MADE IN HOLLAND - HOUSING FOR DIFFERENT FUTURES

Jan Westra
Eindhoven University of Technology
Architecture, Building and Planning
Postbox 513, VERTIGO, 5600MB Eindhoven, Holland

ABSTRACT

In the Dutch housing stock, many residential buildings constructed between 1945 and 1975 either need major refurbishment or have to be replaced by new construction [1]. In the context of the sustainability of the housing stock, refurbishment seems to be the more promising one of these two approaches [2].

An important success factor in refurbishment projects is the possibility to match (existing or easy to accomplish) quality dimensions of a building with the requirements of one or more target groups of (future) tenants. Based on experiences in recently executed projects in several Dutch cities, the paper will show how cost modeling can help to find the right match in such a project.

Key words: Sustainable, Smart, High density, Custom-built, Eco-no-me.
Introduction

In the turmoil of commercial housing versus user-related architecture there is research by industry, institutions and universities: the everlasting strive for better, faster, cheaper, for the continuous customization as a permanent quest for housing that very few desires. There is a tendency for a new approach of what I named Selected Choice: carefully designated processes, parts, products and particles will be orchestrated through the consumer’s market. New challenges will emerge. Large areas are developed according to similar principles of the rebuilt housing projects that were meant to provide instant housing after the Second World War, but they lack the virtues of the older examples that demonstrated a more collective, communal approach. These Vinex sites are close to the main cities and will have to house 750 thousand people as a set goal. Politicians, ecologists, architects and planners are trying to save the voids in the landscape by concentrating housing in former industrial locations as well as in rural domains. On the other hand brave, angry, but certainly cheerful young designers are turning the country upside down: revival of the new rural composition, the housing typology as metaphor, the landscape as S-cape from the regular vocabulary. New castles and fortresses mirror new markets for trendy settings, reflecting the retro-styled answer to the ‘eco-no-me’ view. Housing used to come by the rules, now the rules come with housing. It may be expected that housing schemes will have to cope with re-defined users and issues. Maybe we are on the eve of loosing the last default user. It is important to picture a future in which (again) the participation of users might prevail in mixed scenarios of design and building. It is necessary to point to the past for aspects that seem to have immanent perspectives and qualities.

Ex-Cited Sites

The status of housing has been ignored. It was assumed that the consumer could be merely drawn to the performance of the built product. But in contrast to the appreciation for genuinely industrialized products like cars, refrigerators, microwaves, audio, video a man’s home is ‘wreathed in sentiment as is no other inanimate object’. History shows that (building) industry and administration will turn to the consumer oriented built product when sudden and great needs pull the market. Wars and earthquakes therefore have a tremendous impact on the way we design and build in need for fast and affordable housing, whereas in peaceful times the urge vanishes into paper innovations. There are however less shocking impacts that will even more dramatically change the way we will have to meet the consumer’s needs.
The tradition vertical layers of the society will dissolve by a variety of attractions; plural and impersonal activities are introduced by the technological progress. Housing will have to respond.

We are about to witness the prelude to an aging society in which people will demand suitable accommodations for ‘the rest of their lives’.

Traditionally built housing will not meet the quest for affordable housing for starters in lower market segments.

New building modes that are in pursuit of streamlining the production will meet a demand for old fashioned housing.

The original approach of participation in housing has gone; new professional era-driven commercials stimulate opportunistic anti-state ruled architecture for housing: 'live like you want’, ‘get into loose living’, are today’s answers to the 70’s.

It is necessary to point to the past for aspects that seem to have immanent perspectives and qualities; it is important to picture a future in which (again) the participation of users might prevail in mixed scenarios of design and building. Therefore research is needed for a revival of the building modes. First, one traces down the pioneers of the past, then peers ahead to the professionals of the present and of the future.
Ex-Cited Sites

New sites that have been designed and to a certain extend have been built in the large cities have ‘excited’ the production of new housing. Exciting in the sense that there has been a tremendous wave of different kinds of housing after a rather uninspired period in which the market dominated the production. The new plans are statements in themselves that are unprecedented. Not too long ago urban design used to be the specific territory of the skilled professional who would calculate the density and design the configuration that would envelop the fill-in of the architectural designer. And of course in many less outspoken cities and villages that still is the case. Ex-cities take you beyond the mere answer of the question. The question has become part of the debate on organizing the issues on urbanization. The issues used to be concentrated in big cities with densely populated areas. We have witnessed the city-renewal projects in the 70’s, city-infill projects in the 80’s and 90’s to be continued in this century. Old sites with new potential are developed in Amsterdam (KNSM island, Borneo island), Rotterdam (Kop van Zuid, The Hague (architectural Boulevards). The Dutch have mastered the threat of water on the seaside and hopefully also along the rivers. These actions and works have created possibilities for expanding and inspired new forms in housing. Since the 70’s the new town Almere has been a permanent experiment in growth and attitude as place to live, work and relax claimed from the sea. It is a demonstration of time-related issues and responses. Visit Almere for a trip through planning and architecture over a period of more then thirty years. It starts with the carefully knit patchworks of streets and terraced housing in honest durable materials. It ends in this time with the experiment of Rem Koolhaas to lift part of the town with a superficial city floor to provide an upper-and underworld. On the upper-world new apartments have been build that reflect the taste of this era: outspoken, elite, room with a view and new materials that have not been tested for durability. In between beginning and recent developments the town has witnessed a grand production of housing in many cases inspired by contests that called for special answers to obvious questions. It resulted in thematic neighborhoods carefully planned and organized, yet with the general idea that housing should not be organized as we did before. It resulted in two spectacular little sites that demonstrated the drive of people to go for unconventional solutions: owner build homes, houses with a durability of five years, zero-energy homes, winter/summer homes etcetera. But it there was no follow up. People came to have a look on a Sunday, but they themselves for the greater part would rather like to live in retro styled house or farmette.

Housing has become precious. That is housing has become precious especially for those who come to the market for the first time. My first house has become a dream instead of a reality. Each year selling prices reach new records and although there seems to be a slight drawback in 2004, it is expected that the rise will still be 6-10%. Modest row houses that cover a footprint of 6 by 9 meters on center and will contain no more than 300 cubic meter are sold (and thus bought) for over 200.000 Euro. Given the low mortgage rates, the tax deduction facilities and the double income
(possibly no kids) scenario that stock might be obtained by starters with opportunistic expectations. They are the drivers in a real time consumers program. When they fail or vanish the string will brake and the high end in the market will come down fast. New building modes that are in pursuit of streamlining the production will meet a demand for old-fashioned housing. Building firms are organizing contests to stimulate plans for consumer-oriented housing focusing on starters, elderly, status, performance. Housing used to be advertised by the number(s), now it is advertised in scenario’s that promise the user unexpected lifestyles and prospects.

The housing estate in Amsterdam *IJ-silo* building by architects MVRDV. Stacked programs in sections coinciding with construction and materials organized as it were a laboratory for living.

New patterns are deriving from old traditions. *Borneo* island and *Sporenburg* island in Amsterdam were transformed in massive housing compounds, representing the Dutch harbor settings from the past: small houses along the waterfront, attacked by giant meteorites as a metaphors for mass-housing, opposed to houses for the masses: a sea of houses.

Constraints

Building is about the change of place, shape and state of material. This has been a trial over and over; related more or less to the ways and means of the local context. People in Europe as in many other parts of the world are housed in rather square rooms, connected -or rather divided- by corridors. Most rooms are built to suit specific functions. Regulations and bye-laws have promoted this way of arranging and subsequently the mode of living. Yet modern society has stressed the possession of the house and the status that applies to the spent capital. Housing is no longer equal to living or being but has become equal to capital and having. Even the way someone is housed is often referred to and explained in ‘having’ terms, hardly does one ever try to describe the situation in ‘being’ terms. Housing is advertised, promoted, and rated in square meters, front doors, the color of tiles, but there seldom is information about the way activities can be accommodated, the way of living, in short: nothing about the ‘being’. There is great tradition in the Netherlands to consider housing as a service to users rather than an object that can hold households. The support infill theory and practice has proven that there is an interesting relation between the community and the individual, but also between the providers and the consumers. There will be more experiments on the principle of equity sharing: mortgage and rent will be in a shared relationship depending on the status of the user and the signature of the project. It is in those projects that the issue of durability, consequently sustainability will play a managerial part. Technology will have to accommodate that process rather than being the issue. Technology is the answer: now what is the question? Considering housing it is time to raise that well known question again since it seems there are hardly limits to what can be produced and yet the questions are on the edge of what used to be the obvious knowledge in housing: rooms, square meters, facilities and affordability.

The permanent vs. the temporary, the frame vs. the adaptable, Bernard Leupen, 2004
Housing and Industry

The building industry has remained location-specific. Prefabrication, site organization and alien materials have had their impact, but the status of the site remains dominant. Consequently the construction mode is based on traditional site-related crafts. Improvements and innovations tackle the clumsiness, waste of material, mal organization etc; the basic struggle for better performance, fitting, speed and profit. First we meet the philosophy, then the design, then the prototype and then very often nothing anymore. The integral built product evidently is too complex in its context, culture and cast for a structural change in the building mode. As long as the local building merits will not be denied there is definitively a contribution to the process; if, however it becomes a professional approach towards local misery only, there is doubt. In my opinion little research has been carried out in respect to the potential of the present building modes. Therefore newly introduced building techniques hardly ever proved to be more sophisticated -to the contrary- and seldom cheaper. The methods that called for large scale construction clarified the process, not the product. Low key performance on the building site was banned for private single houses. Thus also participation was customized and incorporated in the modern way of building. It will be certain that the development of the building mode will be generated to a large extent from research activities of affiliated companies. The multinationals have shown to be persistent in their efforts to penetrate the housing-market by producing prototypes for mass-production and will probably continue to investigate the possibilities.

Structural innovations and sophisticated design processes can not prevent nor resist the pull of the market. The product has freed itself from the user and not the other way around. Since the market will shift towards the building stock in stead of the growth of the newly build, the most promising future in the western world will apply to the generic builder. In other words there should not be brands and stickers on building modes.

Modes and Modules

One of the main issues in the western world is the question of the open or closed systems. Open systems have been promoted by those who have pointed to the incapability of the traditional building process to cope with sophisticated production. Referring to the industries that produced consumer goods in an industrialized way, many have argued that the open system would enable the production industry to apply modern technologies. The Open Building Mode is launched in the Netherlands as the innovative approach to building and industrial production, freeing the user from the product.
Since the building products to a large extent still derive from the original traditional building materials and products, the strive for diversity and variation was powered by coordination and rationalization mainly. If building products were to be produced with reference to preset rules concerning the ultimate position and size, the building mode would not only benefit in organizing the grand product, it would imply that the underlying coordination would accommodate participation. This way of reorganizing the building mode without changing its characteristics is inherent to the Open Building Mode. The rules for the (modular) coordination of the building parts and elements are based on abstract dimensions. They are not related to the specific dimensions of the building mode. In order to achieve the conditions under which a more open way of building will flourish the production industry will have to supply the market with building parts that meet the specifications. The reproduction of the stock prevents key shifts in production strategies. The initial investment is to start a sideline production for building products. In other words: in ‘well’ developed countries the menace of the stock of the stock exceeds the push for the open building market. No wonder that the Open Building Mode is proclaimed in countries that have a large shortage and a low technology. Interesting to note that in most efforts the building mode was not questioned. In the Netherlands for instance the new building systems based on a more open approach directly from the traditional ways of construction and production. One cannot simply overthrow the existing culture of building by introducing new philosophies and technologies.
Laboratory on Housing

The Netherlands is a small country accommodating many inhabitants per square acre. The population is growing in number, but also in diversity. A multi-cultural society is emerging. The difference between the ones that have (money, education, health) and the ones that have not is getting more extreme. For the last eight years we have had our polder politics: consensus-based politics on issues. Housing has been extreme to most foreigners in The Netherlands because of its traditional packed terraced housing schemes and the grand failures in the 60’s when building techniques were terrorizing the new development sites. Now under the rules of the New Sites created through a process of elimination of former activities and the promotion of Vinex Sites as a product of state legislature, architects, builders and planners have had the opportunity to strive for extremes. Super-terraced housing, stacked programs, vertical villages, grand castles, loose living, self built, but also off-the-peg housing in different styles, prestigious projects in several middle sized towns that want to become architecturized.

These experiments that are lead by pro-fashionals are known in the world, but they do not reflect the interest of the default user. A recent survey demonstrated that within the Netherlands Laboratory on Housing 58% favored traditional architecture, 15% could live in modern housing, 13% would go for experimental housing, and 14% did not choose. We might therefore see a future where new compositions will combine several programs: condensed multiplicity and in contrast it may be expected that at the new sites middle class semi attached or terraced strings will be parked. Apart from these developments town-rulers and project-developers will call for thematic housing plans to identify the town and to draw a new upper class.

Block 16, Rene van Zuuk architects, blobbed apartments in Almere 2005
- Meanwhile manufactured houses are promoted through a combination of updated technology and catalogue marketing. It means that the client/user will be offered a variety in products, but the technology is a consistent pattern of materials and techniques selected for the specific conditions of the producer.
- Meanwhile new politics proclaim private enterprise for 30% of the new stock.
- Meanwhile the production as a result of conflicting aims and goals is dropping to 60,000 dwellings per year.

What You See Is Not What You Get. This computer phrase might well express what is going on: intrinsic issues have fled the housing market. Genuine arguments on sustainability and durability have been overruled by irresistible alluring qualities proclaiming more exciting, romantic or fashionable features and performances than the ordinary product offered. In that sense The Netherlands might well be the country to visit to become aware of the issues, to learn about experiments, to note that words last longer than products, to reflect on housing as a process that changes as time goes by, to become aware of the ever lasting quest for a better living environment.

Sphinxs, housing the forensic nomads by Neutelings Riedijk architects 2005
References

4. Herbert, G. - *The dream of the factory-made house*, MIT, Boston, 1983
7. Maar B. de - *A sea of houses*, THOTH, Bussum, 1999