

In the works of J.S. Bach, Baroque music, particularly in its three major forms of *Canon*, *Fugue* and *Chaconne*, reached its peak. Bach also pushed the limits of performance, often requiring extreme dexterity from players who, until Bach's time, had been accustomed to playing the keyboard using only the middle three fingers. Similarly with his Organ Works. Pedals had hitherto been used mainly to reinforce leading bass chords; Bach's solo Pedal Exercise (BWV 735) must have tested many an organist, and even in his organ works for manuals and pedals Bach would often include a pedal cadenza, as for example on the popular Toccata & Fugue in d.

In his Sonatas and Partitas for Solo Violin, Bach also pushed performers to their limits, requiring the frequent alternation between chords and single-line melody. Indeed the very intensity of digital challenge presented by these pieces has not only led modern performers to substitute arpeggios for the written chords, but the violinist community has succeeded in establishing a climate of opinion persuading the listener that this is historically correct. While the majority of listeners appear to have accepted the arpeggio style of performance, there remains a stubborn minority who say "this doesn't sound good" and furthermore, "it simply isn't what Bach wrote". Indeed it was not.

Bach was not a sloppy writer. He made sure that his manuscripts conveyed every precise detail necessary to render the piece to his satisfaction. Indeed he annoyed many of his contemporary performers by his frequent habit of fully writing-in the trills and ornaments – normally considered the performer's perks, to be performed as the performer's own taste and mood of the moment dictated. If Bach wrote chords, then chords were what he intended to be played.

Did Bach ever intend or imagine that these pieces would be performed using an Italian bow, thus requiring broken chords or arpeggios instead of full chords? Hardly. At several points in these solo violin works, when a long chord is to be accentuated, Bach writes "*arpeggio*". Why would he single out the occasional chords, if all chords were to be performed as arpeggios? This "internal evidence" alone would indicate quite clearly that, other than where expressly indicated, chords were to be played as full chords.

Bach composed a Sonata for Solo Flute. The flute cannot play chords, and therefore Bach wrote no chords for the flute. But Bach's contemporary violinists could indeed play chords, using the simple expedient whereby the bow-hairs of an arched bow were held under tension by the player's thumb and relaxed for the performance of chords. There are many contemporary illustrations of the curved bows used in Germany in Bach's time. A drawing made by the organist, of musicians in the gallery of Freiberg Cathedral around 1712, clearly shows outwardly-arched, German-type bows, as does the engraving which forms the frontispiece to the *Musikalisches Lexikon* edited by Bach's cousin J.G. Walther and published in 1732. Bach wrote chords because that was what he intended. And that is what his contemporary musicians would play.

Frequent references may be found in Baroque literature to the *arched German bow* with its accompanying technique of thumb-pressure on the bow-hairs. Georg Muffat for example, gave this description in his preface to *Florilegium Secundum*, 1698: *In Angreifung des Bogens spielen die meisten Teutschen, indem sie die Haare mit dem Daumen nach Bedarf andrücken, und seyend hierinnen von den Welschen, als welche die Haare unberührt lassen, unterschieden.* "When grasping the bow, most Germans play while pressing the hairs of the bow with the thumb as required, thus having the option of tightening the hairs or leaving them loose."

Otto L. Bettmann gives this picture of Bach's violin composition at Cöthen in his book 'J.S. BACH - As His World Knew Him': "Aside from composing and conducting violin concertos in Cöthen, Bach was also engaged in exploring, and infinitely expanding, the range of works for solo violin. Violin works to this date were intended to display the violin's potential for evoking melodic beauty. Bach extended the instrument's range in a series of three Sonatas and three Partitas for Solo Violin, which he completed in 1720. The *Chaconne* of his second Partita (in D minor) - made up of twenty-nine variations - is universally acknowledged as one of Bach's greatest, most imaginative works. To this day, it remains the ultimate test of violinistic virtuosity. Essentially, the violin was designed to produce simple, single-toned melodies, imitative of the human voice. Within the course of these Sonatas, however, the violinist finds himself confronted with intricate three-and four-note chords, in complex chordal passages that vastly extend the range of this instrument.

"For the violinist of Bach's time - such as Pisendel - this did not, perhaps, present an insurmountable problem. The violin bow then in use was curved and loosely strung, enabling the performer to touch the instrument's four strings simultaneously. Today, a straight and tightly strung bow permits the player to intone the notes only successively, creating an arpeggio effect.

" (New York 1995 - Carol Publishing Group)

Nikolaus Bruhns (1665-1697), organist in Husum, produced three and four-part polyphony on the violin, according to a report of his contemporary Johann Matheson (1681-1764). Even Leopold Mozart (1719-1787) in his well-known violin anthology, is of the opinion that three-part chords should be played simultaneously with one stroke of the bow. The style of playing of Niccolò Paganini (c1782-1840) was described in detail by Carl Guhr, at the time Director of the Frankfurt Opera, in his violin anthology of 1829. Guhr followed Paganini over a long period, observing his performances, and according to him Paganini, playing his own compositions in which there are numerous three and four part chords, played them simultaneously.

Rudolf Gähler, a modern exponent of the curved bow writes: "It is not only that the manner of playing with the modern curved bow is considerably closer to Bach's notation; but the usual pauses between four-part chords are omitted and a bass theme does not have to be performed arduously with the help of the unbeautiful sounding reverse *arpeggio*. In addition, the dynamic span is considerably increased as, for example, even polyphonic passages can be played *piano*, while a variety of hitherto unknown nuances of timbre results from the slackened horse-hairs of the bow. This in turn makes possible a greater abundance of expressive subtleties."

So why not simply use an arched bow today, when performing Bach's solo violin works? Several reasons may be suggested. For example, techniques of fingering involving the thumb of the left hand are witnessed to in compositions of the Baroque period, but most critics of the curved bow are ignorant of them, which makes their verdict on supposedly unplayable passages in Bach invalid.

Critics also claim that the few curved bows seen in 18th century illustrations are simply not up to the task. While they may be capable of 2- and 3-part polyphony, the performance of full chords using all four strings simultaneously requires a depth of at least 4" / 10cm which is not apparent in Baroque period illustrations. Thus it could be technically difficult to produce a performance of these challenging works which would match the expectations of today's audiences, accustomed as they are to recording and concert-hall perfection.

The "die-hard" curved-bow supporters however, return over and over again to one pivotal point: Bach wrote chords. Chords were what he intended, and chords are what the violinist should play.

This produced a number of attempts to re-create a bow which is not only capable of playing Bach's Sonatas and Partitas as they were written, but doing so with the degree of facility expected by modern audiences.

The "Polyphon-Bogen" by Hermann Berkowskis (Berlin), improved by Hans Baumgart (Rastatt 1925) paved the way, while other models were developed by Günther Hellwig (Lübeck), Georges Frey (Mulhouse) und Rolph Schroeder (Kassel). Schroeder and Otto Büchner used the Curved Bow in concerts and recitals.

A prominent supporter of the curved bow was Albert Schweitzer. "Every one who has heard these [Solo Violin] Sonatas must have realized how sadly his material enjoyment of them falls below his ideal enjoyment," Schweitzer wrote in his comprehensive 1908 study of Bach's music. For Schweitzer, there was no question but that Bach meant for the chords to be played as simultaneities and not as arpeggios. He declared arpeggiation "a particularly bad effect, even in the finest playing," and he could not allow that Bach would have "overstepped the bounds of artistic possibility."

Schweitzer and Schroeder promoted the Curved Bow between 1933 and 1952 in a series of publications. Finally a collaboration between Schweitzer, world-renowned violinist Emil Telmányi, and violin-maker Knud Vestergaard would result in the Vega Bach Bow (Vega being an abbreviation of the maker's name, Bach-Bow being Schweitzer's nomenclature). The main feature of the Vega Bow was the substitution of a simple tensioning lever for the nut – a crucial alteration in respect of the historical prototype - rendering a modern curved bow equal to the demands of polyphonic playing.

On hearing performances of the Bach unaccompanied Violin Works in which the Vega Bow was used, Schweitzer declared: "Anyone who has heard the chords of the Chaconne played without any restlessness, and without arpeggios, can no longer doubt that this is the only correct and, from the artistic standpoint, satisfactory way of playing it." He loved its softer tone, which is a result of the lower tension on the bow hair. Recognizing that the sound of the curved bow would not carry in a large hall, Schweitzer dreamed of the day when "the Works for Solo Violin would disappear from the programmes of the larger concerts, and be restored to the chamber music to which they really belong." Playing with the curved bow allows for a quieter and subtler style of Bach playing, a style that Schweitzer found particularly beautiful and true. In the recording

studio of course, a smaller, more intimate atmosphere allows for softer, more intimate performance.

Performance of German music using the correct German type of bow would have several significant effects. First it would slow down some of the breakneck tempi adopted by many musicians today; it is easy to play rapidly when the bow is held from above in the Italian style because in this position the flexibility of the wrist can be used to full effect. When the bow is held in the German style with the thumb under the strings the wrist is permitted relatively little play; thus the performer is compelled by physical limitation to respect the slower, more deliberate tempi which naturally reflect the introspective, often contrapuntal style of German composition.

A second effect of using the German bow with its generally looser tension is that it would yield a much softer, more mellow sound rather than the rougher, more aggressive sound which so often assails the listener's ears in "authentic-instrument" performances. In addition of course, the violinist would be able to play full chords when required to do so.

Bach's Solo Violin Sonatas and Partitas would benefit particularly from the use of a proper German bow, especially in the wonderful *Chaconne* from the Partita 2 in d-minor BWV 1004, where the alternation between single-line melody and chordal harmony is such an important feature of the musical structure.

Johann Sebastian Bach wrote in the old German tradition of polyphonic composition for stringed instruments, but in this as in other respects his compositions represented the Baroque era's terminal and culminating point. Thus it is his unique distinction to have created with his Sonatas and Partitas for Solo Violin a body of work representing the culmination of a genre. As Richard Strauss, who was unreserved in his enthusiasm for the curved bow, summarized: "*To write something like that you've just got to be a Bach yourself*".

Yet such is the beauty to be found in violin or cello polyphony that contemporary composers have specifically exploited the potential of the Curved Bow. Helmut Bornefeld composed a Sonata for Solo Violin dedicated to Rudolf Gähler. Cellist Michael Bach developed a different Curved Bow to perform Bach's Cello Suites BWV 1007-1012; John Cage and Dieter Schnebel wrote compositions for Violoncello with Curved Bow. Michael Bach performs these works using a curved bow developed by the 'Bach-Bogen' workshops.

Despite ongoing doubts, even insults, attempts will continue to perform Bach's Solo Violin Sonatas and Partitas *as Bach wrote them*.

Emil Telmányi (1890-1988) was born in Hungary, though his birthplace, Arad, would become part of Romania after the First World War. He gave his first public performance at the age of 13 and later studied at the Budapest Royal Academy. In 1911 he began his professional career in Berlin with the Philharmonic. Telmányi first visited Copenhagen in 1912 together with the Polish pianist Ignaz Friedman. Here he was to settle for the rest of his life. Telmányi's reputation as a violinist took him on concert tours throughout Europe and America. He became closely associated with the composer Carl Nielsen as a friend, as a performer of Nielsen's works, and ultimately as Nielsen's son-in-law when he married Nielsen's daughter Anne Marie. The marriage took place on 6 February 1918, and Carl Nielsen's wedding present was the dedication of his recently completed orchestral piece *Pan and Syrinx*. Telmányi was later to make a decisive contribution to the promotion of Nielsen's music, first of all as a violinist but later increasingly as a conductor, and finally as a collaborator on the revised versions of some of Nielsen's works. The two solo pieces *Prelude and Theme with Variations* (1923) and *Prelude e Presto* (1928) were both composed for Telmányi.

For Bach performances and also influenced by the writings of Georg Muffat, Telmányi asked the Danish bow-maker Arne Hjorth to make an outward-curving bow with a moveable frog so that the bow hairs could be tightened or slackened with the thumb during performance. He first used this bow for a performance of Bach in the 1950 Edinburgh Festival. A problem with this bow soon became apparent when long trains of single notes requiring a tight bow hair was putting a considerable strain on the player's right-hand thumb. He therefore found a bow-maker, Knud Vestergaard, who was able to come up with a mechanism enabling the bow's frog to be mechanically engaged during performance. Based on the inventor's name, this became known as the "Vega Bow" (VesterGAard), the one used in this performance.

References and links:

- 1) **Rudolf Gähler: "Der Rundbogen für die Violine - ein Phantom?"** ConBrio Verlag, Regensburg 176pp, 11 illustr, Price Euro5.00 - www.conbrio.de
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- 4) **Bach.Bogen** – Web documents and video clips: <http://pagespro-orange.fr/bach.bogen>
- 5) www.BaroqueMusic.org/barvlnbow.html - www.BaroqueMusicLibrary.com