The background of the entire page is a handwritten musical score on aged, yellowed paper. The notation is in dark ink, featuring various note values, stems, and beams. There are several red markings, including the number '75' at the top right, and a circular library stamp in the upper right quadrant. The text is overlaid on this background.

Olivier Picon

THE CORNO DA TIRARSI

Diplomarbeit an der Schola Cantorum Basiliensis

2010

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“Some people see things as they are and say why, I dream things that never were and say:

“why not?” (George Bernhard Shaw)

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Introduction

“I took up the horn because everyone kept telling me it was difficult, so I just thought that's the one for me. I used to love listening to classical music to hear the horns and whenever I heard them I felt kind of proud because I felt it had something to do with me. Or I had something to do with it.” (Ewan McGregor)

Numerous are the items that, unable to find a path through the mists of history, had to remain belongings of early ages and mystery to us. It is indeed by chance that a miraculously preserved stone could teach us the meaning of Egyptian writings yet we may never understand the Etruscan language. It is fate as well that kept Oxford's Bodleian Library on its feet yet buried the immensely rich library of the King of Portugal in 1755. The same occurs in our musical field where, although some material made it to our time, much remained in its century and is probably lost for ever.

This is the case for the instrument that Johann Sebastian Bach named *corno da tirarsi*. (The name of this instrument occurs only in the writing of J.S.Bach). What makes it very remarkable is the fact that it appears only in Bach's works (actually within a very short period in Bach's composing activity) and that he is the only one to write this name (none of his copyists would mention the full name *corno da tirarsi*). The music written for it, sometimes very soloistic and elaborate, goes far beyond the usual borders of the natural Baroque horn. Combined with the very high standard of Bach's composition, these parts prove to be some of the most exquisite and breathtaking horn parts of the Baroque era.

The sheet-music parts for *corno da tirarsi* made it to our time but this is roughly all that we've got. A rather poor legacy for modern performers. Indeed no such *Corno da tirarsi* instrument remains. Nor some dictionary article, maker's bill, player's list, pictures or document of any kind that would bring proof of the actual existence of the instrument. The reality of the *corno da tirarsi* is only documented (as far as we know) by its music - and that by a single composer.

We shall see what kind of clues we can drag out of the period texts and pictorial documents. Many writers did their best to get a sentiment of what the *corno da tirarsi* might have been; and it could be of great help to confront their writings with the conclusions we will make from the study of the original material. As we shall see later it might lead to some new ideas concerning the possible features of this instrument.

I/ Propositio

“The call to war resounded from the winding horn” (Seneca, Oedipus)

The horn is at the roots of our musical culture. The origin of the instrument goes far beyond our knowledge but two facts are doubtless:

- the horn remained until very late (at least the beginning of the 17th century) a merely signal/communication instrument.
- It has a long tradition of association with the trumpet.

Until modern days, confusion remains, as shown by the use by jazz and rock musicians of the term “horn” to designate any kind of wind instrument. Indeed the horn (natural or modern) is nothing more in its physical principles than a trumpet tuned down an octave or so. In the 18th century the only technical differences between horns and trumpets were there tuning and tube conicity, which evidently led to some ”in between” instruments - coiled like horns but with trumpet-like cylindrical tubes and pitch lying between the usual trumpet c-d and horn f-g. The argument that horns are coiled, conical and with conical mouthpieces is not written in any original source. It is merely a modern simplification of very rich spectrum of instruments that existed back then. The writings of Peter Downey about the brass instruments in very early northern European sources¹ shows quite well that those instruments had the same symbolism.

One of the first sources of modern times where trumpet and horn appears alongside is the ”Musica Getütsch” of Sebastian Virdung² . Virdung gives a drawing of four ”important” brass instruments: “Busaün”, “Felttrümet”, “Clareta” and “Thurner horn”.

Right after he mentions two other “usable” instruments called: “Jäger horn” and “Acher horn”.

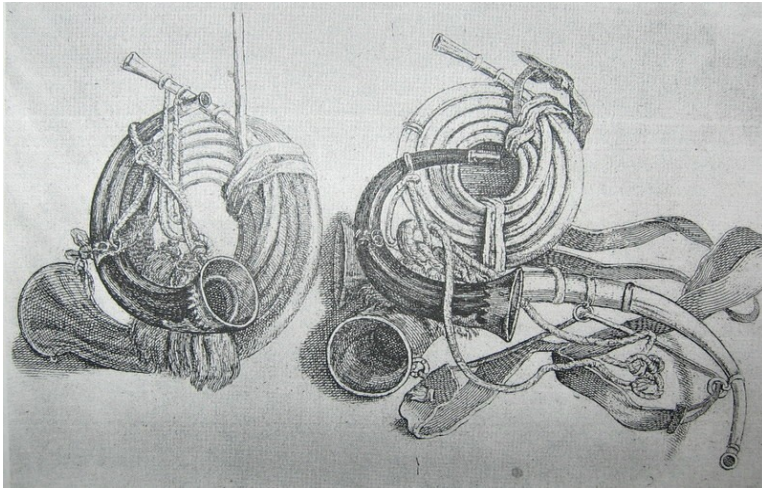
Indeed those instruments (mostly the “Jäger horn”) are very similar to what will be a hunting horn in the 16th and beginning of the 17th century.



Jäger Horn in Sebastian Virdung's "Musica Getütsch" (see footnotes).

¹ Peter Downey "Lip-blown instruments of Ireland before the Norman invasion" in *Historic Brass Society Journal* n°5, Historic Brass Society, New York, 1993 and "Crutti, Cuslennaig, Cornairi-Instrument and music in medieval Ireland" in *Historic Brass Society Journal* n°9 , Historic Brass Society, New York, 1997

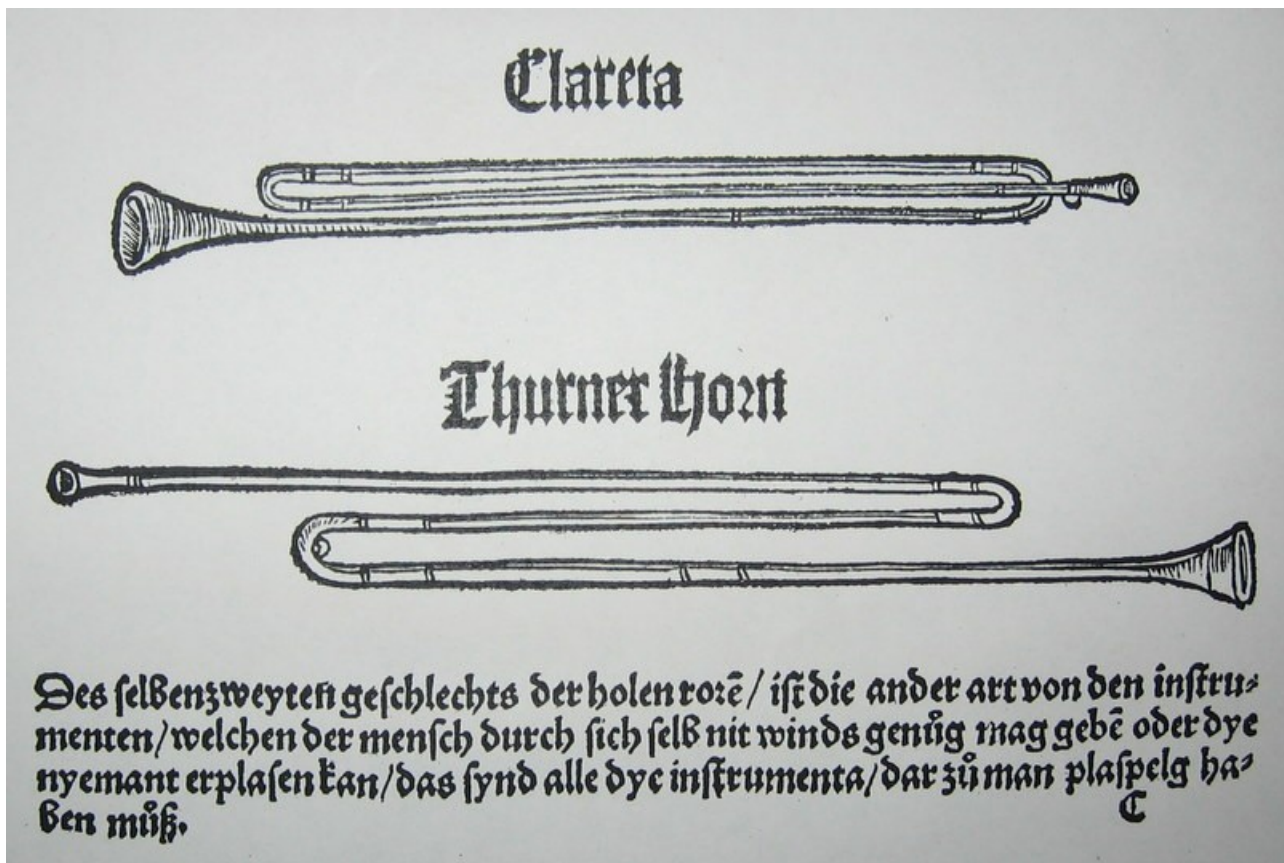
² Sebastian Virdung "Musica Getütsch" 1511; Faksimile edited by Klaus Wolfgang Niemöller, Kassel; Basel: Bärenreiter, 1970



Hunting Horns by Wenzel **Hollar**, XVIIth century (see K.Janetzky "Kulturgeschichte des Horns").

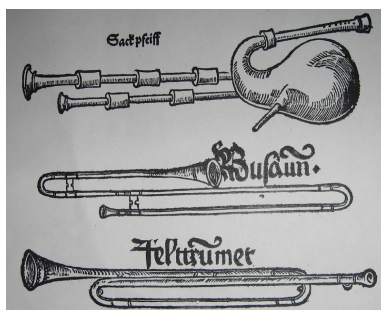
The "*Busaün*" and the "*Feltrtrumet*" are easily recognisable as forebears of the Baroque trombone and natural trumpet but two other instruments are more exotic: the "*Clareta*" and the "*Thurner Horn*". Some specialists came up with the idea that the *Clareta* has a special kind of mouthpiece structure that would work as a single slide³. As Downey puts it the *Clareta* slide system appears on the engraving in *Virdung*. It is supposed to be the little ring close to the mouthpiece.

³ Peter Downey "The Renaissance slide trumpet" in *Early music* vol. XII n° 1 February 1984, London; Keith Polk "The trombone, the slide trumpet and the ensemble tradition of the early renaissance" in *Early music* vol. XVII n°3 August 1989, London; Herbert W. Myers "Slide trumpet madness" in *Early music* vol. XVII n°3 August 1989, London



Clareta and Thurner Horn from Sebastian Virdung's "Musica Getutscht".

6



Felttrümet in Sebastian Virdung's « Musica Getutscht »

Through a purely optical analysis, it's very hard to make a difference between the *Clareta* and the *Felttrümet*. They both feature the little ring by the mouthpiece. The particularity of the *Clareta* however is that it doesn't seem to be soldered. Actually the *Clareta* share this particularity with the *Thurner Horn*.

The latter is a very important instrument for our topic for three reasons:

- It's called a "horn"
- It's obviously played by "Thurmer" (tower player) or the later called "Stadtpfeiffer".
- It's definitely something different than a usual Felttrümet.

The fact that the *Thurner Horn* has his very special snake-like form that we find in many pictorial sources of the 15/16th century can't prove the presence of a slide on the instrument.



Hans Memling, *Musician Angels*, ca. 1480. With two slide trumpets and a straight natural trumpet in the center.

Nevertheless the *Thurner Horn* must have had something different from a *Feltrtrumet* and apart from a slide system, I can't see what it could be. The name "horn" might seem peculiar for such a trumpet-shaped instrument. But we can get a more precise idea of the use and meaning of the word *horn* in 15th century Germany from an article of Martin Kirnbauer⁴.

Kirnbauer refers to several payment bills from the "Stadtarchiv" in Nuremberg dealing with "horn". The first being from the very early date 1377, about a "messing horn uff Sant Lorentzen tür". (brass horn on the Saint Lawrence tower). This is the earliest reference I could find about a metal-made horn and its connection to tower music. References to horn purchase and repairs still appear very regularly in the 15th century Nuremberg with repair bill up to seven horns at a time. All of those for the tower musician. Even if Downey and Polk⁵ argue that "horn" should belong to the Thürmer and "pazawn" (trombone) to the "Stadtpeiffer", Kirnbauer noticed that the naming is usually inconsequent. In his article, two original bills caught my attention:

(probably from 1434)"... kauffet man von Hornmacher zu Landshut viij gut trometen je eine umb iij guld, eine kleine tromete, die nannten sie ein claretlein, sechs gute krome horner, xi schlechte krome hörner und ein langes horn, diess Hörner mitsampt dem klaretlein kosteten xviii guld[...] und ein teil alter Hörener gab man im dazu".

(... by the hornmaker, we bought 8 good trumpets each for 3 guld, a small trumpet, that they call claretlein, six good curved horns, 11 bad curved horns and a long horn, this horn with the claretlein cost 18 guld[...] and we gave him some (or some parts of) older horns on top of that.).

Then a second source:

"37,5 gulden landeswerung umb 8 trometen, 7 gute horner, umb 12 schlechte horner den turnern zu prauchen. Darunter ist ein langes schlechts horn und die andern sein alle krumh".

(37,5 gulden for 8 trumpets, 7 good horns, for 12 bad horns that the tower musicians could use. From those is a long bad horn and all the others are curved.).

There is pretty much information in those sources. First the claretlei (probably what Viridung called a *Clareta*) is a small trumpet ("eine kleine tromet") and apparently not a slide trumpet. Then horns seem to be much cheaper than trumpets (which would call for very short horns the shape of

4 Martin Kirnbauer "Blechblasinstrumentenbau im 15. Jahrhundert" in *Posaunen und Trompeten: Geschichte, Akustik, Spieltechnik: 19. Musikinstrumentenbau-Symposium in Michaelstein*; Michaelstein: Institut für aufführungspraxis, 2000

5 See footnote 3

an animal horn to play signals on one note). Except the long horn of the first bill, which together with the claretlein, cost 18 guld. Meaning that one or both of the instruments are very expensive. Horns are divided into two groups: “good” and “bad”, which strangely enough is not the case for the trumpets. But what is clear from the texts is that horns and trumpets are very different and identifiable even if horns are both straight (lang) or coiled (krum).

Finally Kirnbauer shows two later bills (respectively from 1487 and 1490) saying:

“... ein neues und altes ziehstück” (a new and an old sliding piece)

and:

“ 16 gulden [...] für 6 trompeten, die man zu Nurembergk zu machen bestalt hat, nemlich dry velttrompeten yede trompte für 2 fl. Und zu jeder ein claret mundstücke, für jedes 1 ort, item 3 mitlean trompten, yede für 2,5 fl. Und zu yede ein quint montstücke zu 5 albus und weiteres für transport.”

(16 gulden for 6 trumpets that we ordered in Nuremberg, that is 3 „velttrompete“ (welshtrompets?) each one for 2 fl. And for each one a „claret“ mouthpiece, 3 „mitlean“ trumpets for 2,5 fl. Each. And to each a „quint“ mouthpiece for 5 albus and extras for the transport.)

The presence of a “ziehstück” (sliding-part) shows definitely that the Thürmer made use of slide. The second bill deals with a “claret-mouthpiece”, which has often been taken for a slide that would have belonged of the *claret* trumpet⁶. However the presence in the same bill of a “quint montstücke”(quint mouthpiece) draws some questions. A quint mouthpiece can't be anything else than a mouthpiece to play the quintus register or in other sources, the *principale/vulgano*⁷.

By comparison the “claret mouthpiece” should be a mouthpiece made to play the clarino register and Virdung's *Clareta* might be nothing more than a clarino (a trumpet for the clarino register or high register).

8

Altogether this allows us to think that the Thürmer Horn did exist. It was very probably not coiled but differed from the trumpet somehow (maybe by the use of a slide). Before we go any further I want to make it clear that the evidence of the existence of the Thürmer horn in the 15th century Germany is absolutely no source for research on Bach's instruments. This instrument might have died as many others between the 15th and 18th century.

Nevertheless it's worth noticing that German Thürmer - who's job will be later undertaken by Bach's Stadtpfeiffer – owned instruments named horn and having apparently special features that could have been a slide system.

Finally I just want to draw attention on a detail in Virdung's engraving. On the Thürmer horn's second curve (the lowest on the picture) there's a little ring in the inner side of the curve. The *Feltrümet* own the same ring but with another one on its opposite curve; probably to hang a flag. On the *Thürmer Horn* however there's no chance to hang a flag. The use of this for holding a moving part of the instrument is a possibility like any other.

II/ The Leipzig background: players, instruments and customs

“I had a note that actually was just out of the range of the French horn. And you get these

⁶ See Downey “The Renaissance slide trumpet” *ibid*.

⁷ See Girolamo Fantini “Modo per imparare a sonare di tromba” 1638, Facsimile by The Brass Press, Nashville, 1972, Johann Gottfried Walther “Musikalisches Lexikon: oder musikalische Bibliothek” Facsimile edited by Richard Schaal, Kassel; Basel, Bärenreiter, 1967

great musicians that give you sort of a look and they go, "Um, surely this is, um, um." And you give them a little look like "Can you do it?" And they give you a little look like "Yes I can." It's really a great moment." (Paul McCartney)

When Johann Sebastian Bach took up his duty in Leipzig, the only available source of brass player was the group of Stadtpfeifers. (However there might have been musicians from the University playing brass instruments, but for our topic only the first and main brass player is concerned and it was logically a senior Stadtpfeiffer). Bach had for sure a very good knowledge of this musician class since he's been raised in a Stadtpfeifer family⁸. His father and uncles were Stadtpfeifers themselves while two brothers (Johan Balthasar und Johann Jacob) went in the Stadtpfeifer apprenticeship in Eisenach. Later his father in law Johann Caspar Wilke was a Hof-und Feldtrompeter (Court and Military trumpet player) in Weissenfels, probably the most important city in trumpet playing tradition in Germany at that time. In 1723 as Bach entered the city, there were four Stadtpfeifers with very probably some apprentices and helpers⁹. In this body of players, the persona of Gottfried Reiche is of great interest to us. The amount of scholar writings about him is considerable since he is accepted as the main performer of the extremely demanding brass parts of J.S.Bach. Furthermore, his portrait made by Haussmann features an instrument that has been the subject of much discussion.

But for the *corno da tirarsi* topic there is no doubt that Reiche was its player and probably unique owner.

Indeed Bach never used the *corno da tirarsi* before he came to Leipzig. And right after the death of G. Reiche, Bach had to rewrite lots of the da-tirarsi solos that could apparently not be played by anyone else anymore (like in the cantatas BWV 8, BWV 10, BWV 73, BWV 96, BWV 133, BWV 185...). Unfortunately Reiche didn't leave a *corno da tirarsi* in his legacy: only a horn (apparently natural) and a slide trumpet¹⁰.

Actually, the slide trumpet too is strongly connected to Reiche, since J.Kuhnau had already written twice for the instrument and all probability makes Reiche the evident player of those cantatas¹¹.

But the most important information concerning the *corno da tirarsi* is that the instrument apparently died with Reiche. This is a main topic: knowing if the *corno da tirarsi* is a newly invented instrument in the XVIIIth century or a long-existing instrument of the Stadtpfeifer community. It is very hard to deliberate since there's no obvious sign of the existence of the instrument either before nor after its appearance in Bach's works. Is it Bach who gave a new name to a long existing instrument, of which he'd be the first and only composer to use in art music? Or is it a new invention like Eichentopff's Oboe da Caccia? I wish I knew.

In any case Gottfried Reiche was still a man of the 17th century (born on the 5th of September 1667) and was trained in the 80's of that century in a very trumpet-traditionalist Weissenfels. When Bach came to Leipzig, Reiche was a "senior "Stadtpfeifer", roughly 20 years older than the cantor. Unlike the two oboe players (Gleditsch and Kornagel) who were much younger and therefore maybe more incline to play the newly invented oboe da caccia. However no

8 See Don Smithers "Gottfried Reiches Ansehen und sein Einfluss auf die Musik Johann Sebastian Bachs" *Bach-Jahrbuch* 73, 1987, Evangelische Verlagsanstalt, Berlin, 1986, p. 113-150

9 See Christoph Wolff "Johann Sebastian Bach: the learned musician" Oxford University Press, 2000, p. 262

10 See Herbert Heyde "Instrumentenkundliches über horn und trompete bei Johann Sebastian Bach" in *Johann Sebastian Bachs historischer Ort; Bach Studien* 10, Breitkopf und Härtel muskverlag, Wiesbaden, 1991, p. 261

11 See Don Smithers "Gottfried Reiches Ansehen..." in *Bachjahrbuch* 1987. reference above

proof can be made that Reiche used an already-existing instrument to play the *corno da tirarsi* parts.

Fortunately some documents remain concerning the Stadtpfeifer and their relationship to the corno/tromba da tirarsi; namely the Stadtpfeifer's trial report made by cantors. They are from a time far beyond the "death" of the *corno da tirarsi*. However they give precious clues. The examination of Herzog says:

"Mit den concertierenden Choral konnte er auf der Zugtrompete gar nicht fortkommen und musste er es auf der Altposaune versuchen..."in 1769

while in the same source J.M.Pfaffe gets:

"Den concertierenden Choral auf den Zugtrompete hat er richtig geblasen."¹²

It shows quite clearly that first of all the tromba da tirarsi is no alto (or even soprano as some writers believe) trombone since Herzog had to try it on the trombone after failing on the tromba. It seems that the playing of the choral on the slide trumpet seeing that Herzog was at lost with it unlike Pfaffe who -as a Leipzig Stadtpfeifer relative- did well on the tromba da tirarsi. It's clear that the golden age of the corno/tromba da tirarsi had gone by then since the piece to play is a "concertierenden Choral"; so apparently a choral in concerted piece like what is required BWV 20, 140...; in other words the easiest parts for *corno da tirarsi* ever written. But no mention is made of the *corno da tirarsi*; apparently no more in use or sharing the same name as the tromba da tirarsi.

This is actually a major issue since the term *corno da tirarsi* appears exclusively in Bach's hand. By writing those words on his parts he created the controversy about the *corno da tirarsi*. However, Bach is not usually approximate in his naming of instrumental parts. As far I my knowledge goes, I can't remember of any of Bach's own manuscript where an instrument is clearly mistaken. This is the reason why I find it necessary to investigate the existence of the *corno da tirarsi*. Bach himself giving the name corno (da tirarsi) to the same kind of parts very frequently is a good enough reason to undertake research about what his *corno da tirarsi* could have been. This means first of all what is considered as a horn in the first 18th century in north Germany. And in what extent a *corno da tirarsi* differs from a tromba da tirarsi so that Bach would take care not to mix them up.

III/1.Early written sources and original natural instruments

Firstly, a remark should be made about one of Bach's peculiar customs: he never used the word "Waldhorn"; instead of which he'd go for the Gallican/Italian versions: corno, cornu, corne du chasse, corno da caccia...This being said let's focus on period sources.

We don't get much information by reading 18th century definitions and pictures related to the horn. Starting with Weigel¹³: the text and picture are very "hunt/pastoral" connected and the instrument shown bears no evident possibility of a inbuilt slide. (that would be very out of place anyway in the sylvestrian atmosphere of the page.) The two only unmistakable features of the horn here are its coiled body and its pitch (apparently in f/g).

12 See Thomas McCracken „Die Verwendung der Blechblasinstrumente bei J.S.Bach unter besonderer Berücksichtigung der Tromba da tirarsi“ in *Bach-Jahrbuch n°70 1984*, Evangelische Verlagsanstalt, Berlin, 1984, p.62

13 Weigel, Johann Christoph "Musicalisches Theatrum" facsimile: Kassel; Bärenreiter, 1964



Waldhorn in J.C.Weigel's "Musicalisches theatrum"
(see footnotes).

11

From J.F.B.C. Mayer¹⁴ we get mainly a copy from Mattheson's "Neu eröffnete Orchestre"
apart from an original and probably very "modern" sentence:

"Man heutigs Tags auch C Wald-Hörner hat welche eine Octav tiefer sind als die Trompeten."

(Nowadays we have c-horns as well that play an octave lower than the trumpets).

We should notice too that in the following article Majer says:

"Die[...]Posaune[...] ist eine Art von Trompeten"

(the trombone is a kind of trumpet)

which helps a bit seeing the instrument's connection from an 18th century viewpoint.

14 J.F.B.C. Mayer "Neu-eröffneter Theorisch-und Praktische Music-Saal, Schwäbisch Hall, G.M. Majer, 1732, R; Kassel, Bärenreiter, 1954



Waldhorn in J.F.B.C Mayer's "Neu-eröffneter Theorisch-und Praktische Music-Saal" (see footnotes).

The text of Eisel¹⁵ again is roughly a quotation of Mattheson, even if maybe less than by Majer,. Eisel takes from Mattheson the (too often forgotten) fact that horns:

“gehen aus dem F. und mit dem Trompeten aus dem C”

(horns are pitched in F and -like the trumpets-in C),

which settles the pitch of horns from “descant” C downward to “altus” F. But here comes the interesting bit:

“Auf dem Wald-Horn können weiter keine Semitonia gemacht werden, ausgenommen B. und Fis, und das sind sie alle.”

(On the Wald-Horn are no semitone to be played except for Bb and F# and that's all of them) and the better:

“Übrigens ist nichts weiter bey diesem Instrument inacht zu nehmen, indem alles eine fleissige und tägliche Übung ankommt”.

(Nothing else is to be taken into consideration about this instrument since it all comes with an intensive and daily practice).

The part about the daily practice is not innocent. It shows that it was apparently difficult enough to play the natural scale with the two usual semitones (F# and Bb) without trying to play chromatically.

Mattheson in his "Neu-eröffnete Orchestre" ¹⁶ gives the very famous definition where the most noticeable is that the horns:

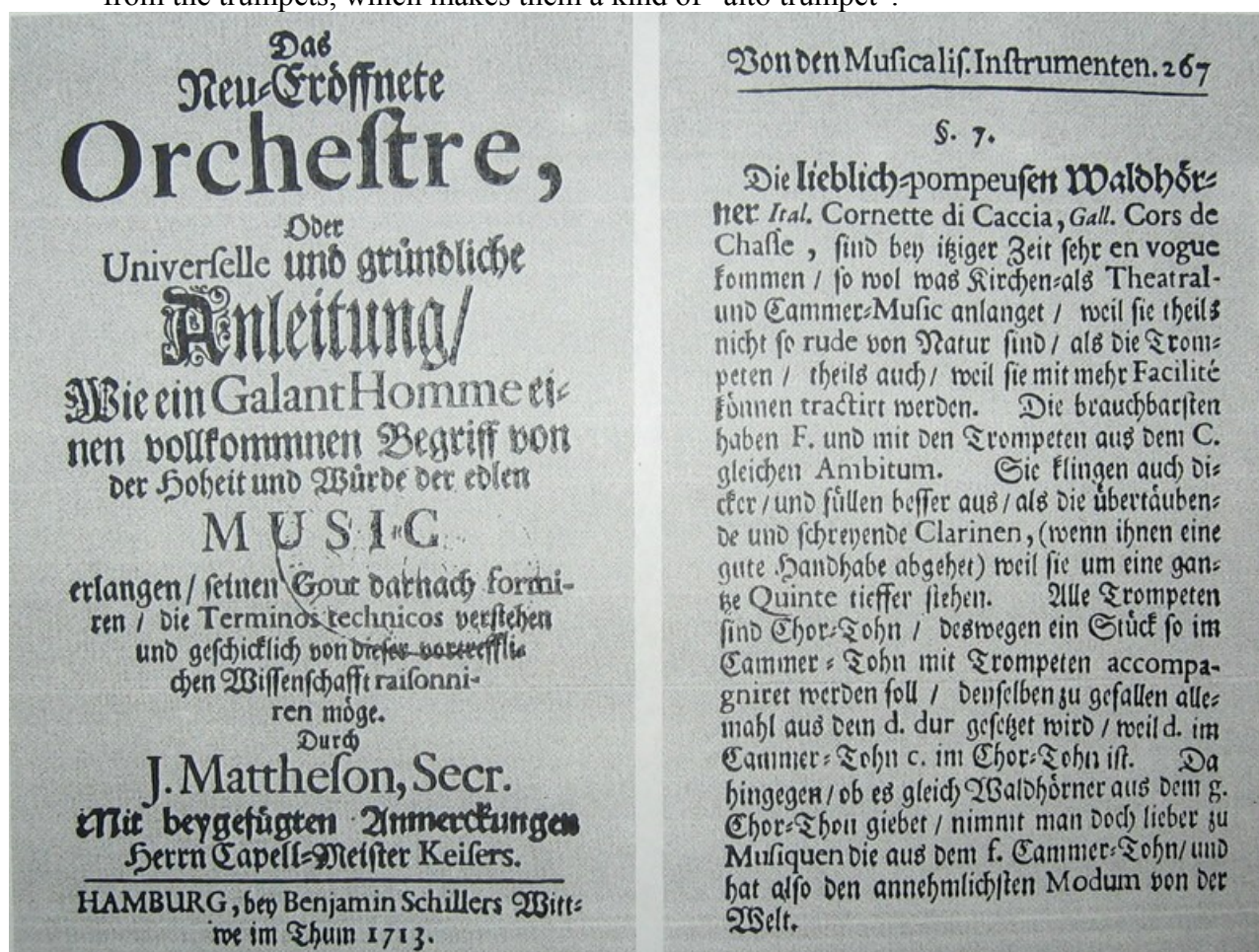
“um eine gansse Quinte tieffer stehen”

15 Johann Philip Eisel "Musicus Autodidactos oder Der sich selber informierende Musicus" Erfurt 1738, Facsimile from the Zentralantiquariat der DDR, Leipzig, 1976

16 Johann Mattheson "Neu-eröffnete Orchestre" "Hamburg 1713, facsimile from Georg Holmes, Hildesheim; Zürich, 1993

(are pitched a full fifth lower)

from the trumpets, which makes them a kind of “alto trumpet”.



Waldhorn in J. Mattheson's "Neu-eröffnete Orchestre" (see footnote)

By the way this article is exactly copied by in the anonym "Kurtzgefasstes musikalisches Lexicon"¹⁷. To ease the reading I shall refer to this source with the name Chemnitz.

Nothing in those definitions really leads to the *corno da tirarsi* but we can learn a lot from what's written about trumpet and "clarino".

Chemnitz goes like this:

"Clarino, ist so viel als eine Trombone, oder Posaune"
(clarino is as much as a trombone).

What an unusual statement indeed!, going clearly against what *clarino* means in other sources. However later in the same source Chemnitz says about the "Trombone":

"Die Posaune, Trommete, etc. sin mehr martialische, als musicalische Instrumenta, denn sie schneiden gar zu scharff ins Gehör, darum solche einige gleich denen Jäger-Hörnern ästimieren."

(Trombones and trumpets are more martial as musical instruments for they "cut too sharp in the ear", therefore some prefer the hunting horns.).

¹⁷ "Kurtzgefasstes musikalisches Lexicon" Chemnitz 1749, facsimile from Zentralantiquariat der DDR, Leipzig, 1975

It indeed fits perfectly with Mattheson's assumption of the change of fashion from the trumpet's golden age to that of the horn. Strangely enough, in his article about the "trompete", Chemnitz describes very accurately a trumpet ensemble and names the two top parts "clarin", which doesn't fit exactly with his given understanding of "clarino".

Let's have a look at what Eisel says about the trumpet. First we can notice that "Künstler können ins G oder C4 hinauf steigen" (Artists can play up to the C4).(an octave above Bach's usual top notes!) which shows that we are maybe not so advanced in trumpet playing compare to our 18th century forebears.

Eisel (agreeing with Chemnitz) explains that the "flatter-Grob"(the lowest part of the trumpet consort) requires a trombone mouthpiece (quart-posaune) to be played properly. Therefore it seems that to the 18th century's eyes a trombone mouthpiece on trumpet doesn't make it become a trombone. As well as a horn mouthpiece on a slide trumpet (actually, technically difficult in itself) would not make a slide trumpet become a *corno da tirarsi*. That's why the idea express by Charles Terry¹⁸(and regularly brought back in the discussion) that the *corno da tirarsi* would be a "zugtrompete" with a horn mouthpiece seems unreliable to me. The mouthpiece was apparently secondary back then. An instrument was mainly defined by its pitch and tuning, mechanical system, shape. Accessories do not really play a role, as the rich variety of horn mouthpieces of the time will prove.



Mouthpiece on a small horn by J.W.Haas (Utlely collection, NMM, 7213)

14



Mouthpiece on a Posthorn from the Poststallhaltereie Brunn (NMM, Utley collection, 7140)



Mouthpiece on a horn by Eichentopf, 1722, (Deutsches Museum Munich)



Mouthpiece from a horn by Eichentopf sunken with the ship *Batavia*, copied by Graham Nicholson, author's collection.

Further on, Eisel says:

”Soll auch der Componist derer Semitonien, sie seyn hart oder weich, sich enthalten, damit die Zuhörer, sie seyn Music-Verständige oder nicht, von solchen heraus gemarterten Semitonien der Ohren-Zwang nicht bekommen mögen: Denn es lassen sich ja wohl selbe nach zwingen, aber mit gröster Mühe, und das gehöret vor echte Künstler”.

(The composer should restrain himself from using the semi-tones so that the listener -being knowledgeable in music or not- would not go through ear-pain: since they are indeed playable however with great effort and they belong only to the real Artists.)

Here is one of the most detailed writing about the production of non-natural notes on a natural brass instrument. It shows clearly that playing some notes beyond the natural scale boundaries is an exceptional and very risky task that apparently didn't end up successfully at every try. Therefore playing long chromatic melodic lines (like the one in BWV 105) was out of question. One could imagine of course that Bach's players, being apparently better than the average trumpet players, would have been able to pass the limits described by Eisel. But then why would the usual trumpet/horn consort part from Bach (the ones with usual transposed notation) be so strictly natural?

In opposition to Chemnitz is Majer¹⁹ who presents “Clarino” as a synonym for Tromba but doesn't give any cue how semitones should be produced on the instrument.

The definition of “Clarino” that is the closest to Bach's universe is the one given by his colleague J.G.Walther²⁰:

“Clarino[...]: eine Trompete, Trompeten. Worauf hoch und klar geblasen wird”
(Clarino[...] a trumpet on wich one plays high and clear).

This matches perfectly with the function of the parts named Clarino by Bach (being natural or da tirarsi). Following this assumption, the three first cantatas for Leipzig with “Clarino”(BWV 75, BWV 76 and BWV 24) were correctly named by Kuhnau, who “meant” a brass instrument

¹⁹ See footnote 14

²⁰ Johann Gottfried Walther “Musikalisches Lexikon” facsimile: Kassel; Bärenreiter, 1967

playing the descant register.

Clarino, pl. Clarini (*ital.*) eine Trompete, Trompeten, worauf hoch oder klar geblasen wird. Es giebt deren mancherley Arten: einige gehen aus dem b, die mehresten aus dem c; etliche aus dem d. e. ja gar aus dem f. Der ordinaire ambitus einer Trompete ist aus Tab. VII. F. 13 zu ersehen. Über diesen ambitum können grosse Practici auch bis ins f ja noch höher hinauf klettern, und dabey das \sharp is, gis und h mit Mühe heraus bringen. das zweygestrichene fis spricht reiner als das f an.

Clarino in J.G. Walther's "Musikalische Lexikon" (see footnotes)

After giving the usual tuning and register of the clarino, Walther says:

"Über diesen ambitum können grosse Practici auch bis ins f ja noch höher hin auf klettern, und dabey das Dis, Gis und H mit Mühe heraus bringen. Das zweygestrichene Fis spricht reiner als das F an".

(Above this register (up to top c) it is possible for great experts to climb up to f or even higher. Moreover they can play D#, G# and B with great effort. The F# sounds purer than the F.)

This statement reinforces Eisel's point of view about the hardly playable semitones neighbouring the natural notes.

Last but not least is the Altenburg²¹ text about the "second class of trumpet", where he writes about the slide trumpet, saying:

"Die Zugtrompete, welche gewöhnlich die Thürmer und Kunstpfeiffer zum Abbläsen geistliche Lieder brauchen, ist fast wie eine kleine Alt Posaune beschaffen, weil sie während dem Blasen hin und hergezogen wird, wodurch sie die mangelnden Töne bequem heraus bringen können."

(The slide trumpet, which is usually played by the Tower musicians and Kunstpfeiffer for sacred chorals, is made almost like a alto trombone, since while playing it is pulled and pushed in order to bring easily all the notes required).

Even if Altenburg's book is published later than Bach's death, it still is the work of a trumpet player of the Weissenfels school (where Altenburg's father, Gottfried Reiche and the father of Anna Magdalena were trained). The definition matches very well with the use of the da-tirarsi instruments in Leipzig. However, it brings up a question when comparing the slide with the "alt posaune".

Would that call for a double slide? No proof can be extracted from the text.

Nevertheless, it settles once for all that Thürmer/Stadtpfeiffers had slide instruments to play chorales on the tower comfortably ("bequem").

To sum up what we can extract from the sources:

- The Thürmer played non-natural notes on the slide trumpet comfortably.
- Semitones on natural instruments are not recommended.

21 Johann Ernst Altenburg "Versuch einer Anleitung zur heroisch-musikalischen Trompeter-und-Pauerkunst" Halle 1795, facsimile Friedrich Hofmeister; Hofheim, 1993

- Mouthpieces do not play a role in an instrument naming.
- Clarino usually describes a descant register brass instrument.
- Horns are usually pitched a fifth/fourth lower than the trumpets - a kind of alto register of the trumpet.
- No mention is made whatsoever of a *corno da tirarsi*.

III/2. Instruments in Leipzig

There seems to have been no brass instruments bought by the Leipzig church before 1759/60²² meaning that the Stadtpfeiffers paid for them from their own money and kept them after their tenure. The “übernahmeinventar”(succession inventory) of J.A.Hiller (dated from 3d of July 1789) gives:

”2 Hörner aus B, 2 Hörner aus G mit drey Paar krumbogen, 2 Zug-Trompete, und nächst diesem 1. Alt, 1. Tenor und 1. Basquint-Posaune”

(2 horns inBb, 2 horns in G with three pairs of crooks, 2 slide trumpets and 1alto, 1 tenor and 1 bass trombone),

showing once again the distinction between Zug-Trompeten and Trombones and mentions the use of the slide trumpet on the tower as late as the end of the 18th century.

Even later in 1794 the Nikolaikirche buys:

“Eine Zug-Trompete für den Thürmer...”
(a slide trumpet for the tower musician)²³.

The main brass maker of the beginning of the XVIIth century in Leipzig was Heinrich Pfeiffer from whom we still have a coiled trumpet of the kind Gottfried Reiche holds in his portrait (although some observers see decorations from Haas on the bell of that instrument).

22 See H.Heyde's “Instrumentenkundliches...” footnote 10

23 See H.Heyde footnote 10



Portrait of Gottfried Reiche by E.G. Haussmann (in the Leipziger Rathaus)

Pfeiffer died in 1719 (4 years before Bach's arrival in Leipzig). The only brass instruments left from Bach's years in Leipzig are all from the later famous Leipzig instrument maker: Johann Heinrich Eichentopf (1678-1769).

We still have four horns from Eichentopf:

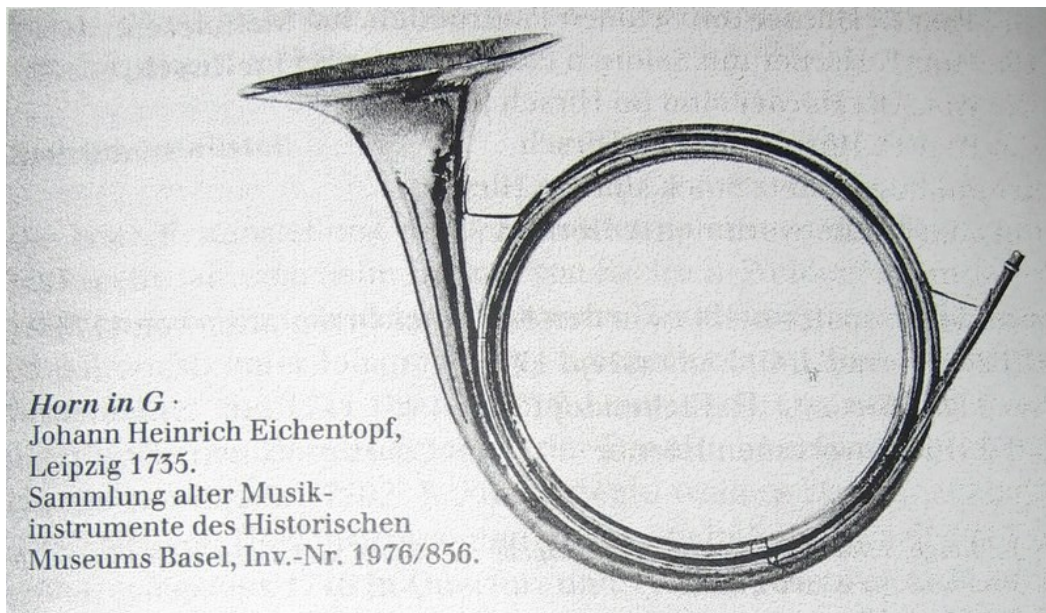
- in F from 1722 (München)
- in F from 1738 (Carolino Augusteum Salzburg)
- in F from 1735 (Prag)
- in G from 1735 (Basel)



Horn bei Johann Heinrich Eichentopf from 1722 in the Deutsches Museum, Munich



Source: Ulrich Prinz “Johann Sebastian Bachs Instrumentarium” (see footnotes)



Horn in G
Johann Heinrich Eichentopf,
Leipzig 1735.
Sammlung alter Musik-
instrumente des Historischen
Museums Basel, Inv.-Nr. 1976/856.

Horn in G by
J.H.Eichentopf in
the Museum Basel,
Source: Ulrich Prinz
“Johann Sebastian
Bachs
Instrumentarium”
(see footnotes)

Apparently none of them bears a slide system or could have had one. They are following the period horn shape like the instruments of Ehe, Werner, Leichnamschneider...).



Horn by Friedrich Ehe in the Museum Carolino Augusteum,
Salzbourg.



Horn by Johann Leonhard Ehe in musée instrumental, Brussels, 3152

Herbert Heyde in his article²⁴ suggests that the *corno da tirarsi* must be a *corno da caccia* with a slide: “jedenfalls gibt es keinen Grund, es anders zu interpretieren”(anyway there is no reason to understand it differently). And then:

“Aufgrund der Rohrlänge ist beim Zughorn nur an einen Doppelzug zu denken...”
(Because of the tube length, only a double slide could fit on a horn).

Heyde gives then a probable drawing of the horn of Mr. Diskhut (Mannheim) that was described by Gottfried Weber in the “Leipziger Allgemeine Musikalische Zeitung” n° 47 from the 18th of November 1812. It was actually a slide horn using the same system as the common English slide trumpet of the 19th century (featuring a coiled spring to bring the slide in its closed position). This is actually the only description with have of a slide horn whatsoever. However it seems hardly possible that this horn has anything to with our *corno da tirarsi*. First of all the Diskhut instrument appeared decades after Bach's death. But moreover, its mechanical system is definitely linked with the English slide trumpet of the 19th century and not with a earlier slide horn. The coiled spring system in itself is a symbol of 19th century instrument evolution. But somehow this instrument proves once more that a coiled horn (as it always is, except for traditional alpine instruments) can feature a slide only when it's a double slide placed in the central coil of the instrument.

In his book about Bach's instrumentarium, Ulrich Prinz²⁵ puts it wisely: the only mentions of the *corno da tirarsi* in the all music history are the three times Bach writes the word in his own hand on an instrumental part:

- in BWV 46 (1st of august 1723) “Tromba ô *Corno da tirarsi*”
- in BWV 162 (10th of October 1723) “*Corno da tirarsi*”
- in BWV 67 (16th of April 1724) “*Corno da tirarsi*”

²⁴ See footnote 10

²⁵ Ulrich Prinz “Johann Sebastian Bachs Instrumentarium” Kassel; Bärenreiter, 2005

As Prinz said; no horn of the times owns a slide or could have had one and furthermore, no pictorial or written source documents it. In short no period element left to us could prove the existence of the *corno da tirarsi* or describe what it might have except the musical parts of Bach's cantatas.

That's why a precise study of these works has been the main source to define pitch, tuning, and mechanical system of the *corno da tirarsi* in aiming for its reconstruction.

IV/ The works

“My biggest problem was that you had to transpose everything as you played. I thought, Why don't they print it in the right key?” (Ewan McGregor)

The music for *corno da tirarsi* is encompassed within the years 1723-1725 and concerns exclusively Johann Sebastian Bach's music. Only three cantatas calls for that instrument by name (BWV 46, 162 and 67). To those three works must be added 27 cantatas requiring a “corno” but definitely not written within the boundaries of natural instrument, in short not playable on a natural horn (BWV 3, 8, 16, 26, 27, 60, 62, 67, 68, 73, 78, 89, 95, 96, 99, 105, 107, 109, 114, 115, 116, 124, 125, 136, 140, 162, 178). The great amount of music concerned and the genuine particularity of all the cantatas require a “case –by-case” study, which will be given in an appendix to this paper.

In this chapter, I will try to sum up the information extracted from the analysis of the works in their chronological order. The dating of the works I use is the one given by Christoph Wolff in his book “Bach the learned musician”²⁶ since it seems to be the most accurate to this date.

What shall be said first of all is that there is no sign of any music for *tromba/corno da tirarsi* before Bach's arrival in Leipzig. The only unusual trumpet part of the pre-Leipzig period is the one of BWV 12. In this cantata a choral must be played (obbligato) using some non-harmonic notes (mostly around the medium G). However the writing of this piece is close to the 17th century in its use of non-harmonic notes that I don't see any reason to consider it as a part for *tromba da tirarsi*.

Therefore the first parts for *tromba/corno da tirarsi* can be called a Leipzig speciality. It should be noted too that the writing for *corno da tirarsi* begins immediately with the first Leipzig works and is very intensive. The writing for brass instrument beyond the natural notes is somehow the norm for most of the cantatas written in the first month of Bach's new tenure. During 1723 and 1724, the biggest parts were written for *corno da tirarsi*. This extends to 1725, where the part for *tromba da tirarsi* began to appear as well. Then the phenomenon vanishes and disappears completely after Gottfried Reiche's death in 1734.

Let's first have a look at the evolution of the naming of those parts. Its evolution is quite logical: the first *corno/tromba da tirarsi* parts we have are from Kuhnau and call for “clarino”. (see in this paper the chapter about text and pictorial sources). Followed by a long list of *corno*-related terms (*corno*, *corne du chasse*, *corno da tirarsi*). The word *tromba da tirarsi* appears only later and exclusively when the piece features a movement for the natural trumpet (the only exception being BWV 77).

26 See footnote 9

Here is a chronological overview of the naming of the parts for solo brass instrument:

- BWV 75: tromba
- BWV 76: tromba
- BWV 24: clarino
- BWV 185: clarino
- BWV 167: clarino
- BWV 136: corno
- BWV 105: corno
- BWV 46: tromba ô *corno da tirarsi*
- BWV 77: tromba da tirarsi
- BWV 95: corno
- BWV 48: corno, tromba, clarino
- BWV 162: *corno da tirarsi*
- BWV 109: corne du chasse
- BWV 89: corne du chasse
- BWV 60: corno
- BWV 90: tromba
- BWV 70: tromba
- BWV 73: corno
- BWV 67 *corno da tirarsi*
- BWV 20: tromba da tirarsi
- BWV 10: tromba
- BWV 107: corne da caccia
- BWV 178: corno
- BWV 78: corno
- BWV 99: corno
- BWV 8: corno
- BWV 114: corno
- BWV 96: corno
- BWV 5: tromba da tirarsi
- BWV 26: corno
- BWV 116: corno
- BWV 62: corno
- BWV 133: cornetto
- BWV 124: corno
- BWV 3: corno
- BWV 125: corno
- BWV 103: tromba
- BWV 68: corne
- BWV 16: corno da caccia
- BWV 126: tromba
- BWV 27: corno
- BWV 140: corno

From a general point of view, a few comments can be made about those pieces:

First the pieces for *corno/tromba da tirarsi* were roughly written during two periods:

- the first extending from Bach's first Leipzig cantata (BWV 75 from the 30th of May 1723) until the end of November that same year.
- Then comes a long period (december 1723 to june 1724) with hardly anything composed for the *corno da tirarsi*. (only BWV 73 and BWV 67)
- Thirdly a new composing period (june 1724 to february 1725)

After February 1725 only some hallows of this custom will remain (BWV 16 and 27 in 1726, and BWV 140 in 1731).

The composing periods for *corno da tirarsi* are very different in the sense that the first one produced the most demanding, soloistic and elaborate parts for the instrument; with some breathtaking obbligati appearing weekly.. On the other hand the second period is far more simple in its demands on the *corno da tirarsi*. The 18 “da tirarsi” pieces written during this period only require doubling of the chorale/cantus firmus- no solisitic appearance is made. The sudden and undeniable fall in the art of playing the *corno da tirarsi* can't be connected to a general lower level of playing by the Stadtpfeifers, since in the same time some of the most difficult parts for natural brass instruments were also written (BWV 91, BWV 41, BWV 5...).

The naming of the parts follows a clear evolutionary line as well. After a first experimental period -where Bach and Kuhnau both kept their habit of using the words clarino and tromba for the soprano range brass instrument, the parts got systematically the name “corno”, which is in the second composing period the norm. Strangely enough, the word “tromba (da tirarsi)” appears far less than ”corno” for the non-natural brass parts. Actually ”tromba(da tirarsi)” is only applied to works also making use, at some point, of the usual natural trumpet.

Actually the two main features of the tromba da tirarsi parts are the presence of a movement for natural trumpet and the use of the slide only in flat oriented keys (C major and “flatwards”); actually mostly d or g dorian. The best demonstration of this is the cantata BWV 116 using a cantus firmus in A major. Kuhnau gave the name “tromba” in the score but it's been crossed out and Bach corrected the part with the name “corno”, probably because the sharp key of A didn't fit on the tromba da tirarsi. Definitely the tromba da tirarsi couldn't play in sharp keys or in other words was crooked in C/Bb. Seeing that the solos in these cantatas for tromba da tirarsi are actually written for the natural instrument and furthermore the non-natural elements are nothing more than simple chorals: it can be said that the one slide system of the tromba da tirarsi was not considered as practical as the *corno da tirarsi* system (whatever it was). Therefore -seeing the genuine specificities of the tromba da tirarsi parts, it is neither possible to consider that the tromba da tirarsi and *corno da tirarsi* could have been the same instrument nor that one of them didn't exist at all.

Now that this point has been cleared let's draw our attention back to the music itself. There is a lot we can learn about the *corno da tirarsi* out of it's very first repertoire. Bach seems to have discovered the possibilities of the instrument step by step. He was used to the ancient single slide trumpet and its basic choral playing and therefore his first demands for the slide instrument stick to the usual choral playing of the Stadtpfeiffer on the tower (like in BWV 75). However he must have noticed that the instrument was capable of more than that, since a week later he added a little obbligato to the usual choral (BWV 76). The three cantatas with *corno da tirarsi* that would follow (BWV 24, BWV 185, and BWV 167) are the firsts where the parts remained. Those three parts,

copied by Kuhnau, all bear the name “clarino”, showing that it was probably the name given by Kuhnau to the parts of the two previous works. This is the name Kuhnau would have given to any brass part in this range; as Bach would have used “tromba” for the same purpose (like he did in BWV 75 and BWV 76). Definitely the name was not yet settled (this was and still is a very secondary problem) although the writing is stepping into a new dimension with BWV 24.

The cantata holds the first independent obbligato for *corno da tirarsi*. A highly complicated part completely independent from the rest of the consort and going far beyond the boundaries of the natural scale. Even if very demanding, the part matches pretty well the forthcoming music for *corno da tirarsi* (BWV 105, BWV 95, BWV 46, BWV 109, BWV 67). Common to most of the *corno da tirarsi* parts as well is notation in sounding pitch which will become the norm after this work. Somehow the piece shows already a very important particularity of our instrument: its pitch. Indeed if played as written (in C) the piece is hardly playable at all and almost impossible on a single-slide instrument. Although for an instrument in Bb (see appendix) it works organically. We could easily consider that Kuhnau -dealing with a new instrument- just missed the transposition. But Kuhnau never took it upon himself to decide about a transposition; he respectfully copied what Bach already transposed in the score. Therefore it's Bach's responsibility not to have transposed the part and this is probably no “forgetting”. An overview of the brass notation in Bach's complete works shows clearly that the sounding pitch notation is the one for the “da tirarsi” instruments. The notation for the natural brass instrument is always transposed in the key of the instrument (already in the score); bearing no exception. The parts for cornetto and trombones use the chorton notation (or in other words are written a tone lower than the consort and call for the vocal register clefs (tenor clef, alto clef...)). The parts for *corno da tirarsi* however are written in sounding pitch whatever the tonality of the pieces. Very probably the *corno da tirarsi* player read the music at sounding pitch and learned the slide positions to play chromatically in any usual keys (from F dorian to E major).

Three exceptions exist to this custom. When the part for *corno da tirarsi* is too fast and above to close to a natural brass instrument part Bach prefers to transpose it like he would have done with a natural brass part. It definitely helps the player who could easily read the part with all its clarino vocabulary that was the daily bread of Bach's trumpeters. Seeing that the rehearsal time was very limited it might even have been a request of the player to use this notation if the part was close enough to a natural part. But even if those parts are close to natural they still require a bit of slide help; that's why Bach has to indicate it by adding “da tirarsi” to the usual corno name. That's why we have three cantatas (BWV 46, BWV 162, BWV 67) using the full name *corno da tirarsi*. They are the only works making use of the full name and the only thing they have in common, which is not shared by any other cantata, is this transposition notation of “natural oriented” obbligati.

Now back to our cantata BWV 24. The last hallmark of insecurity in the notation to be seen is the last choral; definitely for a single horn in F (see appendix) even if written in sounding pitch. There's no other example of a single natural horn playing a choral by Bach. There must have been a misunderstanding of some sort here between Bach, Kuhnau and Reiche. Whether the instrument wished is not the right one or the notation is not appropriate is impossible to determine for sure. This was the last time this kind of incoherence between natural instrument and sounding pitch notation happened with Bach.

Kuhnau still used the term “clarino” in BWV 185 (played on the same day as BWV 24) and for BWV 167 (played for days later). Thereafter, all the “da tirarsi” parts will be named corno or tromba (using as well variations such as: corne, corne du chasse, corno da caccia...).

For an in-depth analysis of every cantata, I lead you to the appendix, from which I will try to draw some sketches of what the *corno da tirarsi* might have been. The first cantata cycle (1723-

1724) will be the golden age of our instrument and it's the music written during this period that help us the most to try and solve the *corno da tirarsi* mystery.

We already scanned the very beginning of this period but what comes later in 1723 is even richer in information. A first statement should be made at this point: from July 1723 onwards all the “da tirarsi” cantatas will be divided into two parts:

- the ones using the usual names “corno” and “tromba” (representing a large majority)
- those calling for “*corno da tirarsi*” or “*tromba d tirarsi*”

The first kind features all the cantatas using strictly the standard names “corno” and “tromba” (with some fashionable variation for corno, like *corne da caccia*, *corne du chasse* etc. in some seldom cases). Apart from the naming of the parts and the use of non-natural notes, nothing else binds these works together. Some have clarino obbligati, some not. Some are simple choral doubling, some are highly demanding obbligati. Actually, one thing is common to them: the sounding pitch notation. Seeing that these works represent about 90% of the music for *corno da tirarsi*, it can be admitted that this notation is the norm.

Therefore we can assume that the works for “da tirarsi” were named corno or tromba and the very fact that they needed a slide was specified by the notation. The Stadtpfeifer would have recognised it at first sight as well as I do when I'm facing one of those parts. The difference between the parts for corno and tromba is the presence of an natural clarino obbligato in all the parts calling for tromba.

This is never the case for the corno except in BWV 136; but the fact that this obbligato is written for the horn in A (never used again by Bach except in BWV 67 but then with the mention “corno da tirarsi”) and that the last choral of the piece is definitely “da tirarsi” speaks for a probable first performance on the *corno da tirarsi* in Bb/A like in BWV 67. On top of that it should be noticed that the non-natural lines for tromba are always written in “flat” keys (d dorian, g dorian...). This could be a coincidence since the actual number of parts for tromba da tirarsi is very small.

Anyway this would speak for a trumpet in C/Bb (most of the natural clarino obbligati in the cantatas for tromba da tirarsi are in C or Bb as well).

On the other hand, the far more numerous parts for corno go through all modes and tonality from Eb major to E major. Therefore the instrument in question must be “pitchable” in two very distinctive tunings, allowing both sharp and flat keys. Since the parts bearing the full name “*corno da tirarsi*” are transposed in Bb and A already, I take it as a serious clue to pitch the *corno da tirarsi* in Bb/A. What actually happened in the reconstruction is that we used an instrument in Bb with a slide long enough to play in A as well. Instead of the only two positions the slide needs to play all those cantatas, we used three positions so that I could play the instrument a semitone lower; in other words in A. It was just the easiest way to make quickly a first prototype of the instrument. This solution was probably not the one used by Reiche. He very probably had an instrument in Bb that he crooked down to A with a semitone crook; the way we do on natural horns and trumpets. This is the solution I tend to use the most now as well.

Another information concerning the form of the instrument can be dragged out of the works of J.S.Bach. From July to October 1723 were written the most elaborate music for this instrument (BWV 105, BWV 46, BWV 95, BWV 162, BWV 109, BWV 89). These works are all labelled “corno”. As a matter of fact, none of the tromba da tirarsi music is so elaborate in “slide technique”. The virtuosity in cantatas BWV 5, BWV 20, BWV 90 resides in the natural clarino obbligati. The slide is only required to play the choral. And when some tromba da tirarsi obbligati occur -like in BWV 77- the use of the slide is slow and never goes beyond a semitone movement. This custom fits very well with the single-leg slide of the tromba da tirarsi.

On the other hand the hardest parts for *corno da tirarsi* make a much more advanced use of the slide. Often with fast whole tone movement and with completely chromatic sequences (see the beginning of BWV 105). Of course the instrument was not truly chromatic in its overall range; however there is a great difference of writing between the *corno da tirarsi* and the *tromba da tirarsi* that would speak for a much more practicable slide system on the *corno da tirarsi*. Therefore one of the reason I see to explain this greater flexibility of the *corno da tirarsi* is its possible double slide system. Of course there is no proof whatsoever for such a statement as well as there is nothing that would sustain a single slide theory. But the gathered facts that the *tromba da tirarsi* played a much less chromatic music as well as the knowledge and use of the double slide for more than two centuries; make the idea of a double slide on the *corno da tirarsi* the most suitable to the demands of the instrument. On top of that -as many scholars already noticed- because of the conicity and above all the circular form of the horn it is impossible to simply introduce in it a single slide long enough to play Bach's music. Roger Montgomery and John Webb gave it a try (as well as I did thanks to endless help and great craftsmanship from my father Pierre Picon) and came to the same conclusion that a single slide on the horn can't be long enough to play all the *corno da tirarsi* parts²⁷.

From the last period of composing for the *corno da tirarsi*, there is not so much to learn about the instrument, except that it required a specific player with a specific technique, since the parts written during 1724-1725 are suddenly far less ambitious than in 1723 (even if the natural clarino parts still keep very high standard of virtuosity).

Now let's sum up the information about the *corno da tirarsi* that we could gather from the study of the parts:

- There must have been a genuine *tromba da tirarsi* and a *corno da tirarsi*, strictly different from each other
- The *corno da tirarsi* is notated at sounding pitch
- One of the *corno da tirarsi*'s particularity was its pitch in Bb/A
- Another particularity is the very probable double-slide system

This information could lead us to the making of an instrument that - if is not based on any originals- corresponds to all the criteria we know about the *corno da tirarsi*. Therefore I'd like to finish with a report of the making of this instrument undertaken by Gerd Friedel and Rainer Egger in Rainer Egger's workshop in Basel, Switzerland.

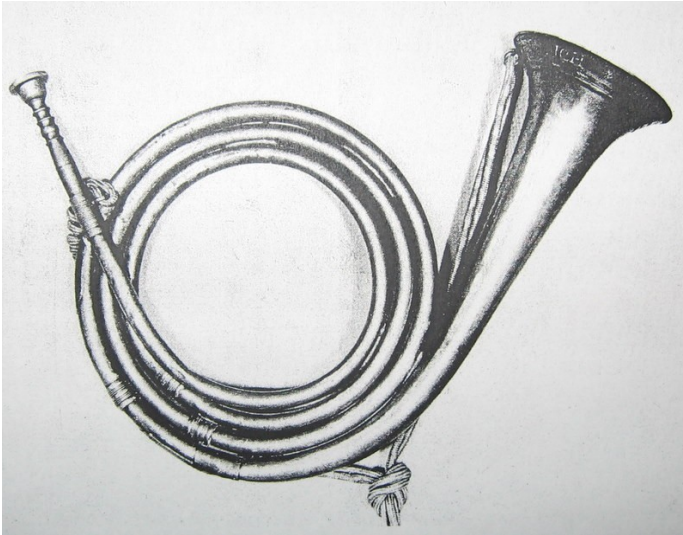
IV/ The reconstruction

The idea of making an instrument from this research never crossed my mind at first. I was already very satisfied with the fact of seeing a bit better through the clouds of the *corno da tirarsi* issue without thinking of bothering an instrument maker with such an hypothetical and non-commercial project. But the needs of the professional life changed the course of events. As the Dutch ensemble, Barokensemble De Swaen, planned a cantata with *corno a tirarsi*, their trumpet player, Mike Diprose took it upon himself to ask for an instrument from the workshop of Rainer Egger in Basel. The idea was simple: using an already existing high horn and enhancing it with a double slide. For a couple of years, the enterprise Egger had already been producing a very good copy of the small horn that appears on the portrait of Gottfried Reiche.

27

27 See Roger Montgomery "Bach on the slide" in *The Horn : Journal of the British Horn Society*, vol. 7 n°2, August 1999

The instrument was designed with cues from this picture and an original small horn in Bad Säckingen²⁸. The decision has been made to start from this instrument because it represents the best known form of horn in high pitch (C alto, Bb) of Bach's time northern Germany²⁹. There are numerous examples of horns of this shape and pitch (original instruments as well as pictorial sources).



Horn by Johann Wilhelm Haas in the trumpet Museum, Bad Säckingen, 21401

Furthermore, the instrument made by Egger was already very good as a simple corno in Bb. It allowed us to hope for a better result than if we'd used a completely newly built instrument; not knowing if problems came from the slide system or from the instrument itself.



Tromba da caccia or horn in high pitch by Egger Blechblasinstrumente.

28 See Rainer Egger's article in *Michaelsteiner Konferenzbericht* vol.70: Augsburg; Wissner, 2006

29 See Sabine K. Klaus "Horn oder Trompete, Ein Instrument von Johann Carl Kodisch" and Monika Lustig "Jagd-und Waldhörner in niedersächsischen Museen" and Christiane Reiche und Wolfgang Wenke "Jagd-und Waldhörner in mitteldeutschen Museen" in *Jagd- und Waldhörner: Geschichte und musikalische Nutzung*, Michaelsteiner Konferenzberichte, Band 70, Augsburg, Wissner, 2006

Therefore the slide system had to be built so that it could be added on the existing corpus. Gerd Friedel and Mike Diprose went for a crook that would have both qualities of tuning the instrument in Bb and holding the slide.



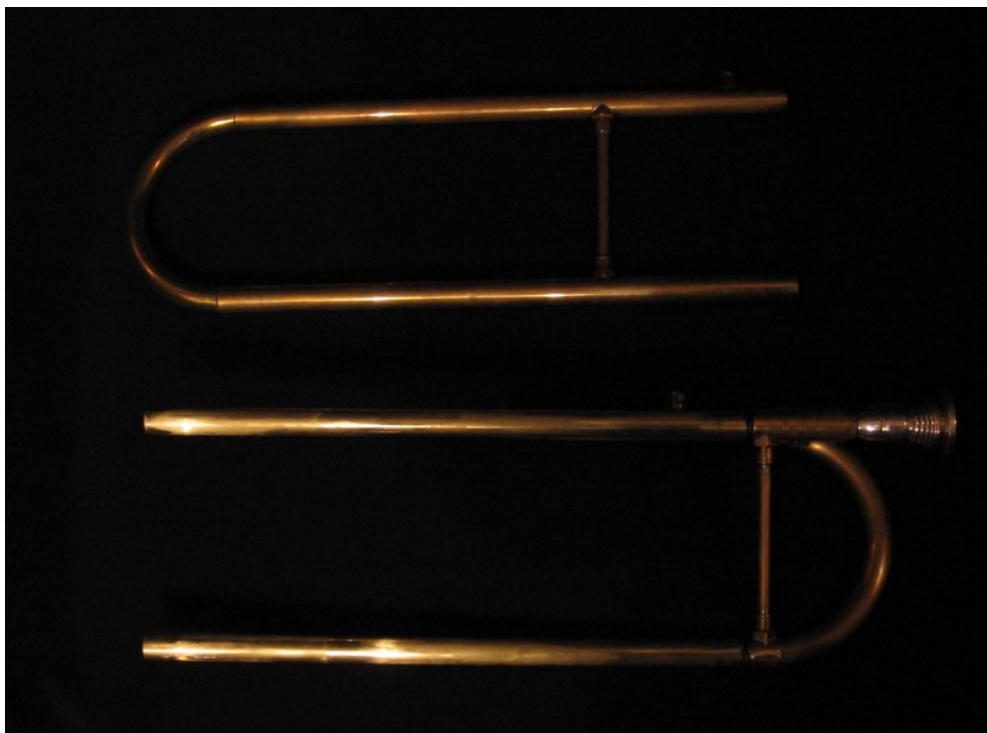
Slide-crook in Bb by Gerd Friedel.

It shows a very practical solution and musically satisfying. I kept this principle for my personal instrument since it fits perfectly with all the instrument's distinctive features described in the previous chapters. However I don't think such a system would have been use on the original *corno da tirarsi*. For the simple reason that they would have had no reason to build the instrument in two parts; the most natural place to build the slide then would have been in the inner wound of the corno (as were made the invention hörner later in the 18th century). However the idea of building the slide separate to the body of the instrument is very practical for the instrument maker and they might well have went for the easy way to back then.

Then the only additional work we did to engineer the definitive instrument was the very accurate definition of the slide length and shape. This has been made by Gerd Friedel and the author with immensely helpful advice from Graham Nicholson. Then came the issue of the mouthpiece and leadpipe. We went for a system allowing us to change from a strictly cylindrical pipe with a proper Baroque trumpet mouthpiece to a slightly conical tube with a mouthpiece copied from a "Hut-horn" in the Historische Musikinstrumentenmuseum in Salzburg; since both systems existed and experience only can teach us what belongs the more naturally to the *corno da tirarsi*.

Curiously, after Rainer Egger, Gerd Friedel, Mike Diprose and this author have designed this instrument following the conclusion of my study, we ended up very close to the instrument made by Toshio Shimada; Mr. Shimada is the first trumpet player of the Bach Collegium Japan and the only player so far to have played and recorded almost all those cantatas on a slide instrument. His way to reconstruction was mainly based on down to earth playing needs and I find it interesting to see that his empirical conclusions collude with my more musicological observations. His always marvellous playing has also been a great inspiration to this project.

Shortly after the instrument was made, Sigiswald Kuijken and Rudolph Lutz (with both of whom I was already playing Bach's music regularly), asked for the newly built instrument to appear on some sound and video recordings, which are forthcoming.



Slide's two parts.



Complete Corno da tirarsi



APPENDIX

This appendix is an analysis of the cantatas featuring one *corno* or *tromba* going beyond the borders of the usual writing for natural brass. More importantly, they are studied in their chronological order, forming a kind of history of the *corno da tirarsi*. It is possible to go from one cantata to another randomly in order to gather technical information about them (date, copyist, naming of the part, keys and other particularities). However the chronological reading brings a much clearer idea of how this instrument appeared, developed and vanished, in a very linear way.

This appendix is actually the reason why I undertook the writing of this paper. In the already flourishing literature about the *corno/tromba da tirarsi*, I couldn't find a study of all the works, one by one, anywhere. Although it was a long and demanding work, I thought this was the only way to paint an accurate image of the *corno da tirarsi* and I was delighted to see my picture of this instrument growing sharper with every cantata I studied. I hope that whoever has questions about one of these cantatas can find some answers in the coming pages. For me, it was from the basis of these hypotheses that led to the reconstruction of the instrument.

The Works:

The dating of each work follows the one given by Christof Wolff in “Johann Sebastian Bach: The Learned Musician” (Oxford: Oxford University Press, 2000).

The naming of the parts and their copyist is taken from the “Kritische Berichte” of the Neue Bach Ausgabe from Bärenreiter. All the first hand information (subsequent performances of the works, information on the parts, copyist, pitch etc.) are taken from the Neue Bach Ausgabe and its Kritische Bericht (Kassel: Bärenreiter, 1954-2000).

Other sources are then given in reference when used.

| | |--------| | BWV 75 | |--------|

According to Wolff, the first cantata by J.S. Bach to be played in Leipzig (on the 30th May) was BWV 75 (“Die Elenden sollen essen”). The dating of the work is not completely sure but I agree warmly with the idea of placing it as the first cantata played in Leipzig. Indeed its two-part structure fits well within the surrounding works of that period. (BWV 76, BWV 21, BWV 186). On top of that, the somewhat awkward notation of the *Tromba* part places it at the very beginning of the Leipzig period.

Unfortunately there are no parts left; only Bach's score remains. In the score, Bach calls only for a “*Tromba*” in two movements (n°8 and n°12). N°12 (a bass aria) is a typical *clarino* aria in C major, with bass singer, as would occur often in later works. By *clarino*, I mean the usual *clarino* style using only natural notes. It's important to settle it down now because there'll be a lot of discussion about this in later chapters:

Something about which most scholars agree is that there are two very distinctive styles in Bach's writing for brass instruments:

On the one hand is what I call the *clarino* style - which is common to almost all Baroque brass parts in general - based on the natural scale and using very specific melodic patterns, like major arpeggios on the tonic and dominant and long semiquaver phrases going up and down stepwise. This is the main trumpet/horn composing style from 1600 until ca. 1750.

On the other hand, there exists a second style by Bach that I would call the “*tirarsi*” style. It is based on melodic lines (mostly chorals but not always) regardless of the restrictions of the natural scale and often having almost no connection with the *clarino* style.

Of course some non-natural notes appear sometimes in *clarino* pieces and some *tirarsi* works use some bits of fanfares and *clarino* lines. However the boundaries between the two styles are easy to identify and almost all of Bach's works can be easily classified.

Now back to cantata BWV 75. The aria n° 12 is a typical *clarino* piece and there's not much to say about it except to mention the already high standard of technique required from the player. But the trumpet is used again in n° 14: a *sinfonia* with the *tromba* playing an obbligato choral (Cantus firmus). This is a very new practice for Bach, who seems to have become quickly aware that at least one of the *Stadtpfeifers* could play chorals on a brass instrument. Of course *Stadtpfeifer* were apparently playing chorals on the city towers on a daily basis. They might have known this repertoire by heart. However the practice hardly ever happens in the contemporary composed church music apart from the pieces we are studying here.

As we will see later, this might have been very appreciable to Bach for he makes use of this new musical tool in 9 of his first 11 cantatas written in Leipzig, meaning 9 cantatas in two months. There can be only two reasons as why Bach wrote so many brass-chorals: he might have been forced to follow the local tradition or it is a personal preference. The first reason is difficult to believe, since Kuhnau (who preceded Bach in Leipzig) didn't use much brass to play his chorales; and more importantly, because Bach ceased to use brass for his chorals in the middle of his Leipzig tenure.

This leads us to conclude that Bach was very pleased with the new possibilities offered to him. His delight was such that he wrote during his two first months as cantor the three most soloistic, complicated and beautiful parts ever written for the *corno da tirarsi* (BWV 24, 105 and 46).

Nevertheless I shall assume that Bach discovered the *corno da tirarsi* in Leipzig (or at least the use the local *Stadtpfeifer* made of it) for the following reason:

BWV 75 is left only in the original score where Bach calls for a “*Tromba*”. Before then, this term had always been used by Bach to name his “normal” trumpet parts. But he knew somehow that the local players could play chorals on their instruments and therefore he gave an obbligato choral to the *tromba*. However, he felt the need to transpose the choral line (“Was Gott tut, das ist wohlgetan”) into a key that would allow it to be played on a natural instrument. In other words he wrote the choral- originally in G major- in C major, as he would have done with any usual *clarino* part. It could therefore be considered for a natural trumpet in G (of which, by the way, we have no trace whatsoever in other works or in the original instruments). But that would mean ignoring all the *tirarsi* works that Bach wrote after BWV 75 since the transposition of this part is unique compare to the later cantatas with *corno da tirarsi* using the concert pitch notation.

Indeed this is the single time that Bach wrote his choral for solo brass in a transposed notation. All evidence calls for the non-existence of a trumpet in G at Bach's disposal³⁰. Bach

30 See U. Prinz “Johann Sebastian Bachs Instrumentarium” Kassel: Bärenreiter, 2005

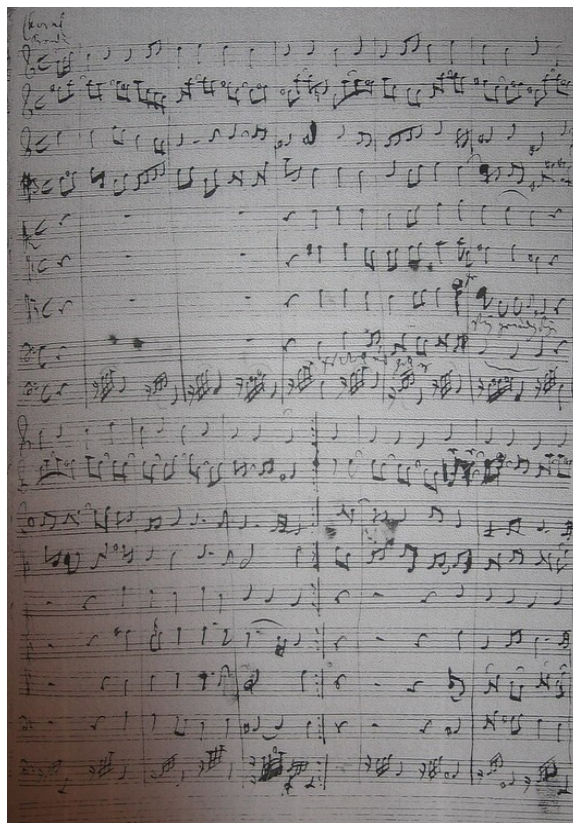
seemed to have been uncomfortable at the beginning with the naming and above all notation of the *corno/tromba da tirarsi*. He probably transposed the chorale because that had been his custom, as well as all other composers' custom at the time. But he must have learnt quickly how to copy the music the best way for the *corno da tirarsi* player since for the next cantata (BWV 76), he left the chorale at sounding pitch and would keep it this way.

Before we turn to BWV 76, I would like to make a short observation about the choral melody of BWV 75, “Was Gott tut, das ist wohlgetan”, which is treated by Bach for the organ (BWV 1116) as well as in two eponymous cantatas; BWV 99 (1724) and BWV 100 (1732-35). It is noticeable that the figuration of the choral in BWV 75, 99 and 100 is almost the same (strings and oboes play a very similar ritornello) but the role of the brass instruments change radically.

In BWV 75 the *tromba* is simply not playing while the choral is sung. Strange indeed, considering that playing the chorale *colla parte* will be the main task of the *corno da tirarsi* in following works. Bach quickly discovered the rhetorical power of a brass instrument doubling the sung *cantus firmus*, since he introduced this practice immediately in BWV 76 (the *tromba* player might even had taken the liberty to play along with the singers in the first performance of BWV 75 discovering the thrilling effect it produced).

Later on, the growing experience of the cantor with the choral-playing brass instrument is clear in BWV 99. Written a year after BWV 75 (on the 17th of September 1724), it shows a new use of the instrument. The brass instrument still plays the chorale, “Was Gott tut, das ist wohlgetan”, but this time it is called “corne”. The *cantus firmus* (still in G major) is now copied at sounding pitch and *colla parte* with the soprano in the first and last choruses of the work. Bach even took the pain to copy the part himself. This represents the main custom for the *corno da tirarsi*.

In BWV 100 (written in the 1730s), the *cantus firmus* is taken back from the horn and left to the soprano alone; the horns being now a pair and playing a very demanding *clarino* style. As we already saw, this sudden change is the consequence of Gottfried Reiche's death in 1734.



BWV 75 Choral

BWV 76

On the 6th June 1723, Bach performed his second cantata for Leipzig: BWV 76 “Die Himmel erzählen die Ehre Gottes”. The cantata is in many ways very connected with BWV 75, sharing with it the two-part form (with a sermon in the middle), the instrumental sinfonia as opening of the second part, the use of the same choral twice to end both parts and the presence of a *clarino* aria. Unfortunately, another common point is the absence of the original *tromba* part. Mention should be made that BWV 76 was played again in 1724-25 and again around 1740 but this time only the first part. As we have already seen, the custom of doubling the choral with the *corno da tirarsi* died with its probable performer, G. Reiche, in 1734.

Although most *tirarsi*-style cantatas granted with a second performance after 1734 are somehow rearranged so that the *corno da tirarsi* wouldn't be needed anymore (for example: BWV 8, 10, 73, 96, 133, 185...), the case of BWV 76 is peculiar. Even with the omission of the second half, there was still a *tirarsi* movement to be played at the end of the first part. If a new part was written - to transfer the *tromba* line to another instrument- it didn't come to us. (This is however the most plausible solution). Otherwise, was this part simply left out for the second performance? Hard to believe, since the *tromba* plays an obbligato ritornello between the choral phrases. Did another instrument played it from the *tromba* part? Impossible to know. The question remains unanswered even if I would go for a substitution of the *tromba* by another instrument. In absence of the original part we can't be certain.

In BWV 76, the two *Tromba* arias (n°1 and n°5) are *clarino*-style pieces of marvellous beauty. Worthy of notice is the fact that those two movements are written for a trumpet in C, which was actually not the common custom in Germany after the acceptance of the “*Kammerton*”. This use of C trumpet is still a feature of the cantatas then forthcoming (BWV 75, BWV 76, BWV 21, BWV 147, BWV 69a, BWV 70, BWV 63).

Generally, Bach wrote all his *clarino* parts in C during 1723 (except BWV 90 in Bb and the Magnificat in Eb). The standard trumpet tuning in D – as we will know from the B minor mass BWV 232, the Christmas Oratorio BWV 248 and numerous secular and sacred cantatas as well as the orchestral suites - had apparently not settled down before 1724. I won't dare to speak of a change of ground pitch in the Leipzig church music between 1723 and 1724; however the existence of all these *clarino* parts in C as well as the very peculiar crooking of the trumpets in Eb for the Magnificat BWV 243a (later changed to D) raise many questions. This matter has, unfortunately, no place in this paper.

Back to our BWV 76; We shall focus on the two movements with trumpet about which we have yet to speak: n°7 and n°14. Those two numbers use the same music and close respectively the first and second half of the work. They clearly show progress in the *tirarsi* notation by J.S.Bach. Unlike BWV 75, the choral here is written at sounding pitch that would, from then onwards, be the norm. Moreover the *tromba* doesn't play the choral alone as a *cantus firmus* (like in BWV 75) but doubles the singing soprano. This as well would become the usual custom for later cantatas.

However a reference to the obbligato practice remains in that, between the choral phrases, the *tromba* plays an independent ritornello. One could see it as a forebear of the later larger-scaled *tirarsi* obligati. Anyway this way of “ritornelling” on the *tromba da tirarsi* between the choral phrases will soon ceased to be used by Bach. (In fact the idea of doing so might come from the

custom of playing improvised phrases on the organ to connect the choral phrases together- a daily practice in 18th century that is rarely practised nowadays). Actually, the single other example of such a practice occurs in the next performed *tirarsi* cantata (BWV 24) first played on the 20th June 1723; a few days after BWV 76.

BWV 24

The cantata BWV 24 “Ein ungefärbt Gemüte” represents a step forward in the writing for *tirarsi* instruments in many ways.

So far I haven’t written much about the ease or difficulty of playing the *tirarsi* parts of BWV 75 and BWV 76 because the music lines were so simple that they could be easily produced on a slide trumpet as the one we know from Hans Veit³¹. Even the modest obligato in BWV 76 requires nothing more than a trumpet with a slide that would tune it down a tone (meaning two positions of slide extension). And the regular and slow pace of the quarter notes don't make it a demanding *tirarsi* piece.

On the other hand, BWV 24 goes much further in its third movement: a chorus with a brass instrument obligato, very ornate, that goes far beyond the limits of the natural harmonics. To make my opinion clear, I shall say now that I consider all these non-natural brass parts from Bach as dedicated to *tirarsi* instruments, for a very simple reason: the parts for natural instruments (in solo or in section) are so clearly restricted within the natural scale that their “naturality” is immediately recognisable. If, by means of hand-stopping (in a horn or a coiled trumpet) or leaping up and down, the players were able to play notes outside the natural scale, then I shall assume that Bach wouldn't have restricted himself to the only natural notes in his *clarino* parts.

A good deal of information can be dragged from BWV 24 since the parts came to us. Our part is written by Kuhnau and includes n°3 and n°6. The part is entitled “*Clarino*” as it is as well on the parts folder. This being the only *tirarsi* part named “*Clarino*” it has been a matter of discussion³². Of course, during Bach's tenure, all trumpet parts (mostly in consort) were named *Clarino* (roughly every natural trumpet part is named so). But this one is different.

BWV 24 is Bach's first composed part for the *corno da tirarsi* and therefore it is the first copy of a *tirarsi* part we know of from Johann Andreas Kuhnau. Indeed, there seems to be logic in the nomenclature of Kuhnau's parts. He calls for “*Clarino*” in his first ever written *tirarsi* part (BWV 24) and use the same name for the cantata played the same day (BWV 185). Four days later, for the cantata BWV 167, he named the part “*Clarino*” again. Unfortunately the parts of the two first Leipzig cantatas are lost. There is no reason to think that if Kuhnau copied them, he would have named them any differently than “*Clarino*”.

Actually the lack of precision in Kuhnau's naming of the parts is quite understandable since the introduction of the *corno/tromba da tirarsi* in the church music was new. (except for the two attempts by Johann Kuhnau - the uncle of the copyist- that don't make it a tradition). However, the

31 See H. Heyde. “Instrumentenkundliches über Horn und Trompete bei Johann Sebastian Bach” in *Johann Sebastian Bachs historischer Ort, Bach-Studien 10*, Wiesbaden: Breitkopf und Härtel, 1991

32 See Kristen Beisswenger and Uwe Wolf “Tromba, Tromba da tirarsi oder Corno? Zur Clarinostimme der Kantate “Ein ungefärbt Gemüte” BWV 24” in *Bach-jahrbuch* n°79, Leipzig: Evangelische Verlagsanstalt, 1993

copyist J.A.Kuhnau would have heard the *tirarsi* instruments play the choral on the city towers on a daily basis. The instrument familiar to his ears was part of an ancient and mostly oral musical culture; and writing a part for it in modern concerted music implied to give it a name. Since the *corno da tirarsi* was a local speciality and even a “one player” instrument it probably didn't have a official name given to it by its maker. Kuhnau went actually for the most logical “*clarino*”, which is exactly what it is: a brass instrument playing in the descant register.

Nikolaus Harnoncourt already saw it this way when he wrote the booklet for his cantatas recordings³³ and he was – as almost always- very accurate in his observations.

Of course one could look for the organological meaning of “*clarino*” in historical sources. J.G.Walter's definition (see the chapter „Early written sources and original natural instruments“) says:

“*Clarino*, pl. Clarini (ital.) eine Trompete, Trompeten, worauf hoch oder klar geblasen wird...”

(*Clarino*[...] a trumpet [...] which is played high or clear...).

On the other Chemnitz (ibid.) goes for:

“*Clarino*, ist so viel als eine Trombone, oder Posaune.”

(*Clarino* is as much as a trombone).

This is already a no way out. Even if Walter's definition seems to be the most accurate considering that many other writer (G.Fantini, Altenburg, Majer &c) called “*clarino*” or “*clarin*” the top parts of a trumpet consort.

Seeing that Bach's usual natural trumpet parts were named “*clarino 1*”, “*clarino 2*” and “*principal*” in the parts copied by Kuhnau (Bach using often *Tromba* or *trombe* in the score) we should give preference to Walter's view. Although Chemnitz's text exist and fits better with our problem of non-natural notes; it would be an easy-found proof of the use of the “soprano” trombone for those *tirarsi* parts. (If ever there was a soprano trombone, which is far from being certain)³⁴.

Unfortunately, reason shows that the answer is not so simple. Bach's trombone parts are consequently always written in *Chorton* (high pitch), which distinguishes them clearly from horn or trumpet parts. One should not forget that Kuhnau was merely copying from Bach's score and he probably read Bach's “*tromba*” as a normal high trumpet sign. Therefore he named it *clarino* as he would have always done with “normal” trumpet parts. There is actually no name on that part in Bach's score for this cantata but since he used “*tromba*” for the two previous cantatas (BWV 75 and 76) and that he would use it again in BWV 48 (where Kuhnau will interpret it as “*Clarino*” again) it is highly probable that he would have named this part “*Tromba*”.

As a conclusion on this topic I would say that J.A.Kuhnau was probably not really aware that J.S.Bach just introduced a new instrument in the local church music. He then didn't figure much further about the nomenclature; following probably Bach's own lack of verbal knowledge in his first scores with *tirarsi*. Later, things got clearer when Bach – who introduced the “standard” name “*corno*” in July 1723- wrote a famous part for “*Tromba ô Corno da tirarsi*” (BWV 46) on the 25th of July 1723.

33 See N. Harnoncourt “Der musikalische Dialog”, Salzbourg; Vienna: Residenz Verlag, 1986

34 See Howard Weiner “Der Sopranoposaunen-Schwindel” in *Posaunen und Trompeten*.

Michaelsteiner Konferenzbericht, Band 60, Michaelstein: Institut für Aufführungspraxis, 2000

Kuhnau, on his side, would never borrow the term “*da tirarsi*” but abandoned the definitive “*Clarino*” for the alternative “*tromba*” and “*corno*” (indeed, mostly the latter).

Finally let's notice that BWV 185 (discussed later) -played on the same day as BWV 24- bears the names “*tromba*” from Bach and “*clarino*” from Kuhnau; but the title page written by Meissner says “*corno*”. Interesting, seeing that this page is probably a later addition from the time when Bach and Kuhnau had standardized the *tirarsi* parts with the name “*corno*”.

Now back to the music itself, for some final statement should be made. Regarding BWV 24: The music written here for the *Clarino* is the corner stone of the *corno da tirarsi*'s history. For the first time this instrument is granted a virtuoso obligato. Difficult to understand how Bach, in the span of two weeks, made the step from the very restricted simple line of BWV 76 to the large scale solo of BWV 24; which is, even to the “modern” player, still a terribly demanding piece of music. The part is written at sounding pitch, and read this way it is hardly playable: with its Bb major/G minor polarity, fast semi-quavers on D (natural) and Eb (slide's first position), a Ab major moment, some low F and Ds and a final firework of semi-quavers in G minor including the frightening leap from low D to Bb calling technically for enormous slide movements - almost unplayable on a single-slide trumpet in C.

Now, to anyone familiar with Baroque brass music, this part looks like a sounding pitch transcription of a part in Bb. Indeed when transposed back for an instrument in Bb the part becomes much easier and above all more natural. Suddenly, the slide technique required seems manageable.

The image displays two pages of handwritten musical notation for BWV 24. The left page is labeled "BWV 24. 3rd Movement transposed for a B^b tirarsi instrument (or in other words written in chorlon)" and the right page is labeled "BWV 24 chorlon". Both pages show staves with musical notation, including notes, rests, and dynamic markings like "Vivace e allegro". The notation is in 3/4 time and features various musical symbols such as clefs, key signatures, and articulation marks.

BWV 24 Transposed part

Could it be that Kuhnau made the wrong transcription? Possible, seeing that he was working with new material. But why would Bach leave these parts at sounding pitch in the score, seeing that he always transposed the parts for natural brass instruments? It is possible that both Bach and Kuhnau were unaware of the *corno da tirarsi*'s pitch. But then why would Bach consciously write this chorus in G minor. We could actually consider it as one more very difficult piece by J.S.Bach. The trouble is that exactly the same situation occurs later in BWV 105, BWV 46, BWV 95, BWV 109, BWV 5, BWV 65 (all soloistic *tirarsi* cantatas). They deal with the same problem of a definitely Bb oriented music but written at sounding pitch (some have transposed parts but most don't). I shall discuss later the probable pitch of the *corno da tirarsi* in Bb/A but it is important for now to notice that the first soloistic work for *corno da tirarsi* -even if written at sounding pitch- is much more reasonable on a Bb instrument. And reason guides us to enlightenment.

Furthermore, the other movement for *clarino* in BWV 24 bear much bigger notational problems. Indeed in the last choral (n°6), the *clarino* is given a part that looks so much like a part for natural horn in F that it's almost impossible to be mistaken. First the choral line fits perfectly the F natural scale. Then the repeated notes on the F major triad (very typical) but above all the final cadential pattern is a natural horn trademark.

Of course the occurrence of this pattern could be a composing coincidence, but not this time, seeing that harmonic licences have to be made due to this formula: on the Bb of the bass, the *clarino* plays its typical 2nd horn/trumpet ornamentation (see illustration) bringing an a on the Bb major chord. This is a very common custom in the 18th century to let the second natural brass instrument play this cadence pattern regardless of the harmony since natural brass instruments are very restricted in notes in this register³⁵. Bach often made these compromises when dealing with natural brass instruments. Why would he go for this practice if he had a slide instrument at hand?

This leads to the conclusion that the last choral is written for a natural brass instrument in F. Therefore probably a horn since there's no trace of a trumpet in F in Leipzig. This is peculiar indeed, since there are only two other examples of a solo natural horn writing by Bach: the cantata BWV 14 "Wär Gott nicht mit uns diese Zeit" and the "Quoniam" of the mass BWV 232.

The "Quoniam" was written especially for the Dresden court and matches perfectly the Dresden standard of horn playing: solo arias, in the key of D and long semi-quaver melodic phrases in the very top of the instrument's register. Bach's aria is very comparable to that of Dresden composers; like the horn arias in "Diana su l'Elba" (Madison: A-R Editions, 2000) and "Il Giardino Chinese" of J.H.Heinichen, or the one Hasse's "Cleofide". (Stuttgart: Carus Verlag, 2008). Anyway, the mass BWV 232 was not aimed for Leipzig and was probably never played there since there is no trace of any other horn in D in Bach's works.

The other solo natural horn piece in question is BWV 14.(first performed on the 30th January 1735). This is a very late cantata indeed - actually, one of the latest from Bach. The work has a first and last chorus where the horn is in F (named "*Corno ex F*")-with the appropriate transposed notation- and plays the choral only on the natural notes. The aria n°3 is probably not for a horn for a trumpet in Bb since Bach writes two times in the score "*tromba tacet*" when pauses occur³⁶. This cantata was composed in a period when the *corno da tirarsi* was no more, owing to G. Reiche's death. Therefore J.S.Bach had to encompass the choral within natural scale's boundaries.

BWV 24, on the other hand, was written during the golden age of the *corno da tirarsi* and is

35 See James Murray Barbour "Trumpets, Horns and Music", East Lansing: Michigan University Press, 1964

36 See T.McCracken "Die Verwendung der Blechblasinstrumente bei J.S.Bach" in *Bach-jahrbuch* 1984

therefore very unlikely to call for a single natural horn. It should be noticed that the first unquestionable cantata with natural horn by Bach is BWV 40 first played on Christmas Day 1723. (I don't consider BWV 136 as requiring a natural horn and I'll show why in the appropriate section of this paper). Of course the n°6 of BWV 24 could be played on an instrument in Bb -as the one probably required in the third movement of the work- but it doesn't explain the natural horn pattern at the end of the movement. The most plausible explanation is an inaccuracy in the composition by Bach, since the instrument was still very fresh and new to him (seeing that such a case would never happen again in the many *tirarsi* cantatas that follow).

As a conclusion, I shall say that BWV 24 still shows a lack of confidence or even knowledge by Bach and Kuhnau about the *corno/tromba da tirarsi*. For sure, the third movement calls for an instrument in Bb and the last choral calls rather for a natural horn in F. On the other hand this cantata sets the model of the other soloistic *tirarsi* cantatas: an obligato in florid style and the doubling of the choral.

BWV 185

Now BWV24 should be compare to the other cantata written for the same day: BWV 185 “Barmherziges Herze der ewigen Liebe”. “Written for the same day” is not exactly true, since BWV 185 is a former Weimar cantata (1715) brought back to life for Leipzig on the 20th of June 1723 and once again during the years 1746/47. There are four different parts sets for this cantata: the two first being from Weimar³⁷, the third being for the Leipzig performance in 1723 and the last for the one in 1746/47. It's the only *tirarsi* cantata for which we know previous versions exist, during and after the collaboration of J.S.Bach and G. Reiche. As one would easily guess the only part set, including a *tirarsi* part, is the one used for the first Leipzig performance (1723) when G. Reiche was available.

The Leipziger part set is mainly a transposition of the Weimar material from *Chorton* to *Kammerton*. The *tirarsi* part, named “*Clarino*” by Kuhnau, is copied from the oboes that played the part in Weimar. It contains a choral obligato in the first and sixth movements. As in the previous cantatas, the part is written at sounding pitch but bears once again a very strong polarity towards Bb major/G minor. There is no demanding virtuosity but the first choral is more florid than the last, owing to its oboe origin, even if they are both based on the same melody.

Like BWV 24, this work could be played on a slide instrument in C -as the notation would suggest- with some uncomfortable moments around the F an Ab in the middle octave. However using an instrument in Bb would make it much more natural; bringing the melody in the natural scale and its surrounding semitones.

BWV 167

Four days later, a new cantata was performed: BWV 167 “Ihr Menschen, rühmet Gottes Liebe”. Here again a brass instrument is used to play the choral along with the soprano. There is no opening chorus so to speak and our instrument plays only in the final choral. Kuhnau copied the part and named it -for the last time- “*Clarino*”. Another similarity with the previous work is the notation at sounding pitch but this time in the key of G major. The mode of the piece brings a few

37 See Neue Bach Ausgabe Band 17, *Kritische Bericht*; Kassel: Bärenreiter, 1993

Ds in the middle octave, which are quite awkward notes to play. Of course the tonality doesn't speak for a Bb instrument even if that would allow the player to avoid the low D. But the part contains so little material that the tuning of the instrument in C, Bb or A doesn't make much of a difference anyway.

BWV 147

The famous cantata BWV 147 “Herz und Mut und Tat und Leben” was the next one performed by Bach and his colleagues on the 2nd July 1723. Once again a solo brass part occurs, this time combining *clarino* style and *tirarsi*-style writing. The cantata had already been played in Weimar (1716) but the question concerning the doubling of the choral by the *Tromba* in Weimar remain unanswered since there are no parts left from this performance. The work was played again in 1730 in the same form as in 1723. (The *tirarsi* part would still have been playable then).

Kuhnau copied the part and named it “*Tromba*” following the “*Tromba*” written by Bach in the score. J.S.Bach must have noticed that Kuhnau felt uneasy with the *tirarsi* parts because he took the pain to copy himself the first choral n°6 (for *tirarsi*), leaving the *clarino* movements to Kuhnau. The last choral (n°10) has been copied by Kuhnau very probably from Bach's n°6, since they bear the same music. It seems to me that Bach was aware that there is an appropriate notation system for the *corno/tromba da tirarsi*. It shows as well that adding the *tromba* or *corno* to the singing of the choral is probably something done in the last stage of composition. Possibly after the piece has been finalized, as a sort of instrumental registration.

As in the previous work, the choral is written at sounding pitch; in G major with no particular difficulties.

After a short break for the *corno da tirarsi* (BWV 186 has no brass parts), we come to the most interesting period of writing for this instrument. Indeed the next three cantatas BWV 136, BWV 105 and BWV 46 contain some of the most complicated and demanding parts for horn and, above all, the term “*da tirarsi*” will appear here for the first time.

Starting with BWV 136 “Erforsche mich, Gott, und erfahre mein Herz” we can notice that that this cantata brings some new customs. Indeed the first chorus call for a “*corno*” (Kuhnau in the part and Bach in the score) and is transposed in A. In this tonality (A major) it plays a *clarino* obbligato of quite the same shape as the *tromba* obbligati of cantata BWV 75 and BWV 76.

The *corno* then plays the final choral *colla parte* along with the soprano written, at concert pitch in F# phrygian. This choral definitely requires a *corno da tirarsi* considering the notation and the shape of the melody.

The interesting thing about this cantata is that it's the first piece with a doubtless natural horn part by Bach in Leipzig. And it calls for an instrument in A. This key is very unusual for the horn and it is a unique case by Bach. The usual natural horn keys by Bach are G and its crooking to F. The only other brass part transposed in A by Bach is the cantata BWV 67 but calling for a “*Corno da tirarsi*” (original Bach naming) with the appropriate notes outside the natural scale.

For a modern performer there wouldn't be any problem to crook a horn into A, since our so-called copies can be played from C alto to C basso; that is indeed a modern development of the Baroque horn. However, instrument makers of the 18th century seem to have thought a different way: Trumpets and horns were made mostly (in Leipzig above all) in a definite tuning and use "krumbögen" or "kreisle" (crooks) to tune the instrument down a semi-tone, a tone and in extreme cases a tone and half. That's why original horns in D are special D horns and not F horns tuned down to D. It should be said that actually even if trumpets were generally crooked, most of the original horns of the first half of the 18th century were made in one tuning without crooking, possibility because of their conical mouthpipe.

Seeing that Bach used mostly natural horns in G and F (like in BWV 1, 40, 52, 91, 88, 83, 128, 14, 100, 79, 174, 248, 112) it speaks for the availability of horns in G and F or maybe horns in G crooked down to F in Leipzig. This hypothesis is reinforced by the fact that Johann Kuhnau (Bach's forebear) used only natural horns in F that he called "*Corno Grande*". Whether those instruments played at *Chorton* or not is not an issue, since the F-*Chorton* horns would then become Bach's F-*Kammerton* horns. On top of that all remaining horns by the Leipzig maker Eichentopf are in G or F.³⁸

Since two works by Bach call for horns in C (BWV 65 & BWV 16) and all evidence shows it would have been C alto (there are many instruments in C alto, while I don't know of any surviving horn in low C before 1750). It would be a possibility to crook down a horn in C to A but that means an unusually long crooking that I haven't witnessed on any original instrument or in any texts of the time.

Another possibility, which I take as the most plausible, is that "horn in A" is our very *corno da tirarsi* in Bb crooked down a semi-tone. This is of course only hypothetical, because the part doesn't call especially for that instrument, but the only other part we know transposed in A is the one of BWV 67 named accurately "*Corno da tirarsi*" by Bach himself. This part is very close to a natural horn part and this style of writing obbligati for *corno da tirarsi* with only very little use of the slide and in a transposed notation is seen in other works of the time: BWV 46, BWV 105. The fact that the part of BWV 136 requires no notes outside the natural sale might be only a compositional coincidence.

BWV 105

A week later (on the 18th July 1723), appears one of the most interesting *corno da tirarsi* cantatas (and definitely my favourite): BWV 105 "Herr, gehe nicht ins Gericht mit deinem Knecht". No part is left for this cantata and even the remaining composition score is full of corrections and untidiness³⁹. A great pity indeed, because it would have been of immense interest to see how Kuhnau (or even Bach himself) would have copied that part. The score (by Bach of course) uses the name "*Corno*" and calls the instrument to play a highly chromatic chorus in unison with the oboes. Then follows an aria (n°5) with only few non-natural notes (if played in Bb) and, although the final choral bears no nomenclature, the presence of the horn to play the soprano line was already a custom at this point. It is highly probable (considering the works surrounding this

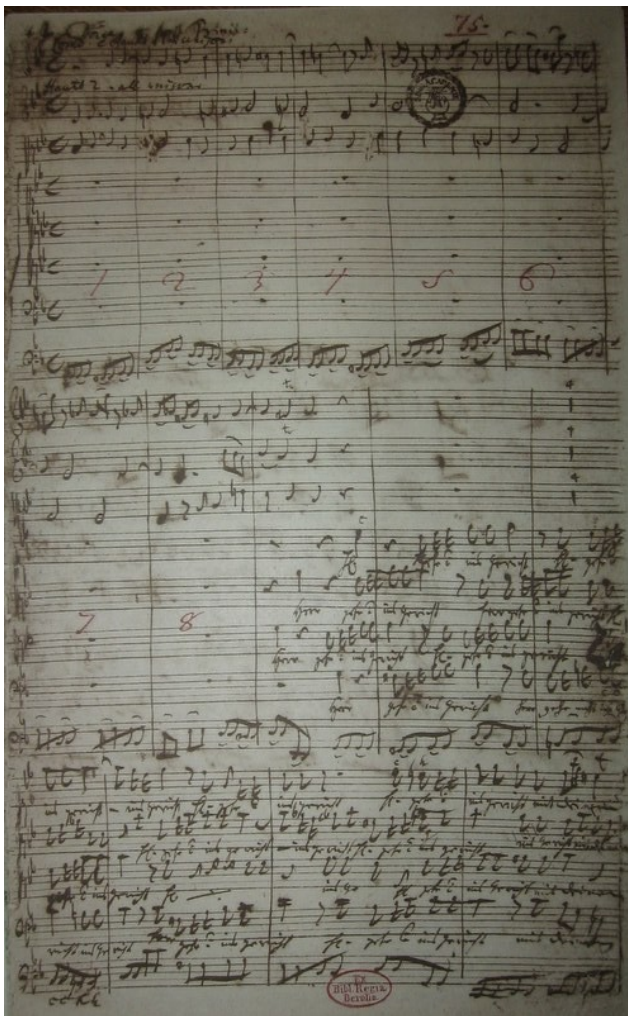
³⁸ See the part of this paper about the instruments

³⁹ See "Herr, gehe nicht ins Gericht(BWV 105) Faksimile nach dem Partiturautograph" Prefaced by Robert L. Marshall; Leipzig: Hänssler-Verlag, 1983

one) that the part would have been copied at sounding pitch except probably for the aria that would have been transposed into Bb.

Once again the part is very Bb-oriented with the first chorus hardly playable if played on a C instrument. The aria might have been transposed in the part since it is very similar to that of the following cantata BWV 46. Played in Bb this aria requires very little slide movement and is comparable to arias in BWV 46, BWV 67 and BWV 5.

This work is one of the most demanding for *corno da tirarsi* and to me the most beautiful. The chromatic figure of the opening chorus is a hymn to the new possibilities of the instrument.



BWV 105 Opening chorus



BWV 105 Tenor Aria

BWV 105
"Herr, gehe nicht ins Gericht"

transposed for
B \flat corno da tirarsi

Corno

1.

5

34

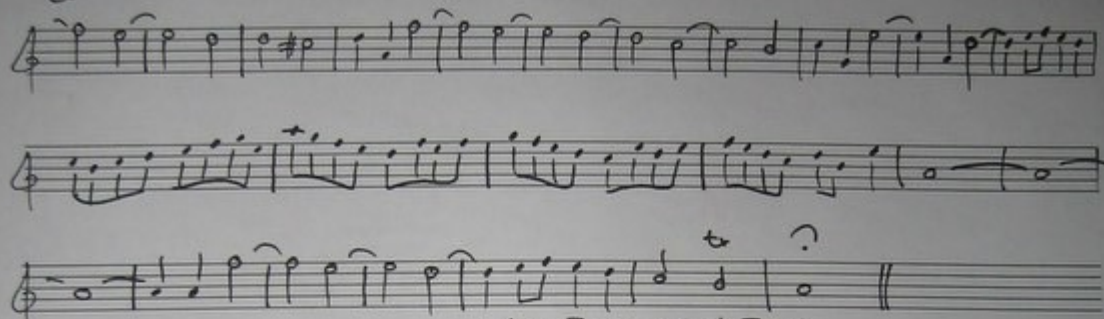
* from this bar on the score mentions only 1st Violin.

BWV 105 Opening chorus, transposed part

BWV 705

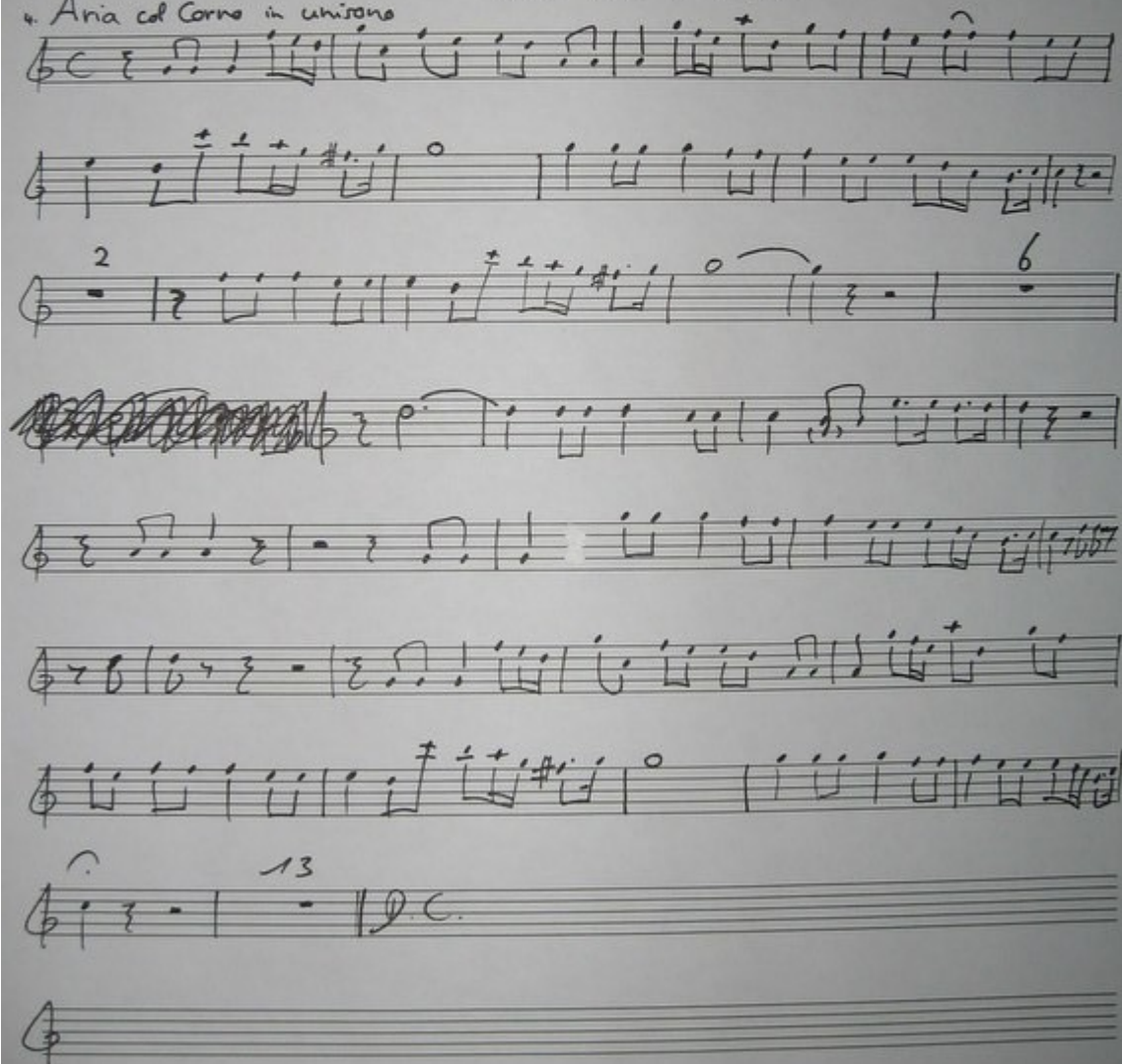
in 36

Cornel



2. Aria: Tacet - 3. Recit: Tacet

4. Aria col Corno in unione



耳

BWV 46

Cantata BWV 46 “Schauet doch und sehet, ob irgendein Schmerz sei” is a corner stone for our topic. Indeed, here will appear for the first time the word “*corno da tirarsi*”. We are deprived this time of the original score but the parts remain. Our brass part was copied by Kuhnau for the aria and choral but the first chorus, the naming and some corrections are from Bach's hand.

The aria is very similar to the one in BWV 105 with its sparse use of non-natural notes transposed in Bb; while the last choral in A phrygian (copied at sounding pitch) speaks for an instrument in Bb too.

The first chorus, in its concert-pitch notation, is quite similar to the complicated parts of BWV 24 and BWV 105. Because of its d minor (or dorian) tonality, this chorus is not so much oriented towards the Bb instrument.

The question remains: why the sudden use of the term “*tromba ô corno da tirarsi*”? Much has been written about this case but it still is a mystery. There is an apparent dot after “*tromba*” separating it from “*corno da tirarsi*”; but it isn't enough to say that “*da tirarsi*” would only apply to “*corno*”.

As Thomas Mc Cracken cleverly noticed⁴⁰ Bach never wrote the full term “*Tromba da tirarsi*” himself, except in BWV 77, where Bach's handwriting seems “doubtful” to Mc Cracken. Bach mostly added “*da tirarsi*” to the word “*tromba*” already written by Kuhnau.

However, a notation peculiarity appears in all parts bearing the name “*corno da tirarsi*”: they contain a transposed movement, as in BWV 46, BWV 67 and BWV 162.

It becomes slowly evident that the sounding pitch notation is the “official” notation system for the *corno da tirarsi* and it is probably the sign for the player that the part requires a slide. Close to the entire works for *corno da tirarsi* are written this way. The player might have then transposed the part from sight for the Bb/A instrument. But the very fast arias, like the ones in BWV 46, BWV 105, or the chorus of BWV 67, where probably too florid to be transposed at sight.

On top of that, the writing is very close to a natural brass piece and therefore Bach might have transposed them to ease the reading for the player. He was then forced to add the suffix “*da tirarsi*” to make sure the player wouldn't be misled by the notation and went for natural *corno*.

⁴⁰ See footnote 36



BWV 46 Original part

BWV 77

After a short break in his use of the *corno da tirarsi*, Bach would write a cantata calling for a "*Tromba da tirarsi*". This is BWV 77 "Du sollt Gott, deinen Herren, lieben" first performed on the 22nd August 1723.

There's no part left for this work but J.S.Bach wrote "*tromba da tirarsi*" in the score for the first movement and "*tromba*" for the fifth. The first is an obbligato choral (no colla parte) written at concert pitch and very suitable for an instrument in C.

The same could be said about the aria n°5 which follow the form of the previous "*da tirarsi*" arias of BWV 46 and BWV 105 with few non-natural notes (mainly C# because of the dorian modality and one Eb). Here again (following BWV 46 and BWV 105), some typical *clarino*-style patterns are combined with highly melodic moments that are only possible thanks to the slide.

The main *tirarsi* solos in BWV 46 and BWV 105 (and later BWV 67) are not transposed, or better said, are already written in it's C "transposition". Indeed the *tromba* line in the score is written in C, which is both concert pitch notation and "transposed" notation for a trumpet in C.

There is no mention of the *tromba* in the last choral (as usual) but it probably appeared in the part. The fact that this work calls for a "*tromba*" and not a "*corno da tirarsi*" is probably because the piece is in C and this key never seems to be associated with the *corno da tirarsi*.

BWV 95

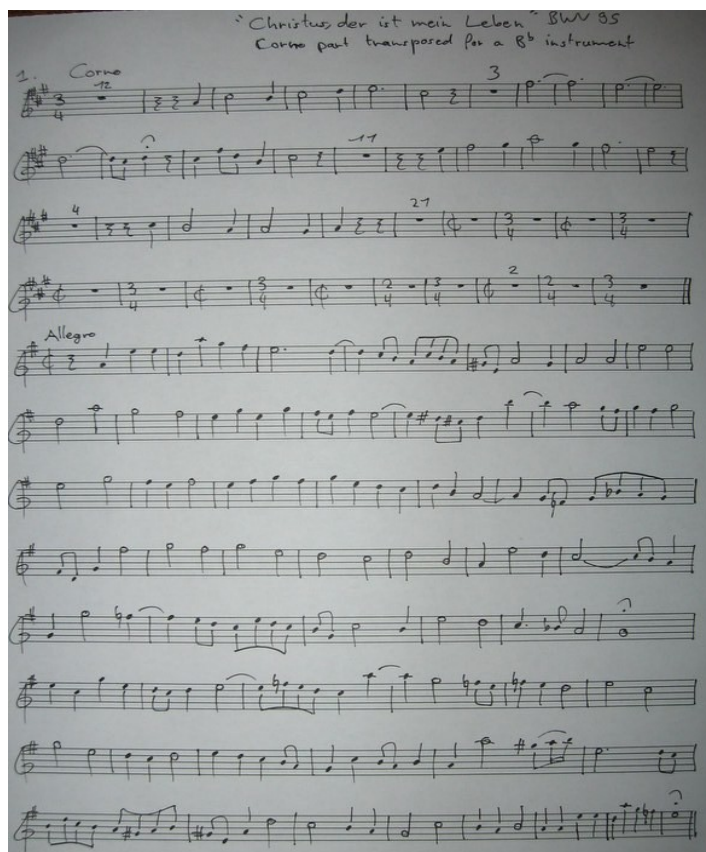
On the 12th September 1723 the *corno da tirarsi* player got some hard work with BWV 95 "Christus, der ist mein Leben". Here again only one single source remains and this time it's the parts. Copied by Kuhnau, our part bears the name "*corno*". The part is written at sounding pitch, already a habit by then: it is, however, very Bb oriented.

The first movement is experimental in the way that it combines the two functions of the *corno da tirarsi*: the doubling of the choral and the melodic obbligati. The first choral in unison with the soprano is in G major and very easy. In the middle of the movement the tempo goes to "Allegro" and the key change from G major to g dorian.

The *corno* part is then obbligato and very demanding. Playing this part in C is very close to impossible considering the frequency of F and D in the middle octave and the completely non-natural moment between bar 104 and 131.

Once again playing this part in Bb makes it much more natural even if it still is a very demanding part anyway.

The last choral is quite awkward because of the G plagal mode, which brings quite a few low Ds that, of course, would be avoided if played in Bb.



BWV 95 Opening chorus, transposed part

BWV 48

The funny thing about cantata BWV 48 “Ich elender Mensch, wer wird mich erlösen” -played two weeks later on the 3rd October 1723 - is that it bears the same name for the brass part as in BWV 24. Meissner gives “Corno” on the title page (probably later added), while Bach wrote “Tromba” in the instrumentation and Kuhnau named the part “Clarino”.

It is strange that Kuhnau comes back to this naming. Anyway the part is not very demanding, consisting in 2 chorals *colla parte* with the soprano and one (the first) in obbligato. Once again the tonality evolves around G dorian/C dorian and a Bb instrument be preferred.

BWV 162

The following cantata is BWV 162, “Ach! Ich sehe, itzt, da ich zur Hochzeit gehe”, performed in Leipzig on the 10th October 1723. This is originally a work for Weimar for which we have a set of part from Weimar (in *Chorton* and without *corno*) and one for Leipzig (in *Kammerton* with *corno*). The part for “*corno da tirarsi*” that we have is very special since it's from Bach's hand (written on the back of a Weimar first violin part). On top of that, it bears the full name “*corno da tirarsi*”.

Bach added the *corno* part to the Weimar material, therefore had no constraint in composing and could write exactly what fitted the instrument's possibilities. However, this part is the most unexplainable one of all the for *corno da tirarsi*. This cantata brought numerous problems to all those who have studied the *corno da tirarsi* theme.

First the part is written down a tone compared to the rest of the consort. This is absolutely unique in all horn parts from Bach and it is very difficult to find a reason for it. One could think that Bach composed it in the form the work had in Weimar, meaning in A minor (a tone lower than the Leipzig version).

This is very possible, except that Bach usually took great care of such transposition issues. He could as well have wanted to transpose it in a way that would ease the playing; suppressing the two sharps of B minor but it doesn't make much sense, considering the very complicated parts the *corno da tirarsi* played in previous works.

Another peculiar feature is that -since the movement concerned is an aria without cantus firmus- the *corno* doesn't double the soprano or the top instrumental part but the viola. This as well is unique. Because of the connection (with some liberties) to the viola part the *corno* line is much lower than usual *corno da tirarsi* repertoire. The result is that the instrument plays mostly in its middle octave where only few natural notes are available and therefore this work requires the greatest use of the slide of all the *corno da tirarsi* history.

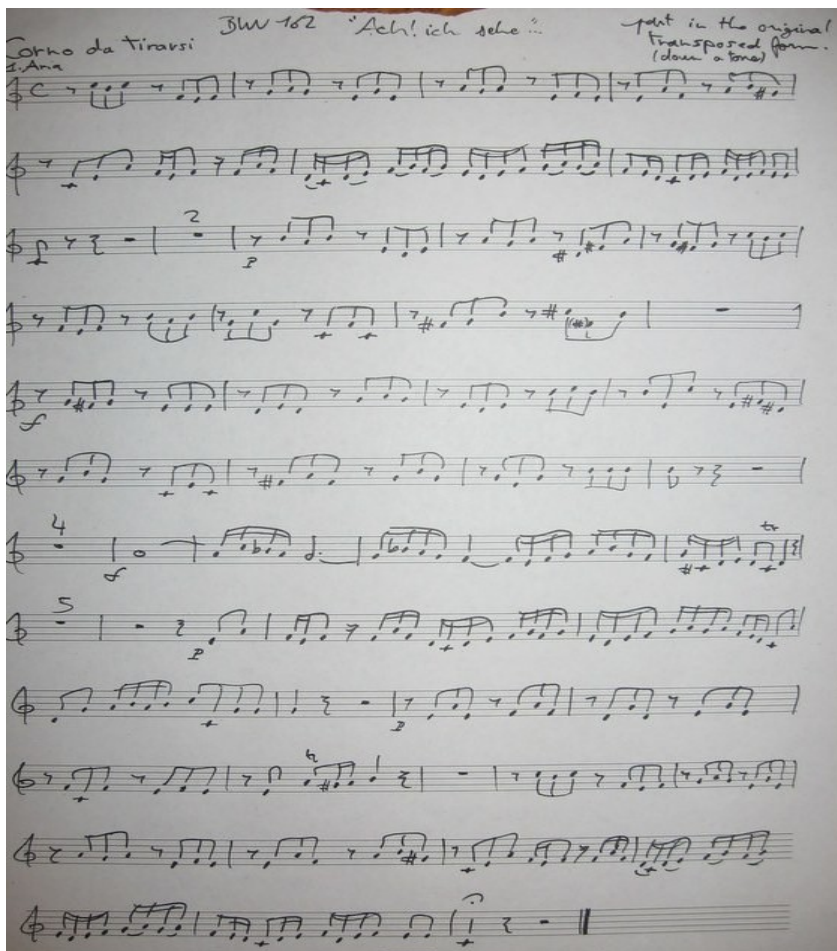
However, the part and its transposition have some logic too. First it comes from Bach's hand and it bears features of careful writing (transposition, dynamics, articulations).

Moreover the consequence of the transposition for an instrument in D is the A minor tonality of the *corno* part. It indeed brings the part close to the natural notes of the written C major. Actually no doubt exists as to whether the transposition is correct since, when the *corno* leaves the viola part, it is mainly to play some typical natural horn pattern that are natural only with this transposition.

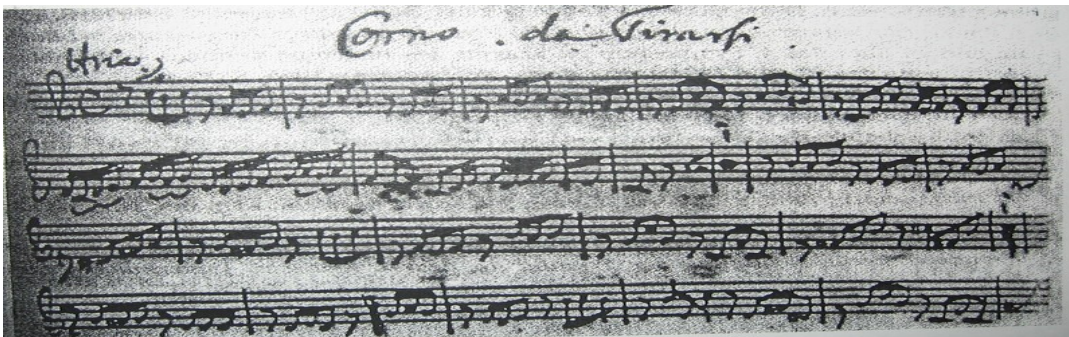
The best example is the often seen cadence pattern with the fifth leading to the third of the minor tonic (see bars 7-8 and 55-56). This appears in hundreds of horn parts of the time prove by itself that the transposition is no mistake but very evident indeed.

The only mysterious point is the tuning of the instrument in D, which normally never happens on the *corno da tirarsi*. It seems to be the result of combined composing conditions. The first Weimar version of the cantata uses a tonality that would work well there and then. As usual, the cantata was transposed up a tone for the Leipzig *Kammerton*. The decision of doubling the viola part with horn then forced Bach to write the part as “naturally” as possible because of the low register it and the fast slide movements it requires.

Therefore, the part had to be transposed into D and, because of its transposed notation, required the specific name “*corno da tirarsi*” for the player not to be mistaken (like in BWV 46 and BWV 67). Practically it is hard to see how an instrument usually tuned in Bb/A could be brought up to D. But the player might well have used the A tuning. This we'll never know.



BWV 162 Opening movement, transposed part



BWV 162 Beginning of the original part

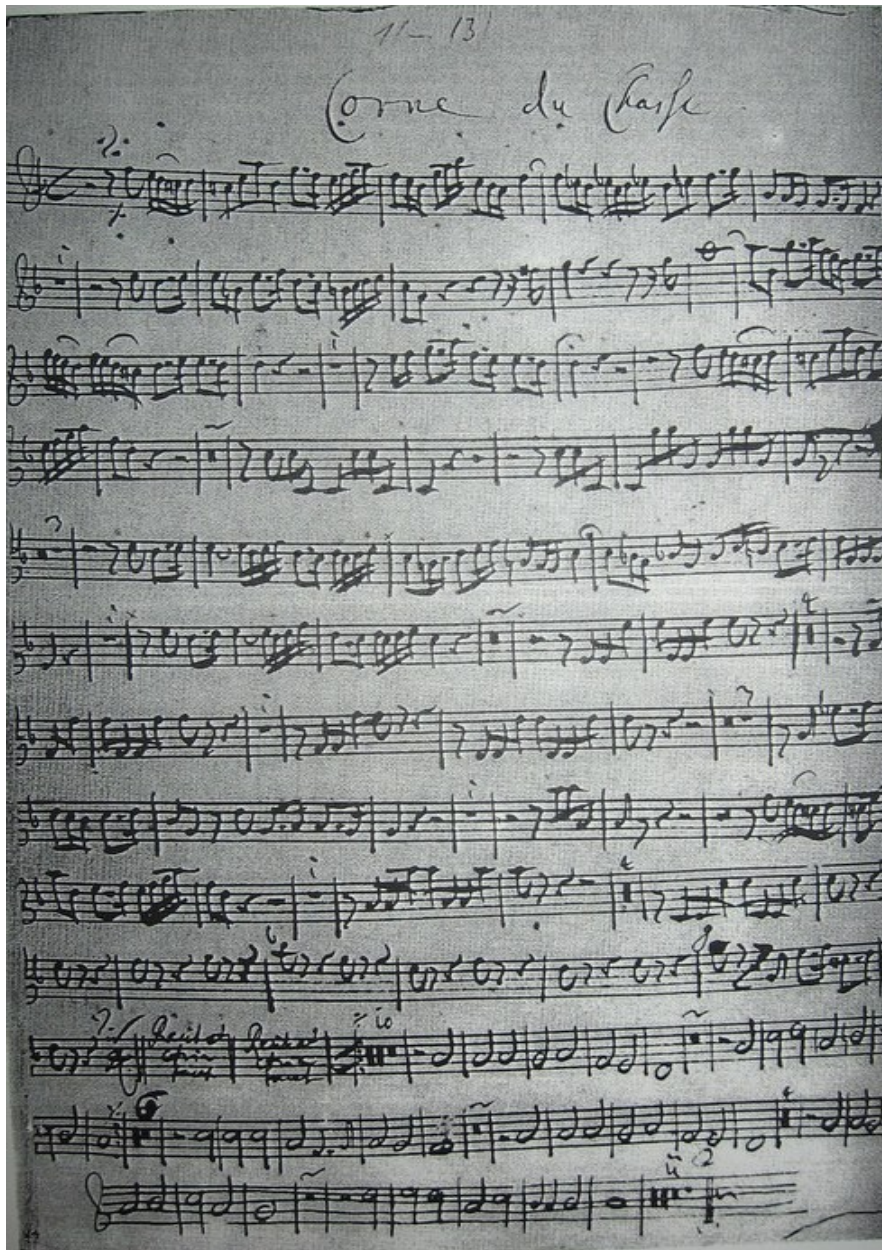
BWV 109

A week later, the *corno da tirarsi* was called to duty again. In BWV 109 “Ich glaube, lieber Herr, hilf meinem Unglauben” (first performed on the 17th October 1723) the *corno* is absent from the score. Only the part from Bach's hand is left and was probably added at the very last moment.

On the same principle as in BWV 162 -played a week before- the *corno* plays a demanding obbligato, following an already composed instrumental part (this time the first violin) with some simplification here and there. This custom of adding the *corno* to enhance the work was used again a week later in BWV 89. Another similarity between BWV 109 and BWV 89 is the naming of the part “Corne du chasse”. This term is strictly linked with the horn and speaks seriously against the

idea of interpreting the usual “*corno*” as a shortened “*cornetto*”. Moreover, these kind of very “horn-esque” names seem to forbid the assimilation of the *corno da tirarsi* and the *tromba da tirarsi*.

The part is using the usual *tirarsi* notation at sounding pitch and calls for the Bb tuning even if less definitely than in BWV 105 or BWV 24.



BWV 109 Original part

BWV 89

The series of works with *corno da tirarsi* goes on the following week with another peak for the instrument's repertoire. Played on the 24th October 1723, BWV 89 “Was soll ich aus dir machen, Ephraim?” is probably an earlier work since it seems to have been transposed from *Chorton* to *Kammerton*⁴¹. Very consequently, Bach followed the same principle as a week earlier and obviously added the *corno* part to an already completed work. He even kept the same name “*Corne du chasse*” for the part that he copied himself.

41 See Kritische Bericht of the Neue Bach Ausgabe band 26

The first movement (an obbligato) as well as the last (a choral colla parte) are written at sounding pitch and are in the keys of Bb major/G minor. The first obbligato is very similar to others of the “golden age” of the *corno da tirarsi* (BWV 105, BWV 46, BWV 95, BWV 109...).

BWV 60

The next cantata asking for our instrument is BWV 60 “O Ewigkeit du Donnerwort” played on the 7th November 1723. There is no mention of the *corno* in Bach's score; only the part copied by Kuhnau remains. The *corno* sustains the choral *cantus firmus* in both first and last movement. This is a form that Bach will keep for many of his choral cantatas with the horn doubling the *cantus firmus* in the external movements.

For some reason the part is written in soprano clef and a tone lower. Kuhnau, never taking the initiative for transposing, might have written the *corno* part directly from the vocal line since there's no *corno* part in the score. This would explain the soprano clef. But the transposition remains awkward. It doesn't have the same weight as BWV 162, since this time, the part was not written out by Bach. It could be simply a mistake by Kuhnau.

However, it is somehow noticeable that the two parts for *corno da tirarsi* in D major so far have used this transposition. Here, as in BWV 162, the consequence is that the part uses many more natural notes. These are the observations we can make and nothing certain can be dragged from it. Two explanations are possible: Kuhnau and Bach were still not aware of the possibility of tuning the *corno* in A and made clumsy notations when the tonality was in sharps; or there was the possibility to play the *corno da tirarsi* in D.

But why would there be a genuine “*Corno da tirarsi*” part transposed in A (BWV 67)? Were there three tunings of the instrument? This hypothesis can't be so easily rejected.

BWV 90

A short comment must be made about cantata BWV 90 “Es reisset euch ein Schrecklich Ende” played on the 14th November 1723. No part has come to us but Bach's score calls for a “*Tromba*”. The obbligato in the third movement is a typical *clarino* line in Bb. Although the last choral has no instrumentation, it's probable that the trumpet plays along the soprano line in the very *tirarsi*-friendly key of D dorian/phrygian.

BWV 70

The cantata played the next week (on the 21st November 1723) is a very peculiar case. Kuhnau's part is entitled “*Tromba*”. The first movement is in C and therefore to define as transposition or a piece written at sounding pitch. The composing style is the *clarino* one; using only the natural notes C-E-G-C in the middle octave. However, the passages in the upper octave bear some foreign notes like Eb, B natural & D#...with insistence. On one hand, those notes are

very unusual in a natural brass part by Bach. On the other hand, most of the *tirarsi* parts deal with non-natural notes in the middle octave and not only in the upper. It is therefore difficult to decide if the part was meant for a *tromba da tirarsi* or a natural one.

Another particularity is the fact that the two chorals (definitely requiring a slide) are in the keys of G major and C major; even though most of the *tromba da tirarsi* parts are in flat keys.

The two other appearances of the trumpet in the piece are genuine *clarino* movement in C major.

The only explanation for those particularities is the fact that BWV 70 comes from BWV 70a (now lost). BWV 70a was a Weimar cantata. As we'll see for BWV 12, the trumpet tradition in Weimar was not the same as in Leipzig. The players there might still have been well connected with the XVIIth century art of playing “foreign” notes on the natural trumpet; leading to the composition of the first movement with some non-natural notes.

When the piece was re-arranged for Leipzig, Bach asked evidently the *tromba* to play in the chorals. But those chorals being already composed he could change their tonality to make it suit the usual *tromba da tirarsi* tuning. That's why, for once, the *tromba da tirarsi* played in sharp key, even if G major is actually not very much of a difficult sharp tonality. This is to me the most plausible explanation.

BWV 40

We reach the period of advent 1723 and therefore church music ceases to call much for brass instruments. Right after this period comes Christmas and it's natural trumpets and horns in large festive works. However, a little use of the *corno da tirarsi* was too hard to resist for Bach. In BWV 40 (played on the 25th December 1723), the two horns play usual natural horn lines transposed in F. But the three chorals sung in the piece are written in the first horn part too; this time at sounding pitch. It calls therefore for a *corno da tirarsi*.

The parts are from Kuhnau who, as usual, copied directly from the score. In this case, probably from the soprano part. The chorals are in the usual range of the *corno da tirarsi* and using the tonalities of G dorian, D dorian and F dorian suiting well the Bb tuning of that instrument.

BWV 73

Then comes a somewhat long break for the *corno da tirarsi* until the 23rd January 1724. The work played that day is another proof of the disappearance of the *corno da tirarsi* around 1730. It is BWV 73 “Herr, wie du willst, so schicks mit mir”.

The part we are busy with was copied by Kuhnau and is named “*Corno*”. The music on the page is in the usual sounding pitch notation. The first movement is a medium difficult obbligato and

the *corno* plays the choral *colla parte* in the last movement. Those two movements are respectively in G minor and C dorian.

The *corno* in the first movement is alternatively doubling the first violin or the top vocal part; taking care of resting when the violin line is too fast-paced. The last bars are a little more independent.

But the most interesting thing about this cantata is that it was performed again between 1732 and 1735. Gottfried Reiche had already passed away by then and therefore a *corno da tirarsi* player was no longer available.

However, Bach thought the part was important enough to be transcribed for another instrument; he took this duty upon himself and rewrote the *corno* part for the organ. The organ part (from Bach's hand) uses a two-stave system with a used-to-be *corno* line on the top and a figured bass on the bottom.

BWV 67

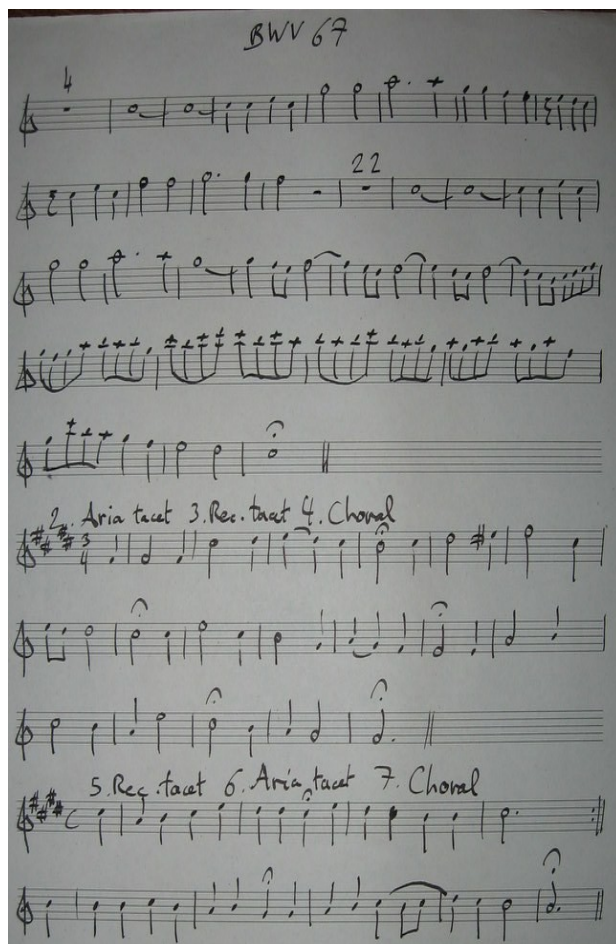
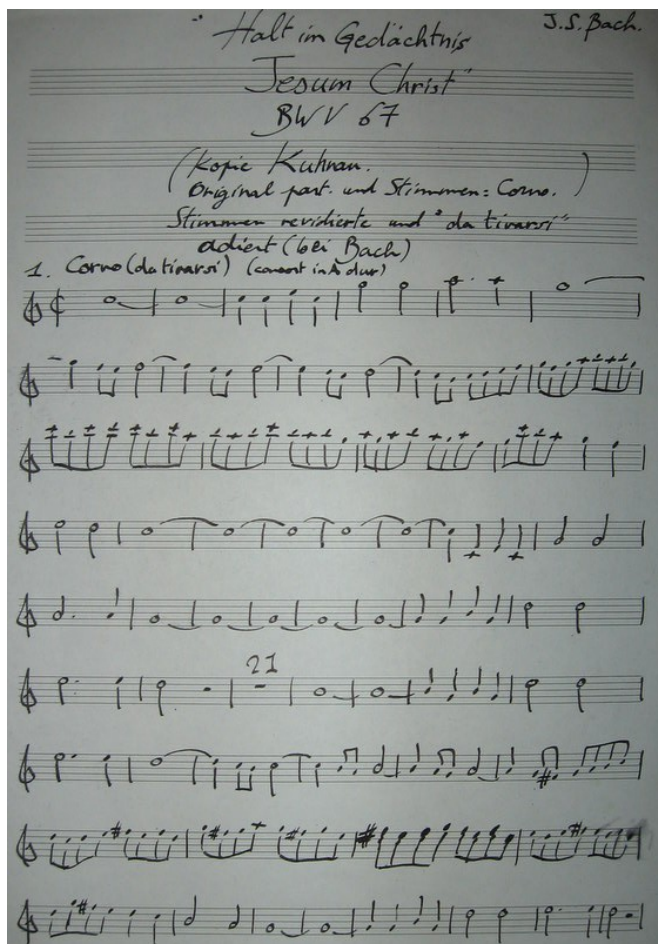
An even longer break was made between BWV 73 and the next *tirarsi* cantata: BWV 67 “Halt im Gedächtnis Jesum Christ” played on the 16th April 1724. This is probably the last specimen of the golden age of the *corno da tirarsi*. After this, the instrument would mostly double chorals. Moreover this piece is the last to bear the full name “*corno da tirarsi*” on its part.

As in BWV 46 and BWV 162 the name “*corno da tirarsi*” comes along with a transposed part. As we already saw in the two above mentioned works, the part has been transposed probably to ease the reading of the fast-moving obbligato, seeing that it is making mostly use of natural notes. However the player still needs the slide to play the theme when it is transposed on the dominant; therefore comes the indication “*da tirarsi*”.

The first movement is an obbligato, very demanding, but very close to the *clarino* style. The part is then transposed for an instrument in A, the last choral uses the sounding pitch notation. For some unexplainable reason the horn part of the 6th movement (an obbligato on the natural scale) has been abandoned in the middle of its composition and struck out in the score.



BWV 67 Erased corno part



BWV 67 Transposed part

BWV 12

The cantata BWV 12 “Weinen, Klagen, Sorgen, Zagen” is actually not genuinely part of the works we are working on since it was written and first performed in Weimar on the 22nd of April 1714. However it was performed anew on the 30th of April 1724. Moreover, the cantata features a trumpet part that could well have been written for a *tromba da tirarsi*. Indeed in the 8th movement (a tenor aria) the “*Tromba*” (as named by Bach in the score) plays an obbligato choral in the key of G dorian.

Unfortunately there is no part left. The *tromba* line is written at sounding pitch with two b's. However the part could be played on a natural trumpet if for an Eb as the only note outside the natural scale. Furthermore it is not impossible that the part could have been transposed in Bb in the separate part; which would have made it completely natural. However, as mentioned earlier, many choral melodies fit well on natural instruments because a choral is “in se” a simple line in diatonic mode.

Therefore I would rather think that it was intended for a slide trumpet even if it doesn't come from the Leipzig period. As a matter of fact the tradition of playing chorals on the *tromba da tirarsi*

had already existed for many years and far beyond the Leipziger walls. It appears clearly that the slide technique required in BWV 12 is light years simpler than the ones like BWV 105, BWV 109, BWV 24, BWV 95 etc. In the last choral of the work, no mention of the *tromba* is made but a concerted part written on the top staff might have been played on the trumpet. It requires the same sparse use of the slide as in n°8.

BWV 20

The frequency of works with *tirarsi* instrument is lowering slowly by this period and, after a break of ten cantatas without *corno/tromba da tirarsi*, we reach the beginning of the second annual cycle of cantatas (Zweite Jahrgang).

It begins with BWV 20, “O Ewigkeit du Donnerwort II”, played on the 11th June 1724. It is a work calling specifically for a “*Tromba da tirarsi*”. Kuhnau named the part “*Tromba*” (after Bach's score) but J.S.Bach completed it with “*da tirarsi*”. As usual with the *tromba da tirarsi*, the movements requiring a slide are in flat keys. The first and last movements are in F major. Actually, the choral used is the same as in BWV 60 (with the same title) except that the earlier version is in D major and due to this sharp key played by a *corno*.

The 8th movement is a *clarino* obbligato for natural trumpet as it almost always happens at some point in the works for *tromba da tirarsi*.

BWV 10

Now that our instrument is slowly vanishing, we have to wait until the 2nd of July 1724 to see the *corno da tirarsi* appearing again in BWV 10 “Meine Seele erhebt den Herren”. The piece written for the Visitation Day is a Magnificat in German.

Kuhnau wrote the part and named it “*Tromba*” and didn't add anything to it since the notation at sounding pitch is sufficient to call for a *tirarsi* instrument. As a typical *tromba da tirarsi* part it plays in the flat keys of C dorian, D dorian and G dorian (in movements n° 1, 5 and 7).

Probably because of Gottfried Reiche's death, the *tromba* part of the 5th movement (an obbligato *cantus firmus* and not a *colla parte*) is transcribed for the oboes in the later version performed between 1740 and 1747. This probably means that, after Reiche's death, Bach redistributed the *corno da tirarsi* parts only if they were obbligati or of some importance; leaving the *colla parte* chorals being sung without *corno* which was in those cases of no contrapuntal concern.

BWV 107

On the 23rd July 1724 Bach goes back to the *corno da tirarsi* with BWV 107 “Was willst du

dich betrüben". He actually named the part that he copied himself "*Corne da Caccia*" but the sounding pitch notation is, to me, a sign for the use of the *corno da tirarsi*.

The first and last movements are *colla parte* with the soprano; in the key of B minor. Both are chorals but the first is of an ornamented form.

No significance can be found from the source as why did Bach use the term "*Corne da Caccia*", a word he would normally have used for his natural horn parts.

BWV 178

Only a week later (on the 30th of July 1724) the *corno da tirarsi* is called to duty again in BWV 178 "Wo Gott der Herr nicht bei uns hält". This time Kuhnau did the copying and name the part "*Corno*" (probably after the score).

It should be said that generally the score mentions only the instrument in the generic word (like "*corno*" or "*tromba*") and Kuhnau never took the liberty to change or complete those names; as well as he never takes upon himself to transpose a part.

Both first and last movements are choral lines in C major along with the singing soprano. We can notice that from then on the parts for *corno da tirarsi* never go beyond the choral doubling.

BWV 78

A long gap happened before the composition of BWV 78 "Jesu, der du meine Seele", the next work for *corno da tirarsi* played on the 10th September 1724. As in the previous cantatas, the *corno* part is written at sounding pitch and doubles the chorale sung by the soprano in both first and last movements. Both are in G minor. The part was copied by Kuhnau and once again bears the name "*Corno*".

The peculiarity of this part is that it also contains a soloistic part for Violone in the second movement. Indeed at the back of the *corno* part is an addition from Bach's hand with a little independent part for the second movement named "Violone". It seems very plausible that the *corno* player played that part on an "extra" violone since the distribution of the basses in their respective parts is not reduced for this movement.

However, we can not exclude that Bach simply performed the work again later when no *corno da tirarsi* was available and therefore took the useless music sheet to copy an added violone part.

BWV 99

It is Bach himself who wrote the part named “*Corne*” a week later (on the 17th September 1724) for BWV 99 “Was Gott tut, das ist wohlgetan, I”. Here again, the first and last movements call for the *corno da tirarsi* to play *colla parte* with the soprano on the choral. The music is written at sounding pitch in G major (actually in G mode).

It should be noticed that the music of the first movement would be used again in the eponymous cantata BWV 100. Since BWV 100 is a later work (1732-1735) the *corno da tirarsi* would disappear from the score two natural horns in G will be added; leaving the choral to the soprano and playing a florid *clarino*-style obbligato.

BWV 8

Cantata BWV 8, “Liebster Gott, wenn werde ich sterben?”, is another example of the connection between Gottfried Reiche and the *corno da tirarsi*. A first version of the work for the 24th September 1724, bears a part named “*Corno*” and was copied by Meissner.

However, the second version of the work (1744-1747), made after Reiche's death, shows no use of the *corno*. The *corno* part of the first version is a *colla parte* with vocal top line with the particularity that the first chorus is not a choral but a freely-composed line.

Therefore the part for *corno* is more challenging than the usual chorales of the surrounding cantatas. Both first and sixth movements are in E major and the part is written at sounding pitch.

BWV 114

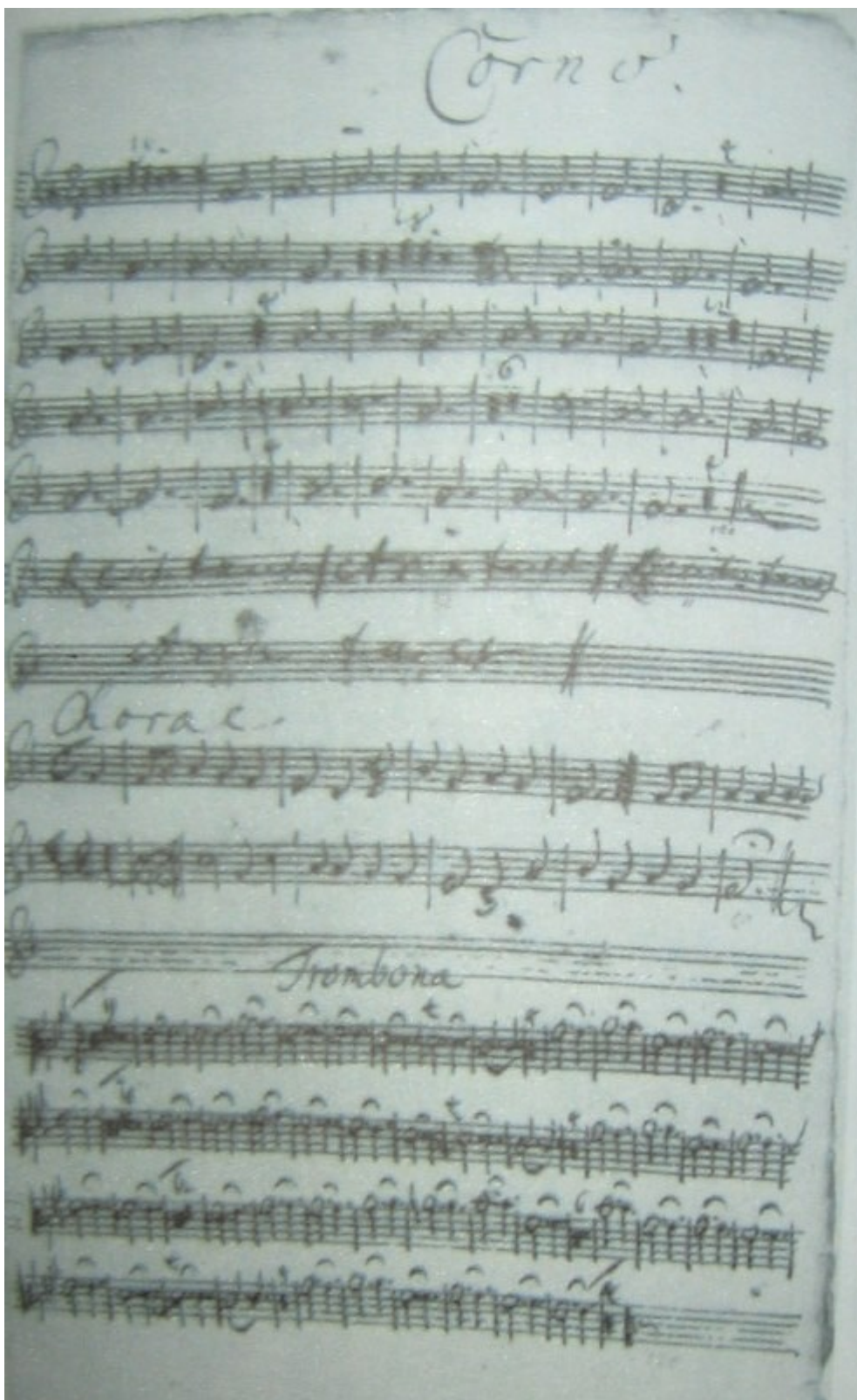
BWV 114 “Ach lieben Christen, seid getrost” was written for the 1st October 1724 and follows the path of the previous works. Bach and Kuhnau shared the copying of the part (respectively first and last movements) named “*Corno*”.

Both movements are written at sounding pitch in the key of G minor and double the choral.

BWV 96

The following Sunday (8th of October 1724) would hear the *corno da tirarsi* again. BWV 96 “Herr Christ, der einge Gottessohn” played that day bears a part named “Corno”. Meissner copied it. The music is a *colla parte* of the choral with the alto in the first movement and with the soprano in the last. The choral is in F major and the notation is the usual sounding pitch.

For the next performance of the work in 1734, the *corno da tirarsi* was still played but for the last one (1746-1747) Bach rearranged the part. He wrote himself on the same page the two chorals but this time for “Trombona” with the appropriate key and usual transposition to *Chorton*. This is another proof of the disappearance of the *corno da tirarsi* after 1734 and of its dissemblance to the trombone.



BWV 96 Original part

BWV 5

On the 15th of October 1724 the cantata BWV 5 “Wo soll ich fliehen hin” was first performed. Kuhnau's brass part is named “*Tromba*”, to which Bach added “*da tirarsi*”. This part for *tromba da tirarsi* is ordinary in the sense that it contains a movement requiring a slide in a flat key (this time G minor) and a *clarino* obbligato for natural trumpet and therefore transposed (here in Bb).

Movements n°1 and n°7 are chorals *colla parte* with the soprano while n°5 is the *clarino* obbligato. Noticeable is the fact that the work has been performed again sometime between 1732 and 1735 apparently without alteration of the *tromba* part. It could mean that contrary to the *corno da tirarsi* The *tromba da tirarsi* could still be played after Reiche's death.

The addition of the words “*da tirarsi*” by Bach has probably the same function as in the other works where it appears: it specifies the instrument to the player who could have been mistaken seeing the transposed notation of the fifth movement.

BWV 115

The cantata BWV 115 “Mache dich, mein Geist, bereit” was first heard on the 5th November 1724. No parts are left and only the original score remains. This creates problems, seeing that scores often don't mention the presence of the *corno da tirarsi* when it's playing *colla parte* with the soprano. Often the *corno* part is copied directly from the vocal line and therefore doesn't have a specific stave in the score.

In the case of BWV 115, the presence of the *corno* is attested by later sources that might have been copied from the parts as it was often the custom.

The *corno* part is similar to most of that period: a choral *colla parte* in both first and last movements. the key is G major and it is highly probable that the lost part was written at sounding pitch.

BWV 26

The next cantata BWV 26 “Ach wie flüchtig, ach wie nichtig” (played on the 15th November 1724) is following the same pattern as its forebears.

This it is Bach himself who writes the part and name it “*Corno*”. Once again the *corno* (written at sounding pitch) doubles the choral-singing soprano in the external movements. Both movements are in A minor.

BWV 116

BWV 116 “Du Friedefürst, Herr Jesu Christ” is very similar to BWV 26 that preceded it. This cantata, first performed on the 26th November 1724, calls for a *corno* to double the soprano in the first and final choruses.

As in BWV 26, Bach copied the part himself and named it “*Corno*”. The choral line written at sounding pitch is this time in A major.

BWV 62

First cantata of the ecclesiastical year of 1724, BWV 62 fits well within the surrounding cantatas with *corno da tirarsi*. The part for “*Corno*” is featured in the first and last movements, where our instrument plays the chorale along with the soprano.

The notation is at concert pitch in the key of B minor. The part and its naming might be from Meissner's hand.

BWV 133

The cantata played on the 24th of December 1724 is very peculiar for our topic. It is BWV 133 “Ich freue mich in dir” and it bears a *corno da tirarsi* -playable part that is, however, named “*Cornetto*”.

Everything coincides with the way the previous *tirarsi* cantatas were written. It's about playing *colla parte* with the soprano in the two external movements. The music is a choral written at sounding pitch in D major/B minor. The only point that differs from the *corno* part of that period is the name “*Cornetto*”.

One could take it as a clue to reconsider all the “*corno*” parts as calling for a *cornetto*. I find this theory – even if very popular among players and writers – a bit exaggerated.

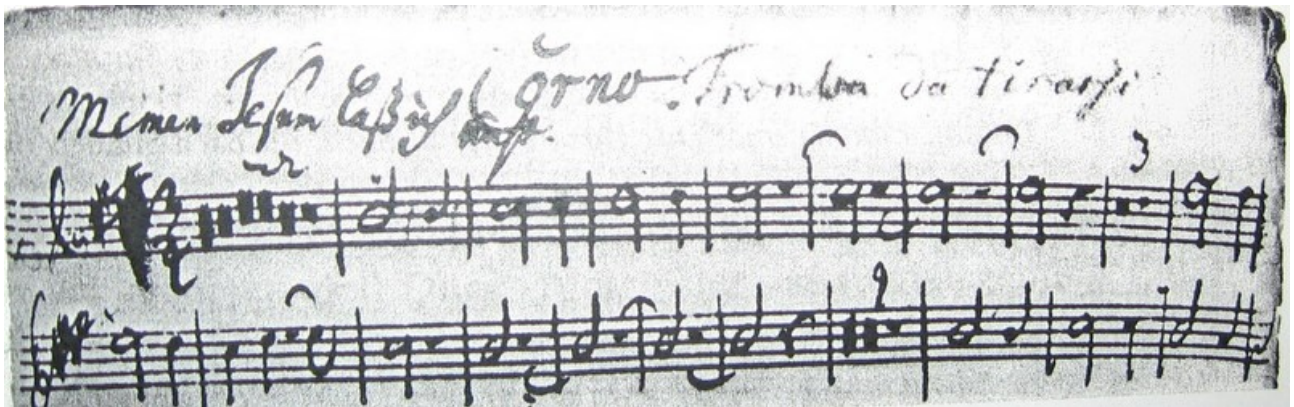
On the other hand we can notice that the part has been copied by W.F.Bach. It is the only brass part we know from him and J.S.Bach apparently found it useful to revise the part; both arguments would speak for a mistake by W.F.Bach.

Anyway even if intended for *cornetto* the part would be incorrect because no *cornetto* parts were written at sounding pitch and would usually require a transposition into *Chorton*.

BWV 124

The custom established in the previous cantatas goes on with BWV 124, “Meinen Jesum lass ich nicht”, played on the 7th of January 1725. Bach himself wrote a part for this work named “*Corno*”.

It is written at concert pitch and plays in unison with the soprano in the first and last movements. Those chorals are in E major.



BWV 124 Beginning of the original part

BWV 3

Played on the 14th January 1725, BWV 3 “Ach Gott, wie manches Herzeleid, I” is an enlightened work for our topic. No mention is made of the *corno* in the score but a part written by Bach himself calls for “*Trombona/Corno*”.

Indeed, the first movement gives the choral to the bass of the choir. Therefore, the *corno da tirarsi* couldn't reach such a low register and Bach had to double the vocal line with a trombone instead. Consequently the trombone part is written in *Chorton* with the appropriate tenor clef.

The last movement is a usual choral with the *cantus firmus* for the soprano and the *corno* is then call to double the voice. This work shows again the impossible assimilation of the *corno da tirarsi* and the trombone family even if they are linked since they both are able to play those parts.

BWV 125

BWV 125, “Mit Fried und Freud ich fahr dahin”, was first performed on the 2nd February 1725. This time it was Meissner who copied the part and named it “*Corno*”.

It is a choral *colla parte* with the soprano and the part is at concert pitch in E dorian.

BWV 126

The next cantata is BWV 126, “Erhalt uns, Her bei deinem Wort,” played on the 4th February 1725. The part that interests us is named, “*Tromba*” by Kuhnau (the score bears the word “*Tromba*” too). It is named that way because of the first movement that – even if sounding in A minor- is written for a natural trumpet as it can be conclude from the fact that the part is transposed for an instrument in D.

On top of that, the music totally playable on a natural instrument. This was a regular custom in the XVIIth and XVIIIth centuries - to use the written key of G minor to play in minor key, since the natural instrument can play both the tonic and the dominant triad in this key.

The different part for a slide instrument is clearly made in the last movement where the *tromba* has to double the soprano in the choral. This requires the slide and therefore the music is this time written at concert pitch.

BWV 127

Cantata BWV 127 “Herr Jesu Christ, wahr' Mensch und Gott” was played on the 11th February 1725. It is quite similar to BWV 126 in that it calls for a “*Tromba*” but this time the part is unfortunately lost. From the score we can learn that Bach asked for a “*Tromba*” to play some natural trumpet fanfare-like music in the 4th movement in the key of C major.

However, it seems very logical that the trumpet would have played the choral along in the external movements, as was the habit by then.

Those choral lines would have been copied directly from the vocal line in the score to the part leaving no trace of the brass part on the score; but it remains speculation.

BWV 103

Bach waited until the 23rd April 1725 to use the *corno da tirarsi* again in BWV 103 “Ihr werdet weinen und heulen”. There is a part named “*Tromba*” (like in the two previous works BWV

126 and BWV 127) copied by Kuhnau.

The piece is unusual because it is the only cantata for “*Tromba*” with a choral in a sharp key. Indeed the last movement (noted at concert pitch) asks the *tromba* to play a choral *colla parte* in B minor. It should be said however that for an instrument in C, the choral would be very easily playable anyway.

On top of that, there is another movement with *Tromba* but this time obbligato. It is

transposed in D and therefore aimed apparently for a natural instrument. The part is actually very typical for a *clarino* aria.

However some Ebs in the high octave appear as well as some A and B in the middle octave. Those are not notes exactly out of the range of the natural instrument (they come regularly in the music of Biber, Schmelzer or Fantini) but Bach did not normally use them in his natural brass parts.

This trumpet aria is actually the 5th movement, leading directly into the choral that is written at concert pitch. In short it seems impossible to change instruments between the two movements.

Therefore, two solutions are plausible: the trumpet player might have played both the aria and the choral using the “bending” technique to produce the notes beyond the natural scale. This is possible in the practice. However Bach remains normally very consciously within the natural notes when composing for a natural instrument.

On the other hand, the part might have been aimed for the *tromba da tirarsi*: the first movement being transposed because of its assimilation with the *clarino* style and its fast pace (like in BWV 46 or BWV 67). It would have needed the indication “*da tirarsi*” in the title then but we know that this word never comes from Kuhnau who actually copied the part here.

BWV 68

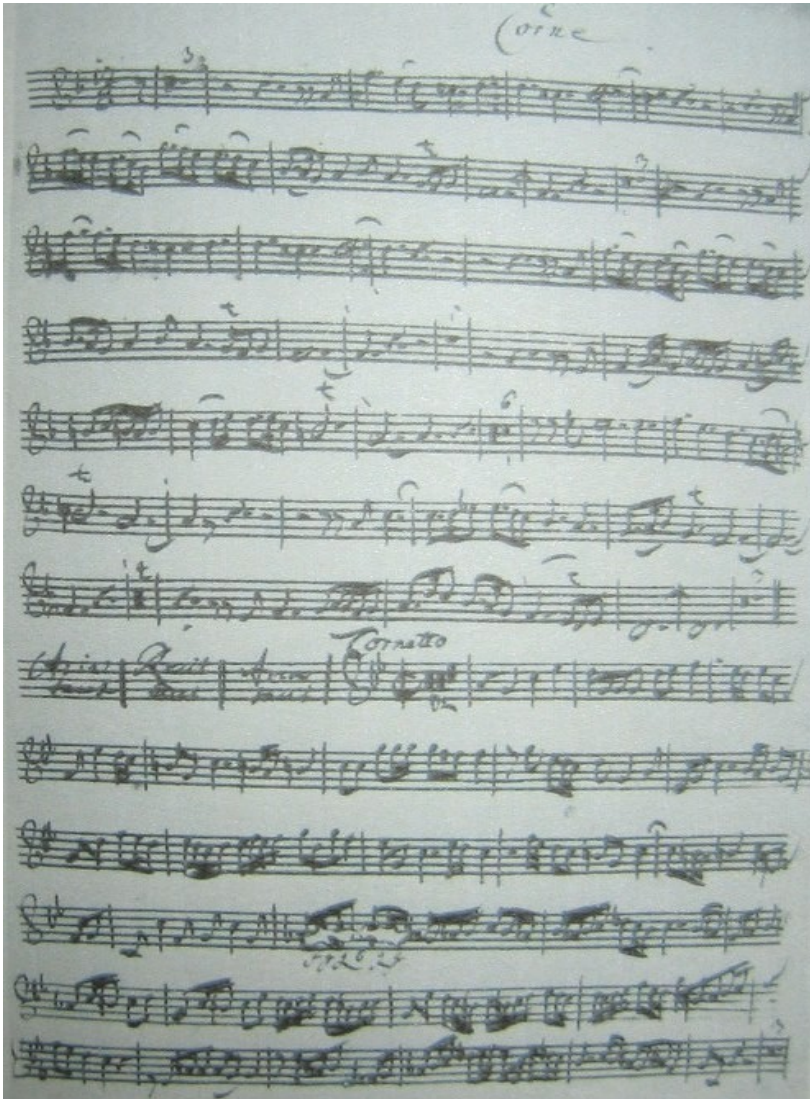
BWV 68 “Also hat Gott die Welt geliebt” was first played on the 21st May 1725. It is a key work for us since it shows very clearly the impossibility of considering the *corno da tirarsi* as a *cornetto*. Indeed there is a part written by Bach himself calling for a “*Corne*” in the first movement.

It bears all the usual features of a *corno da tirarsi* part: it is a *colla parte* with the soprano (although not a choral), written at concert pitch in D minor.

On the same part is there the last movement but this time with the name “*Cornetto*”. And indeed this is a genuine *cornetto* part (within a trombone ensemble) very florid (much more than the *corno* part), and above all written in the appropriate *Chorton* (a tone lower).

Seeing that the part is from Bach's hand it is a very good argument for the independence of

the *corno da tirarsi* from the *cornetto*.



BWV 68 Original part

BWV 16

For the 1st January 1726, Bach composed BWV 16, “Herr Gott, dich loben wir”. This is a mysterious piece. Bach himself copied a part that he named “*Corno da caccia*”. This part is somewhat natural. The third movement is a typical aria with natural brass instrument and the two external movements requires the *corno* to play the choral *colla parte* with almost only natural notes except for the A and the B in the middle octave.

Doubts about the “naturality” of the *corno* come from the fact that the music is in C major. The modes of G (1st movement) and A dorian (last movement) are used; in other words remaining in C major.

Honestly, I think this is a mere coincidence and the two chorals are written at concert pitch, which happens to be the “transposed” notation for a natural instrument in C. That would be a somewhat traditional use of the *corno da tirarsi*.

The main problem is this time the *clarino* aria (3rd movement). The music is very usual but

the fact that it's in C for a *corno da caccia* is unique. Works with C trumpets are very common but the only other example of horn in high C is in BWV 65 (speaking, of course, only of Bach's works). The usual parts for natural horn by Bach are normally restricted in the keys of F and G. It is very understandable, considering the instrumental design of the time. The *Stadtpfeifer* would have had a trumpet in D crookable down to C and a G horn crookable down to F.

This is about the only kind of crooks known then, a loop to lower down the instrument of a semi-tone or a tone. Considering the conical shape of the horn and the absence of crooks on most originals of that period, it is very possible that they separate horns for G and for F.

The fact is: the possession of horns in high C by the *Stadtpfeifers*, that they would use only twice during Bach's tenure, seems not very defensible.

On top of that the obbligato for natural horn is using genuine trumpet pattern that otherwise hardly comes for the horn.

Even nothing definitive can be deduced, I would in practice play the aria on a natural trumpet in C and the chorales on the *corno da tirarsi*. Like in BWV 14 where Bach wrote the part for "Corne du chasse" (for a natural horn in F) and didn't mention that the obbligato in Bb in it is for trumpet.

We know it only thanks to his note in score "*Tromba tacet*" when the trumpet pauses. This could be the same case with BWV 16.

BWV 27

We are now reaching the very last works for *corno da tirarsi*. On the 6th October 1726, the *corno* is required again in BWV 27 "Wer weiss, wie nahe mir mein Ende". Our part is named "*Corno*" and comes from an unknown copyist. The horn is playing the choral *colla parte* with the soprano in the two external movements. The first is in the key of C dorian while the second is in Bb major (actually, this choral is from Rosenmüller). The part is, as usual, written at sounding pitch.

BWV 140

We end now with the last cantata written for the *corno da tirarsi*: BWV 140 "Wachet auf, ruft uns die Stimme" first played on the 25th November 1731.

For its final appearance, the *corno da tirarsi* is presented in the way it was used the most. It plays the choral along with the soprano in both first and ultimate movements. The music is in Eb major and the notation is the usual concert pitch one. Krebs copied the first movement while J.S.Bach himself took the pain to copy his very last chorale for the *corno da tirarsi*.

Handwritten musical score for BWV 140, featuring a Corno part. The score is written on ten staves. The first staff is labeled "Corno" and "Rit." (Ritornello). The notation includes various musical symbols such as notes, rests, and dynamic markings like "f" (forte) and "p" (piano). The score is divided into sections by bar lines and includes a "Choral" section at the bottom. The handwriting is in ink on aged paper.

BWV 140 Original part

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