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Published in *Datutop 24* (Spring/Summer 2004), publisher Tampere University of Technology, Department of Architecture.

SUPERTOOLS LAST ALL SUMMER LONG

New Planning and Building Permission Tools: Towards Self-Organizing Singularities

Brian Aldiss' science fiction short story *Super Toys Last All Summer Long* (1969) features a family which brings home an android child. The android is a so-called Super Toy but emerges as the most human character of the story. Stanley Kubrick had originally intended to make it into a film, but he handed the project over to Steven Spielberg, who completed it, retitled *AI*, after Kubrick's death. The story is based on the assumption that a mechanical machine may eventually become a unique, singular entity, thus raising the oft-asked question of whether man could at some time in the future create a machine with consciousness and a notion of its own subjectivity. An example of mechanical machinery that has seldom been connected with any kind of singularity is the bureaucratic world of planning and building permission authorities. Could the mechanics of regulation and inspection be turned into a device of singular, enjoyable processes and results, instead of the all too often encountered mediocre production? We do think that today there is no doubt about the larger tendency to innovative and artistic compromises in the public sector compared to the private sector's work in architecture. A proof of this claim is *that the most celebrated urban designs – both in competition stage and realised – tend to be results of architectural competitions and private consultations rather than work of the cities' planning departments* in Finland nowadays. City planning authorities usually have good access to information databanks concerning the projects and this is a benefit compared to the consultants. However, the tendency to potential mediocrity is constructed within the structure of public planning and inspection processes which easily emphasise conservative values, norms and restrictions instead of thoroughful study of potentials, and innovative developments. An ideal process of areal development would combine the cities' access to information to the experimentality of the architectural offices. This text is not so much criticism of planning authorities, but an establishing of new emphasises in the discussion about the role of urban design and planning nowadays. We must start by studying the possibility for this kind of revision from the very roots of planning and regulation.

In its essence, planning means defining communities not only in a physical but also in a sociological sense. Urban planning today faces difficult challenges, because present-day communities have unprecedented social objectives. Consequently, planning and building authorities are in need of new working methods, in terms of what to regulate and what not, and what to permit and what not. The authorities are in danger of becoming helpless; making petty decisions when there is no proper understanding of the consumers of today's society and their habits. Before the planners come into the picture, all crucial decisions may have already been made by

other stakeholders of the process (such as land owners and other city officials) or by the automatic, emergent dynamics of the society, such as the changes in people's shopping preferences preferring large retail units, resistance to public traffic and the result of urban sprawl. The threatening helplessness lays in having not enough thought put to studying parallel optional planning possibilities and most of all having not enough collaboration with other agents of urban development. The new Land Use and Building Act in Finland emphasises not only participation procedures, but also *evaluation and assessment* ('osallistuminen' ja 'arviointi' in Finnish) of land use projects. Even without this adjustment in law, new methods for creating scenarios, evaluating and discussing different future options instead of static planning, are needed in order to keep planning and design effective in the present market economy where architecture is not automatically a valuable asset.

EMERGENT DIMENSIONS OF CITIES

Conventional planning tradition defines the identities and structures of communities by the type of activities intended for the planned areas, such as the division into traffic, industry, service, housing and recreation areas; or just as public or private areas; or, more generally, as commercial and non-commercial areas. However, in the present Western global society, particular activities attached to particular places no longer define the identities of communities. Today, the space-identifying features emerge from other spheres than architecture¹:

Lifestyles:

- consumption styles
- uniform (global) style making spatial differentiation disappear
- fashion
- design preferences
- artistic tastes
- ideological groups
- hobbies
- leisure
- travel

Consumption as pseudo-individualist selection:

- marketed identities (self-invention)
- individuality defined by the people's ability to choose and consume
- marketed freedom of choice
- clichéd stereotypes
- nostalgic images
- physical spaces and areas subject to thematization

Communications:

¹ About many of these parameters, see Architekturzentrum Wien (ed., 2001): *Sturm der Ruhe: What is Architecture*, especially Edward Mitchell's article. Also: Koolhaas, Rem (ed., 2003): *The New World*. *Wired*, June 2003, pp. 116-169.

- information networks
- communication devices
- advertising
- branding
- product families

Security:

- security levels
- mental hygiene
- homogenization of global cities

Simultaneously, there has been a shift in many Western societies from monocultural fixed values to an acceptance of cultural pluralism. These new spheres, the contemporary socio-spatial parameters, define new emergent spaces. Nowadays we can say that we have created the illusion that everything is public (because of the media) and everything is private (because of the ownership and individual tastes).

FROM CONTROL TO ADJUSTED POSSIBILITIES

Traditional planning tools in Finland have been developed in order to control communities and the environment with regulations concerning functions, maximum permissible building areas, plot densities, heights of building masses, approved external materials, health and security requirements. The reasons for regulating these aspects have apparently been political policies related to war and defence, balancing population distribution, achieving a healthy environment, economic prosperity, aesthetic pleasure and social prestige.

Certain typologies and traditions have supported these objectives, such as regional differentiation, and suburbanisation. The reason for regional differentiation has obviously been to prevent (physically and mentally) unhealthy or uneconomic collisions between different activities. Usually this type of authoritarian area control has been two-dimensional, creating paternalistic patterns of disjointed units.

Nowadays we have somewhat different obligations to those listed above, because the identities of communities are now often defined in a new way. The dogmatism of regulatory control does not harmonise with the present obsession with *lifestyles, communication, individualism, selection* and *security*. What people nowadays consume is atmosphere, advertised promises, the attractiveness of surfaces and their own image. The new identity patterns emphasise possibilities and fluid processes, not restrictions. The crucial question in planning and building permission regulation is then: *how does one ensure environments of lasting quality while loosening restrictions and accommodating present-day society's pressures?* The danger lays in the neo-liberalist condition of making anything possible anywhere²,

² Neo-liberalist tendencies in contemporary planning emphasising speed and flexibility are scrutinised and criticized in Cenzatti, Marco (2001): *The Twin Crises of Planning*, and Searle, Glen (2001): *Urban Planning as an Instrument of State Corporatism*. Both papers

but also in the populist American New Urbanism³, which emphasises aesthetic conservatism combined with detailed regulations. If the public realm sells out completely to only financial gain of some individuals, the result is likely to be short-sightedness, banality, social segregation and distancing. Who should define the regulations? Who should decide the extent of individual freedom of action compared to the collective needs of the community?

A NEW NETWORKED AND INCLUSIVE WORKING MODEL FOR PLANNING AND BUILDING SUPERVISION

Traditionally the people who decide about urban developments have, at the first definitive stages, been landowners, land developers, investment groups, city or state politicians, and city administrators. These people define the building sites, site ownership and control, locations for different activities, programmes, densities, costs, traffic connection principles and the approximate numbers of users. All this is usually done before any architect or scientist is consulted. It's only at the second stage that architects and even the politically-informed expert organs are utilized - when most of the crucial decision-making has already been made. City planners do not enjoy much influence after all the preliminary decision making, even if they are working in a city planning department.

The use of private consultation and architectural competitions has often been used as a tool when aiming towards more ambitious results in urban design and planning. *The reason for this is that all too often official planning activity by the city authorities remains easily cautious and unimaginative when fresh, collaborative and innovative ideas would sometimes be needed.* Planning and building authorities tend to embody safe, conservative values. However, now it would be necessary to develop process tools for creating new urban spaces and architecture better suited with our time and its new objectives. We argue that in an ideal world, each building and planning project would be a singular process, dependent on its unique contexts and on discussion with the many stakeholders of the process. It would be dependent on the project's particularities and designed by scientifically and architecturally gifted teams of professionals who are skilled at communicating and marketing these ideas.

The old techniques of separation and collage create difficulties when meeting the present demands for inclusiveness, comprehensiveness, interactivity and flexibility. New tools must be invented in order to benefit from all the information we have about the world and to develop architects' skills in communicating architectural imagination, as well as assessing the impact and repercussions of proposed courses of action.

The concept of "SINGULAR PLANNING", as introduced here, involves the architect creating situation-specific, dynamic organisational structures with the aid of co-

were presented and printed in The First Planning School Conference (WPSC), Shanghai 2001.

³ See, for example, Beauregard, Robert (2002): New Urbanism: Ambiguous Certainties, Journal of Architectural and Planning Research 19:3.

operation between experts from many other fields, combining economics, infrastructure, programming, architecture and building construction. The SINGULAR PLANNING methodology can find areas with shared values among all the participating agents. Such a procedure is called MAPPING. MAPPING is the motivation behind an analysis stage of a SINGULAR PLANNING project. The approach is interactive and is based on negotiations, not on predetermined, assumed needs and norms.

The best model for a planning organization is not fixed bureaucratic machinery, but a POOL of experts from different fields, a team formed to fit the needs of the process, rather than the process being dictated by the needs of fixed team routines⁴. Their cooperation is accelerated by SUPERTOOLS as presented here: new informational and statistical technologies. SUPERTOOLS are defined by their ability to generate a planning / design process appropriate to our time.

As regards proper representation techniques used within SINGULAR PLANNING, hyperrealist or high tech perspective rendering techniques are not the answer. Ultra-realistic CAD rendering and real-time animation, tend to lack the ability to delegate atmosphere and mental images, spiritual qualities and immaterial values. Representation techniques used by POOL and SUPERTOOLS techniques should ideally be flexible, varying according to a specific project. SUPERTOOLS respond to and initiate changes; they make possible the avoidance of redundant clichés in planning.

SUPERTOOLS:

1. INFOTOOL

This involves the organized gathering of relevant information concerning the project. At this stage a web site or equal mediation technique is needed, as well as a networking of agents.

2. FIGHTOOL

These are visualisation techniques describing the crucial parameters that may be in conflict with each other. There would be no need for any resolution at this stage.

3. PANORAMATOR

This is a device for creating scenarios. Instead of a single anticipation of the future, this device helps people to picture different optional future situations and planning parameters in relation to them, as well as gain an understanding of the possible repercussions of a particular chosen strategy, an essential risk assessment tool.

3. TALKTOOL

⁴ The Dutch architectural office UN Studio's urban design methods are representative of this kind of collaborative thinking tested in real commissions: van Berkel, Ben – Bos, Caroline (1999): Move 1-3. UN Studio – Goose Press 1999.

This is a conversation tool enhancing combinative analytical thinking. It involves finding out the relevant elements of the project in relation to each other and evaluating alternative scenarios. Pragmatic parameters such as economic values and conventional habits are put on an equal level with other factors such as image building, geometry and architectural surplus value.

4. DIAGRAMMATOR

Diagrams are used as visualizations of the agreed results of the negotiations. A diagram is in this sense a visual tool for compressing information. A diagram enables imagination to be attached to the idea; it has in this sense instrumentality, which is stronger than all the possible single interpretations. A diagram is a suggestive image, an alternative to a cliché. There can be separate sets of diagrams for each of the scenarios.

5. PROGRAMMATOR

Programme negotiations should take place only after the diagram phase, in order to have clear priorities.

6. ANIMATOOL

Animation technologies can be used in order to visualize and communicate key aspects of the project in process before actual design.

7. TYPOLOGIZER

An architect uses a typology generator in order to find not only appropriate design solutions, but also spatial-structural ideas for the project. Collections of used, known typologies may be used here as a library, resulting in many optional examples, suitable for adaptation.

SUPERTOOLS make possible a shift from the traditional planning technique of only arranging volumes on a 2-D surface. SUPERTOOLS is a technique combining infrastructure, urbanism and scenario anticipation with new information technology methods.

THE ARCHITECT'S NEW ROLE

Any agent participating in the negotiations of the SINGULAR PLANNING POOL should represent the stakeholders of the project (investors, owners, inhabitants) an expertise in areas that collectively enable the creation of a 'uniquely memorable', remarkable or 'seductive' cityscape. The notion should be made that we don't mean here only the fashionable "inhabitant participation". Inhabitant participation or "inhabitant democracy" are typically populist concepts⁵ and they carry all the dangers any populism: potential mediocrity, agitation, banality, compulsory conservatism and dogmatic traditionalism. We should admit that planners and designers should be "inhabitants" which have more than average skills and visions about the development of the environment, however unpopulist that fact is.

⁵ According to dictionary, populism refers to "movements which demand more political power to the people". Populism emphasises "direct" decision making or the "opinions of the people" instead of representative democracy and professional cultures.

Naturally, the definitions of 'remarkable' and 'seductive' environment are speculative. Actually, in a beneficial SINGULAR planning project they are supposed to be speculative and redefined repeatedly. SUPERTOOLS is not an automatic machinery that would always produce good designs. We can only construct a process aimed at good results, but never guarantee the quality of the results. That is why the team behind a planning project should have above average skills in the following fields:

1. CREATIVE AND CRITICAL THINKING

One problem with open design processes is a natural reluctance towards critical analysis and creative thinking. Moreover, everybody is aware of private imagination, but in public activities such as planning for the common good, public imagination can and should be utilised, triggered without too much populism by the use of good INFOTOOLS, FIGHTTOOLS and TALKTOOLS.

2. NEGOTIATION SKILLS

This does not mean stubbornness, a willingness to mediocrity or opportunism! An ability to listen, reflect and to treat all the players as you would wish to be treated yourself are essential qualities for key negotiators, as well as knowing instinctively when to stand firm and when to back down.

3. REPRESENTATIVENESS

The players assembled in the POOL should represent not only all the crucial groups financing and using the facilities to be planned, but above all progressive social, artistic and technological thinking. Even advertising and media consultants may be used.

The process of planning and design will become like an iceberg: invisible research, analysis and negotiations culminate in a period of intense design and construction. The planning project can also be SIMULATED with imaginary projects that allow adjusting the tools and sharpening the FIGHTTOOL. An architect becomes a public scientist, equipped with the ability to combine and resolve complex parameters as a manager of the planning / design *process*, not only envisioning the result. The architect is able to substantiate the MAPPING with a singular architectural vision. He/she is an expert in understanding complex information, structuring it, transforming it and generating images, atmosphere and geometry in a creative, inclusive package.

PLANNING BY DESIGN

In opposition to the need-satisfying and normative method, good architecture and enchanting city spaces can be the magnets of social and economic significance. This aspect of architecture and urban design becomes emphasised especially when the same people make town plans and design the buildings of the area. Sometimes this is not the case when the time between planning and design is long and involves other designers. The tourists gathering to see architectural monuments (Guggenheim!) and cultural centres activating whole city parts (Beaubourg!) are a result of this 'planning by design'. The ripple effect produced by a calculated

insertion of a catalyst project can be one way of achieving positive and far-reaching urban renewal. However, blind trust in architecture's abilities does not always produce a hit without proper analysis and negotiation between the project participants.

From the viewpoint of the present global socio-spatial parameters, there is not much difference between designing a small building, or planning a block, part of a city, a whole city, a region or something for the whole global market. All of these scales are subject to the same organizational challenges: branding, identification, networking, differentiation, quantification and flattening. Simultaneously, it has become difficult to differentiate between a city plan and a building, when the room programmes of many building conglomerates have become extremely complex and large - miniversions of small cities. For example, shopping centres, cultural centres, hospitals, university campuses, large office complexes and exclusive housing quarters have become small cities of their own. Simultaneously, architecture has become more linked to infrastructural development than earlier.

In order to have any crucial effect on the increasingly sophisticated world of artefacts and the massive infrastructures that support their use, architects will have to become better managers of information and smarter consumers. As a result, it is the ability to *organize and select* as well as to design that is appropriate within the present consumer society. Architects already use off-the-shelf, ready-made products, rather than design everything themselves. In addition, we currently share a lack of spatial differentiation and temporal coherence, making it difficult to draw lines between work and home, labour and leisure. An architect's work as a designer is constituted within those limits provided by the society. However, an architectural project assembled from a catalogue or a magazine tends to exclude the singular; the unique and extraordinary, the very essence of architectural content. The only way to challenge this system is by first abolishing pretensions about individuality and to then turn oneself into a *critical* consumer.

Due to globalization, environmental connectivity, common responsibility and the enlarging and ever-increasing complexity of building projects, planning and building regulations should not concern irrelevant and petty physical limitative aspects, but instead imagination and planned atmosphere. Planning should emphasise the inclusive, comprehensive design of crucial parameters, which are not necessarily the ones that planning nowadays subscribes to. Planning as design would combine infrastructure, urbanism and economics. Accordingly, planning processes could be led by private consultant architects in collaboration with municipal planners with the information and experts of the crucial fields that the task involves. In the end, authorities responsible for building permission would primarily concentrate on supervising and monitoring the POOL and sharing the SUPERTOOLS.

The crucial socio-spatial parameters of today's society now lay elsewhere than in the tenants of aesthetic conservatism. What is essential in today's design programmes is the control of those factors that really are important in the development of our world,

not the organization of irrelevant physical characteristics. Designing clear structural and organisational diagrams and useful typologies is now as crucial as designing buildings. One's skills in three-dimensional, material design become really useful only after the use of programmatic, scenario-based and diagrammatic devices featured by SUPERTOOLS. Significant places for people are still needed, but what people find significant has changed and is continuously changing in many societies. This requires new process tools for the development of our cities. However, what hasn't altered is the quest for creating places that move and inspire people, as well as fulfilling the basic requirements of human shelter.