Japan’s New National Performing Arts Center

Takahiko Yanagisawa

TAK Associated Architects Inc., 1-7 Kanda Nishiki-cho, Chiyoda-ku, Tokyo 101, Japan

Abstract: Japan’s first National Performing Arts Center, a ‘theater city’, was opened in the Shinjuku district of Tokyo in the Fall of 1997. The center is composed of the New National Theatre, which was the winning design in an international architectural competition in 1986, and Tokyo Opera City*. The whole complex covers a total area of 11 acres. The New National Theatre includes an 1,810 seat opera house, a 1,010 seat drama theater and a small experimental theater, while Tokyo Opera City boasts a 1,636 seat concert hall as well as a 54 story office tower, shops and restaurants. (*TOC was designed as a joint venture of TAK Associated Architects, NTT Power and Building Facilities and Urban Planning Design Institute).

SANCTUARY OF MEMORABLE EXPERIENCES

The theater or hall is a place where one is able to experience directly the power of humanity. The live, sensory information that is physically transmitted by the people on stage is also perceived physically by the members of the audience. The theater is therefore a place where there is direct, 'heart to heart' communication between people. This mutual exchange of energy and innervation of the five senses creates a place of great intensity.

We now have the ability to exchange information at an extraordinary rate, but at the same time we seem to have fewer and fewer opportunities of experiencing genuine excitement and emotion at first hand. In this context it is the theater which must become a 'sanctuary of memorable experiences'.

The theater/hall space facilitates the exchange of energy through a multi-faceted network. It goes without saying that this network includes the exchange between those on the stage and the audience, there is also however, an extremely powerful force which results in the unconscious bonding between the members of the audience as they co-exist in space and time. The excitement of the theater is to be found in those moments in which the performers on stage and the audience become a single, unified entity. It is therefore necessary, when designing theaters and halls to create spaces which heighten the whole range of human senses. Of course, in this respect sound is second to none in its importance.

THE SHAPE OF THE HALL

The design of the hall itself must be based upon principles that intensify the exchange of energies described above. We felt that the best way to achieve this was to have the people in the audience positioned so that they surround the stage as much as possible, and in the design of this Performing Arts Center each of the

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theaters and halls is based upon this principle. In particular it was felt that the role of the balconies, both in reflecting the sound and in encouraging empathy amongst the members of the audience as they face each other across the hall, was very important.

In the Opera House of the New National Theatre multiple balconies are wrapped around the hall on three sides, while in plan the overlaying of a fan-shaped geometry with a rectangular geometry has resulted in a new kind of opera house.

The Playhouse of the New National Theatre is a unique drama theater which can be transformed speedily from proscenium stage format to an open stage format.

The Experimental Theater is a small, flexible space which can be used in a variety of stage/audience formats and which has an intimate atmosphere in which the audience seems to share the stage with the performers.

On the other hand, the Concert Hall of the Tokyo Opera City complex, which neighbors the New National Theatre, combines a rectangular plan form with a dramatic pyramidal section. It represents a totally original conception of the concert hall space.

Each of these halls represent years of work, and we believe that they all provide rich acoustic environments, while each represents a new departure for its genre of theater space.

THE ACOUSTIC DESIGN TEAM

The intensity of the theater/hall space is generated by the exchange of sensual information. In particular, if one considers the acoustics of the hall as paramount, the sense of hearing becomes the ultimate judge of its success. In this case the analysis of physical acoustical data represents, at the most, an important process in the making of an optimal acoustic space.

We employed a new design method which involved overlaying our evaluation of the latest scientific data with the sensual evaluation which was made by actually listening to the halls' acoustics. In addition, the architectural design team visited many of the world's great halls with the acoustic design team to listen and take measurements. The group dynamics of the multi-disciplinary design team contributed to a more profound understanding of each of the specialist fields of architectural design and acoustical design, but it also produced a synthesis which went beyond the limits of any particular specialist field to create a unified team. It was in this spirit that we approached the design. We believe that the design of these halls shows that in order to create original theater spaces it is absolutely vital that the organization of the design team should allow a more organic relationship between the specialist fields.