



EDUCATIONAL PROJECT FOR THE URBAN REGENERATION OF  
THE CITY OF COMACCHIO-ITALY

IMPLEMENTATION OF THE TRANSECT AND THE URBAN CODE  
FOR THE RECONQUEST OF URBAN SPACES







Comacchio is an Italian town of 22,403 inhabitants in the province of Ferrara and is spread over an area of 280 km<sup>2</sup>, with a population density of 76 inhabitants / km<sup>2</sup>.

Comacchio is the major centers of the Natural Reserve of the Po Delta: since 1999 the UNESCO recognizes Comacchio and his valleys in the List of World Heritage Sites.

City of Etruscan foundation, then Roman port in the VI sec. BC: its location in the delta of the Po was measured in the centuries between the areas of the lagoon and the Adriatic Sea

Land rich in important hydraulic works, carried out by the Dukes of Este, by the Papal States, by experts hydraulic engineers the retinue of Napoleon, Comacchio and its territory remained intact until the second half of the last century.

With the economic boom occurred in Italy after the Second World War, Comacchio has experienced a major economic development linked to tourist flows on the Adriatic coast







The growth of Comacchio has always been closely linked to the evolution of the hydrographic valleys that surround it, with the formation of the 13 islands (with trend parallel to the ancient shoreline marine) on which were built the first settlements inhabited.

Comacchio is a water town built on several islands connected by bridges and canals that give its characteristics of true lagoon city, almost a little Venice.

As in all the Italian cities, from the middle of the last century, the urban management of Comacchio used as a technique of planning the zoning.

The local planning activities are destined exclusively to the use residential by applying the most elementary rules of zoning.

The architectural quality of the city suffered an unstoppable decline.

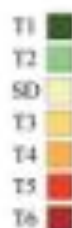




## TRANSETTO



## LEGENDA



In our country there are many urbanistic laws how many are regions (20).

The instruments that regulate the building activity within a territory are several dozen known by the acronyms PRG, PSC, PUA, POC, PiP, PPA, PP, RUE, NTA etc.etc.

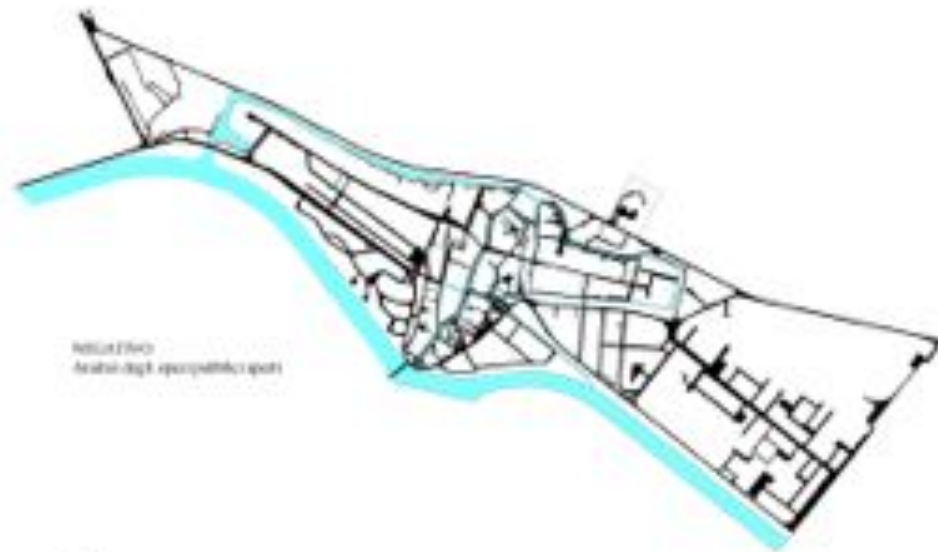
All of these tools are based on zoning

All these tools are imposed from above: administrators, developers, engineers are forced to use more than 80% of their time to "interpret" the rules and the remaining 20% to make a good project.

In this context that the research fits to simplify and innovate the design approach.

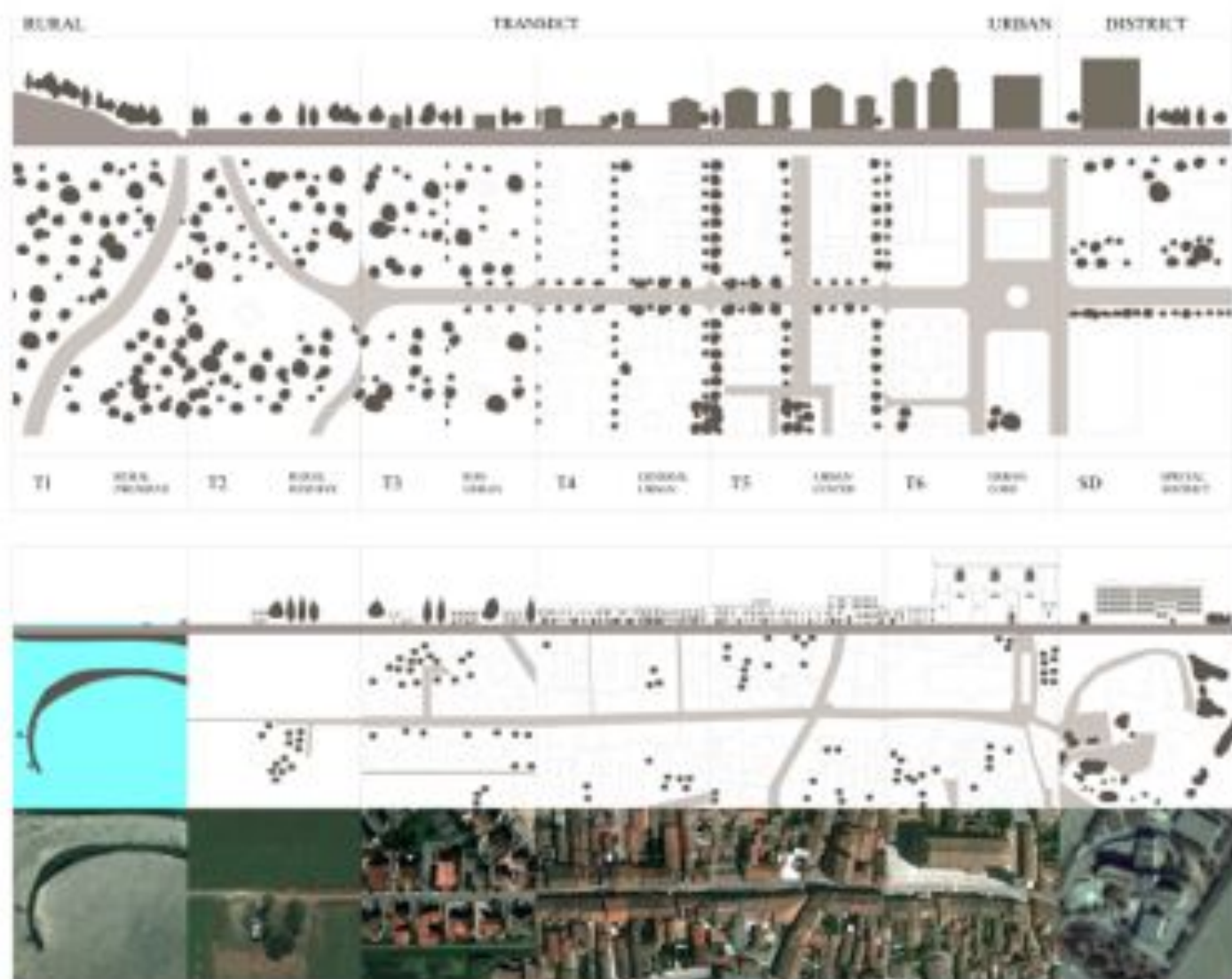
The teaching experience intends demonstrate that by applying the method of the Transect, using the rules of the Urban Code, you can create a pleasant urban environments, with appropriate density That Allows the use of public transport by reducing car use and consequently of CO2.



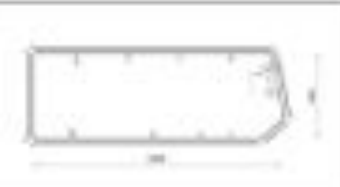

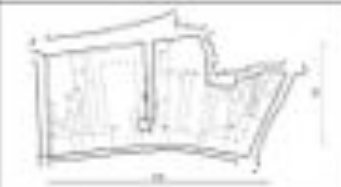











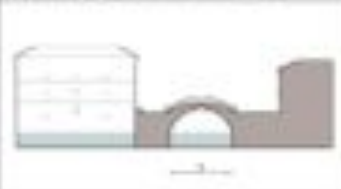













| TIPOLOGIE                                   | T2          | T3                | T4                  | T5                       |                     |                          |
|---|-------------|-------------------|---------------------|--------------------------|---------------------|--------------------------|
|   | Casa rivale | Casa quadrilatera | Edificio periferico | Palazzo per appartamenti | Edificio periferico | Palazzo per appartamenti |
| PROSPETTIVE                                 |             |                   |                     |                          |                     |                          |
| DESTINAZIONE D'USO ED ALTEZZA DEGLI EDIFICI |             |                   |                     |                          |                     |                          |
| COFFRILLI                                   |             |                   |                     |                          |                     |                          |
| POSIZIONAMENTO NEL LOTTO                    |             |                   |                     |                          |                     |                          |
| POSSIBILITA' DI AMPLIAMENTO                 |             |                   |                     |                          |                     |                          |

| TIPOLOGIE        | T2  | T3   | T4  | T5  |
|------------------|---|--|---|---|
| IBERATO          |    |    |    |    |
| SPZINE STRADALI  |    |    |    |    |
| INCROCI STRADALI |    |    |    |    |
| PROFILI CANALI   |   |   |   |   |
| PARCHeggi        |  |  |  |  |



| TIPOLOGIE  | T2         | T3              | T4            | T5                       |               |                          |
|------------|------------|-----------------|---------------|--------------------------|---------------|--------------------------|
|            | Casa media | Casa a giardino | Casa patrizia | Palazzo per appartamenti | Casa patrizia | Palazzo per appartamenti |
| FINESTRE   |            |                 |               |                          |               |                          |
| PORTE      |            |                 |               |                          |               |                          |
| CORNICIONI |            |                 |               |                          |               |                          |
| COLORI     |            |                 |               |                          |               |                          |

After analyzing and discovered the urban characteristics of Comacchio the goal is to use all the information gathered to intervene with design ideas consistent to achieve the purpose of the research: the urban redevelopment.



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The three urban areas cover three different topics: the redevelopment of an abandoned industrial site, the redevelopment of a sub-urban low-density housing without services and neighborhood businesses and the redevelopment of an central area where insist several ecclesiastical buildings in disuse.

# Redevelopment of an abandoned industrial site



## STATO DI FATTO

|                                 |        |
|---------------------------------|--------|
| Superficie territoriale (ha)    | 49     |
| Quartieri (n.)                  | 0      |
| Borgli (n.)                     | 1      |
| Isolati (n.)                    | 6      |
| Distretti (n.)                  | 1      |
| Piazze (n.)                     | 0      |
| Sup. Residenziale (mq)          | 11.920 |
| Sup. Commerciale/Ricettiva (mq) | 300    |
| Falci Pubblici (n.)             | 0      |
| Parcheggi a raso (n.)           | n.p.   |
| Abitati (n.)                    | 140    |
| Alloggi Sociali (n.)            | n.p.   |
| Densità Abitativa (ab/ha)       | 3      |



## STATO DI PROGETTO

|                                 |         |
|---------------------------------|---------|
| Superficie territoriale (ha)    | 49      |
| Quartieri (n.)                  | 2       |
| Borgli (n.)                     | 1       |
| Isolati (n.)                    | 56      |
| Distretti (n.)                  | 0       |
| Piazze (n.)                     | 9       |
| Sup. Residenziale (mq)          | 258.920 |
| Sup. Commerciale/Ricettiva (mq) | 35.300  |
| Falci Pubblici (n.)             | 31      |
| Parcheggi a raso (n.)           | 2.300   |
| Abitati (n.)                    | 10.350  |
| Alloggi Sociali (n.)            | 250     |
| Densità Abitativa (ab/ha)       | 214     |



# Redevelopment of an abandoned industrial site



PROGETTO DLD



# Redevelopment of an abandoned industrial site





low-density neighborhood



## STATO DI FATTO

|                                 |         |
|---------------------------------|---------|
| Superficie territoriale (ha)    | 51      |
| Quartieri (n.)                  | 1       |
| Borghi (n.)                     | 0       |
| Isolati (n.)                    | 30      |
| Diazioni (n.)                   | 0       |
| Piazze (n.)                     | 1       |
| Sup. Residenziale (mq)          | 101.272 |
| Sup. Commerciale/Ricettiva (mq) | n.p.    |
| Edifici Pubblici (n.)           | 2       |
| Parcheggi a raso (n.)           | n.p.    |
| Abitanti (n.)                   | 254     |
| Alloggi Sociali (n.)            | n.p.    |
| Densità Abitativa (ab/ha)       | 5       |

## STATO DI PROGETTO

|                                 |         |
|---------------------------------|---------|
| Superficie territoriale (ha)    | 51      |
| Quartieri (n.)                  | 3       |
| Borghi (n.)                     | 8       |
| Isolati (n.)                    | 75      |
| Diazioni (n.)                   | 1       |
| Piazze (n.)                     | 8       |
| Sup. Residenziale (mq)          | 214.000 |
| Sup. Commerciale/Ricettiva (mq) | 41.000  |
| Edifici Pubblici (n.)           | 12      |
| Parcheggi a raso (n.)           | 2.400   |
| Abitanti (n.)                   | 8.560   |
| Alloggi Sociali (n.)            | 210     |
| Densità Abitativa (ab/ha)       | 173     |



# Redevelopment of a sub-urban low-density neighborhood



Prospetto SUD



insist several ecclesiastical buildings in disuse



STATO DI FATTO

|                                  |       |
|----------------------------------|-------|
| Superficie territoriale (ha)     | 3,5   |
| Quartieri (n.)                   | 0     |
| Borghi (n.)                      | 0     |
| Isolati (n.)                     | 1     |
| Distretti (n.)                   | 0     |
| Piazze (n.)                      | 2     |
| Sup. Residenziale (mq)           | 5.198 |
| Sup. Commerciale/Riceettiva (mq) | 0     |
| Edifici Pubblici (n.)            | 3     |
| Parcheggi a raso (n.)            | n.p.  |
| Abitanti (n.)                    | 201   |
| Alloggi Sociali (n.)             | n.p.  |
| Densità Abitativa (ab/ha)        | 57    |



STATO DI PROGETTO

|                                  |        |
|----------------------------------|--------|
| Superficie territoriale (ha)     | 3,5    |
| Quartieri (n.)                   | 1      |
| Borghi (n.)                      | 0      |
| Isolati (n.)                     | 11     |
| Distretti (n.)                   | 0      |
| Piazze (n.)                      | 4      |
| Sup. Residenziale (mq)           | 14.475 |
| Sup. Commerciale/Riceettiva (mq) | 2.054  |
| Edifici Pubblici (n.)            | 5      |
| Parcheggi a raso (n.)            | 144    |
| Abitanti (n.)                    | 579    |
| Alloggi Sociali (n.)             | 0      |
| Densità Abitativa (ab/ha)        | 224    |

It's a fact that the quality and eco-sustainability of Italian cities is in decline.

The General Regulatory Plan with their rules produced non-most recognizable places, suburbs sub-urban wastelands, the cancellation of the commerce of the neighborhood and the exponential growth of shopping malls already obsolete.

These facts have produced how results that small and medium-sized Italian cities are free of recognizable architectural beauty. Sequence made up of urban blocks, squares and civic buildings has been replaced by one made homes for low-density housing, big mall, public transport in disuse and bad architecture pseudo-global seamless.

If a person enters a medium or small Italian cities will have to travel a very long stretch of road sub-urban area before reaching a recognizable place that has the look of the city that was believed to be found.

The European city and the Italian city and have been for a long time pleasant places where you found all those principles of architectural and urban composition that has often been imitated in other parts of the world.

The global crisis did the rest.

Places full of history and rich experience as the city of Comacchio fights in solitude like other reality in other coastal urban decay against this.

The eco-sustainable urban design should explore new approaches and learn other languages more worthy to propose to the people and the places that host them.

20 students in 60 hours of academic work followed by a teacher : these are the data of the course that gave the work presented.

None of my students had learning experiences of urban design.

The method of the Urban Transect and the Code has allowed them to understand the urban structure and try, for the first time, one urban and typological project.

Their passionate work has allowed this experience that we share with you.

**Thanks for your attention and good job!**



