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# International precedent studies

## dragen children's house

Architects: C.F.Moller  
Location: Odense, Denmark

### description...

"The fundamental architectural concept is a simple and clear geometric form on two levels, with the children's areas located in the best-lit southern end. The two levels are linked by staircases and ramps which are designed to stimulate and challenge the children's sensory and motor skills.

"There is far more space available than in traditional kindergartens," says Odense's councilwoman for Children & Young People's Services, Jane Jegind, "and there is a pedagogical idea to the interior design. The entire architecture is supporting the ambitions Odense Municipality has for the children's development - namely that they enjoy attractive and challenging surroundings for learning and growing."

As an example, the Dragen Children's House has small niches distributed throughout, where children can play, read or just withdraw. In addition, there are purpose-built spaces, giving the children special opportunities: there is a small theatre, atelier, motor skills room and pedagogical kitchens indoors and out.

The building respects the environment, energy-savings and not least the health of the children and employees. The highly insulated construction will consume less than 20 percent of the energy used for a standard building. Passive-houses built of healthy materials have also been proven to reduce the spreading of influenza, meaning fewer sick-days for children and adults.

The building is constructed from pre-fabricated wooden insulated wall segments, and generous glazed facades provide day lighting and passive solar heating. In addition the building integrates solar hot water and electricity generation and a mechanical ventilation system with heat recovery. A touch-screen at the entrance informs parents about the current energy-performance, and provides info and updates from the pedagogues" [Child's play 2009].

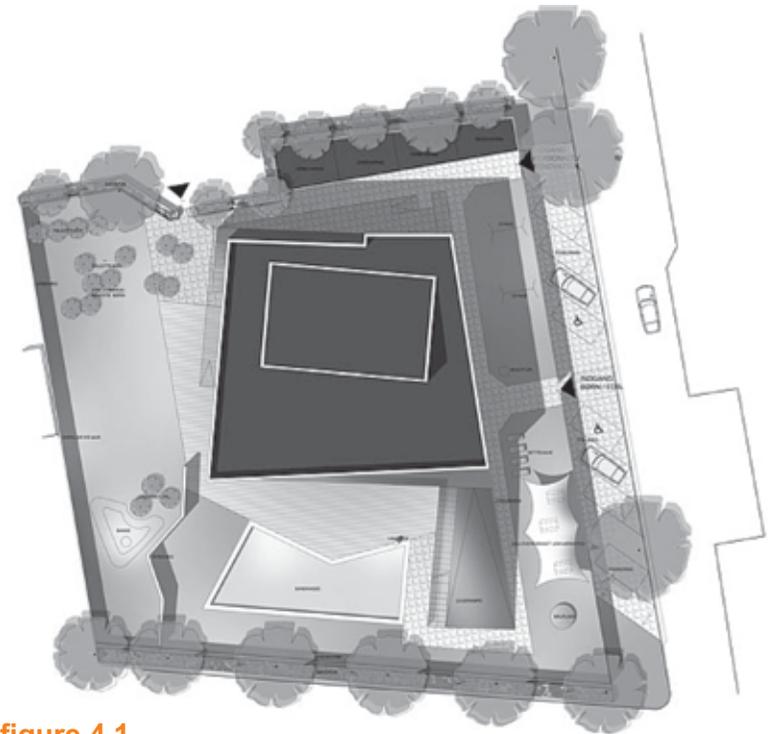


figure 4.1

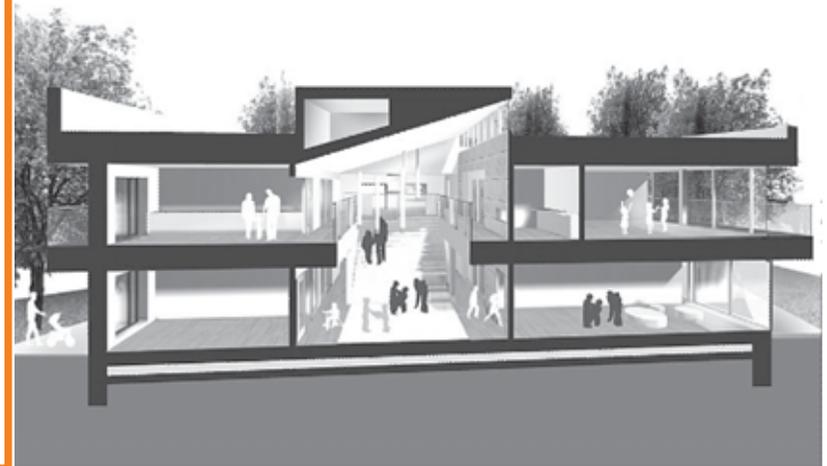


figure 4.2



figure 4.3



figure 4.4



figure 4.6

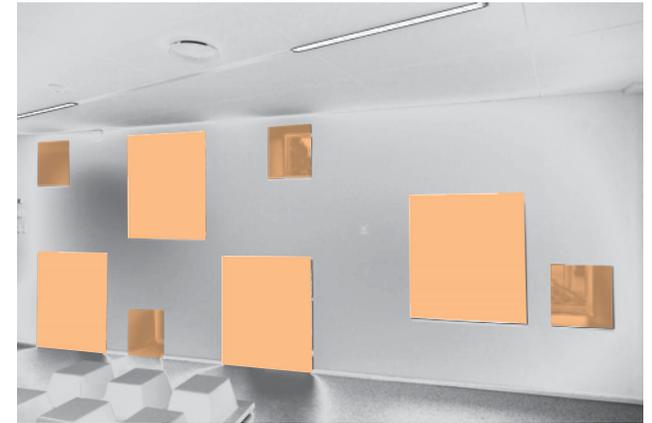


figure 4.5

## day-care centre [in skanderborggade]

Architects: Dorte Mandrup Arkitekter  
Location: Copenhagen, Denmark

### description...

“The building design is the result of the authorities' planning regulations and the call for the greatest possible connection between the outdoor areas of the ground and roof plans, taking optimal advantage of site's sun orientation. The building consists of two planes which extend to the boundaries of the site. One plane forms the ground terrain covering the contaminated ground, a second forms the roof. The ground terrain surface is folded upwards in such a way that it forms a hill or slope between the ground and roof.

The path of the summer sun from northeast to northwest traces the cut of the slope. The slope angle offers the best sun exposure to both the slope and the courtyard from the south and west. Underneath the slope forms an unheated space where a forest of columns is used for swings and other forms of play, when the weather is cold or wet. Two other light wells cut into the roof plane ensure daylight and a variety of outdoor space in conjunction with the other rooms of the building” [Brighten up the Neighbourhood 2009].



figure 4.7

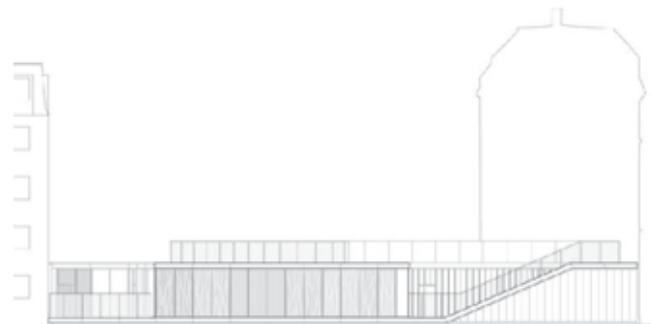
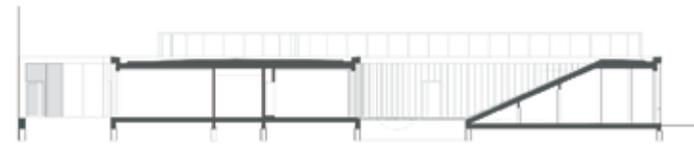


figure 4.8



figure 4.9



figure 4.10



figure 4.11



figure 4.12

## infant educational centre [collar vega]

Architects: Solinas + Verd Arquitectos

Location: Granada, Spain

### description...

“The project articulates itself around the idea of creating a permeable building, in which the relationship between exterior and interior spaces is always protagonist. The general disposition is based on two differentiated and complementary axes. The transversal axis concentrates most of the public services and administrative areas. The longitudinal axis corresponds to the teaching activity, where classrooms are located.

Access to the building is totally differentiated for persons and vehicles. The school looks in its perimeter for an alignment with the existing urban structure, through a wall dense enough to fulfil this task, but at the same time permeable to allow a view of the interior of the enclosure, thus we come to such a usual image in the popular architecture of wall that conceals a garden. The rows of poplars also help to qualify this picture of the interior and integrate with the surroundings.

The main entrance to the building is through a gardened atrium that groups around it the way of access, the administrative area and the dining room of the centre. The way of entry is covered by a projection of concrete that marks us the way and gives the scale of singularity that the building claims. The architectural solution of this centre avoids being pretentious and complicated, but it tries to give an individualized picture of architecture, reflecting its institutional character. It provides a comfortable, cheerful and clean setting, which contributes not only to facilitate the teaching, but also to develop in students habits of conviviality and good relationship with the school environment.

The multipurpose room has a central role in the configuration of the building being on both public and teaching space. Its position in the middle of the building is very appropriate to access from any classroom in a comfortable and efficient way. Next to the multipurpose room is linked the covered porch necessary for the children's recreation when the climatic conditions are adverse. This space placed in the middle of the common play area carries out its function of protecting from the rains during the winter days and providing shadows in the hot spring days. It has been orientated

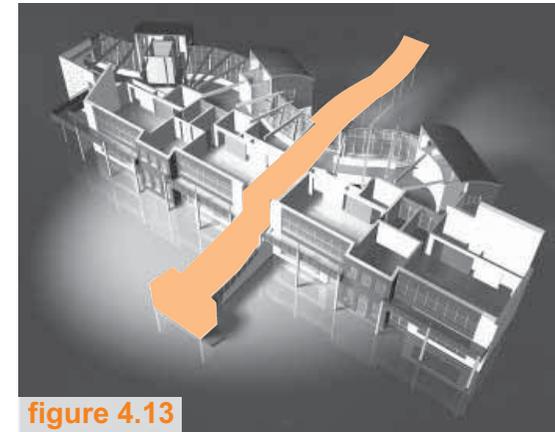


figure 4.13

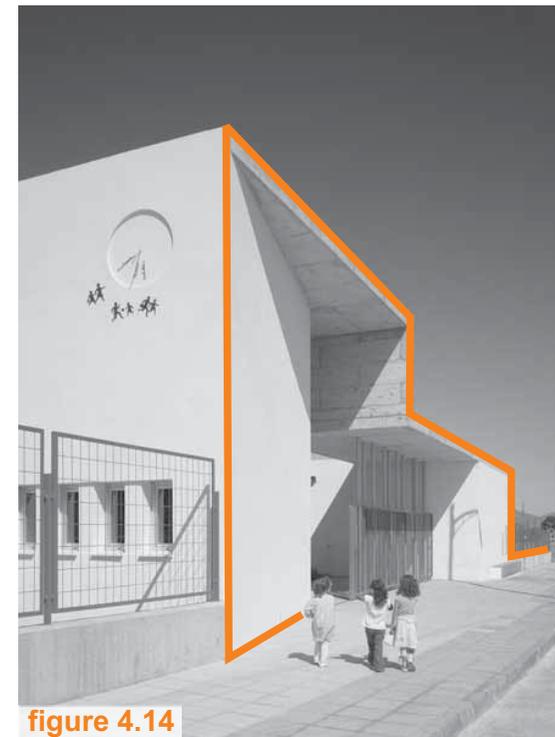


figure 4.14

towards the south to give to this area the best comfort possible...

...In fact the principal play-court has been placed in the south side of the plot to guarantee the maximum sunlight for this space during the winter. The shade of the black poplars will cool the court in spring time.

The exterior spaces treat each other in its entirety with materials adapted according to the uses, offering special attention to the representative zone. The exterior areas of games and outdoors... are placed next to the classrooms and incorporate sand pits, paved areas, etc. These outdoors classrooms have been projected, as complementary spaces, tied to the classroom, where it is possible to realize the school activity outside.

We seek a simple plant articulated around axes of minimal surface movement and allowing flexibility in the arrangement of spaces. Rectangular shapes were used. Likewise we considered the possible expansion of the centre with minimal difficulty and constructive distribution to the southern end of the plot. In the same way the concentration of the building promotes security, cleaning and maintenance of the building and at the same time reduces the cost of maintenance. The teaching activity is focused on the transversal axis, and distributes the students according to the cycles, grouping the three and four years-old ones in the northern zone and those of five years in the south of the building close to the principal court.

In the project the good integration has been kept in mind in its urban environment and its fitness to the bioclimatic conditions of the site taking the maximum advantage by the available orientations, the materials of the region, the aesthetic composition of the architecture, as well as the in force regulation for building and installations.

The choice of the sloping roof for classrooms' zone is connected with the dominant typology of the zone. The chapter of gardening has been kept in mind very much as integration element between the built space and the free space”

[Etherington 2010].

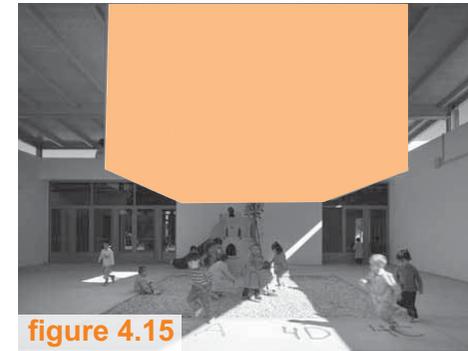


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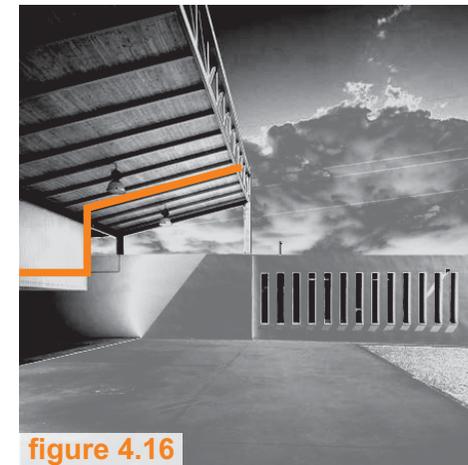


figure 4.16



figure 4.17

## comments...

### Dragen Children's House

#### Attributes

- Transition between levels made into an interior play feature
- Threshold of climbable ramp between inside and outside encourages the building to become a part of the playground outside
- Child-friendly interactive facades that accommodate for the anthropometrics of children

#### Shortcomings

- Although the building begins to interact with the landscape, far more could have been done to integrate the landscape and architecture

### Day-care Centre in Skanderborggade

#### Attributes

- Integration with city framework is interesting
- Good utilisation of available space with levels
- Admirable usage of roof to create a dynamic and interesting play space
- Exciting use of colours and patterns
- Use of structure to create an indoor play facility

#### Shortcomings

- A roof garden could have been implemented to soften the harsh setting and provide a soft-scape on which children could play

### Infant Educational Centre Cúllar Vega

#### Attributes

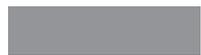
- Exciting use of shapes and forms, not only on the facade, but also inside to create interesting spaces and volumes
- Planning and zoning of the different programmes designed along axes to separate functions

#### Shortcomings

- Although dynamic in its design the centre tends to appear sterile and harsh
- Materials used could be more child-friendly



04\_2



precedent studies local



## daycare centre [delft south I and II]

Architects: Noero Wolf Architects

Location: Delft, Cape Town

### description...

#### “SPATIAL LAYERING

A set of spaces mediate between the street and the more private spaces of the centres in that they are part of the street system of Delft and at the same time are private, being located within the site sub-division. Lined with seats and partially roofed, they form part of the public spaces of the community. Anyone from the neighbourhood can utilise these spaces, although they belong to the centre.

#### LANDSCAPE

Delft is part of the low-lying area adjacent to the sea. Known as the Cape Flats, the area lies in contrast to the varied and imposing mountain ranges beyond. Since landscape is a powerful presence in Cape Town, the design seeks to connect buildings, landscape and city together in new ways. The division of the landscape into flat, low-lying areas and distant mountain ranges is mimicked in the design. Wall surfaces are plastered to a height of 1.5 metres forming a continuous horizontal line that wraps around the buildings at eye level. Above this the wall plane is bagged. The plastered surface is painted green or blue to represent land or sea whilst the bagged surface is coloured white in sharp contrast to the sky - similar to the silhouette of mountains against sky...



figure 4.18



figure 4.19



figure 4.20

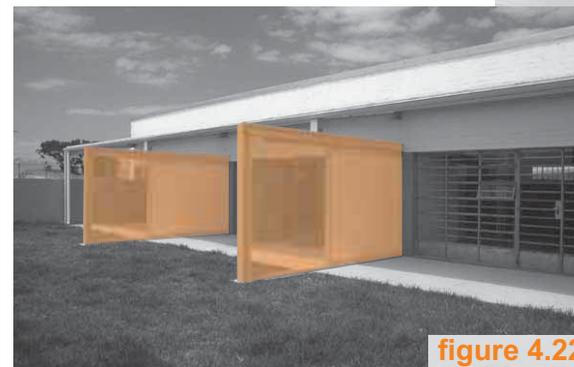


figure 4.22

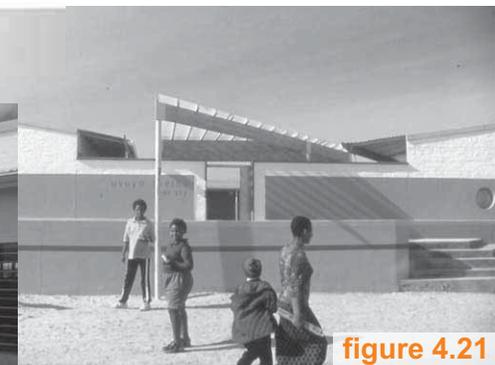


figure 4.21

## RESOURCEFULNESS

The need for resourcefulness - to achieve the maximum ends with minimum means - has shaped the work. Linked to resourcefulness is the notion of modesty - the meaning of which lies in its derivation from the Latin word "modesto". Based on the concept that the value of completing a task is in direct proportion to the amount of energy expended, it is comparable to determining, within limited means, where to invest weight in design. In other words to decide where to be forceful and where to be retiring and modest. The entrance for example has been articulated with bull-nose tiling, used unconventionally, to define the entrance threshold, while elsewhere, construction detail is conventional.

## A SPECIAL LANGUAGE

Each centre is identified by a brightly painted pylon - bearing a symbolic mark within the community and draws people through its verticality. The pylon extends horizontally into a seat which is adjacent to the entrance path - the tension is deliberate and reflects back upon notions of landscape that have informed the design of the buildings. The entrance is marked by a shade cloth pergola, defining a safe place to protect children, whilst also serving as an after-school waiting area. Consequently, it has become the most architecturally elaborate aspect of the centre. The centres are painted in different colours - in both cases the importance of the toy store is represented not only by its central location but also by bright red colouring. This creates continuity in a condition of difference".

[Day-care Centre, Delft South 2002]

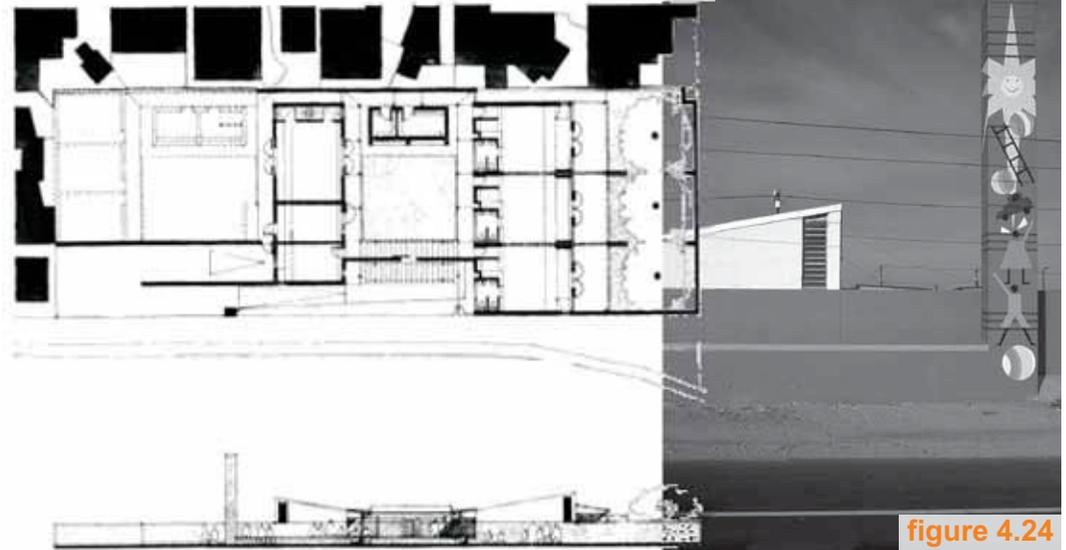


figure 4.24



figure 4.23

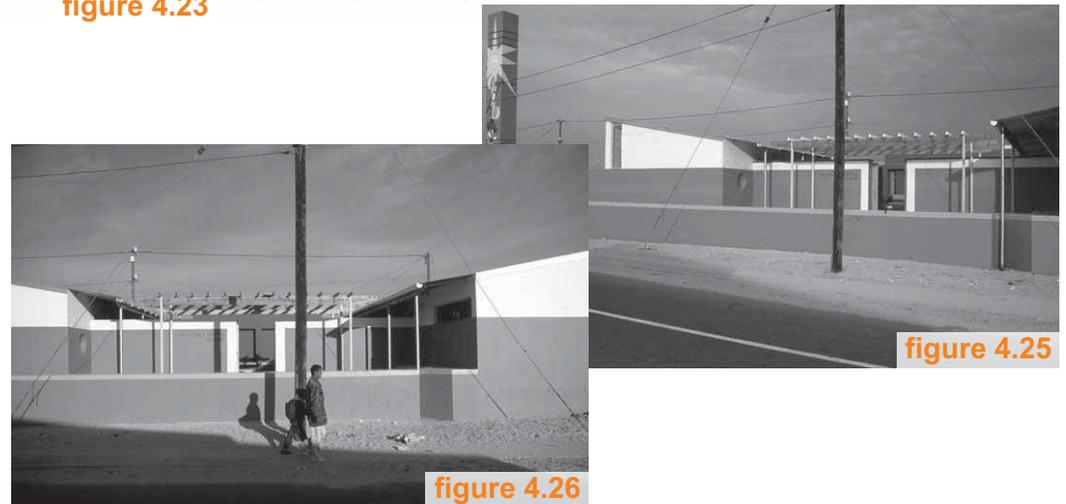


figure 4.25

figure 4.26

## st cyprians' pre-school

Architects: Visser Architects – Design Studio

Location: Cape Town

### description...

“The 'School in the Woods' ...A design that incorporated some of the architectural elements from the historic buildings and threaded buildings between the trees. No important trees were damaged in our scheme. The school is known as the “School in the Woods”. We conceived the school as a cluster of classrooms – each with its own traditional roof – arranged around a courtyard playground. The classrooms are built of brickwork in the architectural style of the existing buildings. A wide glazed veranda links the classrooms and provides indoor play space. 3 toilet rooms have been built with curved walls protruding into the veranda area. Central washbasins are lit from above by a skylight.

The scale of the building was deliberately altered to make it feel more accommodating to children – all doors are slightly shorter and wider, window cills in the veranda are low to act as seats or play surfaces. The choice of materials was to tie the building into the existing architecture of the school and also to be low maintenance”.

[New Pre-school & Sports Centre for St Cyprians' School 1999]



figure 4.27



figure 4.28



figure 4.29



figure 4.30



figure 4.31

