

06

PRECEDENT STUDIES

A precedent should be studied to stimulate the designer, whilst informing the design process.





Fig. 69



Fig. 70



Fig. 71



Fig. 72



Fig. 73

Ecoboulevard Vallecas

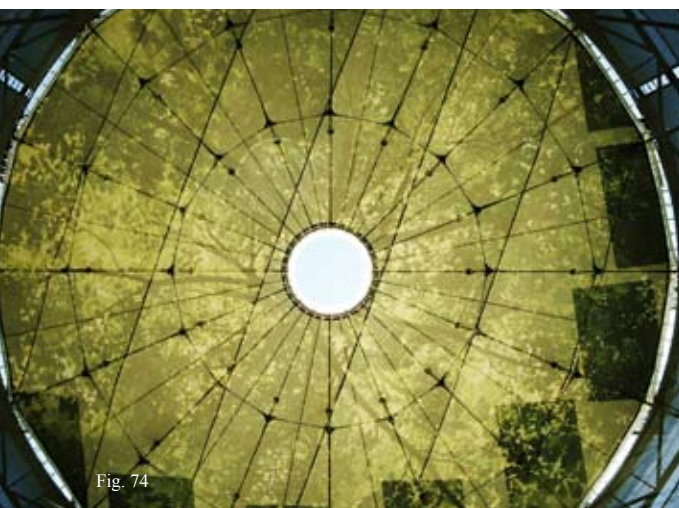


Fig. 74



Fig. 75

Architects: Ecosistema Urbano: Belinda Tato, Jose Luis Vallejo, Diego García-Setién
Location: Pau de Vallecas, Vial C-91, Madrid, Spain
Client: Land and Housing Municipal Company, Madrid Council, Directorate of Residential Projects Innovation
Year: Phase I 2004-2005, Phase II 2006-2007
Structure: Tectum Ingeniería, S.L. (Constantino Hurtado)
Services: IP Ingeniería
Botany: Ignacio López



Fig. 76



EUROPE

SPAIN

MADRID

ECOBOULEVARD VALLECAS, ECOSISTEMA URBANO, MADRID, SPAIN, 2005

Problem statement: Lack of green public space in an urban desert.

Aim: The project attempts to plant a ‘seed’ for public space achieving regeneration through a series of stages. Within these stages ‘air trees’ are erected as multifunctional public spaces. The conservatory allows the urban dweller to interact with tree saplings. The saplings

are nurtured to maturity to be introduced into the surrounding landscape.

Outcome: The project provides a much needed green social gathering space. It establishes a sense of community. Furthermore, it offers amelioration to its direct area and the urban fabric. The resource efficient design makes use of passive systems to perform as wind catcher and water atomizer to create a desirable microclimate. The urban intervention seeks to screen the harsh climatic conditions, yet it uses

these forces to create a life supporting environment. The air trees provide a space that can be reprogrammed and even disassembled. It defines a “place for people whose shape is defined by the very activity developed in it at a given time” (Archdaily, 2008: [sp]). The temporary intervention leaves behind a green residue and may be disassembled once the trees have been planted, to be re-erected on another site.

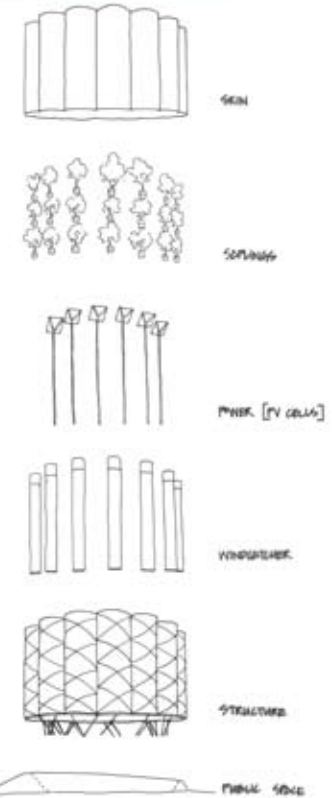
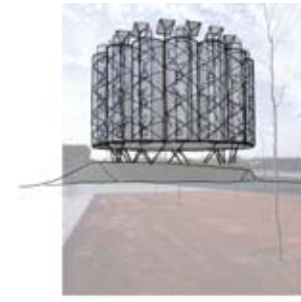


Fig. 77 Illustration of components

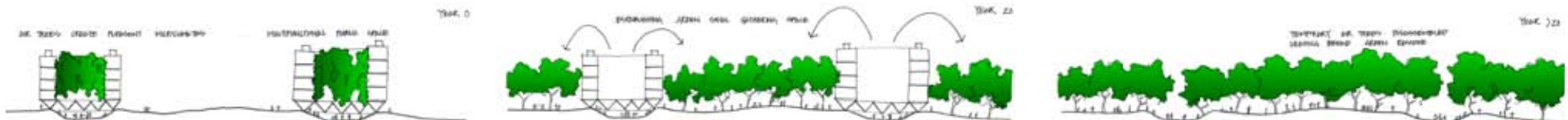


Fig. 78 Illustration of process

Sainsbury Centre for Visual Arts



Fig. 80

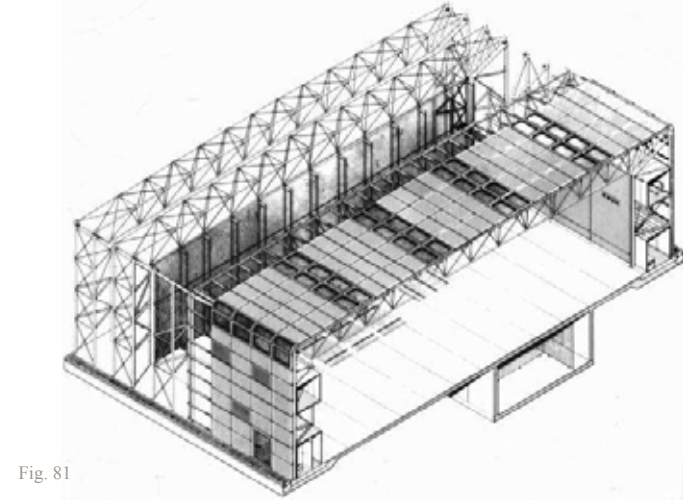
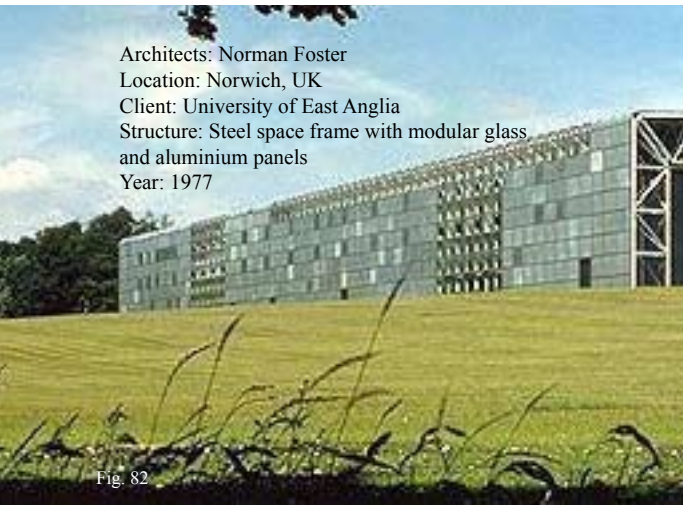


Fig. 81



Architects: Norman Foster
Location: Norwich, UK
Client: University of East Anglia
Structure: Steel space frame with modular glass and aluminium panels
Year: 1977

Fig. 82

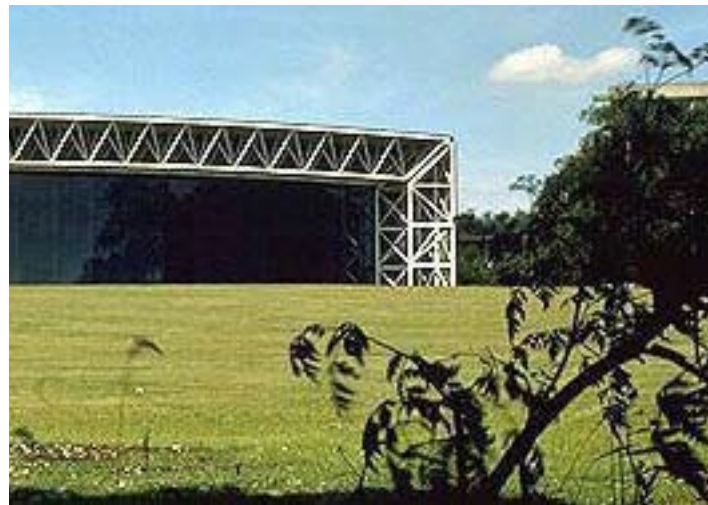


Fig. 83



Fig. 84





EUROPE

UK

ENGLAND

SAINSBURY CENTRE FOR VISUAL ARTS, NORMAN FOSTER, NORWICH, UK, 1977

Problem Statement: The need for exhibition space.

Aim: To design a reprogrammable served space separated by an internal building skin from the space hosting an internal service core.

Outcome: The Sainsbury Centre for Arts was designed as an extendible public art shed. Its structure is capable of accommodating future expansion and adaptability in programme. The

interchangeable white walls and roof of the external building envelope relate as one form. However, both planes are composed of modular panels enclosing an extensive steel space frame replicated along its length offering opportunity for linear extension. Internal public and private space is infused with one another while remaining discernible. It maintains a high degree of adaptability in programme and flexibility in space utility. Sir Norman Foster conceived the design by means of an integrated systems approach “based on the integration of structure and services and the swift assembly of prefabricated

components” (Best, 1984: [sp]). The services, life support, are accommodated within the space frames and are concealed by the modular external and internal panels. The external building envelope protects the contents from the elements, whilst the internal envelope houses the programme.

The serviced shed can be described as: “a minimal, industrialized building type with an envelope that provides maximum internal volume, while support systems and functions are localised, usually within the cavities of lightweight lattice steel

walls, floors and ceilings” (Porter, 2005: [sp]).

Best offers a more simplistic view of the serviced shed: “A lightweight kit of parts tuned to respond to growth and change” (Best, 1984: [sp]).

Possible shortcomings: Although the panels are modular and therefore exchangeable, they are custom made. Additions to the structure without intervening with the structural steel trusses are only possible in a linear direction.

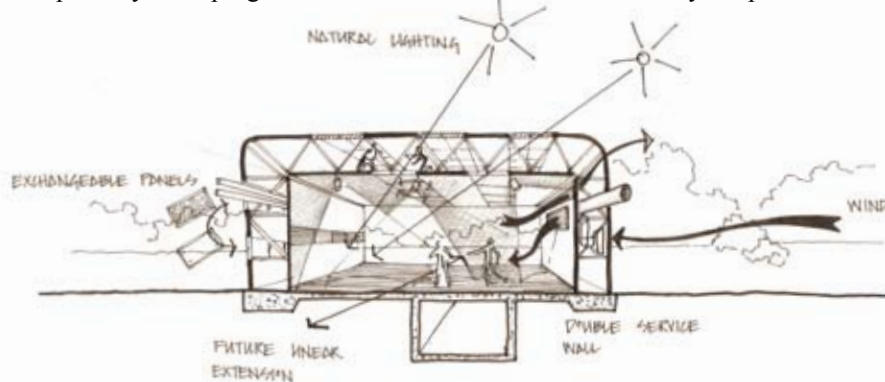


Fig. 86 Sectional perspective

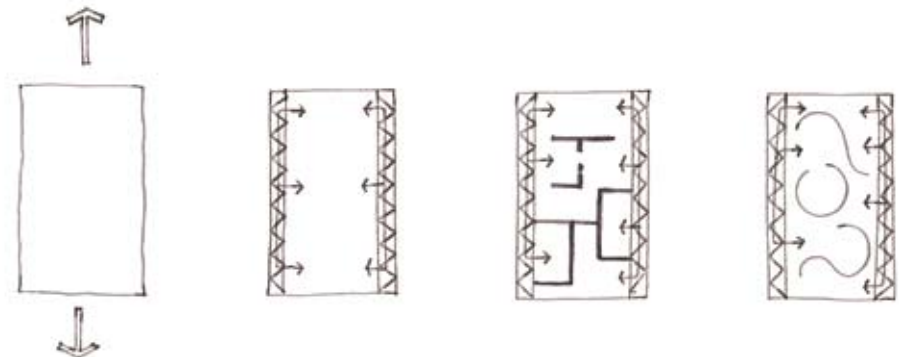


Fig. 87 Open plan allowing for extendable and adaptable exhibition space