

DESIGNING CITIES OF THE WORLD 2020-21

ARCHITECTURAL DESIGN STUDIO 1

POLITECNICO DI MILANO SEDE DI PIACENZA

FUNCTIONAL PROGRAM

The world is becoming older. Especially in the so-called developed countries the living expectation since penicillin (antibiotics) has done a huge jump. But even in the last 20 years average life time in Spain has increased more than 4 years. The combination of medical care, health awareness (diet, sport), climate, welfare state, social integration, and service proximity is in the origin of this tendency, that not even pandemics will stop.

In parallel to the life span the personal life quality is also increasing. An 80-year-old person's physical or mental limitations nowadays are much less in average than for the same age just two generations before. If we consider 67 the age of retiring, quite a lot of the ones arriving at that age will go on living for 20 years or more in good health conditions and will be rather independent.

Dependency often arrives in little steps. Daily life and environment should contribute to minimize or slow down the advance of dependency. The more you are able to do the more you believe in yourself; the more you believe in yourself the more you are able to do. Both the physical and the social environment are determinant in keeping you active and independent.

This evidence is not new. In former times elderly often lived or moved to live with their children and grandchildren, being part of the family structure. They were protected, loved, and helped if necessary, but they also had duties to fulfil and activities to do within the family organisation.

The intergenerational family model is not longer working in Europe, not even in the Mediterranean countries. The liberalisation of women is in the origin: access to the working market, economic independency, few children and greater demand for social non domestic (leisure) activities work against cohabiting and taking care of your elders.

In terms of housing in Spain we find 2 main models when the aged cannot longer live alone: to hire a caretaker who often lives at home (what would we do without the army of beloved ladies from South America!), or to enter an elderly residence. Both "solutions" are expensive and often not the one desired. And both push you into dependency, not facilitating the active contributions the elderly can do to society. This project wants to explore other ways of living for grand people. The functional program insists in mixing the oldies with the youngsters, and in joining independent oldies in commune like living associations.

Maybe putting students and elderly under the same roof can originate some coexistence problems (noise, different time schedules, etc), but you can live close and share other spaces: canteens and laundries, workshops and classrooms. And by that you can help each other, teach each other, work together.... But also living in a shared apartment should be possible, testing "grandma adoptions" built on service exchange.

Sharing can also happen within the same generation: if my dwelling is close to my friends' dwellings, or if I cohabit with some friends, we will (have to) collaborate. We will share responsibility, we will split homework and duties; but we will also share our time, knowledge, thoughts and feelings.

The mini neighbourhood also should attract families with children. As elderly often have experience in children raising and cooking, and parents often work fulltime, the intergenerational family model could be applied, maybe based on a time bank interchange.

The services and facilities required in the functional program will provide the spaces to make these collective activities possible. And an important part of the common social life, mostly the one related with leisure, will take part outdoors, in the public space.

It might sound strange in covid19 times to bring people close and hybridize generations. One of the challenges of this project is to test if space can be designed in a way that permits to adapt to the circumstances. But we should not forget that social distancing is the exception. Living in community makes us human and is in the origin of the idea of town.

FUNCTIONAL PROGRAM

Site surface:	41.000 m2:
Open and Public Space	≥14.000 m2
Facilities	4.500 m2
Housing	22.500 m2

Based on these indicative figures the proposal will count with a **minimum** of:

A	PUBLIC SPACE	4.000 m2
	related to the buildings	1.500 Parking lots
		2.500 Streets , squares, accesses
B	OPEN SPACE	10.000 m2
		8.000 Park with recreational areas (ev. open air sport area)
		2.000 Urban orchards
C	HOUSING	22.500 m2
		7.000 Elderly housing
		3.000 Elderly residence
		10.000 Students housing and Social housing
		2.500 Students residence
D	FACILITIES, SERVICES	4.500 m2
		1.700 Social / Cultural
		800 Educational
		1.000 Productive
		1.000 Commercial (private)

A PUBLIC SPACE directly related to the buildings 4.000 m2

Parking lots 1.000 m2

Internal streets, squares, gardens etc. ≥ 3.000 m2

Inside the plot

B OPEN SPACE 10.000 m2

Park with recreational areas and eventually open air sport areas ≥ 8.000 m2

Urban orchards ≥ 1.000 m2

C RESIDENTIAL 22.500 m2

Elderly housing 7.000 m2 wheel chair adapted

40 apartments for 4 inhabitants	2 bathrooms, kitchen, living room, 4 separable rooms
40 apartments for 1 or 2 inhabitants	1 bathroom, living room with kitchen, 1 separable room

Elderly residence 3.000m2 wheel chair adapted

80 double rooms	1 bathroom, 1 kitchen for every 8 rooms
40 single rooms	1 bathroom; 1 kitchen for every 8 rooms

Reception/administration/ medical visit room, etc.

Shared rooms: living rooms, TV, reading, activity spaces, home gym, etc.

Dining places with "therapeutic" kitchen

Dining room (independent entrance) also for students possible social distancing

Kitchen

Laundry (independent entrance) also for students

Bike storage

General storage

Technical installations

Students housing and social housing 10.000 m2

20 apartments for 6 inhabitants	2 bathrooms, kitchen, living room, 3 separable rooms
40 apartments for 4 inhabitants	2 bathrooms, kitchen, living room, 2 separable rooms
80 apartments for 1 or 2 inhabitants	1 bathroom, living room with kitchen, 1 separable room

Bike storage

General storage

Technical installations

Students residence 2.500 m2

80 double rooms	1 bathroom, 1 kitchen for every 8 rooms
40 single rooms	1 bathroom for every 2 rooms; 1 kitchen for every 8 rooms

Reception/administration

Shared rooms: dining, TV, reading, study spaces, home gym, etc.

Bike storage

General storage

Technical installations

D FACILITIES, SERVICES 3.500 m2

Social / Cultural:

Civic (or Neighbourhood) Centre 1.000 m2

- 4 activity rooms
- 2 classrooms
- 2 kitchen classroom
- 1 small auditorium (multipurpose room)
- Dressing rooms
- Relax area
- Exhibition area
- Children area
- Restrooms
- Storage
- Technical installations

Library 500 m2

- Attendance and administration
- Office room
- Meeting room
- Book reading area (open shelf)
- Magazine and Newspaper area
- Media, video, show and music area
- Children area
- Computer and Research area
- Courtyard
- Restroom
- Storage
- Technical installations

Ecumenical Church - worship space (chapel) 200 m2

- Courtyard or square
- Entrance
- Office
- Restrooms
- Storage
- Technical installations

Educational:

Kindergarten and Nursery school 800 m2

Entrance
Administration: 2 offices
6 classrooms, with bathrooms inside
Multipurpose hall
Interior playground(s)
Exterior playground(s)
Dining room
Teachers' dining room
Kitchen
Teachers' restroom and dressing room
Storage
Technical installations

Productive (Social / Educational / Commercial) :

Fab/Lab and Co-working 1.000 m2

Attendance and administration
Showcase
Exhibition area
1 multipurpose hall: experimental theatre, auditorium, conferences
2 Meeting rooms
Open co-working areas
2 technology laboratories
8 workshops / fablabs: ceramic, wood, restoration (paper, wood, painting,...), 3D printing, media lab, etc.
2 cooking labs
Restaurant and bar area
Outdoor terrace
Take away service
Local-food market
Rest rooms
Bike storage
Storage
Technical installations

Commercial:

Private shops and services 1.000 m2 (spread, retail, never shopping malls)

Preferably spin-offs:

Commercial
Gastronomic
Services
Etc.