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# Neo-classical Etude for Flute Solo: Evaluation of Karg Elert "op.107 no.30 Chaconne" in Terms of Technique and Pedagogy

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**ABSTRACT**

Sigfrid Karg-Elert, one of the German organ composers of the 20th century, introduced the etudes titled 30 Caprices for Flute Solo Op. 107 into the flute education repertoire to meet the technical demands of the period's orchestral music and flute repertoire. Among these etudes, no.30 Chaconne is a concert etude combining elements that require advanced technique with musical expression and style. This research, which aims to examine Karg-Elert's op.107 no.30 Chaconne etude in terms of form, technique, and pedagogy, is a descriptive case study. A general form analysis of Chaconne was made in the first dimension of the research. Chaconne was examined from a technical perspective in the second dimension of the study. The techniques included in the etude are categorized as articulation technique, finger technique, sonority/embouchure technique, and ornaments. The techniques' usage rates in the etude are determined by frequency and percentages. Among the various articulation techniques included in the etude, the legato technique has the highest usage rate, with 42.10%, and among the fingering techniques, chromatic scales had the highest at 30.26%. In sonority techniques, the usage rate of wide intervals of octave and above is very high at 39.47%. In this context, it has been determined that the most decisive difficulty in the etude comes from the use of wide intervals, and it has been concluded that a significant level of flexibility and embouchure control must be provided in the performance of the etude. The technical difficulties included in the etude were determined on a variation basis in the last dimension of the study, and a study guide consisting of original exercise suggestions was presented. This study is novel in the literature as it presents a study guide on Chaconne. Also, this study is thought to contribute to musical literacy by enabling performers to comprehend Karg Elert Chaconne multi-dimensionally.

**Key words:** Flute, Flute Education, Karg-Elert, Concert Etude, Musical Literacy, Neoclassical Music

## INTRODUCTION

Etudes are didactic and functional musical pieces created to teach specific technical skills in the instrument repertoire. Karg Elert's op.107 Caprices, on the other hand, have the characteristics of a concert etude with their use of technical and musical ideas beyond their didactic function. Concert studies are defined as virtuoso pieces in which musical elements are the driving force. In these etudes, the characteristic elements of music are intertwined with technical elements. As with etudes, didactic aims are not always evident. The purpose of musical expression and style comes to the fore (Petanova, 2019, p. 17). With its pedagogical, virtuosic, and musical aspects, concert etudes were used by composers as a tool for the application of various styles and techniques in the twentieth century (Kang, 2010, p. 98).

According to Ferguson and Hamilton (2001), concert etudes are compositions that combine the function of a technical exercise with musical inventions equivalent to other genres in the concert repertoire (as cited in Scott, 2005, pp. 20-21). The first examples of concert etudes were seen in the piano repertoire. Opus 10 etudes published by Frédéric Chopin in 1833, which have a significant place in the Romantic period piano literature, are among the first examples of the etude form suitable for performance on stage (Bird, 2020, p. 6). Chopin's Opus 10 etudes and the Opus 25 etudes he published subsequently took the etude form beyond its pedagogical purpose and gave it the quality of a virtuoso concert work. With these concert etudes, in which musical meaning is always at the forefront, Chopin explored the technical capacity of the piano in a much more comprehensive way than any other composer before him, and these etudes raised the technical and musical expectations for the performer to the highest artistic level (Marler, 1990, p. 21). Another name that was influential in the concert etude genre

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was Franz Liszt. Liszt made this genre even more virtuoso for the piano. In the late nineteenth and early twentieth centuries, names such as Brahms, Saint-Saens, Rachmaninoff, Scriabin, Debussy, and Bartok also wrote concert etudes and contributed to this genre (Kang, 2010, p. 3).

Concert etudes have not gained as much recognition in the flute repertoire as in the piano repertoire. Although flute literature has a vast repertoire of etudes, there are very few concert etudes. Among these, apart from Karg Elert 30 Caprice, Piazzolla's Tango Etudes (1987), the flute transcription of Paganini 24 Caprice, Tsybin's 10 Concert Etudes for Piano and Flute (Petanova, 2019, pp. 18-19) and Krzystof Zgraja's 3 Virtuoso Flamenco Etudes can be exemplified.

Sigfrid Karg-Elert (1877–1933) is considered one of the most important German organ composers of the 20th century. Among the composers of his period who did not depart from the aesthetic understanding and tendencies of the 19th century, Karg-Elert attracted attention as a composer influenced by innovative tendencies. He studied composition and piano at the Leipzig Conservatory in 1897 and was appointed a composition teacher at the same institution in 1919. In addition to his teaching career, his music has gained international popularity, especially in countries such as England and America (Busch & Herchenroeder, 2011, p. 43). His compositional style has varied throughout his career, influenced by many genres. In his works, the effects of the Baroque and Classical periods, the effects of the expressive style of German romantic composers such as Brahms and Wagner, the effects of the impressionist approach of contemporary French composers, and the effects of the modern style of his contemporary composers such as Schönberg and Scriabin are seen (Scott, 2005, p. 14).

The composer has a total of twenty-two works written for flute. Among his published works other than *op. 107 30 Caprice* are *op. 81 Kanzone*, *op.114 Sinfonische Kanzone*, *op. 140 Sonata Appassionata*, *Sonate in B Major*, *Jugend*, *op. 134 Impressions Exotiques* and *op. 135 Suite Pointillistique* (Tasi, 2008, pp. 10- 14). The composer's wide range of expression is displayed in his flute works in different styles and forms ranging from baroque to modern (Scott, 2005, p. 12). The styles of these works vary widely, from late romantic to expressionist and impressionist influences (Baek, 2022, p. 5). In *op. 107 30 Caprice*, some etudes clearly show the characteristics of the neo-classical style. In this sense, the styles used by Karg-Elert in his flute compositions are very diverse, and this diversity offers the composer's innovative composition style.

Since its publication in 1919, 30 Caprice has become important in the 20th-century flute repertoire. With the advances in the structural development of the flute and the changing role of the flute in the 20th-century orchestral repertoire, Karg-Elert has adopted the mission of expanding the flute language by forcing the performer at the highest level (Scott, 2005, pp. 1-19). Toff (2012, p. 132) showed the 30 Caprice among the etude types designed to infuse technique with style and expression. Pellerite (1978, p. 22) showed Karg-Elert's 30 Caprice at the V-VI difficulty level in his book titled *A Handbook of Literature for the Flute,* in which he categorizes flute literature according to genres and levels (from I to IX). He also described these etudes as short and modern, offering various technical exercises. Bernold et al. (2002) also categorized Karg-Elert's 30 Caprice among the etudes that should be played in ten years or more in their repertoire book titled "*10 Ans Avec La Flute*".

As stated in the preface of 30 Caprice, the primary purpose of Karg-Elert in composing these studies is to create an educational resource for the unusually complex structure and technical requirements of modern flute works and modern orchestral works of composers such as Strauss, Mahler, Bruckner, Reger, Schönberg, and Stravinsky. These etudes combine the classical techniques of composers such as Bach, Haendel, and Mozart with the modern understanding of the 20th century (Tsai, 2008, pp. 238-239).

The 30th caprice, "chaconne," is described as a synthesis of the technical difficulties found in the previous 29 caprices. In Chaconne, Karg-Elert combined the technical exercises and patterns he used in previous caprices with the chaconne form. In this sense, the 30th caprice has a very significant place technically and musically among the 30 Caprices (Tsai, 2008, p. 186). The tonal center is in f minor and is written in triple meter. It starts with a descending bass ostinato in f minör and consists of 17 variations based on this ostinato, progressing from simple to complex.

Chaconne, a technically and musically rich concert etude, has been included as a compulsory piece in the repertoires of international competitions. For example, it was a part of the compulsory repertoire in the 6th Jean Pierre Rampal flute competition, one of the most prestigious flute competitions in the world (Tsai, 2008, p. 186). In addition, it has taken part in the repertoires of prestigious competitions such as the Beijing International Music Competition held in China in 2012, the International Music Competition Piano & Flute (Concours de Geneve, 2014) held in Geneva in 2014, and the Nicolet International Flute Competition held in 2022.

Chaconne bears the characteristics of a Neo-classicist style, in which elements from past periods are blended with the understanding of the 20th century. Neoclassicism, which emerged in the 20th century, refers to a movement in which musical features from the Baroque and Classical periods are integrated into modern understanding. The neoclassical movement led to the revival of forms and techniques of the 16th and 18th centuries, such as madrigal, concerto grosso, ricercar, passacaglia, ostinato, and counterpoint (Apel, 1972, pp. 568-569). This movement emerged as a reaction to romanticism and impressionism. Many composers returned to classicism. Form and technique rather than content, an impersonal, intellectual, and abstract idiom rather than a personal, emotional, and programmatic idiom, artistry and craftsmanship rather than imagination and creativity have come to the fore in compositions (Thompson & Slonimsky, 1949, p. 1247). Paul Hindemith (1895-1963) is shown as the symbol and leading representative of this movement. Especially in Hindemith's instrumental works, practices that take Beethoven and Bach as models can be seen. During this period, many composers

continued the tradition and used innovations in their musical languages together with older methods. In particular, the preservation of the tonal center and melody still existed. The neo-classicist approach also found a place in French music. Composers of the period, such as Arthur Honneger, Darius Milhaud, and Francis Poulenc, known for their contributions to the flute repertoire, were among the representatives of the neo-classicist trend in France (Boran & Şentürkmez, 2018, p. 273).

When the national literature was scanned, no research was found addressing Karg Elert's opus 107 30 Caprice or Chaconne. When the international literature was reviewed, studies examining Karg Elert's Chaconne from various perspectives were found. In her doctoral thesis, Scott (2005) included the style, form, and harmonic analysis of the first 29 Caprices. She examined the 30th Caprice Chaconne in terms of its ostinato structure and compositional materials common with the other 29 etudes. In addition, she grouped and categorized 30 etudes according to their musical style, composition style, the period they represent in neoclassical style, and whether they qualify as solo flute works. In her doctoral thesis, Tsai (2008) analyzed 30 Caprices in terms of their musical elements (such as motif, harmony, texture, and tonality) and discussed the etudes according to the technical difficulties they involved (articulation, embouchure flexibility, and rhythm). The researcher examined no. 30 Chaconne separately regarding form, harmony, and technique. The last chapter of Tsai's thesis includes a summary study guide for each 30 Caprice, stating their pedagogical purpose, difficulty level, and pace. Baek (2022) made a theoretical analysis of 30 Caprices in her doctoral thesis. She also discussed the functionality of these etudes in terms of modern flute repertoire and orchestra repertoire. Among these studies, it has been determined that no comprehensive study guide addresses Chaconne from a pedagogical perspective and offers technical suggestions and exercises for studying variations. From this point of view, this research aims to present a guide to the use of flute performers, students, and educators in which Karg Elert Chaconne, which has the characteristics of a neo-classical style where the features of the baroque style are blended with the understanding of the 20th century and is a virtuoso concert study that includes a wide range of flute techniques, is thoroughly evaluated formally, technically and pedagogically. For this purpose, the following questions will be addressed in order:

1. How is the examination of the Karg-Elert op.107 no: 30 (Chaconne) etude in terms of form?
2. How is the examination of the Karg-Elert op.107 no: 30 (Chaconne) etude in terms of technique?
3. How is the examination of the Karg-Elert op.107 no: 30 (Chaconne) etude in terms of pedagogy?

## METHOD

### Model of the Research

This research, which aims to examine Karg Elert's concert etude "op.107 no.30 Chaconne" from a formal, technical, and pedagogical perspective, is qualitative. Qualitative research is research that aims to reveal events and perceptions holistically and realistically, and where data is collected through methods such as interviews, observation, and document analysis (Yıldırım & Şimşek, 2008, p. 39). "Case study," one of the qualitative research methods, was used. In this method, which expresses the in-depth examination and analysis of a system with specific boundaries, the researcher focuses on a phenomenon/entity and aims to reveal its essential factors (Merriam, 2018, pp. 42-43).

### Data Source

The research data source is the Karg Elert op 107 etude book. There are 30 etudes written for flute in this book, which were discussed in the research. Not all etudes in the book were included in the study; only Chaconne etude number 30 was examined in detail regarding formal, technical, and pedagogical aspects. In this sense, the sample consists of Chaconne etude number 30. The reason for choosing this etude as a sample is that Chaconne is a combination of the other 29 etudes in terms of technical and musical elements, is a distinct example of the neo-classical style, and is a concert etude in itself.

### Data Collection and Analysis

The document analysis method was used to examine the etude in terms of form by determining the bass ostinato structure. Document analysis is a method that is especially valid in qualitative case studies. This method refers to the systematic examination and evaluation of a wide variety of documents, printed or electronic (Kıral, 2020, pp. 173-176).

In order to collect data intended for examining the technical aspects and technical difficulties involved in the etude, an "etude evaluation form" was prepared by the researchers. In this form, the techniques used in Karg-Elert Chaconne are listed based on the literature review and presented to four flute educators. Educators were asked to mark the techniques they found to be included in the etude and to indicate additional techniques if they were not included in the list. Another open-ended question was asked from flute educators in the same form regarding the technical difficulties involved in each variation. The data obtained was analyzed using the content analysis method. Content analysis is a systematic technique in which some words in a text are categorized and summarized with codes based on specific rules. This technique is widely used, especially in the field of social sciences (Büyüköztürk et al., 2019, p. 259). The data obtained from expert opinions were evaluated, and, in line with the common answers, the techniques and technical difficulties involved in the study were determined and categorized. The findings regarding the techniques included in the study are given in a table with frequency and percentage value calculations. In addition, a study guide consisting of original exercise suggestions for the identified technical difficulties has been prepared.

## FINDINGS

### Findings Regarding the Examination of Karg-Elert op.107 no: 30 (Chaconne) Etude in Terms of Form

In this section, a general form analysis of Karg-Elert Chaconne will be made, and the ostinato structure will be determined. Chaconne, whose roots date back to the 16th century, is a dance form in triple meters. The characteristic feature of this form is that it consists of ostinato bass motifs and instrumental variations. This form is always written in the major key in France and consists of certain bass functions of 2, 4, 8, or 16 measures. These functions can be listed as VIII-VII-VI-V, VIII-V-VI-V, I-V-II-V or I-II-III-IV-V. Some Baroque music researchers equate this form with passacaglia, another Baroque period form (Swain, 2013, p. 79). Although chaconne and passacaglia are very similar to each other in terms of form and technique, Berry (1986, p. 273) shows the most obvious difference between the two as chaconne consisting of a polyphonic harmonic ostinato and passacaglia consisting of a monophonic melodic ostinato. Karg-Elert Chaconne starts with a bass ostinato consisting of the descending F minor scale and 17 variations based on this ostinato (Figure 1).

In the first variation consisting of quarter notes, the bass ostinato is included in different beats within the measure. Variation notes other than ostinato are articulated as legato, contrasting with tenuto ostinatos. In the second variation, it is seen that the bass ostinato notes appear on the second beat of each measure. As in the first variation, the ostinato line is highlighted with tenuto. In the third and fourth variations, ostinato notes are included in the varying melody; however, they seem less prominent than the first two variations. In the third variation, the bass ostinato is located between eighth notes. In the fourth variation, the ostinato is located one octave above on different beats of each measure (Figure 2).




**Figure 1.** Bass ostinato

The two-voiced melodic texture, one of the characteristic features of the etude, appears for the first time in the fifth variation. Ostinato notes remain in the same tonal center and are located in the lower notes of the two-voiced melody. In the sixth variation, the ostinato notes are moved to the upper octave again, creating a resolution effect between successive eighth notes (Figure 3).

The two-voiced melodic texture is continued in the seventh, eighth, and ninth variations. In the seventh variation, the bass ostinato differs from the previous variations and is included in the form of an ascending scale. The ascending ostinato here, consisting of the notes C-D flat-E flat-F, can be seen. Tsai (2008, p. 198) states that this is an inversion form of the original ostinato. In the eighth variation, the F minor bass ostinato notes have changed and been transferred to A flat major. The ostinato notes, consisting of the notes A flat-G-F-E flat, are emphasized by dotted eighth notes and dynamic contrast. In the ninth variation, it is seen that the ostinato takes a descending chromatic form. Sixteenth notes and tenuto among thirty-second tremolos highlight the ostinato line (Figure 4).

Modulation to D minor occurred with the tenth and eleventh variations. In the tenth variation, ostinato notes are located in front of passages consisting of fast arpeggios and scales in the first half of each measure. The articulation and dynamic contrasts used in the variation ensure that the ostinato line is clearly emphasized. In the eleventh variation, ostinato notes are unclear. The bass notes of staccato

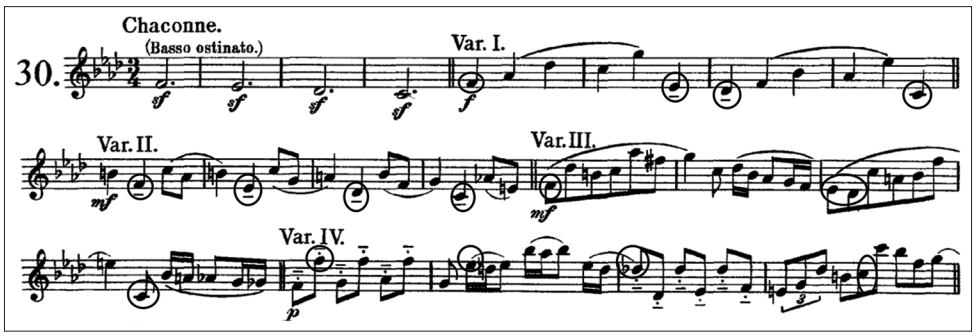



**Figure 2.** Variation I, II, III, IV

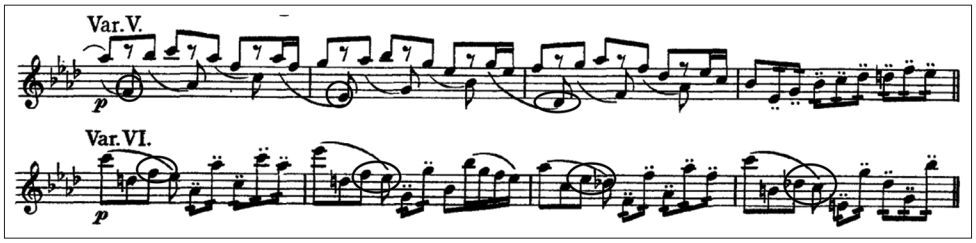



**Figure 3.** Variation V, VI

triplets are emphasized with forte and create a melodic line (Figure 5).

In the twelfth variation, the notes on the same beat of each measure form a descending pattern consisting of major second intervals (Tsai, 2008, p.204). These patterns are a representation of the original bass ostinato. The thirteenth variation, consisting of sixteenth triplets and chromatic intervals, is a transition passage to the main tone, F minor. In this variation, the ostinato notes are ambiguous (Figure 6).

The bass ostinato has returned to its original tonality and form in the fourteenth variation. The original ostinato notes are emphasized as marcato in front of the stringendo chromatic scales, corresponding to each measure's second beat. In the fifteenth variation, which consists of chromatic third and second intervales, ostinato is not evident (Figure 7).

In the sixteenth variation, ostinato notes are located at the lower register between the triplets following the passage consisting of fast chromatic scales. The ostinato notes are entirely present in the first three measures of the variation.




**Figure 4.** Variation VII, VIII, IX

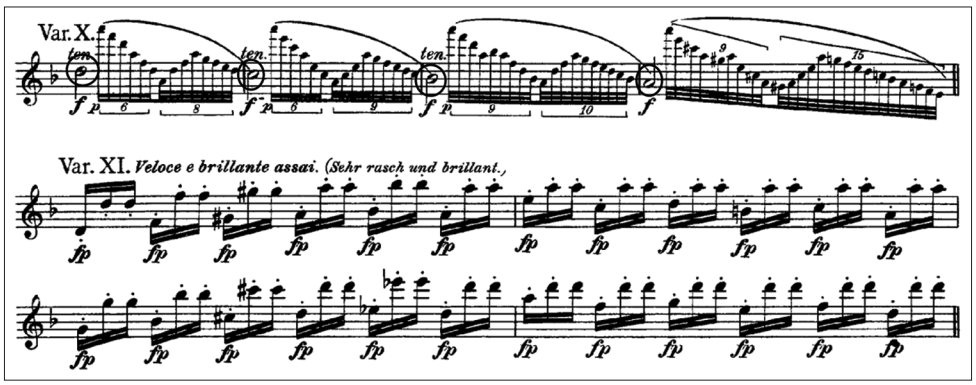



**Figure 5.** Variation X, XI




**Figure 6.** Variation XII, XIII

The differences in register and articulation between triplets and ostinato notes allow the line to come to the fore. The two-voiced melodic texture seen in previous variations is also felt in this variation. The ostinato is ambiguous in the last measure of the variation; this measure serves as a transition passage to the final variation (Figure 8).

In the seventeenth and last variation of the etude, bass ostinato notes appear in the original tonality and register. In the first beat of the measures consisting of F minor scales and chromatic scales, bass ostinato notes are emphasized tenuto. The etude ends with a four-measured coda consisting of arpeggiated patterns in F minor (Figure 9).

**Findings Regarding the Examination of Karg-Elert op.107 no: 30 (Chaconne) Etude in Terms of Technique**

In this section, the techniques in the Karg-Elert op.107 no: 30 Chaconne are categorized as articulation technique, finger technique, sonority/embouchure technique, and ornaments, and the usage rates of the techniques in the etude are determined by frequency and percentages.

According to Table 1, the legato playing technique has the highest usage rate among the articulation techniques, with 42.10%. This is followed by the mixed tongue (slurs and staccatos), in which legato, non-legato, or staccato techniques are used together in the same pattern or in the same

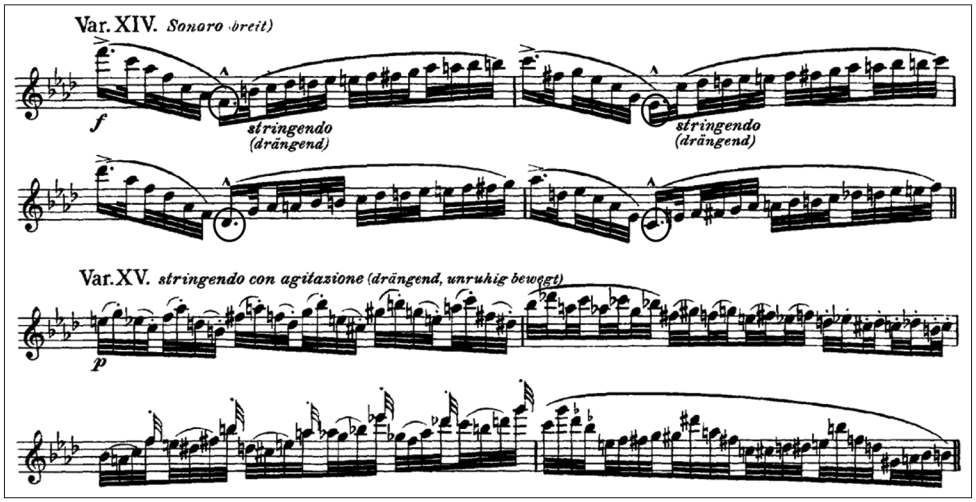



**Figure 7.** Variation XIV, XV

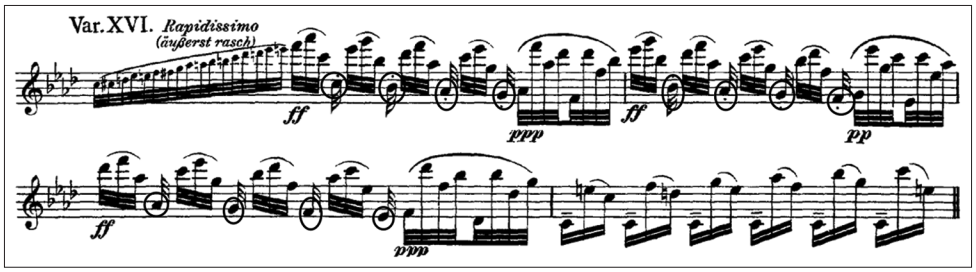



**Figure 8.** Variation XVI

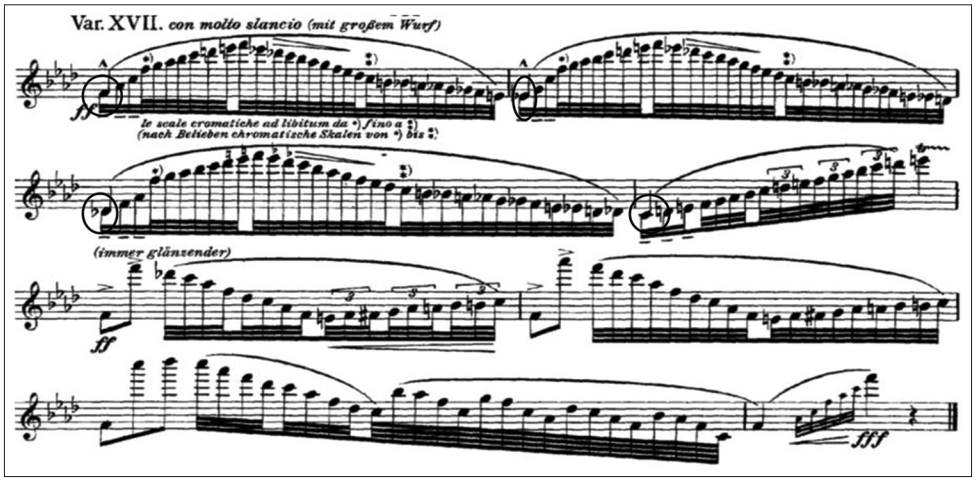



**Figure 9.** Variation XVII and Coda

**Table 1.** Techniques and usage rates included in the etude

| Techniques | Numbers of Measures That Include Techniques | *f* | % |
|---|---|---|---|
| ARTICULATION | | | |
| Legato | 13, 15, 21, 22, 23, 29, 31, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 57, 58, 59, 60, 64, 69, 70, 71, 72, 73, 74, 75, 76 | 32 | 42.10 |
| Staccato | 45, 46, 47, 48, 49, 50, 51, 52 | 8 | 10.52 |
| Mixed Tongue | 5, 6, 7, 8, 9, 10, 11, 12, 14, 16, 18, 19, 20, 25, 26, 27, 28, 53, 54, 55, 56, 61, 62, 63, 65, 66, 67, 68 | 28 | 36.84 |
| Double-Tongue | 24, 25, 26, 27, 28, 49, 50, 51, 52, 62 | 10 | 13.15 |
| Triple-Tongue | 45, 46, 47, 48, 53, 54, 55, 56 | 8 | 10.52 |
| Portato | 5, 6, 7, 9, 10, 11, 12, 17, 19, 35, 37, 38, 39, 56, 68, 69, 70, 71, 72 | 19 | 24.99 |
| Tenuto | 41, 42, 43 | 3 | 3.94 |
| Marcato | 56, 69, 70 | 3 | 3.94 |
| Accent | 57, 58, 59, 60, 73, 74 | 6 | 7.89 |
| FINGER TECHNIQUE | | | |
| Scales | 38, 40, 41,42, 43, 44, 69, 70, 71, 72 | 10 | 13.15 |
| Chromatic Scales and Use of Chromaticism | 16, 36, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 64, 65, 69, 70, 71, 73, 74 | 23 | 30.26 |
| Arpeggios | 33, 34, 35, 36, 41,42, 43, 44, 53, 54, 56, 57, 58, 59, 60, 69, 70, 71, 73, 74, 75, 76 | 22 | 28.94 |
| SONORITY/EMBOUCHURE TECHNIQUE | | | |
| Use of Intervals of 8th and Above | 6, 8, 16, 17, 19, 21, 22, 23, 25, 26, 27, 28, 30, 32, 41, 42, 43, 44, 45, 46, 47, 48, 56, 65, 66, 67, 68, 73, 74, 75 | 30 | 39.47 |
| Legato Large Interval Jumps | 21, 22, 23, 26, 28, 56, 65, 66, 67 | 9 | 11.84 |
| Fast Large Interval Jumps | 21, 22, 23, 26, 28, 30, 32, 45, 46, 47, 48, 56, 65, 66, 67, 68, 73, 74, 75 | 19 | 24.99 |
| Use of Two-Voiced Melody | 21, 22, 23, 29, 30, 31, 32, 33, 34, 35, 37, 39, 65, 66, 67, 68 | 16 | 21.05 |
| Use of Dynamic Contrast | 33, 34, 35, 36, 41,42, 43, 45, 46, 47, 48, 65, 66, 67 | 14 | 18.42 |
| ORNAMENTS | | | |
| Tremolo | 37, 39 | 2 | 2.63 |

measure, with a rate of 36.84%. Then, it was determined that the articulations of double-tongue (13.15%), triple-tongue (10.52%), staccato (10.52%), portato (24.99%), accent (7.89%), tenuto (3.94%) and marcato (3.94%) were included in the etude at different rates, respectively. In this sense, it can be said that the etude offers a wide variety of articulation techniques. It is especially noteworthy that the flutter-tongue technique, one of the 20th-century articulation techniques, has never been used in the study.

In finger technique, chromatic scales and passages consisting of variations of chromatic scales have a high usage rate in the etude with 30.26%. The use of chromaticism is a prominent element in Karg-Elert's compositional language. Then, it is determined that arpeggiated structures were significantly included in the etude with a rate of 28.94%, and scales were included with a rate of 13.15%.

Considering the usage rates of techniques requiring sonority, it was determined that the usage rate of wide intervals of octave and above throughout the etude was very high at 39.47%. The rate of fast jumps at intervals of octave and above was found to be 24.99%, and the rate of the legato jumps at intervals of octave and above was 11.84%. The findings suggest that one of the most decisive technical difficulties in the etude comes from the large intervals used. In addition, the two-voiced melodic texture usage rate was 21.05%, and the dynamic contrast usage rate was 18.42%. It is seen that these techniques, which are the characteristic features of the etude and require sonority and embouchure flexibility, have a very high usage rate.

When the ornaments were examined, it was determined that only 2.63% of the etude included tremolo. Ornaments such as trill, mordent, appogiatura and grupetto were not used. In this neo-classical etude, which combines the baroque period form "chaconne" with the 20th-century understanding of composition, it is seen that other ornaments that were commonly used in the baroque period are not included.

## Findings Regarding the Technical Difficulties and Study Suggestions Included in the Karg-Elert op.107 no: 30 (Chaconne) Etude

In this section, where the technical difficulties in each variation are determined (Table 2), original technical exercise recommendations for the variations and relevant exercise recommendations from the flute education literature are included. This study is important as it is the first to discuss the Karg Elert Chaconne etude from a pedagogical perspective and to provide a study guide in this direction.

**Table 2.** Technical difficulties involved in the variations

| Variation | Technical Difficulties Included in the Variation |
|---|---|
| Bass Ostinato | • Use of accents in lower register. |
| Var. 1,2,3,4 | • Obtaining intervals with good intonation.<br>• Ensuring the necessary air flow and speed in the ascending and descending intervals. |
| Var. 5, 6 | • Providing embouchure flexibility in fast register changes.<br>• Obtaining legato wide intervals homogeneously.<br>• Providing clarity in measures requiring double-tongue.<br>• Revealing the two-voiced melodic texture. |
| Var. 7 | • Use of legato in weak beat.<br>• Revealing the two-voiced melodic texture.<br>• Ensuring homogeneity within the "*pp*" in different registers. |
| Var. 8 | • Use of contrasting dynamics.<br>• Coordinated execution of thirty-second and sixty-fourth notes. |
| Var. 9 | • Homogeneous acquisition of third intervals.<br>• Performing tremolos by ensuring finger coordination. |
| Var. 10 | • Use of contrasting dynamics.<br>• Clear and coordinated performance of arpeggiated patterns grouped as 6, 8, 9, 10 and 15.<br>• Providing the necessary air flow in the performance of the legato arpeggio patterns in "piano". |
| Var. 11 | • Use of triple-tongue in staccato sixteenth notes.<br>• Use of contrasting dynamics. |
| Var. 12 | • Ensuring clarity in double-tongue use.<br>• Ensuring finger and tongue coordination. |
| Var. 13 | • Use of triple-tongue in staccato sixteenth notes.<br>• Use of dynamics on a wide scale from *pp* to *fff*. |
| Var. 14 | • Use of fast chromatic scales.<br>• Homogeneous performance of descending arpeggiated patterns. |
| Var. 15 | • Homogeneous acquisition of third intervals. |
| Var. 16 | • Use of fast chromatic scales.<br>• Providing embouchure flexibility in fast register changes.<br>• Obtaining legato wide intervals homogenously. |
| Var. 17 | • Coordinated performance of sixteenth, thirty-second, and sixty-fourth notes that required agility.<br>• Providing embouchure flexibility in fast register changes. |

Before starting the etude, it is recommended to play the EJ-4 f minor scale from the "17 "Big Daily Exercises" method of Taffanel and Gaubert (1958) with the exercises in Figure 10 and Figure 11. The purpose of the exercise in Figure 10 is to maximize legato, which has been determined to be predominantly present in Chaconne and to obtain a colorful tone.

Achieving flexibility in F minor is crucial up to the tenth variation. For this purpose, the exercise in Figure 11 can be applied to the entire F minor EJ-4 scale. Here, diminuendo is made by playing the top note of the ascending scale first at its harmonic pitch, then at its standard pitch, and then again at its harmonic pitch. In this way, it is aimed to ensure embouchure flexibility and control. Bernold (2017, p. 32) states that harmonic exercises have an important function in ensuring and improving embouchure flexibility. Harmonic exercises are necessary to perform diminuendo and achieve smooth dynamics. These exercises aim to ensure continuity in air flow, reduce the amount of air by gradually reducing the gap between the two lips, and maintain minimal pressure in the air column. The point to be considered is that while reducing the gap between the two lips, no pressure or tension is created in the embouchure. In this sense, the exercise in Figure 11 supports obtaining the diminuendos and soft dynamics required throughout the etude.

It is required that the bass ostinato notes, which form the skeleton of the etude, be articulated in an accented manner. Tsai (2008, p. 189) states that in this passage, excessive vibrato should be avoided, a pure and resonant tone should be obtained, each ostinato sound should start with the use of a hammer-like tongue, and relief should be provided on the tone before moving on to the following note. To ensure the necessary articulation and resonance, the descending scale consisting of the F, E flat, D flat, and C can also be played over different notes in the first-octave register (Figure 12).

Putnik (1970, p. 12) stated that when playing in the lower register or forte dynamics, the tongue should hit a place close to the lower edge of the upper teeth. It means that the teeth should hit a higher area closer to the palate when playing in the upper register or a softer dynamic. He even states that the tongue can even touch the lips when it is necessary to attack the lower register. The critical thing to pay attention to here is that the tongue does not extend between the lips. In this case, the embouchure is distorted, and the attack that should accompany the tone is heard before the tone. Each

note requires attack in the bass ostinato at the beginning of this etude. Here, taking care that the tongue does not extend beyond the lip and that the tongue strike does not get ahead of the tone, the attack can be started in an area close to the lower edge of the front teeth or even behind the upper lip.

An important point to consider in bass ostinato is to avoid playing low registers by crushing them or obtaining them without a tone color. For this purpose, the exercise in Figure 13 can be used. This exercise aims to ensure that the notes in the bass ostinato are obtained colorfully with the support of hot air. It is also recommended to practice this exercise semitone lower (E minor) and semitone higher (F sharp minor) than the original tone, F minor. Additionally, the third interval exercise in Figure 14 can be used. It is recommended to start the interval exercise from the low "C" to strengthen the lower register. Also, in the exercise in Figure 15, which aims to develop the lower register, it is recommended to practice different tonalities in a descending chromatic manner, from F minor to C minor.

The first variation requires elegance and flexibility to perform legato notes other than ostinato notes. To provide flexibility in mezzo-piano in the do-sol interval at the beginning of the second measure of the variation and the la-mi interval at the beginning of the fourth measure, the exercise with fermata and diminuendo in Figure 16 can be used. When the necessary flexibility is provided, the fermata can be removed, and the notes at the end of the legato can be performed as diminuendo.

Especially in the first variations, it is critical to use the mouth as open as possible to provide hot air support and to



**Figure 10.** General exercise recommendation 1

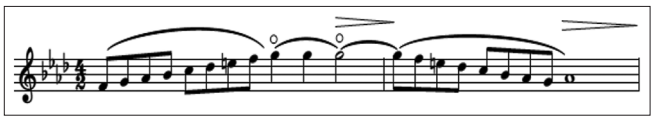


**Figure 11.** General exercise recommendation 2

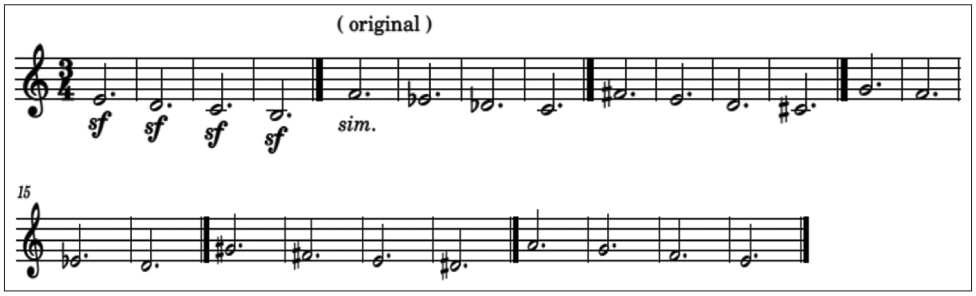



**Figure 12.** Exercise suggestion for bass ostinato-1




**Figure 13.** Exercise suggestion for bass ostinato-2



**Figure 14.** Exercise suggestion for bass ostinato-3



**Figure 15.** Exercise suggestion for bass ostinato-4

optimize the legato. In the third variation, where the use of legato is increased, the exercise in Figure 17 can be used. The motif in the first measure of the variation starts auf-tact and is played until the end of the legato. The "G" at the end of the legato, which requires flexibility, is extended with a diminuendo. Then, the same motif is performed again in reverse. After the exercise, the passage is played as it is. The exercise in Figure 18 can be used to continue the variation. Here, the notes can be added one by one, and exercise can be done up to the "E" in the fourth measure of the variation. The "E," which requires flexibility, can be extended with diminuendo.

In the fourth variation, breathing support must be maintained throughout the intervals, and there should be no space between intervals. In this variation, it is important to play the rhythm pattern's final notes, which constitute two sixteenth notes and an eighth note, elegantly and flexibly. In the fifth variation, where the two-voiced melody appears for the first time, flexibility is needed to perform legato large intervals on a supported piano. In order to provide the necessary flexibility, it is recommended to play on the harmonics of the B flat-C interval in the first measure of the variation, the A flat-B flat interval in the second measure, and the G-A flat interval in the third measure. In the last measure of the variation where the use of double-tongue is required, especially B flat-C-D flat-D are notes that tend to become sharp. For this reason, it is recommended that the double-tongued passage be practiced in legato first to ensure good intonation. In order to obtain the "C" in the measure where the fifth variation connects to the sixth variation, flexible and clear, it is recommended to practice it in its harmonic without attack. This harmonic study prepares the embouchure and makes it easier to obtain the E-flat clearly at the beginning of the second measure of the sixth variation. It is critical not to lose diaphragm support throughout the variation.

The staccato notes in the second and fourth measures of the seventh variation, which includes a two-voiced melody, can be doubled, as shown in Figure 19, to achieve homogeneity within the "*pp*" in different registers and ensure clarity in articulation.

In the eighth variation, the exercise in Figure 20 can be used to find the pianissimo that comes after sforzando (*sf*). It is also recommended to perform the same exercise on B flat and A flat, which correspond to the same beat in the second and third measure of the variation. With this exercise, the upper notes in the second octave can be obtained with a colorful and soft tone in pianissimo. After the slowed-down



**Figure 16.** Exercise suggestion for variation I



**Figure 17.** Exercise suggestion for variation III-1

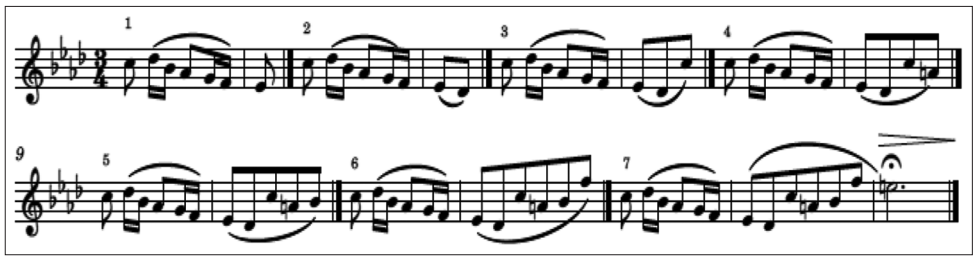


**Figure 18.** Exercise suggestion for variation III-2



**Figure 19.** Exercise suggestion for variation VII

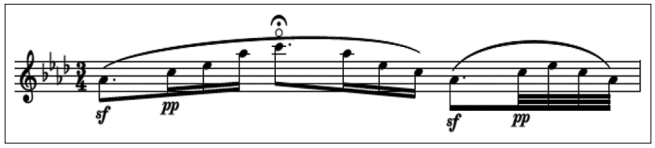



**Figure 20.** Exercise suggestion for variation VIII

exercise, the fermata and harmonics can be removed, and the passage can be performed as is.

In the ninth variation, the exercise in Figure 21 can be used. In this exercise, tenuto bass ostinato notes are emphasized with dotted eighth notes. Practicing thirty-second tremolos and arpeggiated third intervals other than bass ostinato notes, one in the fast and the other in the slow rhythm pattern, is recommended. This type of exercise can be used throughout the variation to ensure finger coordination in this passage, which requires agility. Similarly, the patterns can be varied by changing places, one fast and one slow. In addition to this exercise, practicing the variation entirely non-legato is also recommended. Another exercise suggestion to ensure finger coordination in the third intervals of the second and fourth measures of the variation is shown in Figure 22. In this exercise, one note of the thirty-second thirds is performed as it is, and the other is doubled or vice versa.

In the tenth variation, which requires agility beyond finger coordination, ensuring the necessary airflow between arpeggio notes is of great importance. Because air is the essential support element in finger coordination and clarity, the exercise in Figure 23 can ensure the necessary airflow during legato and piano arpeggio motifs. In this exercise, each arpeggio note is doubled and articulated with the next note with legato. After this exercise, sextuplet, octuplet, nontuplet, and other arpeggiated patterns in the passage can be considered by dividing them into themselves. For example, a sextuplet pattern can be formed as two triplets, an octuplet pattern as two quadruplets, or a non-equally divisible nontuplet pattern as a quadruplet and a quintuplet. In this way, a complete, precise, and coordinated performance of the fast passages can be ensured.

In the eleventh variation, it is recommended to primarily practice the bass notes separately and in legato, as in Figure 24. This exercise is intended to reinforce harmonic progression. Then, practicing the first and second notes legato is recommended, as in Figure 25. In this variation, staccato sixteenth triplets were also requested to be performed as "*fp*" and the bass notes were emphasized. The exercise in Figure 26 can be applied throughout the variation to reinforce articulation and perform contrasting dynamics. Here, the first notes of the triplets that wanted to be performed with forte are given with the eighth note, and the other notes of the triplets that wanted to be performed with the piano are given with two sixteenth notes. With this pattern, time is given for preparing the embouchure and air support during the transition from the first notes of the triplet, which is the forte, to the other notes, which are piano. To reinforce the necessary triple-tongue articulation, Taffanel and Gaubert's (1958) EJ-4 can be studied with triple-tongue.

It is preferred to perform the twelfth variation in a single breath. The legato exercise in Figure 27 can be used for both



**Figure 21.** Exercise suggestion for variation IX-1



**Figure 22.** Exercise suggestion for variation IX-2

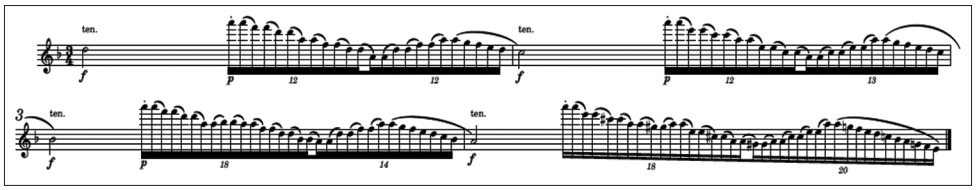


**Figure 23.** Exercise suggestion for variation X



**Figure 24.** Exercise suggestion for variation XI-1

single-breath performance and finding articulation quality. Additionally, the exercise in Figure 28 can be used to gain clarity and agility in the double tongues throughout the variation. After practicing each pattern with rests in between and gaining a certain speed in articulation, the rests can be removed, and the passage can be reinforced.

In the thirteenth variation, which requires the use of a triple-tongue, it is recommended to use the exercise in Figure 29. In the first and second measure of the variation, the first sixteenth of each triplet is played as a double tongue. Each sixteenth note in the legato passages at the end of both measures can be considered a quarter note and practiced as a tone exercise. In the third measure of the variation, since the first sixteenth of the triplets is connected with the previous sixteenth note, the double tongue is transferred to the second sixteenth of the triplets. It is recommended that the third-octave register at the end of the fourth measure, which should be played with a crescendo from *f* to *fff*, should be practiced as a flutter tongue. This exercise effectively ensures maximum throat openness and achieves forte and above dynamics with good intonation. Additionally, the exercise in Figure 30 can ensure coordination and clarity in fast triplets.



**Figure 25.** Exercise suggestion for variation XI-2




**Figure 26.** Exercise suggestion for variation XI-3



**Figure 27.** Exercise suggestion for variation XII-1




**Figure 28.** Exercise suggestion for variation XII-2

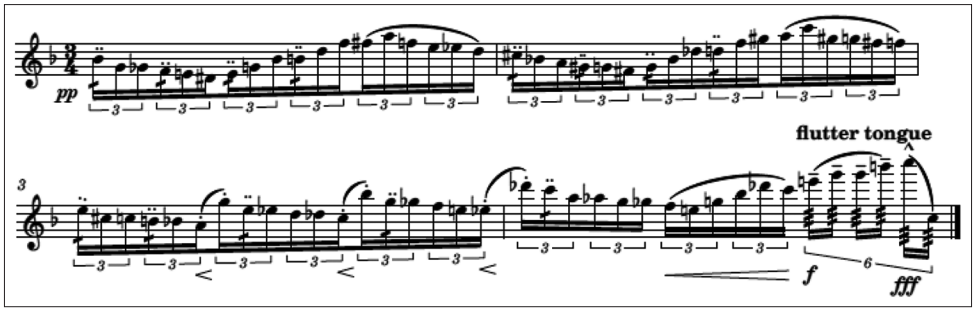



**Figure 29.** Exercise suggestion for variation XIII-1




**Figure 30.** Exercise suggestion for variation XIII-2




**Figure 31.** Exercise suggestion for variation XIV-1



**Figure 32.** Exercise suggestion for variation XIV-2



**Figure 33.** Exercise suggestion for variation XV

Triplet patterns can be varied as one fast, one slow, or one slow and one fast.

In order to obtain a bright third-octave F, which is the beginning note of the fourteenth variation, arpeggio can be practiced with flutter-tongue. In order to ensure coordination in the descending arpeggios at the beginning of all four measures of the variation, it is recommended to perform the broken arpeggio exercise in Figure 31 in different tonalities within the variation. The broken arpeggio can be practiced by transferring it to F minor, C minor, D flat major, and A flat major. In addition, it is recommended to use slurred ascending and descending chromatic exercises in Figure 32 to ensure coordination in the chromatic scales within the variation. This exercise can be practiced by transferring it to all chromatic scales within the variation.

Practicing the third and fourth measures of the fifteenth variation with the rhythmic variation exercise in Figure 33 is recommended.

It is also recommended to practice the fast chromatic scale at the beginning of the sixteenth variation with the two-note slur exercise in Figure 34. The exercise in Figure 35 can be used to prepare the embouchure for rapid register changes following the variation. Here, the bass notes are performed doubled. This exercise can be applied to the same passages requiring rapid register changes in the second and third measures of the variation. Additionally, the exercise in Figure 36 can be used for legato and wide-range jumps within the *ppp* that comes at the end of the first measure of the variation. Here, the legato passage is slowed down and performed first as it is, then in reverse. This exercise can also be applied to the same passage that comes at the end of the second and third measures of the variation. Another point that should be emphasized is that the airflow should not be interrupted between the second-octave G and the first-octave C while moving to the last measure of the variation, and a well-resonating first-octave C is obtained. For this reason, it is recommended not to apply an attack on the C and to articulate the note with the articulation 'hu.'



**Figure 34.** Exercise suggestion for variation XVI-1




**Figure 35.** Exercise suggestion for variation XVI-2




**Figure 36.** Exercise suggestion for variation XVI-3

In the seventeenth variation, the exercise in Figure 37 can ensure coordination and clarity in passages consisting of sixteenth and thirty-second scales and irregular chromatic scales that require agility. In this exercise, the portato arpeggio notes are played non-legato at the beginning of the measure, and two-slurred articulation is applied at the beginning of the scales. The same exercise can be applied in the second and third measures of the variation. Since the two-slurred articulation is not completed at the end of the descending scale in the third measure, the last note, D flat, must be played non-legato.

It is recommended to exercise by playing the arpeggio notes and chromatic scales at the beginning of the coda in the last four measures of the etude separately, straight and backward, similar to the exercise in Figure 17. In the last two measures of the coda, there are very high-pitched notes

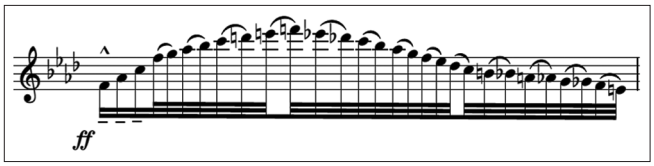



**Figure 37.** Exercise suggestion for variation XVII

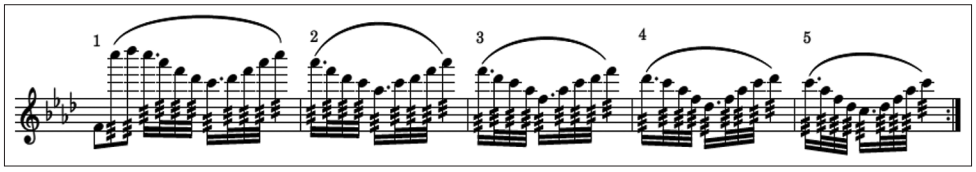



**Figure 38.** Exercise suggestion for coda-1

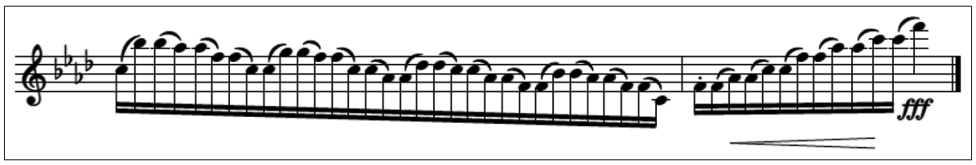



**Figure 39.** Exercise suggestion for coda-2

up to the fourth octave D flat. For this reason, clarity and control of embouchure are essential in this passage. For this purpose, the flutter-tongue exercise in Figure 38 can be used. The arpeggio notes at the beginning of the third measure of the coda are played in a rhythmic variation with flutter-tongue, straight and backward. The exercise varies with the same articulation and rhythm pattern, starting from a different arpeggio note each time. Finally, the arpeggiated passage that starts from the third beat of the third measure of the coda and continues into the last measure can be practiced with the exercise in Figure 39. This exercise aims to provide the necessary airflow between arpeggiated intervals. Similar to the exercise suggestion in the tenth variation, here, too, each of the arpeggio notes is doubled and articulated with the following note in a two-slurred manner. Following these various exercises, passages can be reinforced as written on a metronome, from slow to fast.

## DISCUSSION AND CONCLUSION

This research is aimed to examine the Karg Elert op.107 no.30 Chaconne etude in terms of form, technique, and pedagogical aspects. The etude is written in chaconne form, which has its roots in the Baroque period. It consists of a descending bass ostinato in F minor and 17 variations based on this ostinato. The form analysis of the etude was made by determining the bass ostinato notes included in the variations and should be highlighted in the performance. Accordingly, it is determined that the bass ostinato is located in the different beats of the 1st, 2nd, 3rd, 5th, and 14th variations, in its original tonality and the original register; in the different beats of the 4th and 6th variations, it is still in its original tonality but in the second-octave range; in the 7th variation, each measure changes to an inverted form in its second sixteenth; in the 8th, 9th, 10th and 16th variations, it is heard in different tonalities by modulation; in the 11th, 13th and 15th variations, it is unclear; in the 12th variation, it is among the descending chromatic patterns; in the 17th and last variation, it returns to its original tonality and original register.

The technical analysis of the etude was made by categorizing it as articulation techniques, finger techniques, sonority/embouchure techniques, and ornaments. The usage rates of the techniques in the study were determined by frequency and percentages. Accordingly, it has been determined that the articulation techniques used vary widely, including legato, staccato, mix-tongue, double-tongue, triple-tongue, portato, tenuto, marcato, and accent. Among these techniques, legato, mixed tongue (slurs and staccatos), portato, double-tongue, and triple-tongue have the highest usage rates, respectively. It has been determined that flutter-tongue, among the 20th-century articulation techniques, is not included in the etude that shows a wide variety of articulation techniques. In the finger technique category, it was determined that chromatic scales and passages consisting of variations of chromatic scales had the highest rate. In addition, arpeggiated structures and scales also appear to have a very high usage rate. Baek (2022, pp. 58-86) emphasizes that performers must have a smooth embouchure to play various scales, wide intervals, and arpeggios within 30 caprices. Embouchure flexibility is necessary for applying all techniques, and Karg-Elert 30 caprice reveals the importance of embouchure flexibility.

In the sonority and embouchure technique category, it was determined that the usage rate of wide intervals of octave and above was very high. In this context, it is concluded that the most decisive difficulty in the study arises from using wide intervals in different ways. Tsai (2008, p. 224) also states that the intervals and register throughout the 30 caprices are frequently expanded to take advantage of the Boehm flute's technical possibilities and that this situation is challenging regarding the performer's embouchure flexibility. In addition, the rate of use of two-voiced melodic texture,

which requires a good sonority technique and embouchure flexibility, and the rate of dynamic contrast, which are the characteristic features of the etude, are pretty high. As for the ornaments, it was determined that only the tremolo technique was included in the etude. Notably, other ornaments were not used in this neoclassical etude, which bears the characteristics of the Baroque style.

The last part of the study determined the technical difficulties involved in the variations. Accordingly, the technical challenges included in the variations include providing the flexibility and embouchure control required in the performance of dynamics ranging from *ppp* to *fff* and wide intervals, ensuring airflow and optimizing legato in legato passages, ensuring finger coordination in passages requiring agility, and ensuring clarity in articulations such as double-tongue and triple-tongue come to the fore. A study guide consisting of unique exercise suggestions based on variations for studying these challenges are presented.

This research is limited to examining the "no.30 Chaconne" etude among 30 Caprices from Karg-Elert op.107. In subsequent research, other caprices can be considered from a pedagogical perspective. In addition, it is recommended to increase studies on pedagogical examination of the etudes and works in the flute literature in order to be a guide for flute educators and students beyond their harmonic, form, and technical analysis.

## REFERENCES


Apel, W. (1972). *Harvard dictionary of music*. Harvard University Press.

Baek, S. (2022). *Thirty caprices, op. 107 for solo flute by Sigfrid Karg-Elert as models for flute solo repertoire and orchestral excerpts* [Unpublished Doctoral Thesis]. University of Hartford: ABD. Retrieved from https://www.proquest.com/docview/2667830456?pq-origsite=gscholar&fromopenview=true

Bernold, P. (2017). *Le souffle*, le son. Gerard Billaudot.

Bernold, P., Dufeutrelle, S., & Ploquin-Rignol, A. (2002). *10 Ans avec la flute*. Cite de la Musique.

Berry, W. (1986). *Form in music*. Prentice-Hall.

Bird, J. (2020). *The rise of nineteenth century concert etudes: a comparative analysis of three etudes* [Unpublished PhD Thesis]. Indiana University: ABD. Retrieved from https://scholarworks.iu.edu/dspace/handle/2022/25428

Boran, İ., & Şentürkmez, K. Y. (2018). *Kültürel tarih ışığında çoksesli batı müziği* [*Polyphonic western music in the light of cultural history*]. Yapı Kredi.

Busch, H. J., & Herchenroeder, M. (2011). The German speaking lands. In C. S. Anderson (Ed.), *Twentieth-Century Organ Music* (pp. 43-75). Taylor & Francis.

Büyüköztürk, Ş., Çakmak, E. K., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2019). *Eğitimde bilimsel araştırma yöntemleri* [*Scientific research methods in education*]. Pagem.

Concours de Geneve. (2014). *International Music Competition Piano & Flute* [Brochure]. https://www.concours-geneve.ch/site/app/webroot/kcfinder/upload/files/re%CC%80glement%20flu%CC%82te%20fr_final%281%29.pdf

Kang, E.Y. (2010). *Late twentieth-century piano concert etudes: a style study* [Unpublished PhD Thesis]. University of Cincinnati: ABD. Retrieved from https://www.proquest.com/docview/821438266?pq-origsite=gscholar&fromopenview=true

Kıral, B. (2020). Nitel bir veri analizi yöntemi olarak döküman analizi [*Document analysis as a qualitative data anlysis method*]. *Siirt Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, *8*(15), 170-189. Retrieved from https://dergipark.org.tr/en/pub/susbid/issue/54983/727462

Marler, R. D. (1990). *The role of the piano etude in the works of Charles-Valentin Alkan.* [Unpublished PhD Thesis]. University of Cincinnati: ABD. Retrieved from https://www.proquest.com/docview/303799141?pq-origsite=gscholar&fromopenview=true

Merriam, S. B. (2018). *Nitel araştırma: desen ve uygulama için bir rehber* [*Qualitative research: a guide to design and implementation*]. (S. Turan, Trans.). Nobel.

Petanova, A. (2019). *Vladimir Tsybin's ten concert etudes: performing virtuosity within Russian flute miniatures* [Unpublished PhD Thesis]. University of California: ABD. Retrieved from https://escholarship.org/uc/item/8fz6t222

Pellerite, J. J. (1978). *A handbook of literature for the flute: compilation of graded method materials, solos, and ensemble music for flutes*. Zalo Publications.

Putnik, E. (1970). *The Art of Flute Playing*. Summy-Birchard Music.

Scott, L. E. (2005). *Gradus ad parnassum of modern flute technique: an explication of musical intention and design in 30 capricen für flöte allein: opus 107 by Sıgfrid Karg-Elert together with three recitals of selected works by Schulhoff, Telemann, Berio, J.S. Bach, Rodrigo, Gieseking, Reinecke, and others* [Unpublished Doctoral Thesis]. University of Nort Texas: ABD. Retrieved from https://www.proquest.com/docview/305430207?pq-origsite=gscholar&fromopenview=true

Swain, J. P. (2013). *Historical dictionary of baroque music*. Scarecrow.

Taffanel, P., & Gaubert, P. (1958). *17 Grands exercices journaliers.* Alphonse Leduc.

Thompson, O., & Slonimsky, N. (1949). *The international cyclopedia of music and musicians*. Dodd, Mead, & Co.

Toff, N. (2012). *The flute book: a complete guide for students and performers*, Oxford.

Tsai, C. (2008). *The thirty caprices of Sigfrid Karg-Elert: a comprehensive study* [Unpublished Doctoral Thesis]. The City University of New York: ABD. Retrieved from https://www.proquest.com/docview/304669618?pq-origsite=gscholar&fromopenview=true

Yıldırım, A., & Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri* [Qualitive *research methods in social sciences*]. Seçkin.