IN SEARCH OF THE RATIONAL CITY

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Abstract
Lots of studies and projects about the city today are focused mainly on different types of transformations, leading to “new” urban configurations that will ultimately deal with “new” contemporary and future problems. They seem, however, to forget about the human being whose perception and comprehension of the city is mainly based on its past. There are still some attempts made to address the rational balance of old and new, of traditional and modern, of purely formal and purely functional, of beauty and progressive aspects of the city. The article explores the theme of rational attitude in architecture and urban planning. The author searched for traces of such themes in contemporary developments of the IJburg district of Amsterdam and of the Ypenburg Center near The Hague. These examples may help to discuss the role and critical potential of the traditional urban and building typology in the transformation process of cities and territories that lead to new urban configurations. Both the above-mentioned projects use “old” well known, readable, clearly defined and of human scale urban and architectural types (peripheral blocks, towers, main streets, public squares, semi-private courtyards) as design tools that can provide extraordinary creative and instrumental possibilities; types that represent not only an abstraction of urban and building configuration, but act as carriers of cultural meaning and identity. The author looks to address this question and explore possible solutions that will reinstate the rational city in the present day.

Key words: rational city, typology, IJburg, Ypenburg Center

“Whatever general attitude may be adopted as to the relevance of tradition to modern life, it cannot be denied that of all institutions it is the city in which the past is most tangible”.¹

The City today

Today, a great part of architectural design is highly influenced by digital technologies, new materials and building techniques taken straight from science fiction, and seem to look solely toward the future. Such architectural objects are being seamlessly perceived and accepted, some of them even becoming “icons of architecture”. At the same time, the popular idea of beautiful and good-to-live cities are being continuously related to nineteenth-century or even older images and concepts. The statement of Alan Colquhoun made in the 70’s seems to be relevant: “To a large extent our ideas about pleasant and meaningful city environments are based on our actual experience of living and working among the buildings and city structures of the past”.²

However, concerns appear that the “old” criteria of aesthetics are becoming inappropriate to the value of contemporary city planning³. Aesthetic of – beautiful, pleasant, filled with memories and the possibility to identify with – city, seems to be too subjective to be a guiding principle for urban planning. Aesthetic that is not able to keep up with environmental, social, economic, communicational needs, creates dilemmas and problems of an unbalanced contemporary world. How can this contradiction in aesthetics be overcome?

“Urban areas have been caught up in a turbulent process of transformation over the past 50 years and settlement conditions mutate rapidly. The transformation of the traditional city, as well as modes of peripheral expansion and infrastructures comprises a new landscape for contemporary projects. At the same time, issues such as mobility, nature, water management, energy use and public space are pivotal in each case.”⁴ A number of studies and projects about the city are focused mainly on the different types of transformations leading to “new” urban configurations that will deal with “new” contemporary and future problems. However, they seem to forget about the human being whose perception and comprehension of the city is based on the past. At the city level, it is of course hard to understand what is expected of urbanism because the needs are diverse and change with time and the social environment, but general human needs and expectations to the city conditions have not changed as much. Rem Koolhaas express disappointment in the failure of urbanism arguing that: “now we are left with a world without urbanism, only architecture, ever more architecture”⁵. Urbanism replaced with architecture creates a gap in the overall understanding of the city beyond that of the architectural object. The “good city” is being reduced to an “architecturally significant city”, that instead contains a growing number of interesting buildings that command our attention. Gathered building-icons (like museum exhibits) are transformed into “monuments”, that more frequently look like they are coming from “another reality”, making up the portrait of the city. It seems that the pursuit of a building as strong sign has become the mainstream of contemporary design. Nevertheless, these building-icons are often inserted in the semantic emptiness of the

² Ibidem, p. 83.
city, a city that no longer offers a human scale and loses sense of specific readable, comprehensive and conceivable urban space and identity. Some contemporary solutions may even be seen as highly irrational and anti-urban. As Dariusz Kozłowski states distinctly: “The evoked/memorized city of dense, architecturally and psychologically readable spaces has died. The composition has been replaced by buildings according to economic game, imperfectly corrected by nostalgic intentions. The compact space of the city, permitting the inhabitant, the traveller (and the architect) to identify with it, has come to an end. The amorphous formation of freely built-up terrain is spreading”. 6

The Rational City

The term “rational” – in the context of the city – is commonly associated with early 20th century modernistic rational urban planning; urban planning that wished to create a more civilised version of the world than the one already existing – “the City of Tomorrow”. Using scientific methods based on statistics or theory of probability, theoretical systems were conceived to solve the problems of the city. Today, it is often seen as a view plagued with flaws; it is accused of turning the city into abstract categories, that valued efficiency above aesthetic considerations or historical continuity. Urban doctrines of Le Corbusier act as icons of these modernistic utopias; His unrealized urban machines have been rejected as soulless and deprived of human scale. It is conceived with a kind of intellectual work out of urban planning. Rem Koolhaas comments on it: “Modernism's alchemistic promise – to transform quantity into quality through abstraction and repetition – has been a failure, a hoax: magic that didn't work. Its ideas, aesthetics, strategies are finished”. 7 Are they really all false and/or finished? What can we learn from the Modernist's vision and its pitfalls today? Lots of time has passed but new cities' problems are increasing, old not having been reduced.

In the second half of the 20th century, some attempts were made to deal with the contemporary city, different from those of modernistic provenance. Rationalists, like Aldo Rossi searched for solutions that could help to regain balance in urban planning. He suggested that our knowledge of what is considered beautiful or ugly in the city is based on our memory of its past forms, since, without assuming continuity of cultural meaning, no aesthetic judgment is possible. 9

Rationalists found historical determination still important and believed its meanings inherent in the typology of the traditional city. They searched through time and across cultures to find spatial patterns and compositions that speak through analogy. Léon Krier arrived at a similar configuration after comparing the spatial structure of traditional cities with spatial structures of contemporary cities. He perceived the history of architecture and city's culture as a history of types: types of settlements, types of spaces (public and private), types of buildings and

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8 E.g. modernists solutions were based on the conviction of the existence of universal geometric measure. Nevertheless geometry in urban planning was not invented by Modernists, in Renaissance’s Ideal Cities’ perfection was already determined essentially by geometry.
construction. Dariusz Kozłowski describes the city as a collection of “architectural things”. But before they could be named – theatre, palace or temple – lines, surfaces and solids, rules for space had to be established. He connotes the city’s tradition as based on forms of: “streets” – readable space of people’s encounters, “houses” in lines of frontage – true shelters and “city blocks” – external spaces and hidden interiors. These were some recovery’s pursuits of a rational attitude towards city planning and architecture.

It would seem that the urban planning, like any field of science has a requirement for rationality. "Rationality", as in the characteristics of thinking and behaving, boiled down to the purpose and meaningfulness. It would seem that urban planning (which leans towards universal and intersubjective solutions), should especially prefer to have roots in rationality. As Władysław Stróżewski explains in his theoretical considerations: "We say that something makes sense, if it is rational, if it can be identified, explained, justified. Something is meaningless if it does not meet these demands. Meaninglessness is then one of the possible cases of irrationality". It seems obvious that the choice of urban and architectural form is never a coincidence, that specific intent and purpose underlie every decision. However, many examples from the past and present urban planning and architecture raise the question about the legitimacy of certain solutions. Some of the failures have been caused by taking the wrong motivations and aims, while others probably lost their way to their goal. Such solutions will be inclined towards formalism, structuralism, functionalism – where the balance is lost. Many contemporary examples show the desire of novelty and surprise. Amazement becomes the aim of the authors. Their functional and formal solutions seem to stand outside the category of reasonability. The limit of rationality (and meaningfulness) is a contradiction, incongruent or absurd. Many modern examples exceed this limit, posing questions about the meaning of their functional, technical and formal solutions, while others hold on to the idea of rationality, and do not lose sight of the real purpose.

What does a rational city mean to us today? We would like to say that it should rely on common sense, but it may sound clichéd. It would be better to say it should rely on balance. Balance between the past and the present, between tradition and modern consciousness, between formal and functional, between analogy and creativity, between order and diversity. We should not copy, but move with caution between historical knowledge and contemporary issues in order to envision and construct a bright future.

Traces of the rational City

The following chosen examples are new city developments that didn’t have any historical or material foundations. On the one hand, it seems to be easier to create an “ideal city” from the ground up, but on the other hand, with such a lack of context, there is always a danger of creating a city without any consciousness of tradition, and one without identity or urban spirit.

These selected developments present attempts to retain the rational balance of old and new, of purely formal and purely functional aspects of the city. In these cases, the idea of creating an intimate relationship with city tradition and its universal values in architecture and urban planning can be recognised. We may find such traces of rational attitude in contemporary examples of IJburg district in Amsterdam and Ypenburg Centrum of Rapp + Rapp in The Hague.

IJBURG

In the 1980s, Amsterdam began to be unable to provide a sufficient housing capacity to maintain the population within its boundaries. To help deal with the housing shortage, some planning interventions were focused on water-related areas. In the mid-nineties, the City Council decided on a large-scale reclamation for the new urban area on the eastern side of Amsterdam. IJburg – a major urban development of a new residential district (for 18,000 residences and 45,000 citizens, offering 12,000 new jobs to the area), was to be built on a loose arrangement of archipelagos of artificial islands (ultimately 10) in the IJmeer lake. The project was planned to be completed in stages. In 2001, the first building was completed on Haveneiland West. In 2002 the first inhabitants arrived.

Figure 1. IJburg, Amsterdam

Source: http://amsterdamsmartcity.com/projects/detail/id/45(slug/ijburg

Whereas the composition of the archipelago as a whole is quite irregular, the islands themselves have simple geometric structure. The whole development is governed by a highly detailed masterplan (by Palmboom & Van den Bout, 1995), the implementation of which is strictly regulated. Nonetheless, within its framework, a place was left for sustainable flexibility, for design work to be undertaken by various teams of architects. The urban design scheme is based on a neutral raster of rectangular urban blocks, rectilinear streets, green strips and a

14 When complete, IJburg will cover a total area of 660 hectares.
15 i.e. de Architekten Cie., Claus en Kaan Architecten, Baumschlager&Eberle...
system of waterways of varying width. Architecture within the fields of the grid was not imposed, which results in a rich variety of forms.

The public space is shaped by a simple street plan. The main street – IJburg-laan, with its IJtram and boulevard along the bay, are the base of the structure. A number of cross streets (Fig. 3) create visual links between the coasts of the islands. The dominance of the water guarantees views and openness. The typical, urban public nature of the streets is strongly underlined. The perimeter blocks in turn, are large enough to create an interior world with courtyards (‘hofjes’ like in the historic centre of Amsterdam) and gardens that provide intimacy, in contrast to the long streets and distant views. Many densely built blocks are also crossed by canals, with semi-private spaces facing the water (Fig. 2). Some parts of the city seem to rise up directly out of the water, making for a unique sight.

The condensed close-knit communication grid allows for a number of ties between the banks, the jetties, the bridges and the buildings, and make this readable rigid scheme more user-friendly. A dense network of streets helps to avoid formal and functional monotony and provides human-scale to the scheme. A rigid street plan, however, gives space for the multitude of small typological and architectonic variations. Each urban block is held to a design framework but within this framework, there is a high degree of variation with regards to façade arrangement and the choice of colours and materials used.16

Figure 2, 3. IJburg, Amsterdam

Source: by A. Mielnik, 2013

The housing in IJburg is varied in types, including high rise apartments, low-rise housing blocks of flats, townhouses, terraced and detached houses. All sectors are catered to, from social rentals to mid-priced housing, to exclusive waterside condos, and even owner-occupied dwellings. Around 30% of the housing was planned to be privately owned, 30% for social rent, 30% for middle income housing rent. Providing a full spectrum of housing creates a diversified dwelling environment. The high density of the buildings fits with the strongly urban culture of Amsterdam and gives the development suitable character of a homogeneous continuous city.17

IJburg has been planned as a self-contained district with its own community facilities, shops, offices and schools, sporting areas, parks, restaurants, bars, beaches, yacht harbour and

various new nature reserves. Serving functions as well as (office sectors) are distributed among residential buildings or even mixed with buildings avoiding the functional zoning. Predominant residential areas are complemented by diversified functions. Each island has its own character, in terms of formal, functional and density aspects. Each neighbourhood has a distinct feel. The idea of the project was to provide diverse occupancy and mixed aesthetics, allowing for mixed ways of habitation. Some areas have a more open urban character – with high rise buildings, blocks, urban villas, quayside promenades and facades dropping directly to the water’s surface. There is also a more introverted area of medium density four-storey townhouses with small narrow streets (Fig. 4). Townhouses of similar volume, height, conformed to a building line, represent, nevertheless, a mix of architectural styles, materials and colours. An area with row houses and two-storey terraces was also created. There are also a number of individually designed, self-commissioned, freestanding dwellings. The diversity of housing typologies is complemented with hybrid building types (sport hall with residential) and with innovative ones i.e. a neighbourhood of completely floating homes 18 (Architectenbureau Marlies Rohmer, 2011). Some parts – mostly those with anatural environment, differentiated shorelines and planned greenery – take on a more loose-fit, organic feel.

**Figure 4, 5. IJburg, Amsterdam**

![Image of IJburg, Amsterdam](source: by A. Mielnik, 2013)

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18 Houseboats, floating hotels and restaurants are a familiar sight in Dutch cities but these are always individual units and bear more resemblance to boats than to houses.
An example of a building strongly referencing the traditional morphology and architecture of the city is *Solids* (Fig. 5), the project office of Baumschlager & Eberle (2011). Solids, a very exposed, corner building with a clock is located "at the entrance" to the largest of the islands. It stands as a visual accent – an urban dominant. It begins the city tissue, gives it the urban character and creates or even imposes an atmosphere of the place. The creators decided the project have the character reminiscent of traditional urban offices and residential buildings with colonnades, ordered distribution of windows, balconies, spectacular stone cladding and careful detail. In contrast, the interior of the building, with open plans, is radically simplified, allowing arbitrary division of space, and in doing so, providing functional flexibility. The name "Solid" reflects the strong character of the building and the specific type of functionality.

As it can be seen, IJburg was, on the one hand, designed as a very independent district and on the other hand, designed as a continuation of the main city. The creators did achieve a design that avoids the connotations of a typical housing estate of suburban character. IJburg (unlike older districts of Amsterdam) cannot look back on a rich past and its collective experiences that might help to define its local character and identity. Making use of the value of traditional urban solutions and recognizable building types, can be seen as an attempt to replace this lack of historical context. Maybe that is why IJburg was created as a combination of old (planning scheme, types) and new (forms, materials); a traditional outline with a modern filling.

As Jeanne van Heeswijk[^19] (one of The Blue House[^20] artist’s) remarks: “Though IJburg is not a ‘problem’ area, it is lacking something extremely important, namely a history – a social and human history, stories, life and a beating heart. Each of these qualities and elements must grow, and cannot be planned on the drawing board or built by a contractor. It has been demonstrated that these qualities are decisive for an area’s identity as well as for its inhabitants and users. They are therefore of crucial importance”[^21].

The question can be raised if this scale of spatial intervention can eventually effectively and sustainably operate and if there exists a negative impact of over-planning. Nonetheless, it seems that the planners have done their best in IJburg to make a regulated planning system resident-friendly. It turns out that it is possible to create a very uniform grid masterplan that does not impose a monotonous look but establishes conditions for achieving a balance between order and chaos, cohesion and variation, familiar and new – diversity in various fields. It can merge a varied mix of neighbourhoods and create a strong and unique sense of place and identity.

**YPENBURG**

The next project also took advantage of an emptiness within the site, one with no historical context. The architectural office of Rapp + Rapp was responsible for the urban and architectural

[^20]: Being situated within one of the first blocks to be developed on IJburg, The Blue House offered a platform to observe how the district took shape and the way in which people went about using, appropriating and changing the public space. The Blue House art project closed its doors at December 30 2009.
project of the Ypenburg Centre\textsuperscript{22} (2005), which can be considered as an example of typological thinking on a large scale. The urban layout of the centre of the new expansion near the Hague, established on the former grounds of a NATO airfield, was created by nine closed perimeter residential blocks combined with commercial spaces on the ground floors. The project accommodates 480 housing units, 525 underground parking spaces and 20,000 square meters of commercial and non-commercial space. The sheer massiveness and urban character of the development strongly contrasts with the mixed character and stylistic discontinuity of the surrounding monofunctional domestic outskirts – i.e. fields of mainly single-family dwellings (see: Lego houses by MVRDV, formal experiments from Van Gameren en Mastenbroek, and pithy architecture by West 8). Nevertheless, the ensemble of Rapp & Rapp avoids introversion and carefully relates to Ypenburg’s urban fabric.

The initial masterplan’s framework (Frits Palmboom’s) of the centre as one enormous superblock has been revised. An originally hermetic logic of plan turned out to be surprisingly sensitive to modifications over 8 years of Rapp + Rapp work. Architects gave apparent flexibility to the conventional form of the city in the form of urban blocks and streets. Perimeter blocks were more or less distorted to trapezoids, thus creating some wedge-form public spaces in between. The blocks running along the south side, frame a series of squares offering views to the public park and an artificial lake. Most of these spaces taper in the plan as they approach the lake, introducing a sense of false perspective.\textsuperscript{23} The southern “face” of blocks forms an impressive semi-circular front towards the water. The broadest street cutting across the ensemble contains the tramway that connects Ypenburg to The Hague – opening out to the view, drawing “nature” into the city.

The dimensions of the blocks correspond with those of the neighbouring buildings, and the two main streets which cut the plan (along and across) are a continuation of neighbouring streets. The adjacent estates are thus drawn into the urban composition of Rapp & Rapp’s project, underlining the status of the ensemble as a communal centre for the area as a whole.

Semi-private courts within the perimeter blocks are accessible only by the residents and apartments are reached from inner galleries. Nine slender residential towers of different heights (from three to nine storeys) rise up irregularly from the bottom four-floors blocks, marking the entrance to the residential parts. The towers are capped with differently shaped penthouses of glass brick, that act as light sculptures at night. Vertical accents of towers resemble the silhouette of the Castelfusano shoreline project of Adalberto Libera from 1933.\textsuperscript{24} These towers can be seen as beacons, orientation elements – landmarks clearly visible from far away, creating a visual identity for Ypenburg.

In Ypenburg, the intention was to avoid isolated functional zones. An area of concentrated commercial functions configured in a stage of the master plan has been turned into a shopping main street running north-south. The street is lined by a supermarket, sundry shops, social and cultural facilities, other services and a parking area that is large enough to accommodate the weekly market. Moreover, one of the housing blocks consists of a quadrangle of dwellings with a sports hall at its centre. Creators wanted to avoid a purely functionalist approach of the typical

\textsuperscript{22} The new district, Ypenburg, (construction began in the 90s as part of the VINEX Housing Program) was conceived as an urban field between the cities of Delft and The Hague. It comprises an linear framework of public spaces, with different “fields” in between.

\textsuperscript{23} H. van der Heijden, Rapp & Rapp’s cutting-edge normality, 15.08.2008 [in] http://www.building.co.uk/rapp-and-rapp%E2%80%99s-cutting-edge-normality/3120434.article [10.05.2015]

contemporary suburb centres in the shape of centralized shopping malls and other commercial facilities.

Figure 6, 7. Ypenburg Centrum, Rapp+Rapp, The Hague, 2005


The architectural approach of Rapp + Rapp doesn’t seem to be avant-garde, it shows no excess or shocking innovation. The buildings have neutral, prefabricated, concrete plinths with almost classical grooves and protruding cornices expressing the floors’ divisions. Above, the facades are of orange bricks – stepping back five centimetres at each ascending storey, while the window frames remain in the same alignment. The window layout is rhythmic and repetitive, their fixed position in the vertical plane is maintained. Withdrawal storeys, and thus slight differences in the depth of the embedment of windows, endue some shadow’s play to those severe and massive facades. Simplicity, monotony and the massiveness of architecture are broken by these subtle and intricate details. A neutral and repetitive quality of facades compensates the surreal effects (non-parallel facades) and spatial distortions generated by the urban composition.

The project maintains a unique balance between the scale of architectural detail and urban layout. Between distinctiveness and pragmatism. Between stringent use of geometry and sophisticated thoughtful detailing. Between rigid types and their possible flexibility. Between evident form and indispensable function. Despite overcoming the rigor of the traditional arrangement of the city based on urban blocks, streets and squares, the Creators’ desire to preserve the urban typology and morphology of urban facades is strongly felt. The architects manoeuvred in a controlled manner within the conventions of traditional and modern urban design. The dense urban feeling of a large-city centre is enhanced.

This strong urban and architectural project may be seen as a formal and functional cornerstone – of the heterogeneous Ypenburg’s whole. Christian Rapp quotes Mies van der Rohe: “Building
the city starts when you put one brick on another”. Here, the architects opted for a solution that wouldn’t isolate Ypenburg from the surrounding urban fabric, but one that would form a strong urban unity. The Ypenburg Centre gives the impression of large form; the solid uniform mass with carved out spaces and added towers. Rapp & Rapp’s proposal responds to the complicated urban conditions of Ypenburg with a clearly defined project with a high degree of simplicity as a result of their rational attitude as designers.

What is rare today is that no attempt was made here to give separate buildings their individual, distinctive function, form and character. “Rapp & Rapp did not fall into the trap of adding a new icon building to Ypenburg’s already rich architectural catalogue. If there is anything iconic about this project, it is not its object quality but the ambience that the public spaces, buildings, and even the light sculpture, generate in joint effort.” As they admit themselves, they avoided fashionable interventions that quickly give designs a dated look. This project illustrates their longing for enduring spatial configurations and architecture. We may say that the project even seems to look back to the city from the past (Renaissance times): to “the city that is conceived as a solid, carved up by streets, hollowed out by squares, and articulated by public buildings”.

**Conclusion**

These examples may help to discuss the role and critical potential the “traditional” urban and building typology has in the transformation process of cities and territories that lead to new urban configurations. Both developments use clear urban schemes of perimeter blocks and streets that provide cohesion. As positive aspects of an ordered urban system, we may consider: readable, instinctively comprehended compositions and communication schemes, consciousness of its totality, better space orientation and the ability to quickly mentally map out the streets. An orthogonal pattern of streets and blocks can nevertheless leave space for flexibility, diversity and for mediation between the individual and the city as a whole. Urban planners and architects must not forget to introduce elements of visual irregularity and some “breaks/interludes and reinforcements of city scenery” (i.e. dominants, clearings) to those rigid plans to avoid potential oppressive and inhuman infinity, repetitiveness and monotony. Spatial order must be complemented by the diversity of forms.

Both above-mentioned projects use “old” well known, readable, clearly defined and of human scale urban and architectural typologies (blocks, towers, main streets, public squares, semi-private courtyards) as design tools that can provide extraordinary creative and instrumental possibilities. Type allows for the synthesis of content and matter both in the building and the city’s tissue. It gives us some information encoded in the form. It represents not only an abstraction of urban and building configuration, but is also a carrier of cultural meaning and identity. It may also lead to a resurgence of the city and its architecture of human scale and measure.

These developments may not be seen both in terms of planning and architecture as something spectacular. The architects were not interested in creating architectural signs. Their intention

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was to create rational i.e. – well balanced, user-friendly cities. Cities that by their functional and formal diversity will be well-functioning and architecturally attractive through the decades, not just in the present. The words of Deyan Sudjic come to mind: “Perhaps as secession, which flared briefly in the late nineteenth century, the contemporary iconic architecture has become so pervasive that in a moment it will disappear”.  

The urban architectural world wanted to be liberated from the burden of tradition for a long time, creators becoming alienated from their own sources, history. Maybe it is time to find meaning in inherited urban planning and architecture again. Younger generations may not sense the loss, but unconsciously, they feel uneasy in spaces of lost identity. In spaces that are both empty and dense, lonely yet heavily populated.

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