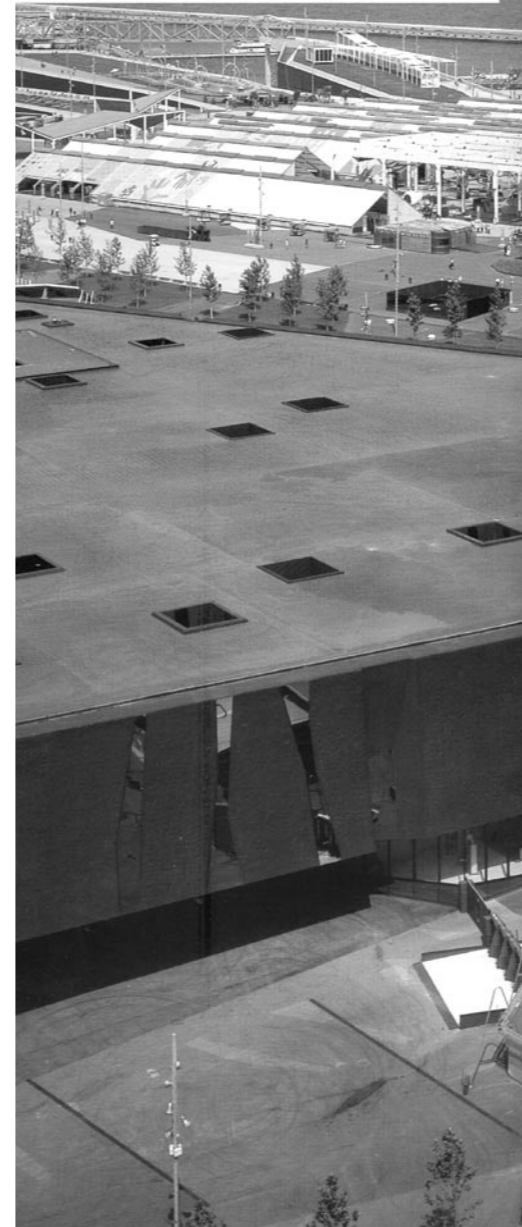


4. Precedent studies

4.1 Precedent study 1: Forum 2004, Barcelona, Spain



Fig. 47 *Forum 2004*, Barcelona, Spain (Futagawa 2005:33)



Design: 2000

Construction: 2001-2004

Architects: Herzog & De Meuron - Carlos Bautista, Aeneas Bracklo, Béla Berc (Modelbau), Marcos Carreño, Maria Flaccavento, Alex Franz, Silvia Gil, Albert Gonzalez, Jacques Herzog, Matthias Hilgert, Blanca Hueso, Ana Inacio, Luis Jativa, David Koch, Nicholas Lyons, Ana Marques, Ascan Mergenthaler, Pierre de Meuron, Marta Mitjas, Julio Muñoz, Holger Othmar, Christopher Pannett, Nuno Ravarra, Aurora Rebello, Miquel Rodriguez, Mónica Serra, Yoana Urralburu, Stephan Wedrich, Mika Woll

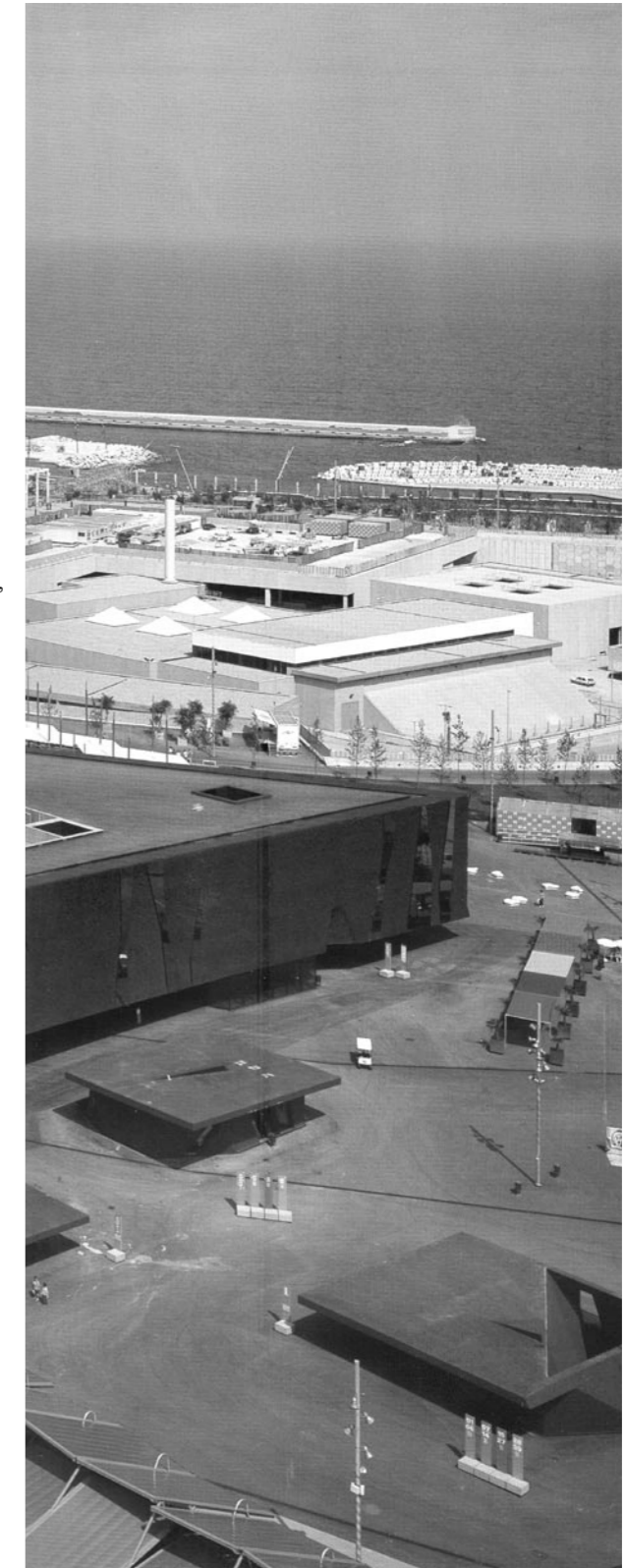
Client: Ayuntamiento de Barcelona represented by Infraestructures del Llevant de Barcelona S.A.

Program: auditorium (3200 seats), exhibition space (8000m²) and public spaces

Site area: 16 000 m²

Built area: 13 000m²

The triangular building provides no enclosure to the plaza. Space is defined using trees, level differences and various types of objects.



The Forum 2004 site is located at the end of Avenida Diagonal, where Barcelona meets the Mediterranean. The street is connected to a new artificial platform, spanning over the Ronda Litoral. The area was formerly occupied by an industrial installation, with a residual water treatment plant and a petrol station (Herzog & De Meuron 2004:108). According to the brief this site was to become an architecturally organised and well-defined space, in a period of three years. The aim was to turn this area into the most important district of twenty first century Barcelona.

Barcelona is a European metropolis that uses its outdoor spaces as a living room (*ibid*:108). These are the sites of social interaction. Instead of designing the building as an independent object within an open space, the design team chose to use the building to generate and organise the environment. Traditional urban proportion systems, such as the one to four, building to space ratio, are eschewed by lifting the triangular building of its artificial plane. This provides shade to the plaza and allows unobstructed use of the ground plane. Gradual level differences provide variety and lead the pedestrians toward the views of the Mediterranean. Space is defined with trees and the placing of various architectural objects.

The design team chose to add programs in order to generate and maintain vitality and interaction (*ibid*:108). These include an open market space with a large fountain, a meditative place around a dripping water courtyard, a small intimate chapel, a bar, a kiosk, and various other facilities that complement the conference and exhibition centre. The programs cater for tourists and citizens, cultural enthusiasts and conference attendees, the young and old. The interior spaces adapt easily to the changing program – the auditorium is neither a conference centre nor a philharmonic music hall, the exhibition area is neither a conventional centre nor a classical museum space.

Forum 2004 demonstrates that contemporary urban space can be defined by lifting the building mass above the ground plane, with level differences, the placing of objects and trees. A variety of programmes lead to a variety of users, which in turn results in the vitality of the project.

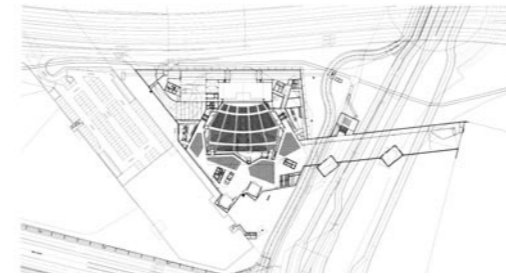


Fig. 50 Forum 2004, Barcelona, Spain
Level -1 ()



Dark green indicates the objects spread through the plaza instead of framing it. Triangular shape is the building overhead providing shade.

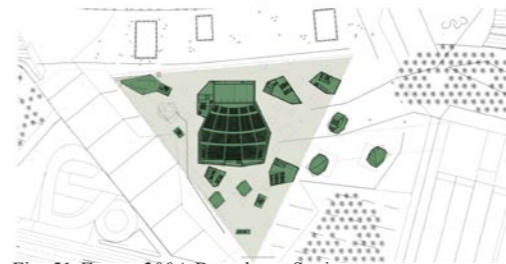


Fig. 51 Forum 2004, Barcelona, Spain
Plaza level ()



Fig. 48 Forum 2004, Barcelona, Spain (Herzog & de Meuron 2005:33)
Artificial platform functioning as

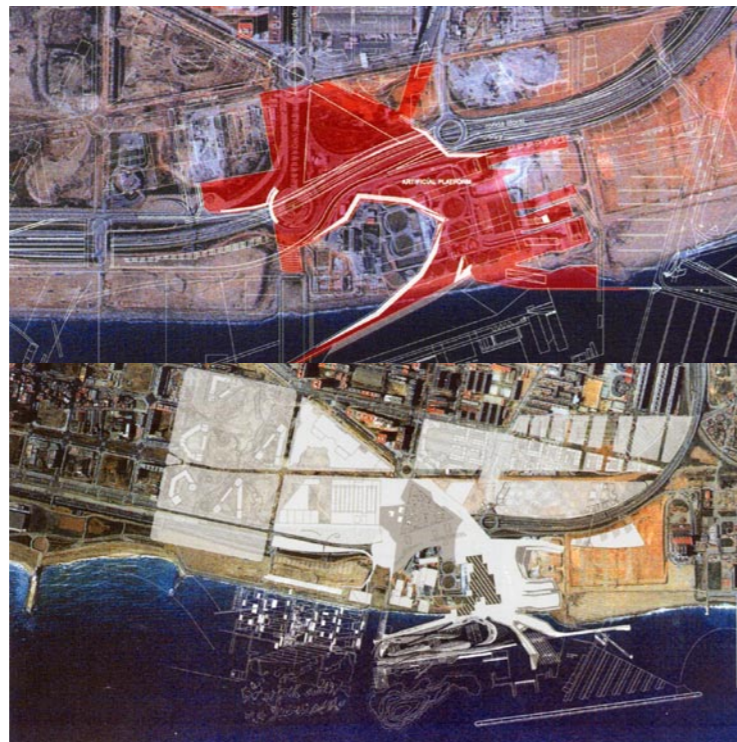


Fig. 49 Forum 2004, Barcelona, Spain (Herzog & de Meuron 2005:33)
Site plan illustrating the various spaces



Top: Fig. 52 Forum 2004, Barcelona, Spain
North facade (Author 2004)

Above: Fig. 53 Forum 2004, Barcelona, Spain
View from below through a roof opening (Author 2004)

The triangular building is lifted from the plaza, providing shade. Some of the objects spread through the plaza can be seen, in this instance, doubling as a skateboard ramp.

Fig. 54 Forum 2004, Barcelona, Spain
View from below the triangular building, as it is lifted of the plaza, providing shade (Author 2004)

4.2 Precedent study 2: Heys Memorial Hall parking, Sunnyside, Pretoria

Proprietor: City of Tshwane
 Design: Public waste department
 Construction: Unknown
 Architects: City of Tshwane municipality
 Program: Parking lot for Heys Memorial Hall, play park, public swimming pool and housing

The parking lot is situated on the corner of Kotze and Bourke Street in the high density residential suburb of Sunnyside. It is adjacent to the Heys Memorial Hall, which is rarely used. On one of the corners a well maintained play park is frequented by the children of the neighbourhood. On another corner a public swimming pool is located, and on the remaining corner another block of flats.

Because of a lack of management, the parking lot is available for any purpose. No fences restrict access to the site and nobody prevents the use of the terrain. The parking lot is quiet during the week, and is mainly used as a practice area for learner drivers. But over the weekends an informal gathering of men between the age of 20 and 40 takes place. These men come together to have their cars washed whilst sitting in the shade talking and listening to music while watching others doing the chore. By means of the smallest cultural element, the music, the site is appropriated. Exchange takes place between those who wash the cars and those whose cars are being washed. One of the important purposes of the gathering on the weekend is showing – what car you are driving and what clothes you are wearing.

This parking lot next to the Heys Memorial Hall proves that open spaces with no predetermined function do have a role in the city. The unprogrammed nature of the parking lot/terrain has a built-in flexibility that can accommodate change over time. Furthermore, it is clearly evident that location and proximity play a vital role. By designing a public space that caters for the needs of the neighbouring habitants, the success of the public space is ensured.



Fig. 57 Aerial of part of Sunnyside (public swimming pool not yet built) (Author 2006)



Fig. 58 Parking next to Heys Memorial Hall on the weekend (Author 2006)



Fig. 55 Heys Memorial Hall (Author 2006)



Fig. 56 Heys Memorial Hall and its parking during the week (Author 2006)



Fig. 59 Play park on the corner of Kotze and Bourke Street on the weekend (Author 2006)



Fig. 60 Parking next to Heys Memorial Hall on the weekend (Author 2006)

4.3 Precedent study 3: Central Station, Rotterdam

Design: 2001

Architects: Alsop & Störmer (William Alsop)

Client: *Breeze of AIR*, AIR Foundation (Architecture International Rotterdam) – an interdisciplinary event on the subject of public garden

Program: Flamingo pool, aquarium, terrarium, housing, offices, shops, train station, tram stop, bus stop, parking and a public space

The project was for the expansion of Rotterdam's Central Station into a terminal in order to house the high-speed railway line (Atelier Quadrat 2002:58). Housing, offices, shops, urban entertainment facilities and parking had to be accommodated in the twenty hectare site around the terminal.

According to the design team contemporary cities are characterised by compartmentalization and concentration with unattractive connections in-between (*ibid* :58). The station area was considered to be a peripheral zone with very little interest to the north of it. A requirement of the design team was that the station area had to be an attraction in order to entice residents and visitors to cross the traffic artery. By changing the morphology of the station area, so that it is not the edge of the centre, new links were established with existing urban areas further away, making the decentralization and expansion of urbanity possible. Also, new links were forged with existing and interesting urban activities.

The design team chose to provide the conditions for change, growth and interaction, because it is not possible to plan for it (*ibid* :58). The conditions were given form through structure. The structure can exist on many levels. For example, a garden can include a number of gardens, in which the group of gardens forms a whole. Because of the structure the project as a whole can work; private, collective and public initiatives can flourish (*ibid* :58). The design team chose to design the station area as a neutral public space with the potential for various public and private activities as well as growth and development beyond the planning area.

With this project the importance of the east-west streets such as Middellandstraat, Binnenweg and Hoogstraat were reduced and the north-south axis became more prominent. The railway tunnel was placed underground in order to create continuity between north and south. On top of the railway tunnel a public space was created where tourists, commuters, city residents and travellers would be able to meet and interact. The metro station, car parks and cycle shelter was placed underground with the tram and bus stops at street level. The public space became an annex for Rotterdam's Blijdorp Zoo with a flamingo pond, a terrarium inhabited by monkeys and an aquarium containing fish.

Rotterdam's Central Station uses a strategy of enticing users to an area with little interest, by placing leisure amenities in it. It also illustrates that in order to bridge an infrastructure barrier, ease of movement across the barrier and permeability is important. The project serves as a mixing-chamber for different social, cultural and economic groups – fostering social cohesion.

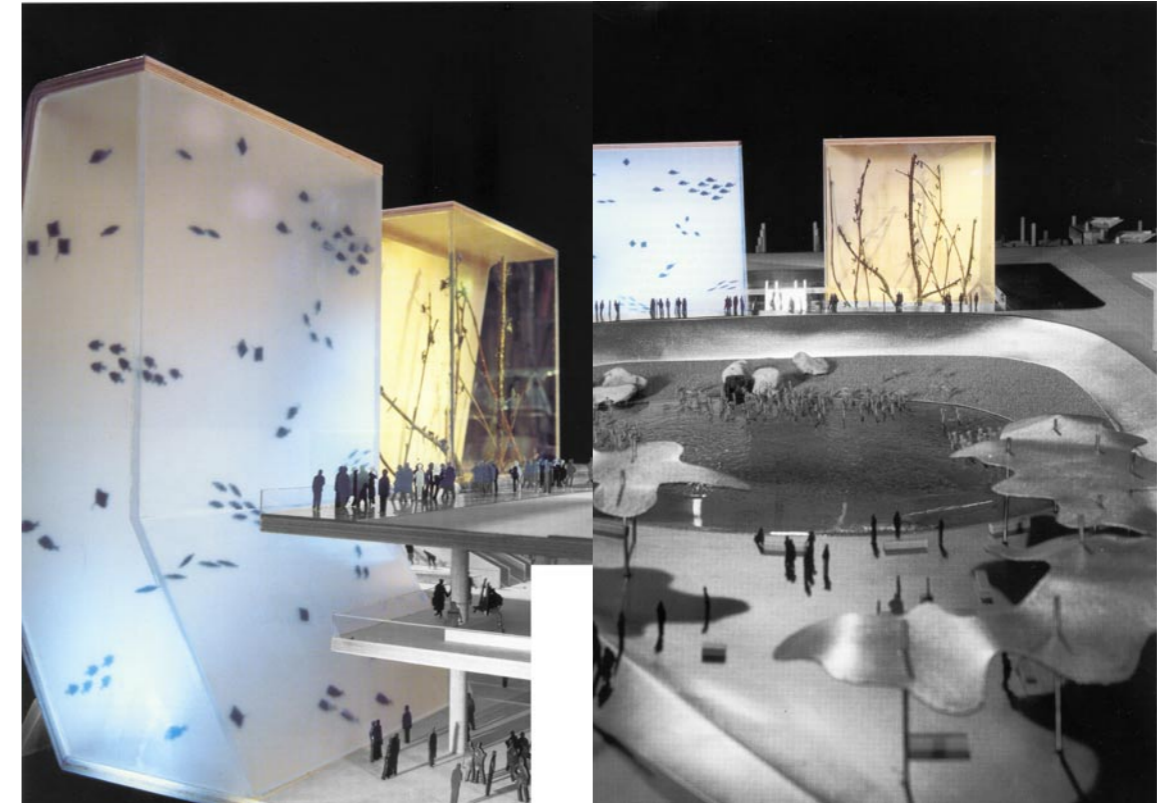


Fig. 61 *Central Station*, Rotterdam. Terrarium, aquarium and underground station concourse (Atlier Quadrat 2002: 64)

Top-right: Fig. 62 *Central Station*, Rotterdam. Flamingo pool with terrarium and aquarium at rear (Atelier Quadrat 2002:65)

Bottom-right: Fig. 63 *Central Station*, Rotterdam. Future scenario: redevelopment of station area after extending railway tunnel as a linking structure (Atelier Quadrat 2002:61)

Bottom: Fig. 64 *Central Station*, Rotterdam. Section including metro shuttle to Blijdorp (Atelier Quadrat 2002:63)

