does not directly concern the *Gesangleiter*, but the student reports of a composer in Opolisburg, who claims that he can teach his system of composition within a week's time using simple bass motions harmonized in parallel thirds and sixths, which the teacher judges as old and formal.

The second introduction to the *Gesangleiter* (pp. 49–52) begins with a reference to the *Baßleiter*. Unlike the *Baßschlüssel* and the first introduction, this discussion does not derive the scale from the triads above C, F, and G. Instead, the *Præceptor* simply states, “in this key, the note C is the Grundnote [fundamental note] because the melody begins and ends with it. It [C] is hereby interrupted by G, because it is necessary for creating a complete cadence. The note F takes care of the Amen cadence as can be seen in the five different cadences in Chapter Five page 56.”<sup>38</sup> Thus instead deriving the scale from harmonic principles, the argument here is focused on observations and examples taken from practice, an approach that is not uncommon in the *Anfangsgründe*. Declaring uni-

36 See Riepel, *Baßschlüssel*, pp. 6–7.

37 “Diese Einbildung ist so lässig als Vergeblich” (Riepel, *Baßschlüssel* Ms, 46.)

38 “*Præc.* In dieser Tonart ist die Note C folglich eine Grundnote, weil der Gesang insgemein damit angefangen und geendigt wird. Hierauf unterbricht sie die Note G, weil sie zu einer vollkommenen Cadenz notwendig ist. Die Note F besorgt die Amen-Cadenz so wie im 5ten Cap: S: 56 die fünferley Cadenzen zu sehen sind” (Riepel, *Baßschlüssel* Ms, 50).

son, octave, fifth, third, and sixth consonances, the Præceptor, then “every essential note in the melody must be accompanied by at least one of these five consonances.”<sup>39</sup> Thus, even though the basic harmonization of the scale is based on C, F, and G, the student-teacher discussion solely focuses on consonances and dissonances, and highlights counterpoint, as the cause for harmonizing the scale.

While I have described the twelve manuscript pages as structured in roughly three sections, because of visual breaks and apparent beginnings in the text, it is also possible to consider all pages a continuous introduction to the *Gesangleiter*. Such a view would be supported by the fact that there exist several references to earlier moments in the text. For example, the discussion of the Maultrommel (see page 43), seems to respond to the limits of the monochord, the emphasis on C, G, and F (pages 44 and 50) could be considered related. However, due to the limited material, the status and function of these pages remains unclear and any conclusions seem preliminary. Having spent a significant amount of time with this material, I do recognize that they should be best addressed in the larger context of the *Anfangsgründe*, because Riepel’s teachings on harmonic and contrapuntal issues, while fragmented, seem to be part of a larger thread that appears throughout his writings.

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39 “[...] muß jede wesentliche Note des Gesangs zum wenigstens von einer aus diesen fünf Consonanzen begleitet werden, [...]” (Riepel, Baßschlüssel Ms, 51).

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