

ECONOMIC CHANGES AND THE NEED FOR DESIGN STRATEGIES FOR MORE SUSTAINABLE URBAN PROJECTS: VALUES OF PUBLIC LIFE, SPACE AND SHARED DESIRE.

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INTRODUCTION

This paper analyses design strategy and tools for planning and designing urban transformation areas, from the point of view of practitioners. In our role as concept developers, who are directly participating in urban transformation, social housing & real estate project development, are closely involved in projects with many investing participants. In these projects we experience the need to find new ways to join forces and to enjoy working together. We also notice that the economic value of urban design is no longer mainly appreciated from traditional short and long term financial perspectives. There is thus a question for a different approach to the development of economic value. This asks for design strategies that can guide this development of the economic value on the long term.

In this paper we exemplify how we interpretate this economic change and introduce a practical case in which we used a design strategy that met these changes. We will describe strategic planning and design for transformation of Kleurenbuurt (*Colour quarter*) in Zaanstad, north of Amsterdam. One specific design tool that is based on *the principle of Mould and Contra-mould* will be explained further.

1 THE PARADOX OF INTEGRAL PARTNERSHIP AND THE NEED TO ACT FREE

Urban transformation is always a matter of the involvement of many parties. This asks for forms of collaboration of these parties. Well known examples of these are Public Private Partnerships (PPPs), which are usually constructions to governance complicated economical investments. The participants in PPPs constructions can be understood as shareholders. During time consuming urban developments, ten to fifteen years of planning and developing to transform an urban area, business contracts are normal guidelines to control the process.

PPPs are constructions to combine the interests of parties with a long term perspective (e.g. municipality) and of those with a short time perspective (real estate developers). They have been effective in projects where the economic value of projects is about balancing investments and profits in terms of money. The surplus value of PPPs in this is mostly about financial risk sharing and other financial advantages (Wolting, 2008).

In PPPs's, a typical way of laying down agreements on spatial transformations are Master Plans, which usually describes spatial boundaries in which a certain urban program has to be realised within a certain time period. In time, PPPs have proved to be effective constructions in the transformation of derelict areas (e.g. brownfields).

Transforming residential and mixed-use areas (for example post-war housing estates and inner city areas) involves many participants with a wide range of interests in a variety of time perspectives. This makes it per definition impossible to base cooperation only on financial issues and thus the economic value of these projects cannot only be determined in direct investments and profits. The value-handbook of CABA explains how these projects need to be valued in different terms (CABA, 2006).

The participation of the different is thus not only based on shares, but more strongly on specific stakes. That's why we call them in this paper stakeholders, who join forces in dedicated alliances. The question is how to integrate this variety of interest and corresponding values in to sustainable urban projects by means of design strategies. This is what we like to illustrate by our experimented design strategies based on *the principle of Mould and Contra-mould* in the case of 'Colourquarter'.

2 COLOR QUARTER IN ZAANSTAD: PRIVATE INITIATIVE TO RESTRUCTURE A NEIGHBOURHOOD BASED ON VISION AND STRATEGICAL PLANNING.

In 2005 the basic idea of transforming a sober modernist residential neighbourhood in Zaanstad by the name of Color quarter (*Colourquarter*) into a vital and sustainable urban quarter came to life.

This was the shared desire of housing corporation ZVH that owns all of the six high rise apartment blocks and other dwellings, of Kristal, being the project developer for ZVH and of commercial project developer Rabo Bouwfonds, who joined to redevelop the local shopping centre. These parties propagated their idea as an act of empowerment of their shared desire as one, by the name of 'De Zaanse Kracht' (*Power of Zaan*). The shared desire of De Zaanse Kracht was this:

"The future urban quarter of Color quarter will be a particular, recognizable, and beloved quarter in Zaanstad, to live, to visit and to work. For people who choose to live in Zaanstad, here in this place, free and together in a sustainable and wonderful future."

From the very beginning local residents have been participating and also other local stakeholders like social care and elderly care institutions took part. The local government became involved much later because restructuring this neighbourhood had no local political priority so far. Nevertheless the empowerment worked and other governors and curious knowledge institutions became attracted by the initiative of 'De Zaanse Kracht' by paying national and professional attention.

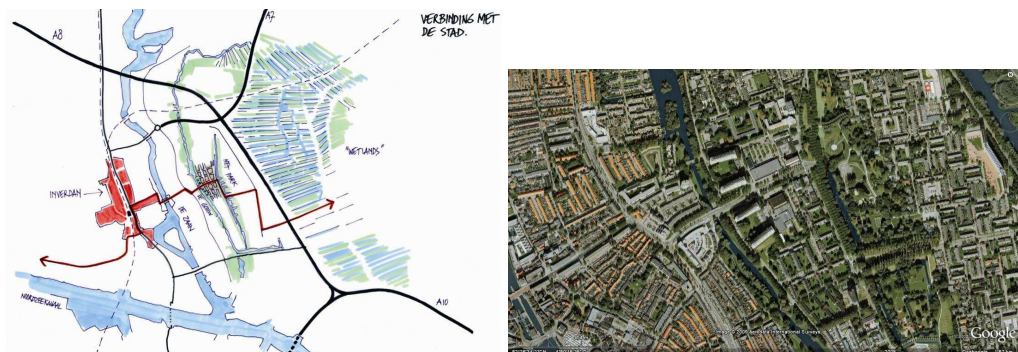


Figure 1a & 1b: Color quarter in Zaanstad

2.1 Task and ambition of the 'Zaanse Kracht'

To revitalise this vulnerable neighbourhood socially economically and physically by transforming the existing into a sustainable environment with following conditions:

- An intimate village atmosphere without losing the urban touch.
- Intensification of mixed use of green area and of public space.
- More dwellings in a wider range of typology.
- A neighbourhood focused on living together, meeting people and sense of safety.
- Reinforcement of facilities and a balanced shopping program.

2.2 Description of the existing area

The 'Color quarter' exists of typical Dutch post-war residential buildings in an open allotment including four characteristic 13-storeyed slab buildings of galleried flats. There is a lot of green area inside the neighbourhood and surround including a park, waterways and green borders. The orientation of the neighbourhood is well appreciated by residents and visitors. There are direct connections with the national and regional traffic network, also with the city centre and with recreation territories. The planning zone is

160.000 m² wide. Dominant presence of large parking grounds and a 100m wide central traffic road offer little quality to public space. Residents are mainly autochthonous elderly people and immigrant families. There is little inflow of new residents who choose specifically to live here. A distinction between owner/residents of the row houses and residents of social rental flats is noticeable. Remarkable in this area is the wide range of facilities such as a shopping centre, sport facilities and care institutions. However their overall image and spatial fragmentation do not support attractiveness of the local living environment.



Figure 2: typical image of the Color quarter

2.3 Present critical match of stakeholders

- Users: residents and entrepreneurs and civic institutions
- Initiators: coalition 'de Zaanse Kracht'
- Governors: Municipality of Zaanstad
- Others: Kroonenberggroep (owners of the shopping centre) and representing consultants

2.4 Shared Desire of the coalition

The 'Color quarter' will be the comfortable and sustainable urban quarter of Zaanstad, of a vital and active community, to be recognized by characteristic green townscape, offering a living environment with a range of different attractive public spaces and facilities.

2.5 Bottlenecks in the development process

- Over a long period of time there was no agreement about demolishing or renovating of the existing buildings of gallery flats.
- Competition between developing parties within the coalition became apparent during the process of design and development

2.6 Process of design & plans for development during the early stage of planning and design

The establishment of the *Zaan Power* in 2006 was based on a vision. Stakeholders in *Zaan Power* had a shared desire in transforming the area into a green urban quarter with sense of belonging to residents. Stakeholders decided with shared images of characteristic urban spaces and buildings to discuss the design assignment for complementing the sustainability of urban fabric.

A first document with the name and content of a development vision by the authors of the housing corporation ZVH and of the developers Kristal and Bouwfonds stated their point of view.

Next there was the *Integral area development plan* as a result of:

- *Vision of residents from the neighbourhood*: a desired future vision written by the locals who were supported by an independent professional.
- *Social plan*: composition of housing plan and house moving plan for the renters of ZVH (corporation) directed by ZVH.

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- *Spatial concept design and the Strategic Masterplan:* the concept of Mould and Contra mould projected on the actual planning area and completed with the definition and localisation of Strategic Projects, directed and produced by Kristal MC² (Kristal concept development).
The urban space design: the design of durable quality of public space and the spatial edge towards private developments, which was directed by Kristal MC² and designed by Khandekar (urban design firm).
 - *Community plan:* the organisation of empowerment for a connected, social network of the neighbourhood, organised and coordinated by representation of the coalition Zaanse Kracht, based on participation of stakeholders of all kind.
 - *Communication plan:* the organisation of various tracks to attract expected and unexpected stakeholders within the process of renewal, coordinated by the representation of the coalition.
 - *Branding and identity plan:* the development of the typical BRAND of this Color quarter for marketing reasons and for reasons of appreciated social cohesion between residents and future residents, coordinated by the representation of the coalition.
 - *Financial plan:* plan of insight and overview of financial feasibility and financial risks, produced by the planning economists of Kristal and Bouwfonds.

2.7 Typical for Kristal project development was their role of concept developer

Within the coalition *Zaan Power* each stakeholder fulfilled a guiding role. ZVH provided social housing program and housing management strategy based on accurate knowledge of local people and buildings. Bouwfonds contributed economy planning related to commercial real estate and shopping concepts. Kristal supported economy planning from the social housing program point of view and did process management of the overall development assignment. Kristal MC² delivered concepts for social planning and concept design for spatial transformation of this area. A typical Kristal MC² task, especially during the early stages of the process, was constant visualising of shared interest of stakeholders and further concept development to be documented and discussed with others.

In later stages organising and supporting the design of plans and planning and organizing for external and internal communication was another typical responsibility that Kristal took care of.

2.8 Program of the development and design assignment for the area

- Some 1200 new built dwellings, including 30% social housing (+/- 450 dwellings) and +/- 200 streetlevel based homes.
- About 30.000 m² floorspace for facilities such as commercial, school and neighbourhood services, sports hall, swimmingpool, social institutions.
- Between 1800 and 2000 built parking places and another 600 parking places in public space.
- Focus zone for high quality public space: by realising an sustainable attractive shopping area, by refurbishing the green edges towards the water and the park.
- Focus cluster for Healthy Life support, including a concentration of social institutions, sportshall, swimmingpool, social housing and built parking.

2.9 Planning ambition for the area

- May 2009 Development plan of the coalition Zaanse Kracht handed in to be supported by the local government of Zaanstad municipality.
- 2010 Start of executing Social plan, by starting house moving of present residents.
- 2011 Start realising transformation of the first development fields.

2.10 Costs and business

The coalition Zaanse Kracht has calculated the economical feasibility for the area together to find out about flexibility in exploitation of grounds and real estate.

2.11 Success & result

- The coalition of private parties managed to put renewal of the Color quarter on the political agenda of the municipality of Zaanstad. Actually the local government gives priority now and is effectively participating in the development of the process.
- Another effect of the effort of the *Zaan Power* is wide spread support by local stakeholders for the development and future projects.

3 THE PRINCIPLE OF MOULD AND CONTRA-MOULD, A FLEXIBLE DESIGN STRATEGY FOR URBAN AREA DEVELOPMENT

The Mould and contra-mould technique is based on the idea of how a sustainable and strict frame allows freedom and flexibility to materialise coherent solid shape, again and again.

This idea is a suitable method for the purpose of designing NEW URBAN FORM that will allow freedom and flexibility for participants in the making or transformation of urban area to create strong and independent projects within a spatial structure of sustainable and shared stakeholder value.

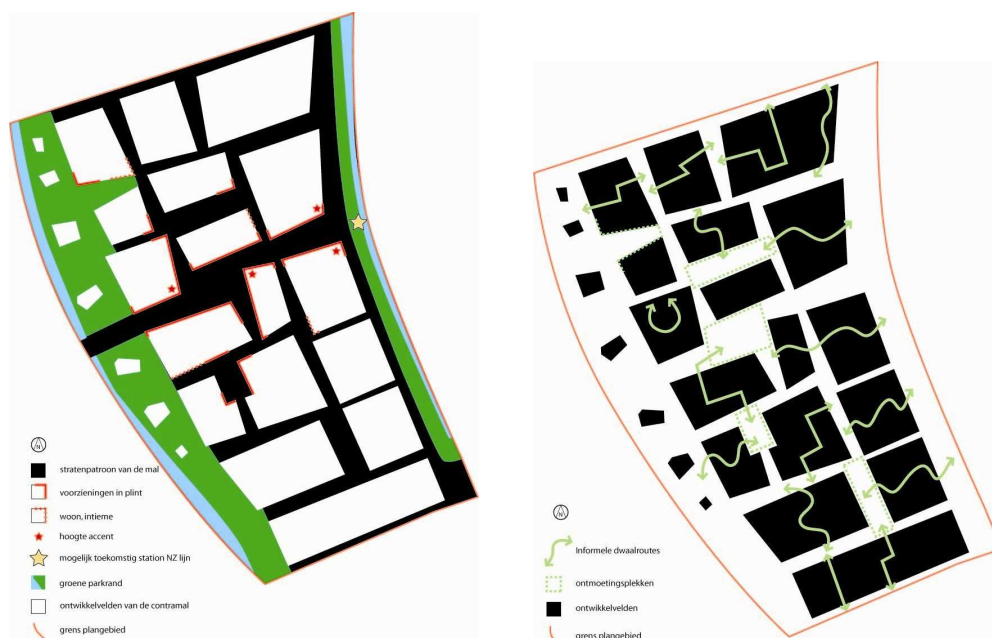


Figure 3a and 3b: the mould & the contra-mould

3.1 The concept of Mould and Contra-mould is a technical design strategy.

In general, the ambition of the desired and sustainable future for urban area focuses at long-term interest. Normally realisation of such a transformation will take place through short-term projects and lucky chances. To transform a complete neighbourhood into a desired and sustainable future will take some 15 years what we consider to be medium-term. It is this term that we concluded to be most relevant in planning strategy and in designing for urban area development.

The future Color quarter will be structured by the Mould, a spatial framework. The Mould offers a skeleton to the Contra Mould, a pattern of fields. This concept is a design strategy for medium-term guidance. The concept is generic. The design strategy works out specific to the location and the force of stakeholders.

The Mould is a durable system of connected public spaces that offers recognisable and beloved character for people to value and to identify with.

The Contra-mould is a pattern of fields for developing free and flexible in fills at different times.

3.2 The Color quarter Mould

This Mould has critical dimensions and a range of characteristics. It is constructed by elements of typical space with program fragments of characteristic use. The space within the Mould will be function flexible, for public stay, for water management, playgrounds, trees and grass, for parking vehicles and traffic movements. The critical dimensions of the Mould must be designed precise. However ideal measurement will grow by the gradual transformation of the existing built-up into the spatial structure of completed urban fabric. Gradual realisation is crucial because the edge between public and private domain will change. In fact this edge will demonstrate conflict between interests of actual owners or shareholders with the interests of actual and future stakeholders. That is why we find our true design incentives to design sustainable public space and durable collective space at this boundary. Think of typical aspects like shadow and sun orientation, flexible building density and cultural features, energy and waste infrastructure, gardening and food growing, playgrounds and collective parking, which are all critical values of the living environment.

3.3 The Color quarter Contra-mould

The outer dimensions of the Contra-mould are the result of free space that will be allowed by the Mould. Like the openings in a piece of netting bounded by the material from which the netting is made. Other dimensions within the fields are result of logic and essential fulfilment at the actual time of realization.

3.4 Further design to define strategic projects of sustainable value creation

The spatial structure of the urban quarter is based on the different ways of people to move through the neighbourhood. Transformation of the existing local urban fabric became for that reason a significant design problem. Equally the public-private land use needed to be restructured into an adjusted pattern for densification of the built up area and for intensification of use of open and public spaces.

In fact it had been decided now to transform the connecting traffic road into an attractive public space (the red boulevard) for people to meet and enjoy a concentration of local and urban provisions. This new 'high street' is to be a major public space element of the renewed local system of ways and lanes, residential streets, small squares and pocket parks, public gardens and secret yards. The new local system will be limited by the soft water borders of the waterways of Gouwe and De Weer, part of the regional water system. The local water system in the quarter will be logically reinforced and sexy integrated in the urban fabric.

The image of the urban quarter is one of beauty of the calm to be experienced in many ways. Imagine the combination of typical compact urban streets and unbending public gardens with tree rows and green carpets, or picture remarking majestic facades along the *red Boulevard* and a solid gate at the Gouwe. But the beauty of the calm will also show in typical urban life here, in the shadow of the heart of Zaanstad, along the river Zaan and Railroads. No calm of drowsiness or monotony but pleasant go together of vital contemporary business with quietness, of light and shadow, of sound and colour. This shall be the radiation of buildings, of public spaces and naturally the charisma of people and their daily pursuits and chores here.

The future of the urban quarter is one of constant change, of evolution. The existing neighbourhood will fill up gradually with new and renewed buildings and with lively streets that replace old traffic roads and tracks. The existing shopping centre will transform ultimately from the introvert spot into a vibrant connection between the northern and the southern part of the quarter, attractive to local people and visitors passing by. The green fringes of the area will support the diversity of green area and water to be used for supply infrastructure and energy balancing for strolling and watching and flexible collective use.

The people of the city quarter will feel stimulated to find space within their territory to do their business and to share community activities. The local economy is based on enduring investment in shared values of local stakeholders. This is a matter function flexible space and of flexible ownership. Function flexibility will be simplified by legal permission to switch objectives between housing and working spaces. Flexible ownership will be made possible by marketing houses and spaces in innovative terms. To own and use by arrangement of mixed renting and buying of property per house or per building, and also for example per interior and exterior, per ground level and other building parts, per cluster and so on. Literally by having buildings and dwellings not just tailor-made in size for standard use but making them larger and smarter to be easily suitable for flexible use. Further value creation can be guaranteed by supplying vitality 'of building skin', especially in a rainy climate. This can be done by means of connecting public space and (collective) open space with transit zones between inside and outside. These can be either collective or individual spaces like hanging gardens, bay windows, comfortable and respectable collective entrees, playful galleries,

impressing roofscapes and ecological biotopes, balanced climate systems and so on, mind peoples typical and sustainable values.

Therefore the spatial concept of the urban quarter is not to make everything extra large but to arrange a combined design for flexible use as well as for multi functional use and sustainable infra structure. This way the sum of functional and non specific spaces is the sum of overlapping spaces, or in other words: the sum of overlapping investments that generate integral profit on the medium-term.



Figure 4: living room stakeholders meeting

The buildings of the urban quarter are characteristic and unique. They play different games with sky lines and touching ground, with trees, grass, water and flowers but the link between building and green space will be evident everywhere. Meanwhile, existing buildings, new sustainable buildings and temporarily buildings need to be balanced out between them, in image as well as in use. This is essential. Instead of creating an area that appears to be one big building site for the next 15 years, improvement of the existing neighbourhood should be successful from the first new building on. Perception of façade design will be fundamental to success of sustainable shared value. Therefore façade design must be treated as to design the authoritative border of public space. The facades of the new Red boulevard will compose interconnection of individual buildings. Facades along lanes and streets offer relaxed image representing people's freedom to express them.

The spatial concept of the urban quarter requires an open planning process that creates an ineffective match with traditional type of plans. Instead of making an urban design for the planning area to show the complete image of the final result in fifteen years from now, we designed strategic plans. A strategic plan is an incomplete image showing the systematic and structural relations between strategic projects, named framed and mapped on a site.

First in a Concept design for the new quarter we illustrate abstractions of a long term area vision.

(If we make a concept design for a building we draw images of the generic idea of the building)

Next we designed a Strategic Master plan which combines the system and typology of public space with definition of strategic key projects. In this case designed the Mould. By designing the Mould we implicate organising freedom of design within the Contra-Mould.

At the same time design of the Mould must act as a structural composition of sustainable identity bearer. Design of the pattern of fields for free development and design is the result of the framing effect of the Mould. In the edge of Mould and Contra-mould specific strategic projects will appear.

The Strategic Project Plan is the design of urban fabric including key projects such as public buildings, landmarks, or basic system components for sustainable and collective climate facilities.

The strategic key-projects are generic. They guarantee sustainable value and can act as propellers in the successful development of transformation, by stimulating entrepreneurship and functional change and by keeping tactics for temporary and sustainable completion open.

The Strategic Masterplan fixes the urban quarter in terms of public and collective space with bordering built-up, based on sustainability in time, money wise, quality value, flexible use, endearment and the respect and love of people and nature.

Further design for the future Color quarter was and will be done at the scale of individual building projects or for specific spots and technical solutions and refurbishments.



Figure 5: possible future image of the mould and contra-mould

4 A REFLECTION ON MOULD AND CONTRA-MOULD design strategy for planning and designing sustainable urban space

Today, transformation of the *Colour quarter* is definitely a topic on the political agenda of the Municipality of Zaanstad. Future vision and strategic plans of private parties are associated by local stakeholders and other prepared private participants. Actual project planning for transformation is a time consuming process which just started now. From our experiences in this process, we have developed three statements. Although we present the statements here as conclusions on our reflection, they should be read rather as questions on which the answer should be discussed with the experience from many other cases.

Design for value of public life, statement 1:

New Urban Form is about modifying urban context to new social economical and cultural circumstances. This implicates that we need to know about true conditions and coincidences and their effect on future value.

In case of *Colour quarter* private initiators tried to find out by organising so called ‘pressure cooking’ meetings. These meetings were meant to determine future value of this neighbourhood between delegates in a range of stakeholders except of the Municipality. We had two meetings during 6 weeks each for three working days in a row without a break. As result of these sessions the coalition by the name of Zaanse Kracht was founded based on a future vision for the neighbourhood and on the notion of shared interest of the participants. The idea of an open planning process to redevelop the area has been investigated and agreed with enthusiasm by all participants. All participants contributed suggestions from their specific points of view and it became clear that we needed new techniques to manage and design for planning. Therefore communication experts joint in and the sessions were conducted by a neutral chairman.

Various illustrated concepts for sustainable urban quarters were subject of broad discussion.

The idea of Mould and Contra mould has been presented and studied further at the spot. Understanding sustainable future value in public space has been discussed in technical senses as well.

Meanwhile experts in planning economics and others in spatial design combined adequate calculating and sketching at the spot. They were criticised by the local stakeholders.

Although people were tempted to discuss the image of preconceived solutions of vague problems, most participants brought clearly forward that they need proof of how planning and design will make things work. This appeared to be interesting insight for many professional planners and designers who are often busy to explain how things will look like or why they will be too expensive.

As it turned out after the two ‘pressure cooking’ events we worked out all together a proposal for our final decision makers. Delegated participants focused on their long-term shared interest in value creation and on typical individual strategic investments to achieve long term ambition.

This is what we could learn from our experiment:

It is the actual need for more sustainable solutions of spatial problems that raises the ultimate new urban question. And still, the need for more sustainable solutions of spatial problems is primarily a fundamental social economical problem to be reflected on by urban planners and designers when (re)shaping cities and when calculating urban projects for the metropolitan.

We notice that urban design culture is shifting towards a culture of designing for smart urban life, eventually.

Design for value of space, statement 2

In case of *Colour quarter* public value of public space is at stake. We needed strategies to make the border between public and private more flexible, to facilitate collective space for collective program. These strategies are often based on the creative interpretation of value development of both private real estate and of public space surrounding private buildings.

To match these economical strategies with programmes for design we need to investigate questions like: who values and when? Or: what is sustainable value creation in terms of urban projects and space, why and how do we design sustainable value of public and private space?

Typical space concepts and strategic designs need to concentrate now at the urban fabric. Urbanists must study the operating quality of collective space and of complementary urban zones and localities.

There is a task for planners and designers to develop new design tools and methods as a need for effective design in practices and processes of multi stakeholder alliances.

Urban design in general has been accepted as key to a better urban environment. However as we move on, urban design should evolve to create public space and design to accommodate urban living of greater sustainability. Urban design and building typology must allow definition of space ownership and building ownership in much more flexible ways.

Design for value of shared desire, statement 3

Designers and planners who have the ambition to generate sustainable urban buildings and spaces must create by knowing technical, wonderful and spatial solutions and by knowing how to match them with peoples real and complex interests and their shared long term values. In a way that these values become natural parts of the design assignment for buildings, neighbourhoods and urban projects and of the design process.

Although this seems logic, we learn from the “colour quarter” and other Dutch experiences that we need to find a complete opposite approach to the usual. In meetings where stakeholders are about to work out New Urban Forms an inevitable question comes to mind. What do we know about the conducting power of design strategies? Especially and clearly to be answered by designers who mostly are busy and responsible to visualise what is in the mind and spirit of owners, of organisations and institutes of people, of governors, developers, and further investors in these New Urban Forms.

Planners and designers are confronted by an increasing variety of stakeholders, individual people and organisations of people with shared desire. Planners and designers need to analyse what these stakeholders value and why they would be interested to participate in the local spatial agenda on the search of New Urban Form.

5 CONCLUDING REMARKS

In new scenarios created by complex interactions between stakeholders, public space is the result of complex negotiations that need to be managed using tools such as:

- a. Concept plans and formulas for urban area.
- b. System designs for sustainability.
- c. Strategic Master plans and definition of Strategic Projects
- d. Prototypes of building/ program concepts

And so on..

It is common sense that all parties need each other to realise sustainable urban space for sustainable urban life of people together. This ambition is an exciting one meanwhile a never-ending story, the ever ongoing story of the shared desire that is the vital power for successful sustainability.

The *new urban question* of how to organise people's freedom to participate in the planning and designing of New Urban Forms while realizing projects together without having to share everything, will still be relevant for further practical experiment as well as theoretical study.

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