Historical development of the cello

The cello emerged in Italy in the mid 16th century. The chief predecessor of the modern cello was the *bassa viola da braccio*. The term "violoncello" was used from the mid 17th century. The earliest cellos had three strings. When four strings became used, they were initially tuned a tone lower than the present day cello (i.e. Bb, F, C and G). Occasionally, cellos were made with five strings.

The violin family (including the cello but excluding the double bass) developed independently of the *viol* family (which flourished in the 15th to 17th centuries, until it became eclipsed by the popularity of the violin family). A consort of viols would consist of treble, tenor and bass (the latter also known as *viola da gamba*), although other sizes did exist (such as the contrabass, or *violone*). Viols are fretted, and held on or between the knees when played. They typically have six strings, with a flatter bridge than the violin's or cello's, making chord playing easier. Other differences, when compared with the violin family, include a flatter back, sloping shoulders, and thinner wood and strings. The bow used for the viol is slightly convex, unlike the concave bow now used by violinists and cellists.

Early violin and cello makers, mostly based in northern Italy, included Giovan Giacomo Dalla Corna, Zanetto de Michelis da Montechiaro, Gasparo da Salò, Giovanni Paolo Maggini, and, most notably, Andrea Amati (c.1505-c.1576); there are surviving Amati violins dating from 1564. The tradition was continued by Andrea's sons Antonio and Girolamo, Girolamo's son Nicolo (1596-1684), and Nicolo's students Andrea Guarneri and Antonio Stradivari.

Dimensions of the early cellos varied, but were - on the whole - larger than modern instruments. The cellos of Antonio Stradivari (1644-1737) set the standard for all future instruments, both in their quality and in their dimensions.

During the 19th century, with the rise of the public concert and the virtuoso performer, further small modifications were introduced to the violin and cello to increase its power: the bridge was heightened and its curvature increased, the sound post was thickened and the neck angled back. These, combined with the slight raising of pitch (to A440) since Baroque times, put increased pressure on the bridge, requiring the bass bar (supporting the bridge) to be strengthened. The fingerboard also became longer, to facilitate playing very high pitches.

Gut strings were used on the earlier instruments, which produced a warm, mellow tone. These began to be replaced in the 19th Century by more resilient metal strings, which are thinner and tauter, and produce a brighter tone. In the 20th Century, synthetic strings also began to be used.

The end-pin or spike was first used in the late 18th century, but did not become standard until well into the 19th century.

Early bows were convex in shape, like those of the viol. The modern bow was developed in Paris in the late 18th century by François Tourte (1747-1835); it was longer and heavier than earlier bows, and convex.

For further reading, see www.cello.org/cnc/article.htm