Historic Spanish organs

Introduction

The Iberian organ is somewhat different from those of other European schools and some of its features are therefore worthy of mention.

There are very few historic instruments surviving in working condition in Spain which were not heavily rebuilt during the eighteenth century. A few, such as the organ at Frechilla featured in this project, retain earlier fluework unaltered, but these are the exception. The fact that virtually all Spanish instruments display the characteristic battery of horizontal reeds with full-length resonators proves the point, as these stops were not introduced until the end of the seventeenth century and did not become commonplace until the eighteenth.

However, a remarkable number of instruments *do* survive in their eighteenth-century condition. In the province of Palencia alone, where the two organs featured in the **OrganART Media** project are to be found, there are some 80 historic instruments. A lasting conservatism among organ-builders, coupled with economic decline during the nineteenth century, meant that most Spanish organs were cleaned and had their bellows repaired two or three times between 1800 and around 1920 but few alterations, additions, or major rebuilds were carried out. From 1920 onwards, most instruments simply fell into disuse as the political and economic situation declined into Civil War and its aftermath. Spain therefore now has more historic organs than any other country.

By far the majority of these are single-manual organs with registers divided at middle C/ C#. The short bottom octave persisted until the end of the eighteenth century. Pedals are usually restricted to draw-downs on the bottom octave of naturals.

Some two-manual organs were built in the eighteenth century; the second, upper, manual was normally a small echo division usually placed on the floor of the instrument underneath the main division.

Cathedral instruments, despite their grandiose cases, are usually little bigger in terms of their specification than organs installed in large parish churches. (The rows and rows of dummy pipes high up in Spanish cathedral organ cases are known as *Canónigos* (Canons) because they look good but do nothing!) Several cathedral instruments, unlike their parish church counterparts, *were* significantly altered in the nineteenth century, and even those whose eighteenth-century pipework survived unscathed often had a romantically-flavoured third manual division added. For this reason, the most original instruments are to be found in parish churches.

The sound of the Spanish historic organ is distinctive. Diapason tone is gentle and rather stringy; there is a wealth of bright mixtures and mutations; the reeds are fiery and strident, and even at the end of the eighteenth century the short-resonator reeds remain medieval in tone. Wind pressures are invariably low at around 55mm, and one of the remarkable features of these instruments is the power of the horizontal reeds operating on such low pressures. Another is the astonishing variety of sounds possible from what are almost always small instruments.

Horizontal reeds

The most obvious visual characteristic of the Spanish organ is its battery of horizontal reeds. Horizontal reeds first appeared early in the seventeenth century, when raucous reed pipes with quarter-length resonators were placed horizontally above the organist's head. The practice later spread to other reeds, with pitches of 8', 4' and 2' in the bass and 16', 8' and 4' in the treble. Most instruments had an 8' vertical trumpet inside the case (the *Trompeta Real*) to be used with

the flue chorus. The rationale behind placing reeds horizontally on the façade was practical, rather than merely decorative. Reed pipes sound at their best when fed the "liveliest" wind, i.e. that immediately above the pallets at the front of the soundboard. Place them here inside the instrument, and you cannot get at them to tune them, yet they are the pipes that need tuning most frequently. Place them at the back of the case, where they are accessible, and they receive the "deadest" wind (unless a complex and therefore less responsive tracker action is used, as in England) and the sound is further restricted by the fact that they are at the back of the instrument. Dust falling into them also causes problems. Horizontal reeds do not collect dust; they are fed with wind from directly above pallets served by a simple, sensitive tracker action; and their sound emerges without obstruction. They are also readily accessible for tuning, and can be tuned by the organist without entering the instrument. The habit of providing registers of 8', 4' and sometimes 2' in the bass and 16', 8' and 4' in the treble also overcomes the relative weakness of reed stops in the treble compared to the bass, and means that the pipes are genuine reeds throughout the range (avoiding the common practice of substituting flue pipes in the top octaves of reed registers). Although it takes a little getting used to, the effect of a reed "plenum" with pitches of 8' and 4' in the bass and 16' and 8' in the treble does have its advantages, provided the 16' stop is used with caution.

Divided registers

The use of divided registers became commonplace in Spain from the early seventeenth century. It is often assumed that the major reason for this was the increased flexibility and economy which resulted from the fact that a solo stop and an accompaniment can be played on a single manual.

However, the use of divided registers may have had more to do with advantages of soundboard construction and wind supply than with the aesthetics of registration. Particularly in central Spain, the climate is not organ-friendly, with extremes of both humidity and temperature. Using two small soundboards, the tendency for warping and splitting of soundboards and slides is greatly reduced. The wind supply is also more stable since, for example, fluctuations caused by playing chords in the left hand do not greatly affect the supply of wind to the upper half of the keyboard. The soundboards of historic Spanish organs are invariably small, with conduits leading not just to the mounted cornets but to *all* the larger flue pipes, and wind taken to the horizontal reeds by means of huge planks of wood with engraved channels. By this means, the soundboards are no bigger than those of a medieval portative organ. Apart from discouraging warping and splitting of soundboards and slides, this also permits the use of very simple, rigid tracker actions, with the minimum of moving parts. The mechanical construction of these instruments is reliable and encourages longevity. The tracker action is also extremely light and sensitive.

Divided registers also provide the ability to produce illusions beloved of the Hispanic psyche. Particularly in improvisation (and improvisation was the norm – eighteenth-century parish church organs rarely had music stands) one can easily give the impression of a large two manual instrument on a small one-manual organ. Simply register a flue chorus with plenty of upperwork on the left-hand (bass) stops. Then, on the treble side, draw the chamade reed chorus of 16' and 8', backed up by the 8' *Flautado* and the 8' internal *Trompeta Real* (and, possibly, the *Corneta*). Then play alternately on the two halves of the keyboard. Any listeners unaware of the trickery involved would believe themselves to be listening to an impressive two-manual organ!

The Short Octave

Spanish organ-builders maintained the short bottom octave (without bottom C# or D#) long after their other European counterparts, and it remained common practice until the end of the eighteenth century. Short octave Spanish keyboards look normal and as though they go down to E rather than C. What looks like bottom E is in fact bottom C, what appears to be F# is D, and

the normal G# is D. On a normal keyboard, the stretches involved in playing some old Spanish music are difficult or impossible; played on the type of keyboard for which this music was written, the difficulties of stretch are replaced by those of getting used to the unfamiliar layout!

Specification and Registration.
Larger Spanish baroque instruments typically have four "families" of stops; smaller instruments, three, two or (rarely) one.

The first group of stops comprises a flue chorus based on an 8' Open Diapason, completed with bright mixtures and an 8' internal trumpet. Typically, these stops are the *Flautado* (Open Diapason), *Octava* (Octave), *Docena* (Twelfth), *Quincena* (Fifteenth), *Diecisetena* (Seventeenth), *Diecinovena* (Nineteenth), *Lleno* (Mixture), *Cimbala* (Cymbal), *Sobrecimbala* (Sharp Mixture) and *Trompeta Real* (Trumpet). Sometimes ranks are combined, for example the Fifteenth and Nineteenth are often combined in the treble half of the keyboard.

The second group of stops consists of a *Violón* (Stopped Diapason) and Flutes at 8', 4' and sometimes 2' pitch. The most common of these stops other than the *Violón* is the 8' *Flauta* and the 4' *Tapadillo* (Stopped Flute).

The third group comprises the major horizontal chorus reeds. Most instruments have stops at 8' and 4' pitch in the bass and 16' and 8' in the treble. Some also have a 2' register in the bass and a 4' in the treble. Usually these horizontal chorus reeds are the 8' *Clarín Bajo* (Bass Clarion) and 4' *Bajoncillo* (Small Bassoon) in the bass, and the 16' *Trompeta Magna* (Grand Trumpet) or *Trompeta de Batalla* (Battle Trumpet) and 8' *Clarín* (Clarion) in the treble.

The fourth family of stops comprises horizontal reeds with half- or quarter-length resonators. These are always the lowest ranks of horizontal reeds placed directly above the organist's head, and produce a harsh, nasal, medieval sound. Often, these are the 4' *Fagot* (Bassoon) and/or the 2' *Violeta* or *Chirimía* in the bass and the 8' *Oboe* and/or the *Clarinete* (to be found in either 8' or 4' pitch) in the treble. These are intended as solo stops, to be accompanied by flues in the other half of the keyboard.

In addition to these "families" of stops, there is the ubiquitous 8' treble solo *Corneta* (Cornet), usually of six ranks, and always very strongly voiced on Spanish instruments. Often they are louder than their reed equivalents. It is of course also common practice to use any of the horizontal reeds, or the internal trumpet, or the flutes, as solo stops.

Spanish organ-builders never had in mind the "full organ" beloved of the romantic school, and one should not make up a chorus which combines stops of one "family" with those of another. Reeds with full-length resonators should not be combined with those with short resonators, nor flutes with the diapason chorus. The most common error made by those unused to these instruments is to add the horizontal reeds to the main chorus; this was regarded by the organ-builders as both in bad taste and, often, impractical, for the wind supply is not designed to cope with it and the instrument may quickly run out of air, with resultant evil effects on the tuning. The only exception to this is that it is customary to use the 8' *Flautado* (Open Diapason) and/or the internal 8' *Trompeta Real* with the chorus of horizontal reeds, to give additional body and weight to these very fiery registers. The habit of using the treble *Corneta* with the reeds, as in the French "Grands Jeux" is practised by some and frowned upon by others. It is really less necessary than in France, as in Spain the reeds themselves have the necessary power in the treble due to the different pitches of the divided registers. However, it does compensate for the lower pitch of the chamade reeds in the treble half of the keyboard when playing music of schools other than the Spanish.