

Gottfried Fritzsich and the Subsemitones in the Large Organ of Hamburg, St. Catherine's

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Introduction

In 1629 Gottfried Fritzsich¹ (1578–1638), court organ builder at the Saxon Electoral Court, began the final important phase of his professional life with his first organ for the Hanseatic town of Hamburg: the monastery church of St. Maria Magdalena acquired the first new organ that Fritzsich built within Hamburg's city walls, and it was equipped with subsemitones.²

In meantone temperament subsemitones were added in Fritzsich's time to increase the number of usable keys (i. e. tonalities), while retaining the purity of the thirds in major chords. Subsemitones were primarily desired to aid in necessary transposing when accompanying ensemble music. Organs with subsemitones customarily had one or two, but sometimes there were three, and even four extra keys.³

According to today's knowledge, Fritzsich was the first organ builder to successfully introduce subsemitones into organbuilding in Germany (with his new organ for the Dresden court chapel), and subsemitones went on to become one of his distinctive trademarks. By 1629, the year he fin-

1 The spelling of names in this article follows autographical spelling as much as possible. Fritzsich, for example, has been known formerly in a modernized spelling "Fritzsche." The spelling of church names in this article follows English usage. The German name is provided in parentheses at the first instance. In cases where an official or common translation could not be obtained the name is only given in German.

2 For an introduction to the subject, see Ibo Orgtjes, "Subsemitones in organs built between 1468 and 1721: Introduction and commentary with an annotated catalog," in *GOArt Research Reports* 3, ed. Sverker Jullander (Göteborg: Göteborg Organ Art Center, 2003), 11–74.

3 Cf. Orgtjes, "Subsemitones in organs," and Ibo Orgtjes, "Die Praxis der Orgelstimmung in Norddeutschland im 17. und 18. Jahrhundert und ihr Verhältnis zur zeitgenössischen Musikpraxis" (PhD diss., University of Gothenburg, 2004), chapter 7. Revised edition at <https://sites.google.com/site/iboorgtjes/phd-dissertationiboorgtjes>.

ished the organ for St. Maria Magdalene's, he had already built at least six more organs in other places with subsemitones:

Table 1. Fritzsich organs with subsemitones 1612–29

1612	Dresden, Castle chapel (Schlosskirche)
1616	Schöningen, Castle chapel (Schlosskirche)
1616–17	Sondershausen, Trinitatis- or Dreifaltigkeitskirche
1618–19	Bayreuth, Stadtkirche „Heilig Dreifaltigkeit“
1621–23	Braunschweig, St. Catherine's (St. Katharinen)
1620–24	Wolfenbüttel, Hauptkirche Beatae Mariae Virginis
1626	Braunschweig, St.-Ulrici- or Brüderkirche

In the planning or examination of these organs, influential musicians of his time were regularly involved, such as Hans Leo Haßler (1564–1612), Michael Praetorius (1571–1621), Henrich Schütz (1585–1672) and Samuel Scheidt (1587–1654).

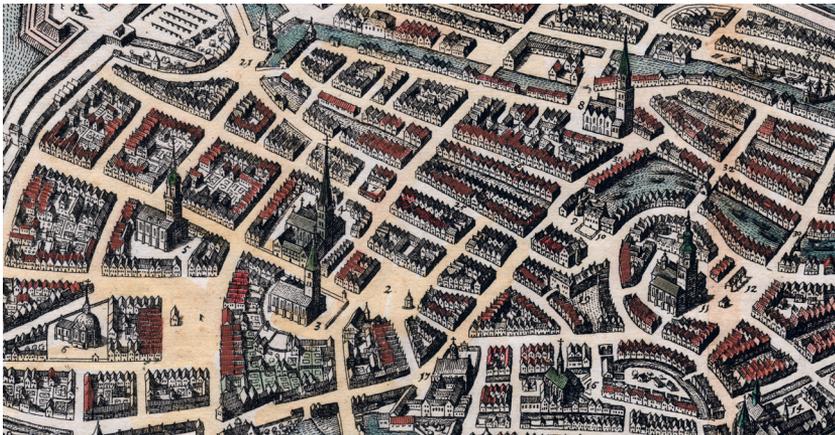
Subsemitones in Hamburg, St. Catherine's

In Hamburg, Fritzsich expanded the large organs of the four principal churches of the city from 1630 onwards. The series of his work on these organs began in Hamburg, St. Nicholas' (St. Nikolai), 1630, followed within six years by the organs of the three other principal churches. It has been established that subsemitones were introduced in two of these instruments.⁴

Concerning subsemitones in the large organ of Hamburg, St. Catherine's, however, different standpoints have been taken in recent years. Günter Seggermann was probably the first to address this issue:

The organ builder Gottfried Fritzsich from Meissen, who worked in Hamburg from 1632 onwards, worked twice on the organ of St. Catherine's. In 1631/33 he rebuilt the organ and built into the manual keyboards double semitones [i.e. subsemitones] for the tones d-sharp/e-flat, which was not common here [in Hamburg] until

4 The principal churches of St. Peter's (*St. Petri*), 1634, and St. James's (*St. Jakobi*). For St. Peter's, see Dorothea Schröder, *Gloria in excelsis Deo: Eine Geschichte der Orgeln in der Hauptkirche St. Petri, Hamburg* (Neumünster: Wachholtz 2006), 33. For St. James's, see Ortgies, catalog no. 46 in "Subsemitones in organs," 55; and Ortgies, "Die Praxis der Orgelstimmung in Norddeutschland," 175.



Figures 1 and 2. Map of Hamburg (above) by Johann Angelius Werdenhagen from Matthäus Merian, *De Rebus Publicis Hanseaticis*, Frankfurt: Matthäus Merian, 1641. Detail (below) of the city center. St. Catherine's is the church in the upper right-hand corner (no. 8). Photo: Christian Terstegge. Reproduced with kind permission.

then. He also introduced effects like the very popular *Zimbelstern* and the *Nachtigall*.⁵

On the basis of Seggermann's description I incorporated Frietzsch's rebuild of the organ of St. Catherine's into my catalog of organs with subsemitones,⁶ even though some details in his description contain inaccuracies:

- Frietzsch began to work in Hamburg by 1629 at the latest.
- Frietzsch rebuilt the organ of St. Catherine's organ no later than 1630–31.⁷
- Frietzsch introduced subsemitones immediately in his first work in Hamburg (in St. Maria Magdalene's) – subsemitones were perhaps not exactly common in Hamburg, but they were clearly known.

Based on a renewed study and evaluation of the sources, Ulf Grapenthin published a detailed article in 2007, dealing with the organ of St. Catherine's during Hinrich Scheidemann's tenure there (c. 1596–1663). Grapenthin rejected the idea that subsemitones were present in the organ at that time.⁸ Grapenthin's comment supports a hypothesis about alleged modifications of meantone temperament in North German organ building that had already been refuted at the time.⁹ However, I have pointed to the the

5 Günter Seggermann, „Kleine Orgelgeschichte der Hamburger Hauptkirche St. Katharinen,“ *Ars Organi* 49, no. 3, (2001): 144: “Der aus Meißen stammende Orgelbauer Gottfried Fritzsche, der ab 1632 in Hamburg wirkte, hat zweimal an der Katharinenorgel gearbeitet. 1631/33 machte er einen Umbau und baute in den Manualen doppelte Halbtöne für die Töne dis/es ein, was bis dahin hier nicht üblich war, er brachte auch Effekte wie den sehr beliebten Zimbelstern und den Nachtigallengesang mit.”

6 Ortgies: catalog no. 42 in “Subsemitones in organs,” 54; Ortgies, “Die Praxis der Orgelstimmung in Norddeutschland,” 173.

7 Ulf Grapenthin, “The Catharinen organ during Scheidemann's tenure,” in *Scheidemann's Keyboard Music. Its Transmission, Style and Chronology*, ed. Pieter Dirksen (Aldershot: Ashgate Publishing, 2007), 186.

8 Grapenthin, „The Catharinen organ,“ 193 (footnote 88).

9 Cf. Ortgies, “Die Praxis der Orgelstimmung in Norddeutschland,” 180–186.

In the meantime another organologist, Koos van de Linde, has joined my argument. Cf. Koos van de Linde, “What Temperament should the New Baroque Organ at the Orgelpark have?” in *Orgelpark Research Report* vol. 5, no. 1, ed. Hans Fidom (Amsterdam: Orgelpark 2014), 135–152. Cf. also Léon Berben, and Ibo Ortgies, Letter to the Editor, in *Ars Organi* 63, no. 3 (2015): 184–186, commenting on Harald Vogel, “Nicolaus Bruhns und sein Opus Magnum, das Praeludium e-Moll (ex e),“ *Ars Organi* 63, no. 1 (2015): 20–24.

well-known retuning of the organ in 1742 in other publications.¹⁰ Regarding North-German temperament history this retuning was a rather early example of a change to a non-meantone temperament (although, as so frequently occurs in such cases, there is no exact description of the new temperament), and the retuning happened against the explicit wish of the organist Anthon Henrich Uhtmöller (1720–52),¹¹

Grapenthin summarized as follows his assessment on the organ keyboard compasses of St. Catherine's during Scheidemann's tenure (1629–63):

There can be little doubt that Scheidemann's organ had only three manuals throughout his tenure. The seven-stop Brustwerk was in all likelihood present since 1631. Hauptwerk, Oberwerk, and Rückpositiv had the usual compass of $CDEFGA-g^2a^2$ with short octave. The Brustwerk had the same tessitura (it received the additional upper notes g^\sharp , $b\text{-flat}^2$, b^2 and c^3 only at a later stage) and was suspended to another manual (undoubtedly that of the Oberwerk) rather than having its own manual, as formerly thought.¹²

Frieztzsch's Brustwerk compass of $CDEFGA-g^2a^2$ is evident from Grapenthin's description:

Johann Dietrich Busch's [1700–1753] statement made in 1743 that the Brustwerk at that point already included the upper notes g^\sharp , $b\text{-flat}^2$, b^2 and c^3 , which in the three other divisions [Hauptwerk, Oberwerk, and Rückpositiv] were added only in 1742 by Busch using the blind keys mentioned by Uhtmöller, confirms that they were added in 1671–74. Uhtmöller, however, wrote at a time when the organ already had four manuals [after Johann Friedrich Besser's (ca. 1630–93) rebuild of the organ, 1671–74]. If those four top notes had been present in the Brustwerk since Gottfried Frieztzsch's time, it would have been impossible to suspend this work to the Oberwerk

10 The retuning is mentioned with references in Ortgies, "Die Praxis der Orgelstimmung in Norddeutschland," 75–76, 173 (footnote 301), and 259.

11 Cf. Harald Vogel, "Mitteltönig – Wohltemperiert. Der Wandel der Stimmungsästhetik im norddeutschen Orgelbau und Orgelrepertoire des 17. und 18. Jahrhunderts," in *Jahrbuch Alte Musik* 1, ed. Thomas Albert and Gisela Jaacks (Wilhelmshaven: Florian Noetzel, 1989), 134 (footnote 26), and 250. The name of Uhtmöller is also provided as "Uhtmöller" in the literature. Uhtmöller was Johann Adam Reincken's (1643?–1722) successor as organist of St. Catherine's.

12 Grapenthin, "The Catharinen organ," 194.

manual. Since, as has been seen, a separate manual for the Brustwerk is out of the question, it must also have had an upper limitation of g^2a^2 .¹³

Gräpenthin presents the later extension by four treble tones as follows:

The addition of the fourth manual for the Brustwerk by Friedrich Besser in 1671–74 must also have been the occasion for the addition of g^\sharp , *b-flat*², b^2 and c^3 .¹⁴

Apart from possible subsemitones, the development of the keyboard compasses of the four manual divisions in the organ of St. Catherine’s, according to Gräpenthin’s account, can thus be summarized as follows (changes in italics):

Table 2. Number of keys in each division of the organ of St. Catherine’s

Year	Rückpositiv	Hauptwerk	Oberwerk	Brustwerk
1630–1631	I: 41 keys	II: 41 keys	III: 41 keys	III: 41 keys
1671–1674	I: 41 keys	II: 41 keys	III: 41 keys	<i>IV: 45 keys</i>
1742	<i>I: 45 keys</i>	<i>II: 45 keys</i>	<i>III: 45 keys</i>	IV: 45 keys

A summary of the situation

The keyboard compass CDEFGA– g^2a^2 , which the organ had in all four manual divisions between the 1631 Fritzsich rebuild and the 1671–1674 Friedrich Besser rebuild corresponds to precisely 41 keys – without subsemitones.

From 1631, the Brustwerk and Oberwerk were played from the same keyboard and must have had the same compass. Besser changed this keyboard set-up and provided the Brustwerk in 1671–74 with its own keyboard, the fourth manual. It was the first keyboard in the organ to have the 45-note compass of CDEFGA– c^3 . It had, therefore, four notes more than

13 Gräpenthin, “The Catharinen organ,” 188.

14 Gräpenthin, “The Catharinen organ,” 189.

the other manual keyboards (HW, OW, RP), which retained the compass CDEFGA–g²a² at least from 1631 until Busch’s rebuild in 1742. According to the quoted passage, however, after Besser’s work in 1671–74 these three manual keyboards contained 41 keys, leaving out the previous four subsemitones. Whether the pipes were left on the windchest and the action was uncoupled can only be speculated.

An organ builder, however, would scarcely undertake the considerable work to build functionless channels, with the associated valves and possibly the respective trackers. The four extra channels must have had some function before Besser worked on the large organ 1671–74, a function that only became obsolete through his rebuild. From Grapenthin’s account it follows, therefore, that until Besser’s rebuild, the organ had a compass of 45 notes in all four manual works (three manual keyboards).

The compass of 45 notes in the manual keyboards, however, which can be credibly stated for the status of the organ between 1631 and 1671–74, cannot be reconciled with the confirmed 41-note compass of CDEFGA–g²a² during this period. The only solution to solve the discrepancy is that the organ had four keys for subsemitones. Since the subsemitone keys were apparently no longer present after the rebuild of 1671–74, Besser must have removed them. Instead of four subsemitones he introduced four regular notes in the Brustwerk to expand the treble to c³: g^{#2}, b^{b2}, b², and c³. To this aim, the Brustwerk also got its own manual for the first time. The absolute number of 45 notes in the Brustwerk, was retained therefore, since the new compass CDEFGA–c³ also contains exactly 45 notes. The other three manual divisions retained the old compass, CDEFGA–g²a², and four unused channels.

From Grapenthin’s account it is unmistakable, therefore, that the manual keyboards created by Frieztzsch in 1631 must have had four subsemitones. How the additional tones were distributed over the manual keyboard is not known. On the one hand, variants are conceivable such as Frieztzsch created in the instruments mentioned above:

- g^{#0}/a^{b0}
- e^{b1}/d^{#1}, g^{#1}/a^{b1}
- e^{b2}/d^{#2}
- analog to Braunschweig, 1621–23 and 1626
- c^{#1}/d^{b1}, e^{b1}/d^{#1}, g^{#1}/a^{b1}, b^{b1}/a^{#1}
- analog to Wolfenbüttel, 1620–24.

Against the latter variant (according to the Wolfenbüttel model), it may be argued that one could well expect that such an unusual arrangement would probably have been mentioned in primary sources or in the secondary literature – but one can't be sure of that, of course.

On the other hand, any other combination with four subsemitones is conceivable, which means for example an “asymmetric” distribution on the octaves, for example:

- $g^{\#0}/a^b0$, $b^b0/a^{\#0}$
- $e^b1/d^{\#1}$, $g^{\#1}/a^b1$
- $e^b0/d^{\#0}$, $g^{\#0}/a^b0$
- $e^b1/d^{\#1}$
- $e^b2/d^{\#2}$.

Only three years later, Friezsch equipped all three manual keyboards in Hamburg, St. Peter's with subsemitones.¹⁵ It is conceivable that the demand for this equipment could have been triggered by Friezsch's work in the neighboring St. Catherine's.

Assuming that subsemitones existed in all manual keyboards from 1631 onwards, Friedrich Besser would only have had to take the channels of the respective wind chests (except for the Brustwerk) out of service by removing the trackers to the four subsemitone pipes in each manual division. The work would have been a fairly uncomplicated and cost-effective affair within the large rebuild, so simple that it might not even have been found worthy to be mentioned in the records – apart from the mention of the new compasses. Perhaps the corresponding channels of the Hauptwerk, Oberwerk, and the Rückpositiv had only been shut off, and Besser used only the corresponding channels in the Brustwerk wind chest to add the four treble tones to c^3 .¹⁶

The considerations in the previous paragraph must remain a working hypothesis, until further notice. The existence of the four subsemitones in the large organ of St. Catherine's, however, must be regarded as certain.

15 The organ of St. Peter's had subsemitones for e-flat/d-sharp, g-sharp/a-flat, b-flat/a-sharp in *all* octaves in *all* three manual keyboards (but presumably – as per usual – this excluded the bass octave and the subsemitones did not extend above $g^{\#2}/a^b2$). Cf. Schröder, *Gloria in excelsis*, 32.

16 It is not known, why the other three manuals were not expanded with the treble notes. It is currently only possible to state the fact that these manual keyboards retained the old compass.

Frietzsch's Hamburg Organs with Subsemitones

According to the evidence presented here, Hamburg must have been the German city which had the richest stock of organs equipped with subsemitones, the list of which is impressive:

Table 3. Frietzsch's Hamburg organs with subsemitones, 1629–1638

- Monastery church of St. Maria Magdalene's, 1629, new organ
- [St. Nicholas' 1630, rebuild/extension]
- St. Catherine's, 1630–31, rebuild/extension
- St. Peter's, 1634, rebuild/extension
- St. James's, 1635–36, rebuild/extension

Hamburg St. Nicholas' is placed in brackets as a hypothetical statement, because it is not known whether Frietzsch actually added subsemitones. In 1630 he transferred the large organ to the west gallery of the church, and rebuilt and extended it for a considerable sum of money. Unfortunately, no details about this work have yet surfaced. In view of the series of major rebuilds/extensions by Frietzsch, the hypothesis is conceivable and plausible that he might have equipped even the large organ of St. Nicholas' with his trademark subsemitones. In that case, the organ would then rightly take its place as the second item on the list.

Hypotheses and Open Questions

In addition to the question of whether Frietzsch added subsemitones to the organ of Hamburg St. Nicholas' similar to the other main churches of the city, the question of who or what caused the subsemitone boom in Hamburg is of particular importance. There might have been several reasons: on the one hand, the Hamburg cantor,¹⁷ who performed with his ensemble every Sunday in the service of a different main church (according to a rotating schedule), might have been delighted. A large organ that had subsemitones would supply improved support to the cantor's music extending possibilities for transposition, as well as to the ever-demanded pure ensemble intonation.

The same advantage must also have been valid for the organists, who themselves offered a demanding "organist's music" (*Organistenmusik*)

17 Erasmus Sartorius (1577–1637) was cantor and *director musices* 1605–1637.

with vocal- and instrument soloists from the organ loft. The contacts of the Hamburg organists to the courts in Braunschweig, Wolfenbüttel and Dresden were intense. Jacob Praetorius (1586–1651), organist at St. Peter's, and Hinrich Scheidemann (ca. 1586–1663) knew Gottfried Friezsch and his qualities well, because they had earlier examined Friezsch's work in Braunschweig, St. Catherine's and St. Ulrici.¹⁸ The good reputation that the Saxon court organ builder enjoyed, therefore, in the Hanseatic City of Hamburg must have played a role, as well as the driving force of his obviously considerable self-interest and, presumably, a pleasant demeanor and skills in negotiation.

In the autumn of 1633, Matthias Weckman (ca. 1616–1674) was brought to Hamburg by Henrich Schütz himself in order to begin his studies with Jacob Praetorius.¹⁹ The subsemitones, as Friezsch built them in the organ (1612) for the Saxon Electoral Court Chapel in Dresden,²⁰ are frequently a prerequisite for Schütz's music.

The young Weckman, who remained in Hamburg until 1636 or 1637, witnessed during his studies Friezsch's transformation of the Hamburg "organ landscape." The furnishing of the organs of St. Peter's and St. James' with subsemitones for E \flat /D \sharp , G \sharp /A \flat and even B \flat /A \sharp (in different manuals and different octave ranges) fell into Weckman's first period in Hamburg.

It seems conceivable that Weckman, who in 1655, after almost two decades of absence from Hamburg, was appointed organist in Hamburg, St. James', and certainly ready to accept this important position not least because of the particular musical possibilities and challenges that the subsemitones offered – in St. James' the Rückpositiv had three subsemitones in each octave (in the central octaves). Weckman's ensemble music, especially

18 Uwe Pape, *Orgeln und Orgelbauer in Braunschweig* (Berlin: Pape, 2016) – on the examination of Friezsch's organ in St. Catherine's, Braunschweig, by Jacob Praetorius in 1623, cf. 154–155; on Hinrich Scheidemann's contribution to the inauguration of the Friezsch organ in St. Ulrici in 1627, cf. 108.

19 New evidence found by Bjarke Moe, University of Copenhagen, shows, that Weckman accompanied Schütz to Denmark, where Weckman must have stayed from at least the end of December 1633 until early January 1634. Bjarke Moe, "Schütz und Dänemark," in *Schütz-Handbuch*, ed. Walter Werbeck (Stuttgart: J. B. Metzler, forthcoming in 2020).

20 The organ had been planned by Schütz's predecessor in the office of the Electoral Hofkapellmeister, Hans Leo Haßler.

the harmonically unrivaled expressive “Lüneburg [Sacred] Concerti,”²¹ can hardly be adequately performed without the use of subsemitones.

From about 1670 onwards a new aesthetic appeared with the organ rebuilds and new organs by Johann Friedrich Besser and, above all, by Arp Schnitger (1648–1719). The subsemitones of the large organs in Hamburg were now virtually systematically removed, although the organ builders at the same time continued to adhere strictly to meantone temperament. In 1721, only the organ of St. Maria Magdalene’s had retained its subsemitones as described by Johann Mattheson (1681–1764): “The manual keyboard is equipped with a couple of [alternatively: *some*] subsemitones in each octave; which has [a] short [octave].”²² Ten years later he mentioned them one last time: “Every now and then you also can find this feature [the subsemitones] in old organs, for example here in Hamburg in the Church of St. Maria Magdalene’s.”²³ This rather small Fritzsich organ, the first organ in Hamburg that was equipped with subsemitones, remained until 1807 as the last witness to *extended* meantone temperament in the Hanseatic City of Hamburg: a rather short-lived, but colorful period, which had long since passed.²⁴

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21 Alexander Silbiger, ed., *Mathias Weckmann: Four Sacred Concertos*, Recent Researches in the Music of the Baroque Era 46 (Madison: A-R Editions, 1984).

22 Johann Mattheson, “Anhang von den Dispositionibus etlicher 60 (mehrentheils) berühmter Orgel=Wercke itziger Zeit,” in *Musikalische Handleitung, anderer Theil*, ed. Friedrich Erhardt Niedt (Hamburg: Schiller and Kißner, 1721), 181, footnote “m”: “Das Manual hat ein paar Subsemitonia in jeder Octava; welche unten kurz ist.” The term “ein paar” can be translated literally as “a pair” (i. e. a couple of), or as “some” (a few).

23 Johann Mattheson, *Das Beschützte Orchestre* (Hamburg: Schiller, 1717), 460–461: “Man findet auch noch hin und wieder diese Einrichtung in alten Orgel=Wercken, Z[um]. E[xempel]. hier, in Hamburg in der Marien=Magdalenen=Kirche.”

24 Gustav Fock, *Arp Schnitger und seine Schule: Ein Beitrag zur Geschichte des Orgelbaues im Nord- und Ostseeküstengebiet* (Kassel: Bärenreiter, 1974), 67. The “still good” (noch gute) organ is said to have been sold in 1807 “to an unnamed village church near Braunschweig” (an eine nicht genannte Dorfkirche in der Nähe von Braunschweig verkauft worden sein).

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