KANAALZONES OF B5
Industrial Waterfronts: transforming the industrial canal zones of B5, The Netherlands

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In September 2010 I started the first design studio on 'Industrial waterfronts: transforming the canal zones of B5'. 25 students from The Netherlands and Erasmus ones, in their program of exchange at the TU/e, participated in. Since then, more than 100 students took part in the several design studios that I tutored on this theme. I want to thank each of them for their enthusiasm, interest, dedication and very hard work. Many thanks for their brilliant ideas in the development of the five canal zones and for making the layout of the five books. Without their contribution this research would not have been possible.

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INTRODUCTION

This book series collects the work developed during the three years experience of architectural design studios developed by the Faculty of Architecture at Eindhoven University of Technology.

The courses focused on the specific case of the BS canal zones, namely the five Dutch cities of Eindhoven, Helmond, 's Hertogenbosch, Tilburg and Breda, located in the southern region of the country named Brabant, from which BS derives (BS-Ruimtelijk Ordening, 2007).

A former industrial canal area characterizes each city and is waiting to be transformed. These canals, dug at the end of 1800 and highly active until 1960s, are connected to each other by a large system of navigable canals (Willehminakanaal, Zuid-Willemsvaartkanaal, Eindhovenkanaal). They physically connect the 5 cities and small towns and cross unique urban agglomerations and man-made landscapes, thus forming a transport circuit with a high potential.

The design course consisted of one-semester project each (one canal), and involved local master students that worked together with Erasmus students in their program of exchange with our university. The five books, one per each canal, contain the results achieved during each semester.

On the one hand, the courses were intended to increase the students' sensitivity in revealing the characteristics and values of industrial buildings/areas as well as the environmental awareness about their role as a source of local identity. On the other hand, the courses showed that the students had acquired a new 'mentality' on this topic which led them to more attentive design explorations. Therefore, the students reappraised the existing situation and further exploited its potential through the projects of reuse. During the three-year period representatives of the five Municipalities, from the local heritage institution and also from the Province, were actively involved in the learning process.

They shared their professional competence with the students, thus contributing to design more thoughtful projects and make the results both conceptually and pragmatically more valuable.

The following text will illustrate why, as architects and educators, we should focus our interest on dismissed industrial area and educate the new generation of architects not only in enhancing heritage values but also to disseminate the knowledge of sustainable design in their professional field. Furthermore, it will show the design approach that I pursued with the students in these years. Such approach crosses the notions of sensitivity and creativity in both interpretation and intervention in dismissed industrial sites.

The investigation carried out in 'Industrial waterfronts: transforming the canal zones of BS', is part of the research program of 'The architecture of the Living City' chaired by prof. van Wesemael and prof. Colenbrander. Studio results were presented in academic publications on various platforms such as the CIB W070 Conference organized by the International Council for Research and Innovation in Building and Construction in São Paulo, 13-15 September, 2010; and at the Heritage 2012, 3rd International Conference on Heritage and Sustainable Development, Porto 19-22 June, 2012 of which this text is an abstract.
1. THE NEED OF ACTION

In terms of urban sustainability, the rehabilitation of dismissed industrial areas fulfills two needs: ‘necessity’ and ‘resource’.

‘Necessity’ refers to the reclamation of polluted lands, which represent a contamination threat against the surrounding areas. The threat is often due to the central location of these sites and their vicinity to densely inhabited areas. This is basically an engineering approach to the site.

‘Resource’ is referred to the potential benefit, both environmental and social, that a well-advised reuse of such large portions of territory can be for the macro and micro scale of the city. It refers to design strategies able to suggest a different idea of urbanity that will arise from an unexpected and complex network of old and new with a mixture of large and small scale.

See the case of Bovisa area in Milan, Italy or the Finlayson project in Tampere, Finland. In other words, these sites can be sources of wealth for their cities.

What about the heritage value of abandoned industrial sites? They are usually considered empty areas, smelly, valueless and ordinary locations: ‘terrein vagues’ (de Sola-Morales, 1996) outside of the urban dynamics and forgotten in the ‘mental map’ of a city. The change of this negative perception is the first step to transformation. On the contrary and according to the definition of industrial heritage by The Nizhny Tagil Charter of 2003 (TICCIH, July 17, 2003), dismissed industrial sites are “the evidence of activities which had and continue to have profound historical consequences”; their remains record historical and social events, technological and architectural experimentation, whose investigation would contribute to the understanding of our industrial past and present.

This definition is true and applies ‘easily’ to those historic ruins that embody the deep state of dereliction. But how can people (in our case students) be made aware of the heritage values of these more ‘contemporary’ ruins/sites if these sites have not yet officially declared ‘locations to safeguard’?

After the abandonment, none of the five municipalities has a defined strategy on how to tackle this issue and there is a general tendency of fragmenting these vast areas into smaller pieces, in order to maximize profit due to market demand.

Nonetheless, all of them have the means to undertake a sustainable approach to the city’s growth: providing room for expansion inside the city itself. Furthermore, the transformation of these waterfronfts can have a huge impact on their urban image.

2. THE FRAMEWORK FOR TEACHING, LEARNING AND RESEARCHING

2.1 Theme

The approaches and questions concerning the enhancement of the historical value of the canal zones are very important in the transformation of these dismissed sites.

In this respect, the initiatives I have undertaken with the students made it as a target.

In educational terms, the goal was to increase the students’ sensitivity in revealing the characteristics and values of industrial buildings/areas as well as the environmental awareness about their role as a source of local identity.

In practical terms, the active involvement in the learning process by local authorities and heritage institutions aimed at strengthening students design proposals through professional experts’ criticism, while disseminating the knowledge of sustainable design in the students’ How can we assess the value of industrial heritage on canal waterfronts? Beside the ‘standard rules’ of evaluation, can other aspects influence the choice of keeping them? (Fig. 02)

Memory and identity is attached to these industrial sites: how can the past be revealed rather than covered? What should we keep of the existing heritage?

Today the spectacular size of the factories has been glorified: how can we detect and present to others those innovative construction details? For years industrial sites have been ‘forbidden terrains’: how to disclose them to the public? And what about appropriateness of program?

These were some of the questions and themes discussed during the various courses. Certainly, they appear difficult and complex questions.

Nevertheless, students acquired a relevant knowledge on industrial heritage and searched for the fine line between the ‘too little’-’too much’ design intervention when transforming a dismissed industrial site/building.
2.2 Methodology

Sensing is the quality of perceiving, conceiving and understanding an existing environment. From this perspective making sense is based on the engagement of a dialogue within the context. Design is the direct result of it (Vassilis, 2011).

When transforming dismissed industrial sites into new uses the notions of sensitivity and creativity play a key role in both interpretation and intervention. Both sensing a particular historical context and projecting an appropriate intervention in it should be equally considered as deliberate actions.

The former is expressed through the particular setting of the context of intervention (analysis); the latter is done by fitting our design intervention into that context (synthesis). This is the research method I followed with the students of the International design Studios that focused on the transformation of the five canal areas of Brabant and of which I will illustrate the learning process.

The courses consisted of one-semester project each, and involved local master students that worked together with foreign ones (Erasmus students), both in terms of nationality and to the Dutch context.

In this respect even if foreigners seemed to be privileged for not being affected by any previous knowledge, team-working with local students created the ideal conditions to sensing the existing context in the most appropriate way. Moreover, the higher the number of students’ nationalities and cultural background, the wider was the spectrum of perception and understanding. Thus, broadening and enriching the designs both in term of quality and creativity.

2.3 Structure

Each course was organised in four interrelated phases and I adopted this structure for all five canals, introducing additions and adjustment during the process so as to comply with the needs and differences among the canals.

The first phase was a research work, or better the first point of entry to the understanding of industrial heritage. Students carried out literature research on the state of the art in industrial heritage, then researched into listed topics related to transformation of former industrial sites.

Then it followed the sensing of the specific canal zone through impression analysis and model of the area that stimulated open-end questions while addressing problems on the existing heritage.

Thirdly, it was making sense through a design strategy for the canal area that couch the values of the heritage they detected.

Representatives of the municipalities participated with individual review of students or group presentations during the design development.

Lastly, it was ‘testing’ the design strategy through the development of a selected portion of it at the architectural level; students could therefore express their personal design attitude towards industrial heritage via details and use of materials and their way of communicating its value to others.

Between stages three and four, students were always involved in public activities related to industrial heritage that took place outside the university.
Two goals motivated these participations: the first was to let students express their knowledge on industrial heritage to the public and show how they can take responsibility for the future; the second was to make people aware of the need of safeguarding our past and give appropriate feedback to them through questions and answers to students.

The investigation of the industrial heritage of the canal zones of B5 definitely included the canal in itself.

Its role and meaning was explored beyond its current function of dismissed infrastructure: students analysed and interpreted the canals as a carrier of collective memories but also of innovative ideas that attempt to give a new, integral sense to water into the urban landscape.

As for the industrial heritage along the canals, students studied the notable variety from city to city: it regarded the architectural footprints of former industries, length of the canals, their relationship with the urban and landscape context and the amount of cultural resources still existing on site.

Final presentation models

Installation from "The beauty of decay", Eindhoven, 25-29 October 2010

Project discussion during Inspiratiedag industriële erfgoed Brabant, Eindhoven, December 2010

'The beauty of decay' was a 5-day program that involved students and professionals. Through projects and lectures was discussed the aesthetic of decay (see http://ddw-workshop-tue.blogspot.com/). The activities were open to the public and related to the yearly event of the Dutch Design Week, which attracts a huge amount of visitors to the city of Eindhoven, where our university is located.

'Inspiratiedag industriële erfgoed Brabant' (Inspiration day on Industrial Heritage Brabant) was a public seminar organized as conclusion of a one-year activities focused on industrial heritage and undertaken by Erfgoed Brabant. Students presented their research on industrial heritage to the public. (see )
3. CONCLUSION

The intention of these three years' experience with the students was to make them aware that it is not enough to observe and analyze historic buildings but that students can play an active role, rather than being spectators in the interpretation, use and the safeguard of our heritage. During this period, students acquired a personal awareness of the existing heritage and learnt how to work with others so as to develop and disseminate awareness.

The results achieved are based on the firm belief of a co-existence with the past and with the need to adopt sustainable solutions. Students learnt that there are not standard solutions, but only appropriated ones, which relate to the specificity of the context.

Students learnt how to detect these characteristics and to work with them so as to enhance heritage values.

And finally, students realized that understanding, interpreting and intervening are unified moments, which belong to the same process of cognition and are in dialogue with the site. Sensing a specific context and making sense of an architectural intervention into it is a working method that goes beyond personal empathy and individual analytical skills.

It is not my intention to enter the endless debate on the scientific consideration of this method, but I would like to remind that the notion of 'sensitivity' is the key element in both interpreting the historic urban landscape and in intervening in it. This is clearly stated in the Vienna Memorandum (2005).

This document calls for (...) 'a culturally and sensitive approach' to the historic urban landscape, that (...) 'should avoid all forms of pseudo-historical design' and 'demand for high-quality design and execution, sensitive to the cultural context (...)' Therefore, 'sensitivity' binds analysis to creative design.

As an educator in the field of architecture, I am left with the unsolved issue on how to systematically communicate this theoretical knowledge to our students.

I think that the experience developed in these three years has been a successful attempt to achieve it by adopting this theory.

The selected topic of industrial heritage is not exclusive of this work method, although the issues related to former industrial areas add to the work one more pregnant question: the need of 'extra sensitivity' so as to overcome the negative perception, which is generally associated to abandoned industrial sites.

From the dialogue with the students and the Members of municipalities, province and guest advisors found a challenging exploration on the heritage value of the five canal zones, which brought a new and fresh perspective of the matter.

Through the inventiveness of young designers and the experience of professionals and academics, theory and practice found their invaluable combination.

Although the collaboration with local authorities was not concerted from the beginning, it turned out to be an original outcome for both students and professionals.
Results of the work became raw material to synthesize in guidelines for a design brief addressed to professional designers. And last but not least, representatives of the five municipalities have requested to hold a ‘canal zone seminar’ as a platform to compare and discuss those strategies that enhance industrial heritage in the five canals.

The enthusiasm fired by the collaboration between University and official Institutions has inspired it. This action is to come and will be the conclusion of the work on the industrial heritage of the canal zones of Brabant.

I would like to conclude with a quote from a student of mine when he ‘(...) entered for the first time the unknown world of architectural heritage in the industrial landscape. (...) through the difficulties of our project, I learned that sensitivity is not an abstract term but an instrument to assess values of a particular context; and the are not bad ideas but the lack of architectural dialogue’.

This proves to me that our most important objective is to encourage young people (like students of architecture, as in my case) to take conceptual and creative ownership of cultural resources. Such active approach will evolve from knowledge into responsibility, which is needed to safeguard our heritage.

REFERENCES


