

The Development
of the
Shared Hand Technique
in the
17th and 18th Century
North German Organ School

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The course of organ composition in Central and Northern Germany and Denmark during the mid 17th to early 18th centuries was in part directed by the technical achievements of the performer, which developed rapidly during this period. Specifically, the sharing of an independent voice between both hands brought a greater freedom to the composer in the derivation of thematic material and its subsequent manipulations over the duration of a work. Through an examination of the historical progression of the works by these composers, ending with J. Sebastian Bach, certain fingering patterns and their articulation will become evident and a greater insight into the proper performance practice of these pieces will be gained.

The sharing of a motif in the midst of a single passage between both hands is encountered in the *Phrygian Preludium* BuxWV 142 by Buxtehude (Lübeck, 1637-1707) in the development of the final fugal section (set as a gigue). The subject, which opens with octave leaps, is contrapuntally surrounded by treble and bass lines sounding simultaneously at measure 125 (ex.1).¹ It is also the case that the bass voice is in the midst of a continuous line descending from F above middle C and Buxtehude's organ had a pedal board that did not reach over D. Therefore, this voice could not be taken by the pedals and sustain the same contrapuntal integrity in its timbral identity (the pedals enter with the fugue subject just two bars later). The motif which could previously be played by a single hand is transformed into a two handed passage in this instance, but must maintain the articulation as if by one. Similarly in the *Preludium in g minor* BuxWV 150 during the development of the second fugal section at measure 80, Buxtehude uses the

¹ Note that a similar solution to solve this type of problem is used by J.S. Bach in the St. Anne Prelude at measure 162 (see footnote example 1).

thumbs in conjunction to move a middle voice from one hand to the other without any pauses in the linear motion (ex.2). However, while Buxtehude's use of shared passagework between the hands is brief and employed for specific purposes only, J.S.Bach's use of this technique can be observed much more consistently throughout the duration of an entire work.

To reach further back into history, the next master to be examined would be Matthias Weckmann (Dresden and Hamburg, 1619-74). The spacing between his contrapuntal voices, which is more akin to the discreet tessiturae of Sweelinck than to Buxtehude's dense writing, is a key to their proper articulation. Study of the *Fantasia in d minor* raises the possibility of two different fingering possibilities which would lead to varying articulations. At measure 11 (ex.3) the right hand could easily play the treble parts together, which would necessitate a very detached approach. On the other hand, if the left hand took the alto voice, which would necessitate the use of the thumb and second finger, a more legato line could be produced. This second approach would also break the line up between the hands, as can be seen from the previous measure. However, it would seem that the second method is actually the correct one as succeeding passages deal with the left hand thumb and second finger 'borrowings' in the same way, with a sustained tenor voice (ex.4). This is confirmed at the climax of the work (ex.5) where both hands have a sustained voice and a moving line, which infer, in retrospect, that the articulations of previous similar passages should be identical.²

² An isolated passage in Weckmann's output (footnote ex.2) implies the use of this same technique of holding a sustained tone during the switching of hands but at a greatly increased rate and tossing the inner voice between the left and right hands more frequently. A contemporary of his, Franz Tunder (Lübeck, 1614-1667) exhibits the greatest amount of hand sharing of single voices for the period. However, as can be seen in footnote ex.3, this typically results from his proclivity towards successive large

In his *Tabulatur Buch: Dass Vatter Unser* from 1627, Johann Ulrich Steigleder (Lindau and Stuttgart, 1593-1635) presents us with an enormous composition lasting about an hour. Within its forty variations he displays a virtual compendium of the compositional methods and forms inherent in his era in Northern Germany incorporating many of the innovations of Samuel Scheidt and Sweelinck. In so doing, he is also giving the performer an exhaustive catalogue of the fingering implications of the time. The score is laid out according to the standard *partitura* system introduced by Scheidt in his *Tabulatura nova* (1624).³ Throughout most of Steigleder's work, the textures between the left and right hands are noticeably kept apart with the sharing of a voice part between both being either unnecessary or impossible. Whenever a voice *is* placed evenly between the two upper and lower voices, it is assumed that it is to be played by the pedals at 4' pitch⁴ (ex.6). There are a few exemplary passages at points of striking textural changes wherein changing which hand plays a voice is necessary. One such spot is the cross from measure 26 to 27 in variation 16 (ex.7). However, the *cantus firmus* could be played on the pedals at 2' pitch, as Scheidt similarly instructs the performer in *Io son ferito lasso* from the first volume of the *Tabulatura nova*, negating the need for such a cross. Indeed, only variation 31 calls for frequent exchange of the alto voice between the right and left hands, although restricted to passages where the tenor is absent or following a rest (ex.8).

leaps in the same direction within a voice part which inevitably results in voice crossing. Since he does not apply similar techniques to scalar motion in a line, this type of hand sharing lies outside the scope of this study.

³ Willi Apel, ed., *Corpus of Early Keyboard Music*, Vol.13, *Johann Ulrich Steigleder I* (American Institute of Musicology, 1968): introduction.

⁴ *ibid.*, introduction. Reference is made to notes of long duration in betwixt quickly moving outer voices being brought down into the pedals, which at that time had little ability to serve as much outside of providing a *cantus firmus*. This tradition is spelled out in the introductory notes to Scheidt's *Tabulatura Nova* and can be seen in Sweelinck as well.

In essence, until the work of Sebastian Bach, German music employed shared hand techniques sparingly and only to facilitate specific technical difficulties. By turning to other national influences, the range of Bach's compositional as well as technical prowess was amplified.

The *Livre d'Orgue* of Nicolas de Grigny (Rheims, 1672-1703) was copied by Sebastian Bach by hand in his youth and left an indelible mark on his own writing.⁵ Although the contemporary French playing style was quite different from that in Germany, an active cross-pollination between the two countries is evident.⁶ Grigny reveals a similar approach to soprano/alto pairing in the right hand with tenor/bass in the left as Steigleder, but allows for parallel 10ths in the left hand (ex.9).⁷ He takes this division to the extreme in dropping out an inner voice rather than to allow for the other hand to continue the line.

One of Bach's most prestigious students, Johann Philipp Kirnberger (1721-83) relates to posterity in his publication *Clavierübungen mit der Bachischen Applicatur* that his master "recommended the division of voices between the hands to negotiate wide

⁵ Howell Almonte, "Nicolas de Grigny Nicolas," in *The New Grove Dictionary of Music and Musicians*, ed. Stanley Sadie (London: Macmillan Publishers Ltd., 1980). BWV 562, the five part *Fantasia in c-minor*, which was written in 1703 (the same year Bach copied the Grigny work), exhibits many of the contrapuntal traits of Grigny including the well defined upper and lower 'bounderies' of the individual parts. Bach goes as far as to imitate the detached parallel sixths, which, though common in contemporary French organ scores, is absent from most German sources, including any others of Bach himself (Footnote ex.3).

⁶ Charles-Léon Koehlhoeffler, *Nicolas de Grigny: Livre d'Orgue* (Paris: Editions Alphonse Leduc and Sons, 1986): introduction. The author notes that Grigny drew on the ornamented chorale form of German origin in some of his settings of Gregorian chant.

⁷ Due to the narrowness of the French keys, this was entirely feasible although producing a necessarily detached fingering. However, the acoustical presence of the sonorous French cathedrals would render the line more legato than the articulation would imply.

separations between voices.”⁸ Since this volume contains the teachings of many newer manual techniques that Bach developed, this statement may be taken as a vanguard approach to the problem. However, this was never used in place of finger expansion or contraction, which is commonly needed in Buxtehude. Scrutiny of the marked fingerings of one pedagogical piece printed in the *Bachischen Applicatur*, the *Allabreve*, imparts Bach’s proclivity towards finger skipping and the playing of two successive scalar pitches with the *same* finger, both of which necessitate the repositioning or relocating of the hand.⁹ This inevitably leads to detached *groupings* but not always detached articulation from note to note.

The ideal of detached articulation in the organ music of the North can be traced back without question to the Fantasias of Jan Pieterszoon Sweelinck (Amsterdam, 1562-1621). The passagework in sixths is most noteworthy since rarely can another hand reach to aid the other and allow the line to be more legato (ex.10). For the sake of consistency, then, it is necessary to play the entire work with similar articulation.¹⁰ But as the 17th century progresses, one notices fewer and fewer passages which don’t allow for any sense of legato. This is accompanied by increased hand-sharing and closer part writing when voices become disjointed. Overall, it seems that by small increments, the detached articulation common in the early Baroque becomes merely occasional detached groupings

⁸Robert Rayfield, “Fingering the Organ Works of Bach,” *The American Organist* (May 1981): 41.

⁹ Quentin Faulkner, “J.S.Bach’s Keyboard Fingering: New Evidence,” *The Diapason* (April 1980): 15.

¹⁰ Through his students, most importantly Samuel Scheidt, one observes strikingly similar passages although quite often with closer voicing, thus allowing for some shared hand fingering.

by the age of J. Sebastian Bach.¹¹ Bach employed the string instrument bowing schemes by introducing slurrings over beat groupings comprised of the smallest note value of the particular piece¹²(something he was accustomed to since the violin was his first instrument). However, some evidence suggests that in order to accomplish greater evenness in articulation, Bach indicated scalar passages to be divided hand over hand, as in the florid passages of BWV 535.¹³ Other devices he employed, according to Mattheson and his contemporaries who wrote about his playing, including his son, Karl Philip Emanuel, included the passing of the thumb under the hand as to avoid unnecessary leaps in the positioning of both hands and to eliminate the need to use the other hand to facilitate the passage.¹⁴

Another issue to contend with is the size of the keyboard itself. The dimensions of the keys specified by Michael Praetorius¹⁵ indicate that their width, in comparison to modern standards, would allow a ninth or tenth within today's octave. This inevitably would decrease the distance the hand would need to move in repositioning and call for less stretches in hand sharing passages as well as eliminate many of the shared hand

¹¹ The comparison between similar passages from the early Baroque with the late and their relative opportunity to employ shared hand techniques should exemplify the different approach to articulation. Of particular interest is quickly moving lines in parallel motion. In a Bach excerpt from the *St. Anne Prelude* (footnote ex.4) we find that the alto voice is running in parallel thirds but with the tenor raised high enough that the left hand can handle both inner voices for just this moment, rendering a legato touch not only possible, but almost blatantly called for. However, in a similar passage in a Sweelinck Toccata (footnote ex.5), the left hand can not be of any aid to the right in this respect and the upper lines must be detached from note to note.

¹² Anthony Newman, *Bach and the Baroque* (New York: Pendragon Press, 1985): 191-92.

¹³ Peter Williams, *The Organ Music of J.S. Bach, Vol. III, A Background* (London: Cambridge University Press, 1984): 218.

¹⁴ *ibid.*, 214.

passages that a modern organist needs to properly perform the works. Also, the amount of finger motion needed in extensions and 4-5 cross-overs would be moderated.

Concerning the evidence of playing with one hand on two manuals simultaneously, the much closer spacing between keyboards and the fact that the keys literally hang over the manual beneath it would support the possibility although Mattheson and Kirnberger make no reference to such a practice.¹⁶ The evidence against the practice concerns the coupling stops. Although the North German tradition specifies that the Rückpositiv be able to be coupled to the Hauptwerk, the same situation does not exist in reverse and the Brustwerk cannot be coupled at all. This would lead to variations in timbre if bridging were employed in most cases. The only exception would be if a solo line with a different registration than that of its accompaniment, as in a chorale arrangement, were to be facilitated by such a technique.

Tempo, always a governing factor in technique and interpretation, must be understood to be somewhat dictated by the key-weight of the heavy tracker action organs of the Baroque. As well, the inability to play the pedals with the heels is a key to the speed at which a piece could be played. The fastest pedal passage is indeed a guideline along which any manual work had to conform: the tempo must allow the pedals to speak

¹⁵ Harald Vogel, *Samuel Scheidt: Tabulatura Nova*, Vol.III (Weisbaden: Breitkopf & Härtel, 1994): 9.

¹⁶ Willi Apel, ed., *Corpus of Early Keyboard Music*, Vol.23, *Delphin Strunck and Peter Morhardt* (American Musicological Society, 1974). The close proximity between the Hauptwerk and the Rückpositiv encouraged organist/composers to write in rapid successions of manual changes between statement and echo passages. An extreme example exists in the *Toccata ad manuale duplex* of Delphin Strunck (Celle, 1601-94). The composer increasingly shortens the duration between changes in manual (for both hands) from half notes to eighth notes. Measures 247 through 256, in fact, consist entirely of alternating manuals every eighth note. Playing this on modern American organs becomes almost comical and accuracy is very difficult.

and the body to articulate properly.¹⁷ The practice of *pleno* playing including 16' stops¹⁸ is another indication of proper tempo. In order for this sound to project, the tactus would have to be slower. In turn, this allows more time for finger substitutions (as seen in the Kirnberger method) and less detached playing.

Although some of the practices of the North German Baroque organists remain in the realm of conjecture, a knowledge of the instruments' abilities and limitations as well as reference to contemporary treatises can allow the modern player to come close to realizing the works as they were originally intended. As techniques have advanced and newer approaches to problems have occurred since the age of Bach, it becomes the question as to whether he himself would not have integrated these practices into his playing since he was so concerned with creative playing strategies during his lifetime.

¹⁷ Newman, 190-91.

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¹⁸ *ibid.*, 192. According to Mattheson, the *pleno* included all but the softest stops as to not take away unnecessarily from the needed wind pressure to sustain so many sounding ranks.

Examples from Body of Text

Ex.1. Buxtehude (BuxWV 142): m.125

Ex.2. BuxWV 150: m.80

Musical notation for Ex.1 and Ex.2. Ex.1 shows a treble and bass clef with a key signature of one sharp (F#). A box highlights a specific melodic phrase in the treble clef. Ex.2 shows a treble and bass clef with a key signature of one flat (Bb). A box highlights a specific melodic phrase in the treble clef, followed by the text "etc..." and a fermata.

Ex.3. Weckmann: m.10-11

Musical notation for Ex.3. It shows a treble and bass clef with a key signature of one sharp (F#). A triplet of eighth notes is marked with a "3" above it. The notation continues across two measures.

Ex.4. Weckmann: m.33 (beats 3 and 4)

Ex.5. Weckmann: m.87 and 89

Musical notation for Ex.4 and Ex.5. Ex.4 shows a treble and bass clef with a key signature of one flat (Bb). A box highlights a specific melodic phrase in the treble clef. Ex.5 shows a treble and bass clef with a key signature of one sharp (F#). A dashed vertical line indicates a measure boundary. The notation continues across two measures.

Ex.6. Steigleder: Var. 15, m.24

Ex.7. Steigleder: Var. 16, m.26-27

Musical notation for Ex.6 and Ex.7. Ex.6 shows a treble and bass clef with a key signature of one sharp (F#). A box highlights a specific melodic phrase in the treble clef, with the text "Pedal (4')" and a pedal symbol below it. Ex.7 shows a treble and bass clef with a key signature of one sharp (F#). The text "cantus firmus" is written above the treble clef. A box highlights a specific melodic phrase in the treble clef, with the text "...etc..." and a fermata below it. The notation continues across two measures, with the text "etc..." and a fermata at the end. Fingerings are indicated: "3 1 2 3 1" above the treble clef and "4" and "5 3 5" below the bass clef.

Ex.8. Steigleder: Var. 31, m.7-8

etc...

Ex.9. Grigny: 1er Kyrie en taille à 5, m.10

etc...

Ex.10. Sweelinck: Fantasia (Mixolydian) m.108

Examples from Footnotes

Footnote Ex.1. J.S.Bach: St. Anne m.162

etc...

Footnote Ex.2. Weckmann: Fugue m.21-22 (Pars Tertia)

etc...

Footnote Ex.3. Tunder: "Jesus Christus, unser Heiland" (Tertius versus), m.4

Musical score for Footnote Ex.3, Tunder: "Jesus Christus, unser Heiland" (Tertius versus), m.4. The score is in G minor, 3/4 time, and consists of two staves. The treble clef staff begins with a treble clef, a key signature of one flat, and a measure number of 18. The bass clef staff begins with a bass clef, a key signature of one flat, and a measure number of 7. The music features a melodic line in the treble and a supporting bass line in the bass.

Footnote Ex.4. J.S.Bach: St. Anne m.136

Musical score for Footnote Ex.4, J.S. Bach: St. Anne m.136. The score is in G minor, 3/4 time, and consists of two staves. The treble clef staff begins with a treble clef, a key signature of one flat, and a measure number of 19. The bass clef staff begins with a bass clef, a key signature of one flat, and a measure number of 19. The music features a melodic line in the treble and a supporting bass line in the bass.

Footnote Ex.5. Sweelinck: Toccata Variation (No.4) from Psalm 140, m. 141

Musical score for Footnote Ex.5, Sweelinck: Toccata Variation (No.4) from Psalm 140, m. 141. The score is in G minor, 3/4 time, and consists of two staves. The treble clef staff begins with a treble clef, a key signature of one flat, and a measure number of 20. The bass clef staff begins with a bass clef, a key signature of one flat, and a measure number of 20. The music features a melodic line in the treble and a supporting bass line in the bass.