

GEORG VON BERTOUCHE AND HIS SONATAS WITH TRUMPET

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In 1738 Georg von Bertouch wrote his *XXIV Sonates Composees par les canons, fugues, contre points et parties scion le sirteme de 24 modes et les preceptes du fameux musicien, componiste et polihistor Jean Mattheson, avec la baste continue*, a collection of sonatas in all twenty-four major and minor keys. Of these, twenty-two are scored for violins and basso continuo while the remaining two require trumpet, two violins, and continuo.¹ One of these sonatas with trumpet is most unusual because of the keys in which it is written—O major.

Before discussing the music, let us look at Bertouch's background. He was born in Ostheim, Franken, 19 June 1668. His father, Jacob de Bertouch, was a professor of law and philosophy. At the age of fifteen Georg started his musical training. His tutor was Daniel Eberlin, court Kapellmeister at Eisenach, a town not far from Ostheim. Eberlin taught him violin and composition (although Bertouch gives Mattheson the credit for having taught him all he knew about music). At the time of his studies, two members of the Bach family were employed in the court orchestra, and Bertouch became a close friend of Johann Nicolaus (the other Bach was Johann Ambrosius). When Johann Nicolaus left Eisenach in 1689 to study at the University of Jena, Bertouch went along, in order to study law like his father. J.N. Bach and Bertouch later went to Italy together, and at the border they met a Danish army officer who invited Bertouch to come to Denmark. So he ended his studies in 1693 with a dissertation on opera and theatre² and enlisted in the Danish army. His subsequent military career can be summarized as follows:

1694 Regimental quartermaster

1704 Cavalry captain

1709 Major

1711 Lieutenant-colonel

1717 Colonel

1719 Commander of the fortress of Akershus, Christiania (Oslo)

1733 Major-general

He continued to live at Akershus until his death in 1743. His duties as a soldier did not preclude musical activity, and he became well known as a composer and violinist. He corresponded with several important musicians, for example, Antonio Lotti, Johann Mattheson, and Georg Philip Telemann, to whose *Tafelmusik* Bertouch subscribed. Fragments of a letter to J.S. Bach are extant, and it might have been he who inspired Bertouch to write in all twenty-four keys, as in the *The Well-Tempered Clavier*. Bertouch even sent Bach a copy of his work.³ Mattheson also mentions Bertouch among twelve other

better-known composers—including Handel, Telemann, and Kuhnau—to whom he dedicated his *Das beschatzte Orchestre* in 1717.

Bertouch's sonatas,⁴ of which the first six are lost, are mostly trio sonatas, and they show that he was a well-educated composer in the late Baroque style. They are in three or four movements, and Bertouch often uses the typical late-Baroque concerto form: fast-slow-fast. He also includes some less formal movements and several based on dance forms. The harmonic content is fairly simple but clearly set out.

But why did he write for trumpet in sonatas nos. 9 and 23? In particular, why did he compose no. 23 in A major? Did he not know that C, D, and E⁶ were the most common keys for the trumpet? It is hard to believe that a well-educated musician and composer who had also travelled a good deal could have been unaware of the trumpet's practical limitations. Since the sonatas do not appear in succession, but are separated by some fifteen other sonatas, it is probably not a coincidence that he chose to score no. 23 for trumpet in OS instead of, for example, A. How can we understand this difficult and unusual choice of key? Let us consider a few options.

1. We do not know much about musical life in Christiania at this time, but if trumpeters there used instruments in C, we could propose a theory that they used a mute, thereby raising the pitch by a half step. Such a mute seems to be the only surviving type of the period. Of course this mute could also have been used on a trumpet in D, crooked down a whole tone for Sonata no. 9⁵, with the mute then inserted for the other piece.

2. Alternatively we could postulate the use of a trumpet in C, crooked down a half-step to B, with a whole-step mute inserted to raise the pitch to C. To find evidence for this theory we would need to examine the parts in order to determine if there is a difference in pitch between trumpet and strings. This reveals weaknesses in both theories relating to muting, since the entire collection of sonatas is preserved only in a handwritten score (see Figures 3 and 4), with no indication of a mute.

3. A more plausible suggestion is the use of a crook alone. While the collection has two sonatas with trumpet, there is no indication they were played successively, but Bertouch may have had a particular player in mind when he wrote them. The composer would likely have known the key of this player's instrument, and the fact that the two keys are so close could for example make it convenient to use an instrument in D with both a whole-step and a half-step crook.

4. It is well known that tuning in the Baroque period varied considerably, chronologically as well as geographically. This last theory deals with the difference between choir and chamber-pitch. J.S. Bach made this difference clear in BWV 71, the cantata *Gott ist mein König*, in which he notated the basso continuo part one tone lower in order to tune with the chamber-pitched woodwinds. Could it be that for the Bertouch sonatas the trumpets were pitched differently than the strings and continuo? (In this regard, it is again unfortunate that the single source consists of score only; no parts exist.) Let us see what a few of the well-known writers of the 18th century say about pitch:

Johann Mattheson:⁷ Choir-pitch is a major second to a minor third higher than



Figure 1
Bertouch, Sonata no.9, C Major, first page.

The image shows a page of handwritten musical notation for the first page of Bertouch's Sonata no. 23, C# Major. The score is written on ten staves, with the first two staves for the Violin and the remaining eight for the Piano. The title "Sonata" is written at the top right. The tempo marking "Allegro Vivacissimo" is written above the first staff. The key signature is one sharp (F#) and the time signature is 3/8. The notation includes various musical symbols such as notes, rests, and dynamic markings like "p" and "f". The handwriting is dense and somewhat messy, with some ink bleed-through and smudges. The page is numbered "25" in the top right corner.

Figure 2
Bertouch, Sonata no. 23, C# Major, first page.

chamber-pitch.

Johann Kuhnau:⁸ Chamber-pitch is a second or a minor third lower [than choir pitch].

J.J. Quantz; "Therefore consider the so-called German A-chamber-pitch, which is a minor third lower than the old choir-pitch, to be the best."¹⁰

J.E.Altenburg: "The choir-pitch, as far as sound is concerned, is a whole tone higher than chamber pitch."¹¹

If trumpets, in contrast to strings, were tuned in chamber-pitch, Altenburg presents a strong argument in his *Versuch*. as to why Bertouch may have chosen C and C# for his sonatas: "What is in chamber-pitch

C, D, E¹, E, F, FS, G, A¹, A, B¹, B, & [et]c.

is in choir-pitch B¹, B, C, D¹, D, E¹, E, F, G¹, G, A¹, A."¹²

From this we can see that, as far as pitch level is concerned, B1 in choir-pitch sounds the same as C in chamber-pitch, C in choir-pitch the same as D. We can see that the unusual keys C and CS here correspond with the more common trumpet keys D and E¹. But we know from several other sources that trumpets were normally in choir-pitch, which would turn this theory upside-down.

Although we know so little about musical life in Christiania in the Baroque period there was at least one trumpeter employed by the governor, mentioned in the records at Akershus. While Norway was under the Danish crown the governor was the Danish king's deputy. The trumpeter probably played both in the town and for the aristocracy at Akershus. It is likely that the church would have needed the help of town musicians in its performances of sacred music. The Swedish musicologist and author A.A. Hilphers wrote as late as 1773 that "Organs should be tuned to choir pitch...because all chorale books in the world are composed according to choir pitch. If the organ is tuned to chamber pitch, the chorales must be transposed one tone higher (at great discomfort for the organ player)."¹³ The strings may therefore have been accustomed to play at that high pitch. With only one trumpeter in town (rather than the three normally required for church use) there would not be much church music for him to perform other than perhaps playing from the church tower alone and for that he would not have to be at that high pitch. There is also the possibility of geographical variations in the tradition shown in, for example, Bach that organs and trumpets were at the same pitch. I have found an entry in the account books of the German church of S t.Gertrud in Stockholm from 24 March 1721, indicating that money was paid to the organ player Kellner "for being responsible for the music and transposing the piece, adapting it according to the trumpets in the celebration of the Jubilee."¹⁴ This indicates that at least in Sweden, trumpets and organs were not at the same pitch, and perhaps we could make use of Altenburg's table after all.

I have tried to present a few of the hypothetical ways of dealing with the problems of the two sonatas;

a) The mute, changing sound and pitch; two types, whole-tone and half-tone, used in combination with crooks.

b) Starting at a higher pitch than C and using crooks for C andal.

c) Variable pitch; i.e. the many different ways of naming a certain pitch, and that some instruments were tuned to a different standard.

We must bear in mind that these two sonatas originate from what might be called the "provinces" of musical culture at that time, and perhaps they do not obey rules which were valid elsewhere. In conclusion, we can only guess: trumpeters would have solved any problem in Bertouch's sonatas as easily and practically as possible. A good principle even today: look for the solution best suited to your instrument and the circumstances in which you work.

NOTES

1. A modern edition of the two sonatas is available from NOTON, P.O.Box 1014, N-2301 Hamar, Norway. Editions nos. N-8918-A and N-9018-A.
2. Title of the dissertation: *Disputatio juridica de eo quod justum est circa ludos scenicos operasque moderns, dictas vuko operen.*
3. See P. Spitta, *Johann Sebastian Bach* (Leipzig, 1873-80; 5/1962. English transl., London, 1884-99/R1951), 3:235f.
4. The manuscript is in Copenhagen, Det Kongelige Bibliotek, DK-Kk Ny Kongl. Saml. Fol. 110 d.
5. According to Johann Ernst Altenburg, "Every [trumpeter] who wants to play with other instruments must: 1. Tune his instrument accurately according to the others. The trumpeter must therefore have various mouthpieces and crooks at hand..." *Versuch einer Anleitung zur heroisch-musikalischen Trompeter- and Paukerkunst* (Halle, 1795), p. 96. ("Jeder der zu andern Instrumenten mitspielen oder blasen will, muss: 1. Sein Instrument nach den andern richtig einstimmen. Der Trompeter muss daher verschiedene Setzstücken und Krummbogen bey sich fahen....")
6. J.D. Eysel (*Musicus Autodidactus*, Erfurt, 1738, p. 92) says, "Can one indeed moderate the call of the trumpet? Why not? Indeed by putting in the so-called mutes, which are small hollowed-out pieces of wood. If one places these in the end of the trumpet, it sounds very sweet, and thereby sounds a tone higher, which in *Cammerton* is E." ("Kan man der Trompetenschall auch wohl moderieren? Warum dieses nicht? Und zwar durch einsteckung der sogenannte Sordinen, welches kleine ausgehohlte Holzgens sind. Wenn man diese unten in die Trompete stecket, so klinget sie ganz doux, and dabey urn einen Ton holier, welches im Cammer-Ton E dur ist.") Fantini in the preface to his *Modo per Imparare e sonare di tromba* (Frankfurt, 1638), says, "And with the muted trumpet you must play in D sol re." ("E per la Tromba Sordina si deve sonar per de sol re.")
7. *Das neu-erhoffirete Orchester* (Hamburg, 1713), p. 74.
8. Cited in Johann Mattheson, *Critica musics* (Hamburg, 1722-25), 2: 235-36.

10. J.J. Quantz, *Versuch einer anweisung die Rote traversiere zu spieln* (Berlin, 1752), Chapter XVII, section vii, § 7:1.

11. J.E. Altenburg, *Versuch*, p. 84.

12. Ibid.

13. AA. Hiilphers, *Historisk afhandling om musik och instrumenter särdeles om orgwerks inrattningen i allminhetjemte kart beskrifning afiver orgwerken i Swerige* (Visterls, 1773). "Orgwerk bora stammas i chorton...darfore, at hela werldens urildriga choral bocker aro forfattade efter chorton. Der ett orgwerk blifwer stamt i Kammarton, maste alla choraler en ton hogre transponeras (till mycken olagenhet for organisten)."

14. Stockholm, Stadsarkiv, Ty. fOrsaml. LIE: 40, fol 917. "... bey hal tong der Music and transportierung der stuck nach denen Trompeten eingerichtet bey feyrung des Jubilee."

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