

# UNMEASURED PRELUDES OF LOUIS COUPERIN

MAXX CHO

This paper is completed for the Senior Music Comprehensives at Swarthmore College. We discuss Louis Couperin and the unmeasured prelude, then turn to an analysis of “Prelude 13” found in both the Bauyn and Parville manuscripts.

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## 1. HISTORY

**1.1. The Life and Works of Louis Couperin.** Most of biographical information about Louis Couperin come from the *Le Parnasse François* by Évrard Tilton du Tillet [20]. Louis Couperin was born on 1626 in Chaumes-en-Brie, a city nearby Paris [5]. His father was Charles Couperin, who was the organist for the Benedictine abbey of St. Pierre in Chaumes. Although he was a violin and harpsichord prodigy from a young age, he never received wide recognition as a composer until Louis and his brothers Charles and François visited the Chambonnières on July 24th, 1651. At this famous visit, the Couperin brothers performed a concert, playing Louis Couperin’s pieces. As the story goes, Chambonnières was so impressed by Louis Couperin’s compositions that he became Couperin’s teacher and convinced him to stay in Paris.

Some time in 1652, Couperin met Froberger in Paris and heard his music. This meeting had a significant influence on Couperin’s music. Most likely, Couperin heard Froberger’s organ toccatas for the first time during this time. The Froberger toccatas eventually became one of the stylistic origins of Couperin’s unmeasured preludes (please see section 1.2).

On April 9th, 1653, Couperin was appointed organist at Saint-Gervais in Paris [12]. Some time between 1956 and 1957, Couperin was offered the royal position occupied by Chambonnières: *joueur d’espinette*. The royal act of 1957 declares Louis Couperin as the *ordinaire de la musique du Roi* [14]. Apparently, Couperin

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refused out of royalty for his teacher, and so Louis XIV created the new post of a viol player just for Couperin.

Following his appointment as a court viol player, Couperin performed in many *ballet de cour*. (Please see section 1.2 for more discussion on *ballet de cour*). Primary sources indicate that Couperin performed in “*Ballet de Psycheè ou de la puissance de l’Amour*”, “*La Galanterie du Temps*”, “*Ballet de l’Amour malade*”, “*Ballet des Plaisirs troublès*”, and “*Ballet de la Raillerie*” [5]. Couperin continued to serve as the organist for the Saint-Gervais, supervising its organ renovation on July 26th, 1659 and being reappointed as the organist on August 6th, 1659.

On August 27th, 1661, he signed his will illegibly, writing that he was “sick of body and sane of mind” [14]. Presumably, he was very sick by this time. Louis Couperin died on August 29th, 1661 in Saint-Gervais at the age of 35. Louis’s younger brother, Charles, took Louis’s post of organist at Saint-Gervais, and Charles’s only son, the famous François Couperin, took the post after Charles. The organist post at Saint-Gervais remained occupied by the Couperins until the death of the last descendant in 1826 [14].

All of Couperin’s works come from just three manuscript sources: the Bauyn manuscript now at the Bibliothèque Nationale in Paris, the Parville manuscript now at the University of California at Berkeley, and the Oldham manuscript which is in a private collection and remained off-limits to scholars until 2003 when transcriptions of organ pieces from it were finally published [5].

The Bauyn manuscript is not an autograph manuscript. It was compiled by a scribe at the end of the 17th century. It contains 133 pieces by Louis Couperin, in addition to works by other composers. According to scholarly consensus, the manuscript was compiled for Couperin’s family members, as the ordering of pieces in the compilation groups works by Chambonnières and Couperin separately, in addition to a third section with works by miscellaneous composers. Speculatively, the third section of miscellaneous composers are works Louis Couperin accumulated during his lifetime, including toccatas by Froberger. (There is actually some controversy over the ordering of the pieces in this manuscript, as the binding is faulty). The Bauyn manuscript is often considered the most significant source of 17th century keyboard music.

The Parville manuscript is also not an autograph manuscript. It contains 56 harpsichord pieces by Louis Couperin, only 4 of which are not already contained in the Bauyn Manuscript. For the works also contained in Bauyn manuscript, there are “significant differences” [5] between the two versions. As far as the unmeasured preludes, there are difference in the shapes of slurs, but for the most part are very similar in both manuscripts. The Parville manuscript is often considered less authoritative than the Bauyn manuscript because Couperin’s name is always spelled *Coupprain*, *Couprain*, or *Couprin*, suggesting that the scribe may not have known any Couperin family member personally.

The Oldham manuscript was discovered by Guy Oldham in 1958 in London. It contains 78 pieces by Louis Couperin, in addition to other works by composers such as Chambonnières and d’Anglebert. Of the 78 pieces by Couperin, only 4 are for the harpsichord, one of which is already contained in the Bauyn manuscript. Guy Oldham has stated that the manuscript is in Louis Couperin’s own handwriting, but the manuscript has yet to be published and still remains in private collection, so no scholarly verification has been performed for this claim.

In both the Bauyn and Parville manuscripts, works are ordered in increasing tonality (beginning with *C*-major). Within each group of works in the same key signature, the pieces are grouped by genres: all the allemandes show up first, then the courantes, sarabandes, gigue, then chaconnes or passacaille. This grouping reveals two aspects of the dance suite in relation to Louis Couperin: first, the order of appearance shows that the “classical” ordering of dance genres (allemande, courante, sarabande) in the baroque suite was in practice during Louis Couperin’s lifetime. Second, that the dance genres are grouped by tonality than by genres shows that Couperin did not organize any of his pieces into specific suites. For example, the fact that the Bauyn manuscript scribe did not have trouble grouping all allemandes in *C*-major together shows that a player is supposed to compile their own dance suite [5].

The unmeasured preludes are often considered the greatest contribution by Louis Couperin. For example, Ledbetter says “The preludes of Louis Couperin are unique in both lute and keyboard repertoires in their scope and expressive range” [13]. Thus, we now turn to studying its stylistic origins and its relationship to the dance suite.

**1.2. The Harpsichord Style and the Unmeasured Prelude.** As late as the 1620s, primary sources indicate that there were no stylistic differences between the repertoire of the organ and the harpsichord (or its smaller cousin, the spinet). For example, the “Premiere livre de tablature d’*espinette*” by Simon Gorlier contained motets and fantasies, which are usually considered organ repertoire [13]. As another example, Jean Denis’s “*Traité de l’accord de l’*espinette**” from 1643 implies that the spinet is largely a practice instrument for organists [13].

Indeed, the lack of a distinct repertoire for plucked-string instruments such as the harpsichord and the spinet is reflective of its social status as a domestic instrument (as opposed to liturgical). The spinet was a common household instrument for bourgeois families, while the larger harpsichord was popular among aristocracy [13].

The lute repertoire, however, had a very distinct style dating back to the Renaissance. Much has been written about the *style brisé*, which is a twentieth-century term describing a typical style of the lute repertoire starting from the Renaissance, and later influencing French baroque harpsichord music. While the term itself has no universally-accepted definition, the following list of features by Rave in his dissertation seems to capture it best [17]:

- (1) The avoidance of textural pattern and regularity in part writing
- (2) Broken chord textures
- (3) Ambiguous melodic lines
- (4) Temporal distribution of chord members
- (5) Rhythmic displacement of pitches within a line
- (6) Octave migration of line
- (7) Fleeting inner lines
- (8) Absence of an assertive vigor of a line
- (9) Vague inner phrase definition
- (10) Avoidance of melodic, harmonic, bass, and textural accent
- (11) Irregular phrase lengths
- (12) An impression that melody hardly exists, with a surface harmonic progression that overshadows the melody

If a majority of the above elements hold, a piece can be said to be in *style brisé*. Buch, in “Style brise, Style luth, and the Choses luthées” argues that, above all, the most important characteristic of the *style brisé* is “pseudo-polyphony” [6]. In other words, the *impression* of independently-moving voices is given through broken chords and melodic lines (either in an inner or outer voice) freely appear, disappear, or transfer.

The lute largely functioned as accompaniment to *ballet de cour* (court dance), which were popular among French aristocracy. The ballet de cour is also hypothesized to be the origin of the baroque dance suite [7]. Many stories surrounding the origin of the unmeasured prelude exist. One such account holds that the unmeasured prelude originated from an improvisation used to tune the lute before a dance suite [15]. Another account holds that the unmeasured prelude is an “exploration” of the key about to be used in the dance suite [11]. Others provide a more socially functional explanation, positing that the unmeasured prelude is “background music” meant to prepare the participants of the ballet de cour and alert them that the dance is about to begin. Buch offers a more concrete theory, hypothesizing that the unmeasured prelude originated from the French *recit*, a slow and often chromatic vocal work that appears to have functioned as an introduction to the dance, evidenced by its description in *Grand Ballet des effects de la nature* [7].

According to Ledbetter, the very first fully-developed prelude occurs in *Tablature de luth de differents autheurs* in 1631 [13]. The preludes in this collection exhibit all the characteristic features of the lute prelude, including rolled chords that begin and end the piece. Nevertheless, these works are measured. The first instance of unmeasured notation for lute preludes occurs in *Panmure 5*. But as Ledbetter points out, the switch to unmeasured notation seems to have been purely a notational innovation, as there are no other stylistic differences between these and the measured preludes in the *Tablature de luth*.

The *style brisé* for the lute also appear to have developed gradually. Consider, for example, the following pavane by Antoine Francisque. Two different versions are given, both arranged by Francisque himself.

Ex. 2 Francisque, f. 10-10r: Pavane d'Angle[terre], bars 25-30 (a) with double (b)

The image displays two musical versions of a lute piece. The top version, labeled (a), is a lute tablature. It consists of a single staff with letters (c, d, a, c, f) placed above and below the staff lines to indicate fret positions. The bottom version, labeled (b), is a standard musical notation. It features a treble clef and a bass clef, with notes and rests written on the staff. Both versions are for the same piece, 'Pavane d'Angle[terre]' by Francisque, and cover bars 25-30. The notation in (a) is more complex, with many slurs and ties, while (b) is more straightforward, using standard musical symbols.

**Figure 1** (Development of Style Brisé)

The second arrangement exhibits rhythmic displacement of individual voices, accentuating the movement of each voice.

Interestingly, the harpsichord gained its popularity as interest in the lute declined [13]. Presumably, this is when the *style brisé* was transferred over to the harpsichord repertoire. The precise details of this transfer is both obvious and problematic, as we now explore.

In general, it can be observed that the lute style was transferred to the harpsichord, because both are plucked string instruments that are sonically similar. The percussive pluck of the attack on both instruments, combined with the keyboard's ability to imitate the *style brisé* with ease, allowed for a natural transfer of idiom. Furthermore, organists and organ composers were attracted to writing and performing a wildly popular style without having to learn a new instrument. However, it must be kept in mind that these are only hypotheses, and no primary source evidence exists that directly verify any of these claims.

There seems to be a literature of lute preludes arranged for the harpsichord, before preludes written for the harpsichord appear [13]. Furthermore, these arrangements exhibit a gradual embodiment of the *style brisé* into the harpsichord idiom.

The unmeasured prelude reached its ultimate proliferation under Louis Couperin, who not only imitated the lute unmeasured prelude, but also drew inspiration from a keyboard genre: the organ toccata. Indeed, while the organ toccata is notated in measured notation, it was meant to be played freely. This is evidenced by Froberger's teacher Frescobaldi, who codified the performance of toccatas. In it he warns that the toccata must be played with "discretion", filled with rubatos [10]. Thus, the Froberger toccatas provided a natural source for Couperin when translating the lute idiom of the unmeasured prelude for the harpsichord.

Couperin even labeled one of his preludes as *Prélude à l'imitation de Mr. Froberger*. In this prelude, Couperin draws directly from a Froberger toccata, fully notating how the block chords in the toccata would have been played [13]:

Ex. 27 Opening patterns in a toccata by Froberger and a prelude by Louis Couperin: (a) Toccata I (1649) (SCHOTT, p. 2); (b) Prelude (MORONEY, p. 56)

The image displays two musical examples, (a) and (b), each consisting of two staves (treble and bass clef). Example (a) shows a toccata opening with block chords in the right hand and a single note in the left hand. Example (b) shows a prelude opening with a more complex, flowing pattern in the right hand and a single note in the left hand.

**Figure 2** (Prélude à l'imitation de Mr. Froberger)

This example is significant, because the spread of the first chord is uncharacteristic of the lute, which prefers wide open spacings in the lower register.

Other times, Couperin uses spacings for chords that are more idiomatic for the lute, as shown in this prelude:

Ex.28 Lute-type chord spreads in a prelude by Pinel: (a) PINEL, no.6, opening; (b) LOUIS COUPERIN: Prelude (MORONEY, no.11 (p.69, lines 7-8))

The image shows two musical examples, (a) and (b), illustrating lute-type chord spreads. Example (a) is the opening of Pinel's prelude, and example (b) is the opening of Couperin's prelude. Both examples show wide open spacings in the lower register and closer spacings in the upper register. The notation includes a lute tablature (T18) at the top and a piano accompaniment below.

**Figure 3** (Bauyn Manuscript, II f. 13 r.)

Here, Couperin uses chord spacing that is wide-open in the lower register and closer together in the upper register. Another characteristic element of the lute prelude is two repeated block chords, the first one often rolled:

Ex.33 Repeated chord pattern in P. Gaultier, p.39: Prelude, opening

The image shows a musical example, Ex.33, illustrating a repeated chord pattern in P. Gaultier's prelude opening. The notation includes a lute tablature (T10) at the top and a piano accompaniment below. The chords are wide-open in the lower register and closer together in the upper register.

**Figure 4** (Repeated Chord in Lute Prelude)

Couperin's use of this idiom can be seen in the prelude in C-minor in the Parville manuscript:

Ex.32 Prelude opening formula in Louis Couperin (MORONEY, no.7 (p.62))

The image shows a musical example, Ex.32, illustrating the prelude opening formula in Louis Couperin's prelude. The notation includes a piano accompaniment below. The chords are wide-open in the lower register and closer together in the upper register.

**Figure 5** (Repeated Chord in Couperin)

One difference is that in the Couperin, both chords seem to be rolled, whereas in the lute repertoire, it is characteristic to roll only the first chord. Some have suggested that one should roll the second chord in the Couperin faster, to reflect the lute

idiom [13]. Another lute element frequently appearing in Couperin preludes is the *trait*, which is a fast ascending scale. On the lute, the scale is often played in two separate parts, to accommodate the player in fingering. This practice is transferred over to Couperin’s harpsichord preludes as well:

Ex.31 Lute and harpsichord *traits* in Pinel and Louis Couperin: (a) PINEL, no.6, pp.18-19; (b) Louis Couperin, Prelude (MORONEY, no. 13 (p.73, line 9))

The image displays two musical examples. Example (a) is a lute tablature labeled 'T13' with letters 'a', 'b', 'c', 'd' indicating fret positions on a six-line staff. Example (b) is a harpsichord score with two staves, showing a fast ascending scale in the right hand and a slower accompaniment in the left hand.

Figure 6 (The Trait in Lute Preludes and Couperin)

Thus, Couperin synthesizes the stylistic idioms of both the lute unmeasured prelude and the organ toccata for the harpsichord unmeasured preludes. The unmeasured prelude represents the birth of a uniquely harpsichord style, as a synthesis of organ and lute music, through Louis Couperin.

## 2. ANALYSIS

**2.1. The Notation of Unmeasured Preludes.** The unusual notation of the unmeasured preludes have contributed much to the renewed interest in the genre. While much of the literature still disagrees on the finer details, several points are now universally accepted. There are two separate notational issues to consider: the unmeasured notation, and the long and wavy “slurs” that saturate the score.

First we turn to the unmeasured notation. A common source of confusion is the distinction between *unmeasured notation* and *unmeasured performance* [5]. Whereas the notation is definitely unmeasured, it would be artificially contrived to attempt a genuine unmeasured performance of this music. Especially in tonal and common-practice functional harmony contexts, the harmonic rhythm also plays a large role in implying meter. As Richard Troeger says in *Metre in Unmeasured Preludes*, “Any decision regarding relative note-values and stresses will, to a greater or lesser degree, imply metre.” [19]

Troeger goes a step further and argues that the unmeasured preludes are, by and large, in duple meter. Some of the evidence for his conclusion are: that the unmeasured preludes are derivative of toccata (see section 1.2) which are in duple meter; that duple meter is most well-suited for the figural and harmonic development characteristic of preludes; that preludes with a middle measured metered section is in triple meter for contrast; that in the unmeasured prelude works for lute and viola da gamba, duple time signatures are often notated; and that ternary groupings of notes are statistically rare compared to binary groupings of notes in

the unmeasured repertoire [19]. While his arguments are interesting, I believe that a more thorough and scientifically rigorous study is required before one can begin to understand meter in such free-form works as the unmeasured prelude. Along with atonal music, it seems that meter in unmeasured preludes is a difficult issue that requires, at the very least, the tools of cognitive science and information theory.

Conceding that *some* form of meter is implied in any natural performance of unmeasured preludes, now we turn to addressing how one might determine general pacing in performance. The unmeasured notation is *not* an invitation to improvise the rhythm - rather, it reflects the inadequacy of the usual measured notation to convey the style of the french prelude [16]. Of the unmeasured preludes, Louis Couperin's nephew François likened it to musical prose, as opposed to the metered poetry of measured music [9]. Just like the pacing of prose, which is determined by the semantics and syntax of the utterance, the pacing of the unmeasured preludes are determined by stylistic conventions and musical content.

Indeed, Davitt Moroney in *The performance of unmeasured harpsichord preludes* warns that “the notation’s lack of rhythmic measurement is a subtly negative element rather than a strictly positive one.” [16] In other words, the lack of rhythmic notation does not imply the lack of intended rhythm - rather, the intended rhythm is implied by stylistic conventions.

One may begin to understand the stylistic conventions by looking at the unmeasured prelude’s stylistic origins: the toccata (see section 1.2). Even though the toccata is also played freely, it is notated in measured notation. It also helps to fully understand the harmonic material of the piece, so that pacing can be used to heighten the drama of the music. In my analysis of Couperin’s Unmeasured Prelude 13, I have included a two-voice reduction, which aids in identifying structural goalposts, which in turn helps determine pacing and phrasing (see section 2.2).

It also helps to remember that the unmeasured notation was primarily used for composers and professional players [16]. Existing primary sources suggest that Louis Couperin was the first to use the unmeasured notation for a keyboard instrument. According to Colin Tilney in “The Art of the Unmeasured Prelude”, Couperin invented the unmeasured notation by taking lute tablature (which has no rhythmic indications) and turning the letter notes to “whole notes” on the staff [18]. This is most clearly illustrated here:



**Figure 1** (Lute Tablature and Unmeasured Notation)

By simply transforming letter-names on the lute tablature to whole notes on the staff, we recover Couperin’s notation for his unmeasured preludes.

Here, we see another creative synthesis by Couperin: adopting lute notation to harpsichord music that is largely inspired by the organ toccata. (Please see section 1.2 for a more detailed discussion on the stylistic origins of the prelude). As



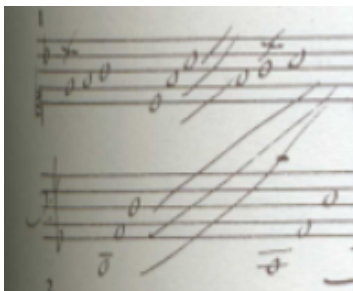
explored in section 1.1, all of Louis Couperin's music come from just three sources, all of which were intended for professional players or Couperin's immediate family members. Thus, the unmeasured prelude flourished under circumstances in which the players had an implicit understanding of how it was meant to be interpreted.

Indeed, when other composers published preludes for wider consumption, they were notated as measured. For example, François Couperin's "l'Art de Toucher le Clavecin" contains eight preludes written measured, but with explicit instructions to "play them in a free, easy style, not sticking too closely to the exact time." [9] It may seem strange to include rhythmic information, then instruct players to disregard them. But as François explains, "One of the reasons why I have written these Preludes in measured time was to make them easier, as will be found to be the case, whether in teaching them, or in learning them." [9] Other composers, such as Lebègue, also reverted to measured notation when his preludes were published. [16] Thus, the unmeasured notation was abandoned as a practical measure: whereas the unmeasured notation is appropriate for professional players, it was easier for amateurs to learn from measured notation. Unfortunately, Louis Couperin's music was never published during his lifetime, hence no versions of his preludes exist that are notated measured.

Now we turn to the issue of interpreting the "slurs" in the unmeasured preludes. Many writers have proposed a system for the seemingly enigmatic "slurs". Some look conventional, while others are more problematic: slurs starting or ending on empty space, slurs with exotic and wavy contours, and straight diagonal lines that don't look like slurs at all. There is no consensus about the musical meaning of these lines, while its visual aesthetic value as it appears on manuscripts is undeniable. Some have suggested an elaborate system for interpreting them [19], while others settle for much simpler explanations [5].

The most mainstream source available on the interpretation of slurs is Davitt Moroney's "The Performance of Unmeasured Harpsichord Preludes" and his introductory remarks in "Pièce de Clavecin" [5]. Moroney concedes that there is no consistent and systematic account of all the slurs, precisely because Couperin's preludes were never prepared for publication and because there are inconsistencies between the Bauyn and Parville manuscripts for the same preludes. Nevertheless, he identifies three different types of slurs: the ones that indicate how long notes should be sustained, the ones that indicate phrasing and grouping of notes, and the ones that clarify the sequence of notes to be played.

The slurs that indicate the length of sustain often start on a chord tone and end on empty space, cluing us in on its function. For example, on both the Bauyn Manuscript and Parville Manuscript versions of Prelude 13, each note of the very first chord (F-major) has a slur, which continues through the ensuing three-note motive. Hence, the three-note motive is meant to be played while the F-major chord is being sustained. Interestingly, these very same slurs also have the function of indicating the sequence of notes to be played. Otherwise, strict vertical alignment would imply that the three-note motive that plays over the F-major chord is played simultaneously with the subsequent C-major chord:



**Figure 2** (Vertical Alignment)

Read literally, it seems as though the second chord in the left hand is played at the same time as the second melodic figure in the right hand. Clearly, this is musically incoherent. But the slurs that stretch out from the F-major chord creates a clear visual delineation that shows that, despite the vertical alignment, the C-major chord comes after the three-note motive. This is an interesting bit of semiotics: the slurs are drawn concave-up, and somehow it seems natural and obvious that the notes placed above the slur sound together, while those below it are meant to be played separately afterwards.

We briefly remark on interpreting accidentals in the manuscripts. The use of accidentals had not yet been standardized during this period [1], and especially in unmeasured notation, the question of how long accidentals last can be a tricky and hazardous problem. The best and quickest solution is to always go with the interpretation that makes the most musical sense. A detailed study of this topic is beyond the scope of this paper. Needless to say, there is ample literature on this topic [2] [8] [4]. Some have even suggested the notion of “retroactive accidentals”, where accidentals later in the music actually apply to notes appearing *before* it, based on whether the note is an ornament to it or not.

**2.2. Prelude 13: Bauyn Manuscript, II f. 17 r. and Parville Manuscript, p. 156.** The most distinctive feature of this prelude is an exact quotation of Froberger’s Toccata 5, *Da sonarsi alla Levatione*, starting from line 8 [18]. (Lacking measure numbers for reference, we shall refer to line numbers in the Bauyn manuscript.) The placement of the quotation about two thirds into the piece allows us to devise a convenient division of the work into sections. This division partly reflects tonal areas and textures, but is mostly based on dramatic development arising from harmonic motion.

Section	Bauyn MS Line Number	Tonal Areas	Predominant Texture	Dramatic Purpose
1	1 to end of 2	F Major	Broken Chords with Melody	Introduction
2	3 to end of 7	G minor/Major, Bb Major, C Major/minor	Style Brisé	Build-up of Tension
3	8 to end of 9	g Major/minor, F Major	Melody with Slow Bass and Tenor Line	Froberger Quotation / Quiet Middle Section
4	10 to the end	c Major/minor, Bb Major, F Major	Broken Chords RH with Bass Line	Climax and Ending

**Table 1** (Formal Scheme)

One of the harmonic devices pervasive in this work is the ambiguity between the major and minor mode. This can be seen in the tonal areas listed on the above table. First, the middle section labeled “G minor/Major” is ambiguous between the two modes, as evidenced by varying (and contrasting) inflections of scale degrees three and six. We shall see specific instances of this later. Furthermore, the final “climax” leading to the ending is mostly in “c minor”, as opposed to the expected key of C major (the dominant).

The piece begins with a plain and peaceful introductory statement in F major. In the soprano line, a 4-note ascending melody is sequenced 3 times:



**Image 1** (Opening Motive)

Accompanying the sequence are rolled chords, first on F-major, second on C-dominant seventh, and third on first inversion F-major. The voice-leading from the C-dominant seventh chord to the F-major chord is voice-exchange between the outer voices, resulting in the final note of the sequence to actually break the sequence, moving by a skip down to the F (as opposed to up by a step to C to complete the sequence):



**Image 2** (Voice-Exchange)

The voice-exchange resolution of the dominant seventh to a first inversion tonic chord makes this opening phrase open-ended and incomplete. This is characteristic of the entire prelude—the resolution of dominant seventh chords are always subverted by either first or second inversion tonic triads. For example, precisely the same

progression of  $V_5^6$  to  $I^6$  is repeated again in C-major at the climax of the prelude in the middle of line 11, a moment of structural importance where the dramatic melodic and harmonic descent into the final cadence begins. Thus, while there are moments of temporary repose, the overall effect is that the prelude does not seem to offer clear-cut ends of phrases and seems to “keep going”.

After the voice-exchange resolution, the next two chords heard are  $vii^{o6}/V$  and  $ii_3^4$ . Note that these two chords differ by a chromatic inflection of  $\hat{4}$ , or  $B\flat$  (in addition to the addition of  $\hat{2}$  for the  $ii_3^4$ ). This difference is amplified by the melodic and ornamented voice-leading that leads the  $B\sharp$  to  $B\flat$ :

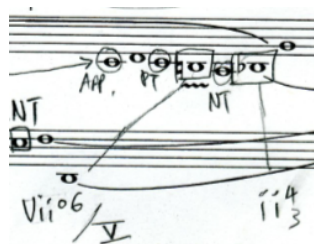


Image 3 (Chromatic Inflection of  $\hat{4}$ )

In quater-comma meantone, the difference between  $B\flat$  and  $B\sharp$  is just 76 cents (as opposed to the full 100 cents in equal temperament) [3]. Thus, this progression from one predominant chord to another is greatly intensified by the minute movement of this single note.

Towards the end of line 2, the final cadence in this beginning F-major section is heard, but the  $V^7$  resolves to a  $I$  with a  $\hat{5}$  pedal beneath the tonic triad. But this second-inversion tonic triad does not function as a cadential  $\hat{4}$ , because it quickly modulates into g-minor/G-major, aided by a melodic bass line. Thus, we have another instance of a subverted resolution to the tonic, creating a sense of continued motion without repose.

Beginning with the modulation to G at the end of line 2, we have entered into section 2 (as shown on Table 2), which is characterized by the *style brisé* texture and a modal ambiguity between g-minor and G-major. First, we discuss the modal ambiguity. Harmonically, the section is firmly in g-minor until the middle of line 4, where  $V_5^6/iv$  resolves to a  $IV^6$ . Until that moment, chords such as  $i_4^6$ ,  $VII^7$ , and  $ii^{o6}$  are heard. But despite chords that imply g-minor, modal ambiguity still exists throughout this section because of  $\hat{6}$ , which alternates between  $E\flat$  and  $E\sharp$ :

The image shows a handwritten musical score for two staves. The top staff has notes with red boxes around them, with labels 'E-flat' and 'E-natural' pointing to specific notes. The bottom staff also has notes with red boxes and labels 'E-natural', 'E-flat', 'E-flat', and 'E-natural'. Below the staves, there are Roman numerals:  $V^7$ ,  $V^6$ ,  $V^4/iv$ ,  $ii^{o6}$ ,  $VII^7$ , and  $V^6/iv$ . There are also annotations like 'g.m.', 'G.M.', 'Pedal', 'bis', '3rd resolves down', '1st resolves up', and '(Neighbor chord to)'. The notes are written in a cursive, handwritten style.

Image 4 (Modal Ambiguity with  $\hat{6}$ )

At the end of line 2, an upper neighbor of  $E_b$  within the  $V^7$  strongly implies G-minor. But exactly in the next chord of  $V^6$ ,  $E_n$  is used as appoggiaturas. Then, another  $E_b$  is heard as part of the  $ii^{o6}$  triad, then back to  $E_n$  as neighbor notes to the  $V^6/iv$ . Once again, the difference between  $E_n$  and  $E_b$  is only 76 cents in quarter-comma meantone, making the alternation between  $E_n$  and  $E_b$  more exciting and expressive.

Next, we discuss the *style brisé* texture of this section. As discussed in section 1.2, this texture calls into prominence the movement of independent voices through rhythmically displaced statements of melodic fragments in each voice. Consider for example, the following segment from end of line 3:

The image shows a handwritten musical score for two staves. The bottom staff has a red arrow pointing to a note with a label 'Sustained D from previous line'. There are Roman numerals:  $V^4/iv$ ,  $ii^{o6}$ ,  $VII^7$ , and  $V^6/iv$ . There are also annotations like 'g.m.', 'G.M.', 'Pedal', 'bis', '3rd resolves down', '1st resolves up', and '(Neighbor chord to)'. The notes are written in a cursive, handwritten style.

Image 5 (Style Brisé)

Simply looking at the roman numerals, the progression of  $V^4/iv$ ,  $ii^{o6}$ ,  $VII^7$ , and  $V^6/iv$  seems highly unusual. But the voice-leading (accentuated by the *style brisé*) gives coherence to this passage. Note that the expected resolution of  $V^4/iv$  to  $iv$  and the actual resolution to  $ii^{o6}$  actually have only one pitch difference:  $A$  instead of  $G$ . Thus, in the  $V^4/iv$  (a G dominant seventh chord), the leading tone  $B_n$  still resolves up to  $C$ , the seventh factor  $F$  still resolves down to  $E_b$ , the bass still moves down by a step from  $D$  to  $C$ , but the fifth (and the root of the chord)  $G$  moves up to  $A$  (instead of remaining at  $G$ ), forming  $ii^{o6}$  rather than  $iv$ . Then, the  $A$  slides down to  $F$ , forming the  $VII^7$  chord (along with soprano voice of  $E_b$  moving up to  $F$ ). Then the bass moves down chromatically to  $B_n$ , and along with step-wise motion in other voices, we are right back at  $V^6/iv$ . Thus, the chords  $ii^{o6}$  and  $VII^7$  in between the  $V^4/iv$  and the  $V^6/iv$  can be said to be a “neighbor chord”, slipping voice-leading wise to the neighbor chords, then right back.

After the  $V_5^6/iv$  resolves to  $IV^6$  in the middle of line 4, it quickly moves to a  $V$ , with a long and dramatic pedal point on  $D$ . This dominant chord is also the first in a circle of fifth sequence, which takes us into  $B\flat$  major. The  $V$  in the key of  $G$  is reinterpreted as  $V/vi$  in  $B\flat$  major, which resolves to  $V_3^4/ii$  as interlocking secondary dominants, beginning the circle of fifth sequence:

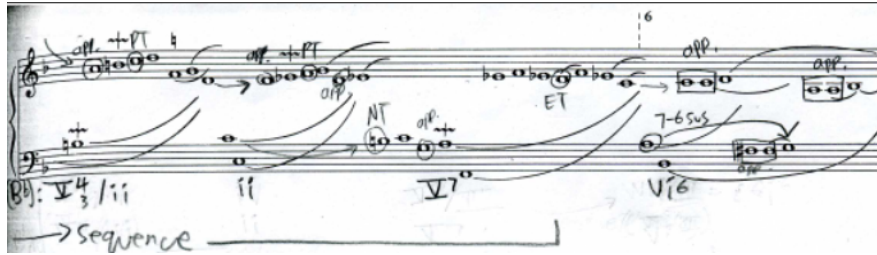


Image 6 (Circle of Fifth Sequence)

We can observe *style brisé* at work here once again: while the melodic line in the right hand heavily gives the impression of polyphony, voices appear and disappear out of thin air. For example, the melodic descent up to the high  $D$  above the  $V_3^4/ii$  seems to be a melody, with the alto voice filling-in almost an octave below with the figure  $F - G - D$ . But then the apparent soprano melody disappears into thin-air, with the hitherto alto voice continuing on as the melody. Also consider the very final two notes of the above excerpt, where the alto voice playing  $A - A - G$  appears out of nowhere into the texture.

Towards the end of line 6, we see another tension between the major and minor mode, this time harmonically:

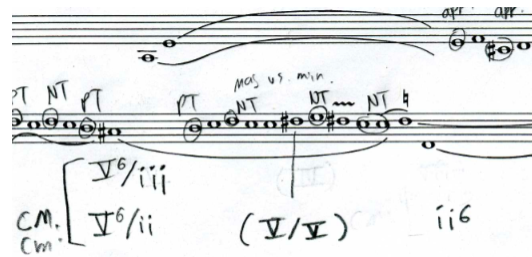


Image 7 (Harmonic Tension between Major and Minor Mode)

Now in the key of  $C$ , the  $V^6/ii$  at first seems to resolve to  $ii$ , with the melody in the tenor voice that first sound a  $F\sharp$ . But an  $F\sharp$  sounds immediately afterwards, implying an interlocking secondary dominant resolution to  $V/V$ . But the tenor melody line returns to  $F\sharp$ , resolving as  $ii^6$ . Once again, the tension between the major and minor mode plays an important role in creating tension in this passage.

Thus so far, section 2 (as shown on table 2) achieves its gradual build-up of tension through modal ambiguities, circle of fifth sequences, and modulations from  $G$  to  $B\flat$  to  $C$ . This tension seems to come to its pinnacle with a *trait*, which is French term for a rapid scale passage (Ledbetter). Immediately following the trait,  $V_5^6/V$  resolves to  $V^+$ , and the augmented fifth resolves by semitone to the perfect fifth, giving  $V^7$ :



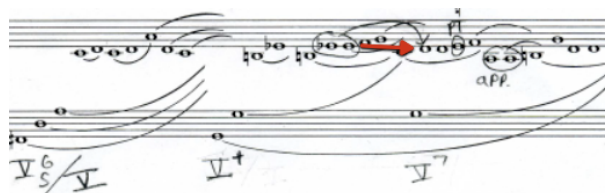


Image 8 (The Augmented Dominant)

Note that the strongly dissonant  $E^b$  (especially in quarter-comma meantone) is also the pitch that created the modal ambiguity in line 2. Thus thematically, the resolution of this  $E^b$  to  $D$  in this passage continues the variation of inflection on this pitch.

This leads us into section 3 (on table 1 above), which is a quotation from a Froberger's elevation Toccata. First, let's compare how the quotation differs from the original:



Image 9 (Excerpt from Froberger's Elevation Toccata 5)

Quotation from Froberger's Elevation Toccata V;

A handwritten musical score for a quotation from Froberger's Elevation Toccata V. The score is written on a grand staff (treble and bass clefs) and includes extensive annotations. Above the staff, there are notes like "app.", "NT", "PT", "Bric", "Neighbor Group", and "Sus. 4-3". Below the staff, there are chord symbols:  $IV$ ,  $i:06$ ,  $V^7$ ,  $cad^6_4$ , and  $V$ . The bottom section is labeled "End of Quote" and includes more annotations like "NT", "PT", "app.", and chord symbols  $V^6/V_1$ ,  $V_1$ , and  $cm: ii$ . The page number "10" is visible at the bottom right.

### Image 10 (The Quotation in Couperin)

As discussed in section 1.2, the Froberger toccatas were one of the stylistic origins of Couperin's unmeasured preludes. The differences in notation between the original excerpt and the quotation is visually deceptive: performed in the stylistic manner, both the original Froberger and the Couperin would sound very similar. However, there is a key difference: the toccata is an organ work, while the Couperin prelude is a harpsichord work. Thus, Couperin adds ornaments and traits in the quotation that would not work on the organ, but adds expressiveness and interest on the harpsichord. For example, in the second measure of the quoted Froberger, the right hand simply resolves the second between  $D$  and  $C$  by moving the  $C$  down to  $Bb$ . This can sound flat on the harpsichord, due to the lack of sustain that the organ has. Therefore, Couperin adds an ornamented melody here, circling melodically around the  $Bb$  before settling there. This melodic line is also in *style brisé*, once again demonstrating the conflation of the organ and lute style. Also, in the fifth measure of the quoted Froberger, the melody jumped from an  $E$  up to the  $C$ . Couperin adds an ascending scale, connecting the  $E$  up to the  $C$ . Once again, the overall effect is more florid and idiomatic of the harpsichord.

The overall texture in this quotation is in contrast with the rest of the prelude thus far: a relatively simple and linear melody is accompanied by slow-moving bass and tenor notes. This creates a relatively quiet sound on the harpsichord. I have chosen to accentuate this aspect in my performance by switching to the upper manual for this section.

Couperin takes us out of the quotation with a sweeping scalar bass line that rises to  $F$  above middle  $C$ , the highest pitch of the bass in the entire prelude. From this highest point, a relatively fast and dramatic descent follows, with the bass reaching its lowest note in the entire piece of  $A$  below 2 octaves below middle  $C$  at the end of line 12. Along the way, the bass line also sounds an  $Ab$ , a note non-existent in typical quarter-comma meantone tuning:

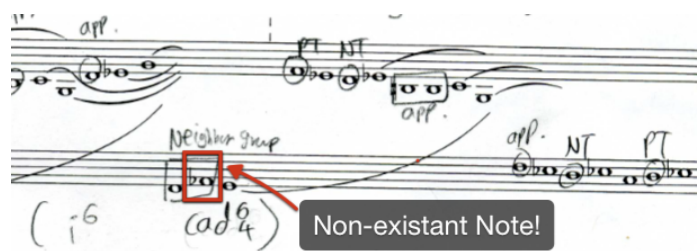


Image 11 (The Appearance of  $A_b$ )

There are two ways to approach playing this pitch. If one stays with normal quarter-comma tuning, then a  $G\sharp$  would be played instead of  $A_b$ . These two pitches have a difference of 41 cents. Thus, the  $A_b$  will sound “out-of-tune”, and will be much closer to the  $G$  that it descends to. This can be very dramatic, especially in this context of a bass line that is slowly descending against rolled chords in the right hand. Alternatively, one can tune this specific pitch separately to a  $A_b$  (as opposed to  $G\sharp$ ) before the performance. As of writing, I have not decided upon the method to use for my own performance.

The texture in this final section is a slow moving bass-line with either rolled or arpeggiated chords in the right hand. Because of this, there is less melody to be



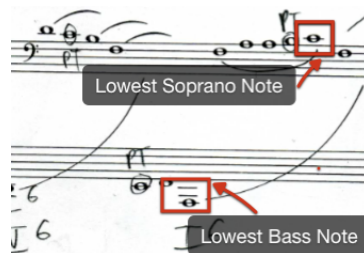
heard in this section. Although the chord progressions are much more diatonic and straight-forward in this final section, there is one interesting moment:



**Image 12** (The Dominant-Seventh Subdominant)

In what would otherwise be a  $iv_5^6$  to  $V_5^6$  progression in *C*-minor, the bass is ascending a melodic minor scale from *G* up to *C*, thus plays an  $A\flat$  instead of  $A$ . The resulting quality of the  $iv_5^6$  is actually a dominant seventh chord, perhaps more suggestively notated as  $IV_5^6$ .

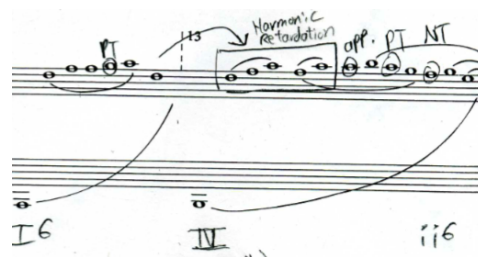
While the bass has been descending steadily since its highest pitch at the beginning of line 10, the soprano line only reaches its local highest pitch at the middle of line 11, where the  $V_5^6$  shown above resolves to  $I^6$ , much like at the beginning of the piece at the end of line 1. With this resolution to the first-inversion tonic, the soprano reaches its local maximum of *C*, and begins a dramatic descent, reaching its lowest pitch of middle *C* simultaneously with the lowest bass note of *A*:



**Image 13** (The Global Minimum of the Prelude)

Thus, both outer voices start at their highest pitches, then dramatically descend to their lowest pitches of the entire piece within this final section, by way of a non-existent note! The outer voices are especially resonant on the harpsichord at this low register. This creates for a very dramatic and exciting lead-in to the final cadence.

As the lowest bass note of the entire piece is heard, the harmonic rhythm slows down as well, as if weighed down by the heaviness of this low note. In fact, the right hand even exhibits harmonic retardation, with the right hand resolving to the next chord after the bass has already moved:



### Image 14 (Harmonic Retardation)

In fact, Ledbetter uses the harmonic rhythm of this final section to demonstrate Couperin's imitation of the lute style:

Couperin varies the rate of chord change in order to build up tension before the final cadence. The harmonic intensity and preparation of the cadential dominant chord are governed by the number of notes that intervene between the bass pitches. [...] Such finesse and sensitivity in the exact placing of each note is typical of the best lutenists and further demonstrates the remarkable precision of the unmeasured notation [13]:

Ex.30 Variable rate of chord change in Louis Couperin: Prelude (MORONEY, no.13 (p.74, closing section))

The image shows a musical score for a lute-style prelude. It consists of two systems of music, each with a treble and bass clef. Brackets above the notes indicate the number of notes per chord: 6 notes, 12 notes, 5 notes, 6 notes, and 9 notes. The score is in a key with one flat (B-flat) and a common time signature.

### Image 15 (Ledbetter's Analysis)

Indeed, the most number of notes per chord is present on the *IV* chord due to the harmonic retardation, while the second most number of notes is present on the final dominant chord of  $V^7$ , aiding in the usual *retard* at the dominant chord of the final cadence. Thus, whereas the prelude is performed freely, the number of notes per chord strictly controls the pacing of the harmonic motion.

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