



# A Practice-Based Research on the Articulation of Baroque Keyboard Prelude: A Comparative Analysis of Recorded Performances

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**Abstract.** The baroque score needs more instruction in articulating or performing the written notes. It is problematic for non-specialists or beginners as the pieces are not written for the modern piano and require understanding to characterize the works. Using the Prelude from "Prelude and Fugue No. 2 in C minor, BWV 847" by J.S. Bach, this study compares the articulations through the recordings of two pianists. The transcriptions reveal the differences in how motifs or subjects are performed. The findings demonstrated that subtle differences in articulations could affect the interpretation, particularly the piece's tempo and overall dynamics.

**Keywords:** Baroque articulations, Bach's Preludes, keyboard, interpretation.

## 1 Introduction

Prelude No. 2 in C minor, BWV 847, is an introductory music that precedes the Fugue. Articulation in music refers to the movement on a single note or between multiple passages [1]. The articulation governs how long a sound will last and how its attack and decay will sound. Essentially, articulation determines the sound of a single note, but for modern pianists playing Baroque keyboard pieces, articulation is a means of expression.

The texture of baroque pieces is often polyphonic. Polyphony consists of several interdependent, overlapping melodic lines with multiple melodies and countermelodies. It has a continuous bass line [2]. Articulation may affect music's texture of music, impacting its dynamics, length, and the relationship between notes, such as the form of group legato notes that are linked together.

It is essential to play in style and correct expression through the desired articulation [3]. Comparing articulations between the keyboard and the other instruments can be challenging due to the differences in the instruments' characteristics and capabilities. Moreover, different notation marks offer various indications of articulations, and some suggestions may cater to specific instruments.

Bach did not indicate markings in his score for keyboard music compared to other mediums, such as strings and woodwinds. Additionally, the articulations must be

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modified for the piano's contemporary idiom as opposed to the organ or harpsichord, the instruments for which they were initially composed. Very slight differences or articulation may create diverse effects in terms of performance and the overall outcome of the piece. One such example is the impact on speed based on the type of articulation the performer employed, even if they both play the same instruments. It is neccrate to make comparisons of articulations between pianists and how the manipulation of these nuances creates an interpretation that affects aspects such as tempo.

Therefore, the research question for this study is: what are the articulations used for this Prelude between two existing piano recordings, and how is the tempo affected in the performance?

## **2 Literature Review**

### **2.1 Articulation and tempo in continuous figuration type Preludes**

Except for dance pieces, performers can determine the preferred tempo from the time signature, rhythmic patterns used, the selection and placement of note values, and their titles. Some words or indications on score today known as indications of speed are indications of character, for example, *vivace* and *largo* [4]. Comparatively, fast-moving early music such as this seventeenth-century Prelude must often be performed at a slower tempo than typical passagework from the nineteenth century to convey the intricacies of articulation. In short, Baroque composers adopted a non-legato articulation for single notes. The slur is applied to recurring figures with less than four notes. For variety, detached notes alternated with short and long slurs as a form of expression [5, 6, 7].

For Bach's Preludes of continuous figurations, such as the no. 2 in C minor (BWV 847), the semiquavers (sixteenth notes) are played legato, detached or with two or three slurred notes followed by one or two staccato or detached notes with uniformed articulation. In contrast, the slower-moving notes are mainly detached (Gan, 2020, pp. 3-5) [6]. Although this Prelude typically accentuated the strong beats - first and third beats (Gan, 2020, p.4), continuous figuration led to the most contrasting execution between pianists (p.10) [6]. A closer look at this Prelude will show the kinds and combinations of articulations that performers have adopted.

### **2.2 Piano as a medium**

The early keyboard instruments like the harpsichord, the clavichord, and the organ had moderately short and tight keys [4]. The clarity of the harpsichord's sustained sound is more challenging to copy on the piano than the bright attack [8, 9]. Historical treatise on harpsichord performance described utilizing just the strength of the fingers to go after the keys, keeping the hand and arm weightless [9]. An early document by reference [10] explains that the type of finger development effectively produces sonic clarity that describes baroque keyboard music to oblige the scope of piano articulation that requires weight in addition to finger weight from weighted techniques.

### 2.3 Performer's perspective as a method to evaluate articulations

Personalized or individual elements of expressive performance in Baroque organ music included local tempo changes, onset asynchronies, and articulation and overlaps [11]. Baroque expressiveness in reference [12] is a term to investigate the existence of alternative style-specific expressive qualities in elaborate performance through recordings.

Recording quality has no bearing on evaluations of the baroque expression when listening to the recordings because it is possible to distinguish between minute details like legato and staccato articulations. According to study in reference [12], these distinctions are viewed as perceived qualities applied to various aesthetic variables. In a recent study on Bach's Preludes by reference [6], a comparison between five recordings and performers found freedom of articulation and highly personal performance. At times, pianists disregarded the articulation principles in baroque treatises.

## 3 Methodology

The type of research is a case study. Alongside historical research and score analysis, the analysis comprised transcriptions of articulations from existing music recordings. In addressing the research questions, a suggestion of articulations in the Baroque period in keyboard music provided the basis for implementation. From the literature, possible tips for articulations for the piece are derived.

For this study, two recordings of the Prelude are selected to reveal contrasting articulations. Transcriptions of selected passages from the recordings are made to illustrate the articulations. By extracting a particular phrase, a closer analysis of each performance's overall texture can be documented, followed by a more detailed transcription, such as slurs and staccatos of the semiquavers.

A music score is used as a reference and for transcribing the articulations. The music score depicted in the figures or the purpose of presenting these articulations is extracted courtesy of the edition by David Castellone in reference [13]. It is available in the public domain under the Werner Icking Music Collection. A brief analysis of the score provided the piece's structure and outlined the crucial divisions and forms within the music. The articulation examples are drawn onto the score as part of the analysis. A graph to chart tempo fluctuations of both recordings in a snapshot (Rink, 2002, p. 46-48) is provided to map the music's temporal landscape [14].

### 3.1 Discography

The discography and the label of the recordings include information about the music performed.

The first recording is by Siatovslav Richter, from the album J.S. Bach: The Well-Tempered Clavier [Box Set] [15]. Richter recorded the performance in 1970 at Schloss Klessheim, Salzburg, Austria. The recording was released under RCA Gold Seal (Europe). The selected recording featured a playing style that was fast and exciting.

The rendition captured the attention of listeners and focused on the technique. Richter's recording of music was extensive, and his version offered "a depth of interpretations, virtuoso technique, and a vast repertoire, which included almost 80 programs, excluding chamber works.

The second recording is by Glenn Gould [16]. The album Johann Sebastian Bach - Glenn Gould – The Well-Tempered Clavier Books I & II comprise four volumes [17]. Recorded in 1963 under Columbia Records, New York City, USA, Gould created a musical texture that "is more understandable and sheds some light on less obvious problems with counterpoint, hypermeter, and harmonic strain" [18]. Both recordings are landmarks of piano performance and have been re-released multiple times.

## 4 Findings and Discussion

### 4.1 Score Analysis

The purpose of score analysis is to identify the structure and form of the piece. There are several publishers with different editions for scores. With other editors, the score of a similar work would have different or additional qualities like various indications and expression markings such as tempo, dynamics, and suggested articulation. The urtext edition is highly regarded for its authenticity and accurate representation [19]. By using an urtext edition, performers and scholars can have a reliable and trustworthy source that preserves the integrity of the music and facilitates a more accurate interpretation and analysis of Baroque Preludes. A popular edition is by Barenreiter, edited by Alfred Durr in 1989. However, to illustrate the score in this paper, musical excerpts are taken from the public domain.

**Table 1.** Bach Prelude in C minor Op 847 No. 2: Format and tonal plan

Section	A	B	C	
Bars	1 – 13	14 – 27	28 – 38	
Pedal Point	1-6 Tonic Pedal	Bar 21- Dominant Pedal	28-33 Dominant pedal and tonic pedal	34-38 Tonic Pedal
Tonality	C minor – E flat major (bar 4)	E flat major—C minor (bar 18) _ Cm/G (bar 21)	G maj/ min -- C min	C major --C minor (ends in tierce-de-picardie of C major)
Key	C minor			

This prelude consists of a regular metrical pattern that changes harmony on each bar. A dominant pedal in bar 25 leads the music to a deceptive resolution and a recitative, the Adagio passage at bar 28.

### 4.2 Motif

The motif or subject of the Prelude is repetitive or has a continuous figuration which lasts for 24 bars.



Fig. 1. Bar 1 from Bach Prelude in C minor Op. 847: subject, from [13]

Five bars to the end, the Adagio passage in bar 34 comprises an ascending scalic passage in the right hand.

### 4.3 Articulations

The following are examples of the contrast of articulations between recording one and recording two on selected passages:



Fig. 2. Bar 5 and 6 of Bach's Prelude in C minor, Op. 847, recording 1

The overall impression of the first recording is that all semiquavers are played short and detached. The first and third beats are slightly accented with a combination of staccato. The first and third beats are more striking than the other semiquavers, where there is an impression of a slight attack on these beats (indicated by accents). The second and fourth beats remained staccato, less prominent, and evenly played with the rest of the semiquavers. The first recording's articulation is consistent throughout the piece, with a regular pulse offering a steady motion and build-up. The regulated tempo with an anticipated pulse gave an impression of clockwork machinery and a perpetuum mobile effect.



Fig. 3. Bar 5 and 6 of Bach's Prelude in C minor, Op. 847, recording 2, alternating types of articulation (legato, then staccato) on the first and third beats

For the second recording, the overall impression of the recording has a drier, crisper sound. The semiquavers are played staccato. However, the second recording presented

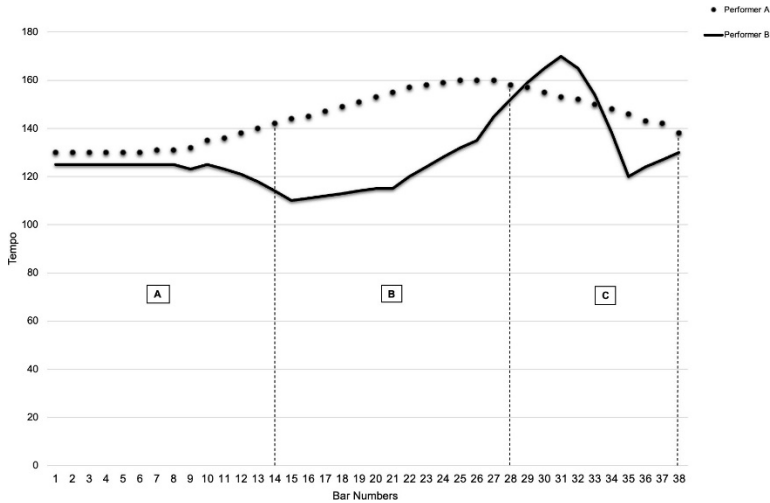
the first and third beats with varying qualities. The opening for at least four bars featured all notes played almost evenly in staccato. The point of contrast occurred in bar 5 (Figure 3), where the E flat is played tenuto and held to nearly a full crotchet, creating a sustaining cantabile (singing-like) quality, and similarly on the third beat. Compared to the first recording, the tenuto quality makes a slight pushback or delay on the tempo rather than a strict regular meter. Such execution created an interest on top of the change of register.

To further emphasize the legato contrast, the proceeding bar (bar 6) immediately reverted to an all-staccato, with an even shorter and drier staccato of the first and third beats. Such a pattern of alternating the articulation of the first and the third beats from legato followed by an all-staccato phrase in the following bar occurred selectively, giving a characteristic of Gould's performance. Similarly, alternate figurations occurred between bars 7 to 8, then in reverse order between bars 9 (legato/ tenuto) and 10 (staccato). Such is a feature of this performance where articulations alternate between legato and staccato on the repeated figures.

Legato is used to point out the harmonic shift of a major third (A natural and F) in bar 15 of the second beat within a minor passage. At the same time, there is a slight holding on to the notes, a diminuendo and a touch of pedal. On the other hand, legato with a combination of accents is used to point out important longer phrases of harmonic changes and important pedal points. Before entering section C, the texture switches to a broken chord interlude section of 3 bars; legato adds tone and contrasts to the bass note. This gesture is accompanied by a gradual crescendo on the left hand on the first beats beginning from bar 19. With a crescendo, the legato brought out the first notes on both hands by bar 21, drawing attention to the dominant pedal (G) on the left hand on each first beat from bars 21 to 24. Similarly, the legato is played on the first beat of the right hand, pointing out the rising E flat – F sharp – G - A flat dissonances before it resolves to G dominant 7 (bar 25). These subtle variations of articulation created a sound layering and increased dynamics to contrast the section before proceeding with the broken chords of section C.

The different approaches concerning articulation warrant consideration regarding the tempo decided for each performer. The first recording acquires consistency or rhythmic pulse accompanied by similar articulations, and the second performer contrasts alternating patterns or groups of articulations within the piece as a feature of the performance. Therefore, it is necessary to consider the tempo to promote the aesthetics of both versions.

For this purpose, a graph to illustrate the tempo contrast between the two recordings is provided to document noteworthy tempo changes (Figure 4).



**Fig. 4.** Illustration of tempo between recording/performer one (A), and recording/performer two (B). Transcribed by Hamdi, NFH

In addition, using a graph can provide an accurate speed indication for the different sections. The diagram gives the designation of the three areas depicted in the piece and indicates if each section adopts any tempo change. The dictation of speed between the two recordings reveals the contrast between recordings 1 and 2. Recording 1 (dotted line) is faster, beginning at 130 bpm. To complement the pulse and character of the performance, the graph reveals that the tempo increased as the piece developed.

Whereas in recording 2, the performance began slightly slower and remained at a consistent tempo. However, there are speed fluctuations as the piece progresses and even dips significantly in parts. The changes are constant with the various articulations employed by the performers, including different groupings of articulations alternating between legato or staccato. Characterizing these phrases between the legato and dryer staccato created different textures in the music. In presenting these characteristics, the performer is ascribed to leaning towards selected notes or delay for effect. In addition, the tempo changes closely relate to different sections' textures or to mark harmonic changes within the work. A significant slowing down at bar 25 emphasizes the textural difference, and even more so at bar 27 to highlight the dissonances between A flat - G# - C of the left hand. Such slowing down of the tempo ceased in bar 28 at the dominant pedal section, where the tempo accelerates (bars 28 – 33) immediately. However, the acceleration is calculated, slowing down enough to shape the end of phrases or cadences, providing breath marks, and accommodating change of hand positions to reach a high register. Overall, the tempo of this section surpassed recording 1. While the first recording remained consistent throughout, the second depicted a broader range in tempo fluctuation to accommodate the various articulations and contrast through the piece's harmonic structure and textures.

As a result, effectively presenting the types of articulation can impact tempo as the performer embeds these peculiarities for a convincing performance. Articulation is not

merely about creating texture or length of notes; tempo manipulation can be considered in terms of how the characteristics are introduced. In addition, the application of legato or tenuto within the music created a rounder and fuller tone, particularly on the modern piano, creating a broad effect on the instrument, and influencing the overall dynamics of the piece. In conclusion, the choice of articulation significantly impacts the composition's general character and mood.

## 5 Conclusion & Recommendations

### 5.1 Conclusion

Based on the recordings, the keyboard's articulation and the performer's versatility are evident. Potentially, ornamentations and different combinations and patterns can offer complex musical expressions. Subtle distinctions such as articulations of staccato and legato are perceived features used across aesthetic variables.

Highlighting other musical phrases through various articulations allows performers to explore and expand the performance through different music offerings. Although the Prelude to No. 2 in C Minor, BWV 847, may appear simplistic and played widely by pianists, it is an excellent example of Bach's mastery of composition and demonstrating the keyboard's potential to convey a wide range of emotions. In contributing each one's distinctive interpretation to the work, performers can experiment with various combinations of articulations. The variations in tempo of this prelude necessitate a high level of technical competence to perform them accurately.

### 5.2 Recommendations

A study comprising recordings to explore other possibilities and combinations of articulations within the similar work or continuous figuration Prelude type.

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**Paper Contribution to Related Field of Study.** Preludes with continuous figuration can be given many qualities by choosing how to interpret a piano performance through subtle articulation adjustments.

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