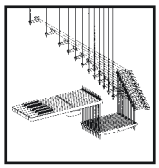
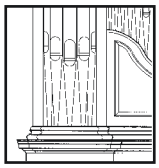
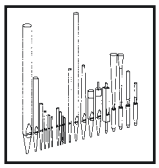


organ gallery





At Christ Church Cathedral, Victoria, British Columbia, a majestic new organ towers in the west gallery. Its builder, *Hellmuth Wolff*, describes the design

Gothic fantasy

The challenge of building organs around rose windows has faced organ builders through the ages. The most daring examples can be found in some Baroque churches of Austria and South Germany. For example, Joseph Gabler's monumental organ in Weingarten was built around six windows – and it was a stroke of genius! Its construction lasted from 1737 to 1750 and was plagued by delays (mainly due to a fire in the monastery) and financial constraints. However, 255 years later, the organ is still playing and its bold design, mechanical marvels and lovely sound remain an inspiration to builders and players alike, and never fail to impress the visitors.

Christ Church Cathedral in Victoria, British Columbia, has just one west window, though it has a large diameter of 24 feet, around which we had to build the organ. The instrument's construction was therefore a challenge, and to make it earthquake-proof added to its complexity. Its mechanism remains relatively simple, however, as the pipes of the main organ are located on only two levels, aside from those of the Rückpositiv housed in the gallery railing.

The location around the window could have inspired us to build the case in a southern European Baroque style, but harmonizing it with the cathedral's Gothic architecture was more imperative than anything else. The case ended up in a style that could be described in organ terms as 'Modern-French-Gothic'. It is free-standing and made of solid mahogany and mahogany-veneered solid wood. A vacuum press made it possible to make and veneer the curved parts of the case. The lines highlighting the curves and the floral ornaments in the under part (hiding the swell louvres) are covered in gold leaf.

The organ's appearance may reflect its musical style, but that is not always the case, especially not in the present day when we can choose from so many different stylistic periods. The personal taste and musical background of the player is often the point of departure for the stylistic direction that a new project may take, and so it was decided by Michael Gormley, the cathedral's principal organist, that the organ's tonal qualities be southern European. His many years spent in Vienna made him love this type of instrument with its silvery plenum, lovely flutes, mysterious string stops and colourful reeds.

We opted however for a slightly more eclectic approach, more in line with builders of Upper-Suabia (or Oberschwaben, in the region between Stuttgart and Munich), like Holzhey and Riepp, who were also linked to French building practices (in addition to the more profitable activity of wine growing). This French connection squares well with our own building style, especially that of reeds, of which there are a good number in the French style. Nothing suits a cathedral organ better than these trompettes with their characteristic éclat!

The console is detached from the main case and the key action is entirely mechanical. If the organist wants to play all four keyboards together, he has to work!

Photos courtesy of
Christ Church Cathedral, Victoria, Canada

The organ comprises a free-standing case of solid mahogany and mahogany-veneered solid wood. A steel structure carries the load of pipes and windchests, and provides seismic resistance. The detached console allows space for two rows of singers between the console and main case. Key action is mechanical, stop action is electric.

The manual compass is 58 notes (C-a''') with an octave spanning 161mm. Natural keys are capped with ox-bone with arcaded nosings of padouk, sharpsare of ebony. The Pedal compass is 30 notes (C-f'). Naturals are of oakspaced 60mm apart, sharps are of oak capped with pallisander.

A multi-level capture combination system provides 256 levels of memory; memory levels may be locked. There are 12 general and 6 divisional pistons, programmable tutti, general cancel and sequencer. The general pistons, couplers, tutti and sequencer are duplicated by toe-studs.

The organ's wind is raised by a single low-speed blower located in the towerroom. It feeds a primer bellows behind the main organ and branches out to feed five parallel-fold bellows placed in the underpart and to either side of the organ beneath the choir risers. The character of the wind may be modified through theuse of winkers. The wind-system is provided with all necessary baffling and damping devices to ensure that it is perfectly silent.

However, the playing action is feather-light compared to some of the great organs of the past. It is in this domain of refining the mechanical action-that modern builders have made real progress.

The organ was built using traditional materials, such as mahogany for the case, and domestic woods for windchests, wind system and action, or different tin alloys and wood species for the pipes. Individual ranks of pipes, or different combinations of them, are opened or closed by magnets, and numerous electronic memories may be set by the player for the registrations.

Admittedly, a sense of suspense filled us during the voicing period, as it is not that common to base the style of a new organ on models take from a completely different acoustical, architectural and cultural environment. However, all our apprehensions vanished once the instrument was ready to play. First of all, it vigorously, or humbly, fulfilled its duties in accompanying

left & right **manual keys are capped with ox-bone and arcaded nosings of padouk, sharps are of ebony; the pedal naturals are oak, sharps capped with pallisander**

congregational singing and that of the choristers. Second, it sounded well at home in the music of Muffat, Pachelbel or Kerll, the very music it was intended to play, but Sweelinck and Bach – even Franck and Duruflé – can be performed convincingly on this organ. Langlais's *Chant de joie* sounded glorious with all its dissonances when Michael Gormley played it as a first piece during the dedication service. Artist-in-residence Luke Parkin surprised us with lush registrations for his improvisations during services. Finally, John Scott showed us the intimate side of the instrument, as well as the plena with their characteristic tierce mixtures, and concluded his inaugural recital with Vierne's *Carillon de Westminster*, which he played with panache.

The several years involved in building this organ have been a wonderful experience for all of us and I think each person gave of their very best. We were rewarded by the exemplary cooperation of the cathedral's committees, staff and officers, as well as with all the other craftspeople, architects and engineers involved in this huge project. ■

Christ Church Cathedral, Victoria, British Columbia, Canada
Hellmuth Wolff & Associés Ltée – op.47 (2005)

I. Rückpositiv

Quintadena	16
Principal	8
Rohrflöt	8
Octave	4
Koppelflöt	4
Nasat	$2^2/_3$
Superoctave	2
Terz	$1^3/_5$
Mixtur	V
Dulcian	16
Trompete	8
Krummhorn	8
Tremulant	

II. Hauptwerk

Praestant	16
Octave	8
Spitzflöt	8
Flöt travers	8
Octave	4
Hohlflöt	4
Quint	$2^2/_3$
Superoctave	2
Cornet	V
Mixtur	V-VI
Fagott	16
Trompette	8
Tremulant	

III. Unterwerk (enclosed)

Lieblich Gedackt	16
Principal	8
Bordun	8
Salicional	8
Unda maris	8
Octava	4
Nachthorn	4
Flagiolet	2
Mixtur	V
Basson	16
Trompette	8
Oboe	8
Clairon	4
Tremulant	

IV. Oberwerk

Suavial	8
Copula major	8
Quintadena	8
Octava	4
Copula minor	4
Violetta	4
Hörnli	II
Fletl	2
Oberquinte	$1^1/_3$
Mixtur	IV
Trompete	8
Vox humana	8

Pedalwerk

Bordun	32
Principalbaß	16
Subaß	16
Octavbaß	8
Flötbaß	8
Choralbaß	4
Rauschpfeife	V
Kontraposaune	32
Posaunenbaß	16
Trompetenbaß	8
Trompette	8
Schalmey	4

Accessories

Wind stabiliser (winkers)
Echo (opens Unterwerk rear louvres)
Nachtigall (bird song)
Zimbelstern