

FACHHOCHSCHULE NORDWESTSCHWEIZ
MUSIK-AKADEMIE BASEL

HOCHSCHULE FÜR MUSIK
SCHOLA CANTORUM BASILIENSIS

MASTERARBEIT

The Key to Modulation

Translation of Antonio Soler's Chapter X of
Llave de la Modulaci3n (1762)
and edition of the musical examples and 8 Preludes.

von

Irene Gonz1lez Rold1n

Betreuende(r) Dozent(in): J3rg-Andreas B3tticher, David Mesquita

Hauptfach: Cembalo

Hauptfach-Dozent: Andrea Marcon

Datum des Masterkonzerts: 31. Mai 2022

Abgabedatum der Masterarbeit: 4. April 2022

Abstract

This work revolves around *Llave de la Modulaci3n*, a treatise by Spanish composer Antonio Soler which was published in Madrid in 1762. Chapter X of this treatise is especially significant for performers because it deals with modulation and how to move quickly across distant keys, in a process that he refers to as *Modulaci3n agitada*. In addition to Soler's explanation, this chapter also includes a number of short modulation cases and eight preludes. The present work contains a transcription of these musical examples as well as a translation of Soler's text to English. Despite the fact that its importance was originally widely praised even amongst the most renowned musicians of the Spanish court, this source is somewhat neglected by modern performers. This work aims to serve as a first step towards appreciating what *Llave de la Modulaci3n* has to offer for the benefit of the modern musician.

Table of contents

| | |
|--|-----------|
| I. Introduction | 4 |
| II. Life of Antonio Soler | 6 |
| III. Works of Antonio Soler | 7 |
| IV. <i>Llave de la Modulación</i> | 8 |
| V. Modulations and preludes | 10 |
| VI. Critical commentary | 18 |
| The translation | 18 |
| Musical content | 20 |
| The Modulation examples | 22 |
| The Preludes | 26 |
| VII. Translation and musical edition of Chapter X | 30 |
| VIII. Conclusion | 75 |
| IX. Bibliography | 76 |
| X. Appendix A | 80 |
| XI. Appendix B | 83 |

I. Introduction

The works of the Spanish composer Antonio Soler (1729-1783) have been one of my main focuses of interest during the two years of my Master studies. My growing interest for Spanish music led me to discover his keyboard sonatas in more depth, and made me curious also about his theoretical input. I found his treatise *Llave de la Modulaci3n* especially useful because of the practical tools that it offers to the performing musician. Towards the end of the first part of the treatise we find a set of short examples on how to shift quickly and smoothly from one key to another, offering access to the entire range of possible modulations. In addition to this, we also find a set of Eight preludes. All of these examples have a very distinctive improvisational style, which is quite special within the context of Eighteenth-century Spain. Although they are written in a measured way, they are meant to be played freely: “*El Preludio no v sujeto  Comps; pero si al movimiento*”¹. Additionally, they are full of different tempo indications, including *Arbitri*² (to the taste of the performer).

Over the course of last year, I have been exploring these preludes and I have included some of them into my own performances as preludes or interludes between Scarlatti sonatas which are in distant keys. I have also tried to improvise or write my own Soler-inspired preludes, after becoming familiar with the melodic idioms found in these examples. My intention of further developing my understanding of Soler’s theory of modulation and his musical language led me to choose *Llave de la Modulaci3n* as the focus for my Masterarbeit. The main body of this work includes the transcription of the treatise’s tenth Chapter, including the complete translation of the sections related to the topic of modulation, as well as a critical edition of the musical examples and Preludes found in this chapter.

One of the main challenges in producing a translation for Soler’s text is that his writing style in Spanish is generally convoluted and complex, and its intended meaning can prove hard to grasp even for a Spanish native speaker.

¹ The Prelude is not bound to strict measure but it is to certain movement. (Soler, *Llave de la modulaci3n*, 120)

² *Arbitri v al gusto del que executa*. (Ibid., 120.)

In the transcription of the musical examples, the main dilemma was whether to respect the rhythmical inaccuracies or correct them to fit the common time.

Despite being a fairly popular Spanish composer, whose life has been researched extensively, I could not find any full translation in English either of the full treatise or even of Chapter ten, which is the most useful part for performers. I did find a free translation and summary of the four general rules and other fragments of the tenth chapter³. Some articles and books that roughly refer to Soler's theory of modulation are available in Spanish and English.⁴ Unfortunately I did not find any edition of the musical examples of modulations nor a full critical edition of the eight preludes. It is my wish to contribute to the study of Soler's work and to facilitate access to the text and to the practical examples contained in *Llave de la Modulación*, especially for non-Spanish speakers.

While carrying out the present work I received very valuable assistance from a number of people. I would like to thank my supervisors, Jörg-Andreas Bötticher and David Mesquita for their insight and advice, and my teacher Andrea Marcon for his musical guidance. Last but not least, I would like to thank Maya Webne-Behrman and Tommaso Caudullo for revising my writing.

³ Heimes, K. F. (1969). *Antonio Soler's keyboard sonatas*. Pretoria: Department of Music, University of South Africa.

⁴ Morales-Cañadas, E. (2014). *Antonio Soler, un visionario ilustrado*. München: Akademische Verlagsgemeinschaft München.

Sadowsky, Reah. "Antonio Soler: Creator of Spain's Fifth Century of Musical Genius." *American Music Teacher*, vol. 28, no. 1, 1978, pp. 10–15. JSTOR, www.jstor.org/stable/43538186. Accessed 24 June 2021.

II. Life of Antonio Soler

Antonio Soler (full name: Antonio Francisco Javier José Soler Ramos) was born in December 1729 in Olot (Catalonia). Son of a band musician of the regiment of Numancia, he joined the Escolanía of the monastery of Montserrat at the early age of six: here, he received a broad education in music, among other humanities and scientific subjects. The young students of Montserrat learned to play various instruments, and they were trained in harmony, counterpoint and composition, which would allow them to become professional musicians. Father Benito Esteve (teacher at the Escolanía from 1734 to 1759) and the organist Benito Valls are regarded as the most influential masters of Soler during these early years. Another important influence for Soler at this time was the organist José Elías, who was described by the composer José de Nebra as the “father and Patriarch of good organists”⁵. Soler remained at the Escolanía of Montserrat from 1735 to 1745, until he turned sixteen, the maximum age permitted.

According to his obituary, he competed for the post of *maestro de capilla* in two cathedrals and won at Lleida. Strikingly, there is no documental evidence that he accepted the position⁶. In 1752, he joined the Hieronymite order at the monastery of El Escorial, where he became the main organist. The exact date on which Soler became *maestro de capilla* at El Escorial is not known, but he probably inherited the position after the death of Padre Gabriel de Moratilla in 1757.

El Escorial also served as a temporary residence for the Spanish Royal family, who would typically stay here for two or three months a year during the autumn. King Ferdinand VI and his wife Maria Bárbara were known for their love of music and for having extraordinary musicians at their service, such as José de Nebra, Domenico Scarlatti, Carlo Broschi (Farinelli), Francisco Corselli, etc. It is certain that Soler was student of José de Nebra at some point, although the dates or details of this relationship are yet unknown. Nebra, who was one of the four organists of the Royal Chapel, could have been an influence on Soler’s organ playing style, as well as contributing to his theatrical style of composing, which is especially significant in Soler’s *autos*

⁵ Querol, Miguel. *Reflexiones Sobre La Biografía y Producción Musical Del Padre Antonio Soler (1729-1783)*, 162–177.

⁶ There is evidence that he was in Lleida at some point, as attested by a work of Soler, kept at El Escorial, in which can be read “Made in Lérida” (Sierra Pérez, *Vida y crisis...*, 236). But there is no proof in the musical archive or chronicles of the Cathedral of Lleida that he ever took possession of his job.

sacramentales and comedies. It is unfortunately not certain whether Soler received any direct instruction from Scarlatti, who was teacher of Maria Bárbara. However, Soler's familiarity with Scarlatti's compositions is not in doubt, and he even described himself as his disciple⁷. Furthermore, it is clear that he was an admirer of Scarlatti's work and probably studied his style of composition, as is evident from his keyboard sonatas.

In 1762, Soler published his *Llave de la Modulación*, which was funded by the Hieronymite community of El Escorial. By 1766 he had been commissioned to take over the musical training of Don Antonio and Don Gabriel, the two infant sons of Carlos III. Soler composed a large part of his instrumental music for Don Gabriel, including the harpsichord sonatas and especially the five concertos for two organs which they performed together.

In 1776 he was working in a treatise in several volumes about “*música eclesiástica antigua, inocente, clara y devota*”⁸. His interest for the field of music theory led him to write a short book of instructions for tuning and for building the *templante*, a small instrument with keys and strings useful to set the temperament, *Theorica y practica del temple para los órganos y clave*.

Soler died in December 1783, at fifty-four years of age.

III. Works of Antonio Soler

-Vocal music in Latin: at least 360 works, around 260 of them written in 8-voice double choir. A few pieces are composed in a polyphonic, *prima prattica* style, but most of the religious, Latin works of Soler are in modern, *seconda prattica* style and show influences of Italian theatrical music by the use of basso continuo, the growing importance of instrumental parts, the use of recitative and arias, and vocal virtuosity. Some works include sections in both styles.

⁷ In a letter dated 27 June 1765 and addressed to padre Martini, Soler claims to be “*scolare dil Sr. Scarlatti*” (student of Scarlatti). According to Querol (*Reflexiones Sobre La Biografía y Producción Musical Del Padre Antonio Soler (1729-1783)*) it is unlikely that he was a direct student of Scarlatti, and he was just an admirer of his work.

⁸ According to a letter written on the 2th July 1776 to Padre Martini.

-Vocal music in Spanish: around 130 villancicos. Some of them were interpreted in religious festivities of the monastery and show a more complex structure and Italian influences. Others are called *villancicos de Navidad* and they are closer to Spanish popular forms (*tonadillas, seguidillas, coplas*, etc).

-Theatrical music: simple music with the goal of entertaining, most of the time based on Calderón de la Barca. Around 20 works (*loas, autos sacramentales, entremeses, sainetes* and *comedias*).

-Instrumental music: more than 150 works for keyboard, mainly Sonatas which show a clear influence of Scarlatti, six concerti for two organs and quintets.

-Theoretical works: two treatises, *Llave de la Modulación y Antigüedades de la Musica* and *Theorica y practica del temple para los órganos y claves*.

IV. *Llave de la Modulación*⁹

The treatise *Llave de la Modulación y antigüedades de la Musica* was published in Madrid in 1762 by printer Joachin Ibarra, and it is made up of 19 sheets and 272 pages. The book begins with a praise of the Hieronymite community, which made possible the publication of the treatise, and a Canon in 4 with the text “*Viva la fama de ese sol de mi fortuna*”. The next pages contain the *Censuras*, or laudations, written by important musicians and chapel masters of the time, such as:

- Francisco Courcelle (Corselli): *Maestro de la Real Capilla de su Magestad y Rector de su Real Colegio*.
- José de Nebra: *Organista y Vice-Maestro de la Real Capilla de su M. y Maestro de Musica del Serenissimo Infante Don Gabriel*.
- Joseph Mir: *Maestro de la Real Capilla de Señoras de la Encarnacion*.
- Antonio Ripa: *Capellan Titular, y Maestro de Capilla en la Real de Señoras Descalzas Reales de Madrid*.
- Nicolás Conforto: *Maestro de Capilla Napolitano, y Maestro de sus Reales Altezas las Serenissimas Señoras Infantas de España*.

⁹ Found in Madrid, Biblioteca Nacional, M 2148.

The next few pages contain the printing license of the Church and other significant authorities.

All the *censtras* contain words of praise for Soler's work and his theory of Modulation. They all agree on the innovative character of these theories, as stated by Joseph Mir: "*El título, y la idea es tan nuevo, que pasando en el día de hoy de setecientos Autores de Música (...) ninguno ha tocado tan delicada materia*"¹⁰, or José de Nebra: "*Confieso con ingenuidad, que nunca discurrí se pudiesen dar reglas fixas para Modulaciones tan extrañas: vivía en el concepto, que las producía la práctica, el buen gusto, y la fineza del oído; pero, gracias a Dios, y a nuestro ínclito Fr. Antonio, que en nuestra Era ha enriquecido la Facultad, con el nuevo tesoro de tan útil descubrimiento*"¹¹. From this last quote of Nebra it can be understood that the novelty of Soler's approach lies in the systematization of modulation, which until then was considered to be an intuitive and purely practical procedure. His theory was also praised as an educational tool and reference manual for chapel masters and organists to learn how to modulate elegantly from any major or minor key to any other of the 24 keys in the fewest number of bars. However, the treatise was also object of controversy and criticized by some theorists, notably Don Antonio Roel del Río, author of *Institución harmonia* (Madrid, 1748). As a response, Soler wrote a 67-page booklet, *Satisfacción a los reparos precisos* (Madrid, 1765), in which he cites a number of musical authorities, including Morales, Palestrina, Gesualdo and Domenico Scarlatti, and the theorists Martini and Nassare.

The volume of *Llave de la Modulación* is divided into two books. The first one is made up of ten chapters, nine of which are devoted to basic aspects of music theory, such as intervals, proportions, ratios, scales, etc. The tenth Chapter, which is the main focus of this paper, explains Soler's theory of Modulation and contains practical musical examples and eight Preludes. The second book of *Llave de la Modulación* is devoted to early notation and resolution of canons. The second book, titled "*Libro Segundo de las*

¹⁰ The title and the idea are so new, that even though there has been an uncountable number of great musicians (...) none of them had yet touched such a delicate matter. (Soler, *Llave de la modulación*, Dictamen de Don Joseph Mir [page not numbered])

¹¹ I naively confess that I never thought of fixed rules for such strange Modulations: I lived in the concept, which was produced by practice, good taste, and the finesse of the ear; but, thanks to God, and to our illustrious Fr. Antonio, who in our Era has enriched our field, with the new treasure of such a useful discovery. (Soler, *Llave de la Modulación*, Censura de Don Joseph de Nebra [page not numbered])

Antigüedades y Curiosidades de la Música” can be considered a strict treatise on musical paleography of classic Renaissance polyphony¹².

It is interesting to see how Soler’s theory has deep roots on the musical tradition of the sixteenth and seventeenth century, as can be inferred by this second part of the treatise and by the references to authors such as Boethius, Pietro Cerone and Nasarre. This attachment to tradition is a common characteristic of Spanish authors of the first half of the eighteenth century, who still use a terminology which can be traced back to the Renaissance. A proof of this can be seen in Soler’s lack of a clear tonal language or structure and his use of the hexachord and Solmization when naming notes or scales. Despite this old-fashioned way of thinking, he does incorporate compositional, stylistic and rhetorical elements of modern practice. For instance, his use of distant keys and enharmonic modulation, as well as his musical language, full of invention and far-away from Spanish traditional polyphony and counterpoint. This dichotomy can be especially perceived in the musical examples and explanations of Chapter X of *Llave de la Modulación*, as well as in Soler’s thought: “*De qué servirá, pues, que la composición esté bien escrita, si no produce buen efecto?*”¹³. This statement shows Soler’s modern way of thinking. He was not only concerned with abiding with the traditional rules, but he also aspired to have an impact on the listener through the stimulation of different musical affects.

V. Modulations and preludes

It is interesting to compare *Llave de la Modulación* to other treatises that also deal with the issue of Modulation. In Spain, Soler’s theory is probably the only example of systematized modulation procedures, but outside Spain we find other similar cases that are aimed as a method for learning modulation mechanisms. Similar to Soler’s system, these instructions allow for a quick shift between distant keys.

¹² Querol, Miguel, *Reflexiones Sobre La Biografía y Producción Musical Del Padre Antonio Soler (1729-1783)*, 176.

¹³ *What is the point of a well-written composition, if it does not provoke a good effect?* (Soler, *Llave de la modulación*, Cap. VII, page 43)

An obvious correlation can be found in Carl Philipp Emanuel Bach's *Versuch über die wahre Art das Clavier zu spielen*, which was coincidentally published in Berlin in the same year as *Llave de la Modulaci3n*, 1762. In Chapter 41 of the treatise, devoted to the free fantasia, Carl Philipp offers some harmonic examples on how to move from C major to any other possible key.

Example 1: *Versuch über die wahre Art das Clavier zu spielen*, Chapter 41, page 334:

334 Ein und vierzigtes Capitel.

S. II.

It is also inevitable to find certain commonalities between the style of Carl Philipp's fantasias and the style of Soler preludes, although it is not likely that they knew each other's music. As seen in the following example, both composers use a similar texture, with arpeggios in the left hand and a cantabile melody in the right.

Example 2: Carl Philipp Emanuel Bach's Fantasia in F major H 279 and Soler's Preludes 4 and 5.



Another similar treatise published in London a decade before *Llave de la Modulación* is Francesco Geminiani's *Guida Armonica* from ca. 1752. This book was conceived as a manual on harmony and modulation and it contains a vast collection of harmonic sequence possibilities. The focus of the treatise is purely practical.

Example 3: Cover page and example from Geminiani's *Guida Armonica*, page 9.

GUIDA ARMONICA.
 0
DIZIONARIO ARMONICO.
A Sure Guide
 TO
HARMONY AND MODULATION.
In which are Exhibited
 The Various COMBINATIONS of SOUNDS, Consonant,
 and Dissonant, PROGRESSIONS of HARMONY;
 LIGATURES and CADENCES, Real and Deceptive.
 B N.
F. GEMINIANI I.
 OPERA. X . . .

Artem aliū involvunt multis Ambagibus : Artem
 Abſque labore Artis, Geminiane doces.

L O V D O V

*Printed for the Author, by John Johnson, in Chancery-Lane.
 Where may be had all the Author's Works.*

The image shows a page of musical notation from Geminiani's *Guida Armonica*, page 9. It contains 28 numbered musical examples, each consisting of a single staff with a treble clef and a key signature of one flat (B-flat). The notation includes various chords and progressions, often with figured bass notation (numbers 1-7) and chord symbols (e.g., X3, X4, X5, X6, X7, X8, X9, X10, X11, X12, X13, X14, X15, X16, X17, X18, X19, X20, X21, X22, X23, X24, X25, X26, X27, X28). The examples are arranged in a grid-like fashion, with 8 examples per row and 4 rows.

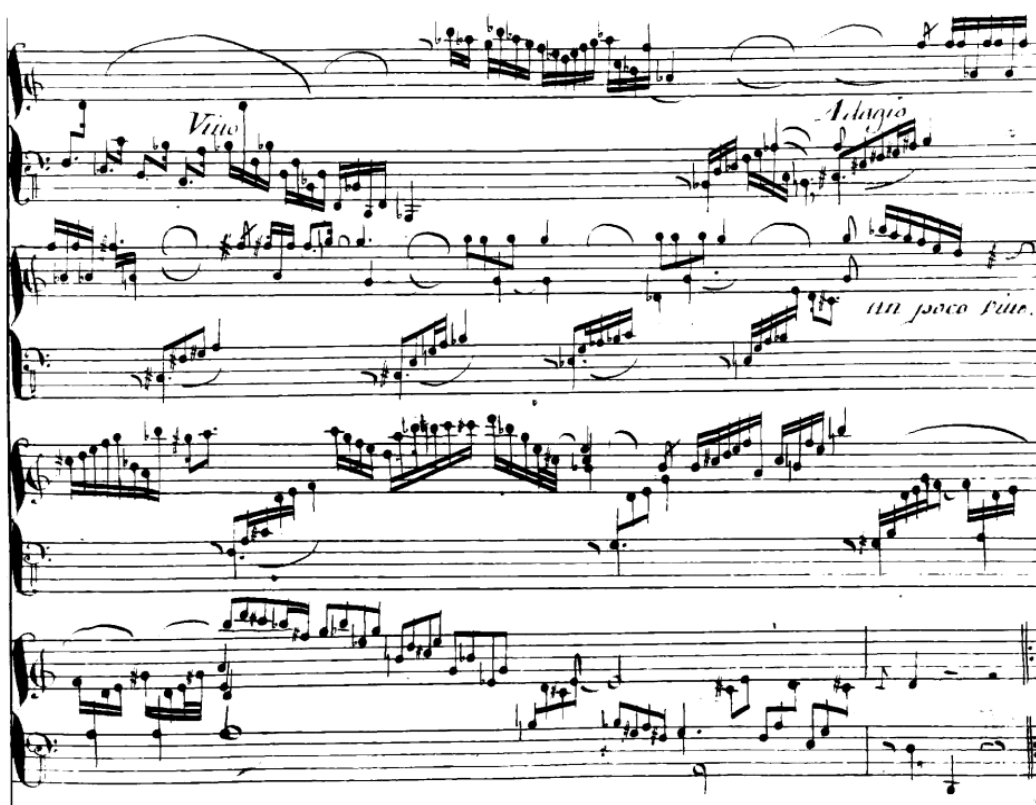
Further stylistic similarities can be found between Soler's musical language and the writing of Geminiani's *Pièces de clavecin* (1743). This is especially evident in the cadence of the first piece, which is shown in the left panel of example 4.

Example 4: left: *Prelude, Lentement*, H.200. Right: Soler's fermatas in his fifth and seventh Prelude):

The image displays musical notation for a prelude and two specific fermata passages. On the left, the prelude 'Prelude, Lentement' (H.200) is shown in three systems of grand staff notation. The first system includes a measure number '3'. The second system features a 'vite.' marking. The third system includes 'lent.' and 'vite.' markings. On the right, two separate systems of grand staff notation show fermata passages. The top system includes 'r.' markings above the notes. The bottom system includes 'Arz. per.' and 'r.' markings.

Within the confines of Spain, there is a clear parallel between Soler's preludes and the Recercatas by Sebastián de Albero (1722-1756). His *Obras para Clavicordio o Pianoforte* (exact date unknown) contain 6 sets of *Recercata, Fuga and Sonata*. The first movement of these pieces, the Recercata, is a prelude written in an improvisational, unmeasured style. Albero's position as organist of the Spanish Royal Chapel suggests that Albero might credibly have been influential to Soler's output. There are similarities not only in the texture and harmony of the Recercatas but also in the use of tempo indications.

Example 5: Fragment from *Recercata prima*, Obras para Clavicordio o Pianoforte, unnumbered:



On the topic of Modulation, it is interesting to mention the diagram *Labyrintho de Labyrinthos* (1754) by Pablo Minguet e Yrol (1733-1801). The aim of the author is to teach the performer how to modulate “in the modern style” through all possible keys. He suggests to navigate through these keys using an arpeggio design that is shown at the beginning. This could demonstrate that Soler’s enharmonic procedures were not an exception for mid-18th century Spain, but common practice of the time.

Example 6: *Labyrintho de Labyrinthos*, from *Reglas, y advertencias generales que enseñan el modo de tañer todos los instrumentos mejores y mas usuales*, 1754, pp 74-75.

Labyrintho de Labyrinthos por arpeggio, con la modulacion de los doce Termi^{os} al estilo moderno,

Los Instr^{tos} que no suben tanto como los Violines, lo han de tañer con Oct^{ava} bassa o canja apuntada. Tam-

Entrada.

bien pueden trocar las voces haciendo del tiple basso,

Pro-

Este Lab^{ro} las Reglas generales, que enseñan à tañer la Guitarra, Clavicordio, Harpa, Psalterio, Bandurria, Violin,

el qual tañiendolo bien se verá lo armonioso que es en sus cadencias, y sirve para todo Instr^{to}

Profigue.

Enredo.

Se deshace.

Decapo.

Flauta dulce, Flauta trav^{er} y otros Instr^{tos}, y las demas Obras de Pablo Minguet se hallarán en Mad^{rid} en su casa y en los Lib^{ros}

A last case related to the Spanish prelude tradition is found in an eighteenth-century manuscript found in the National Spanish Library (signature MP/3170/8). This document contains keyboard music by composers such as Alessandro Scarlatti, Sebastián de Albero, Soler himself, José Elías and José Lidón. At the very beginning we find a number of short pieces by José Teixidor which contain the indication *Arbitrii* and a series of fermatas. **Example 7: MP/3170/8, folio 1v:**



At the end of the manuscript, we find six fugues for organ by José Lidón, and each one of them is preceded by a short prelude. These preludes also contain a number of fermatas. It could be argued that these fermatas are suggestions for introducing improvised fragments. **Example 8: MP/3170/8, f. 52v and 61v.**





VI. Critical commentary

The translation

The explicit intention of my translation to English has been to remain as literal as possible, i.e., to respect the nuances of the original text whilst trying to adapt it to a modern English framework. Therefore, I have decided to maintain a few especially difficult to translate faithfully, or otherwise ambiguous terms in the original Spanish. Followingly, a brief explanation of the meaning of each of these terms, most of which are common place for Spanish music theory:

- *Término*: word that Soler uses to refer to either a key and or a chord. In his descriptions of the modulation examples, it is quite clear that he uses the term to refer to *key* or *tonality*. Nevertheless, the conception of Soler does not correspond to our modern understanding of tonality¹⁴. This can be seen in the following example, which, according to Soler, contains a modulation to the *Término* of E flat.

Example 9: *Llave...*, page 93, no. 1.



¹⁴ Mesquita, David, *Musiktheoretische Polemiken im Spanien des 18. Jahrhunderts*, 300.

It is therefore questionable for our modern understanding of tonality to affirm that we have arrived to the key of E flat Major. Translating *Término* with “chord” is not completely accurate either, as it often refers to a broader meaning than just one single chord.

- *Tono*: another word for “*Término*”
- *Diapason*: In Chapter XI, Soler shows the formation of the different *Diapasones* in form of scales with different key signatures which represent the major and minor keys. *Diapason*, therefore, refers to the organization of the scale for each one of the keys or *Términos*.

Example 10: Llave..., page 74.

T A B L A D E L A F O R M A C I O N
de los Diapasones de Tercera mayor , y menor
por todos los Terminos.

Diapasones con Tercera menor.

- *Puesto*: It refers to the first bar of each example, which in turn indicates the starting position or first *Término* of the modulation (in other words, the key that we want to leave).
- *Salida*: Refers to the modulation procedure, or the process which leaves the first *Término* shown in the *puesto* and leads to the desired key.

The following terms, although less ambiguous than the former ones, will be left untranslated due to their importance and prevalence in Spanish musical theory.

- *Cláusula*: cadence or cadential movement.
- *Especie*: Interval.

I have also left untranslated the terminology used by Soler to refer to the two types of Modulation according to their speed:

- *Modulación agitada*: Fast modulation. The literal translation would be “agitated modulation”, or “turbulent modulation”.
- *Modulación lenta*: Slow modulation.

I have also respected the solmization terminology for naming notes used by Soler, which is based on the hexachord.

The section of Chapter X ranging from paragraph II of p. 114 to paragraph II of p. 117 remains deliberately untranslated here, given that it deals with theoretical tuning matters which are not directly pertinent to the topic of modulation.

Musical content

Summary and index of the musical content of Llave de la Modulación. The keys are shown in their modern denomination.

| <i>Término</i> | <i>Original Término</i> | <i>Final Término</i> | <i>Page number</i> |
|----------------|-------------------------|----------------------|--------------------|
| 1 | D Major | Eb major | 35-36 |
| 2 | D minor | Eb major | 38 |
| 3 | Db Major | Eb major | 39 |
| 4 | C# minor | Eb major | 40 |
| 5 | C Major | Eb major | 41 |
| 6 | C minor | Eb major | 42 |
| 7 | B major | Eb major | 43 |
| 8 | B minor | Eb major | 44 |
| 9 | Bb Major | Eb major | 45 |
| 10 | Bb minor | Eb major | 46 |
| 11 | A Major | Eb major | 47 |
| 12 | A minor | Eb major | 48 |
| 13 | Ab Major | Eb major | 49 |
| 14 | G# minor | Eb major | 50 |
| 15 | G Major | Eb major | 51 |
| 16 | G minor | Eb major | 52 |
| 17 | F# Major | Eb major | 53 |
| 18 | F# minor | Eb major | 54 |
| 19 | F Major | Eb major | 55 |
| 20 | F minor | Eb major | 56 |
| 21 | E Major | Eb major | 57 |
| 22 | E minor | Eb major | 58 |

| Prelude | Final <i>Término</i> | Page number |
|---------|----------------------|-------------|
| 1 | D minor | 63 |
| 2 | G minor | 64 |
| 3 | C Major | 64 |
| 4 | F minor | 65 |
| 5 | D Major | 67 |
| 6 | G Major | 69 |
| 7 | C minor | 70 |
| 8 | F Major | 72 |

Regarding transcription, my decision was again to respect the original notation as possible, as it is typically challenging in improvisational writing to discern whether deliberate intention lies behind apparently erroneous syntax. An example of such cases is provided below. Here, the voices of the lower staff exceed the rhythm of common time and the layout of both staves looks a bit shifted and irregular:

Example 10: *Llave...*, page 95, no. 3.



I have also tried to respect the layout and design of the original, as well as beam and stem orientations, slurs and distribution of voices between the staves. I have only made some isolated alterations that I considered necessary for the sake of clarity. I will not refer to them in the remarks as they do not have musical implications.

In the context of introducing new key signatures with fewer sharps or flats than the previous ones, Soler occasionally opts for writing only the corresponding naturals instead of the new key signature in full.

Example 11: *Llave...*, page 92, no. 1.



In such cases, I have generally decided to repeat the full new key signature, as seen in Example 12.

Example 12: Transcription of Example 11, page 38 in this work.



In some cases, precautionary accidentals have been placed on top of the affected note.

Example 13: Transcription of *Llave...*, page 124 (Prelude 5), bar 14 (page 68 in this work).



The Modulation examples

- *Término* 1:
 - o Example 3: upper voice of the lower staff exceeds the measure by an eight note (*Salida*, bar 1).



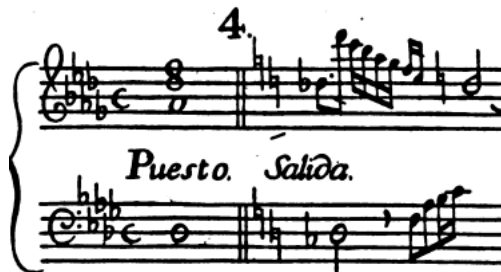
- *Término 2:*

- Example 1: Common time measure sign missing in the lower staff.
- Example 4: eight note rest missing in the first bar of *Salida*. Ambiguous slurs in the second beat of the second bar of *Salida* (indicating *legato*?).



- *Término 3:*

- Example 3: bar 2 of *Salida* – flat missing?
- Example 4: upper voice exceeds the measure by an eighth note.



- *Término 4*

- Example 4: slur missing between bar 1 and 2 (E flat)?



- *Término 5:*

- Example 1: dots missing at the second bar of *Salida* (half notes F and A).

- *Término 6:*

- Example 3: bar 1: the lower staff exceeds the time of the measure. In the transcription, two of the sixteenth notes have been written as an arpeggio figure.



- *Término 8:*

- Example 1: in the lower staff, slurs missing between bar 1 and 2 (B – D) and bar 3 (A – C)? Ambiguous slur in the top staff between bar 2 and 3.
- Example 4: bar 1 lower staff: natural missing for g?

- *Término 10:*

- Example 2: bar 1: a half note is written instead of a quarter note in the second beat.



- *Término 11:*

- Example 2: bar 1: the second part of the bar in the lower staff is written double in value.



- *Término 17:*

- Example 3: bar 1: in the lower staff, the flat for the d (second beat) is misplaced.



- *Término 18:*

- Example 3: bar 2: Irregular first beat (missing a thirty-second note).

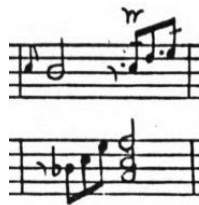


- *Término 19:*

- Example 4: slur missing between third and four beat (B)?

- *Término 20:*

- Example 2: bar 2: misplacement of ornament? It has been transcribed over the D instead of the C.



- *Término 21:*

- Example 4: bar 1: one beat missing in the second half of the bar (upper staff).



The Preludes

A general issue found in the process of transcribing the preludes was related to the location of the tempo indications: in some cases, these markings appear in the space between two staves, making it hard to determine which one of the two staves they refer to. This problem can be found most frequently in Preludes 3 and 4:

Example 14: left panel: *Llave...*, page 122 (Prelude 3), bars 4-13. Right panel: *Llave...*, page 123 (Prelude 4), bar 1-8.

The image displays two panels of musical notation. The left panel, representing Prelude 3, consists of three staves. The top staff has a tempo marking 'Poco presto' written between it and the middle staff. The middle staff has a tempo marking 'Presto' written between it and the bottom staff. The bottom staff contains the markings 'deto solo' and 'ferma'. The right panel, representing Prelude 4, also consists of three staves. The top staff has the marking 'Arbitri' written between it and the middle staff. The middle staff has a tempo marking 'Largo' written between it and the bottom staff. The bottom staff has a tempo marking 'Presto' written between it and the bottom-most staff.

In the case of the left panel (Prelude 3), the indications have been applied to the upper staves due to musical reasons, as they coincide with the beginnings of new progressions. Furthermore, the indication *presto* most likely is not intended to correspond to the bottom staff, which already harbors two additional indications, *deto solo* and *ferma*.

In Prelude 4 (right panel above), the indications have been applied to the bottom staves. I consider this to be the most probable interpretation: the first *Largo* marking could not, in fact, apply to the middle of the second bar, as this would only be valid for two beats before a new marking, *Presto*, appears. Following this reasoning, the second *Largo* marking will be applied to its corresponding lower staff as well.

The general writing of the preludes obeys the common time measure, except for the fermata bars found at the very end of each prelude. Here, the measure is extended to suggest an improvisatory character, as seen in Example 15.

Example 15: *Llave...*, page 126 (Prelude 7), bars 12-13.

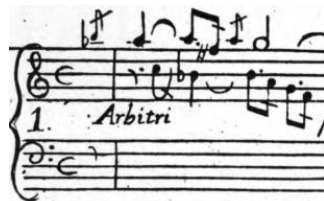


In the last bar of each prelude, a half note rest is often missing. This particularity has been preserved in the transcription.

Example 16: *Llave...*, page 122 (Prelude 2), bars 8-9.



- Prelude 1:
 - o Bar 1: The first appoggiatura is written outside the bar, as if it were in a pickup measure. It has been transcribed inside the first bar.



- Prelude 3:
 - o Bar 1: sixteenth note missing after dotted eighth note (third beat).



- o Bar 8: thirty-second note missing in the second beat.

- Prelude 4:
 - o Bar 3: ambiguity in the slurs due to a bar which is split between two staves. There is a slur which grows from F on the top voice and would probably connect to the first note in Bar 4, but the slur that appears at the beginning of the second line seems to be referring to the ascending scale. In the transcription I have decided to include both slur options.



- o Bar 4: quarter note rest missing in the fourth beat.
 - o Bar 5: sixteenth note rest missing in the third beat.
- Prelude 5:
 - o Bar 9: in the fourth beat (lower staff), a half note is written instead of a quarter note.



- Prelude 6:
 - o Bars 2-3: Part of the main motive of the prelude appears in different rhythmical values (dotted sixteenth note + two sixty-fourth notes and dotted eighth note + two thirty-second notes). It has been unified in the transcription, following the first option.



- Bar 5: extra beat in the upper staff.



- Bar 7: second beat: dots missing for the half notes (G – B).

- Prelude 7:

- Bar 3: extra quarter note rest.

- Prelude 8:

- Bar 5: first beat: thirty-second note missing.
- Bar 6: dot missing in the second beat (B)? Rest missing in the fourth beat?
- Bar 8: extra beat.



VII. CHAPTER X

On Harmony and Modulation

Harmony is nothing *but the result of many equal things, and unequal degrees*. Jorge Beneto says: Music will have more perfection when it is made up of perfect harmony, and the perfection of the harmony depends on its variety. Variety in music has its origin in two elements: Time and Modulation. Time, because it expresses the affects contained in the composition in order to highlight the meaning of the text. Modulation, because it sweetens the transition to different keys.

Modulation (according to Pietro Cerone, book 2, Chapter 26, fol. 238) is the motion from one sound to another one, which is achieved by various steps and should be made with restraint, sweetness and order. And he goes on: This [motion] is found in all genres of Harmony. Therefore, it is not possible to make a good Modulation without Harmony but it is possible to find Harmony without Modulation. The term “Modulation” comes from the Latin verb *Modulor*, which means “to sing in a sweet and gentle manner”.

In the times of the famous Zarlino, who (as can be gathered from Cerone) flourished in the last years of the sixteenth century, composers made modulations which are still in use by composers today and (as it is often said) can be described as trivial¹⁵. After two hundred years of use, they can be described as such, and to prove this I refer you to Zarlino’s Book 2 of *Demostraciones Harmónicas* and you will agree. Nowadays there are plenty of excellent and talented masters who modulate in their works with such dexterity and skill that the result is truly a glorious masterpiece of harmony: it is the latest discovery and it surpasses all the rest. We will now describe this way of proceeding, although firstly there are three remarks to make. The first one is: it is necessary to know the definition [of the technique of modulation] in order to answer to those who would have composition limited to the use of regular progressions, with a trivial composition as an outcome. This is the opinion of the present author which surpasses (as proven by this treatise) to all of those who have written about music before. I add that if a composition has no modulation, it will lack perfection.

The second [remark]: in this treatise I will only shed light on the practice of *Modulación agitada* [agitated Modulation] with its examples. Although these

¹⁵ He denominates this kind of composition as *Composicion de Caxon*.

explanations also shed light on the mechanism of the *Modulación lenta* (slow Modulation), I will not discuss this here, as I would need another volume similar to this one. But with the favor of God, I promise to provide it, if he grants me a long life and health.

The third [remark] is, for those who ignore it, the speed of the modulation depends only on two things: Knowledge and Suspension. Knowledge simply consists of being able to find the fifth degree of the *Tono* that you wish to reach, even when coming from a seemingly distant *Término*. The Suspension is used so that the ear is not shocked by the course of the modulation.¹⁶ The Suspension is used in the *Modulación lenta*, and not for the *agitada*: *Modulatio agitata est illa, que de remoto loco brevissime ad proprium pervenit*.¹⁷ This definition means that *Modulación agitada* is the one that very quickly goes from a foreign *Término* to the home *Término*. This definition has to be understood in the following way:

Whenever the music has moved far away from its original *Diapason* (in which it must end) and a sudden ending *Cláusula* is needed (as happens to the organist who is signaled to stop playing an Offertory), it does not mean that he should stop abruptly in the middle, but that he must pass smoothly and with agility back to the original *Término* of the piece, because it is proper that the end should be in that key, and not in the one he might happen to be in at that particular moment. It is for this reason that one of the keys is called distant (*Remoto*), and the other is the main one (*Propio*). These general rules must be followed:

1. It is not good to pass from one *Término* to another if the two connecting chords do not have notes which are mutual to both, unless you use a tie.
2. In order to achieve a sonorous modulation, it is necessary to look for the fifth degree of the desired key.
3. If a key is repellent with the desired one, use its opposite.¹⁸

¹⁶ A more literal translation: The Suspension is used so that the ear is not shocked by the journey that takes it to the desired goal by means of a detour, far away from the first knowledge that it walked by.

¹⁷ Fast Modulation is one that in very short time arrives from a far-away place to the main position.


¹⁸ With this rule, Soler refers to the use of enharmonic modulations. He uses the expression “*Contrario con contrario se vence*”.

4. The Modulation will be more sonorous if it proceeds by alternating movements of low and high voices (outer voices).

Explanation of these four rules.

1. This rule states that the Bass should never move to a position which has no common consonances with the first one. When the Bass goes to another position that has no consonances in common: for example, the chord is built upon Gsolreut [G] in the Bass, and this Bass goes to Alamire *blando* [Ab]. It can be clearly seen that neither the third of the Gsolreut, nor the fifth, nor the octave appear in the chord of Alamire *blando* [Ab], which is the chord that follows. This Bass then contradicts the first rule (therefore this Rule will not be referred to as “general”), by putting a slur upon this Bass, which is much more harmonious than just adding the Third and the Sixth. The reason is that a part of the harmony of the Gsolreut chord continues to sound, thus softening the transition through this chained series of movements that inevitably gives the feeling of an uplifting harmony. Passing from one *Término* to another with this rule is only possible by making a suspension before, otherwise it will never be admissible for the ear. Everything that has been said here can be observed in the examples.

EXEMPLO I. Sin ligar



Musical notation for Exemplo I. Sin ligar. It consists of four staves of music in 3/4 time, with a key signature of one flat (B-flat). The first staff is the soprano voice, the second is the alto voice, the third is the tenor voice, and the fourth is the bass voice. The music shows a progression of chords: G major (G-B-D), F major (F-A-C), and E-flat major (E-flat-G-B-flat). The bass line moves from G to F to E-flat, with no slurs connecting the notes.

II. Con ligadura



Musical notation for Exemplo II. Con ligadura. It consists of four staves of music in 3/4 time, with a key signature of one flat (B-flat). The first staff is the soprano voice, the second is the alto voice, the third is the tenor voice, and the fourth is the bass voice. The music shows a progression of chords: G major (G-B-D), F major (F-A-C), and E-flat major (E-flat-G-B-flat). The bass line moves from G to F to E-flat, with a slur connecting the notes F and E-flat.

III. No es tan consonante

IV. Por Suspension

To avoid any misunderstanding, I must warn that we are not dealing with compositional matters here, but with the perfection of the *Modulación agitada*. The first three examples are all correct in their Composition, but not all of them are in accordance with the topic that we are dealing with here. The fourth example is equally not useful for making a *Modulación agitada*. Thereby it is necessary to distinguish in a composition when there is Modulation, and when there is not, so that this one thing can be distinguished from the other.

2. Rule. This general rule states that the goal of the *Modulación agitada* must be to search for the Fifth degree of the desired *Tono* or *Término*: the operation of this rule can be inferred from the practical examples.

3. Rule. This general rule indicates that when the starting key seems repellent to the key that has to be approached, because the first one has sharps and the latter has flats, then the equivalent flats may be used in the original key instead of sharps.¹⁹ This can be seen in the next example, taking into account that the key signature is equivalent where it says *Puesto* and *Salida*, although strictly speaking it is not. In this case, we will consider the flat and the sharp as the same thing.

¹⁹ Alternative translation: This general rule indicates that, for example, when there is a key with sharps that seems to be repellent because the desired key has flats, it is easier to pretend that the starting key has flats instead of sharps.

The image shows a musical score for four voices: Soprano, Alto, Tenor, and Bass. The music is in common time (C) and starts in D major (two sharps). It is divided into two sections: 'Puesto' and 'Salida'. In the 'Puesto' section, all voices play a whole note D. In the 'Salida' section, the Soprano and Alto parts move together to E-flat, while the Tenor and Bass parts move together to E-flat. This illustrates the rule that the principal movements of modulation should be found in the outer voices.

4. Rule. This rule dictates that the voices should not move all together, but alternatively in a way that the principal movements of the modulation should be found in the outer voices. The reason is that the ear perceives these two parts more clearly than the middle parts, Alto and Tenor, which only accompany in accordance with the consonance that has to be produced.²⁰

In order to proceed with perfection, it is necessary for those beginners who never entered this labyrinth of Modulation to learn these rules. It is also advisable that they assign a fixed *Término* in which to arrive from the 22 different *Términos*, as I have assigned here. By trying to recreate, or at least imitate what I am showing here, they will achieve a perfect knowledge of the subject.

Hence, I have chosen the *Término* of Elami *blando* (Eb) as the key of destination for the 22 *Términos*, starting in Dlasolre with a major third, and the rest can be deduced by showing how it has to be done in the first example (*Puesto* and *Salida*).

²⁰ Alternative translation: the voices should not move together, but alternate in such a way that all the principal movements of parts should be concentrated in the outer voices. The reason is that the ear hears these two parts better than those in the middle. For in all modulation it will be observed that the voices in the middle, i.e. Alto and Tenor, serve only to accompany in accordance with the consonance that is to be produced.”

[Referring to the next example – Exemplo 1] In order to leave the original *Término*, I use the natural [perfect] fourth and minor sixth, which is the first movement (a plain fourth without ornamentation will be shown [in this example], so that it is clear, and from this it can be understood how the composition works. There is a difference between modulation for human voices and for instrumental voices, namely that in vocal music they will proceed by consecutive motion. It was not my intention in this chapter to address anything that has to do with human voice, but I also do not want to hold back from declaring my method to the rest of composers). The voice that is in octave with the Bass will move upwards to reach the minor third, while the fourth will be placed at the octave of said minor third, and will ascend gradually to look for the diminished fifth of the Bass. By moving the Bass [upwards] it will be possible to reach the desired *Término*.

Exemplo 1

The reason why this [movement] not only does not cause dissonance, but rather great harmony, is because the minor sixth, which lies in the second part of the first bar of *Salida*, is the perfect fifth of the following position, or *Término*, where the Bass will arrive. The minor sixth is accompanied by the natural fourth, which appears in the Tenor and suggests *Diapason* of Gsolreut [G] with minor third (See chap. IV.). Every note can adopt a flat, so the Tiple will pass neatly through Elami *blando* [E flat]. Passing through this note forces the following third to be minor, and will introduce the *Diapason* of Bfami *blando* [B flat]. This *Diapason* already consists of two flats: if it is necessary to add another one, this will be Alamire *blando* [A flat], which is exactly where the Tenor goes. Precisely when the Tenor arrives there, the Bass must leave his position and go to the desired *Término*.

From this first operation it can be inferred how important it is to remember everything that has been explained previously. It also explains why the term *agitada* is appropriate for this kind of modulation, because as soon as he reaches a certain point, he is already passing to the next one. Note the following examples.

Exemplo 2

2. **Puesto Salida**

3. **Puesto Salida**

4. **Puesto Salida**

Explanation of the example.

The second example is in every way similar to the previous one, and it only differs in the inversion of the voices, so that the lower part here sings what the upper part sang in the previous example. Although they both arrive at the same place it is not the same harmony, nor how it sounds, since the low notes are more clearly perceived by the ear.

This example will sound as good as the former one, since it contains the same consonances, although with a different harmony, which is caused by the inversion of the voices. It was proven in the explanation of intervals that every dissonant interval produces dissonance [when inverting the voices], and the consonant interval will produce consonance. Consequently, if the ligature was well executed in the previous example, it will also be correct now, since it will be the same as the previous one.

The second *Término* is Dlasolre [D] with a minor third. In order to arrive at the indicated *Término*, you must sustain the upper part, which is the third, and the Bass must descend three steps, or at least pass through the *Diapason* of Bfami *blando* [B flat]. Doing this will fulfill the first rule, which says: It is not good to pass from one *Término* to another if the two connecting chords do not have notes which are mutual to both. Thus, if the upper part starts in the third of said beginning chord, the [descending] movement of the Bass will arrive to the fifth of the new *Término* (this chord will be common to both *Términos*). When the Bass arrives there, the upper part will sing its way through Bfami *blando* [B flat] until it arrives to Alamire *blando* [A flat], where a little ornament will be made, such as Trill, *Appoggiatura* or *Mordiente*, allowing for the Bass to move and arrive in the new *Término* that is intended. See the following four examples. [*Next page*]

1. **Puesto Salida**

Musical score for exercise 1, 'Puesto Salida'. The piece is in common time (C) and B-flat major. The right hand starts with a whole chord, followed by a melodic line with a trill (tr) on the final note. The left hand provides harmonic support with chords and moving lines.

2. **Puesto Salida**

Musical score for exercise 2, 'Puesto Salida'. The piece is in common time (C) and B-flat major. The right hand features a melodic line with a trill (tr) on the final note. The left hand consists of chords and a simple bass line.

3. **Puesto Salida**

Musical score for exercise 3, 'Puesto Salida'. The piece is in common time (C) and B-flat major. The right hand has a melodic line with a trill (tr) on the final note. The left hand features a more active bass line with eighth notes and chords.

4. **Puesto Salida**

Musical score for exercise 4, 'Puesto Salida'. The piece is in common time (C) and B-flat major. The right hand has a melodic line with a trill (tr) on the final note. The left hand features a complex bass line with sixteenth notes and chords.

Third *Término*

The Third *Término* is very clear, since it is only necessary to remove the flat from the Bass, creating a diminished 5th that brings the desired *Tono*, as can be seen in the four examples that follow.

1. Puesto Salida

Example 1: Musical notation for the first *Término*. The piece is in 3/4 time and C minor. The right hand starts with a whole chord (C minor) and then plays a melodic line: G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), C4 (half). The left hand starts with a whole chord (C minor) and then plays a bass line: C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter), F3 (half). A trill (tr) is indicated over the final C4 note in the right hand.

2. Puesto Salida

Example 2: Musical notation for the second *Término*. The piece is in 3/4 time and C minor. The right hand starts with a whole chord (C minor) and then plays a melodic line: G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), C4 (half). The left hand starts with a whole chord (C minor) and then plays a bass line: C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter), F3 (half). A trill (tr) is indicated over the final C4 note in the right hand.

3. Puesto Salida

Example 3: Musical notation for the third *Término*. The piece is in 3/4 time and C minor. The right hand starts with a whole chord (C minor) and then plays a melodic line: G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), C4 (half). The left hand starts with a whole chord (C minor) and then plays a bass line: C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter), F3 (half). A trill (tr) is indicated over the final C4 note in the right hand.

4. Puesto Salida

Example 4: Musical notation for the fourth *Término*. The piece is in 3/4 time and C minor. The right hand starts with a whole chord (C minor) and then plays a melodic line: G4 (quarter), F4 (quarter), E4 (quarter), D4 (quarter), C4 (half). The left hand starts with a whole chord (C minor) and then plays a bass line: C4 (quarter), B3 (quarter), A3 (quarter), G3 (quarter), F3 (half). A trill (tr) is indicated over the final C4 note in the right hand.

Fourth *Término*

The Fourth *Término* will be achieved by the general rule that says “If a key is repellent with the desired one, use its opposite”. The goal will be reached easily by a descending movement in the upper voice.

1. **Puesto Salida**

tr

2. **Puesto Salida**

tr

3. **Puesto Salida**

tr

4. **Puesto Salida**

Fifth *Término*

The Fifth *Término* will be accomplished by a 4th and minor 6th, which will remain still while the Bass ascends through the diminished 5th in order to find the desired *Término*.

See the following four examples.

1. **Puesto Salida**



2. **Puesto Salida**



3. **Puesto Salida**



4. **Puesto Salida**



Sixth *Término*

The Sixth *Término* is also very clear, since the 3rd of the starting position becomes the 8th of the desired *Término*. As soon as this is understood, there are infinite ways of modulating rapidly. See the following four examples.

1. Puesto Salida

2. Puesto Salida

3. Puesto Salida

4. Puesto Salida

Seventh *Término*

The Seventh *Término* will be attained by the 3rd general rule. The 3rd of the first *Término* will transform into an interval of a 6th with the Bass, when it ascends a 5th up. Afterwards it will proceed to the desired *Cláusula*. See the following four examples.

1. Puesto Salida

Example 1: Musical notation for 'Puesto Salida'. The treble staff shows a trill (tr) on the note G4. The bass staff shows a sequence of notes: G3, F3, E3, D3, C3, B2, A2, G2.

2. Puesto Salida

Example 2: Musical notation for 'Puesto Salida'. The treble staff shows a trill (tr) on the note G4. The bass staff shows a sequence of notes: G3, F3, E3, D3, C3, B2, A2, G2.

3. Puesto Salida

Example 3: Musical notation for 'Puesto Salida'. The treble staff shows a trill (tr) on the note G4. The bass staff shows a sequence of notes: G3, F3, E3, D3, C3, B2, A2, G2.

4. Puesto Salida

Example 4: Musical notation for 'Puesto Salida'. The treble staff shows a trill (tr) on the note G4. The bass staff shows a sequence of notes: G3, F3, E3, D3, C3, B2, A2, G2.

Eight *Término*

The Eighth *Término* will be achieved through the fourth general rule, which says: the modulation will be more sonorous etc. The reason for this is that there are no notes in common between the first and the second *Término*. Adding a 6th to the first chord will produce the 3rd of the desired *Término*. By alternating the movements [of the outer voices] this will be made promptly and smoothly. See the following four examples.

1. Puesto Salida

1. Puesto Salida

2. Puesto Salida

2. Puesto Salida

3. Puesto Salida

3. Puesto Salida

4. Puesto Salida

4. Puesto Salida

Ninth *Término*

The Ninth *Término* is very easy because it is in the 5th of the desired *Término*. See the following four examples.

1. **Puesto Salida**



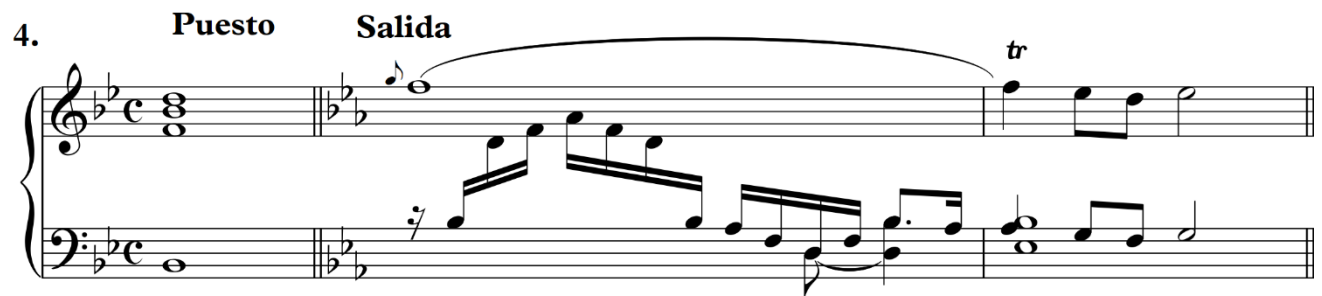
2. **Puesto Salida**



3. **Puesto Salida**



4. **Puesto Salida**



Tenth *Término*

The Tenth *Término* is not difficult either. The minor 3rd can stay still while the Bass descends by three steps, so that the so-called 3rd turns into diminished 5th from the Bass. By moving the Bass again, this diminished 5th transforms into a perfect 4th. By resolving the 4th, the desired *Término* is found. See the following four examples.

1. Puesto Salida

Musical notation for example 1. The piece is in C minor and common time. The right hand starts with a whole note chord (C3, E3, G3) and then moves to a half note chord (C3, E3, G3) followed by a half note chord (C3, E3, G3). The left hand starts with a whole note chord (C2, E2, G2) and then moves to a half note chord (C2, E2, G2) followed by a half note chord (C2, E2, G2).

2. Puesto Salida

Musical notation for example 2. The piece is in C minor and common time. The right hand starts with a whole note chord (C3, E3, G3) and then moves to a half note chord (C3, E3, G3) followed by a half note chord (C3, E3, G3) with trills (tr) on the notes. The left hand starts with a whole note chord (C2, E2, G2) and then moves to a half note chord (C2, E2, G2) followed by a half note chord (C2, E2, G2).

3. Puesto Salida

Musical notation for example 3. The piece is in C minor and common time. The right hand starts with a whole note chord (C3, E3, G3) and then moves to a half note chord (C3, E3, G3) followed by a half note chord (C3, E3, G3) with a trill (tr) on the notes. The left hand starts with a whole note chord (C2, E2, G2) and then moves to a half note chord (C2, E2, G2) followed by a half note chord (C2, E2, G2).

4. Puesto Salida

Musical notation for example 4. The piece is in C minor and common time. The right hand starts with a whole note chord (C3, E3, G3) and then moves to a half note chord (C3, E3, G3) followed by a half note chord (C3, E3, G3) with a trill (tr) on the notes. The left hand starts with a whole note chord (C2, E2, G2) and then moves to a half note chord (C2, E2, G2) followed by a half note chord (C2, E2, G2).

Eleventh *Término*

To reach the Eleventh *Término*, one must proceed according to what was said in the Eighth *Término*. It is similar to this one because there are no notes in common between the first and the second *Término*. See the following four examples.

1. Puesto Salida

2. Puesto Salida

3. Puesto Salida

4. Puesto Salida

Twelfth *Término*

The Twelfth *Término* is the most remote one, since it only has the 3rd in common with the desired *Término*. In order to go out of this remote *Término*, a 6th must be used, as well as the fourth general rule, according to the four examples that follow.

1. Puesto Salida

2. Puesto Salida

3. Puesto Salida

4. Puesto Salida

Thirteenth *Término*

The Thirteenth *Término* is accomplished with the same ease as the Ninth, as can be seen in the following four examples.

1. **Puesto** **Salida**

tr

tr

2. **Puesto** **Salida**

3

tr

3. **Puesto** **Salida**

4. **Puesto** **Salida**

tr

tr

Fourteenth *Término*

The Fourteenth *Término* will be attained by the third general rule that says “If a key is repellent with the desired one, use its opposite”. See the following examples.

Puesto Salida

The first example shows a musical score with two staves. The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The piece begins with a whole rest in both staves. The first staff (treble clef) starts with a half note Bb, followed by a quarter note G# with a trill (tr), a quarter note F# with a trill, a quarter note E, a quarter note D, and a quarter note C with a trill. The second staff (bass clef) has a whole rest, followed by a half note chord of Bb and F#, and then a half note chord of G# and C#.

Puesto Salida

The second example shows a musical score with two staves. The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The first staff (treble clef) starts with a whole rest, followed by a half note Bb, a quarter note G# with a trill, a quarter note F# with a trill, a quarter note E, a quarter note D, a quarter note C with a trill, and a quarter note B. The second staff (bass clef) has a whole rest, followed by a half note chord of Bb and F#, a quarter rest, and then a half note chord of G# and C#.

Puesto Salida

The third example shows a musical score with two staves. The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The first staff (treble clef) starts with a whole rest, followed by a half note Bb, a quarter note G# with a trill, a quarter note F# with a trill, a quarter note E, a quarter note D, a quarter note C with a trill, and a quarter note B. The second staff (bass clef) has a whole rest, followed by a half note chord of Bb and F#, a quarter rest, and then a half note chord of G# and C#.

Puesto Salida

The fourth example shows a musical score with two staves. The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The first staff (treble clef) starts with a whole rest, followed by a half note Bb, a quarter note G# with a trill, a quarter note F# with a trill, a quarter note E, a quarter note D, a quarter note C with a trill, and a quarter note B. The second staff (bass clef) has a whole rest, followed by a half note chord of Bb and F#, a quarter rest, and then a half note chord of G# and C#.

Fifteenth *Término*

The Fifteenth *Término* will be accomplished by the fourth general rule with great ease.

Note this in the following examples.

1. Puesto Salida

Example 1: Puesto Salida. The piece is in G major (one sharp) and common time (C). It consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a half note G4, then a half note A4, and a half note B4. A slur covers the next two measures: the first contains a quarter note C5, a quarter note D5, and a quarter note E5; the second contains a quarter note F5, a quarter note G5, and a quarter note A5. This is followed by a half note B4 and a half note A4. The piece concludes with a trill on G4, marked 'tr', and a whole rest.

2. Puesto Salida

Example 2: Puesto Salida. The piece is in G major (one sharp) and common time (C). It consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a half note G4, then a half note A4, and a half note B4. A slur covers the next two measures: the first contains a quarter note C5, a quarter note D5, and a quarter note E5; the second contains a quarter note F5, a quarter note G5, and a quarter note A5. This is followed by a half note B4 and a half note A4. The piece concludes with a trill on G4, marked 'tr', and a whole rest.

3. Puesto Salida

Example 3: Puesto Salida. The piece is in G major (one sharp) and common time (C). It consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a half note G4, then a half note A4, and a half note B4. A slur covers the next two measures: the first contains a quarter note C5, a quarter note D5, and a quarter note E5; the second contains a quarter note F5, a quarter note G5, and a quarter note A5. This is followed by a half note B4 and a half note A4. The piece concludes with a trill on G4, marked 'tr', and a whole rest.

4. Puesto Salida

Example 4: Puesto Salida. The piece is in G major (one sharp) and common time (C). It consists of two staves: a treble clef staff and a bass clef staff. The treble staff begins with a whole rest, followed by a half note G4, then a half note A4, and a half note B4. A slur covers the next two measures: the first contains a quarter note C5, a quarter note D5, and a quarter note E5; the second contains a quarter note F5, a quarter note G5, and a quarter note A5. This is followed by a half note B4 and a half note A4. The piece concludes with a trill on G4, marked 'tr', and a whole rest.

Sixteenth *Término*

The Sixteenth *Término* is really simple, as the 3rd of the starting position is the 5th of the desired *Término*, and by using the minor 6th this will be reached with precision. See the following four examples.

1. Puesto Salida

Musical notation for example 1, Puesto Salida. The piece is in 3/4 time and B-flat major. It begins with a whole rest in the bass clef and a C5 chord in the treble clef. After a double bar line, the key signature changes to B-flat minor. The bass clef plays a half note B-flat, followed by quarter notes A-flat, G, and F. The treble clef plays a half note C5, followed by quarter notes B-flat, A-flat, G, and F. The piece concludes with a whole rest in the bass clef and a C5 chord in the treble clef.

2. Puesto Salida

Musical notation for example 2, Puesto Salida. The piece is in 3/4 time and B-flat major. It begins with a whole rest in the bass clef and a C5 chord in the treble clef. After a double bar line, the key signature changes to B-flat minor. The bass clef plays a half note B-flat, followed by quarter notes A-flat, G, and F. The treble clef plays a half note C5, followed by eighth notes B-flat, A-flat, G, and F, then a quarter note E-flat with a trill (tr) above it, and finally a quarter note D. The piece concludes with a whole rest in the bass clef and a C5 chord in the treble clef.

3. Puesto Salida

Musical notation for example 3, Puesto Salida. The piece is in 3/4 time and B-flat major. It begins with a whole rest in the bass clef and a C5 chord in the treble clef. After a double bar line, the key signature changes to B-flat minor. The bass clef plays a half note B-flat, followed by quarter notes A-flat, G, and F. The treble clef plays a half note C5, followed by eighth notes B-flat, A-flat, G, and F, then a quarter note E-flat with a trill (tr) above it, and finally a quarter note D. The piece concludes with a whole rest in the bass clef and a C5 chord in the treble clef.

4. Puesto Salida

Musical notation for example 4, Puesto Salida. The piece is in 3/4 time and B-flat major. It begins with a whole rest in the bass clef and a C5 chord in the treble clef. After a double bar line, the key signature changes to B-flat minor. The bass clef plays a half note B-flat, followed by quarter notes A-flat, G, and F. The treble clef plays a half note C5, followed by eighth notes B-flat, A-flat, G, and F, then a quarter note E-flat with a trill (tr) above it, and finally a quarter note D. The piece concludes with a whole rest in the bass clef and a C5 chord in the treble clef.

Seventeenth *Término*

The Seventeenth *Término* is no less clear than the last, as it obeys the third general rule.

See the following examples.

1. Puesto Salida

Musical notation for example 1, labeled "Puesto Salida". It consists of two staves (treble and bass clef) in common time (C). The key signature has four sharps (F#, C#, G#, D#). The piece begins with a whole rest in the treble clef and a whole note chord in the bass clef. The melody in the treble clef starts with a half note, followed by a quarter note, and then a series of eighth notes. The bass clef provides a simple accompaniment with quarter and half notes.

2. Puesto Salida

Musical notation for example 2, labeled "Puesto Salida". It consists of two staves in common time with a four-sharp key signature. The melody in the treble clef features a half note, followed by a quarter note, and then a series of eighth notes. A slur covers a group of eighth notes, and a trill (tr) is indicated above a note. The bass clef accompaniment includes quarter notes, eighth notes, and a final whole note chord.

3. Puesto Salida

Musical notation for example 3, labeled "Puesto Salida". It consists of two staves in common time with a four-sharp key signature. The melody in the treble clef features a half note, followed by a quarter note, and then a series of eighth notes. A slur covers a group of eighth notes, and a trill (tr) is indicated above a note. The bass clef accompaniment includes quarter notes, eighth notes, and a final whole note chord.

4. Puesto Salida

Musical notation for example 4, labeled "Puesto Salida". It consists of two staves in common time with a four-sharp key signature. The melody in the treble clef features a half note, followed by a quarter note, and then a series of eighth notes. A slur covers a group of eighth notes, and a trill (tr) is indicated above a note. The bass clef accompaniment includes quarter notes, eighth notes, and a final whole note chord.

Eighteenth *Término*

The Eighteenth *Término* will be solved through the third and fourth rule, according to the following examples.

1. **Puesto Salida**

2. **Puesto Salida**

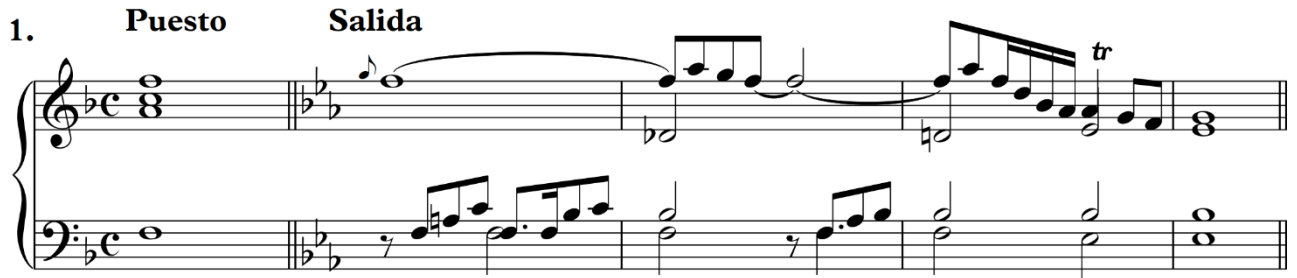
3. **Puesto Salida**

4. **Puesto Salida**

Nineteenth *Término*

The Nineteenth *Término*, if it uses the major 4th and 6th, and after the slur of 3rd by production, or the 7th by supposition, will come to the desired *Término* without violence according to the following examples. The fourth general rule will be applied.

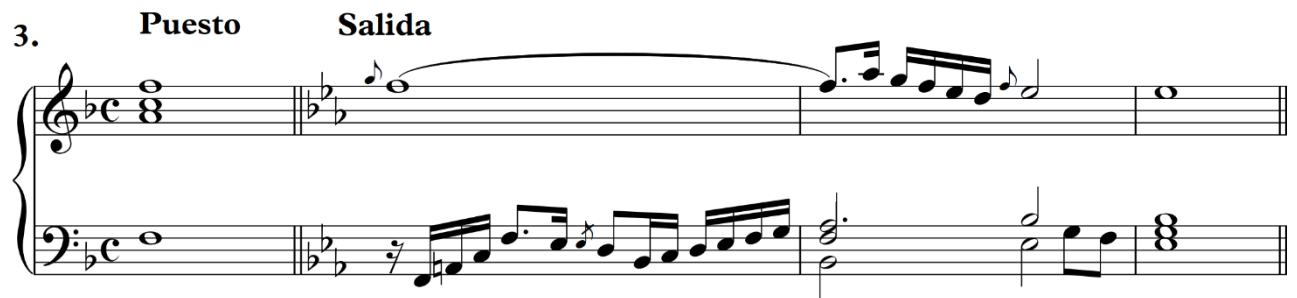
1. **Puesto Salida**



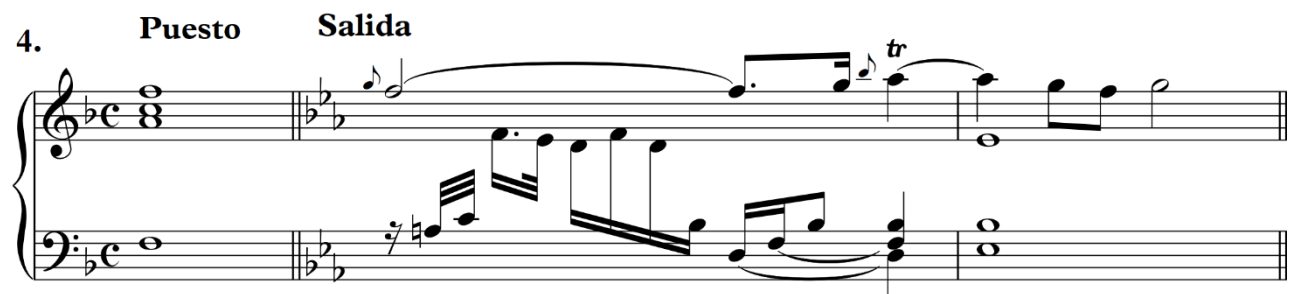
2. **Puesto Salida**



3. **Puesto Salida**



4. **Puesto Salida**



Twentieth *Término*

The Twentieth *Término* will be easy to leave, if the minor 6th is used in the first movement. See the following four examples.

1. Puesto Salida

Musical notation for example 1, Puesto Salida. The piece is in 3/4 time with a key signature of three flats (B-flat, E-flat, A-flat). The notation consists of a grand staff with a treble and bass clef. The melody in the treble clef starts with a whole note chord (F3, A-flat3, C4), followed by a half note (B-flat3), a quarter note (A-flat3), and a quarter note (G3). The bass line starts with a whole note chord (F3, A-flat3, C4), followed by a half note (F3), a quarter note (E-flat3), and a quarter note (D3). A trill (tr) is indicated above the final note of the melody.

2. Puesto Salida

Musical notation for example 2, Puesto Salida. The piece is in 3/4 time with a key signature of three flats. The melody in the treble clef starts with a whole note chord (F3, A-flat3, C4), followed by a half note (B-flat3), a quarter note (A-flat3), and a quarter note (G3). The bass line starts with a whole note chord (F3, A-flat3, C4), followed by a half note (F3), a quarter note (E-flat3), and a quarter note (D3). A trill (tr) is indicated above the final note of the melody.

3. Puesto Salida

Musical notation for example 3, Puesto Salida. The piece is in 3/4 time with a key signature of three flats. The melody in the treble clef starts with a whole note chord (F3, A-flat3, C4), followed by a half note (B-flat3), a quarter note (A-flat3), and a quarter note (G3). The bass line starts with a whole note chord (F3, A-flat3, C4), followed by a half note (F3), a quarter note (E-flat3), and a quarter note (D3). A trill (tr) is indicated above the final note of the melody.


4. Puesto Salida

Musical notation for example 4, Puesto Salida. The piece is in 3/4 time with a key signature of three flats. The melody in the treble clef starts with a whole note chord (F3, A-flat3, C4), followed by a half note (B-flat3), a quarter note (A-flat3), and a quarter note (G3). The bass line starts with a whole note chord (F3, A-flat3, C4), followed by a half note (F3), a quarter note (E-flat3), and a quarter note (D3). A trill (tr) is indicated above the final note of the melody.

Twenty-first *Término*

The Twenty-first *Término* will be achieved with great ease, if the third general rule is followed, according to the following examples.

1. **Puesto Salida**



2. **Puesto Salida**



3. **Puesto Salida**



4. **Puesto Salida**



Thus, I have concluded the 22 *Términos* without the need of extra sharps, nor increase of flats, nor overlooking any compositional rule or well-known traditional principle. In case Chapter IX was not explained clearly enough and there is any doubt left, I will put here a clear example following the mathematical knowledge and rules of this treatise, with which everyone will be able to write easily in any *Términos*.

I say, then, first of all, that in Chapter IX I showed the 24 *Diapasones*, so that they can be used according to the needs of the modulation, as you can see in the following Preludes. This will help to keep the compositions clean and clear, by determining which *Diapason* is predominant in a piece. This *Diapason* will be kept until a modulation takes place and replaces it with another one that fits better to the new *Término*.

The second thing is that whenever sharps or flats are to be found somewhat separate from the notes (independently of whether or not they apply to the next one), they should be considered as a new *Diapason* formation. This means that they should be treated as if they belong to the key signature, and they will go on to being written as such.

The third thing is that the natural accidentals work in the same way, with only one remark. These naturals, which can remove two, or three sharps, or flats, will not be written in the new key signature. For example, a *Término* of Alamire with a major third [A major] modulates to *Término* of Elami with a minor third [E minor], where it takes some time, and then passes to Gsolreut with a major third [G major]. When the modulation reaches the *Término* of Elami with a minor third, two naturals will be applied, one in Gsolreut [G], and another in Csolfaut [C]. These naturals will be written somewhat separated from the notes if they appear in the middle of the bar. If they are introduced at the beginning of the bar, they will be placed right next to the barline. When writing the clefs at the beginning of the line, or staff, only a sharp in Ffaut [F] without naturals will be written, and so on, according to the *Términos* that said modulation will pass through.

(...)²¹

After knowing well everything that has been said, it is the moment to begin with the preludes. It seems irregular to end a Book with something that should appear at the beginning, but the intent of this Book is to teach how to modulate by putting the theory

²¹ In this fragment (line 8, page 114 to line 14, page 117), which is not translated here, Soler argues against the modern practice of using double accidentals and justifies his opinion through a mathematical reasoning based in *comas* which was already introduced in the previous chapters.

first to facilitate the practice. The preludes contain both types of modulation, *agitada* and *lenta*, but we have included only one of the species [*agitada*] in the examples. It is therefore necessary to explain the other one, since they are both included in these compositions [the preludes]. Although it was never my intention to touch on the topic of *Modulación lenta*, I do not want something of such taste, beauty, and novelty to be missing, for it is music of the most precious kind that can be heard and the last thing that this fertile Science, rightly called *Physico-Mathematica*, has produced. Although this music is presented only in the form of prelude, it will nevertheless be very useful to composers, organists, and harpsichordists. To the former ones [composers], because they do what bees do with flowers for the formation of their honeycomb. But the others [organists and harpsichordists] must also know how to do it, and execute it: for this purpose, the definition of *Modulación lenta*, with the explanation that corresponds to the prelude, will be described.

*Modulatio gravis, est illa, quae per varios modos, modum trahit volentis*²². This definition states that the *Modulación lenta* is the one that, moving through several *Tonos* (or *Términos*, as we know them) arrives at the desired *Tono*. This definition makes clear the difference between this one [*Modulación lenta*], and the *agitada*; and it is, that *Modulación agitada* is achieved by a single concrete procedure, while the [*Modulación*] *lenta* can be executed in several ways²³. From this it can be understood that the *Modulación lenta* is the Queen of this Science and the most fertile and abundant garden of novelty. If the modulation, speaking according to its general definition, is the softness in the transition from one sound to another (that is, from one *Término* to another), this kind of modulation, the so-called *lenta*, will be much more admissible to the ear than the *agitada*, because of its greater variety of sounds. And from this it is understood that the prelude, which has to determine the *Tono* to start the following piece, will have to make use of the *Modulación agitada* at the end. In the meantime, it may freely, and voluntarily go to any *Término*. As there is no doubt about the principles that have been said, let's see what a Prelude in Music is: *Preludium est cognitio Physice consonantiarum ad recte operandum*²⁴. This sentence states that it is a practical way of evaluating [the tuning of

²² Slow modulation is the one that brings the desired mode in several ways.

²³ Soler's explanation is enigmatic: *la Modulación agitada es obligada, y obliga; y la lenta es obligada, y no obliga*.

²⁴ A prelude is the physical assessment (through cognition) of the proper tuning of consonances (chords). In other words, it is a way of trying out an instrument and checking that it is properly in tune.

the] consonances²⁵, to ensure that they work well. I compare it to the doctor's visit to a sick person, when the doctor gets information about the disease and its causes through questions and by measuring the heartbeats, and he decides how to proceed according to this information. Similarly, whoever has to play a new organ, or harpsichord²⁶ that they have never played before, is informed [through the Prelude] about which parts are healthy, or in tune, and which ones are not, or how much sharpness or softness the touch needs. Finally, it is important for the proper performance [of the prelude] to pass through all of the *Términos* included in the pieces that will be played afterwards. It will be a poor decision to proceed to play the next piece if any of the *Términos* have been found to be discordant. In this case, no pleasure will be found in arriving at this *Término*, and it is important to confine oneself to consonant, tuned *Términos*, rather than dissonant.

The prelude is not bound to strict measure but it is to certain movement²⁷. When arriving to some uncertain chord, one must take time on it and resolve it by doing the modulation that can be found in the piece [that follows after the prelude], not by imitating the same notes, but by taking the movements of the Bass while it passes through different *Términos*, and the chords that accompany it. This will be done with a soft, *cantabile* way of playing, and if the modulation does not show dissonance, one can make a suspension or ligature for the cadence, and then move on to another *Término*. From what has been said, it can be inferred how difficult it is to make an artful prelude, and the novelty that this practice contains.

One must never pass directly from a major to a minor third within the same *Término*, because it is very dissonant and it weakens the harmony if there is not a suspension (which there should be). For instance, if I am in the *Término* of Dlasolre and I want to go to the minor version of said *Término*, I will do the following: cadence by going from Dlasolre to Alamire, where I make a suspension, and then I can enter the key of Dlasolre with the minor third. The reason for this complication²⁸ lies in the clear difference in disposition of the two *Diapasones* within the same sign. While the first one [D major] says *ut, re, mi*, the other one [D minor] says *re, mi, fa*, and this last *fa*, with the last *mi* of the former scale [C#], forms the Unsingable Semitone, such an abominable


²⁵ In other words, the tuning.


²⁶ *Clavicordio*. General term used to refer to both harpsichord and clavichord.

²⁷ It should not be played *alla Battuta*, but following a pattern of rhythmical relationships (strong and weak beats).

²⁸ Not being able to pass directly from D major to D minor.

especie of the ancient times. It is not my intention to say that such transit is bad; but I do affirm that the best thing is to act as I say, and the reason (taken from the very definition of harmony) is: The greater variety the harmony contains (according to Jorge Beneto), the more perfect the harmony will be. It will be less perfect when it contains less variety. Since the way in which has been instructed to proceed results in greater variety, it is thus of greater and more perfect harmony. The long version of this transition appears in the definition of Don Pedro Cerone of Generic Modulation, and Jorge Beneto's text about Harmony and Modulation. The short version is technically correct, as it consists of the same *Términos*, as passing from Dlasolre [D] with a major third to Dlasolre [D] with a minor third, rigorously is nothing more than a *Término* with two different ways of forming the *Diapason*. But in the procedure which has been described, three different *Términos* are to be used, since it includes Dlasolre [D] with a major third, Alamire [A] with a major third and, after making a suspension, the newly formed natural [minor] *Término* [in D], which was major at the beginning.

In order to play the following preludes, one must observe two things. The first one is: although the notes are bound to the time signature set next to the clefs, you do not have to pay so much attention to the measure, as to the rhythm. This indicates how much time to stay in each note, which can also be shown clearly by this sign . If the Notes are not bound to this figure, the voices will just move according to how they are written. The tempo is designated by these three names: *Arbitri*, *Largo*, *Presto*. *Arbitri* is subject to the taste of the performer, *Largo* means very slow, and *Presto* fast, or other equivalents.

The voices are never struck together all at once, but they must appear in their order, putting the lowest one first, as the basis of said chord. The same thing will happen when short notes are to be found before the chord and the first one of them is tied to the Bass note of the chord . In this case the chord will be built following the order of these small notes. Everything will be easily and clearly seen in the following examples. It must be noted that whoever wants to learn must take the first example, which is easier, and only move on when they understand how it is done. The first four examples must be used for this, and the last four show how long the preludes have to be, which should be enough to display the modulations that a piece contains. Making them longer than necessary would be a nuisance to the listener.

Quatro Preludios para Aprender

Four Preludes for learning

1.

Arbitri poco presto p.^{to} nontanto

Musical notation for the first prelude, measures 1-3. The piece is in C major, 2/4 time. It begins with a treble clef and a common time signature. The first measure contains a half note G4, a quarter note A4, and a quarter note B4. The second measure contains a quarter note C5, a quarter note B4, and a quarter note A4. The third measure contains a quarter note G4, a quarter note F4, and a quarter note E4. The piece concludes with a trill on G4. The tempo is marked 'poco presto' and the dynamics are 'Arbitri' and 'p.^{to} nontanto'. The bass line is empty.

4

Presto Largo

Musical notation for the second prelude, measures 4-6. The piece is in C major, 2/4 time. It begins with a treble clef and a common time signature. The first measure contains a half note G4, a quarter note A4, and a quarter note B4. The second measure contains a quarter note C5, a quarter note B4, and a quarter note A4. The third measure contains a quarter note G4, a quarter note F4, and a quarter note E4. The piece concludes with a trill on G4. The tempo is marked 'Presto' and 'Largo'. The bass line contains a half note G3, a quarter note A3, and a quarter note B3.

7

tr.

Musical notation for the third prelude, measures 7-9. The piece is in C major, 2/4 time. It begins with a treble clef and a common time signature. The first measure contains a half note G4, a quarter note A4, and a quarter note B4. The second measure contains a quarter note C5, a quarter note B4, and a quarter note A4. The third measure contains a quarter note G4, a quarter note F4, and a quarter note E4. The piece concludes with a trill on G4. The tempo is marked 'Presto' and 'Largo'. The bass line contains a half note G3, a quarter note A3, and a quarter note B3.

9

tr.

Arbitri

Musical notation for the fourth prelude, measures 9-11. The piece is in C major, 2/4 time. It begins with a treble clef and a common time signature. The first measure contains a half note G4, a quarter note A4, and a quarter note B4. The second measure contains a quarter note C5, a quarter note B4, and a quarter note A4. The third measure contains a quarter note G4, a quarter note F4, and a quarter note E4. The piece concludes with a trill on G4. The tempo is marked 'Arbitri'. The bass line contains a half note G3, a quarter note A3, and a quarter note B3.

2.

Musical notation for exercise 2, measures 1-3. The piece is in C major, 3/4 time, and marked **Largo**. The right hand features a melodic line with eighth-note patterns and slurs, while the left hand provides a simple accompaniment. The word **Arbitri** is written above the right hand in the second measure.

Musical notation for exercise 2, measures 4-5. Measure 4 begins with a **tr** (trill) on the right hand. The tempo marking **Largo** is present. The right hand continues with eighth-note patterns and slurs, and the left hand has a simple accompaniment.

Musical notation for exercise 2, measures 6-7. The right hand continues with eighth-note patterns and slurs, and the left hand has a simple accompaniment.

Musical notation for exercise 2, measures 8-9. Measure 8 features a **tr** (trill) on the right hand. The right hand continues with eighth-note patterns and slurs, and the left hand has a simple accompaniment.

3.

Musical notation for exercise 3, measures 1-3. The piece is in C major, 3/4 time, and marked **Largo**. The right hand features a melodic line with eighth-note patterns and slurs, while the left hand provides a simple accompaniment. The word **Arbitri** is written above the right hand in the second measure, and a **tr** (trill) is marked above the right hand in the third measure.

4

Musical notation for measures 4-5. Treble clef has a whole rest in measure 4 and a half note in measure 5. Bass clef has a continuous eighth-note accompaniment.

6

Musical notation for measures 6-7. Treble clef has a half note in measure 6 and a half note in measure 7. Bass clef has a continuous eighth-note accompaniment.

Poco presto

8

Musical notation for measures 8-9. Treble clef has a half note in measure 8 and a half note in measure 9. Bass clef has a continuous eighth-note accompaniment.

Presto

10

Musical notation for measures 10-11. Treble clef has a half note in measure 10 and a half note in measure 11. Bass clef has a continuous eighth-note accompaniment.

deto Solo **ferma**

1

Musical notation for measures 12-13. Treble clef has a half note in measure 12 and a half note in measure 13. Bass clef has a continuous eighth-note accompaniment.

Arbitri

4.

3 **Presto** *tr*

4 **Largo** 6 6 6 *tr*

6 **Largo**

8 **poco p.^{to}** **Presto**

10 **ferma Arbitri** *tr*

Siguense Otros quatro Preludios, para que se sepa lo regular, con corta diferencia de lo largo, que deben ser
Another four Preludes will follow, in order to know how long they should be

1.
5.

Presto **Adagio** *tr*

5

Poco presto **largo**

7

Presto

9

tr **largo** *tr*

11

Musical notation for measures 11 and 12. The piece is in G major (one sharp) and 3/4 time. Measure 11 features a treble clef with a melodic line of eighth and sixteenth notes, and a bass clef with a bass line of eighth notes. Measure 12 continues the melodic line in the treble and includes a trill (tr) in the bass line.

13

Musical notation for measures 13 and 14. Measure 13 shows a treble clef with a melodic line and a bass clef with a bass line. Measure 14 features a treble clef with a melodic line and a bass clef with a bass line, including a flat (b) in the treble.

15

Musical notation for measures 15 and 16. Measure 15 features a treble clef with a melodic line and a bass clef with a bass line. Measure 16 includes a trill (tr) in the treble and a trill (tr) in the bass line.

17

Arb. ^{ti} fer. ^a

Musical notation for measures 17 and 18. Measure 17 features a treble clef with a melodic line and a bass clef with a bass line. Measure 18 includes a trill (tr) in the treble and a fermata in the bass line.

tr

Musical notation for measures 19 and 20. Measure 19 features a treble clef with a melodic line and a bass clef with a bass line. Measure 20 includes a trill (tr) in the treble and a fermata in the bass line.

2./
6.

1

Arbitri

Poco presto

3

Presto

largo

5

tr

tr

tr

7

tr

tr

tr

tr

tr

Poco Presto

10

tr

tr

tr

Piu Presto

tr

3

tr

12

ferma Arbitri

3./
7.

Largo **Presto**

3

Largo

5

Largo

7

9

poco presto *ferma* *Presto* *tr*

12

tr *p*

tr *tr* *p*

4./
8.

Arbitri

largo **p.^{co} presto**

Cantabile

largo

2

12

Musical notation for measures 12 and 13. The key signature is three sharps (F#, C#, G#). Measure 12 features a long melodic line in the right hand with a slur and a descending eighth-note pattern in the left hand. Measure 13 continues the melodic line with a slur and a descending eighth-note pattern in the left hand.

14

Musical notation for measure 14. The key signature changes to two sharps (F#, C#). The right hand has a long melodic line with a slur, and the left hand has a descending eighth-note pattern.

15

Musical notation for measures 15 and 16. The key signature is two sharps (F#, C#). Measure 15 features a long melodic line with a slur and a descending eighth-note pattern in the left hand. Measure 16 continues the melodic line with a slur and a descending eighth-note pattern in the left hand. Trills (tr) are marked above the right hand notes in measures 15 and 16.

17

ferma Arbitri

Musical notation for measure 17. The key signature is two sharps (F#, C#). The right hand has a long melodic line with a slur and a descending eighth-note pattern. The left hand has a long melodic line with a slur. A trill (tr) is marked above the right hand note. The measure ends with a fermata symbol.

I concluded the book, and the first treatise on modulation, being as concise and clear as I could. I still have so many things to say about the Art of Modulation that this knowledge would occupy a lot of space and would exceed the title of this book. But at some point (if God grants me health) I will write another treatise showing the Art of Modulation in all sorts of compositions, including vocal music, as well as organ and harpsichord. And I ask you again, my friend the reader, to not pay so much attention to the style, but rather the content. If by any chance you notice something that opposes the rules of the Art (not being my intention to write against them), I will be grateful for your notice. In the meantime, and always, be it to the greater glory of God for ever and ever.



VIII. Conclusion

Although it is not easy to evaluate the full influence of Soler's modulation theory on the musical practice of eighteenth-century Spain, it is safe to state that his approach was groundbreaking for the time. It was the systematization of a procedure that was thus far considered to be purely intuitive and a result of many years of necessary experience, which now could be quickly understood and learnt. *Llave de la Modulación* can be considered a useful tool that can still serve as a model for improvising nowadays. In the future it would be interesting to use this treatise as a basis for designing a didactic method on how to improvise Preludes. In the context of a concert program, Soler's examples of *Modulación agitada* are also very useful to improvise short interludes between pieces which are in distant keys in order to produce a smooth shift of key.

It can be argued that this work deserves more in-depth analysis and can be very useful for today's performer of historical keyboards and early music in general. Sadly, Spanish music has been somewhat neglected by today's study of historical sources and it is important to highlight its value and potential.

As anticipated in the introduction to this work, it is my hope that the translation and transcription provided herein will contribute to the growing understanding of the Spanish musical repertoire.

IX. Bibliography

Primary Sources

MADRID, Biblioteca Nacional de España (E:Mn):

- Soler, Antonio: *Llave de la modulación y antigüedades de la música*, Madrid, 1762.
- [Tecla], MP/3170/8. [1701-1800?]
- Roel del Río, Antonio Ventura: *Reparos musicos, precisos a la Llave de la Modulación, &c. del P. Fr. Antonio Soler, maestro de capilla en el Real Monasterio del Escorial / por don Antonio Roel del Rio*. M/1902(1), 1764.
- Bruguera i Morreras, Juan Bautista: *Carta apologetica que en defensa del labyrintho de labirintos compuesto por un autor, cuyo nombre saldrá presto al público / escribió don Juan Bautista Bruguera i Morreras ... contra la Llave de la Modulación, i se dirige a su autor el M.R.P. Fr. Antonio Soler*, M/1902(4), 1766.
- Soler, Antonio: *Carta escrita a un amigo por el P. Fr. Antonio Soler, maestro de capilla y organista del Real Monasterio de San Lorenzo, en que le da parte de un dialogo ultimamente publicado contra su Llave de la Modulación*. M/1902(3), 1766.
- Soler, Antonio: *Satisfacción á los Reparos precisos echos, por Don Antonio Roel del Rio á la Llave de la Modulación* [Manuscrito / por su autor el Padre Fray Antonio Soler, Maestro de Capilla y Organista del Escorial. M/1284, 1850?
- Soler, Antonio: *Sonatas para fuerte piano*. MP/3170/7, 1770.
- *Seis quintetos para dos violines, viola, violoncelo y órgano o clave obligado*. M/1271, 1776.
- Elías, José. *Musicha de órgano / del Sr. Joseph Elías mi maestro*. M/812, 1717
- *Papeles varios de música*, MSS/13422, [1801-1900]

MADRID, Biblioteca del Real Conservatorio Superior de Música de Madrid (E-Mc):

- Albero, Sebastián: *Obras para clavicordio o pianoforte*, 4/1727(2).

NEW YORK, Morgan Library.

Ms. Cary 703, 1756.

Secondary Sources

- Boyd, Malcolm: *Music in Spain during the Eighteenth Century*. Cambridge: Cambridge University Press, 1998.
- Capdepón Verdú, P. (2017). Música de tecla en la España del siglo XVIII: Domenico Scarlatti y el padre Antonio Soler. *Cuadernos De Estudios Del Siglo XVIII*, (21), 7-34. <https://doi.org/10.17811/cesxviii.21.2011.7-34>
- Climent, José. “La música española para tecla en el siglo XVIII.” *Revista De Musicología*, vol. 8, no. 1, 1985, pp. 15–21. JSTOR, www.jstor.org/stable/20794963. Accessed 24 June 2021.
- Gallardo, Cristóbal L. García. “El tratamiento de la sintaxis armónica en los principales tratados españoles sobre teoría musical (hasta la primera mitad del siglo XX).” *Revista De Musicología*, vol. 36, no. 1/2, 2013, pp. 444–452. JSTOR, www.jstor.org/stable/24245741. Accessed 24 June 2021.
- Gonzalo Delgado, Sonia. “¿Un nuevo repertorio? La inclusión de los clavecinistas ibéricos del siglo XVIII en la actividad concertística española. La figura de Joaquín Nin.” *Revista De Musicología*, vol. 39, no. 1, 2016, pp. 173–209. JSTOR, www.jstor.org/stable/24878541. Accessed 24 June 2021.
- Heimes, K. F. (1969). *Antonio Soler`s keyboard sonatas*. Pretoria: Department of Music, University of South Africa.
- Llorens, José M.^a. “Repercusión de las obras de José Elías en la formación musical organística del Padre Antonio Soler (1729-1783).” *Revista De Musicología*, vol. 8, no. 1, 1985, pp. 23–28. JSTOR, www.jstor.org/stable/20794964. Accessed 24 June 2021.
- Marín, Miguel Ángel: “Música para tecla: Scarlatti y sus contemporáneos”, en J. M. Leza (ed.), *La música en el siglo XVIII, en Historia de la música en España e Hispanoamérica*, vol. 4, (Madrid, FCE, 2014), 271-291
- Mesquita, David, “Musiktheoretische Polemiken im Spanien des 18. Jahrhunderts“, in: Lehmann, A.; Jessulat, A.; Wunsch, C. (Edition), *Kreativität-Struktur und Emotion*. Würzburg : Königshausen & Neumann, 2013.
- Morales-Cañadas, E. (2014). *Antonio Soler, un visionario ilustrado*. München: Akademische Verlagsgemeinschaft München.
- Querol, Miguel. “Reflexiones Sobre La Biografía y Producción Musical Del Padre Antonio Soler (1729-1783).” *Latin American Music Review / Revista De*

- Música Latinoamericana, vol. 7, no. 2, 1986, pp. 162–177. JSTOR, www.jstor.org/stable/780214. Accessed 24 June 2021.
- Sadowsky, Reah. “Antonio Soler: Creator of Spain's Fifth Century of Musical Genius.” *American Music Teacher*, vol. 28, no. 1, 1978, pp. 10–15. JSTOR, www.jstor.org/stable/43538186. Accessed 8 March 2022.
 - <https://dbe.rah.es/biografias/8344/antonio-soler-ramos> (visited on the 28th March 2022)

X. Appendix A

Original excerpts of Chapter X of Llave de la Modulaci3n

General Rules (pages 81-84)

1. No se pasar3 de un T3rmino a otro, sin que alguna de sus especies consonantes tenga parte con el T3rmino siguiente; cuando no, sea lo contrario con Ligadura.

2. Para que cualquier Modulaci3n salga sonora, se procurar3 coger la Quinta del Tono que se desea.

3. Si alg3n T3rmino repugnase con el que se desea, contrario con contrario se vence.

4. En tanto ser3 m3s sonora la Modulaci3n, en cuanto proceda por Movimientos alternantes de sones Graves, y Sobre-agudos.

Expl3canse las cuatro Reglas. 1. *No se pasar3, etc.* Manda esta Regla, que no se pase el Bajo nunca por paraje, en el cual no haya alguna de sus especies consonantes anteriores, que sea parte de lo que se sigue; y cuando el Bajo pasare a otro T3rmino, que antes no tuvo especie alguna, que diga con dicho T3rmino: V.g. est3 la consonancia puesta sobre el bajo, que es Gsolreut, y pasa el Bajo en Alamire blando, claramente se ve, que ni la Tercera de Gsolreut, ni la Quinta, ni la Octava dicen con Alamire blando, que es el signo que se sigue; y asi pide semejante Bajo, que se invierta el orden de la primera Regla (por lo que esta Regla tan solamente no se llamar3 General), poniendo Ligadura en dicho Bajo, que esto es mucho m3s sonoro que no acompa1arle con Tercera, y Sexta. La raz3n es, porque queda sonando parte de lo que hab3a antes sonado en Gsolreut; y as3 se dulcifica por varios movimientos tan encadenados, que no es posible que se sienta sino una armon3a que eleva. El pasar de un T3rmino a otro contra esta Regla, solo puede ser con una Suspensi3n antes; de otra manera, nunca saldr3 plausible al o3do. Adv3rtase en los Ejemplos todo lo dicho.

Para quitar toda equivocaci3n, digo, que aqu3 no tratamos casos de Composici3n, sino solamente la perfecci3n de la Modulaci3n agitada, que los tres primeros ejemplos son todos buenos en *ly* [sic] Composici3n; mas no todos son conducentes al fin de la materia, que aqu3 tratamos. El cuarto Ejemplar tampoco es 3til para la Modulaci3n

agitada; y así es preciso distinguir en una Composición, cuando hay Modulación, y cuando no, que con eso se distinguirá lo uno de lo otro.

2. Regla. *Para que qualquiera Modulación, etc.* Manda esta Regla general, que el fin de la Modulación agitada debe ser procurar coger la Quinta del Tono, o Término que se desea: esta de los ejemplares prácticos se podrá inferir su operación.

3. Regla. *Si algún Término repugnante con el que se desea, etc.* Dice esta Regla general, que cuando hay algún Término de Sustenidos, v.g. que parece ser repugnante dicho Término, si el que se desea tiene Bmoles, que fingiendo los mismos signos Sustenidos, Bmoles, es fácil la salida. Véase en el Ejemplo siguiente, previniendo antes, que el mismo signo es donde dice *Puesto*, que *Salida*, aunque en rigor, como queda probado, no lo sea. Lo mismo se entiende del Bmol al Sustenido.

4. Regla. *En tanto será más sonora, etc.* Manda esta Regla general, que no se muevan las voces todas juntas, sino alternativamente, y que de toda salida sean los principales movimientos en la parte inferior, y superior: la razón es, porque el oído percibe mejor estas dos partes, que no las del medio, como son Contralto, y Tenor, solamente acompañen, siguiendo la consonancia que se pidiere.

The prelude (pages 118-119)

(...) veamos qué cosa es Preludio en la Musica: *Preludium est cognitio Physice consonantiarum ad recte operandum.* Dice, que es un conocimiento práctico de las consonancias, para el bien obrar, por lo que le comparo a la visita del Medico a un enfermo; pues así como este se va informando con preguntas, y pulsaciones de la enfermedad, y sus causas, para determinarse a obrar, según las tales fueren; así el que llega a un Órgano, o Clavicordio, que no ha pulsado otra vez, se va informando qué partes tiene sanas, o afinadas, cuales no; si pide fuerza la pulsación, o suavidad, etc. y por fin, es determinare para el bien obrar, demostrando todos los Términos, que ha de pasar la obra, que quiere practicar; y hará mal cualquiera, que encontrando que algún Término, que tiene la obra, está discorde, en pasar a tocar, o ejecutar dicha obra; porque en llegando al tal Término, en lugar de dar gusto, sucederá lo contrario, y debe tocar, y ajustarse a los Términos acordes, y no discordes.

El Preludio no va sujeto a Compás; pero sí al movimiento; y cuando se encuentra algún Término dudoso, se detendrá en él y se asegurará haciendo la Modulación, que la obra tuviere, no con las mismas Notas, que están en la obra, sino tomando los movimientos del Bajo, según pasare a diversos Términos, y las especies, que le acompañan. Se hará prueba de ello con un cantar suave; y viendo que la dicha Modulación no dice, se encubre su disonancia al instante, haciendo una suspensión después cadencia, o ligadura; y puede después pasar a otro Término. De lo dicho se infiere cuán difícil sea hacer un Preludio con arte, y la novedad que encierra.

XI. Appendix B

Selbständigkeitserklärung

Name: González Roldán

Vorname: Irene

Hiermit erkläre ich, dass ich die vorliegende Arbeit selbständig und ohne die Mithilfe anderer Personen verfasst habe, dass ich keine anderen als die angegebenen Hilfsmittel verwendet sowie alle wörtlich oder dem Sinn nach aus der Literatur zitierten Stellen entsprechend gekennzeichnet habe.

Ort, Datum: **Basel, 03. April 2022**

Unterschrift

**DECLARATION OF CONSENT
FOR MAKING YOUR MASTER THESIS AVAILABLE
IN THE REPOSITORY IRF OF THE FHNW**

I hereby declare that I agree to make my Master Thesis, written for the conclusion of my studies at the Schola Cantorum Basiliensis, available in the official repository of the FHNW, the IRF.

The rights to the text remain the property of the author and the Schola Cantorum Basiliensis.

Basel, on 15-02-2023