

## Forschungsportal Schola Cantorum Basiliensis

URL: [www.forschung.schola-cantorum-basiliensis.ch/de/forschung/ina-lohr-project/smith-low-pitch.html](http://www.forschung.schola-cantorum-basiliensis.ch/de/forschung/ina-lohr-project/smith-low-pitch.html)

Published: 27 March 2020

SNSF Research Project “Ina Lohr (1903–1983). Her Influence on Early Music in Switzerland and The Netherlands”

### The Curious Story of Low Pitch at the Schola Cantorum Basiliensis

Anne Smith

#### Abstract

*Although it is well-known that pitch was not standardized before the 19th century, in the world of early music A415 Hz – referred to as low pitch and exactly one tempered semitone below the international chamber pitch established in 1939 – came to hold sway. Taking the history of pitch at the Schola Cantorum Basiliensis as a case study, this article seeks to illustrate how cultural, pragmatic, and marketing factors from outside of the world of music, apart from actual historical considerations themselves, came to play a significant role in the acceptance of A415 Hz as the standard early music pitch. Since the nature of the decision-making factors does not support the aura of “authenticity” that A415 Hz has enjoyed for many years, an examination of these factors will hopefully lead to a more open attitude to choice of pitch for music of earlier eras, without banning the pragmatic convenience either of A415 or A440 Hz.*

To date, the story of low pitch at the Schola Cantorum Basiliensis has been limited to the succinct version of 1983 recounted by the organologist and former assistant director of the institution, Walter Nef. In it he describes the difficulties in obtaining instruments at the time of the school’s inauguration in 1933:

In Switzerland there was not a single harpsichord or clavichord maker, nor someone who had the specialist knowledge to restore keyboard instruments. It was hardly any better with the bowed, plucked and wind instruments. If on occasion a violin maker built a viola d’amore or viola da gamba, or even more rarely a lute, these were exceptions, not products of specialists. Also the selection abroad was not great and restricted almost exclusively to Germany and England. It became difficult in World War II, as the influx from the warring countries gradually dried out. Moreover, the so-called low pitch had been introduced at the foundation of the Schola Cantorum Basiliensis, which – for practical reasons – had been set at an

equal semitone below the modern standard pitch. Only instruments in this low pitch could be used and this limited the choice even further.<sup>1</sup>

He further specified this pitch in a footnote, saying that

The 'chamber pitch' was then 435 Hz [established by the French government by law in 1859], the lower pitch of the Schola Cantorum thus ca. 410 Hz. The small elevation of the concert pitch to 440 Hz, a decision made by the international pitch conference in London 1939, in turn forced the Schola to raise its lower pitch by the same interval to ca. 415 Hz. Pitch, however, needed to be handled flexibly in order to make allowances for the old instruments with fixed pitch, especially in concerts.<sup>2</sup>

This description makes it seem as if it were a very rational decision, taken after much deliberation. While going through archival material for a biography of Ina Lohr (1903–1983), one of the co-founders of the Schola Cantorum Basiliensis, however, I came across such surprising, rather bizarre information, that I thought it worthwhile to collect it all together to increase our awareness of how some aspects of historically-informed performance practice really are based on the context in which they originated in the 20th century, whereas others served purposes outside of the purely musical realm.

### **Acquisition of the First Recorders by the Schola Cantorum Basiliensis**

The Schola Cantorum Basiliensis was founded in 1933 by a group of idealists, spearheaded by Paul Sacher (1906–1999) who created the administrative and organizational basis necessary for its success. One of the major difficulties that had to be overcome was finding the sponsors needed to finance the initial years. Among the first contributions received was 600 Swiss francs (roughly equivalent to 4700 CHF today)<sup>3</sup> from Werner Reinhart (1884–1951), a patron of the arts in Winterthur, for a consort of recorders made by the early music pioneer Arnold Dolmetsch (1858–1940).<sup>4</sup> Although a consort by a German maker (presumably Peter Harlan, 1898–1966) had originally been envisaged, August Wenzinger (1905–1996) and Ina Lohr's trip to

---

1 "In der Schweiz gab es keinen einzigen Cembalo- und Clavichordbauer, auch niemand, der alte Klavierinstrumente hätte fachgerecht restaurieren können. Bei den Streich-, Zupf- und Blasinstrumenten war es kaum besser. Wenn ein Geigenbauer einmal eine Viola d'amore oder Viola da gamba oder noch seltener eine Laute herstellte, waren dies Ausnahmen, nicht Erzeugnisse von Spezialisten. Auch im Ausland war das Angebot nicht gross und fast nur auf Deutschland und England beschränkt. Schwierig wurde es im Zweiten Weltkrieg, als der Zustrom aus den kriegführenden Ländern allmählich versiegt. Dazu kam, daß bei Gründung der Schola Cantorum Basiliensis die sogenannte tiefe Stimmung eingeführt wurde, die einheitlich – aus praktischen Gründen – auf einen temperierten Halbton unter dem modernen Kammerton festgesetzt worden war. Nur Instrumente in dieser tiefen Stimmung waren verwendbar, und das machte die Auswahl nochmals enger". Walter Nef 1983, 93. Translation based on citation in Kirnbauer 2018, 139–40.

2 "Der Kammerton betrug damals 435 Hz, der tiefere Stimmtton der Schola Cantorum also ca. 410 Hz. Die kleine Erhöhung des Kammertons auf 440 Hz, die 1939 an der internationalen Stimmtongkonferenz in London beschlossen war, zwang auch die Schola Cantorum, mit ihrer tieferen Stimmung um das gleiche Intervall auf ca. 415 Hz hinaufzugehen. Der Stimmtton mußte aber, mit Rücksicht auf alte Instrumente in fester Stimmung, besonders in den Konzerten etwas flexibel gehalten werden". Kirnbauer 2018, 140.

3 Values calculated at: [www.portal-stat.admin.ch/lik\\_rechner/d/lik\\_rechner.htm](http://www.portal-stat.admin.ch/lik_rechner/d/lik_rechner.htm) (23 November 2018).

4 Thiele 2016, 53 and letters of 21 September 1933, 27 September 1933 between Werner Reinhart and Paul Sacher, Sondersammlung der Winterthurer Bibliotheken, Depot Music Collegium Winterthur, 365/27 and 365/14 respectively and the letter of 14 December 1933 from Werner Reinhart to the Schola Cantorum Basiliensis, Sondersammlung der Winterthurer Bibliotheken, Depot Music Collegium Winterthur, 365/20.

the 1933 Haslemere Festival of Early Music – at the invitation of the businessman and music entrepreneur Hans Eberhard Hoesch – had led them to covet a set of the Dolmetsch instruments, presumably due to their greater similarity to original instruments.<sup>5</sup>

As the purchase of these instruments had considerable influence on the pitch used at the Schola Cantorum Basiliensis in the early years, it is first necessary to look at their history more closely. Brian Blood tells the Dolmetsch story of these recorders in the following manner:

It was [in Haslemere], in 1919, that Arnold Dolmetsch completed one of the first, and certainly the most influential, twentieth-century recorder[s], based on one of his originals (an alto by Bressan, now part of the Dolmetsch Collection housed at the Horniman Museum, Forest Hill, London). [See Illustration 1] The antique instrument had, by that time, been mislaid on Waterloo rail station (April 1919), left behind in the rush to catch a train back to Haslemere after a concert by the family at the Art Worker's Hall. This loss was the spur for one of the most remarkable acts in the recorder's revival. Arnold Dolmetsch, now over sixty years old, worked for many months to uncover the recorder's secrets before producing a working model. Over the following six years he completed the main consort of recorders (descant, treble, tenor and bass) all at low pitch and based on historical originals. This consort featured in the 1926 Haslemere Festival of Early Music. Peter Harlan, visiting an early Festival, purchased a set of recorders from Dolmetsch and, despite being confused by their being at low pitch, commissioned derivatives from German manufacturers and so started the mass recorder movement in Germany [...] and what of the lost recorder? It was purchased at a junk shop and returned to its rightful owner.<sup>6</sup>

This quotation not only makes the timeline clear, but also the fact that the instruments were at low pitch. According to Edgar Hunt, "Dolmetsch had adopted for his old instruments one of the eighteenth-century pitches, and they were a semitone flatter than normal", whereby normal at that time was, as mentioned above A435 Hz.<sup>7</sup> Peter Thalheimer mentions a report by an unknown author, which indicates that Dolmetsch regretted this choice of pitch, that he thought it was a mistake "which he unfortunately no longer could eliminate from the instruments built by him and his family" and that in the future he would only build them at the "modern chamber pitch".<sup>8</sup> Although these instruments were based on Dolmetsch's own Bressan alto recorder, it unfortunately cannot be used as a direct reference, as at some point it was shortened to conform to "modern pitch" and then re-extended to its assumed original length by an extra ring of ivory at the top of the body.<sup>9</sup> Thomas Lerch, however, has pointed out that even in its current, lengthened state, it is 3-10 mm shorter than ten other recorders made by

---

5 Kirnbauer 2006, 25–56.

6 Blood 2019.

7 Hunt 1962, 131.

8 "den er aber leider an den von ihm und seiner Familie gebrauchten Instrumenten nicht mehr ausmerzen könne. Er baut jetzt nur noch Instrumente im modernen Kammerton". Anonymous, "Arnold Dolmetsch und wir", in: *Der Blockflöten-Spiegel 2* (1932), 84, as cited in Thalheimer 2010, 46–47. Thalheimer's book presents a thorough and detailed history and analysis of recorder building in the 20<sup>th</sup> century, particularly in Germany.

9 Palmer 1981, 43.

Bressan.<sup>10</sup> Thalheimer points out that this shortening would have yielded an increase in pitch from A400 to A410 Hz, but certainly not up to a “modern pitch”. Jan Bouterse, on the other hand, has measured a slightly higher pitch for five Bressan altos, considering them to lie between A405 and A409 Hz.<sup>11</sup> Lastly, Richard Griscom and David Lasocki comment that Bressan in coming from France would no doubt have adapted his instruments to the 18th-century London pitch of A408 Hz, which just happened to be conveniently close to an equal tempered semitone below the 1859 chamber pitch of A435, or A410.6 Hz, the pitch that Dolmetsch ultimately chose.<sup>12</sup> The unavoidable conclusion is that the selection was largely a pragmatic one, with an eye to combining some historicity with the advantages of being in line with the 20th-century practice. The consorts were made up of F and C instruments.

Blood's tale of Dolmetsch's experiences in building recorders also makes reference to Peter Harlan, the German maker whose instruments had no doubt also been under consideration for purchase. Hermann Moeck and Thalheimer, however, make it clear that the recorder story in Germany took a slightly different path than that indicated above by Blood.<sup>13</sup> Apparently Harlan had already been made aware of the recorder by Willibald Gurlitt (1889–1963) in a seminar at the University of Freiburg in 1921. It was not until he went to Haslemere in 1925, however, that he became so fascinated by the instrument that he decided to make one. Rather than buying Dolmetsch instruments, he went back to Germany where, together with Kurt Jacob, he developed his first model in the workshop of Martin Kehr on the basis of an instrument in what is now known as the Berlin Musical Instrument Collection. Their first instrument in E (at A435 Hz) – at that time Harlan was not even aware that it might have been built at some pitch standard other than the current one – was sold in 1926. Their first consort in A and E was sold in 1927 but was wide-bored and not based upon historical models. With this came the so-called German fingering system, highly popular at the time, which although it eliminated the more complicated forked fingerings, did so at the expense of intonation and range. By 1933, however, he was also building recorders with historical fingerings at low pitch in addition to these simplified instruments. In his catalogue of that year he describes them in the following manner:

I call these baroque recorders and turn them in the form of baroque chair legs in contrast to the actual Harlan form, which is used all over by most imitators of my recorders and is also the usual one today. These recorders are notated in F, [C], f, c and are tuned a semitone lower than the present chamber pitch, thus in chamber pitch they are tuned at E, B, e, b.<sup>14</sup>

### **The Consequences for the Schola Cantorum Basiliensis**

Dolmetsch and Harlan were thus the two recorder makers at the cutting edge in 1933, and therefore came into question as purveyors of recorders for the nascent Schola

---

10 Lerch 1996, 118; Thalheimer 2010, 45.

11 Bouterse 2010, 15–24.

12 Griscom and Lasocki 2012, 128.

13 The information in this paragraph about Peter Harlan is taken from Moeck 1978 and Thalheimer 2010, 50–63.

14 “Ich nenne diese die Barockflöten und drehe sie auch in der barocken Stuhlbeinform im Gegensatz zu der eigentlichen Harlanform, welche allenthalben von den meisten Nachahmern meiner Flöten verwendet wird und also die heute übliche ist. Diese Flöten notieren in F, c, f, c, sind aber einen halben Ton tiefer wie der heutige Kammerton gestimmt, nach Kammerton stimmen sie also E, H, e, h.” Moeck 1978, 85.

Cantorum Basiliensis, the former for the institution itself, the consort being used by the *Konzertgruppe*<sup>15</sup> in conjunction with other non-fixed pitch instruments such as plucked and bowed strings, and most likely the latter for the production of inexpensive instruments for their students, all presumably at about A410 Hz.

Just a year after the school began, the minutes of the Schola's board of directors of 11 December 1934 give an indication of the importance they gave to fixing A410 Hz as the standard pitch for the institution:

The low pitch of our instruments makes it impossible for various interested parties who possess recorders in high pitch and do not have the means to purchase a second recorder in low pitch to take lessons at the S.C.B. The company Hug & Cie. has agreed to grant a 20% discount for a second instrument in low pitch to those students who have already bought a recorder in high pitch at their store. The board decided to supplement this with a further 20–30% [discount], as a special dispensation for those impecunious interested parties who commit themselves to enrolling in a course at the Schola, to allow them to acquire a recorder in low pitch at the price of Fr. 15.- (instead of 27.-).<sup>16</sup>

This decision takes on particular significance if one knows that it was primarily through the instruction of amateurs on recorder that the Schola held itself above water financially in those first all-important first years.<sup>17</sup> Through this significant discount on low-pitch instruments they subliminally suggested that it was more authentic to play this music at A410 than at A435 Hz, thereby hoping to brand themselves as *the* specialist institution for a historical approach to early music.

As Walter Nef mentioned, new instruments were scarce during the war, and one bought what was available, whether it be in A410, A435 Hz or in the new international standard of A440 Hz. (See Illustration 2, in which the variety of recorders available at the time is made evident.) As a result, all the pre-war work in establishing A410 Hz as the low-pitch standard was undermined. This situation continued to persist for several years after the war, as is revealed by the minutes of the teachers' conference of 23 February 1949:

There are three pitch levels at the SCB at the moment, Hug has two tuning forks, during the war the children had to buy whatever recorder [was available], so that in one and the same group of four pupils it is often out of the question that they can all play together. In principle, it would be

---

15 The ensemble led by August Wenzinger which contributed largely to the school's reputation.

16 In today's currency, these values would correspond to CHF 97.- and 175.- respectively. Values calculated at: [www.portal-stat.admin.ch/lik\\_rechner/d/lik\\_rechner.htm](http://www.portal-stat.admin.ch/lik_rechner/d/lik_rechner.htm) (23 November 2018).

“Die tiefe Stimmung unserer Instrumente verunmöglicht es verschiedenen Interessenten, die Blockflöten in hoher Stimmung besitzen und nicht in der Lage sind, eine zweite Blockflöte in tiefer Stimmung anzuschaffen, an der S.C.B. Stunden zu nehmen. Die Firma Hug & Cie. hat sich bereit erklärt, Schülern die in ihrem Geschäft bereits eine Blockflöte in hoher Stimmung gekauft haben, auf die Anschaffung eines zweiten Instrumentes in tiefer Stimmung eine Entschädigung von 20% zu gewähren. Der Vorstand beschliesst im Interesse der Schülerwerbung, auf spezielles Gesuch hin, weitere 20–30% beizufügen, um dadurch unbemittelten Interessenten, die sich verpflichten, einen Kurs an der Schola zu belegen, die Erwerbung einer Blockflöte in tiefer Stimmung zum Preise von Fr. 15.- (statt Fr. 27.-) zu ermöglichen”. From the minutes of the board of directors meeting of the Schola Cantorum Basiliensis of 11 December 1934; Basel, Paul Sacher Foundation, Paul Sacher Collection.

17 See Smith 2020.

desirable to once again introduce the old low pitch (a semitone below the normal A 870). Practice has shown, however, that it is then not possible to play together [with others] at home or elsewhere with the instruments of the SCB. Unfortunately, one has to settle for the higher low pitch (a semitone under 880). But even this pitch will be difficult to introduce again, as there is such unbelievable confusion at the moment. From the fall of 1949, however, it will once again be pursued with vigour.<sup>18</sup>

This situation was deemed so unsatisfactory that Ina Lohr reached out to Franz Küng in Schaffhausen (see Illustration 3), inquiring whether his company would be willing to make alto and soprano school recorders in A415 Hz.<sup>19</sup> By 2 November 1950, the models were sufficiently advanced for them to be brought to the Schola for inspection, as in the minutes of the board of the directors meeting it is reported that

[Franz Küng] will come to Basel next Wednesday for a discussion with the recorder teachers. The SCB will now, if they can get the right recorders, once again introduce the old low pitch, as they unreservedly regard it as the best.<sup>20</sup>

This quotation illustrates the level of activity that the Schola was willing to undertake in order to achieve its idealistic goals, even to the extent of initiating the design and construction of recorders at the pitch they regarded best.

But it was apparently difficult to convince the amateurs to replace their recorders, as in the teachers' conference of 8 December 1954, the use of high pitch was admonished:

It has been noticed that much music-making at the SCB is once again at high pitch. During the war it was difficult to acquire low-pitched recorders, but now there is a selection of low and high-pitched recorders available, which allows us to insist more emphatically that all music-making at the Schola should take place at low pitch. The higher-level students at the SCB must play at low pitch on all instruments. If necessary, they must purchase

---

18 "An der SCB herrschen zur Zeit drei Stimmungen, Hug hat zwei Stimmgabeln, die Kinder mussten während des Krieges jede Blockflöte kaufen, sodass in ein und derselben Viererklasse es oft ausgeschlossen ist, dass alle zusammen spielen können. Im Prinzip wäre es wünschenswert, dass man die alte Stimmung tief (Halbton unter dem Normal a 870) wieder einführen könnte. Die Praxis aber hat ergeben, dass dann mit den Instrumenten der SCB zuhause oder anderswo nicht mehr musiziert werden kann. Leider muss deshalb auf die höhere tiefe Stimmung (Halbton unter 880) gegriffen werden. Aber auch diese Stimmung wird schwer wieder einzuführen sein, da heute unglaubliches Durcheinander herrscht. Ab Herbst 1949 soll jedoch darauf gedrungen werden." Minutes of the teachers' conference of the Schola Cantorum Basiliensis of 23 February 1949, 4; Basel, Paul Sacher Foundation, Paul Sacher Collection.

19 Cf. [www.kueng-blockfloeten.ch/cms/ueber-uns/geschichte-der-firma-kueng/](http://www.kueng-blockfloeten.ch/cms/ueber-uns/geschichte-der-firma-kueng/) (23 November 2018) where it is stated that "at a request of Ina Lohr of the Schola Cantorum Basiliensis [...], he [Franz Küng] is already making school recorders (soprano and alto) at the end of the 40s in 415 Hz". / "Auf eine Anfrage von Ina Lohr von der Schola Cantorum Basiliensis (Gründungsjahr ebenfalls 1933), baut er [Franz Küng] gegen Ende der 40er Jahre bereits Schulflöten in 415 Hz (Sopran und Alt)".

20 "Er [Mr. Küng] wird nächsten Mittwoch zu einer Besprechung mit den Blockflötenlehrern nach Basel kommen. Die SCB wird, wenn sie die richtigen Flöten erhalten kann, von nun an wieder die alte tiefe Stimmung einführen, da sie diese unbedingt als die beste erachtet." Minutes of the meeting of the board of directors of the Schola Cantorum Basiliensis of 9 November 1950; Basel, Paul Sacher Foundation, Paul Sacher Collection.

a low-pitched recorder. In the external, lower level school, we cannot proceed so rigorously.<sup>21</sup>

This subject was obviously of very contentious nature, as it not only involved setting a controversial historical standard for the institution, but also convincing many people to replace their beloved instruments. It therefore could not be so quickly resolved. In the following year the subject was brought up once again, as a new brochure for the school was being made. And once more the teachers were being exhorted to conform to this decision:

It would, of course, make the situation much easier if we had a uniform pitch, in particular as the organ in the small recital hall is being built a semitone lower than 880. Naturally the recorder teachers who have only been allowing their students to play recorders at the very low pitch for the past five years are fighting against this. One cannot demand of these individuals that they change to the higher pitch. Also the orchestra pitch of 880 has a tendency to rise, so that perhaps we will be once again stand alone [in the world] at a semitone under 880 in the foreseeable future. On the other hand, it makes a bad impression to the outside world, if the SCB cannot agree on a single low pitch. Mr. Dr. Sacher has therefore stipulated that we gradually introduce the higher pitch within the entire SCB (415.3 Hz).<sup>22</sup>

This quotation shows the absurdity of the situation. For the image of the Schola in the world around them, they desired a standard low pitch for early music, but within the school itself, and within the context of the sister institutions of the Music Academy Basel, they were unable to achieve this; the difficulties were seemingly insurmountable. They were augmented by the decision to build an organ in the small recital hall of the academy, one used by both the Schola and the Conservatory. And whereas the director of the Music Academy was willing to countenance an organ at low pitch, he deemed an equal semitone below A435 Hz to be a purely “arbitrary” pitch. It was therefore decided that the organ be built at A415 Hz, so that it could be used together with modern instruments, albeit requiring the organist to transpose up a semitone.<sup>23</sup>

---

21 “Es ist aufgefallen, dass in der SCB wieder sehr viel hoch musiziert wird. Während des Krieges bereitete die Beschaffung tiefgestimmter Blockflöten Schwierigkeiten, jetzt gibt es aber eine Auswahl an tief und hoch gestimmten Flöten, die es uns erlaubt, vermehrt darauf zu bestehen, dass an der Schola nur tief musiziert wird. Berufsschüler der S.C.B. müssen bei uns auf allen Instrumenten tief spielen. Notfalls müssen sie sich eben eine tiefgestimmte Blockflöte anschaffen. In der externen Schule können wir nicht so strikte vorgehen.” Minutes of the teachers’ conference of 8 December 1954. Basel, Paul Sacher Foundation, Paul Sacher Collection.

22 “Es würde die Sache natürlich sehr vereinfachen, wenn wir eine einheitliche Stimmung hätten, umso mehr als im kleinen Vortragssaal die Orgel auf 1/2 Ton unter 880 gebaut wird. Natürlich wehren sich die Blockflötenlehrer dagegen, die seit fünf Jahren ihren Schülern nur auf ganz tiefgestimmten Flöten (1/2 Ton unter 870) zu blasen erlauben. Es gibt Schüler, die lange Zeit an der SCB bleiben und sich teure Flöten angeschafft haben. Man kann von diesen Leuten nicht verlangen, dass sie sich auf die höhere Stimmung umstellen. Auch hat die Orchesterstimmung 880 die Tendenz zum Steigen, sodass man vielleicht in absehbarer Zeit mit 1/2 Ton unter 880 schon wieder isoliert ist. Andererseits macht es nach aussen einen schlechten Eindruck, wenn die SCB sich nicht auf eine einheitliche tiefe Stimmung einigen kann. Herr Dr. Sacher verlangt daher, dass wir die höhere Stimmung nach und nach in der ganzen SCB einführen (415,3 H)”. Minutes of the teachers’ conference of 11 May 1955. Basel, Paul Sacher Foundation, Paul Sacher Collection.

23 Minutes of the teachers’ conference of 27 June 1955. Basel, Paul Sacher Foundation, Paul Sacher Collection.

The Schola was thereby forced to raise their low pitch by 5 Hz to conform to the pitch of this modern organ.

Having not been able to achieve their goal of a unified pitch for the school by words alone, another means was devised, as exemplified by a circular of 26 January 1956 in which the recorder teachers were given the following information and instructions:

After the visit of Mr. Küng, who assured us that he can alter the tuning of our low recorders within 2 days and at a price of ca. Fr. 1.50, the pitch level for both the school and concerts shall be standardized as quickly as possible. The standard a' of the SCB is 415.3 (an [equal] tempered semitone below the normal a' 440). The recorder teachers are requested to inform their students about this and to organize that their recorders are sent as quickly as possible to Mr. Franz Küng, Grabenstrasse 3, Schaffhausen.<sup>24</sup>

The teachers were also requested to inform the secretary as soon as the students had gotten back their instruments, so that the harpsichords in their rooms could be tuned up to A415. One can only too well imagine the dismay of the students when they got back their instruments: it seems highly unlikely that the instruments escaped their shortening unscathed. There is no indication how many people allowed their recorders to undergo this procedure.

Although one might suspect that this episode was the end of the story, this was, of course, not the case. How could it be, when the various factions all viewed the situation from different perspectives? Indeed, the subject was brought up once more five years later, on 15 February 1960, in a teachers conference and was the object of considerable discussion.<sup>25</sup> Hans Martin Linde (b. 1930), who had joined the SCB teaching staff in 1957, was for low pitch in concerts or even in teaching as long as music from the 18th century was involved; but for earlier music its use was untenable as there was no fixed pitch level for that period. Furthermore, the accompaniment of high-pitched recorder with a low-pitched harpsichord placed excessive demands on the part of the teacher. Various teachers felt that it was ill-advised to require students to buy low-pitched recorders for the short time they were at the Schola when they could not use them in the world around them. August Wenzinger (1905–1996), however, defended the use of low pitch in concert and in teaching, saying that that which had proved itself so valuable in concert should also be made accessible to the students. Paul Sacher wished to retain the low Schola pitch, which had been introduced with such effort, but also with success. And Walter Nef's concluding remark was "that the low pitch had proved its value, and that the [practice] in concert should not be divided from that in the lesson. The SCB had been able to assert itself and rise to prominence as a special institution not the least because of low pitch."<sup>26</sup>

---

24 "Nach dem Besuch von Herrn Küng, der uns versichert hat, dass er die Stimmung unserer tieferen Blockflöten innert 2 Tagen und zum Preis von ca Fr. 1.50 ändern könne, soll nun die Stimmung der SCB für Schule und Konzert so rasch als möglich vereinheitlicht werden. Das einheitliche a' der SCB ist 415.3 (ein temperierter Halbton unter Normal a' 440). Die Blockflötenlehrer sind gebeten, ihre Schüler darüber zu informieren und zu veranlassen, dass deren Flöten so bald als möglich an Herrn Franz Küng, Grabenstrasse 3, Schaffhausen, gesandt werden". Rundschreibung No. 137 of 26 January 1956, found together with the minutes of the teachers' conferences. Paul Sacher Foundation, Paul Sacher Collection.

25 All information found in this paragraph is taken from the minutes of the teachers' conference of 15 February 1960. Basel, Paul Sacher Foundation, Paul Sacher Collection.

26 "dass sich die tiefe Stimmung bewährt hat und dass Konzert und Unterricht nicht voneinander getrennt werden dürfen. Die SCB hat sicher nicht zuletzt der tiefen Stimmung wegen sich behaupten



## Significance for Musicians Today

The whole story and this discussion, in particular, make the incompatibility of the various points of view obvious. First of all, the choice of pitch when the doors of the Schola opened was dependent on the instruments available. The only fixed-pitch instruments on the market at that time which could actually be considered historical copies, in our understanding of the word, were the recorders made by Arnold Dolmetsch; thus the standard low pitch was taken from them. Conveniently it was semitone lower than the 1859 chamber pitch. But then this pitch, A410 Hz, was used for all earlier music, for all functions, and all levels of players. One of the advantages derived by the Schola from doing this, was that it enabled them to set themselves off from other institutions teaching recorder, as through this distinction in pitch, they could openly demonstrate the historical nature of their enterprise. In part through this, low pitch – whether A410 or later A415 Hz – came to be associated with a historically sound interpretation of earlier music.

Insisting on a single pitch standard – an ideal born of the industrial revolution – in and of itself, however, was ahistorical. A purely historical perspective would, namely, insist on pitch in use in the locality and time of specific performance of a piece. Bruce Haynes' book, *A History of Performing Pitch: The Story of "A"*, bears witness to the impossibility of this task, as it would, for example, depend on having the organs of past ages being restored to the particular constellation of a certain point of time, the building of instruments to accommodate this, and the cultural context to support this diversity.<sup>27</sup> But even in earlier eras there was sufficient stability of pitch in a specific city or region at a given time to allow musicians to play with one another, whether on the amateur or on the professional level. Thus there is also a certain value in adapting instruments to play at specified pitch standards. In addition, if a professional musician today wants to play music of different styles and places of origin on the same concert program, it must be restricted to one or at the most two pitches, because of the difficulty and expense of assembling the instruments and players needed to accompany him.

Adapting instruments to a certain pitch, however, frequently alters the specific nature or character of the instrument; its entire sonority may change. The adaptation does not recreate the sounds of the past, but rather generates something new. We "early musicians" should therefore be aware of these differences in sonority and take them into consideration when making our decisions about what pitch we will be playing a specific concert or recording a certain repertory. And as in the past, our decisions will be a reflection of the entire context of our music making. It is to be hoped, now that Early Music has established itself in the musical scene, now that the battles between it and the status quo have quieted down, that we can move away from the exclusivity of A415 Hz as a marketing device, to a situation in which parallel solutions are increasingly possible.<sup>28</sup>

---

und als Spezialinstitut hervortreten können." From the minutes of the teachers' conference of 15 February 1960. Basel, Paul Sacher Foundation, Paul Sacher Collection.

27 Haynes 2002.

28 Barthold Kuijken in his book, *The notation is not the music*, 21–22, describes how pitch, as an easily audible component of historically informed performance practice, was targeted by opponents of this movement: "During the last third of the previous century the acceptance of the  $a^1 = 415$  Hz pitch for Bach cantatas took some time, and there was vehement opposition from many sides. I see this opposition as part of a zealous kind of self-defense put up by the "traditional camp". Unfortunately, the

And it is here, in my opinion, that the value of this story of low pitch at the Schola Cantorum Basiliensis lies, in the very human nature of the choices and decisions made. The original pitch was chosen in part because Dolmetsch based his recorders on original instruments, but also because they, for all intents and purposes, had no other possibility at the time. But the raising of the international pitch standard to A440 Hz in 1939 in addition to World War II made shambles of this effort, making it impossible to institute a uniform pitch at the school, no matter how much they tried; the absurdity of having the students send in their instruments to have them re-tuned only highlights the arbitrariness of the situation. As all of us, the school had to adapt itself to the forces of society, and thus today low pitch has been unified at A415 and A440 Hz remains a valid standard for the integration of early instruments in the modern world. Lastly, however, the story – by revealing the ephemeral nature of pitch standard – could encourage those who wish to explore the sound worlds of specific times and places down to the last Hertz, making it no longer a question of principle, but of historical curiosity.

## References

- Blood 2019.** Brian Blood, “The Dolmetsch Story”, [www.dolmetsch.com/Dolworks.htm](http://www.dolmetsch.com/Dolworks.htm) (version of 11 September 2019).
- Bouterse 2010.** Jan Bouterse, “Bressan Alto Recorders: Pitch and Sound, and Some Tips to Make a Copy”, in: Fellowship of Makers and Researchers of Historic Instruments Quarterly 116 (August 2010), 15–24 (Communication no. 1910).
- Griscom and Lasocki 2012.** Richard Griscom and David Lasocki, *The Recorder. A Research and Information Guide*, 3rd Edition, New York: Routledge 2012.
- Haynes 2002.** Bruce Haynes, *A History of Performing Pitch: the Story of “A”*, Lanham MA: Scarecrow Press 2002.
- Hunt 1962.** Edgar Hubert Hunt, *The Recorder and its Music*, London: Herbert Jenkins 1962.
- Kirnbauer 2006.** Martin Kirnbauer, “Paul Sacher und die alte Musik”, in: *Paul Sacher – Facetten einer Musikerpersönlichkeit*, ed. Ulrich Mosch, Mainz: Schott 2006, 25–56.
- Kirnbauer 2018.** Martin Kirnbauer, “Between the ‘Revival of Ancient Artworks in the Correct Style’ and the ‘Instrumentenfrage’. The Basel Collection of Musical Instruments between Musical Practice and Museum”, in: *Private Passion – Public Challenge: Musikinstrumente sammeln in Geschichte und Gegenwart*, ed. by Dominik von Roth and Linda Escherich, Heidelberg: arthistoricum.net, 2018. DOI:10.11588/arthistoricum.402, 132–41.

---

word ‘camp’ was justified in those days; there was a deep separation and strong opposition between the traditional attitude and the historically informed attitude toward performance practices. Lower pitch was an easily identifiable feature of the totally different approach to Early Music in general and J.S. Bach in particular. As a pars pro toto it was attacked in defense of the “holy” Bach and the traditional performing style. I am very glad that this fanaticism, which existed on both sides, generally has made room for more understanding and respect.”

**Kuijken 2013.** Barthold Kuijken, *The Notation is Not the Music: Reflections on Early Music Practice and Performance*, Bloomington IN: Publications of the Early Music Institute 2013.

**Lerch 1996.** Thomas Lerch, *Vergleichende Untersuchung von Bohrungsprofilen historischer Blockflöten des Barock*, Berlin: Staatliches Institut für Musikforschung 1996.

**Moeck 1978.** Hermann Moeck, “Zur ‘Nachgeschichte’ und Renaissance der Blockflöte” [part 2], in: *Tibia. Magazin für Freunde alter und neuer Bläsermusik* 3 (2/1978), 79–88.

**Nef 1983.** Walter R. Nef, “Die Musikinstrumentensammlung Otto Lobeck”, in: *Alte Musik – Praxis und Reflexion* (supplementary volume of the *Basler Jahrbuch für Historische Musikpraxis* for the 50th anniversary Schola Cantorum Basiliensis), ed. Peter Reidemeister and Veronika Gutmann, Winterthur: Amadeus Verlag 1983, 91–106.

**Palmer 1981.** Frances Palmer, “Catalogue”, *The Dolmetsch Collection of Musical Instruments*, London: Greater London Council 1981.

**Smith 2020.** Anne Smith, *Ina Lohr: Transcending the Boundaries of Early Music*, Basel: Schwabe Verlag 2020 (Schola Cantorum Basiliensis Scripta 9).

**Thalheimer 2010.** Peter Thalheimer, *Die Blockflöte in Deutschland 1920–1945: Instrumentenbau und Aspekte zur Spielpraxis*, Tutzing: Hans Schneider 2010 (Tübinger Beiträge zur Musikwissenschaft 32).

**Thiele 2016.** Ulrike Thiele, *Musikleben und Mäzenatentum im 20. Jahrhundert: Werner Reinhart (1984–1951)*, PhD dissertation, University of Zurich 2016; accessible at Zurich Open Repository and Archive, <https://doi.org/10.5167/uzh-130409>, publication forthcoming.

**How to cite this article:** Anne Smith, “The Curious Story of Low Pitch”. Forschungsportal Schola Cantorum Basiliensis, 2020. URL: [www.forschung.schola-cantorum-basiliensis.ch/de/forschung/ina-lohr-project/smith-low-pitch.html](http://www.forschung.schola-cantorum-basiliensis.ch/de/forschung/ina-lohr-project/smith-low-pitch.html) (accessed: DD.MM.YYYY)

**Published:** 27 March 2020

**Copyright:** © 2020 The Author(s)

**License:** This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License ([CC-BY-NC-ND-4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.