

LEARNING STRATEGIES IN ORGAN PRACTICE: A preliminary investigation as a potential tool in the preparation of a contrapuntal work

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Abstract: The purpose of this study was to investigate the potential of learning strategies used as a tool for organ students in their first contact with a musical work. They were designed considering the initial practice of a contrapuntal organ piece and divided into the following categories: melodic, technical and contrapuntal strategies. This exploratory study filmed one organ student during ten organ lessons in order to assess his difficulties and build strategies for each one. The question arose: Did the student learn this score faster and more efficiently than the others of his repertoire for the semester? Results show that this work was ready for performance before the others even though it was considered the most challenging of all.

Resumo: O objetivo deste estudo foi investigar o potencial de estratégias de estudo como ferramenta para estudantes de órgão no seu primeiro contato com uma obra musical. Estas foram desenvolvidas considerando-se a prática inicial de uma obra contrapontística para órgão e divididas em: estratégias melódicas, técnicas e contrapontísticas. Este estudo exploratório utilizou um estudante, o qual foi filmado durante dez aulas, onde suas dificuldades foram discutidas e estratégias específicas foram construídas. O estudo se propôs a responder esta pergunta: O estudante aprendeu esta obra com maior rapidez e eficiência do que as outras de seu repertório do semestre? Os resultados mostram que esta peça ficou pronta para performance antes das outras, mesmo sendo considerada a mais desafiadora do semestre.

Introduction

Today it is a known fact that how you practice will definitely influence the results. Gerald Klickstein (2009, p. 20) states: “Your habits in the practice room make you the musician that you are.” Several

studies examine how musicians learn new music (Barry & Hallam, 2002, p. 156), mainly with professional musicians. Klickstein's book is mainly directed to first-year university-level performance students in the United States in Western music traditions. These habits must be learned, organized and fulfill the purpose of mastering music for performance. The "decisive aim to practice is to prepare performances because, as an art form, music centers on the interaction between performer and listener" (Klickstein, 2009, p. 4). To do so, one must achieve practical skills and artistic expertise.

Williamon and Valentine (2000), in their research with twenty-two pianists of four different skill levels, demonstrated that, after learning and memorizing compositions by J. S. Bach, the more advanced pianists spent more time in each practice session. However, "Quantity of practice...was not significantly related to quality of performance." (Williamon & Valentine, 2000, p. 353). They concluded that "the content and quality of an individual's practice must be examined when investigating the determinants of musical skill" (Williamon & Valentine, 2000, p. 353).

According to Nielsen (2004, p. 418), "Many students enter higher music education with the perception that they have not been taught how to practice by their instrumental teachers". Barry and Hallam (2002, p. 154) affirm that many novice students have problems "identifying difficult sections and tend to practice by simply playing through the music". These two affirmations may apply even more so in the Brazilian musical context, where organ majors enter the undergraduate program with little or no experience with the organ itself. They must have piano experience in order to be accepted into the program, but since teaching organ before this level is very limited, learning the organ in higher education has become a reality. Moreover, there are still few universities that offer organ studies at the undergraduate level; however, demand is growing and many students are furthering their studies even at the graduate level.

Another issue that must be brought up is the fact that although Brazil has many pipe organs, a large number of these needs repair and many that are in suitable condition are not always available for practice or performance due to numerous reasons within the churches: it is expensive to conserve the instrument in proper conditions; no other organists are allowed to play aside from the hired one (of these, many have never had organ lessons and do not use the pedalboard); the organ is in unsuitable condition; there is little or no interest within the community to buy a pipe organ, for instance. Nevertheless, several churches and universities are now acquiring real time sampling digital organs (Nielsen, 2004, p. 418). Some have even combined them with existing pipe organs to expand their performance possibilities. Less than ten pipe organs exist in non-church locales in Brazil.

The purpose of this exploratory study is to investigate the effects of using learning strategies created after a first glance of a short organ piece before the actual practice began. The strategies are based on passages that the student found more difficult while sight-reading the work. This study seeks to answer the following question: What is the effect of the learning strategies created for specific passages and practiced before the entire score in terms of time spent in preparing a work for performance?

Method

Participants

The participant in this exploratory study was a 21-year-old, sixth-semester undergraduate organ major. Before initiating his graduate studies, he had not received any formal organ instruction, only piano lessons. However, one must take into consideration that in Brazil, most organ majors have had very little or no contact with this instrument before entering the undergraduate program; most entry exams require

only prior knowledge of piano. The student, whom we shall call David, was chosen because he was an organ major and agreed to commit to this study. He waived his rights to the use of images and sound. Two examiners evaluated his final organ exam. His organ professor is the author of this investigation.

Materials

For this study, the idea was to select a work from the student's repertoire for the semester, so as not to hinder his semester's practice time and to guarantee that he would not withdraw from the study because of lack of time to practice. It would also reveal if the piece reached the same level of performance as the others within the same time frame.

After choosing his repertoire for the term with his professor, he selected the *Prelude in G Major* (BWV 568) by J.S. Bach for this study¹. When asked how he thought this piece rated among the others, he said he believed it to be the most difficult.² David was then asked not to listen to recordings of the work. The organ used was a three-manual Johannus Opus 30.

A Sony Handycam HDR-CX190 video camera was used to videotape each weekly organ lesson in which the Bach *Prelude in G Major* (BWV 568) was worked on during the first 15–20 minutes of the class period. It was then turned off for the remainder of the lesson. The software *Finale* was used to create practice strategies for the student.

Procedure

Throughout the standard 15 weekly individual organ lessons during the semester, the student played the *Prelude* during 10 of these.

1 The score used was taken from the *Bach-Gesellschaft Ausgabe*, Band 38. Leipzig: Breitkopf & Härtel, 1891.

2 The other works of the repertoire included: *Processional March in A major*, Op. 41, no. 5 by Alexandre Guilmant and *Choral Prelude Herr Jesu Christ, dich zu wend* by Johann Kirnberger.

He was absent during two lessons and the other three lessons were used solely for the remainder of his repertoire. In each of these lessons, the first 15–20 minutes was devoted to the *Prelude*. The student sight-read the piece in the first encounter and signaled where some of his difficulties occurred. Other demanding passages were spotted by his professor as he played. During each session, the student was asked what and how he had practiced, what his difficulties were, and followed by the performance of these sections. Each difficulty was transformed into one or more learning strategies and then given to the student in the subsequent lesson for his individual practice. He was asked to play these strategies, while being filmed, at the beginning of each lesson.

The *Prelude in G major* (BWV 568) contains 57 measures and alternates polyphonic and homophonic passages, thus providing insight as to how the student deals with these two types of structures. During the lessons, the student verbalized his difficulties, played the passages and discussed them with his professor: why do you think you made mistakes in this passage? Why do you find this passage difficult? What have you tried doing on your own to resolve these difficulties?

The difficulties presented by the student follow, along with learning strategies prescribed to solve them. Two interviews were conducted before and after the process by this author. At the end of the semester, David took his standard organ exams with two evaluators present. We asked them which of the pieces performed was the best overall.

Results

The following passages were transformed into learning strategies based on the difficulties the student revealed during his organ lessons. They will be presented in order of appearance in the score. First, each difficulty will be acknowledged, followed by exercises (strategies) formulated to overcome it and a conclusion of how the student addressed each one. Some of the strategies introduced are not common

to organ methods and will be discussed later. The strategies have been categorized as melodic, technical or contrapuntal. Melodic strategies include articulation, phrasing, dynamics; technical strategies embrace those that include difficulties with ornamentation, coordination of hands and feet passages, fingering, etc.; and contrapuntal strategies include the use of sequence, imitation, and *stretto*, among others.

Learning strategies for the *Prelude in G major* (BWV 568) by J.S. Bach

1) Melodic strategy: mm. 1–5, first beat

Figure 1– Prelude in G Major (BWV568), mm. 1–5 (first beat)



Difficulty. The last note of each phrase (marked in Figure 1) needs to be detached from its following note. David played the first 4 notes of m. 2 all as one motive and even after his professor showed him the difference, there was still a minute distinction in articulation between this phrase and the subsequent ones.

Strategy. The student was requested to play the passage from mm. 1–5 (first beat) with alternating hands. In this manner, the time he took to change hands was the time needed to separate the phrases (Figure 2):

Figure 2 – Prelude in G Major, J.S.Bach (BWV 568), mm. 1–5 (first beat).



Alternating hands, playing the pedal part with the L.H.

After this, he was asked to perform the passage as written and the problem was solved. The same strategy was applied to mm. 8–12.

Conclusion: The difficulty presented itself only when the phrase was repeated by the same hand (mm. 1–3); when the left hand (mm. 3–4) and pedal took over (mm. 4–5), it was resolved by the time it took to switch hand or foot. Hearing the difference after playing the first three measures with alternating hands made it clear to David what he needed to do.

2) Technical Strategy (mm. 7–8, first beat)

Difficulty: The trill in the pedal in m. 7 proved to be a problem since it had to be played simultaneously with triplets in the left hand (L.H.), as can be seen in Figure 3:

Figure 3 – Prelude in G Major, J.S.Bach (BWV 568), mm. 7–8 (first beat)



Strategies: Five exercises were proposed with increasing difficulty to eliminate this problem:

- a) Play the L.H. alone, listening to the rhythmic distinction between the dotted rhythm and the triplets. Use a metronome (See Figure 3).
- b) Pedal with L.H.: Play the L.H. with the R.H. and the pedal with the L.H., first without the trill, then adding it.

Figure 4 – Prelude in G Major, J.S.Bach (BWV 568), mm. 7–8 (first beat).

Right hand

Left hand

Right hand plays the left hand and left hand plays the pedal

c) Now play the pedal, starting with the left foot, using both feet to trill.

Figure 5 – Prelude in G Major, J.S.Bach (BWV 568), mm. 7–8 (first beat).

Pedal with trill

d) Play the right hand (R.H.) with pedal (mm. 7–8):

Figure 6 – Prelude in G Major, J.S.Bach (BWV 568), mm. 7–8 (first beat).

Right hand with pedal

e) Now play R.H. and L.H. (mm. 7–8):

Figure 7 – Prelude in G Major, J.S.Bach (BWV 568), mm. 7–8 (first beat). Both hands



Conclusion: After following these steps and repeating each one twice, David played the passage without any mistakes and mentioned that it was “really not that hard!”³.

3) Technical Strategy (mm. 13–15, first beat)

Difficulty: chords in both hands and melodic notes in the pedal (homophony x counterpoint):

Figure 8 – Prelude in G Major (BWV568), mm. 13–15 (first beat)

Strategies:

a) Play the uppermost note with the R.H. (melody) and the pedal with the L.H.:

3 Taken from David’s recorded session after he was given the strategies to practice.

Figure 9 – Prelude in G Major, J.S.Bach (BWV 568), mm. 13–15 (first beat).



Melody in R.H. and pedal with L.H.

b) Now, continue playing the melody with the R.H., but play the pedal with the feet:

Figure 10 – Prelude in G Major, J.S.Bach (BWV 568), mm. 13–15 (first beat).



Melody with R.H. and pedal as written

c) Play the melody with the R.H. on one manual and the remaining notes of the R.H. with the L.H. on a separate manual. Use an 8' flute stop for the melody and a principle 8⁴ for the other part:

4 8' ("Eight-foot") is an 8-foot stop on the organ that provides the same pitch as on the piano. A principal stop is the main sound produced only by the organ.

Figure 11 – Prelude in G Major, J.S.Bach (BWV 568), mm. 13–15 (first beat).



Right hand content divided between hands

d) Now play both hands as written on the same manual:

Figure 12 – Prelude in G Major, J.S.Bach (BWV 568), mm. 13–15 (first beat).



Hands only

e) Add the pedal: See Figure 8.

Conclusion: After following these steps, David found it very easy to play the passage.⁵

4) Technical and Contrapuntal Strategy (mm. 16–21, first beat)

Difficulty: This 5-measure passage contains chords in both hands and a sequential pattern in the pedal in sixteenth notes.

⁵ Taken from David's recorded session after he was given the strategies to practice.

Figure 13 – Prelude in G Major (BWV568), mm. 16–21 (first beat)

Strategies:

a) Analyze the pedal and identify the two sequential patterns (marked in Figure 14). Play the pedal alone. Identifying a sequence or sequential pattern can help memorization since the same fingering can usually be used; by knowing the pattern, it is much easier to prepare for what is to follow.

Figure 14 – Prelude in G Major (BWV568), mm. 16–21. Sequential patterns in the pedal

b) Play the chords in both hands and identify the chords:

Figure 15 – Prelude in G Major (BWV568), mm. 16–17. Chords in both hands

The image shows the chord voicings for measures 16 and 17 of the Prelude in G Major (BWV 568). The top staff is in treble clef and the bottom staff is in bass clef. The key signature is one sharp (F#). The time signature is common time (C). Above the staves, the chords are labeled: Am, D, G, and C7. The notation shows the chord voicings for each measure.

c) Play the passage as written: See Figure 13.

Conclusion: Once the pedal pattern was understood and the chords identified, David had no problem performing the passage.

5) Technical and Contrapuntal Strategy (mm. 28–32, first beat)

Figure 16 – Prelude in G Major (BWV568), mm. 28–32 (first beat)

The image shows the first beat of measures 28-32 of the Prelude in G Major (BWV 568). The notation is in G major and common time, showing the first beat of four measures. The top staff is in treble clef and the bottom staff is in bass clef. The notation shows the first beat of the passage, including the treble and bass clefs, the key signature, and the time signature.

Difficulty: Playing all the pedal notes correctly.

The most difficult pedal notes to play without looking at the pedalboard are G, A and D, given that the other notes can be “found” by

way of the black keys. This passage focuses precisely on G, A and D. Although it appears to be exclusively technical, this difficulty becomes contrapuntal once it is analyzed.

Strategies:

a) After playing the A in m. 28 (pedal), do not take your foot off the key (Figure 17). Shift it to the next note that will be played by the left foot (G), while playing D with the right foot (m. 29). Do the same with the right foot on D (m. 29) to C (m. 30). Continue this pattern in the following measure. In summary: play the notes in squares (Figure 17) with the left foot (toe)⁶ and the ones in circles with the right foot (toe). Recognize the sequential pattern.

Figure 17 – Prelude in G Major (BWV568), mm. 28–32 (first beat). Pedal only



b) Recognize the sequential pattern in the L.H. (mm. 29–32):

Figure 18 – Prelude in G Major (BWV568), mm. 29–32 (first beat). Left hand only



c) Recognize the sequential pattern in the R.H. (mm. 29–32):

⁶ The sign “V” above the staff implies the use of the right foot (toes, not heel) and below it, the left foot (toes). A circle means the heel should be used, left or right foot, in the same manner as “V”.

Figure 19 – Prelude in G Major (BWV568), mm. 29–32 (first beat). Right hand only



Conclusion: Knowing that each foot will play descending half steps makes it easy to memorize the pattern: left foot plays A–G–F–E, while the right foot has D–C–B–A. Preparing each foot for the following note solved the problem.

6) Technical and Contrapuntal Strategy (mm. 41–44)

Figure 20 – Prelude in G Major (BWV568), mm. 41–44 (first beat)

Difficulty. Playing the *appoggiatura* with the chord along with L.H. in the third beat of each measure.

Coordinating the *appoggiatura* with the chord (hands) and pedal note proved to be technically difficult, however, a strategy based on contrapuntal listening can also be applied in this situation.

Strategies:

a) Divide the R.H. material between both hands: R.H. plays the soprano line on one manual with a Flute stop; L.H. plays the remaining notes on a separate manual with an Oboe stop, to make it stand out.

Figure 21 – Prelude in G Major (BWV568), mm. 41–44 (first beat).

The image shows two systems of musical notation. Each system consists of two staves. The top staff of each system is in treble clef and contains a complex melodic line with many sixteenth notes. The bottom staff of each system is also in treble clef but contains a much simpler line, primarily consisting of quarter and eighth notes. This illustrates the strategy of dividing the right-hand material between both hands.

Right hand content divided between both hands

b) Play the R.H. as written:

Figure 22 – Prelude in G Major (BWV568), mm. 41–44 (first beat).

The image shows a single system of musical notation with two staves. The top staff is in treble clef and contains the full right-hand melodic line from the original score, which is a complex piece of music with many sixteenth notes. The bottom staff is in treble clef and contains a simple accompaniment line, primarily consisting of quarter and eighth notes.

R.H. only

c) Recognize the sequential patterns in the L.H. and pedal:

Figure 23 – Prelude in G Major (BWV 568), mm. 41–44 (first beat).



L.H. and pedal

Conclusion: The first strategy introduced (a) was the most helpful and solved the student's problem right away, revealing the student's difficulty as a rhythmic one.

Discussion

Some of the strategies presented are not new – such as playing each part separately (R.H.; L.H.; Pedal), then all together. Analysis, too, is often undertaken, though it is not always applied to the activities, such as recognizing sequential patterns (Figures 14, 18, 19, 23) and chord progressions (Figure 15), using this knowledge to help prepare for the next step. The strategies were divided into three categories: melodic, technical and contrapuntal, as shown in the figure below:

Figure 24 – Strategies/Difficulties encountered in Prelude in G Major (BWV 568)

Strategy name	Example	Difficulty	Measure
Melodic	1	Articulation	mm. 2–3
Technical	2	Trill in pedal	m. 7
	3	Chords in	mm. 13–14

	4 5 6	hands+melody in pedal Chords in hands+fast notes in pedal Pedal notes <i>Appoggiatura</i> in right hand	mm. 16–21 mm. 28–32 mm. 41–44
Contrapuntal	4 5 6	Sequence in ped+chords in hands Sequential patterns in all parts Coordinating <i>appoggiatura</i> with other parts	mm. 16–21 mm; 28–32 mm. 41–44

Many times errors are not completely understood (Was it a single note? Rhythm? Fingering? The pedal part? The left hand?) and students repeat a measure several times, without a clear understanding of what the actual problem is. By introducing the strategy in which the material of one hand is divided among both on separate manuals and with the inner voice being played louder (Auhor et al. Year, ; Author & Author, Year; Author, Year), as in Figures 11 and 20, the inner voice becomes more evident. When the material is played in its original form again, one can distinguish that inner voice much more clearly, thus making it easier to articulate correctly.

The strategy in which the pedal and the left hand are played with the left hand and right hand respectively, as in Figures 4 and 9, is based on the idea that switching parts – in this case, a part played with two feet, to a hand that is accustomed to playing more difficult passages – can facilitate learning. This strategy is similar to reversal of parts in a study by Burnsed and Humphries (1998).

Burnsed and Humphries (1998) researched the effects of playing the two hands' parts reversed in the early stages of learning the piano

where twelve of twenty-four right-handed students received material to practice. The remaining students learned from the normal practice book and all received ten lessons in eight weeks of traditional group piano instruction. Many pianists believe that the left hand may have weaker technique due to the nature of piano music given that the melody is most often in the right hand. Five categories were evaluated in their study: pitch accuracy in the left hand/right hand, rhythmic accuracy in the left hand/right hand, and overall technical proficiency. The reversal of material between hands showed that “the treatment group scored significantly higher than the control group in four out of five performance categories” (Burnsed & Humphries, 1998, p. 89) after taking a post-test.

In a study by Barry where three different practice conditions (teacher-assigned, student assigned, and free practice) were compared among student instrumentalists’ performance improvement concluded that students “using a structured approach to practice (teacher and student methods) were able to correct more performance errors than those subjects not using a specific method (free practice).” (Barry, 2002, p. 4).

Conclusion

The learning strategies presented in this exploratory study proved to be useful to the student because they pointed out the exact difficulty in each passage. The use of various types of strategies – melodic, technical and contrapuntal – brought about more interest in practicing and the student learned this *Prelude*, the most demanding of the pieces of his semester’s repertoire, more quickly. Also, the use of two manuals and distinct registrations for each hand provided a more careful listening (“contrapuntal hearing”, Author et al., Year) of each type of strategy. After David’s exam, two evaluators were asked as to which

piece was best prepared among all. Furthermore, both agreed that this Bach *Prelude* was the best performed at his final examination. Although the student was in the sixth semester, it is apparent that his practice can be more effective “when governed by an appropriate framework or structure.” (Barry & Hallam, 2002, p. 160). This exploratory study will serve as a basis for further research, where testing these strategies will be applied to a large number of students.

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