Innovation in Early Eighteenth-Century Central German Organ Building

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N DECEMBER 17, 1717, JOHANN Sebastian Bach signed the report he had written after examining the large organ at the St. Paul's Church at Leipzig University. The instrument had been completely rebuilt and enlarged by Johann Scheibe, a builder who would be Bach's colleague in Leipzig for twenty-five years. Bach's report made no mention of the innovative features of Scheibe's organ, but Daniel Vetter, organist at St. Nicholas's Church in Leipzig, reported that Bach could not praise more highly the organ's "rare and unusual" stops.1 Vetter's comment was surely meant to emphasize the organ's forwardlooking concept and the builder's success at incorporating the newest and most fashionable elements of central German organ building—elements such as the organ's location in the west gallery, its architectural case with no Rückpositiv, the presence of stops specifically for continuo playing, its "extremely comfortable and harmonious temperament,"2 the extended compass, the rare and unusual stops, and the presence of stops providing gravity as well as those that allowed an astonishing diversity of registrations. Some of these innovative features of eighteenth-century organs, and their relationship to the church music of the time, are the topic of this essay.

Location in the West Gallery

Church music changed dramatically around the turn of the eighteenth century, when composers began writing cantatas in the Italian madrigal style, and the

See Werner Neumann and Hans-Joachim Schulze, eds., Schriftstücke von der Hand Johann Se-bastian Bachs (Kassel: Bärenreiter, 1963 and 1982), 166–67, where Vetter's comment is cited in the explanatory text to Bach's report.

According to Scheibe's son, Johann Adolph Scheibe, "the splendor, its effect, and the exceedingly comfortable and harmonious temperament of this large instrument ... demonstrate extensive experience and no ordinary skill" ("Die Pracht, der Nachdruck und die überaus bequeme und wohlklingende Temperatur dieses grossen Werks ... zeigen die gröste Erfahrung und keine gemeine Geschicklichkeit"). Johann Adolph Scheibe, dedication to his father, Der Critische Musicus, Erster Theil (Hamburg: Thomas von Wierung's Heirs, 1738), unnumbered page.

ensemble of instrumentalists and singers was gathered together with the organ in the west gallery of the church. The organ was an integral, and very visible, member of this ensemble. The organist provided the prelude that introduced the concerted work, and to which the other instrumentalists tuned, and also realized figured bass as a member of the continuo group. To accommodate as many musicians and instruments in one place as possible, organs were built in, or moved to, spacious west galleries, and their façades were given slightly concave shapes.

Generally set at Chorton (choir pitch), the organ was a whole step or even a minor third higher than the pitch now employed by the baroque string band, which played at Kammerton (chamber pitch).3 Thus, organ continuo parts were transposed down in order to be at the same pitch as the ensemble. Sometimes the organist was left to transpose the part himself, either at sight or by writing it out in the new key. However, as pieces began to be written in ever more remote keys, and as bass lines became ever more active, transposition of this kind became less feasible. Also, the key into which the part was transposed was not always a "good" key in that organ's temperament. One way in which organ builders attempted to solve this problem was to add individual Kammerton stops—a Gedackt 8', for example—so that the organist could improvise the prelude on the plenum in Chorton and then—without having to transpose—play the continuo part on the Kammerton stop together with the other instrumentalists.4

Two important organs from the early eighteenth century demonstrate the practice of building an organ without a Rückpositiv division and of placing it in the west gallery with the musicians. As part of a project at St. George's Church, Eisenach, that lasted from 1696 to 1707, the organ was moved to the west gallery, where it was completely rebuilt and expanded by Georg Christoph Stertzing under the direction of Johann Christoph Bach, J. S. Bach's first cousin once removed.

The change to Kammerton pitch occurred at the beginning of the eighteenth century. For example, under Johann Kuhnau's direction, musicians in Leipzig's principal churches began playing at Kammerton in 1701. Johann Kuhnau, letter to Johann Mattheson dated December 8, 1717, in Johann Mattheson, Critica Musica, vol. 2 (Hamburg, 1725), 235.

This practice is described by Adlung: "If, for example, the piece is in D and the organist is playing in C, then he improvises the prelude with full organ in C, because the C in Chorton is the same as D in Kammerton. Afterward he pulls on the Kammer-Gedackt [in the manual], the Kammer-Subbass and Kammer-Octav in the Pedal, and whatever else is available, and plays in D from the music. The other Subbass, Gedackt, Octav, etc. he pushes off" ("Wäre z. Ex. das Stück aus dem d, und er sollte aus dem c spielen; so präambulirte er mit dem vollen Werke aus dem c, weil das c in Chorton dem d im Kammerton gleich ist. Hernach zieht er das Kammergedackt, den Kammersubbaß, Kammertonoktave im Pedale, und was dergleichen mehr ist, und spielt aus dem d, wie die Noten stehen. Den andern Subbaß, Gedackt, Oktav, u. thut er weg"). Jacob Adlung, Musica mechanica organoedi (Berlin, 1768), § 277, 193.

The organ was pushed back as far as possible in the gallery and given a concave shape so that there would be room in the gallery for the other musicians in the ensemble.⁵ The larger student choir that sang the chorales in unison found its place in the lower balcony.

At Freiberg Cathedral, where Gottfried Silbermann built a three-manual, forty-two-stop organ just a few years later, the spacious west gallery and the organ's façade were designed by Elias Lindner, who would become cathedral organist when the instrument was completed in 1714. The organ's consultants had been resolutely opposed to having the new organ built in a side gallery, where the old organ had been, because it was "not particularly convenient for concerted music."6 In Lindner's drawing of the organ and the gallery,7 Psalm 150 is inscribed at the top, exhorting the praise of God with all manner of instruments and dance, a command echoed by the angels on the organ, who are playing trumpets, a portative organ, and drums. The real-life musicians are in the half-moon shaped balcony while the director stands in the center, paper roll in hand. To his right are a couple of singers, the string players (including a violone player), the lutenist, and what looks to be a cornetto player. To the director's left are more singers, the trumpeters, the timpanist, and what appear to be four young sopranos behind a music stand. We see in the west gallery the whole ensemble of singers and instrumentalists, including the continuo player, who is hidden behind the conductor, his music open on the keydesk.

No Rückpositiv

More and more organs were built with no Rückpositiv. "Rückpositivs were much more in use in earlier times than at present. The entire organ is nowadays in one case, which is much better," wrote Jacob Adlung.8 In Freiberg, Silbermann had

The organ and choir lofts of St. George's Church, Eisenach, are depicted in the frontispiece of the 1759 edition of the Eisenachisches neurevidirtes und beständiges Gesangbuch; see Lynn Edwards Butler, "Johann Christoph Bach's New Organ for Eisenach's Georgenkirche," Bach: The Journal of the Riemenschneider Bach Institute 35, no. 1 (2004): 59. The organ's half-moon or concave shape can be seen in Johann Andreas Silbermann's drawing; see Das Silbermann-Archiv: Der handschriftliche Nachlaß des Orgelmachers Johann Andreas Silbermann (1712-1783), ed. Marc Schaefer (Winterthur, Switzerland: Amadeus Verlag, 1994), 159.

⁶ "Der Orth, da es bißher gestanden, zur Music nicht gar zu bequem ist." Werner Müller, Gottfried Silbermann: Persönlichkeit und Werk (Leipzig: Deutscher Verlag für Musik, 1982), 120 n. 620.

⁷ See the reproduction in Christoph Wolff and Markus Zepf, *The Organs of J. S. Bach: A Handbook*, trans. Lynn Edwards Butler (Urbana: University of Illinois Press, 2012), 109.

^{8 &}quot;Diese Rückpositive waren sonst weit mehr im Gebrauche, als itzo, da man alles in ein Gebäude

initially proposed a Rückpositiv for the cathedral organ in 1710, but the organist was against it, and Silbermann ultimately built three manual divisions—Hauptwerk, Oberwerk, Brustwerk—but no Rückpositiv. The same thing happened at the castle church in Altenburg. In 1733, Heinrich Gottfried Trost proposed a three-manual organ with a ten-stop Rückpositiv, but Capellmeister Gottfried Heinrich Stölzel convinced the court to have the Rückpositiv eliminated and the gallery enlarged so that there would be room for all the court musicians.⁹

There were also exceptions to removing the Rückpositiv—usually, I believe, when an organ's case was exceptionally beautiful and well-crafted. In the Merseburg Cathedral organ, whose splendid baroque case was built in ca. 1697, the Rückpositiv was retained during Johann Friedrich Wender's major renovation in the years 1714–17. Likewise, the baroque organ case with its Rückpositiv was retained in Naumburg, where Zacharias Hildebrandt built a completely new organ in 1743–46. Of course, baroque façades were sometimes preserved despite thoroughgoing alterations. The organ in St. John's Church in Zittau, originally built in 1685, was modernized in 1719 by turning the Rückpositiv into an Oberpositiv. The fabulous Baroque case, considered one of Saxony's most beautiful, was retained even when the organ was later moved to Ebersbach. (Like the cases in Merseburg and Naumburg, this case has survived into our time.)

Continuo Stops

The organ's façade design and location were just two changes made in response to the demands of church music of the day. Another was the addition of stops especially useful for continuo playing. A Gedackt 8' in an organ was nothing

bringet, welches auch viel besser ist." Adlung, Musica mechanica organoedi, § 20, 20.

[&]quot;The Rückpositiv is to be removed ... in this way space is won so that the ducal orchestra can play in the gallery" ("Das Rückpositiv sei wegzunehmen ... so gewinne man Platz, daß die ganze fürstliche Kapelle am Chore musicieren könne"). Hans Löffler, citing a memorandum submitted by Gottfried Heinrich Stölzel dated September 24, 1734, "J. H. Trost und die Altenburger Schlossorgel," Musik und Kirche 4 (1932): 172.

Also, many saw that the Rückpositiv division has a very distinct musical advantage. As Quentin Faulkner has pointed out on numerous occasions, while Adlung manifested a distinct aversion to Rückpositivs, his editors Johann Lorenz Albrecht and Johann Friedrich Agricola—apparently expressing a view shared with Johann Sebastian Bach—took pains to contradict him: "Once and for all we must note that this is Mr. Adlung's opinion. It would be very easy to refute with solid reasons his entire loathing for Rückpositivs," wrote Agricola. Adlung, *Musica mechanica organoedi*, § 344, vol. 2, 19. For an English translation of Adlung's treatise, see *Musica mechanica organoedi*: *Musical Mechanics for the Organist*, trans. Q. Faulkner (Zea E-Books, 2011), http://digitalcommons.unl.edu/zeabook/6.

new, obviously, but now the Gedackt was built of wood, softly voiced, and placed in a secondary division.11 In the Pedal, the Subbass 16' was voiced so that it "fit very well with concerted music."12

In the court chapel in Weissenfels, where Christian Förner built a two-manual organ in 1673, the Gedackt 8' in the Brustpositiv and the Subbass 16' in the Pedal were said to be so well-suited to concerted music that their equal could not be found.¹³ In his renovation plan from 1708 for the organ in Mühlhausen, J. S. Bach requested a Stillgedackt 8' of wood in the new Brustwerk, because, he said, it "so perfectly accords with ensemble music." ¹⁴ (This was not a Gedackt set to Kammerton pitch, as several recent authors have claimed. It was the only 8' stop in the small Brustwerk division and would have been at Chorton, just like the other six stops.) In the organ built in 1717-22 for Grossengottern, Heinrich Gottfried Trost placed "Lieblich Gedackt 8' from pearwood for concerted music" in the secondary manual, a Brustwerk.¹⁵

Indeed, Trost took great care to provide the stops necessary for the organ to carry out its function as a member of the continuo group. It is possible to detect an echo of Bach's requirements in Trost's 1722 proposal for the organ in Walters-

¹¹ Although voiced for accompaniment, Gottfried Silbermann's Gedackt was not built entirely of wood. In his second proposal for the Freiberg cathedral organ, Gottfried Silbermann specified "Gedackt 8' voiced sweetly for concerted music" ("Gedacktes 8 Fuß zur music liebl. Intonirt"). In later contracts, Silbermann described the Gedackt 8' as having "the lowest octave with wood pipes, the remaining octaves of metal, sweetly voiced for concerted music." Frank-Harald Greß, Die Klanggestalt der Orgeln Gottfried Silbermanns (Leipzig: VEB Deutscher Verlag für Musik, 1989), 132.

^{12 &}quot;Ist insonderheit der Sub-Bass von 16 Fussen zu der Musik sehre bequehm." This early description of a "continuo Subbass" comes from a history of the organ built in 1674-76 by Zacharias and Andreas Thayssner for the St. Jacob's Church in Köthen. See Hubert Henkel, "Die Orgeln der Köthener Kirchen zur Zeit Johann Sebastian Bachs und ihre Geschichte," Cöthener Bach-Hefte 3 (1985): 5.

^{13 &}quot;Was das Gedackte 8. F. in der Brust, nebst dem Sub-Bass, anlanget, so glaube ich nicht, daß leichtlich an einigem Orte solche zu einer Music so bequem mögen gefunden werden." Johann Caspar Trost Jr., Ausführliche Beschreibung des Neuen Orgelwercks auf der Augustus-Burg zu Weissenfels (Nuremburg, 1677), 21. See Felix Friedrich, "Christian Förner und die Orgel der Schlosskirche zu Weißenfels," Acta organologica 27 (2001), 21-72; Friedrich's article includes a facsimile of J. C. Trost's pamphlet on pages 36-72.

¹⁴ Bach's specification for the repair of the organ is published in Wolff and Zepf, *The Organs of J. S.* Bach, 141-42; also Hans T. David, Arthur Mendel, and Christoph Wolff, eds., The New Bach Reader (New York: W. W. Norton, 1998), 55-56. See also Peter Williams, The Organ Music of J. S. Bach, vol. 3, A Background (Cambridge: Cambridge University Press, 1984), 141-44.

¹⁵ Felix Friedrich, Der Orgelbauer Heinrich Gottfried Trost: Leben, Werk, Leistung (Wiesbaden: Breitkopf & Härtel, 1989), 150.

hausen. He promised that the wooden Bordun 16' in the Hauptwerk would be properly voiced for accompanying concerted music, and he described the Fagott 16', also proposed for the Hauptwerk, as producing a good sound that would work well in ensemble music. The wooden Gedackt in the Brustwerk would be voiced, he said, "so that it is very quiet and lends itself to continuo playing," and he noted that the Nachthorn 8' would be "very nice to use in all kinds of music." In addition, he recommended that "two or three stops, in whatever keyboard was preferred, be set at *Kammerton*, which would make them very useful in concerted music." For performing continuo, Trost also recommended pairing Viol di Gamba 8' and Gemshorn 4'; Nachthorn 8' and Lieblich Gedackt 4'; and Flauto traverso 16' and Spitzflöte 8'. For performing an obbligato solo part, he suggested Hautbois 8' or Trompetta 8', as well as Fagott 16'. 18

Fagott 16' was considered "a rare and pleasant-sounding register" when Christian Förner added it to his organs in the Augustusburg chapel in Weissenfels and in St. Ulrich's Church in Halle in ca. 1675. When J. S. Bach requested that a Fagott replace the Trumpet in Mühlhausen, he noted the stop's delicate sound in concerted music and claimed it would be "useful for all kinds of new ideas. One can find Fagott 16' in numerous of the dispositions gathered together by Adlung—including in the Contius organ in Halle (1716), the Herbst organ in Halberstadt (1718), the Finke organ for St. John's Church in Gera (1725), the Wagner organ in Berlin's Garrison Church (1725), the organ rebuilt by Christian Friedrich Wender in the St. Mary's Church in Mühlhausen (1738), and, of course, in the Johann Friedrich Wender organ in Mühlhausen's Divi Blasii Church, where the Fagott 16' Bach requested had a bass range up to middle C. Organist Johann Friedrich Walther described Fagott 16' as "very nice to use, when drawn with another stop, for playing running basses in ensemble music." Similarly,

¹⁶ The proposal is cited in full in Friedrich, *Trost*, 157–61.

[&]quot;Es ist hierbey annoch zu gedencken, daß man zwey oder drey Stimmen, in welchem Clavir es beliebet wird, Cammerthon stimmen kann, welche Stimmen als denn bey der Music wohl zu gebrauchen sind." Friedrich, *Trost*, 158.

¹⁸ Friedrich, Trost, 79.

^{19 &}quot;Rare wohlklingende Stimme." Ernst Flade, "Förner," in Friedrich Blume, ed., Die Musik in Geschichte und Gegenwart (Kassel: Bärenreiter, 1949–1986), vol. 4, col. 449.

²⁰ See note 14 above.

^{21 &}quot;Fagott 16 Fuß ... ist in der Music zu laufenden Bässen nebst Zuziehung einer andern Stimme, schön zu gebrauchen." Johann Friedrich Walther's description of the organ he played in the Garrison Church in Berlin can be found in its entirety in Quentin Faulkner, *The Registration of J. S. Bach's Organ Works* (Colfax, NC: Wayne Leupold Editions, 2008), 37–44.

for left-hand parts with a lot of figural activity, Georg Friedrich Kauffmann suggested a registration of Fagott 16', Quintadena 8', and Spitzflöte 2' in his Harmonische Seelenlust chorale collection. (The Fagott 16' in Merseburg cathedral, where Kauffmann was court organist, was built for the Rückpositiv by Zacharias Thayssner during his rebuild of the organ in the late 1690s.)

One other way in which organs were adapted for continuo playing or made more flexible generally was by means of divided stops. In Gräfenroda, where Johann Peter Kellner was cantor, Johann Anton Weise built a two-manual organ in 1736 in which Gedackt 8' and Gemshorn 8' were playable either alone in the bass or throughout the compass; likewise, four other stops (Viola di Gamba, Octava 4', Octava 2', and Scharff) were playable either throughout the compass or alone in the soprano range. In Zschortau, just outside of Leipzig, Johann Scheibe built two of the organ's thirteen stops as divided stops in 1746: Viol de Gamba 8' and Nasat 3' each had two stop knobs, one controlling the lower two octaves, and the other controlling the upper two octaves. Scheibe promised the divided stops would provide "even more registration possibilities" than otherwise. Any organist can easily imagine the flexibility such stops provide in a one-manual instrument—for playing a solo melody with accompaniment, for duos, or for a continuo part with different registrations in the left and right hands, for example.

Kammerton

I have already mentioned the possibility of setting one or more stops in Kammerton in organs otherwise set at Chorton. One of the earliest examples of this practice occurred in Halle in 1716. After Christoph Contius's sixty-five-stop organ had been examined by three experts, including Johann Kuhnau from Leipzig and J. S. Bach from Weimar, Contius agreed "of his own free will, to bring Cammerton into the organ."22 According to Peter Wollny, Contius accomplished this by adding a Gedackt 8' at Kammerton, which is corroborated by cantata scores in the hand of Wilhelm Friedemann Bach, the church's organist from 1746-64.²³ Also, Wender's rebuild of Merseburg's cathedral organ in 1717 included "several

²² Werner Neumann and Hans-Joachim Schulze, eds., Fremdschriftliche und gedruckte Dokumente zur Lebensgeschichte Johann Sebastian Bachs 1685-1750 (Kassel: Bärenreiter, 1969), 61.

²³ Peter Wollny, "Studies in the Music of Wilhelm Friedemann Bach: Sources and Style" (PhD diss., Harvard University, 1993), 302. See the discussion in Matthew Cron, "The Obbligato Organ Cantatas of J. S. Bach in the Context of 18th-Century Practice" (PhD diss., Brandeis University, 2004), 514–18. Cron proposes that the addition of a *Kammerton* stop might have been suggested by Bach, Kuhnau, or the organ's third examiner, Christian Friedrich Rolle.

stops in *Kammerton* for continuo playing."²⁴ According to Adlung's record of the disposition, which reflects additional *Kammerton* stops added by Hildebrandt in 1734–35, the Rückpositiv had Gedackt 8', Gedackt 4', and Octava 4', all at *Kammerton*; the Pedal had Subbass 16' and Octavenbass 8' at *Kammerton*.²⁵ But Wender also undertook a more daring experiment: he added an additional, fifth keyboard in the musicians' gallery directly below the large organ and made eleven of the Rückpositiv's twelve stops playable from that remote keyboard.²⁶

In Halberstadt, too, organ builder Heinrich Herbst added an additional keyboard for playing in *Kammerton*. Finished in 1718, the sixty-two-stop organ had three keyboards in the main case, but on each side of the keydesk were two special keyboards. The one on the left played eight stops pitched in *Kammerton*; the one on the right played eight stops in *Chorton*. As Adlung observed, with justifiable wonder, "... and so three organists can play at the same time." Likewise, in Breslau, in the amazing fifty-six-stop organ built by Johann Röder for the Mary Magdalene Church in 1725, the lowest of the three manual keyboards was playable in both *Chorton* and *Kammerton*, and there were also two *Kammerton* stops, at 16' and 8', in the Pedal.²⁸

The availability of two keyboards, or instruments, one in Chorton and the

²⁴ Johann Kuhnau in Mattheson, Critica Musica, 2:236.

Adlung, Musica mechanica organoedi, 255–57. Apparently only Kammerton Gedackt 8' and Kammerton Octav 4' were added by Wender, while no other source for the disposition corroborates the presence of a Kammerton Gedackt 4'. The Pedal Kammerton stops appear to have been added by Hildebrandt.

Two histories of the cathedral organ refer to this additional keyboard. "The Rückpositiv was set up with a separate keyboard on the lower gallery, with separate trackers and key action" ("Das Rückpositiv auf dem untern Chore durch ein besonderes Clavier, besondern Abstracten und Regierwerk eingerichtet"). Wilhelm Schneider, Ausführliche Beschreibung der großen Dom-Orgel zu Merseburg (Halle: Kümmel, 1829), 21. "In addition, there is also the fifth keyboard on the lowest gallery, whose stops and specifications have already been mentioned in the Rückpositiv section above" ("Ferner ist noch hierbei befindlich das fünfte Clavier auf dem untersten Chor, deren Stimmen und Pertinencien schon oben beim Rückpositiv erwähnert worden"). From the examination report by Johann Kuhnau and Gottfried Ernst Bestell, cited in David Hermann Engel, Beitrag zur Geschichte des Orgelbauwesens: Denkschrift zur Einweihung der durch Fr. Ladegast erbauten Domorgel zu Merseburg nebst Disposition derselben (Erfurt, 1855), 15. It must be noted that Schneider's account that only eleven of the Rückpositiv's stops (the Fagott 16' was excluded) were playable by the fifth keyboard dates to the state of the organ in 1813, after numerous alterations.

^{27 &}quot;Auf beyden Seiten finden sich annoch zwey besondere oder Nebenclaviere. Das eine steht im Kammerton, das andere im Chorton, und können also drey Organisten auf einmal spielen." Adlung, Musica mechanica organoedi, 239.

²⁸ Adlung, Musica mechanica organoedi, 204.

other in Kammerton, was not unusual. In Dresden's Kreuzkirche, Johann Heinrich Gräbner provided a one-manual, seven-stop positive organ in Kammerton in 1716 for use as a continuo instrument each Sunday. (The church's larger, eighteenstop organ was in *Chorton*.²⁹) While Silbermann was building the three-manual organ for Dresden's Frauenkirche in the 1730s, two positive organs were in use: one was for chorales, its seven stops set at *Chorton*; the other, a five-stop organ, was tuned in Kammerton and used as a continuo instrument. (The Kammerton instrument was praised not only for its "pleasant and sweet sound," but for its ingenious construction: the wind chest and its pipes could be set on top of the bellows and everything closed up like a large chest.)30

The arrangement in the Marienkirche in Mühlhausen, where Christian Friedrich Wender completed a three-manual, forty-three-stop organ in 1738, three years after J. S. Bach had offered advice that reanimated the seemingly stalled project, may have been unique, however. The organ's full and correct disposition was inserted in Adlung's collection by the organist of the church, Johann Lorenz Albrecht. One notices the availability of "Basson [or Fagott] 16' throughout the entire compass" in the Hauptwerk and a Sordino 8', also throughout the entire compass, in the Oberwerk. Most notable, however, is that the organ had two Kammerton couplers that affected the entire organ, one for normal Kammerton and the other for low Kammerton.31

More common were couplers that affected just one manual. Michael Engler, perhaps the most important organ builder in Silesia in the eighteenth century, provided the possibility in his large organs of one manual being transposed to Kammerton. One finds this, for example, in the three-manual, fifty-four-stop organ in the abbey in Grüssau (now Krzeszow, Poland), built in 1732-36: the ten stops in the lowest manual—a Rückpositiv housed in two cases—could be played in either Chorton or Kammerton; in addition, four Pedal stops could be transposed to Kammerton.32

²⁹ Ulrich Dähnert, *Historische Orgeln in Sachsen* (Frankfurt am Main: Verlag das Musikinstrument, 1980), 79.

³⁰ For the dispositions, see Dähnert, Orgeln in Sachsen, 69.

³¹ Adlung, Musica mechanica organoedi, 259-60.

³² Rudolf Walter discusses the work of Michael Engler in a 1998 article that focuses especially on the organ in Grüssau (and includes details on the registration instructions for the organ that date to the eighteenth century). See Rudolf Walter, "Der Orgelbauer Michael Engler d. J., Breslau: seine Orgelbauten, besonders das Instrument für die Abteikirche Grüssau," Acta Organologica 26 (1998): 217-42. For a report on the organ's restoration and reconstruction by Jehmlich Orgelbau Dresden (2008), see Andreas Hahn, "Die Michael-Engler Orgel in Grüssau (Krzeszow/Polen):

Of course, entire organs were set at *Kammerton*—especially in wealthy Dresden, home of the Saxon court, and in court chapels throughout Saxony and Thuringia. As Frank-Harald Greß has pointed out, the impetus seems to have been two-fold: setting the organ at a pitch that matched the other instruments while at the same time achieving more gravity—as one source described it, a sound both "more virile and sweeter."³³ Gottfried Silbermann built four of his largest organs at *Kammerton* pitch: at the Sophienkirche (1720), the Frauenkirche (1736), and the Hofkirche (1754) in Dresden, and for the St. John's Church in Zittau (1741), where Bach's student Carl Hartwig was organist and director of music.³⁴ Johann Ernst Hähnel built a two-manual, twenty-seven-stop *Kammerton* organ for the church in Dresden-Friedrichstadt (1738), and Zacharias Hildebrandt and his son built the *Kammerton* organ for the Church of the Three Kings in Dresden (two manuals, thirty-eight stops 1757), a project that was overseen by G. A. Homilius, also a Bach student.

Most new instruments for court chapels were set at *Kammerton* (and built without a Rückpositiv). When a new organ was built for the castle chapel in Saalfeld, Thuringia, in 1706, the builders set it at *Kammerton* so that "oboes, lutes, viols de gamba, and recorders could comfortably be used without having to transpose" and also so that the pitch would be more comfortable for singers.³⁵ At Gera, Johann Georg Finke built a one-manual, ten-stop *Kammerton* organ

Restaurierung und Rekonstruktion," Ars Organi 57, no. 1 (March 2009): 19-31.

[&]quot;Because Kammerton, which is two semitones deeper, sounds more grave, virile and sweeter" ("Weiln Kammerthon, um zwei Semithone gravitätischer, Mannhaffter und lieblicher klinget"). Frank-Harald Greß, Die Klanggestalt der Orgeln Gottfried Silbermanns (Leipzig: VEB Deutscher Verlag für Musik, 1989), 110. Joachim Wagner disagreed. The lower pitch gave the organ neither more gravity nor more sweetness, he claimed, and there were no advantages to outweigh the high cost of building at Kammerton. ("Ich niemanten darzu rathen will, weil es keine nutzen hat, oder doch um der darzu erfoderten Kosten ... den inportanten Vortheil nicht davon hat ... Eine tieffer die andere höher den nahmen des thones nach auff dam Clavier, sonst is kein unterschied in der gravitet noch anmuhtigkeit." Joachim Wagner, "Meine Raisons," memorandum dated January 1, 1731. Cited in Wolf Bergelt, Joachim Wagner (1690–1749), Orgelmacher (Regensburg: Schnell und Steiner, 2012), 696–97.

³⁴ In addition, Silbermann's organs for Frankenstein (I/13, 1753) and Ringethal (I/16, ca. 1725) were in *Kammerton*, and it is likely that the positive he built for the Catholic chapel in the Opera House at Taschenberg (1720) also was at *Kammerton*. See Greß, *Orgeln Gottfried Silbermanns*, 109–12.

^{35 &}quot;Damit die Hautbois, lauten, viodigamben, flouten douce ohne unnöthige Transposition könen bequem gebraucht werten auch denen vocalisten undt delicaten Sängern nicht sauer mit zu sing fallen mögte." Jakob Theodor Berns and Johann Baptist Funsch, proposal (1706) for a new organ, cited in Bernhard Buchstab, "Orgelwerke und Prospektgestaltung in Thüringer Schlosskapellen: Visualisierung sakraler Musikinstrumente im höfischen Kontext" (PhD diss., Philipps University, Marburg, 2002), 121.

for the court chapel in 1719-20. A few years later, he also built organs in the St. John's and St. Salvator's churches. The St. John's organ was examined and dedicated by Bach, who was likely consulted regarding its disposition. A fourstop low Kammerton positive was built in 1725 by Johann Heinrich Gräbner for Schloß Moritzburg in Zeitz. This positive survives in the collection at the Arts and Crafts Museum in Pillnitz, no doubt partially because of the stunning chinoiserie style of its case. Other chapel organs in *Kammerton* were in Tenneberg, near Waltershausen (Thuringia), where Johann Christoph Thielemann built a one-manual, nine-stop organ in 172136—the organ has just been restored and reconstructed by Orgelbau Waltershausen—and in Sondershausen (Thuringia), where Wolfgang Heinrich Nordt renovated and enlarged the castle organ in 1725. The Hauptwerk and Pedal of this two-manual, twenty-six-stop organ is fully transposable: by means of a stop "that did not shift the keyboard," both divisions can also be played in *Chorton*.³⁷

Stops for Obbligato Parts

Organs were not only provided with stops appropriate for continuo playing; often they were also given solo stops that imitated stringed or wind instruments in the baroque ensemble—for example, Traverso, Hautbois, Fagott, Chalumeau, Viol di Gamba, and Violon.³⁸ Trost made this explicit: "Hautbois 8' is a very special register, very similar to the natural oboe, and also very useful when said instrument is missing from the ensemble."39 Organists were frequently called upon to play a solo part—either because the instrument was missing from the instrumental ensemble or simply because the composer preferred that the organ take the solo. The idea of a solo part being played by the organ rather than by the instrument

³⁶ See Buchstab, "Orgelwerke in Thüringer Schlosskapellen," 153.

³⁷ For a description of the Nordt organ, see Christian Ahrens, "Die Orgel von Wolfgang Heinrich Nordt in der Schlosskapelle zu Sondershausen," Ars Organi 57, no. 1 (2009): 32–37. The disposition and description of the Kammerton "stop" is from a manuscript attributed to Johann Jacob Büchner: Aufzeichnungen über Orgeln und Orgelbau, Bach-Archiv Leipzig, Gorke Collection, no. 123, 103.

³⁸ See, for example, George Stauffer's discussion of new orchestral stops that were introduced into the Central German organ in the first half of the eighteenth century. George Stauffer, "Bach's Late Works and the Central German Organ," Keyboard Perspectives 3 (2010): 115-17.

³⁹ "Hautbois 8', eine ganz besondere Stimme, der natürlichen Hautbois sehr ähnlich, auch in deßen Ermangelung bei der Musik nützlich zu gebrauchen." Heinrich Gottfried Trost, proposal to Altenburg dated December 18, 1733. Cited in Hans Löffler, "G. H. Trost und die Altenburger Schlossorgel," Musik und Kirche 4, no. 4 (1932): 174.

itself led to such obbligato organ parts being referred to as "Traverso parts"—no matter for which instrument the continuo player was substituting nor in what way the part was registered. "If a continuo part calls for a Flötetraverse [—that is, an obbligato solo] and this stop is not available," wrote Adlung, "the Violdigamba can be used instead, since it is somewhat similar, or one uses Principal 8'. If one wants more penetrating stops, however, then one can register the Sesquialtera along with the Octava 4', or the Tertian, or the Rauschpfeife.... Other registers can also be used for such *Traversen im Generalbasse* [obbligato organ solos in figured bass parts], especially flutes and strings."40

Of course, some organs had a Traverso or another imitative stop. The organ in Sondershausen, mentioned above, was more famous for its Traverso stops than for its transposition mechanism. Nordt provided two Traverso stops for the three-manual, twenty-six-stop organ he built in 1725: Traversa 8' in the Hauptwerk and Traverso 16' in the Pedal. He placed the same stops in the three-manual, thirty-four-stop organ he rebuilt in 1728 in Greussen. According to lexicographer Ernst Ludwig Gerber, who played the Sondershausen organ for more than forty years, the Traverso stop was invented by Nordt, who on account of it deserves "everlasting fame in the history of the organ." Transverse flutes (whether called Traversa, Flûte d'Allemagne, or Flöte traversière) can be found in at least twenty-three organs built in the years 1688-1767 by builders such as Tamitius, Gräbner, Scheibe, Casparini, Herbst, Wagner, Schröter, Volckland, Trost, Weise, and Hildebrandt. 42 Johann Scheibe is often credited for building the first "natural Gamba," a stop that came very close to the quality of the gamba itself, including its attack. He built this stop for his magnum opus at St. Paul's Church in Leipzig, successfully re-voiced the Gamba in Leipzig's New Church organ, and donated a Viol di Gamba when he built the organ in the village of Zschortau. (This instrument in Zschortau is the only Scheibe organ that survives.) Even in

[&]quot;Wenn eine Piece im Generalbasse mit der Flötetraverse zu machen wäre, und dieselbe nicht bey der Hand ist, kann die Violdigamba dazu gebraucht werden, als die ihr etwas ähnlich ist; oder man nehme das Principal 8': will man es aber mit schärfen Registern thun, kann die Sesquialter sammt der Oktave 4' oder das Tertian, oder die Rauschpfeife dazu gebraucht werden. ... Es können bey solchen Traversen im Generalbasse noch andere Register gebraucht werden, sonderlich Flöten." Adlung, Musica mechanica organoedi, § 238, 173 (translation by Quentin Faulkner with corrections).

[&]quot;He [Nordt] also deserves everlasting fame in the history of the organ on account of his invention of the so-called *Traversa*" ("Er hat sich auch durch seine Erfindung der sogenannten Traversa einen bleibenden Nachruhm in der Geschichte der Orgel gestiftet"). Ernst Ludwig Gerber, *Neues historisch-biographisches Lexikon der Tonkünstler*, vol. 3 (Leipzig, 1813), 595.

⁴² See the dispositions in Adlung's Musica mechanica organoedi.

the absence of these particular imitative stops, organists did everything possible to emulate them. The organist of Joachim Wagner's organ in the Garrison Church in Berlin observed that when Gemshorn 8' is combined with Principal 16' in the Pedal and the keys are attacked rapidly, the result is "a lovely bass that sounds just like bow strokes on a bass violone."43 In brief, the organ's imitative stops were used in various ways. One important use, often overlooked in our time, was as a substitute for an instrument in the instrumental ensemble.44

I have focused on one aspect of the German organ in the first half of the eighteenth century: the incorporation of the large organ in the west gallery as a full-fledged member of the instrumental and vocal ensemble that provided concerted music on regular Sundays and feast days. I have discussed only some of the innovations that this role necessitated. If this were a more extensive study, I would explore other changes, such as extension of the organ's compass, the introduction of new temperaments, or the expansion of the wind supply. Along with hymn playing and improvisation, playing continuo was one of the organist's three essential responsibilities. In this brief essay, I hope to have demonstrated some of the ways the organ changed so that it could properly fulfill this role.

⁴³ See Faulkner, Registration, 43.

⁴⁴ Frank-Harald Greß points out that the numerous solo registrations attributed to Gottfried Silbermann must be understood in this light: as registrations used when an organist was called upon to play an obbligato solo written into the continuo part. Greß, Silbermanns Orgelklanggestalt, 133.