

# Auditoria

Annual 2012

**Stone rose**  
Zaha Hadid's pebble-inspired  
opera house blossoms in Guangzhou

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**Frank Gehry's brave New World**

**The Mariinsky, St Petersburg**

**Musical youth: attracting new audiences**

**A Canterbury tale: Marlowe Theatre**



**The opening gala concert in the Dora Stoutzker Hall at the Royal Welsh College Of Music & Drama in Cardiff**

# Building for the future

How do you turn an exceptional performing arts college into a world-class teaching facility? Theatre Projects looks at how a new building project for the Royal Welsh College of Music & Drama did just that

The Royal Welsh College of Music & Drama (RWCMD), or to give it its official title Coleg Brenhinol Cerrd a Drama Cymru, has recently extended its facilities to include a world-class performing arts centre to rival some of the best facilities in the UK. The new centre adjoins and enhances the college's existing facilities, giving a nod to the illustrious past of the college, while adding two outstanding performance spaces, drama rehearsal studios and an exhibition gallery.

Drawing on the experience of international theatre consultants Theatre Projects, award-winning BFLS Architects (formerly Hamiltons), and internationally-renowned acousticians Arup, the design project placed the needs of the users at the very heart of their creative process. The new centre carefully balances the primary requirements of the facility to teach students their craft, and the provision of a much-needed venue for the local community to enjoy. The spaces are designed with optimal functionality in mind and with the versatility to accommodate student learning as well as professional events. College principal Hilary Boulding outlined her hopes for the project as a venue that would "significantly enhance opportunities in the city and region of Cardiff, and the many professional and community groups that contribute to Cardiff's vibrant cultural life".

The college's ambitious brief was no easy task. The Welsh have become synonymous with great artistic talent, and designing a facility to contribute to such a culturally rich region needed to take the provision of other arts centres in the region into account, not least the nearby Sherman Theatre and St David's Hall, which have both served the college's performance needs in the past. The BFLS-led design team approached the design challenge pragmatically, designing the performance and rehearsal spaces for the college "from the inside out, for acoustic excellence and theatrical intimacy", as project director Jason Flanagan explains. To achieve this, the design team drew on their combined experience of creating other complex performing arts facilities, such as The Sage Gateshead, which Flanagan helped design while working at Foster + Partners, and which also involved a strong collaborative relationship with both Theatre Projects and Arup Acoustics.

## ROYAL WELSH COLLEGE OF MUSIC & DRAMA



Nick Cuttridge/BFLS



BFLS

But the importance of this £22.5 million project is best understood by looking at the college's humble beginnings. Established in 1949 as the Cardiff College of Music, the only facilities were two rented rooms in Cardiff Castle. The immediate post-war years saw other new performing arts schools springing up around the UK, including Bristol Old Vic School, Rose Bruford College and the Glasgow College of Dramatic Art (which later became the Royal Scottish Academy of Music and Drama). But it wasn't until 1977 that the Cardiff College of Music expanded to include drama training and relocated to purpose-built accommodation. It also changed its name to the Welsh College of Music & Drama to reflect its expanded curriculum.

Interestingly, the college still promotes the teaching of music above drama, with only a third of its 640 students studying theatre-related subjects. But the quality of its acting alumni is also world class, as demonstrated by notable luminaries such as Sir Anthony Hopkins, Keith Allen, Dougray Scott, Rob Brydon, and Eva Myles. The college's growing reputation as an institute of excellence was recognised in 2002, the year of the Queen's Golden Jubilee, when it received its Royal title.

### Diverse offering

It was clear at the turn of the millennium that the college's theatre spaces were no longer sufficient for their ever-growing need for modern performance training facilities. The college had



Nick Cuttridge/BFLS

**The striking exterior (above and top left) contrasts with the warmth of the Dora Stoutzker Concert Hall (centre)**

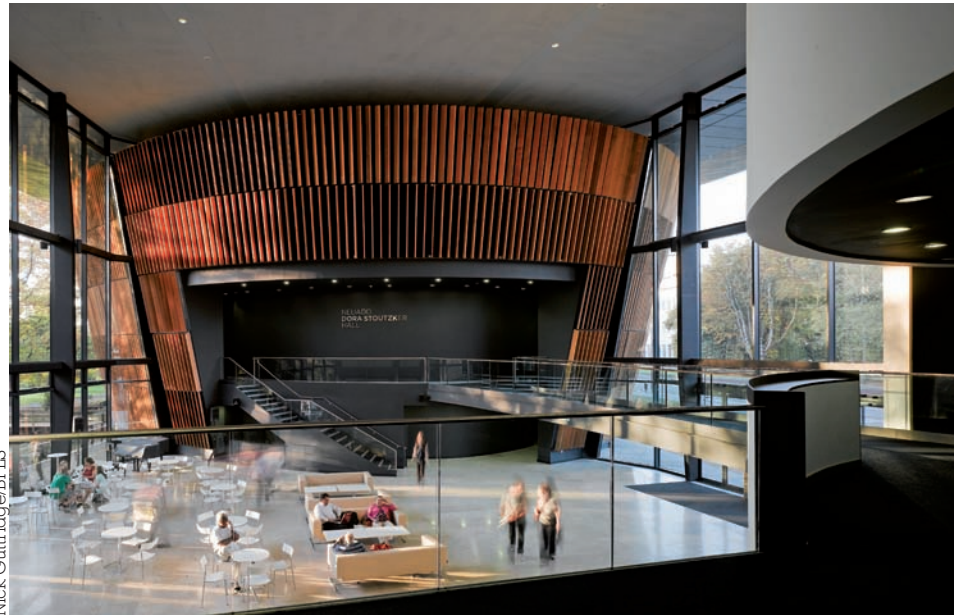
followed the national trend in expanding undergraduate and postgraduate courses to offer more diverse subjects than the previously simple music, acting, or stage management training. This increased variety of courses, coupled with greater demand for places and competition with other international colleges, happily coincided with the boom in lottery-funded new performance buildings in the education sector. RADA and the Central School of Speech and Drama in London both benefited from major renovation or expansion projects, and RWCMD duly followed suit. The new facilities were opened on 23 June 2011 with a week-long residency of the Welsh National Opera.

### Performance spaces

The design of the building mimics the differences in the main performance spaces – the 450-seat Dora Stoutzker Concert Hall (the first purpose-built chamber recital hall in Wales) and the 160-seat Richard Burton Theatre. The building has formal rectangular, straight-walled sections that reflect the formal square shape of the proscenium-arch theatre, while the concert hall's more informal oval shape is emulated in the playful curved design at the back of the theatre, masking where the new facilities adjoin the original 1970s building. Each performance space also has its own aesthetic identity, with building materials sourced from around the UK – Portland Stone clads the theatre as a reference to the adjacent Cathays Park, and Western Red Cedar decorates the interior of the concert hall.



Nick Cuttridge/BFLS



Meanwhile the bright and elegant foyer is a remarkably open and communal area, much like the park behind it. And despite its huge volume, it remains intimate and inviting. The timber-clad concert hall and white-walled theatre face each other at opposite ends of the foyer, their distinct façades suggesting the different performance environments within. Although strikingly different in design and purpose, the two spaces complement each other well.

From the outset of the project, it was clear the main performance spaces required careful consideration. The client's brief was to design a proscenium-style theatre to international performance standards, and a world-class recital hall. The specification for the latter was a critical factor of the project. Cardiff already had a large concert hall, but no venue for smaller, more intimate work. RWCMD's new concert hall was designed with this in mind. It would provide both a private training facility for students and a public venue to attract major professionals to play, thus increasing both revenue and status for the college. This is where Theatre Projects' extensive experience came into play, having designed similar educational facilities for RADA, the Guildhall School of Music and Drama, Cheltenham Ladies' College, and the Irish World Academy of Music and Dance.

Theatre Projects' project manager for RWCMD, Petrus Bertschinger, explains that the Richard Burton Theatre was designed to "provide students with the understanding and facilities of the most common venue type they'll encounter



Nick Cuttridge/BFLS

**The open foyer (top right) and the Richard Burton Theatre (above)**

in their professional careers." Theatre Projects designed and specified the stage to be equivalent to a medium-sized repertory or touring house; it has a full-height grid with 28 counterweight lines, fly and loading galleries, adequate wing space, and a shallow forestage. It has an ample scenery dock, with doors opening onto the road, and generous production facilities – technical stores, scenery and prop making, wardrobe and wigs. These support spaces mainly remain in the original building and are moved to the theatre for fit-ups, mirroring the set-up in a professional scenario.

Theatre Projects also designed the lighting and sound technical infrastructure with both conventional dimming for lighting as well as plenty of data, DMX, and fibre lines throughout to manage the contemporary demand for intelligent lighting, digital sound and controllable special effects. Above the auditorium is a tension wire grid for rigging front (face) lighting and a motorised forestage truss bar for specialist sound, stage, or lighting provision. Bertschinger explains: "The auditorium is an ideal and very practical space that'll enable students to design and produce a range of theatrical styles in a conventional UK-style setting. It's large enough for students to learn essential performance techniques like voice projection or technical production in a realistic professional setting, while still being small enough to nurture their talent in an intimate environment."

While the proscenium theatre is a very functional space, the Dora Stoutzker Concert

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**The college is situated  
in leafy Bute Park**

Hall is a stunningly beautiful room, shaped like a boat with an oval form on two levels, higher at the back than the stage end. The stalls seating gently slopes down to a raised stage with motorised platforms built within, able to form different levels for different orchestral settings. In addition, a pit elevator can replace the front two rows of seats and provide a forestage for larger orchestra rehearsals or musical performances.

Between the balcony and ceiling, the walls are indented with a series of black vertical timbers which Arup designed to break up reflective sound. The timbers contrast against the black-painted walls and also collectively focus attention on the audience and performers rather than the room itself.

### **Functional design**

BFLS, Theatre Projects, and Arup worked closely together to design this room so it's as functional as it is beautiful. The ceiling was designed as a series of undulating waves, painted in old-gold from front to back to reflect the warmth of the seating below and the acoustic requirements of the room. The waves of the ceiling discretely hide the platform lighting, mounted on bridges above the ceiling, and projected through glazed openings cut into it.

As Jason Osterman, production lighting consultant for Theatre Projects, explains, "what's special about this space is that we've managed to make it work where other venues don't quite get it right. The lighting positions are perfect without compromising the look of the room or its acoustic quality".

Ian Knowles, who led the Arup team, continues: "The occupied reverberation time is 1.7 seconds, perfect for strings and similar concerto performances. It sounds superb. This is

a world-class chamber music recital room – a room that does what it says on the tin."

Without doubt, the concert hall has been perfectly designed for acoustic music, but the college also needs it to work for amplified music or brass, which in turn required the room's acoustics to behave very differently. The ability to alter the reverberation time (RT) of a small concert hall has been a recent holy grail in performance design. This hall has gone far in that development.

In addition to the motorised platforms that can change the size and shape of the orchestra/band stage arrangement, Theatre Projects specified four over-stage NOMAD controlled flown truss bars for suspension of speakers, lighting, screens, or drapes for pop or rock shows. To help with the change in RT, lower timber wall panels behind the stage can be changed from hard to soft surfaces, while 48 acoustic blinds on the balcony walls can be remotely lowered between the timber verticals. This makes it possible to accurately tune the room to whatever RT rating is required.

RWCMD's new facilities have high expectations to live up to. They fill a gap in the cultural provision of the local community, but more importantly they're now an indispensable tool for many students to learn their craft. The real test of any design project is how it is received by its users and community – not just on opening night but for the years that follow. This stunning new centre is a fitting contribution to the college's philosophy of promoting a lifelong interest in the performing arts and supports the college's position as the National Conservatoire of Wales. ■

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