

DOI: <https://doi.org/10.54937/ssf.2023.22.4.32-41>

Pedálová hra v Bachovi; všetko špicou alebo?

Pedaling in Bach; All Toes or?

David di Fiore

Abstract

Currently, many instructors of organ playing are teaching that all toe pedaling without the use of the heel is the only possible method for pedaling in the organ works of J. S. Bach. While that may be the current thinking, it is necessary to examine all of the sources available, and also to use rational thinking when deciding whether or not to use toes, heels, or a combination of them. This article will examine the issue, and when it may be preferable to use a heel depending on what the music itself is doing, and a variety of other factors.

Keywords: Pedaling. J. S. Bach. Toe. Heel. Baroque pedal board.

General Implications

In the performance of the organ works of J. S. Bach, performance style and practice are certainly important factors that must be considered. Presently, there are many who say the issue of all toe pedaling is a „must be“, and give no allowance for any other possibility. When I started this article I began writing with one particular idea, but I must admit that with more research, I have concluded that there are not clear or final answers, which is not unusual when speaking about musical interpretation from any period of music. There may be general trends, but in the final analysis we must look at a particular passage of music, in this case the pedal passages, and experiment with different solutions for a particular problem, always adapting to the organ we are playing at the moment.

Arnstadt

The fact is, we really have no direct evidence as to whether or not Bach used his heels for pedaling, or whether or not (for example) he used them when a slur was marked in a score (which is rare). Complicating the issue is conflicting evidence. At least one person who played the organ at Arnstadt, (Stephen Roberts) where Bach was the organist from 1703 – 1708, says the use of the heel is very possible on this instrument. In a somewhat differing opinion

from that expressed by Jon Laukvik in his book on performance practice, Stephen Roberts writes:

„The pedal keys, though shorter than modern ones, allow for the use of heels. To test my theories about Bach's pedaling, I tried out the pedalings of Johann Samuel Petri (which use the heel) included in his treatise of 1767, revised and expanded in 1782. These are the earliest complete pedalings that we have, and since Petri was a pupil of Wilhelm Friedemann Bach (whose only teacher was his father), there is a direct link to J.S. Bach himself. I can tell you that the Petri pedalings are perfectly comfortable on the Arnstadt organ. That doesn't prove that Bach pedaled the same way Petri indicates, but it does at least prove that Bach could have used heels at a very early period in his career. No one can say that he couldn't, for the proof is there in Arnstadt that he could. Since Arnstadt is the only organ that survives of all the instruments Bach played in the churches he served, this is the best evidence that we have, it seems to me” (Roberts, 2003, p. 2).

Arriving at a different conclusion, Jan Laukvik in his book on performance practice writes:

„The toe technique propagated here may certainly seem far less comfortable or secure than a modern method (such as the „Germani technique“). That it is favored here is not a result of blinkered musicology or of pure historical fact, but a consequence of the same interpretive objective as in fingering: our aim is not a smooth, perfectionist virtuosity, but rather the complete mastery of attack and articulation, and, with that, a variety of tone production and expression. The control required over the touch is best ensured by playing with the toes, as making contact with the pedal note through the (thin leather) sole of the toe is far more sensitive than through the mass of dead material at the heel. It is not therefore the short pedalboards of old organs which give us the basis for this way of playing; it is solely the musical objectives that dictate it“ (Laukvik, 1996, p. 53).

I have a great respect for Jan Laukvik, his very careful research in the area of performance practice, and most certainly the ideals he expresses for musical results. However, as a performer, I am not sure I would draw the same conclusions as he does regarding the use of the heel. All of the issues he describes, that being musicology, virtuosity, and control of attack and articulation, come under the same heading of good musicianship, and cannot be separated or used as a justification for any particular kind of pedaling, be that the toe, or the heel. Control of attack and articulation and creating good tone production and expressive playing, also come under the category of virtuosity, of which Bach was perhaps the greatest. If one has a good pedal technique and is well trained, articulation can be controlled just as well with a heel as with the toe. While using toes only may give the results he speaks about, the use of the heel for some players may create a better musical result. Pedaling with toes only in Bach is a hypothesis.

In fact, at times, using another commonly seen pedaling method, (hopping with the same toe of the same foot note by note), results in a series of downbeats that are choppy and disconnected. The sound is much like a small child playing the piano for the first time with one finger, which is anything but the musical results that Laukvik is describing. Some now are playing all Baroque music with this “one foot” method, ignoring the other pedaling methods we know were used at the time, but still, there are times when this may offer a solution in a given passage such as in Bach's Prelude and Fugue in G-Major, BWV 550, from the Weimar period. We will also see that there is not unanimous agreement about whether or not the use of the heel is possible on the organs of the periods when Bach was playing and composing.

Personal Experience

Much of my writing in this paper comes from personal experience, playing a wide variety of international organs over many years. For that reason my bibliography is much shorter than other papers I have contributed in the past. Maybe the best teacher is playing many different organs and finding solutions when something doesn't follow the method that is supposed to work. I absolutely believe that studying historical models is very useful, but I also believe that when we are playing modern instruments we should adapt to the instruments at hand. While this is not a paper on the various kinds of organ actions, there is a large gap between the mechanical actions of Bach, and the various kinds of pneumatic and electric actions that followed in later centuries.

I do not believe there are simple answers to any of these questions, but we must strive to honor the music first, which may require a very different approach when dealing with an electric or pneumatic action. Control of attack and release usually has to be simulated, in contrast to a mechanical action where one has direct control over the attack and release of the notes. Hence, the use of these old pedalings has to be simulated more than actually done on electric actions. When a person does not have that control in the case of electric or pneumatic actions, the result can be the opposite of the ideals Laukvik expresses, sounding a bit like one of my former teachers described as „electronic“ music. The line is chopped to bits, with a kind of equal, machine-like harsh staccato (no difference in accented or unaccented) when there is no control over attack and release. (Irwin-Brandon, archive) So in those cases, being effective outweighs the need to be authentic.

Not to be underestimated are the instruments themselves. So the question is then when we are playing modern organs, do we use modern pedaling ideas along with the older systems when they will work? Of course the purists would say absolutely not, but what I have come to in my research is that doing what is most comfortable for whomever is playing offers the best solution, although not just because you have always done it that way. A very

important concept is the fact that we must decide ahead how to articulate a particular pedal passage (rather than learning notes first and dealing with the music second), and then decide which pedaling will give the best results for the musical idea that we have. To those who say it must be modern pedalings on modern instruments, I would say experiment with other systems, because you may be surprised at what can happen musically. And to those who say it must be old pedalings, I say the same, where the use of a heel makes something much easier to play, especially at the ends of the pedal-board, but also sometimes when dealing with big skips. While the type of action does play a role, it is not a reason to ignore the importance of attack and release of notes, and if playing on a type of electric or pneumatic action, the need to pay careful attention is even more important because of lack of direct control, and also the factor of pedal pipes speaking a bit more slowly with certain stops.

In another opinion, Sandra Soderlund writes: „Bach’s first important pedal work was probably done in Arnstadt (1703-1708). Ernest Zavarsky has written in detail about the console of the Arnstadt organ since it is extant“ (Soderlund, 1980, p.133). In Figure 1 we can see the comparison of modern console dimensions and those in Arnstadt. What is immediately apparent is the high bench, and short length of the naturals in the pedal.

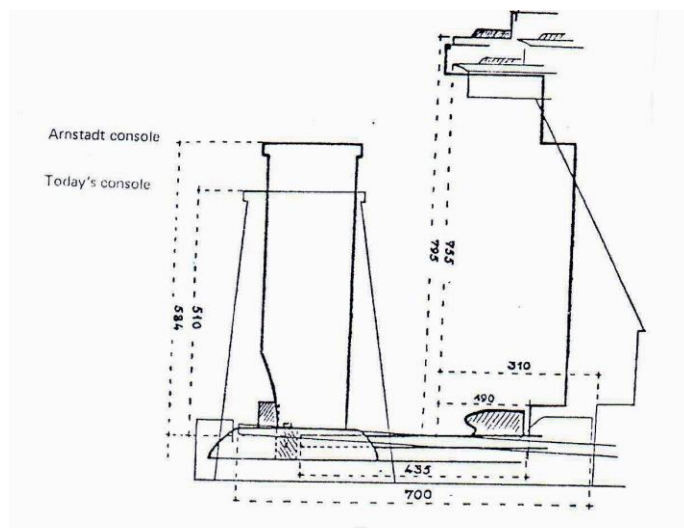


Figure 1: Modern and Arnstadt consoles (Soderlund, 1980, p.134)

According to Soderlund, but in contrast to Laukvik, and again different from Roberts, her opinion is that the bench is so high and the pedals are short in length so that only toes can be used on the natural except at the ends of the pedal board, where heels could be used. Comparing the three, Roberts says heels can be easily be used, Soderlund says they may work at the ends of the

pedal board, and Laukvik says they were not likely used, but uses purely musical reasons for his statement and (somewhat) the console itself.

Observing what we do know about pedaling sources at the time there are four systems at play. Bach's pupil Kittel wrote about three of these in *Neues Choral-Buch* from 1803. Citing examples from Soderlund we can see how these work. The three basic systems allow, first, alternating toes, and the second using toe and heel which is called the „old style“. The third would be a combination of the first two. The fourth, for which I could find no source, but is commonly seen, would be moving with the toe of the same foot, from one note to the next without crossing behind.



something should be done. It all depends on the organ, the person playing it, the particular passage of music, and what will work for any given situation.

I believe as teachers we must make adaptations, taking into account all of these factors. There is not one way that is going to work for everyone, not unlike the way people with small hands sometimes have to adapt at times to music that has large reaches. We need to guide our students so that they find solutions where they do not harm their bodies trying to fit to a system they read about, which may or may not have been the common practice of a period. That method may be different for different students depending on how tall they are, the size of their feet, how high the bench is, or a variety of other factors.

The Organ in Špania Dolina, Slovak Republic

I would like to mention my own experience with one of the organs here in the Slovak Republic which is the organ by Martin Podkonický in Špania Dolina from 1751. In that I have played that instrument many times, it gives a good framework for the discussion about pedaling. First, the organ is not very different from what Laukvik describes although it is a one-manual instrument. The pedal board is two octaves with the lower octave being a short octave. For those readers who do not know about the composition of the short octave, it is constructed as follows: C, F, D (sharp key) E (sharp key), G, A, A-sharp, B

The bench is very high and not adjustable. I have played for several televised liturgies there and also several recitals. In the liturgies, it was necessary to play some of the hymns from the Slovak hymnal, JKS. When I first played for a liturgy, I went in with the idea I would not be able to use heels at all, but when confronted with Romantic style hymns and the necessity of legato lines in that style, I found I was able to use heels sometimes even on this flat, 2 octave pedal board from 1751. That being said, I am not tall and the bench is very high for me; the legato was not exactly what I wanted, but still, I was able to connect notes far better for this style, than if I had just used toes. I believe that if the bench were a bit lower, I could have easily created the legato I wanted with the use of heels.

So we come to the idea that each organ and each situation must be evaluated individually. For me, it is about rationality and using one's knowledge to adapt to different situations, always keeping in mind what is „best music“ and not necessarily applying a set system of pedaling (Pierre, Archive).

J. S. Bach – Prelude and Fugue in G -Major, BWV 550

It may be a good idea to look at a specific musical example, and how the use of the heel may solve a technical problems. For my example, I would like to use a passage from the Prelude and Fugue in G Major, BWV 550 of J.S.

Bach, bars 33 and 34. In those bars, I will show three solutions, using toes for two of them, and using a heel for another.



Figure 4: Solution with Alternating Toes, Bars 33 – 34

A student of mine has been working on BWV 550, and when using the alternating toe method, continually missed a skip. In Figure 4, starting on beat 3 of bar 33, playing a D-sharp which using the alternate toes system, required him to skip to the second eighth note of beat 1 of bar 34, another D-Sharp. That interval is an octave away, a skip made with the same toe, which I thought, and proved to be, perilous.



Figure 5: Heel Solution

I suggested covering the upper three notes of bar 34, with the toe and heel of the right foot, which then gives time for the left foot to move to cover the 2nd beat half-note which is a B-Natural. This idea comes from the method of covering as many notes as possible with minimal motion, whether that be the hands or the feet. Minimizing both body motion and the numbers of motions to play four notes is going to increase accuracy. The question then is do we follow a system which requires just toes, or do we use rationality and common sense when solving the problem? Another way of looking at this: why should we make four motions with just toes, when we can make two motions (in a way one motion, because all the notes are covered before playing them), minimize

the risk of an error, and not take the risk of playing an octave skip with the toe of the left foot.

Now of course some would argue that you could not execute the solution in Figure 5 using the heel on a Baroque pedalboard. First, at least Soderlund and Irwin-Brandon both said that the use of the heels at the end of the pedal board was possible. I spoke about the term „comfortable“ earlier. It is likely one is going to be more comfortable covering those notes earlier than dreading the passage when there is a mistake nearly every time playing an octave skip with the left toe only. Reduction of stress in performance is likely an additional advantage in this case, as well as reduction of unnecessary large motions.

However, sometimes using heels at the end of a particular pedal board can be uncomfortable depending on the particular organ; that also applies to using toes at the end of the pedalboard on some instruments. One of the organs I played from the 18th century actually required me to change an all toe pedaling to one where the heel played the highest note in that it was near impossible for me to use my toes at the high end with the shape of that particular pedal board, in addition in that case, to a high bench.



Figure 6: Toes of the right foot solution

For those who cannot use heels at the higher end of the pedal board, this solution for the pedal passage in BWV 550, bar 34, uses both „newer“ alternate toe, and the 4th older system of toes from one foot. I normally would accent the 2nd of the three eighth-notes on beat one in bar 34, so that using three consecutive toes is possible. However, there are still four motions involved in this solution when use of the heel in Figure 5 only requires two motions. For that reason I favor solution 2 in Figure 5. Figure 4 may be possible depending on how far the octaves are apart on a given pedal board, but I still find it dangerous, and inefficient as far as measuring or executing an octave skip with a toe of the same foot. The idea of minimal motions gives better control over articulation and effective musical results.

Conclusion

When it comes to pedaling, I believe much has to be determined based on what an individual person is comfortable executing, and that which has the most musical results, honoring a style in the process, but not necessarily being a slave to it. That means then that the various methods of pedaling we have discussed certainly could be used, but not when they result in discomfort, either physically, or mentally. That idea also applies equally to more modern systems of pedaling. There must be attention to the physical characteristics of an individual's body, for example how tall one is, the length of the legs, and the size of the feet.

For one to reach the extremes of a pedal board, if one is taller with long legs it of course is much easier to reach those extremes, while that may not be the case if a person is short, has short legs, has small feet, and is playing on an organ with a high bench that is not adjustable. I note that attention to one's body characteristics is needed just as much as attention paid to whatever pedaling system is used. I further conclude that finding practical, and rational solutions in pedaling outweigh the need to be „authentic“, whether or not the pedaling decided upon is from early sources, or more modern sources. When playing on modern instruments, using modern pedalings is also possible assuming that the articulation is equally good as a result.

Bibliography

- Frank, L. 2018, December, 12. Johann Gottfried Mützel: Bach's Last Student. Online Journal: *Vox Humana*. Retrieved from: <http://www.voxhumanajournal.com/frank2018.html>
- Irwin-Brandon. M. Notes from courses, 1978-1980 (private archive).
- Lakuvik, J. 1996. *Historical Performance Practice in Organ Playing Volume 1*. Stuttgart: Carus. ISBN 3-923053-49-5.
- Pierre, O. Notes from private study, 1983-1993 (private archive).
- Pinkevicius, D. 2015, May, 16. *C Major Scale, Early Pedaling*. Secrets of Organ Playing. Retrieved from: <https://www.organduo.lt/blog/why-some-organists-still-use-heels-in-early-music>
- Roberts, S. 2003. *A Visit to Arnstadt, Piporg-L Tenth Anniversary Commemorative Papers*. Retrieved from: <http://www.albany.edu/piporg-I/FS/index.html>
- Soderlund, S. 1980. *Organ Technique: An Historical Approach*. Chapel Hill: Hinshaw Music. ISBN 9780937276006.
- Soderlund, S. 2006. *How did They Play? How did They Teach*. Chapel Hill: Hinshaw Music. ISBN 9781934596135.
- The Organ Bench: Heel or Toe, Part I. 2016, March, 17. Retrieved from: <http://www.organbench.com/419797270/3624744/posting/>

The Organ Bench: Heel or Toe, Part II. 2016, July, 2. Retrieved from:
<http://www.organbench.com/419797270/3929142/posting/>

Mgr. art. David di Fiore

Katedra hudby

Katolícka univerzita v Ružomberku, Pedagogická fakulta

Hrabovská cesta 1, 034 01 Ružomberok

gdif98@hotmail.com