

Abstracts of Articles in GSJ Volume LXII (2009)

A Third Century AD Chinese System of *Di*-Flute Temperament: Matching Ancient Pitch Standards and Confronting Modal Practice: HOWARD L. GOODMAN & Y. EDMUND LIEN

Abstract. China's ancient holed *di*-flute, playing a seven-note scale, underwent radical retemperament by a third-century AD court official named Xun Xu. A few Chinese musicologists have looked into the temperamentology, giving a narrow technical basis for further work. The present article goes deeper into sources, focusing on Xun's thinking, motivation, and technical approach. Part One examines his interaction with low-ranked court musicians and technicians, showing that Xun's a priori was to match the *di*-flute's seven notes with the pitches of China's twelve classical pitch-standards. Part Two reviews the computation steps he devised to site the finger holes of a complete set, that is, one *di* fundamental per each pitch-standard. It shows how his siting 'algorithm' worked in light of his a priori, and how it seems to have adjusted, albeit crudely, for side-hole correction. Part Three sleuths out a puzzle: music trends in accompaniment modes and ensemble variety inspired the idea to play more than one mode on the same flute. Xun's algorithm, however, rejected new modes that might alter the court's 'standard scale,' keeping the court flutes ritually bound to one modal structure.

'Els flabiols de Montsoriu': Two Popular Bone Flutes, Probably from the Sixteenth Century: RAFEL MITJANS & TERESA SOLER

Abstract. This article introduces two six-holed bone whistles discovered in 2007 in the Castell de Montsoriu, at Arbúcies/Sant Feliu de Buixalleu, in Catalonia (Spain). Although considered the best Gothic castle in Catalonia, the flutes were found in a large archaeological deposit dating from near 1570 and containing nothing older than the late years of fifteenth century. The flutes are about 16 cm long; one of them has a thumbhole. They seem to be fipple flutes rather than tongue-duct flutes. Their holes are narrow enough to discourage comparisons with either known similar bone medieval instruments or modern Catalan wooden flutes. Because of this, their quite crude appearance and their archaeological context, the authors incline to the view that these are popular instruments from the first half of the seventeenth century.

Cavalry and Court Trumpeters and Kettledrummers from the Renaissance to the Nineteenth Century: BRUCE GLEASON

Abstract. For centuries, musicians have found employment in battle and other outdoor arenas, and within this tradition, horse-mounted trumpeters and kettledrummers have held prominent positions, with the horse adding a sense of grandeur and nobility. The present study focuses on this military and court tradition from the Renaissance to the nineteenth century.

The Single-Manual Italian Harpsichord in the Royal College of Music, London, Cat. No. 175: An Organological Analysis: GRANT O'BRIEN

Abstract. The instrument that is the subject of this paper is a small single-manual Italian harpsichord. The characteristics of the instrument are discussed in relation to those of Neapolitan instruments generally and to those of Onofrio Guarracino in particular. The unit of measurement used in the instrument's design and construction is shown to differ slightly from the 'standard' Neapolitan unit of measurement. The unit used by Guarracino in this and his other instruments is shown to be consistently smaller than the 'standard' unit by a characteristic amount. The use of this individual unit along with numerous other characteristics lead to a confident attribution to Guarracino. A new method is used to increase the accuracy of the determination of the unit of measurement used by Guarracino using the usual regression analysis statistical methods of the

measurements of the string and register-slot spacing. A new and previously unpublished method of construction used by Guarracino and some of his Neapolitan contemporaries is discussed. The original compass, stringing and pitch of the RCM instrument are determined and put into the perspective of Guarracino's other instruments and the contemporary Neapolitan music and musicians. The refined musical sound of Neapolitan harpsichords is discussed and differentiated from the musical qualities of other Italian instruments.

New Information about Harpsichords and Harpsichord Makers Employed in Rome by Cardinal Pietro Ottoboni and his Father Antonio: TERESA CHIRICO

Abstract. The of Ottoboni family accounts books in the Vatican Library comprise a corpus of very interesting documents that bear unpublished information about keyboard instruments which belonged to cardinal Pietro Ottoboni (1667-1740) and his father Antonio. Those instruments were in Rome, in the Chancellery Palace, the cardinal's residence, and in other seats around Rome, which were Pietro Ottoboni's usual residences. These documents mention about forty instruments, mainly harpsichords and spinets, but also a clavictherium and an organ and other instruments that were hired by the cardinal for special occasions (concerts, operas, oratorios). Some of these harpsichords were surely among the richest and the most expensive of the period because of their case, painting and decoration, and some of their structural features were experimental, such as copper twisted strings, a theorbo register and the 'ottava bassa' (16-foot pitch register). Many harpsichord makers, including the famous Giuseppe Boni Cortona, were employed by Antonio and Pietro Ottoboni, and an unknown harpsichord maker, Tomasso Mandelli, is revealed. The documents also provide names and addresses of other craftsmen and workshops who worked on harpsichords and spinets (gilders painters, cabinet-makers, carvers) and about the harpsichord trade between Venice and Rome.

Violicembalos and Other Italian *Sostenente* Pianos 1785-1900: PATRIZIO BARBIERI

Abstract. In Italy, the *sostenente* piano saw a significant revival at the dawn of Romanticism, thanks to its features typical of the human voice and to its aptitude to provide a surrogate orchestra. The first attempts, following the traditional solution of the strings rubbed by a continuous bow (Geigenwerk), were abandoned owing to their laborious technology and to their often unsatisfactory results: see the Violicembalos by Gaetano Elli (1785), Francesco Tacconi (1820), Gregorio Trentin (1821), Luigi Taparelli d'Azeglio (1855, often successfully played by Franz Liszt), and Fortunato Gamba (1866). For a short time (1861-68) it was replaced by the piano-harmonium which, however, presented uneliminable tuning defects (Piano-melodios by Michelangelo Ducci, Antonio Fummo, and Giacomo Ferdinando Sievers). Then came the repetition piano, which had greater luck because it complied with the principle on which the original instrument was based (i.e. the string struck by a hammer) and mainly because it could be applied as a simple optional device to any ordinary piano: see Luigi Caldera's Melopiano (1868) and Enrico Ricordi & Lino Finzi's Armonipiano (1882, warmly approved by Liszt and Giovanni Sgambati). By about 1890-1900, however, all these innovations had been abandoned and the original piano fully accepted.

A Proposed Graphical Method for Establishing a Preliminary Gauge Pattern for Stringing Eighteenth-Century French Harpsichords: THOMAS DONAHUE

Abstract. Based on the information in historical treatises about harpsichord string gauges, there is evidence that a preliminary gauge pattern may have been established as a guide to stringing an instrument. A passage from the 1753 treatise *Le Maître de Clavecin* by Michel Corrette stated that both string gauges and lengths are associated with 'the diapason of the instrument.' Evidence suggests that this refers to the scaling diagram originally used by organbuilders to dimension organ pipes, and that such a method may have been adapted and used by harpsichord makers for establishing string gauges. A version of the diagram is presented.

The Viscountess de Beaumont's Harp and Music Album (1780): ROBERT ADELSON

Abstract: In 1995, as preparations were underway to sell the castle of the Bourbon-Busset family in the village of Busset (Allier), a large harp case was discovered in the attic of the castle. This case, which appeared not to have been opened since the late eighteenth century, contained two objects preserved in their original states: a single-action harp made by Jean-Henri Naderman (1734-1799) and a music album. The harp, the case, and the score subsequently passed through the hands of two different antique dealers before the city of Nice acquired them for the Musée du Palais Lascaris in 2007. This ensemble of objects has now been identified as having most probably belonged to an eighteenth-century aristocratic amateur musician, the Viscountess de Beaumont. Together, they provide valuable information about the musical practices of amateur harpists of this period.

Two Bass Viols labelled John Roos at the Gemeentemuseum, The Hague: GESINA LIEDMEIER & MICHAEL LATCHAM

Abstract: The viols in the collection of musical instruments at the Gemeentemuseum in The Hague include some with labels bearing the names of well-known makers. These include Rombouts, Jacobs, Tieffenbrucker and Roos. The authenticity of the two Rombouts viols is not doubted but whether those with the names Jacobs and Tieffenbrucker are by those makers is uncertain. This article discusses the two instruments labelled 'John Roos'. The scanty literature about the two viols is reviewed and their possible origins are discussed. No firm conclusions are reached. An objective approach based on some knowledge of the history of the instruments, but above all based on an examination of the instruments themselves and on comparisons with each other and with other surviving instruments shows that the two were probably made in the late seventeenth century or the early eighteenth century. Their maker may perhaps have influenced Rombouts, suggesting a Dutch attribution. At the same time, various features contradict this and indicate rather a French school and, more specifically, Collichon. Other features again, including some of those that suggest Rombouts, deny a French attribution. Whatever their origins, these two bass viols are of fine quality, in a league to which the instruments of both Rombouts and Collichon belong.

Hamburg and Paris: Joachim Tielke's Pochettes: FRIEDEMANN HELLWIG

Abstract: Tielke has for many years been suspected of having employed a number of craftsmen or even of having sold only other makers' products. This paper shows that his pochettes were made in Paris by Jacques Regnaut (Regnault). However, this does not necessarily mean that all of Tielke's instruments were made outside of his shop by other craftsmen. At the same time, the necessity of examining the Parisian pochette making in more detail becomes obvious.

Remarks on an Unnoticed Seventeenth-Century French Lute in Sweden, the Swedish Lute (*Svenskluta* or Swedish Theorbo) and Conversions of Swedish Lutes: KENNETH SPARR

Abstract: Many musical instruments have been subject to conversion and transformation, minor or substantial, due to changes in musical fashion and preferences, not least plucked instruments such as the lute and the guitar. The Swedish lute (*Svenskluta* or Swedish Theorbo) offers a good example of these conversions. This study is divided into three parts. The first contains a preliminary report on an important and unnoticed French seventeenth-century lute in the Stockholm Music Museum. The second part provides the reader with an overview of the *Svenskluta* or Swedish Lute/Theorbo and the third with conversions of Swedish lutes. The changed tuning, the changed stringing and the necessary conversions meant that the proportions of the Swedish lute changed to a considerable extent. These conversions and changes have meant that many old Swedish lutes have survived as they were used even into the twentieth century. It is not very difficult to identify the conversions though there still seems to be some confusion and uncertainty among specialists.

The Invention and Evolution of the Wheatstone Concertina: NEIL WAYNE

Abstract: During the late eighteenth and early nineteenth centuries, many new musical devices containing metal free reeds appeared in Europe, influenced by the arrival of examples of the metal-reeded sheng from China. Demian's bellows-driven accordion (c1825) enabled chords or notes to be selected by keys on the bellows. Charles Wheatstone patented his mouth-blown symphonium, a free-reed device whose fingering system enabling the easy playing of runs, melodies and chords (1829). By the early 1830s Wheatstone created the concertina, a hexagonal bellows-driven instrument with the symphonium's fingering system. This may have been a demonstration device for use in his acoustical research and lectures, though by 1835 he was offering concertinas for sale via his family's London music shop. By 1844 Wheatstone created a range of concertinas, detailed in his 1844 patent. A fashion for the instrument emerged among bourgeois and amateur enthusiasts in London and around Britain. This article records the progression of the concertina from a device for acoustical research to a fashionable musical instrument and notes new makers (many of whom had learned their skills in the Wheatstone workshops) who produced and sold many types of concertina from the 1850s, when the instrument became more popular world wide.

A New Body for a New Tango: The Ergonomics of Bandoneon Performance in Astor Piazzolla's Music: GABRIELA MAURIÑO

Abstract: This article describes the organological characteristics, main makers and history of the signature instrument of Tango music, the bandoneon. It goes on to compare the performance practices of the bandoneon in Traditional and New Tango. Finally, the article discusses how the changes introduced by Astor Piazzolla in the ergonomics of bandoneon performance that is, from seated to standing positions, shaped his sound characteristics and compositional style.

Comfy Cushions and Golden Grandiosi: Instruments of British Experimentalism: VIRGINIA ANDERSON

Abstract: Instruments in British experimental music (1960-1973), as defined in Michael Nyman, *Experimental Music: Cage and Beyond*) and its postmodern successors exemplify an aesthetic complex including anti-monumentalism and humour. 'Classic' indeterminate experimentalism, including improvisation, non-standard notation, and early process minimalism, employed extended common-practice instruments, 'low art' instruments (for example, toy pianos), invented instruments, and 'found' instruments (bicycle wheels and cheese graters). Despite its technical differences, postmodern experimentalism (later minimalism, systems and eclectic tonal styles) expressed an aesthetic complex similar to that of indeterminate music through acoustic and electronic instruments. A brief background to instrument use in American experimentalism as it affected the British movement precedes an exploration of instrument use by such composers as Cornelius Cardew, John White, and Gavin Bryars, and such groups as the Scratch Orchestra and the Promenade Theatre Orchestra, in both types of experimentalism.